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KATA PENGANTAR

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DAFTAR ISI

Agribusiness Rice Commodity in Organic Food System in Supporting Food Security

Soetriono[1], Djoko Soejono[1], Dimas B. Zahrosa[1], Ariq Dewi Maharani[1]

[1]*Faculty of Agriculture, Universitas Jember, Jl. Kalimantan no. 37, Jember (68121)*
Email: triono.faperta@unej.ac.id

Abstract

Organic farming is a solution for restore the health of land and the products produced. Efforts to switch to organic products, The demand for organic agricultural products is increasing rapidly. The application of the organic food system, especially rice, at this time is still a problem, between efforts to increase production using chemical fertilizers or pesticides (agrochemical products) and efforts to conserve nature that try to control / remove these agrochemical products. The purpose of this study was to find out application of organic food system for rice commodity, analyse feasibility of organic rice system and strategic development of rice commodity for support food security. The The analitical methode used descriptive analysis, feasibility analysis and SWOT analysis.

The results of this study are rice commodity farming with an organic food system that is centralized in the area in Wonosari Subdistrict, Bondowoso Regency, using non-chemical production facilities on the stretch of land in the upstream and certified areas of LeSOS. The level of feasibility of organic rice farming produces income of Rp. 22,309,615 per season, meaning that it is feasible or provides benefits for farmers. The R/C ratio of 5.08 can be used for efficient production costs in the production of 7.192 kg/Ha and the price of dry grain of Rp 5,000/kg. Development strategy for organic rice commodities for support food security is strengthen cooperation between farmer group, local goverment and other stakeholder. And then active role of farmer who are incorporated in institutions or group in the provision of organic material, composting, cultivation of local micro-organisms and the manufacture of vegetable pesticides.

Keywords: Organic Rice, Feasibility Analysis, Development Strategy

1. Introduction

Food security is basically a condition of fulfilling food for households which is reflected in the availability of sufficient food, both in quantity and quality, safe, evenly distributed and affordable. The framework study approach to food security and community nutrition is focused on tracing aspects of food fulfillment by the community, the level of food availability and food accessibility and stability. Organic farming is a solution to restore the health of land and products produced. The people's willingnesses to switch to organic products have caused the demand for organic agricultural products increasing rapidly.

The application of organic systems to food commodities, especially rice, is still a dilemma between efforts to increase production by using fertilizers or chemical pesticides (agrochemical products) and efforts to conserve nature that try to control/limit the agrochemical products. Organic rice agribusiness with high costs and based on several shortcoming causes not all parties can provide supports for the organic farming. Organic agricultural products can only be enjoyed by certain groups, namely the upper middle class economy, because the price is more expensive than conventional agricultural products. Another challenge of organic farming is related to the condition of food needs that are still importing food, so it is better to think further in implementing organic farming in order

to produce food products that are healthy, affordable, and meet the food needs of East Java. Based on the existence of these factors, it is necessary to know the techniques and application of organic food systems in agribusiness rice commodity, the feasibility of rice farming in the organic food system, and its development strategy to support food security.

2. Methods

The analytical method employed includes descriptive and efficiency analysis. According to (Soekartawi, 1995):

$$\pi = TR - TC \tag{1}$$

Information:
π = Revenue (Rp)
TR = Total revenue (Rp)
TC = Total cost (Rp)

Decision Making Criteria:
- TR > TC, then organic rice farming benefits farmers
- TR < TC, then organic rice farming impedes farmers
- TR = TC, then organic rice farming breaks even (break event point)

To test the second hypothesis about cost efficiency in organic rice farming, analytical method is used (Soekartawi, 1995):

$$R/C \text{ ratio} = a = \frac{R}{C} \tag{2}$$

Decision Making Criteria:
- R/C ratio ≤ 1, then the use of production costs in organic rice farming is inefficient.
- R/C ratio > 1, then the use of production costs in organic rice farming is efficient

For the next problem, SWOT analysis is used in several stages. Identify internal and external factors for the development of organic rice, Internal Factor Analysis Summary (IFAS) and External Factor Analysis Summary (EFAS). Internal factor analysis includes identification of strengths and weaknesses; external factor analysis includes identification of opportunities and threats.

Table 1. Elements of SWOT Analysis

S (Strength) What the main strengths of Organic rice business are (Internal) (from the past until now)	W (Weakness) What the main weaknesses of Organic rice business are (Internal) (from the past until now)
O (Opportunity) What the external opportunities for organic rice business are (from now until the future)	**T (Threat)** What the external threats Organic rice business are (from now until the future)

(Source: Soesilo. NI, 2000)

To determine the relative competitive position, a matrix consisting of Ideal quadrants (high growth/high competition); adult (low growth/high competition); bad (low growth/low

quality); speculative (high growth/low competition is used). Then to choose and make strategies is by combining internal elements with external in the form of a SWOT matrix.

Table 2. SWOT Matrix for Formulating Strategies

IFAS EFAS	S (Strength)	W (Weakness)
O (Opportunity)	SO Strategy (Creating strategies that use power to take the advantage of opportunities)	Strategy WO: (Creating strategies that minimize weaknesses to take the advantage of opportunities)
T (Threat)	Strategy ST (Creating strategies that use power to overcome threats)	Strategy WT (Creating strategies that minimize the weaknesses and avoid threats)

(Source: Soesilo. NI, 2000)

3. Findings and Argument

Techniques and Application of Organic Food Systems in Agribusiness Rice Commodity

In realizing food sovereignty, Bondowoso Regency focuses on developing organic agriculture. The content of organic materials is an average of fewer than 2% and irrational use of chemical fertilizers by farmers which damages the soil structure; thus it becomes the government's commitment to realize this program. In 2013, farmers in Lombok Kulon Village, Wonosari District, Bondowoso Regency successfully produced organic rice. There were 10.3 hectares of land that had passed organic certification from the Seloliman Organic Certification Institute (LeSOS) with an average production level per hectare ranging from five tons of dry grain, so that a total of around 50 tons of grain had passed organic certification. In 2015, farmers increased their production by expanding the land area of around 15 hectares of organic rice fields targeted by LeSOS certification. In the coming planting season, it is predicted that the productivity of organic rice plants will be good, because it is supported by friendly weather. The technical applications of organic rice cultivation in Bondowoso Regency include:

1. Preparation before planting
   Regarding the land processing, where there are many harvested rice paddies, the technique of leveling straw and spraying with probiotics are done so that it is quickly destroyed. Furthermore, the land is processed using plows / tractors and the edge of the land using a hoe.

2. Seeding
   Seeding is carried out on seedling media with a mixture of organic fertilizer. The land used for seeding is about 2 x 1 m. The varieties used are rojolele, mentik, pandan, and cianjur. The seeds used to produce organic food are seeds without treatment or not from genetically engineered products.

3. Planting
   Planting is done after the seedlings are around 15 days old. Planting by way of seedling roots buried in the soil to a depth of 2-3 cm with horizontal root positions such as the letter 'L', this aims to increase hybrids, accelerate root growth and development.

4. Fertilization
   The main fertilizer used is locally available fertilizer, such as straw compost, manure, or bokashi organic fertilizer. Fertilization is done before planting and after the plants

are around 15 days old. Furthermore, biological control and weeding are carried out to control the growth of grasses and other disturbing plants.

5. Harvesting and post-harvest

    Organic rice in Bondowoso Regency is harvested after around 110 days old. Milling in post rice harvesting is an activity of separating rice from the skin that covers it. Separation of rice from the skin can be done in a modern way or with a grinding tool. A tool that is often used is a huller. Post-harvest handling uses special organic RMU services managed by farmer groups.

Commodity Feasibility Level of Organic Rice Commodity in Bondowoso Regency

Bondowoso Regency is one of the potential organic rice and rice producing districts. Organic rice farming in Bondowoso contributes greatly to Bondowowso Regency itself to realize organic food. The analysis of organic rice farming in Bondowoso Regency is as follows.

Table 3 shows that the average amount of organic rice farming revenue in Bondowoso Regency per hectare was Rp. 35,961,538.46. The revenue obtained from organic rice farming in Bondowoso Regency per hectare comes from the average production per hectare multiplied by the price of dried rice from organic rice per kilogram. The average production of organic rice farming in Bondowoso Regency per hectare amounted to 7,192.31 kg with the price of dried rice from organic rice per kilogram of Rp. 5,000. The average amount of production costs for organic rice farming per hectare was Rp. 13,651,923.08. The smaller the costs spent by farmers, the greater the income obtained by organic rice farming farmers in Bondowoso Regency.

Table 3. Average Revenue of Organic Rice Farmers

No.	Information	Total
1.	Average Production (kg/ha)	7.192,31
2.	Price of dried grain (Rp)	5.000
3.	Average Production Cost (Rp/ha)	13.651.923,08
4.	Average Acceptance (Rp/ha)	35.961.538,46
5.	Average Revenue (Rp/ha)	22.309.615,38
6.	Average R/C	5,08

(Source: Data processed)

Table 3 shows that the average amount of organic rice farming revenue in Bondowoso Regency per hectare was Rp. 35,961,538.46. The revenue obtained from organic rice farming in Bondowoso Regency per hectare comes from the average production per hectare multiplied by the price of dried rice from organic rice per kilogram. The average production of organic rice farming in Bondowoso Regency per hectare amounted to 7,192.31 kg with the price of dried rice from organic rice per kilogram of Rp. 5,000. The average amount of production costs for organic rice farming per hectare was Rp. 13,651,923.08. The smaller the costs spent by farmers, the greater the income obtained by organic rice farming farmers in Bondowoso Regency.

Based on the average revenue and average production costs, the average amount of organic rice farming income in Bondowoso Regency was obtained. The average organic rice farming revenue in Bondowoso Regency per hectare was Rp. 22,309,615.38. The amount of the revenue level showed a positive value means that the total revenue obtained in organic rice farming in Bondowoso Regency was greater than the total production costs

spent in organic rice farming in Bondowoso Regency. Thus, it can be said that organic rice farming activities in Bondowoso Regency are beneficial and feasible to be cultivated.

Farming can be said to be efficient if it can reduce production costs to a minimum and get the maximum possible revenue. Based on Table 3, it is known that the average value of revenue efficiency (R/C ratio) organic rice farming in Bondowoso Regency was 5.08. This shows that organic rice farming in Bondowoso Regency is efficient and profitable. The R/C ratio was 5.08, meaning that each use of the fee was Rp. 1.00 can result in a profit of Rp. 5.08. The R/C ratio of more than 1 indicates that the revenue generated by organic rice farmers in Bondowoso Regency is higher than the costs spent. The high income is influenced by the amount of production and prices of organic rice commodity. Organic rice farmers in Bondowoso Regency always take into account the cost of efficient organic rice farming.

Based on Table 3, organic rice commodity in Bondowoso Regency is very plausible to be developed. This can be seen from the revenue that can be said to be profitable and efficient to be cultivated. The majority of people in Bondowoso Regency cultivate organic rice commodity with the abundant production of organic rice, moreover organic rice farming has the potential to further increase its cultivation. Quality improvement is carried out through plant maintenance in accordance with the procedures set by the government.

Organic Rice Commodity Development Strategy to Support Food Security

Bondowoso Regency is one of the regencies in East Java that has a surplus of rice almost every year, but the obstacles that are often faced by farmers are scarcity of fertilizer, especially at the beginning of the planting season. This condition is due to the dependence of rice farmers on the use of chemical fertilizers. To anticipate this problem, the Bondowoso Regency government and rice farmer groups try to develop environmentally friendly food agriculture or organic farming with various obstacles and challenges.

The results of SWOT Analysis on Strengths, Weaknesses, Opportunities and Threats of Organic Rice Commodity Agribusiness Development to Support Food Security in Bondowoso Regency are as follows.

Table 4. Strengths, Weaknesses, Opportunities and Threats of Organic Rice Commodity Development to Support Food Security

Strengths	Weakness	Opportunities	Threats
1. Experienced farmers in organic rice farming	1. The number of-norganic farmers is relatively small	1. The need for organic rice com-modity tends to increase	1. Various publics' perceptions of organic rice
2. Acquisition of farm income	2. Relatively low productivity	2. Growing public awareness of healthy living	2. Limited access to market information
3. Natural and biological resources support	3. Limited business capital	3. An enviromentally friendly technology package is available	3. The price of organic rice is relatively expensive
4. Farmer groups are formed	4. Institution is not optimal	4. Local government response to organic rice	4. Access to financial services is limited
5. Certified organic rice commodity	5. Limited research development		5. Climate anomalies
	6. Rural infrastruc-ture that has not supported		

Strengths	Weakness	Opportunities	Threats
6. Utilization of waste for organic fertilizer 7. Formed organic areas	7. Limited labor 8. Narrow land tenure	5. The existence of an organic certification agency 6. Profitable business opportunities 7. Open to build business partnerships	6. Conflict between regions, especially water flow 7. The emergence of fake organic rice 8. Lack of knowledge on the difference between organic and non-organic rice

Based on the External Factor Analysis Summary (EFAS), the development of organic rice agribusiness to support food security in Bondowoso Regency, for the challenge / threat factor, the highest value was the variation in public perception of organic rice, with a value of 0.32. Consumer perceptions of organic rice vary widely. This will be a challenge for producers in paying attention to the needs and preferences of consumers in the face of competition, both for organic rice products produced by other regions and inorganic rice circulating in the market. Considering the market power is in the hands of consumers, so that every effort must be made by producers to improve the quality of their products, including product design attributes and the benefits of consuming organic products.
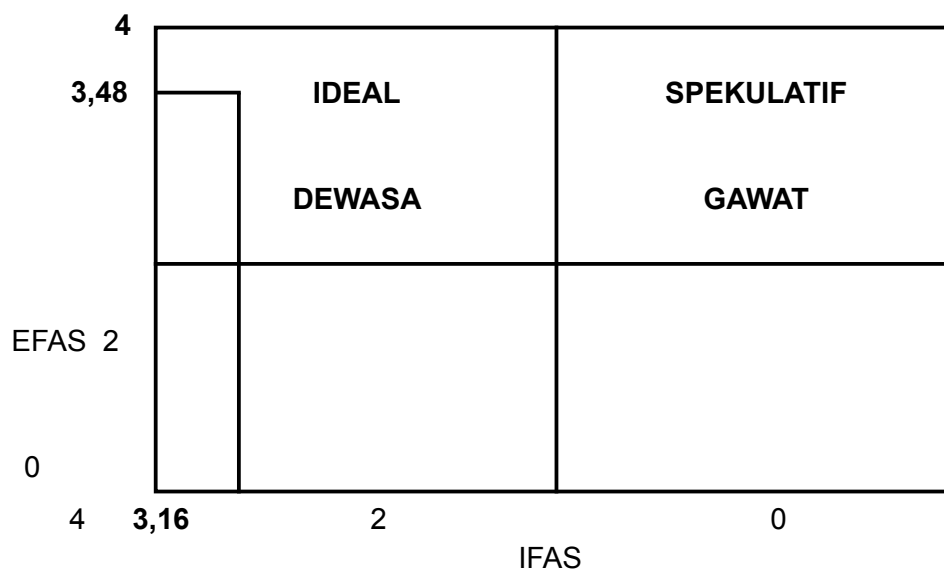
Figure 1. Matrix Diagram of Competitive Position of Organic Rice Commodity Agribusiness Development to Support Food Security in Bondowoso Regency

The result of the analysis for the development of organic rice agribusiness to support food security in Bondowoso Regency showed that the relative competitive position of the SWOT Analysis was the IDEAL quadrant with IFAS values 3.16 and EFAS 3.48. This means that the development of organic rice agribusiness to support food security in Bondowoso Regency has a prospective opportunity and producers are strong enough to develop it.

Based on the SWOT Matrix, several alternative strategies for developing organic rice agribusiness are obtained to support food security in Bondowoso Regency, as follows:

1. Development of organic rice agribusiness by utilizing the potential of resources in the group organization
2. Strengthening the fabric of cooperation between farmer groups and local governments and other stakeholders
3. Adequate price incentives for organic products are needed
4. Survey activities are needed in order to find out the behavior characteristics of consumers towards organic rice
5. Strengthening farmer groups to toughen the business capital system collectively and independently
6. Develop effective and efficient marketing strategies through inter-city cooperation and the opening of potential new markets

From the various alternative strategy options, the priority strategies for the IDEAL quadrant are determined, namely (1) the development of organic rice agribusiness by utilizing the potential resources in the group organization; (2) strengthening cooperation between farmer groups and local governments and other stakeholders; and (3) adequate price incentives for organic products are needed.

4. Conclusion

1. Techniques and Application of Organic Food Systems in Agribusiness Rice Commodity, organic farming centered on the area in Wonosari Sub-district uses non-chemical production facilities on the stretch of land in the upstream and certified areas of LeSOS;
2. The level of feasibility of organic rice farming, with a production of 7,192 Kg / Ha produced revenue of Rp. 22,309,615 per season, meaning that it is feasible or provides benefits for farmers. The value of R / C ratio was 5.08 which means that the use of production costs is efficient;
3. Strategy for the development of organic rice agribusiness admits the IDEAL quadrant, meaning that the development has good prospects, where organic rice products produced by farmers are qualified and certified, so they are able to compete in the market. The strategies are (i) the development of organic rice agribusiness by utilizing the potential resources in the group organization; (ii) strengthening cooperation between farmer groups and local governments and other stakeholders; and (iii) adequate price incentives for organic products are needed.

Acknowledgements

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Competitive Advantages of Breeding Rabbits in Jakarta (Study on Livestock Farmers in Jakarta)

Sylvia Sari Rosalina[1], Eko Sembodo[2]
[1]Universitas 17 Agustus 1945 Jakarta, Jl. Sunter Permai Raya, Jakarta Utara (14350)
[2]Universitas Respati Indonesia, Jl. Bambu Apus 1 no. 3 Cipayung, Jakarta Timur (13890)
Email: sysil_jember@yahoo.co.id

Abstract

This research is about "Business Prospects Breeding Rabbits in Jakarta (study on Bunny Ranch in Jakarta)". This study aims to determine the competitive advantages, and value-added impact of government policies, as well as changes in the factors of production on rabbit breeding business in Jakarta. The population in this study is a rabbit farm in Jakarta, amounting to 7 persons, while the samples used in this study consists of 7 people. These samples were obtained by the method of saturation sampling. The research method in this research is quantitative method using the Policy Analysis Matrix (PAM). Research results showed that rabbit breeding business has comparative and competitive advantages, government policies do not add value, and changes in tradable input factor of 5%, 10%, 30% do not have a positive for rabbit breeding business in Jakarta. Rabbit breeding business is still profitable despite the change of policy by the government.

Keywords: Competitive, Policy, Analysis, Matrix, Rabbit

1. Introduction

Agribusiness that breeds and grows fast and has high economic value. Some of the benefits derived from colorful livestock businesses in terms of the economic benefits obtained. The potential of rabbit farming in Indonesia is very large. Conditions that are very supportive of businesses in Indonesia can develop rapidly. Based on statistical data from the Directorate General of Animal Husbandry and Animal Health (DG PKH) and the Ministry of Agriculture of the Republic of Indonesia (KPRI) in 2014 where the Rabbit livestock population in Indonesia from 2009-2013, has experienced an increase in demand. Graph request data can be seen in Figure 1.
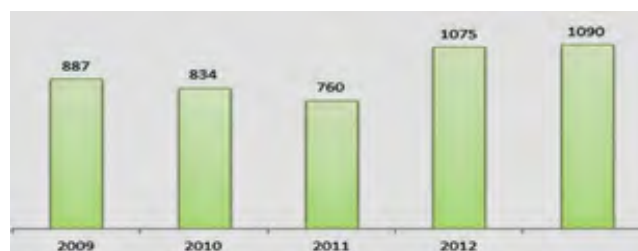
Figure 1. Rabbit Request Data in Indonesia

(Source: Directorate General of Livestock and Animal Health and Ministry of Agriculture of the Republic of Indonesia, 2014)

Rabbit meat has advantages compared to other livestock meat, including low saturated fat content compared to other livestock such as cattle, sheep and goats and its high protein content makes rabbit meat good for maintaining body tissues, forming cells, and increasing brain intelligence (Pujoharjo, 2001). The chemical composition of several types of livestock meat can be seen in Table 1.

Table 1. Chemical Composition of Various Types of Meat

Meat Type	Energy (Kkal/kg)	Sodium (mg/g)	Saturated Fat (mg/g)	Water Content (%)	Protein (%)	Fat (%)
Cow	380	65	41,3	49	15,5	35
Sheep	345	75	55,4	53	15	31
Chicken	200	70	-	67	19,5	12
Rabbit	160	40	37	70	21	8

(Source: Lebas et al. in Pujoharjo, 2002)

Demand for rabbit meat abroad is also high, as stated by Lebas et al., (1983) that world rabbit meat production in 1980 was 1 million tons and in 1991 it increased to 3 million tons. This shows that overseas rabbit meat is very popular especially for people in European countries. Production and consumption of rabbit meat in various European countries can be seen in Table 2.

Table 2. Production and consumption of rabbit meat in several European countries

Country Annual (ton)	Production Annual (ton)	Consumption Capita/Annual	Consumption/kg (ton)	Deficit
Italy	300,000	320,000	5.3	20,000
French	150,000	160,000	2.9	10,000
Spanish	120,000	120,000	3.0	-
Belgium	20,000	26,000	2.6	6,000
Portugal	20,000	20,000	2.0	-
Malta	1,300	1,300	4.3	-
Total	**611,300**	**881,300**	**20.1**	**36,000**

(Source: Lebas dan Colin, 1992)

Russia, France, Italy, China and countries in Eastern Europe are the largest producer of rabbit meat, in addition there are also several countries that produce rabbit meat in small quantities that are only used for own consumption such as some African and Latin American countries, the Philippines, Malaysia, Egypt and some developing countries (Raharjo, 1994), while in Indonesia until now it is difficult to obtain data on the production and consumption of rabbit meat, but according to Lebas and Colin (1994), the consumption of rabbit meat in Indonesia has only reached 0.27 kg / capita / year. Indonesia's foreign market opportunities for rabbits and their processed products are quite good can be seen in Table 3.

Table 3. Volume of Animal Commodity Exports (Tons)

Country Annual (ton)	Production Annual (ton)	Consumption Capita/Annual	Consumption/kg (ton)	Deficit
Italy	300,000	320,000	5.3	20,000
French	150,000	160,000	2.9	10,000
Spanish	120,000	120,000	3.0	-
Belgium	20,000	26,000	2.6	6,000
Portugal	20,000	20,000	2.0	-
Malta	1,300	1,300	4.3	-
Total	**611,300**	**881,300**	**20.1**	**36,000**

(Source: BPS processed by Pusdatin DEPTAN, 2007)

Based on the data in Table 3 regarding the export volume of livestock commodities that rabbit exports in Indonesia have increased from year to year and in 2005 occupied a position under cattle seen from the volume of exports. This means that there is a large market opportunity abroad so rabbit breeders in Indonesia must be able to capture this opportunity by producing quality and highly competitive rabbits. The development of rabbit livestock business in Indonesia, began to develop slowly and began to increase efficiently. Based on the statistics of animal husbandry, rabbit population in 2009 was only 834,608, then rabbit population in 2010 which reached 898,075 tails or an increase of 7.6%.

Economic benefits obtained from rabbits livestock business in small and medium scale businesses include business capital that is not too large, ease in obtaining feed and not dependent on feed production, able to consume green waste products efficiently so as not to compete with food, not difficult to adapt to the environment, does not require too much land, meat produced is healthy and halal, a variety of products that are also produced in addition to meat such as, skin, fur, organic fertilizer, ornamental rabbits, as well as the quality of high protein and low cholesterol meat (Sartika, 1998).

The role of the government in assisting the development of rabbit animals in Indonesia by launching 2 (two) patterns of rabbit development, namely Kampung Kelinci Pattern and Integration Pattern. The Rabbit Village pattern is the development of rabbit breeding business in one area / village in an integrated manner by applying technology optimally. The integration pattern is the development of rabbit breeding business in the center of horticulture plants, so that there is a symbiosis between livestock business and plants (horticulture).Cultivation of rabbits can be a business that provides good profits. One of them is a breeding rabbit farm. Breeding rabbit business in Indonesia is still very minimal, while the demand for rabbit meat continues to increase every year. Rabbit meat needs in Indonesia reach 3,000 kg per day, but only 100 kg per day can be fulfilled (Iskan, 2014). Rabbit farming opportunities in Indonesia are also quite large.

Breeding rabbit business in Jakarta is still relatively small compared to areas that have become centers of production of breeding rabbits. The number of breeding rabbits in Jakarta is 4 (four) people, namely 1 (one) person in South Jakarta and 3 (three) people in East Jakarta. Indonesia until now is difficult to obtain data on the production and consumption of rabbit meat, but according to Lebas and Colin (1994), the consumption of rabbit meat in Indonesia has only reached 0.27 kg / capita / year. Rabbit meat can be used as a good opportunity to realize the nutritional norms of animal protein standards set by the Indonesian government, because until 2002 the livestock sector had only reached 4.82 grams / capita / day. Based on the data that the marketing of rabbit products in West Java and East Java consists of 3 markets namely rabbit meat, pet and nursery. A larger percentage is in pets with weekly sales of ± 1000 individuals aged 1.5−2 months, for meat marketing the market demand is very high but meat can be supplied per week ± 6 quintals while seed marketing per 3 months ± 200−400 various types of tails.

The demand for breeding rabbits is increasing in Jakarta, the increasing production of breeding rabbits, so that breeding rabbits can open business opportunities and can help meet the demand of breeding rabbits in Jakarta. Based on the explanation above, the author wants to review more deeply, so that he gets a clearer picture of the rabbit livestock business in Jakarta. This is the background of the writer to examine more deeply the "Prospects of Breeding Rabbit Livestock Business in Jakarta (Study on Breeding Rabbits in Jakarta)".

2. Methods

Data analysis method used in this research is quantitative method. This analysis is used to analyze the comparative and competitive advantages of beef broiler business, as

well as analyze the impact and added value of government policies on broiler rabbits.

The analytical tool used in this study is the Policy Analysis Matrix (PAM) method. The Policy Analysis Matrix (PAM) method was developed by Monke and Pearson since 1987. Systematic Matrix Analysis (PAM) can be seen in Table 4.

Table 4. Policy Analysis Matrix (PAM)

Information	Receipt	Fee		Profit
		Input Tradable	**Domestic Factors**	
Private Prices	A	B	C	D
Social Price	E	F	G	H
Policy Influence	I	J	K	L

(Source: Monke and Pearson, 2002: 28)

Information :
1. Private Benefits (D) = A-B-C
2. Social Benefits (H) = E-F-G
3. Transfer Output (I) = A-E
4. Transfer Input Tradable (J) = B - F
5. Transfer of Non Tradable (K) = C - G Inputs
6. Clean Transfer (L) = D-H, also J-K

Competitiveness of rabbit production can be known by performing the following analysis:

2.1 Comparative Advantages and Competitive Advantages

Comparative advantage and competitive advantage of broiler rabbit business can be measured by paying attention to domestic resource costs (Domestic Resource Ratio / DRCR) and private costs and calculated private profits (Profit Individual / PI) and social benefits (Profit Social / PS).

Information :
1) DRC = G / (E-F)
2) PCR = C / (A-B)
3) PI = A-B-C
4) PS = E-F-G

Decision making criteria:
1) PCR and DRC <1, indicating a competitive advantage and comparative advantage.
2) PCR and DRC> 1, indicating the absence of competitiveness and comparative advantage.

2.2 Impact of Policy

1. Government policy on output prices can be seen from Transfer Output (TO) and Nominal Protection Coefficient On Output (NPCO) / Nominal Protection Policy against Output.

   Information:
   1) TO = A-E
   2) NPCO = A / E
   3) TO, see how far government policies provide incentives to producers.
   4) NPCO, see whether a commodity is protected or not.

   Decision making criteria:
   1) NPCO <1, the producer does not get protection from the government.
   2) NPCO> 1, producers get protection from the government.

2. Government policy on other tradable inputs by looking at Transfer Input (IT) and Nominal Protection Coefficient On Input (NPCI). This policy is used to find out how much the government interferes with farmers.

   Information:
   1) IT = B-F
   2) NPCI = B / F
   3) IT, see how much subsidies the government gives to producers.
   4) NPCI, see whether a commodity is protected or not.

   Decision making criteria:
   1) NPCI <1, there is protection of inputs to producers.
   2) NPCI> 1, there is no input protection for producers.

3. Government policy on tradable input by looking at Transfer Factor (TF) and Net Policy Transfer (NPT). This policy is used to determine differences in social prices and private prices received by farmers, especially for production inputs that are not traded on international markets.

   Information:
   1) TF = C-G
   2) NPT = D-H or I-J-K
   3) TF, see the difference in social prices and private prices received by producers.
   4) NPT, seeing differences in producer surplus caused by government policies.

   Decision making criteria:
   1) TF is positive, the cost of livestock business for domestic goods is paid at a price higher than the actual price.
   2) TF is negative, the cost of livestock business for domestic goods is paid at a price lower than the actual price

3. Findings and Argument

One indicator of comparative advantage is the analysis of domestic resource costs or Domestic Resource Cost Analysis (DRC). This DRC analysis is used to measure how much one-unit foreign exchange can be saved if the product is produced domestically. The DRC value is smaller than one, meaning that the product- ion of beef broiler business in Jakarta is efficient in terms of the use of domestic resources. Economically producing domestic broiler rabbits is more efficient and profitable than importing, on the contrary if the DRC value is greater than one, it means that producing broiler rabbits in the country is inefficient in terms of domestic resource use.

a. Comparative Advantages of Broiler Rabbits

Analysis of Domestic Resource Cost Analysis (DRC), calculated based on social prices or based on international market prices. Production results and internationally traded income are based on world market prices, c.i.f import prices for imported commodities and f.o.b for export commodities. Broiler rabbits are imported meat-shaped commodities, so that they use China f.o.b price, which is US $ 8,000 / ton or US $ 8 / kg. Analysis of domestic resource costs based on social prices, is used to detect comparative advantage in mastering the commodity of broiler rabbits in the study area. The comparative advantage of beef broiler business in the study area in the PAM Table can be known from the DRC coefficient (Domestic Resource Cost Analysis), where if the DRC value is smaller than one, it means that it has comparative advantage. The results of the analysis of comparative advantage can be seen in Table 5.

Table 5. Matrix of Policy Analysis Matrix for Comparative Advantages of Broiler Rabbit Livestock Business in Research Areas (Harvest Season 2018)

Information	Receipt	Fee		Profit
		Input Tradable	Domestic Factors	
Private Prices	27.000.000	7.668.000	11.682.000	7.650.000
Social Price	74.942.280	17.104.065	13.728.870	44.109.345
Divergence	(47.942.280)	(9.436.065)	(2.046.870)	(36.459.345)
DRC = 0,2374				

(Source: Primary Data, processed in 2018)

The results of the PAM analysis in Table XI, show that the DRC number of broiler breeding business in the study area is smaller than one, which is 0.2374. These results prove that broiler rabbit business has a comparative advantage. The DRC value of 0.2374 shows that the beef rabbit business in the study area is economically efficient in using domestic resources, because to generate foreign exchange by one unit only domestic factor costs are about 0.2374 units. These results can be concluded that to produce one-unit output on social prices, it is necessary to reduce the cost of domestic resources at social prices smaller than one, or in other words to save a foreign exchange unit must sacrifice the cost of a smaller domestic resource balance. This DRC value of 0.2374 shows that broiler rabbit business saves one foreign exchange unit (US $) with the balance / SER exchange rate (IDR / US $) in 2015 amounting to IDR 13,864.00 / US $ domestic resources required 0 2374 US $ or Rp. 3,291.31. This DRC value also shows that the cost of producing broiler rabbits in the study area is only 24% of the import costs, so if the fulfillment of the demand for broilers from domestic production will be able to save foreign exchange by 76% of the required import costs, or be able to save costs of Rp. 10,572.69.

Comparative advantages in PAM analysis are analyzed using tradable input costs and domestic factors in perfect competitive market conditions (social prices). The components of domestic resource costs in broiler rabbits business include labor costs, capital, land costs, cages & equipment costs, cage maintenance costs, electricity and water costs. The calculation of social prices for domestic factors, tradable inputs and inputs is reflected in the shadow price. The shadow price is used to adjust to international market prices. Domestic factors that cannot be traded internationally such as labor, capital, land, cages & equipment, cage maintenance, electricity and water for shadow prices are estimated by assumptions. Shadow price estimator for labor price of broiler rabbit business is assumed as untrained labor and comes from family. The shadow price of interest on capital is obtained at the Bank Indonesia interest rate, which is the average Bank Indonesia interest rate in effect in 2015 of 11.97%. The shadow price for land according to World Bank is estimated at 85% of the prevailing land rent, assuming financial land rent is higher than economic value.

Shadow prices for tradable outputs and inputs are calculated based on world market prices. CIF (Cost, Insurance and Freight) prices for imported products are converted into domestic currency (Rp). The rupiah exchange rate (NTR) against the US $ which was valid in 2015 averaged Rp. 13,726.00 / US $. The shadow price of the rupiah exchange rate (Shadow Exchange Rate) is calculated by dividing the rupiah exchange rate (NTR) with the standard conversion factor (SCF), from the calculation results obtained by the shadow price of the rupiah exchange rate (SER) of Rp. 13,864.00 / US $.

The price of shadow for tradable output of beef cattle business is based on the social price of broiler rabbits which are converted into pieces of rabbit meat, because the products traded on the international market are carcasses of rabbit pieces. The social price of broiler

rabbits at the farmer level is Rp. 138,782.00 / kg. Tradable input values for broiler rabbits businesses include broodstock, feed / pellets, drugs & vitamins. The price of the shadow of the broodstock is estimated to be the same as the price prevailing in the market because the broodstock used for broiler breeding business is assumed to originate from domestic brooders. The price of the shadow of the feed / pellet is estimated to be the same as the prevailing price in the market because the feed / pellet used for the business of the broiler rabbit is assumed to come from within the country. The price of the tradable drug & vitamin input shadow is calculated based on the CIF price, because drugs & vitamins are imported products. The results of the calculation of import social price adjustments for drugs & vitamins amounted to Rp. 13,451.44 / kg.

The DRC value that is close to zero, is also an indicator that the use of costs used by broiler rabbit breeders is very economically efficient. This is because the prices of tradable inputs are cheaper than their social prices and farmers in the study area in the marketing process of their broiler rabbits do not send or sell directly to consumers, but rather sell them to broiler broiler collectors who always come to the farm to buy their broiler rabbits, so that farmers do not need to pay transportation costs, this is what causes farmers to save costs and get a large profit. However, on the other hand farmers cannot maximize the price of broilers, because the price of broiler rabbits is relatively the same as other farmers. The conclusion of the discussion above is that broiler rabbit business in the research area has comparative advantages, so it can be said that the broiler breeding business is profitable and feasible to cultivate.

b. Comparative Excellence Private Imports of Broiler Livestock Business

The results of the analysis that show the value of comparative advantage, where the prices that apply to broodstock and drugs and vitamins come from private import pairty prices. The results of the analysis are in Table 6.

Table 6. Matrix of Policy Analysis Matrix for Comparative Advantages Private Import Parity in Broiler Rabbit Livestock Business in Research Areas (Harvest Season 2018)

Information	Receipt	Fee		Profit
		Input Tradable	Domestic Factors	
Private Prices	74.348.280	17.213.230	11.682.000	45.453.050
Social Price	74.942.280	17.104.065	13.728.870	44.109.345
Divergence	(594.000)	109.165	(2.046.870)	1.343.705
DRC = 0,2374				

(Source: Primary Data, processed in 2018)

c. Competitive Advantage of Broiler Rabbits

Analysis of Private Cost Ratio (PCR) using private prices or prevailing prices at the farmer level in the study area. The existence of competitive advantage can be indicated by the value of private profits that are greater than zero (positive value). These benefits are derived from the difference between revenue and costs. Receipts and fees for the analysis of competitive advantage are calculated based on the actual prices received and paid by broiler breeders in the study area. The private profit value of broiler breeders in the study area is Rp. 7,650,000.00 per kg of broiler rabbits. This value indicates that activities in broiler rabbit business include livestock business activities and post-broiler beef cattle business is efficient. For more details are shown in Table 7.

Table 7. Policy Analysis Matrix Results for Competitive Advantage in Broiler Rabbit Livestock Business in Research Areas (Harvest Season 2018)

Information	Receipt	Fee		Profit
		Input Tradable	Domestic Factors	
Private Prices	27.000.000	7.668.000	11.682.000	7.650.000
Social Price	74.942.280	17.104.065	13.728.870	44.109.345
Divergence	(47.942.280)	(9.436.065)	(2.046.870)	(36.459.345)
DRC = 0,2374				

(Source: Primary Data, processed in 2018)

d. Competitive Advantage Private Import Parity of Broiler Rabbit Farming Business

The results of the analysis showing the value of competitive advantage, where the prices applicable to drugs and vitamins and broiler rabbits in the form of private import parity prices are found in Table 8.

Table 8. Matrix of Policy Analysis Matrix for Competitive Advantages Private Import Parity in Broiler Rabbit Livestock Businesses in Research Areas (Harvest Season 2018)

Information	Receipt	Fee		Profit
		Input Tradable	Domestic Factors	
Private Prices	74.348.280	17.213.230	11.682.000	45.453.050
Social Price	74.942.280	17.104.065	13.728.870	44.109.345
Divergence	(594.000)	109.165	(2.046.870)	1.343.705
DRC = 0,2374				

(Source: Primary Data, processed in 2018)

4. Conclusion

Based on the results of the analysis and discussion, the conclusions in this study are as follows:

1. Broiler rabbit business in Jakarta has a comparative advantage and competitive advantage. This is because domestic factor prices are lower than output prices.

2. Government policy does not provide added value, this is because the price of broiler rabbits at the farmer level is lower than the social price. The low price of broiler rabbits is because farmers do not directly sell broiler rabbits to exporting companies, but through collectors. The low price of broiler rabbits is also due to the absence of bargaining between exporting companies and breeders because the marketing of broiler rabbits from the study area was only purchased by the exporter and there were no other alternatives.

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Supply Chain Risk Control Framework in Coffee Commodity

Deki Zulkarnain[1], Septi Intan Purnama Sari[2], Puji Wahono[3]
Department of Administrative Sciences, Faculty of Social and Political Sciences,
Universitas Jember, Jl. Kalimantan no. 37, Jember (68121)
Email: zulkarnaindk@gmail.com

Abstract

This study concern the risk control of supply chain of coffee commodities in Indonesia. Coffee, listed as a commodity export mainstay in the sub-sector of plantations in Indonesia. Data from the Ministry of Agriculture shows that the contribution of foreign exchange from coffee commodities reached 1.36 billion US Dollars. This contribution is the largest of the plantation sub-sector, after coconut, rubber and cocoa. The volume of coffee exports reached 639,305 tons in 2016. This condition places Indonesia as one of the 4th largest coffee exporters in the World, after Brazil, Vietnam and Colombia based on USDA data. Although, the large contribution of export value, coffee production tends to decrease in some areas. Jember regency, for example is one of the coffee producing regions in East Java whose production decreased by 0.2% in 2016 compared to 2015. Studies show that there are various risk agents that must be controlled in every supply chain related to suppliers, traders, industry and distributors. This paper is a case study on supply, trade, industry and distribution, with data collection instruments in-depth interviews to respondents such as farmers, traders, and distributors in Jember regency and secondary data obtained through literature study. This study provides an overview of the various interrelated risk agents on the coffee supply chain and build a risk-control framework on an international-oriented empirical based supply chain.

Keywords: Risk Control; Supply Chain Management; Coffee

1. Introduction

Coffee productivity in Indonesia has an unstable tendency and fluctuations in each period. Based on data from the USDA the total coffee production from 2013 to 2017 began at 11,900; 10,4700; 12,100; 10,600; until 2017 with the production of 10,600 (Thousand 60-Kilogram Bags). However, the total coffee production in Indonesia during this period still places Indonesia as the fourth largest producer in the world [2]. Indonesia has five provinces as a center for coffee production with a contribution of 74.13% to coffee production in Indonesia [3]. The region includes Lampung Province with a production contribution of 110.35 thousand tons; South Sumatra with a contribution of 110.39 thousand tons; Aceh with a contribution of 47.38 thousand tons; North Sumatra is able to produce 60.18 thousand tons; while East Java contributed 33.39 thousand tons. In fact, according to the statistics center, in 2016, it decreased by 4.53% from the previous year [4]. Although the contribution of Indonesian production based on USDA data puts Indonesia in fourth place as a coffee producer, in some regions it has also decreased, Jember Regency which is also one of the largest coffee producers in East Java has decreased by 0.2% from 2015/16 [3]. Ironically, other districts which are also coffee producers in East Java, such as Malang, Banyuwangi, Lumajang and Bondowoso, experienced an increase.

Coffee as a mainstay commodity in agriculture which has an important role in the Indonesian economy [4], in addition to being able to meet the needs of the domestic market is also able to meet the international market. This certainly has a network that is interrelated

with each other so that it can be distributed from the supplier to the end user. In fact, these conditions create mutual dependence, giving rise to cooperation in order to control and manage the flow of commodities and information available [5]. Management of the supply chain in agriculture is very different from supply chain management in the processing industry. The supply chain network is very complex, so it tends to be longer [6], its management can have an impact on increasing the enabler equity at each supplier, also strengthening farmers in producing more high quality with more quantity so as to meet preferences according to customer needs [7].

Supply chain activities will not be separated from various risk factors [8]. Uncertainty, allowing a variety of events to occur can affect the flow of material in the supply chain, even risk being used as adverse consequences in the supply chain [8, 9]. The consequence is a decrease in supply chain productivity [10]. So then, need serious attention to each supply chain. Natural disasters are one of the many risk factors that make a disruption to the supply chain. The series of disasters that are still not forgotten in previous years. The Tsunami that erupted in Aceh in 2004, the eruption of Mount Sinabung in 2017 to February 2018, Mount Kelud which erupted in 2014 which was able to cripple various public facilities and damage various crops, landslides in several points of Java Island in 2017, uncertain climate with high rainfall in 2016, Raung Jember Mountain Eruption in 2015, Earthquake 7.0 Magnitude leveled West Nusa Tenggara on August 5, 2018, a warning to all of us that environmental conditions are increasingly unstable. The level of uncertainty and impact on the occurrence of an event in the supply chain is said to be a risk [11].

This paper aims to provide an overview of risk control techniques that occur in the coffee supply chain. This supply chain risk management framework will be formed by conducting supply chain mapping. Mapping is carried out systematically through the process of identification, mitigation and establishment of control. Identify the actor supply and various risk factors from each actor. Mitigation techniques on each risk through elaboration of field findings and elaboration of various relevant literature in the study of agribusiness supply chains. Preparation of a control system framework in the coffee supply chain that is expected to be a technique for controlling risks in the supply chain

Supply Chain Risk

Supply chains show networks of organizations that are connected to each other and work together on the flow of material and information from suppliers to end users [5, 12]. The supply chain focus is about cooperation, recognition and trust. Through supply chain management management approach is defined as an integrated, coordinated and controlling plan in all supply chain processes that have implications for cost efficiency, creating customer value, and providing satisfaction to all parties involved in the network [13]. The supply chain is formed through a partnership process with the principle of mutual benefit and maintaining trust. Another principle in building supply chains is reliability, responsiveness, resilience and relationships [5]. Standardization in each supply chain process is also very needed in providing improved production quality [14].

Supply chain management is able to increase market competitiveness in producers to end users. At the end user, it will form competition in the price sector to product and service innovation. While for producers, supply chains will compete with each other to build trust in alliances. The above concept can be illustrated in the Figure 1 below.

Figure 1 describes the flow of commodities from suppliers to end users, capital flows and payments for purchasing commodities from suppliers, and describes the flow of information needs of various actors. It can be concluded that supply chain management addresses three materials, information and financial flows [15].
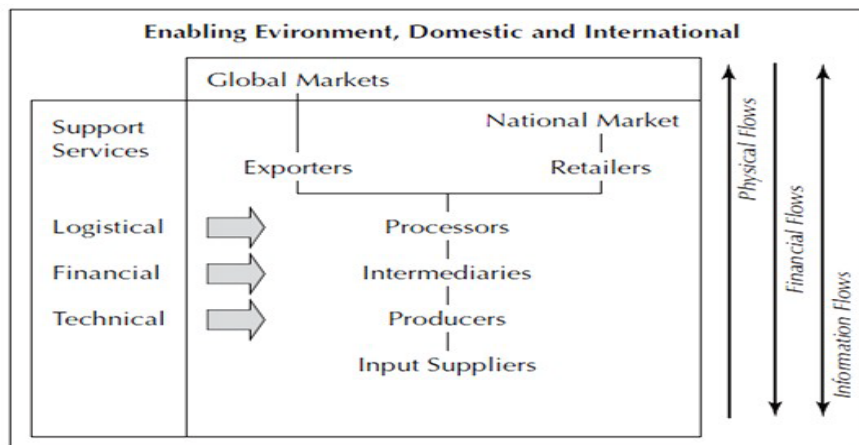
Figure 1. Logistic Management Porcess [1]

Supply chain risk discusses various risks in the supply chain that cause events and have a negative impact on the organization's operations thus creating an inability of the organization to meet customer preferences and needs [16]. The risks that occur in the supply chain can also lead to Constraints and even lead to supply chain failure [9], so that these failures cause delays in service to customers. The wider the supply chain network, the more challenging it is in managing it. Obviously, the risk sources are more and more also. In agricultural commodities, various causes of risk come from various factors such as (1) weather conditions; (2) Biological properties that cannot be predicted; (3) Real production cycle and seasonal market cycle; (4) Geographical conditions of production and end use; (5) Domestic and international food and agricultural economic policy [1]. The implications for various risk factors will disrupt reliability, costs, and efficiency, production, processing and marketing activities [1]. Vulnerable for every supply chain process against risk is illustrated in the following Figure 2 below.
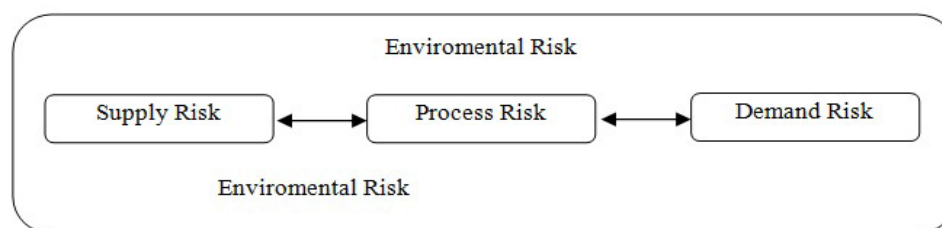
Figure 2. Supply chain risk (modified) structure [5]

The context of the supply chain in figure 2 basically represents each entity that independently conducts supply activities so that a supply chain is formed. This happens in the macro supply chain in the macro.

The discussion is not based on organizational units but rather on the flow of material, financial, and information that occurs in coffee commodities in the community. So the scope of the supply chain is quite large. This forms a very diverse risk factor / Each chain with all its activities has a vulnerability to various risks as described in the previous paragraph. The structure of the illustration above will be a reference in drawing a model of coffee supply chain risk control as one of the agricultural commodities.

2. Methods

This research was conducted in Jember District using a qualitative approach through a case study strategy. Empirical data was obtained from in-depth interview processes involving 8 coffee farmers, 3 farmer groups, 6 collectors / traders, 1 plantation company, 2 small industries, 1 large industry. Respondents were selected through a puporseful strategy [17]. One fundamental thing about the location of the respondents was those in the East (Raung Mountain Slope) and the North to Northwest and Power Areas of Jember Regency (Argopuro Mountain Slope). The location was the largest coffee producer in Jember Regency with a large trade flow. The interviews were conducted by visiting them at home and operating locations so that researchers could immediately see their activities.

3. Findings and Argument

3.1. Coffee Supply

The linkages between each supply agent form a coordinated supply chain network [18]. Figure 1 shows the coffee supply chain network based on the survey results at the research location. On the left in figure 1 shows the actors who are related to each other. They are all smallholders and plantation companies who then sell their produce to collectors, farmer groups, industry, to exporters, while on the right side it describes a stream of commodity processes transformed to the end consumers.
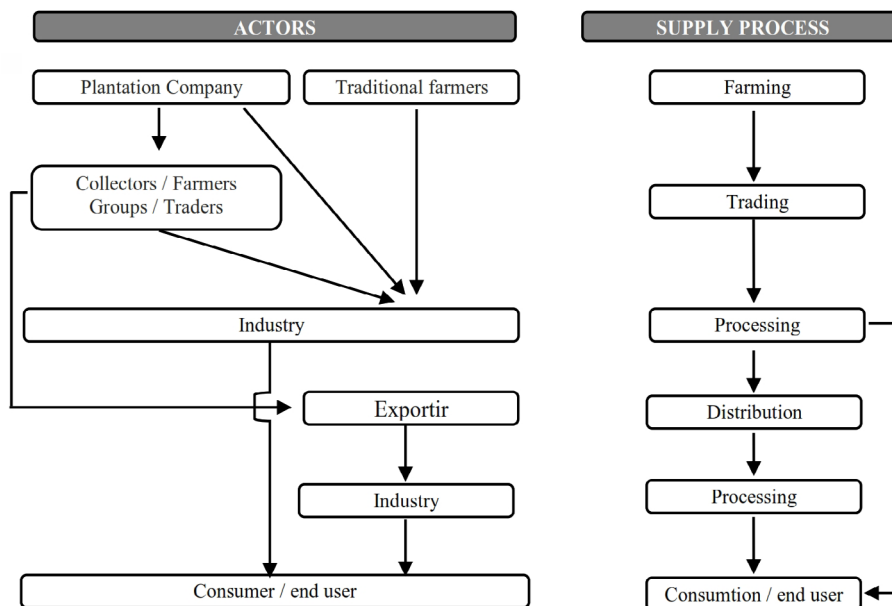
Figure 3. Coffee Supply Process

Coffee Farmer

Coffee (Coffea spp.) Is one of the plants with genus (coffea) [3]. In general there are two types of coffee plants that are cultivated and traded, namely robusta coffee and arabica [19] although there are 120 coffee species that have been identified [20]. Robusta coffee has small and thick leafy characters and is cultivated at an altitude of 1000 to 1500 meters above sea level, while arabica coffee has broad and thin leafy characters and is cultivated at an altitude of 40 to 900 meters above sea level [21]. Jember Regency is one of the coffee production centers in East Java [22]. Most coffee farmers in Jember Regency cultivate robusta species, but there are also some farmers who cultivate Arabica coffee especially in the northwest (argopuro mountains).

Coffee farmers in the area of Jember Regency can be divided into (1) Smallholders who grow crops on privately owned land (village land) and Perhutani land that they contract with the plantation sharing system, (2) Government and Private Plantation Companies. Cultivation carried out by farmers starts with (1) Nurseries derived from seeds and entres, (2) Planting, (3) Fertilization, (4) Trimming, (5) Providing Protective Plants, (6) Fertilization, (7) Pest Control and Disease, (8) Harvesting, (9) Processing, (10) Plant Rejuvenation. The nursery process can be done by tapping or connecting. Connection can be made by preparing entries of the desired upper and lower trunks, then sharpening and flattening the upper trunk, then inserted and tied to the lower trunk entres and planted in the lid media in both polybags and on the ground. Whereas seedlings through seedlings are prepared to prepare superior seeds and add them to the soil or polybag media until the age of 3-5 months. Coffee growers are generally when the seedling age reaches 3 - 6 months with a spacing of 2 - 2.5 meters from the right, left, front and back sides. The planting process has taken place, then the next step is to fertilize. Basically, fertilization is carried out in order to maintain the durability of the coffee plant, improve the quality and quantity of fruit. The next step is to keep coffee trees not high so farmers do pruning, besides that the activity also aims to eliminate the stems that are no longer productive (already old) and grow new branches that are more productive. While to regulate the intensity of sunlight and air fatigue in the rainy season, farmers provide protective plants [22]. The plants they usually use are gamal, lamtoro, and sengon.

Trading

Coffee commodities from coffee farmers will arrive at the industry through merchant intermediaries. They bought the commodity from the farmers in two ways. (1) Traders went to the farmers to sell coffee to them. Usually, they buy in the form of alkaline seeds, dried seeds, and are still in the form of logs (just harvested). There are even traders who buy these commodities in the form of "slash system" according to the average prediction of coffee beans in each tree and the number of trees in the coffee garden. Traders like this have limited capital. They mostly work for individual interests, but sometimes there are also some people (groups) representing farmer groups in their respective areas. In addition to buying coffee from farmers' crops, they also manage the garden , but there are also those who only conduct trading activities. They have limited funds. The funds are sourced from their own capital, joint capital, and there are also those who have cooperated with large traders through the capital system. Subsequent sales are to wholesalers. In Jember district, they are referred to as collectors or tengkula. Subsequent purchase models farmers sell and come to meet with traders. These types of traders have substantial capital, they even focus on buying coffee and various other agricultural commodities without doing farming activities. These activities have been engaged for decades, so they have a large capital from the results of the trade profits he made. In addition, there were also new traders with considerable capital ownership to cultivate trade in agricultural commodities. They were organized individually and in groups. However, this group was not much compared to collectors. They resold commodities after that the process in accordance with the criteria needed in the Industry and the expatriate.

Processing

Other stages in the supply process that are quite important are processing. Coffee beans are processed to become green, roasted coffee, and powder. Processing can be done with large and small quantities based on market demand, forecast, to be based on consumption needs. Large amounts of processing are carried out by large industries in the form of limited liability companies or vennootschap commanditaire. The industry produces

processed products in the form of Powder, Green Been and Roasted Coffee .The quality of processed products is determined by the quality of coffee beans from suppliers. In maintaining this quality, some industries have their own plantations and there are also industries that provide education to farmers in the cultivation process to harvesting the results of their gardens (partner farmers). Green bean is produced through a hulling process in the form of stripping horn skin with a moisture content of 11-12%. After hulling, the green has been sorted and qualified based on its quality. Sorting results give birth to quality levels in the form of quality grades 1, 2, 3, to quality 4. Then, the green has been packed and stored. The function of the hulling and sorting process is to avoid the risk of infestation and maintain the quality of the aroma of coffee beans. Besides producing green, the industry also produces roasted coffee and ground coffee as a commodity for their trade. The taste of coffee is also determined in the roasting process. This process must be passed in order to produce ground coffee. Sangrai will be marked by changes in the color of the coffee beans from green to brown. This process requires temperatures between 190 to 2050C and can be carried out in a simple way through a frying pan. Basically, the roasting process is a process of reducing the water content (or evaporation) of the coffee beans. Post roasting, the coffee will be cooled and packaged as a trading commodity or even enter the grinding stage to produce ground coffee that is ready to be sifted and packed for distribution in trading commodities.

For industry, the process is very strict in maintaining the quality of its processed products. In fact, some industries in Jember applied standard operating procedures (SOP) in the processing process. On the other hand, home industries still use very simple methods of processing their coffee. This also cannot be separated from the production motiv for their own needs or for local people who have not prioritized the aroma and taste of coffee.

Distribution

Traders distribute coffee beans in green bean form to logistic companies and this is also done by other industries in Jember. They have diversified processed products, one of which is green coffee which is sold to several logistic companies in Surabaya, Sidoarjo, Dampit - Malang, Jakarta. In addition, there are also industries that distribute their processed products to their parent company. World coffee demand is quite large, an average consumption increase of up to 3% since 2014 to 2017 based on USDA data [2]. In the last five years, the European Union still dominates the world coffee export market, following United Stated, Japan and Canada and Russia [2]. Indonesian Arabica Coffee Market to Europe and America while robusta coffee leads to Asian markets, Middle East, to European Parts Timur. On the one hand, sales to the global market have also faced challenges from various cases such as excessive pesticide content and the quality of coffee beans for Japanese importers. Rupiah exchange rate weakens or strengthens the destination country's currency, fluctuations in international coffee prices are caused by several factors such as international economic conditions, demand and supply, besides export volume which is increasingly in demand by global customers will also be a challenge for exporters to always supply. That is, coffee producers are not aware of it, so it is not surprising that some companies educate and empower local farmers in order to improve the quality and quantity of production of their garden products.

3.2. Supply Chain Risk In Coffee

Supply risk is a form of probability of an event that can cause problems with the supply chain network [16]. The risk in the supply chain is categorized into three levels which cover the operational level, organizational level, and level between organizations [23]. At the operational level, it will usually experience natural disasters, accidents, intentional

actions, data and information security risks and management problems. While at the organizational level, the risk can be in the form of an organizational strategy. In addition, at the level of inter-organizational level, Risioko is in the form of changes originating from outside the organization such as political conditions, changes in government regulations and laws that are able to make the organization less productive or no longer efficient in operating. These three risk levels have a bias towards business paradigms that rely on organizational units in a supply chain network, but are not more inclined to the economic paradigm. Coffee supply chain risk will have more bias in economic outlook. This is why the supply chain risk discussion for coffee commodities leads to a risk level of each separate and independent supply chain process. They are all actors who are not an organizational unit. To be sure, we can see it in Table 1 which describes various sources of risks, their impacts, and actions that can be taken to reduce these risks.

Table 1. Potentials Risk and Their Impact and Preventive Actions

Process	Potential Risk	Impact	Mitigate
Farming	1. Volcanic 2. Period excess rainfall 3. Pests and diseases 4. Poor maintenance 5. Bad harvest method 6. Illegal harvest	1. Damage coffee flower 2. Flower fall and damage beans 3. Limited harvest 4. Bad Quality 5. Low Income	1. Protective plants 2. Sufficient pesticide and superior seed varieties 3. Training in standardization of quality and price of coffee 4. Catch and give punishment
Trading	1. Fluctuations price 2. Mixing of bad and good quality beans 3. Limited Supply	1. High or low profit 2. Low price 3. Unfulfilled demand	1. Government Policy 2. Training in standardization of quality and price of coffee 3. Goverment policy to land improvement
Processing	1. Supplier quality problems 2. Low Market share 3. Human error 4. Low-quality packaging	1. Low profit 2. Low income 3. Bad quality 4. The product does not last long	1. Improve understanding of the Defects Value System "*Sistem Nilai Cacat*" 2. Increase in target market area and Improve the sales person 3. Increase training of human resource for coffee processing 4. Apply the standard operational procedure (SOP) Strictly

Process	Potential Risk	Impact	Mitigate
Distribution	1. Product rejected by a foreign customer 2. Inadequate Infrastructure 3. Limited Supply	1. Loss of profit 2. High Cost 3. Loss Global Market Share and Loss Income	1. Improve understanding of the Defects Value System "Sistem Nilai Cacat" 2. Goverment policy to land improvement

Risks in the coffee supply chain are found through an assessment process by classifying the processes that occur in each supply chain. So that the actors will be able to see the various risks they are facing on a time scale. Not only that, they also can see the impact that can occur after the risk hit it but also think to consider ways to reduce risk. On the right side of table 1 is an elaboration that produces actions to be recommended in dealing with various types of risk. Basically, the treatment given to the risk agent is preventive and if it is not taken immediately it will become a event that can produce a greater impact.

3.3. A Framework For Coffee Supply Chain Risk Control

The framework for managing risk in the supply chain encourages us to carry out a risk management system. There are stages in risk management, generally through the process of risk identification, risk assessment, risk treatment, control risk [15, 16]. In addition, the process of risk management will depend on the stages of the supply chain. These activities involve the process of identifying risks in each supply chain, as illustrated in Table 1, then assessing the possible impact on risk events by prioritizing risk should be completed in order to reduce risk and evaluate the results of the control measures. Table 1 shows that each supply chain contains vulnerabilities to risks that need to be managed properly. This illustrates the organizational system can be independent or even a production chain. However, this study provides an overview of a stand-alone chain and performs specialized activities. For example, in the farming process, the actors are smallholders and also companies that already have agricultural land. On the other hand, the trading process is carried out by small and large traders. While coffee will be processed by small and large industries to be processed products ready for consumption or semi-finished products. Processed products will be distributed in the local, domestic, and international markets to be processed by an outside industry that has a production capacity that exceeds the local industry and finally the product will arrive at the end user. The process is a separate process from one another. They stand alone and are not an organizational unit. This requires an economic view, but the view of business is also very important in its management actions. They are encouraged to be able to manage various risks that can occur when, how, where. The control activity framework for these risks is illustrated in Figure 4 below.

Although this framework focuses on risk control indicators, some actors in the process are also able to assist in reducing risk for other actors. The contribution of traders, processors and distributors also has a role in reducing the risks that occur in the upstream process of the commodity, namely the agricultural process. They can help farmers to produce quality coffee in large quantities (abundant harvests) through assisting farmer communities, educating about coffee cultivation, and helping with funding support issues. That is, the supply chain network that has been formed requires cooperation between each other in sorting out each event that has an impact on risk. Control of risk in the supply process is very important [24]. Even active monitoring by ensuring effective actions to control risk [25].
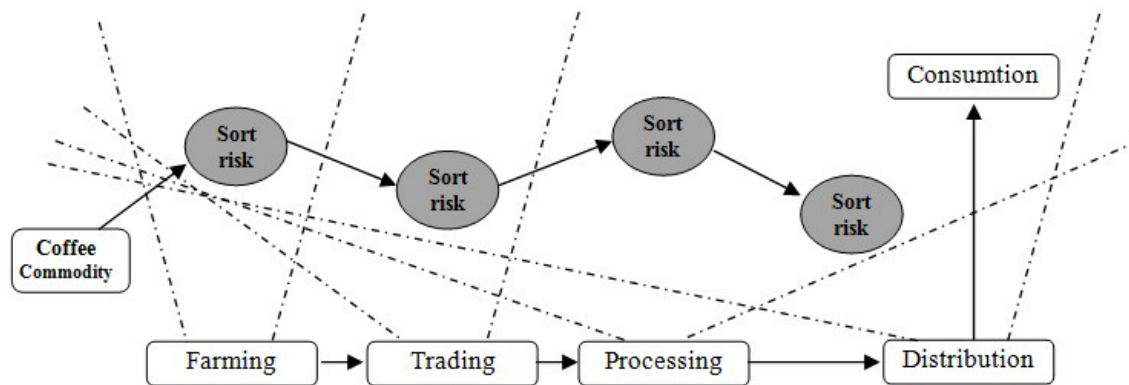
Figure 4. Control Activity Framework

4. Conclusion

This study reports that the coffee supply chain network formed in the midst of the community has the full potential of interrelated risks. This risk can be classified based on the supply chain process flow, namely farming risk, trading risk, processing risk, and distribution risk. Supply chain actors need to carry out control activities. The process can be started from risk identification, risk analysis, mitigating risk, and performance control and monitoring. The integration of risk control in the supply chain in coffee commodity is so important, seeing the risk factors are interrelated, such as the quality of coffee will be produced if each actor (farmers, traders, processors, and distributors) in the supply chain process maintains quality based on customer needs.

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Study of Sugar Cane Farming As a Perspective of Sugar Cane Production Development in Situbondo Regency

Duwi Yunitasari[1], Nanik Istiyani[1], Endah Kurnia Lestari[1]
[1]*Department of Economics Development Study, Faculty of Economics and Business,*
Universitas Jember, Jl. Kalimantan no. 37, Jember (68121)
E-mail: duwiyunita.feb@unej.ac.id

Abstract

Related to the achievement of sugar self-sufficiency, sugar production is expected to always increase from year to year. The purpose of this research is to know how the influence of sugar cane farming experience, sugarcane area, and ratoon, either simultaneously or partially test to sugar production in Situbondo Regency. The data used are primary data obtained by distributing questionnaires to sugar cane farmers, and secondary data coming from related institutions. The data obtained were processed using Multiple Linear Regression Analysis method. Result of F test (simultaneously), it can be concluded that the variables of sugar cane farming experience, sugarcane area, and ratoon, have significant effect on sugar production in Situbondo regency. The t test (partially) shows that the area of sugar cane field has a positive and significant effect on sugar production in Situbondo Regency. The experience of sugarcane and ratoon farming has no significant effect on sugar production. The magnitude of coefficient of determination (R Square) means variable of sugar cane farming experience, sugarcane area, and ratoon, affecting the production of sugar equal to 92,4%. To increase the production of sugar, it is necessary to repair and use of technology in the way of sugar cane farming. In addition to the ease of obtaining credit for capital of farming and ratoon.

Keywords: Agriculture, sugarcane, production, Situbondo Regency

1. Introduction

Situbondo regency is one of the districts in East Java that also produce sugar production. Based on data from East Java BPS 2017, total production of sugar cane in 2016 amounted to 119365.5 tons. The largest sugarcane production came from the sub-districts of Asembagus, Banyuputih, Jangkar, and Panarukan, with sugarcane production of 46837.5 tons, 24937.5 tons, 16112.5 tons and 11088 tons. Cane production in Situbondo is expected to increase from year to year.

Sugarcane production in Situbondo Regency is supported by wide of land and planting area of sugarcane plantation. The total area of planting and land area in Situbondo is 10002 ha. This became one of the supporters for sugar cane production.
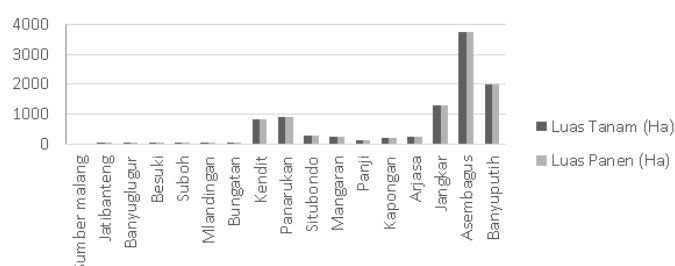
Figure 1. Planting Area and Harvest Area of sugar cane plantation in Situbondo Regency in 2016
(Source: Central Bureau of Statistics East Java, 2017)

Based on Figure 2, the largest planting area and harvest area are found in Asempbagus sub-district (3747 ha), Banyuputih (1995 ha), Jangkar (1289 ha), and Panarukan (924 ha). Planting area and harvest area in Situbondo regency with the amount of production. This indicates that the more widely planted, the production of sugarcane also increased. Increased production of sugar cane is a very important factor for the availability of sugar. Sugarcane is the main raw material of sugar consumed by the people of Indonesia (Yunitasari, 2015).
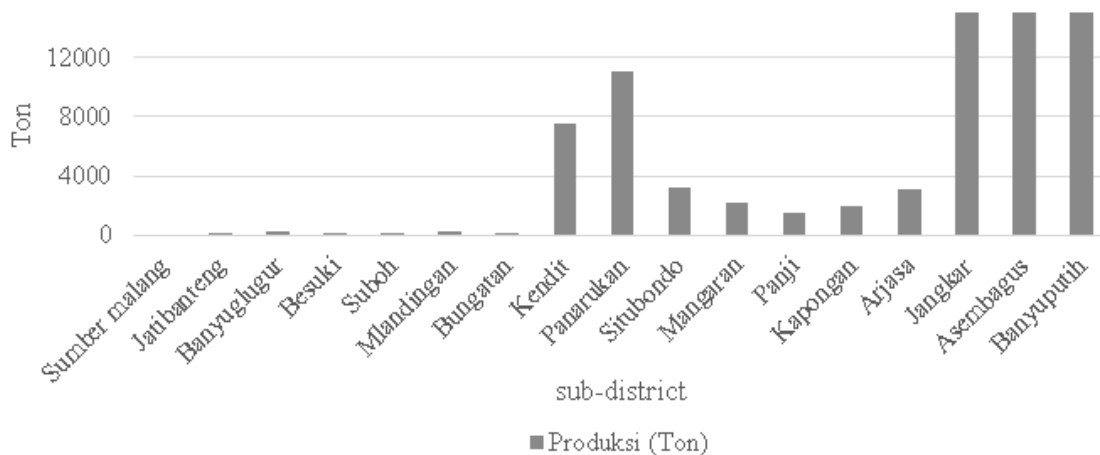
Figure 2. Sugar Cane Production Data at Situbondo Regency in 2016
(Source: Central Bureau of Statistics East Java, 2017)

Increased production and efficient farming activities are important in order to increase production and run efficiently. The purpose of this research are: 1. To know how influence of sugar cane farming experience, sugarcane area, and ratoon, partially to sugar production in Situbondo regency 2. To know how influence of sugar cane farming experience, sugarcane area, and ratoon , simultaneously to sugar production in Situbondo Regency.

2. Method

The data used in this study is secondary data obtained from the Central Statistics Agency (BPS) report of East Java and Situbondo. Primary data were obtained from questionnaires distributed to 30 cane farmers. This method uses multiple linear regression data analysis using classical assumption test (Ordinary Least Square). Through this OLS method it will give good regression result about the influence of independent variable to dependent variable (Nachrowi & Usman, 2006: 11).

The model of economic equation: $Y = b_o + b_1X_1 + b_2X_2 + b_3X_3 + e$

Where:
Y: Sugar Production (ton)
b_o: The coefficient of sugar production when the independent variable is constant
b_1: The coefficient of influence of sugarcane farming experience on sugar production
b_2: The coefficient of influence of sugarcane area on sugar production
b_3: The coefficient of ratoon influence on sugar production
X_1: Sugarcane farming experience (year)
X_2: Area of sugar cane (ha)
X_3: ratoon (times)
e: error variables

3. Statistic Test

Before performing regression analysis, the previous classical assumptions were tested including normality test, heteroscedasticity test, multicollinearity test and autocorrelation test. Regression calculation with Eviews 7 will be obtained information or the results of the coefficient of determination (R2), F test and t test to answer the formulation of the research problem. The coefficient of determination (R2) essentially measures how far the model's ability to explain variations in the dependent variable. Simultaneous Significance Test (F-test) is a test of independent variables simultaneously which is intended to determine whether all independent variables together can affect the dependent variable. And Significant Individual Parameter Tests (t-test) are basically used to determine the significant level of regression coefficients if a significant regression coefficient shows how far the influence of an explanatory variable individually in explaining the dependent variable.

4. Result and Discussion

Result

Regression Analysis

Regression results to the data obtained, as follows:

Table 1. Regression Results of 30 Sugar Cane Farmers in Situbondo District

Dependent Variable: HP
Method: Least Squares
Date: 05/20/18   Time: 08:37
Sample: 1 30
Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.751389	1.633795	2.296120	0.0300
PUTT	-0.193178	1.201990	-0.160715	0.8736
LLT	14.72160	0.930193	15.82639	0.0000
RTN	0.311891	1.269273	0.245724	0.8078
R-squared	0.924618	Mean dependent var		20.27767
Adjusted R-squared	0.915920	S.D. dependent var		10.43737
S.E. of regression	3.026485	Akaike info criterion		5.176246
Sum squared resid	238.1498	Schwarz criterion		5.363073
Log likelihood	-73.64370	Hannan-Quinn criter		5.236014
F-statistic	106.3026	Durbin-Watson stat		1.976923
Prob(F-statistic)	0.000000			

(*Source: Data processed*)

Based on the regression coefficient, the regression equation that can be obtained from the test:

Y = 3,751389 – 0,193178PUTT + 14,72160LLT + 0,311891RTN

From the multiple linear regression equation can be explained as follows:

1. The constant value of 3.751389 indicates that if the sugar cane farming experience (LOW), sugarcane area (LLT), and ratoon (RTN) is 0, the yield of sugar will increase by 3.751389 kw;

2. The coefficient value - 0.193178 on the variables of sugar cane farming experience (PUTT), indicates that each additional increase in farming experience and other variables

is constant, then the variable value of the production of sugar (HP) will decrease by 0.193178 kw;

3. Coefficient value 14,72160 on variable of sugarcane area (LLT), show that every increase of sugarcane area and other variable is constant, hence variable value of result of sugar production (HP) will experience increase equal to 14,72160 kw;

4. The coefficient value of 0.311891 on the ratoon variable (RTN) shows that each additional ratoon increase and the other variable is constant, then the variable value of the production of sugar (HP) will increase by 0.311891kw.

F-test and T-test

Based on the results of data processing, F statistic with a significance of 0.000 0,000 is smaller than alpha 0.05, so it shows that the variables PUTT, LLUT, and ROT in this study together influence the dependent variable, Sugar Cane Production. T statistic with a significance of 0.8736 in farming experience (PUT), significance of 0.000 in the area of farmland (LLT), and at 0.8078 in ratoon variable (ROT). This shows that only LLT is significant, because the significance value is 0,000 $<\alpha$.

Multiple Determination Test (R2).

From the results of multiple regression analysis with OLS method obtained Adjusted R2 value of 0.915. It shows that 91,5% of variation or change of sugar production in Situbondo Regency can be influenced by variation or change of farming experience, sugarcane area, and ratoon, while the rest of 8,5% is influenced by other variable outside model.

Classic Assumption Test

1. Normality

Based on Jarque-Bera normality test conducted, the probability value of count is 0.181547> α by 5%. This shows that the empirical model is normally distributed.

Series: Residuals		
Sample 1 30		
Observations 30		
Mean		-8.50e-15
Median		0.237493
Maximum		7.767601
Minimum		-5.996484
Std. Dev.		2.865670
Skewness		0.590237
Kurtosis		4.156056
Jarque-Bera		3.412483
Probability		0.181547
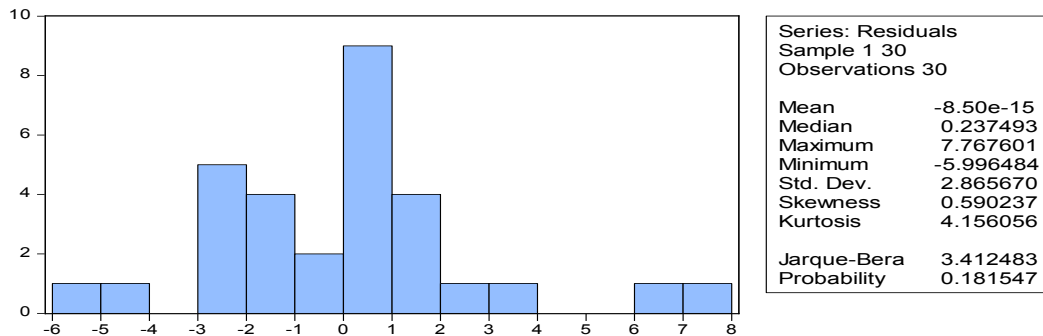
2. Multicolinearity

Based on the results of multicolinearity testing, it is known that the free correlation between variables is not worth more than 0.8 so it can be concluded that there is no multicol in the model.

	PUTT	LLT	RTN
PUTT	1.000000	0.219295	0.585207
LLT	0.219295	1.000000	0.281551
RTN	0.585207	0.281551	1.000000

3. Heteroscedasticity

Based on the heteroscedasticity test, X2 probability value of 0.1246> α is 5%. This shows that the empirical model does not contain Heteroscedasticity.

Heteroskedasticity Test: White

F-statistic	1.449054	Prob. F(8,21)	0.2345
Obs*R-squared	10.67036	Prob. Chi-Square(8)	0.2211
Scaled explained SS	12.64730	Prob. Chi-Square(8)	0.1246

4. Autocorrelation

Based on Autocorrelation test conducted using BG-LM test, the value of probability X2 of 0.9707> α is 5%. This shows that the empirical model does not have Autocorrelation.

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.001128	Prob. F(1,25)	0.9735
Obs*R-squared	0.001353	Prob. Chi-Square(1)	0.9707

5. Discussion

Farming experience (X1) has no significant effect on sugarcane production in Situbondo district, this is in line with research (Asni, 2016). Farming experiences have no significant effect on the production of farmers in Bontokaasi Village and Bellabori Village where the most farming experience has a farming experience of 13-15 years, only 7 farmers. In addition, the insignificance of the farming experience variable was observed that the average farmer had a lack of education.

Farming experience (x1) is not significant, because in Situbondo District, on average farmers use sugar cane farming methods that are carried out from generation to generation and there is no new cropping technology. Besides that the average farming experience is between 3-8 years.

Sugar Cane Area (X2) is significant to sugar production. (Apriawan, Irham,& Mulyo, 2015, and Tunjungsari, 2014) stated that the total area affected sugar cane production. The wider the harvest of sugar cane is done then the amount of sugar cane production will increase and the sugar production will increase. This is because sugar cane is the main raw material in the production of sugar. In line with Yunitasari et al (2015) research, the area of sugar cane field affects the production of sugarcane in the effort to achieve national sugarcover sugar.Research by Nasir et al., 2013 states that land also contributes to the results of sugarcane production in Pakistan.Ratoon (X3) is not significant to sugar production, because ratoon is done on average after 6 harvest (6 years). Whereas ratoon done after 3-4 times keprasan (harvest).

To increase sugar cane production, in addition to sufficient land, ratoon accuracy (after 3-4 harvests), the climate also plays a role in producing sugarcane production. Research by Zao and Rui Li (2015), states that climate contributes to increased sugarcane production. The increase in sugarcane yield is important, especially in the sugarcane farming system of the people (Tena et al, 2016).

6. Conclusion

1. Based on the test t: Farming experience (X1) and ratoon (X3), no effect / not significant on sugar production. Area of Sugar Cane (X2) is significant to sugar production in Situbondo district.
2. Based on test F: Area of Sugar Cane significant to sugar production.

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Analysis Influence of Economic Variable to Agricultural Land in Java Island and Non Java Island

Miranda Luftisari[1], Duwi Yunitasari[1], Sebastiana Viphindrartin[1], Yudhistira[2]
[1]Faculty of Economics and Business, Universitas Jember, Jl. Kalimantan no. 37, Jember (68121)
[2]Faculty Economics and Business University of Abdurrachman Saleh Situbondo, Situbondo
email: duwiyunita.feb@unej.ac.id

Abstract

Population density, infrastructure road and industrial income in Java and Non Java Island has increase in agricultural land that should be productive but quantity is decreasing. The purpose of the research were to determine the effect of population density, industrial income, and infrastructure road on agricultural land area. This research uses Least Square Panel method, with data from 2008 to 2015. The result of research is population density significant negative to agricultural land area in Java Island and Non Java Island. Infrastructure road has a significant positive effect on agricultural land area in Java Island, but long road infrastructure has significant negative effect to agricultural land outside Java Island. While the income of the industry has a negative effect is not significant on the agricultural land area in Java and Non Java Island

Keywords : Land Area, GRDP Industry, Infrastructure, People Density

1. Introduction

Jhingan (2014: 3), economic development is a process that can cause income per capita rill society increases in the long term. This economic development occurs because of changes, especially in the field of industry and trade. According Suryana (2000) is a growth-oriented economic development model, job creation, poverty eradication and economic development model oriented to the growth of basic needs.

For example from economic development model is infrastructure development. Limi and Smith (2007) road and irrigation infrastructure is an important role to be able streamline production and distribution in the agricultural sector. This condition causes demand for land is increasing. The other factors that cause land conversion occur are Population Density, Increasing population also causes the area of agricultural land in the area is increasingly eroded due to every inhabitant need board, clothing and food.

Population density in Indonesia can also lead to conversion of agricultural land into settlements (Nyak Ilham, et al., 2004). The unequal distribution of peasant populations between Java Island and Non Java has made some difference. (Suara.com, 2016) Java has labor intensive, while Non Java is less labor intensive. Java uses most of agricultural land to produce foods such as rice, corn and cassava. While the outside of Java Island agricultural products used for trading such as rubber, coconut, coffee pepper and others. Every population in Java Island and Non Java a place to live, so many agricultural land is converted into housing.

In addition to population density, the factors cause land conversion are industry. The large number of industrial developments in Indonesia can lead to constrict of agricultural land. The increasing number of settlements Non Java and Java Island caused a lot of demand for industrial goods and demand for labor, therefore the use of land for non-agriculture such as industry tends to be able to expand freely in this part of Indonesia (Nuryati, 1995). This research has hypothesis:

1. Population density negative effect agriculture land on Java Island and Non Java,
2. Industrial GRDP has negative effect on agricultural land in Java Island and Non Java,
3. Infrastructure road has negative effect agricultural land on Java Island and Non Java.

3. Methods

1. Research Design or Design
    The method used to explain the effect of industry, infrastructure and population density on agricultural land in Java Island and Non Java is Panel Least Square (PLS).

2. Types and Data Sources
    This research approach uses quantitative research. Quantitative research tends to use numbers, starting with data collection, interpretation of data and interpretation of results. The type of approach that the researcher uses is the type of quantitative description analysis approach with explanatory research (Kuncoro, 2007). The type of data used in the study is secondary data sourced from BPS data

3. Population and Sample
    The population of this research includes road infrastructure, industrial GDP and population density in Indonesia. Sample for this research in Java and some provinces Non Java. Period from this research 2008 to 2015.

4. Research Methods
    Panel data is a combination of observations time series and cross-section. There are two types of panel data in econometric analysis, balanced panel and unbalanced panel. If a subject has the same time in the observation it is called a balanced panel and if the observation time is not the same in the subject then it is called the unbalanced panel (Gujarati, 2009: 23-25).

4. Results and Discussion

Results

Based on the analysis of the effect of economic variables on agricultural land in Java and Non Java Island using panel data. Analysis of panel data used in this research is Fixed Effect. Selection of Fixed Effect analysis through test *chow dah hausman test*. The regression equation used the result of estimation of population density, industrial and infrastructure variables on agricultural land in Java and Non Java Island. The estimation results are described in the table below:

Table 1. Fixed Effect Method Estimation Result in Java Island

	C	Population density	Industrial Income	Infrastructure
Coefficient	156384.6	-47.09	0.697	54.37255
t-Statistic	2.86	-6.85	0.91	20.89243
Prob.	0.0068	0.0000	0.3675	0.0000
R-square		0.992349		
Prob F		0.000000		

(Source: Secondary data, 2016)

From Table 1 it can be seen that the constant value is 156384.6, when the population, industry and infrastructure density is 0, the total agricultural land is 156384.6 hectares. While the population density variables have a negative effect on agricultural land of -47.09344, meaning that when population density increases 1 person/km^2 it will reduce agricultural land

equal to -47.09344. The effect of significant population density on agricultural land, this can be proven with probability value 0.0000, smaller than α (5%).

Industry revenue has a positive effect on agricultural land of 0.697027, meaning that when industrial income increases 1 billion will increase agricultural land 0.697027. The effect of industrial opinion is not significant on agricultural land, this can be proven with probability value 0.3675, greater than α (5%).

Infrastructure variables have a positive effect on agricultural land of 54.37255, meaning that when the infrastructure increases 1 km will increase the agricultural land by 54.37255. Significant infrastructure impact on agricultural land, this can be proven with probability value 0.0000, smaller than α (5%).

Tabel 2. Result of Fixed Effect Regression Non Java

	C	Population density	Industrial Income	Infrastructure
Coefficient	1297236	-1366.431	0.264	-24.405
t-Statistic	8.817	-6.459	0.149	-2.294
Prob.	0.0000	0.0000	0.8816	0.0274
R-square		0.848377		
Prob F		0.000000		

(Source: Secondary data, 2016)

From Table 2 it can be seen that the constant value is 1297236, when the density of population, industry and infrastructure is 0, the agricultural land will be worth 1297236 ha.

While the population density variables have a negative effect on agricultural land amounted to 1366.431, meaning that when the income of population increases 1 person/ km^2 it will reduce agricultural land of 1366.431. The effect of significant population density on agricultural land, this can be proven with probability value 0.0000, smaller than α (5%).

Industry revenue has a positive effect on agricultural land of 0.264545, meaning that when industrial income increases 1 billion will increase agricultural land by 0.264545. The influence of industrial opinion is not significant on agricultural land, this can be proven with probability value 0.8816, smaller than α (5%).

The infrastructure variable has a negative effect on agricultural land of -24.40521, meaning that when the infrastructure increases 1 km it will reduce agricultural land by 24.40521. The influence of significant infrastructure on agricultural land, this can be proven with probability value 0.0274, smaller than α (5%).

Chow Test

Chow Test is a test to choose whether the model approach used common effects or fixed effect in testing the stability of the parameters. Hypothesis used in this research as follows:

H_0: *Common Effect Model*
H_1: *Fixed Effect Model*

Table 3. Chow Test Results Analysis of Java Island

Effect Test	Statistic	Prob.
Cross Section F.	16.717388	0.00000
Cross Section Chi-Square	54.663040	0.00000

(Source: attachment)

Based on chow test results Table 3 can be concluded that the probability of cross section F of 0.00000 is smaller than 0.05 so H_0 rejected H_1 accepted. So, a good model used is the Fixed Effect.

Table 4. Results of Chow Test Analysis Non Java

Effect Test	Statistic	Prob.
Cross Section F.	16.034775	0.00000
Cross Section Chi-Square	53.324831	0.00000

(Source: attachment)

Based on the results of chow test table 4 can be concluded that the probability of cross section F of 0.00000 smaller than 0.05 so H_0 rejected H_1 accepted. So, a good model used is the Fixed Effect.

Uji Hausman

Hausman Test is used to choose which approach is appropriate to the equation model and the data between fixed effect and random effect. Hausman This test uses Chi Square values so that the decision of this panel data selection method can be determined statistically. The hypothesis of the Hausman test is as follows:

H_0: *Random Effect Model*
H_1: *Fixed Effect Model*

Table 5. Results Analysis of Hausman Test Java Island

Test Summary	Chi-Sq Statistic	Prob.
Cross Section random	2.881077	0.4103

(Source: attachment)

Based on table 5 the value of Chi-Sq.Statistic (2.881077) is greater than probability value (0.4103) so H_0 is rejected and H_1 is accepted, so a good model used is Fixed Effect.

Table 6. Results Analysis of Hausman Test Non Java

Test Summary	Chi-Sq Statistic	Prob.
Cross Section random	1.749243	0.6260

(Source: attachment)

Based on table 6 Chi-Sq value. Statistic (1.749243) is greater than probability value (0.6260)so H0 is rejected and H1 is accepted, so a good model used is Fixed Effect.

Table 7. Results Analysis of Classical Assumsion Java Island

Uji Diagnosis	Test	Prob. ($\alpha=5\%$)	Kesimpulan
Multikolinearitas	Correlations	-	Tidak terjadi multikolinieritas
Heteroskedasitas	White test (No cross term)	0.75	Tidak terjadi heteroskedasitas
Normalitas	Jarque Berra-test	0.04	Terjadi normalitas

(Source: attachment)

Table 7 shows the test of classical assumption is not fulfilled all. Multicollinearity test results show independent variables there is no relationship between variables so that the model pass from multicollinearity. It can be seen from the correlations estimation, where the correlation value is below the boundary value of the correlation so there is no linear relationship and can explain the dependent variable in the model.

The estimation also shows that there is no problem of variance inequality from residual observation to other observations on the model so the model has homocedasticity, it is seen in the result of heterokedastisity test using white heteroschedasticity test with the result of probability value more than α (α = 5%) that is equal to 0.8510. Residual in this research model can be seen by using normality test that is Jarque-Beratest which that Jarque-Bera probability value bigger than α that is equal to 0.042883 means that model is not normally distributed. Nasrul Setiawan (without years) the data is not normally distributed because the data has an outlier. So it can be seen in Java Island own data, there are outlier in that data, that is in East Java Province data itself.

Table 8. Results Analysis of Classical Assumsion Non Java

Uji Diagnosis	Test	Prob. (α=5%)	Kesimpulan
Multikolinearitas	Correlations	-	Tidak terjadi multikolinieritas
Heteroskedasitas	White test (No cross term)	0.417	Tidak terjadi heteroskedasitas
Normalitas	Jarque Berra-test	0.00	Terjadi normalitas

(Source: attachment)

Table 8 shows the test of classical assumption is not fulfilled all. Multicollinearity test results show independent variables there is no relationship between variables so that the model pass from multicollinearity. It can be seen from the correlations estimation, where the correlation value is below the boundary value of the correlation so there is no linear relationship and can explain the dependent variable in the model.

The estimate also shows that there is no problem of variance inequality from residual observation to other observations on the model so that the model has homocedasticity, it is seen in the result of heterokedastisity test using white heteroschedasticity test with the result of probability value more than α (α = 5%) that is 0.1326 . Residual in this research model can be seen by using normality test that is Jarque-Beratest which shows that Jarque-Bera probability value bigger than α that is equal to 0.000000 mean that model is not normally distributed. According to Nasrul Setiawan (without years) the data is not normally distributed because the data has an outlier. So it can be seen in data outside Java Island itself, there are outliers in the data, that is in Maluku Province data.

Discussion

This research explains the effect of economic variables on agricultural land. Based on the research results can be seen that:

1. From the regression results, the economic variables affecting the area of agricultural land in Java are population density and long road infrastructure. Population density has significant negative effect on agricultural land area in Java Island. This is in accordance with research Puspita Mega and Effendi (2014) which shows that the macro development of settlements proportioned with the increase in population did not show a positive relationship. This indicates that the trend of home ownership is not only a place to live but also as an investment.

Dhany (2014) shows that the population density in Central Java does not show a positive relationship, its because with the increasing of population density in Central Java hence can be bad impact for agricultural land in that province. Because to be able to meet the needs of the board that is home, then we also require the land to be able to build. With the increasing number of population density in a region, of course the need for home is also more and more land needed. While the available land area remains. And also with the denser settlement in Java Tengan precisely in Semarang, it will also be less and less vacant land remaining.

2. While on Non Java from the regression results the economic variables that have a significant effect on agricultural land is the population density and infrastructure. This is same with Winoto's research in Handoko (2016) in Samarinda which states that the most vulnerable agricultural land to land conversion is rice field. This is caused by the population density in rural areas that have dominant rice agroecosystems in general is much higher than dryland agro-ecosystem, so the population pressure on the land is also higher.

   Rifchi Anggari, Zulfan and Husaini (2016) in addition to the level of population density that causes land conversion occurs, there are other factors that cause agricultural land is reduced, ie people in the province of Aceh precisely in Trumon Subdistrict to change the function of paddy fields into oil palm plantations is due to the quality of existing land in Trumon District is more suitable for plantation crops planted. In addition, economic factors are also the main reason people in Trumon Sub-district are converting land to oil palm plantations.

3. From the regression result, besides the economic variable of population density, there is variable of linfrastructure road affecting agricultural land area in Java Island. Long-term infrastructure road has a significant positive effect on agricultural land area, practically every increase of 1km long road construction, it can also raise 54.37255 ha agricultural land. Zaenal Effendi (2016) because a lot of underpass development or can be called a flyover, the construction of this flyover does not pass agricultural land or other vacant land. This flyover is built on a pre-existing road. This causes the area of agricultural land is not reduced for the Surabaya area.

   In addition, this research same with Dwi Yanti research (2014), which states that the coefficient regression road length in Central Java amounted to 0.002469 with probability 0.2275. This indicates that the length of the road has a positive effect on wetland area and significant. That every increase of 1 km of road length, the area of rice field will increase by 0,002469%. This is because the need for roads in Central Java does not always pass the rice fields.

4. Of the regression results, Non Java has a significant negative road length relationship, it means that every 1 km increase of road length will reduce 24.40521 ha agricultural land area. This research is reinforced by the news in *riau.go.id* (2017) which states that agricultural land in Riau today has been widely converted to the interests of development, such as the development of road infrastructure, industry and community settlements. This will affect the food security that must be available as a basic necessity.

   Ni Putu (2018) in Bali a lot of foreign investors who are interested to invest as the construction of toll roads in Denpasar Balu Utara. With the increasing number of road infrastructure development in Bali, it can also cause agricultural land in Bali is decreasing. This can be bad for food security in Bali. According to the local government in Bali, Bali will be more prioritizing tourism then the tourist attraction needs to be connected easily because they want as much as many can be seen tourist attraction. With the increasing number of enthusiasts for tourism, then the access road to tourism places should be

improved even better. Although it can have adverse impact on existing agricultural land in Bali Province.

5. From the regression result, PDRB of industrial sector has no significant effect to agricultural land located in Java Island. This is reinforced by research Sandi R (2009) which states that the GDP of the industrial sector does not significantly affect the conversion of agricultural land contained in Karawang. This is because agricultural industries are still largely owned by farmers, as industry opinions are increasing. Farmers only want to update technology and keep their business alive. So, the farmers in Karawang do not increase the number of their agricultural industry, so the area of agricultural land in Karawang City is not reduced.

6. From the regression result, PDRB industrial sector has no significant effect to agricultural land outside Java Island. This is reinforced by research Aditya and Theodora (2016) which states that the increase in GDP of agricultural industry in Tomohon City has no effect on agricultural land. This is because Tomohon City is a city that is a lot of development, so that even if the agricultural land increased or decreased, agricultural sector GDP in the Tomohon City continues to increase.

5. Conclusion

1. The population density variables Non Java Island and Java Island have a significant effect on the area of agricultural land.
2. Industry Revenue Variables Non Java Island and Java Island have an insignificant effect on agricultural land area.
3. Variable Infrastructure road length in Java Island and Non Java Island have a significant effect on agricultural land area.

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Competitive Analysis on a Tuna's Cold Chain in East Java: Some Policy Options

Dias Satria

Faculty of Economics and Business, Universitas Brawijaya, Jl. Veteran, Malang (65145)

Abstract

This study analysis competitive advantages in a tuna's cold chain in East Java. Data from this study is gathered from the Focus group discussion as well as interview involving traditional fishermen (TFs), in the five sampled areas, namely Malang, Pacitan, Trenggalek, Banyuwangi and Jember, representing traditional tuna fishing economies in Indonesia. Fisheries development requires policies that can support how efforts need to be made to develop the quality and quantity of fisheries. Especially related to the development related to infrastructure which has a lot to do with the management and treatment related to the fishing results of fishermen. Based on field observations, there are several policies that are able to encourage the development of existing infrastructure related to the following matters.

Keywords: traditional fishermen, competitive analysis, and transaction costs

Introduction

Development of how to develop the competitiveness of tuna in global marketing is indeed one of the jobs that is not easy. This is inseparable from how we see Tuna from the condition of resources, human resources, processes, chains that are carried out to how the marketing process has been carried out so far. One of the things that is striking is when the Tuna Fish resources are fulfilled but not balanced with how to manage the fish from the process of catching, auctioning to marketing. So that when viewed in terms of quality it has decreased. So that good governance needs to be done about the input process to marketing that can be done. Some common problems that occur regarding Tuna can be seen as follows:

1. The absence of collective actions that help fishermen in negotiating prices.
2. Still not optimal efforts to create a cold chain.
3. High barrier to entry in TPI, creating a relatively oligopolistic market.
4. The absence of a fishing industry at the downstream level near the TPI location.
5. The still low supporting infrastructure.
6. Not yet regulated efforts to encourage sustainability in fisheries (sustainable fisheries).

Based on the existing problems, an effort is needed to improve the quality and competitiveness of Tuna in the Global Market by looking at several perspectives including Governance in the cold chain, infrastructure, and also Fish Handling that can be done. Governance basically bridges how the relationship or linkages between the process chains that occur are associated with the handling efforts that have been made in order to increase the added value and afternoon power of the development of the Tuna Fish. Of course in this chain the main one is based on the view of the manufacturing organization process (or service) as a whole system consisting of input, process and output.

This Input, Process and Output cannot stand alone but involves the point of view of the acquisition and consumption of money, labor, materials, equipment, land building, administration and management. Management in this chain will determine how the process of determining costs and affect the benefits that can be obtained by the perpetrators.
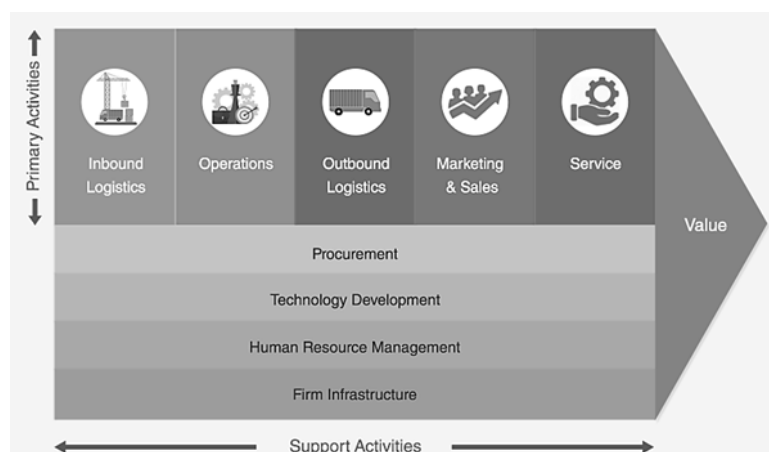
Figure 1. Coldchain

In the management of cold chains in increasing the added value of tuna fish management can be divided into 2 sectors / activities, namely primary activities and secondary activities. The balance between the two that make effort to increase the added value of tuna fish management is even better. Some explanations regarding primary and secondary activities are as follows:

Primary Activities

The primary activity that was emphasized was how the process of Tuna Fish was carried out as an object (Internal factor) so that the management of this chain rested on the Tuna fish itself. The processes of service logistics are a key factor in the development of these values.

1. *Inbound Logistics (Shipping)*
    This process involves the relationship between the processor and suppliers (fishermen and pengambek). There are some problems that occur related to this logistic / inbound process where based on the tabulation of the problems that have been done, often the prices applied between the processor to the fisherman occur asymmetric information flow so that the profit margin is on the browser. Both the existence of the auction market also narrows the potential for asymmetric flows regarding the existing prices because the margin range in the auction market is 10-20 thousand / kilo higher. Whereas for regions that do not have auction pairs (Banyuwangi for example) prices are set by the pengambek. So that departs on these problems directives regarding policies that can be done as follows:
    a. Price information updates can be made through the extension service to fishermen in the next 3-4 days
    b. The implementation of the auction system needs to be done (especially in Banyu-wangi) in order to provide profit margins to fishermen who are relatively high enough without the auction process
    c. Pricing through the processor to the pengambek in the export market can use the agreement contained in black on white
    d. The formation of fishermen groups, and the optimization of the role of fishermen groups is considered important in order to monitor the development of fish prices for the welfare of fishermen so that productivity is maintained

2. *Operations*
    Activities related to the process of converting inputs (raw tuna) into output (canned

tuna and fillets). At this stage fishermen often pay less attention to how the quality of Canned results or fillets. Of course this product diversification effort needs to be done by the fishermen themselves in order to add to the existing economic value. Some policy directives that can be carried out at this operational stage are.

   a. Debriefing and training to fishermen related to the processing of tuna fish into fillets or canned

   b. Provision of processing industry infrastructure needs to be carried out around the auction location

   c. Utilizing the role of fishermen's family to diversify Tuna fish into other forms through business centers with industry standards

3. *Logistics (Shipping) Outbound*
   Activity in distributing output. In this process the main obstacle is the distance of sending Tuna fish to the processor or the factory that receives the existing Tuna. For example, shipping is done by pengambek to processors in Surabaya, Bali and others with the packaging process, and a relatively long distance. So that there will be a decrease in the quality of fish when the fish reaches the processor. Policy directives that can be carried out to minimize the existing impact are as follows.

   a. The provision of Cold Storage as an effort to maintain and control the quality of existing Tuna fish

   b. The packaging process must be adapted to the standards set by WWF, related agencies, or export Tuna Fish management companies

4. *Marketing and Sales*
   Activities of marketing and selling Tuna. In the process of developing efforts to improve competitiveness through marketing and sales there are several things that need to be improved first regarding the quality of fish, the quality of packaging, and efforts to open a wider network of marketing chains. Some policy directives that can be developed in marketing and sales are as follows.

   a. Distribution of information related to good tuna standards ranging from industry, related agencies to fishermen. So that all stakeholders know how the quality standards are needed in the global market

   b. Industries that export Tuna bring the distance to raw materials, in the sense of building an industry near the auction place. As an effort to minimize the risk of damage to fish and so on.

   c. There needs to be innovation in efforts to expand network marketing and sales by utilizing existing technology and social media

   d. For the next few years, the concept of developing Indonesia as an integrated and sustainable resource and tuna fish market needs to be developed with an industry development approach.

5. *Service Services*
   Activities to ensure the products produced are of good quality, and in accordance with consumer preferences. If every coastal area with fisherman domination Tuna can have a good group of fishermen, then it is not impossible to form a research team with cooperation between the private sector, universities and the government. The goal is how to maintain the quality of fish so that if distributed in the global and regional markets are still in the same standard and quality.

Supporting Activities

    In addition to primary activities, supporting activities also need to be considered as an effort to improve the primary process. As for some of the items that are used as supporting

factors are as follows:

1. *Procurement*
    In this process what needs to be done as one of the supporting factors is a good planning process. Where at this stage the needs to be carried out to achieve the objectives achieved must be appropriate and mutually supportive. The problem that often occurs is a lack of support to improve the quality and quantity of Tuna because there is no adequate equipment available. So what needs attention is the effort to minimize the existing risks with good planning and adjusted with the existing lifetime as a reference for the existing procurement planning period.

2. *Technological development*
    Technology, if compared to being a double-edged knife, in the sense that if we can use it well it will be more useful for us, if we consider a threat and do not want to follow it will achieve a loss. The development of this technology needs to be carried out strategic steps so as not to become one of the obstacles where these steps can be realized with.
    a. The updated technology is tailored to the needs with the option of meeting competitiveness and optimal added value
    b. Prepare existing human resources in order to adapt to the conditions of existing technological developments. Basically, if the human resources are capable, the technology can automatically be followed

3. *Human Resources*
    Increased productivity, competitiveness, technology must be balanced with an increase in competent human resources as well. Many things can be done including training, counseling and other activities aimed at improving existing competencies. Good management of human resources, will have a systemic impact on the success of the system as a whole both related to machinery, finance, administration and others. Especially in terms of increasing added value for existing Tuna Fish production and being able to compete with global market. The role of human resource management is as a key factor to maintain the quality and quantity to be able to continue to survive and in accordance with the conditions of consumer desires.

4. *Company Infrastructure*
    The last factor is how the infrastructure of the company / industry is provided in accordance with the determination of the minimum standard set. Infrastructure is one of the factors that can be said that the supply is quite expensive, but if it can be provided properly, productivity will continue to be improved with quality beyond standards.

Porter's Diamond Analysis

In improving the competitiveness of existing Tuna, there are several aspects that need to be considered well, namely with regard to Business Competition, Demand Conditions, Conditions of Input Factors and Supporting Industries. If this can work well in accordance with optimal roles and functions, the opportunity to improve competitiveness can be done easily.

In the discussion of the influencing factors can be used as a number of development strategies which can later be used as technical references that can be done on every existing factor. Some factors that can support the increase of day asi are, among others, as follows:

1. *Business competition*
    Associated with business competition that is explained is how local conditions are able to encourage investment and sustainable innovation in the Tuna industry. Of course this can be realized if between stakeholders, both from the community, fishermen, related agencies can sit together to discuss the development of existing local potential. Some

policy direction that can be done is:

a. The preparation of the substance of the profile of the region or region with regard to local potential based on natural resources (the main sea) and humans as a compelling factor for investors

b. Increased product diversification as a branding effort for tuna fish in East Java

c. Utilizing the role of mass media and print to introduce the potential of the existing ocean

2. *Input factor*

This increase in input factors can be seen in how the efforts to provide the main needs in the production factors include Fishermen's HR, technology of capture, cold storage, road infrastructure, information and scientific and natural resources. The existing information and scientific balance can influence the development of the fulfillment of the factors of production, namely with regard to the use of technology, the use of existing infrastructure and efforts to improve the competence of human resources and the utilization of its natural resources.

3. *Factor of demand*

In addition to input factors and competitiveness of demand factors is one of the factors that need to be considered. This is because with the high demand of local people, it will encourage high productivity. That way, the existing competition to meet the demand needs can be done simultaneously. The existing demand needs to be handled well by providing good quality tuna fish. Besides that, as an innovation effort, tuna product diversification also needs to be done so that the community has many choices in using tuna both fresh and processed.

4. *Supporting industries*

In the last moment, of course, the supporting industrial sector is the main requirement, how can efforts be made to meet demand and competitiveness adjusted to the existing input factors. Some policy directives that can be done to increase the power of the afternoon include.

a. The formation of the tuna fish industry cluster which serves to improve the competitiveness and quality of the products produced

b. Establishment of a professional and capable local industry in order to reduce dependence on existing large industries.
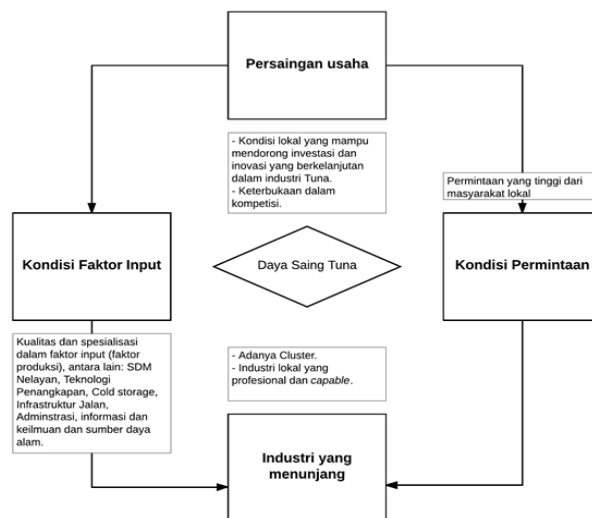
Figure 2. Porter Diamond

Porter's value chain analysis

The cold chain system is a way to maintain the quality and safety standards of food products. The cold chain system commonly referred to as "cold chain management" is one of the cold chain systems that are compiled / designed to maintain the overall integrity of the process that starts from capture, cultivation, to the distribution of products to be consumed by consumers. The aim is to maintain integrity in terms of standard compatibility and quality produced in good conditions. In meeting the determined standards, there are 3 basic standards that need to be met, namely with regard to quality, safety, and flexibility.

According to Emond (2008) cold chains can be interpreted as supply chains that are controlled by climate / temperature. This concept is generated from specific needs related to product transformation and distribution processes. To effectively manage the cold chain we need to be careful about the controlling factors which can be a modifying factor in the food supply chain process and can be adapted to the chain. According to Professor Davies (2003) there are 7 modifying factors that need to be controlled in order to achieve maximum results.

1. Taste and consumer behavior
2. Competition and product efficiency
3. Technological progress
4. Institutional and regulatory interventions
5. Environmental considerations
6. International influence and globalization
7. Political influence
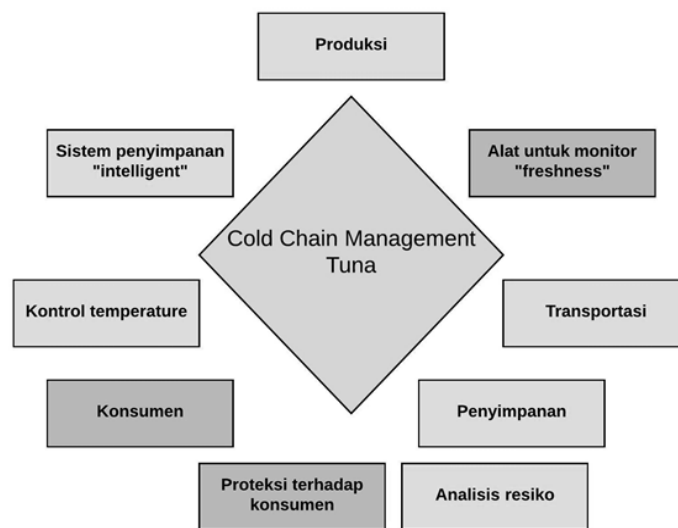
Figure 3. Cold Chain Management Tuna

Based on the factors that influence how the cold chain management takes place in Tuna Fish, there are several things that need to be considered in relation to production, tools for monitoring, transportation, irregularities, risk analysis, protection of consumers, consumers, temperature control, and storage systems. The total of nine things that can be conditioned based on approaches that occur in the East Java region that can improve how to keep Tuna Fish products can compete in the global market.

1. *Production*
   In terms of production factors that need to be considered are related to infrastructure, fishing gear, technology and so on. In this process, which is the initial process as an illustration of how the productivity produced is able to meet market demand or not. The production process, including the capture of fish in the sea, also needs to be considered

because based on the results obtained, a great chance of damage to the quality of tuna is located in the production process. Directives related to policies that can be done include the provision of equipment that meets the standards and the use of technology that can be used as a support for productivity improvement.

2. *Monitor freshness*

Monitor tools that are enforced can be institutional, which is the industry that houses them. In the sense that if a team can be formed to monitor how fresh tuna is, it will be able to support quality that is adjusted to the global market standard. Besides that, the existence of industry (including cold storage) can also support the maintenance of these qualities. So that between existing institutions and industries if they can be formed, it can become one of the spearheads in terms of maintaining the quality of Tuna fish.

3. *Transportation*

In terms of transportation, the current constraints are related to distance, type of transportation and the quality of existing road infrastructure. At present fish shipments are still based on land transportation where the problem is in long distance conditions, poor road quality can affect how the quality of the fish goes to the Processor. Especially if there is an automatic congestion it will affect the supply of ice in the car which can affect the quality of the tuna over time. So that the direction that can be done to maintain the quality of tuna fish in order to be able to compete according to standards is as follows.

a. Using a low-risk travel alternative such as by sea or air
b. Adjustment of delivery hours is adjusted to the existing traffic conditions
c. Proposed improvement of road infrastructure to the local government

4. *Deviation*

Storage or what is often referred to as cold storage is indeed its existence in order to maintain the quality of tuna fish. Besides that, the presence of cold storage is useful to suit the transportation conditions that are adjusted to the time of delivery. So if traffic conditions are not possible it can be stored first in the cold storage that has been provided. So there is no need to worry about the quality of tuna that is available if it has not been deposited to a large industry that holds the tuna yield. Policy directions regarding storage factors include.

a. Bring the location of cold storage closer to the raw source.
b. The provision of cold storage is balanced with the implementation procedures that are in accordance with the applicable procedures and do not burden the fisherman or pengambek.

5. *Risk analysis*

This risk analysis is carried out to reduce the impact of losses received by relevant stakeholders so that profits can still be obtained by all parties. Risk analysis can be carried out on all aspects including aspects of existing input-output processes. So that the hope is that by doing this analysis stakeholders can choose the steps taken according to the minimal risk.

6. *Protection of consumers*

Protect against consumers is what it means to maintain the quality of tuna fish before arriving at consumers with treatments that are in accordance with the standards set. So that ultimately the results produced can protect consumers from health risks and negative conditions and other losses.

7. *Consumers*

The terms used today are related to consumers, namely by request. In the current sense, what is requested by consumers is at the stage of good quality, competitive prices and punctuality. So what needs to be considered in this case are the things that

are the main needs of consumers. That way both parties will equally benefit both in terms of profit and ongoing cooperation.

8. *Control temperature*
    Setting the temperature is done as an effort to meet the standards determined that the results of tuna fish can be maintained in good conditions. The standards of the specified standards may be one of WWF's standard setting for a good temperature of below 50 C. So that if it exceeds the standard the risk of damage to fish quality can occur.

9. *Deviation system*
    The deviation system that can be done is by using the help of ice which reaches a temperature of 50 C. If there is already a cold storage facility then the deviation becomes more minimal. This business has become one of the efforts to keep Tuna fish products in line with the global market requirements.

Supply Chain

The great potential of tuna makes the prospect of developing Tuna fish in the future also worthy of account. This is based on the data obtained according to the number of landed tuna landings based on Fishery Management Areas (FMA). The results obtained that the largest number is located in the south coast region starting from the island of Java to the island of Sumatra with the location of FMA 572 and 573 with the process of landing results that is equal to 54%. Whereas for the 713 FMA located in Java Island around 18.2% and respectively for the 715 FMA and 718 respectively at 12.4% and 33.7%. So that the potential if it is not utilized properly and maximally will have a positive impact on the welfare and economy of the Indonesian people. However, the involvement between stakeholders who are involved needs to be properly approached so that they are coordinated and run well.
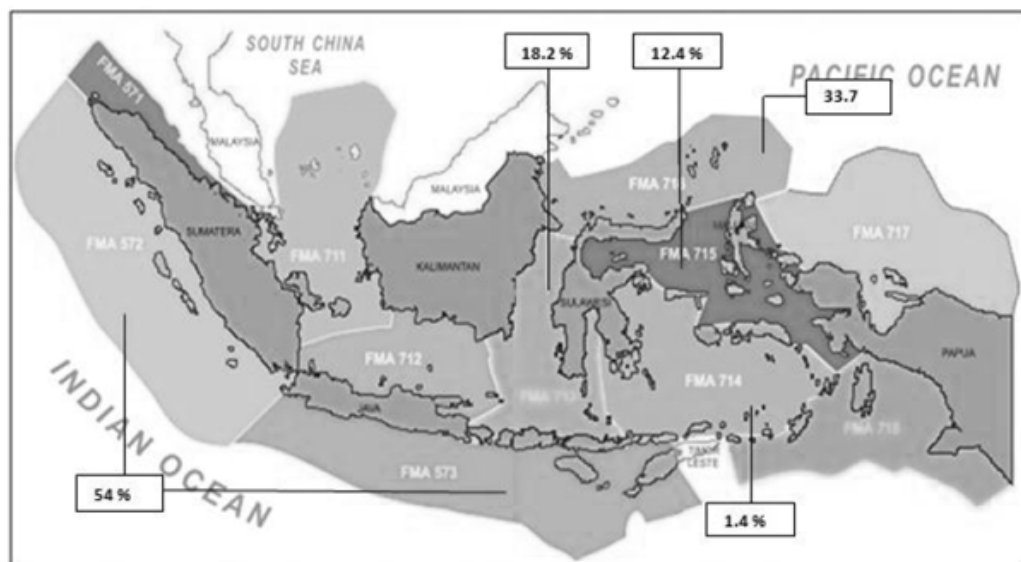
Figure 4. Yellowfin Tuna landing distribution per FMA in 2004
(adaptation after Indonesian Tuna Supply Chain Analysis 2010)

According to Harland (1996), supply chain is the management of interconnected business networks that meet the main requirements of the product and service package desired by the end consumer. In the Tuna supply chain, how to manage networks (fishermen, intermediaries, processors, wholesalers, retailers, freight carriers, etc.) from catching to the end of the consumer (from the sea to the table).
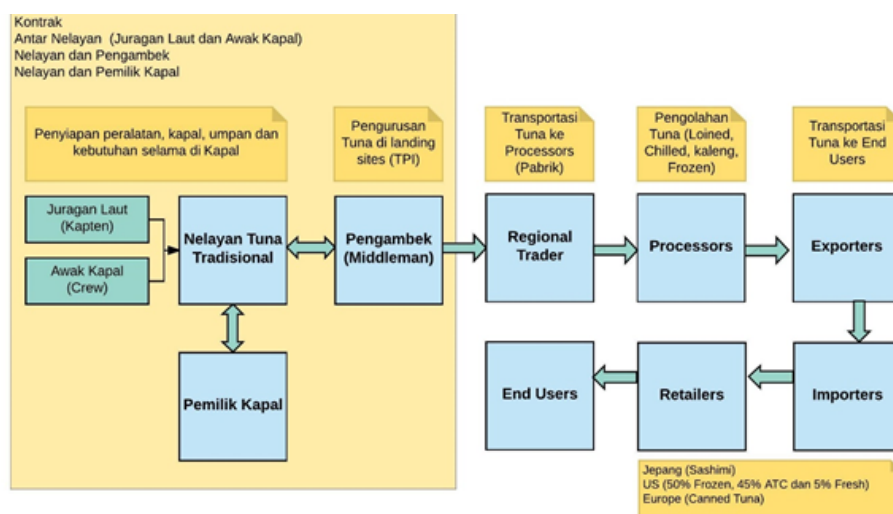
Figure 5. Tuna Fish Management Network

In the Tuna Fish management network in the East Java Region there are several stakeholders involved. Within the internal sphere there is coordination between naval employers, crew, fishermen of traditional masters, pengambek, and ship owners. The relationship between the two is a contract that takes place between the sea skipper and the crew, fishermen and pengambek, as well as fishermen and boat owners. In the case of a contract between the sea skipper and the crew, it is related to the supply of equipment and the needs of fishermen during the sea, including preparing equipment, ships, bait and needs while on board. Whereas for the contract between the pengambek and fishermen occurred during the process at the TPI Landing Site where there was the handling of tuna in the TPI by pengambek related to the weighing process until the auction. Furthermore, the delivery of tuna products to the Regional Trader is the delivery of tuna to the factory for processing. After being sent to the factory processing of tuna to the Processor is used as a Fillet or tuna in a can, so that the results are finally distributed to the end consumers who have been waiting.

Some approaches that can be used in developing Tuna Fish Competitiveness include the upstream subsystem approach, business and downstream.

1. *Concept of the Upstream Subsystem Approach*
    Based on the results of interviews conducted, there were indeed a number of obstacles regarding methods and tools for fishing. This will have an impact on how to increase the productivity of existing Tuna fish. Some strategies that can be used include:
    a. Provision of boats equipped with hatches in accordance with the stipulated conditions so that Tuna can survive their quality during fishing at sea
    b. Development of fishing equipment which must have been supported with adequate technology in accordance with the provisions and recommendations from the Fisheries Service and related agencies
    c. Use of maps of Remote Sensing technology issued by BIG to determine the location of many fish in the sea
    d. Provision of GPS equipment, and good fishing gear to minimize inefficient capture times

2. *Concept of Business Subsystem Approach*
    Business subsystems are Tuna fisheries production activities. In this subsystem there are human resources, fisheries production facilities, infrastructure, financing institutions, and the role of each institution. Strategies that can be used by others related to the

development of Tuna Fish are as follows:

a. Establishment of Institutions and research teams to maintain the quality and quantity of Tuna catches that will be sent to the Processor

b. Maximizing the performance of fishermen groups to assist in efforts to improve welfare and liaison between buyers and fishermen

c. Development and optimization of TPI functions, especially in the Banyuwangi region (Pancer)

d. Cold storage supply as an effort to maintain the quality of tuna fish if it cannot be sent to the processor according to the same day as the day of capture

3. *Concept of Downstream Subsystem Approach*

Processing subsystems include industries that manufacture primary fishery (minaindustrial) commodities into processed products both intermediate products and finish products, including the food industry. In this case if it is able to be developed it will be an extraordinary potential for the ongoing Tuna fisheries in East Java. Strategies and development of policy direction that can be done include.

a. The factory or processing industry becomes Canned and Filled brought closer to the location of the raw material so that the quality of the tuna is well maintained

b. Establishment of Tuna Fish Processing Industry cluster both center and small industry

c. Striving for branding of Tuna fish products so that it can lift the name of the East Java Region in accordance with the diversification of other products and not only famous for the sale of raw tuna

Infrastructure

Fisheries development requires policies that can support how efforts need to be made to develop the quality and quantity of fisheries. Especially related to the development related to infrastructure which has a lot to do with the management and treatment related to the fishing results of fishermen. Based on field observations, there are several policies that are able to encourage the development of existing infrastructure related to the following matters.

1. *Fish auction place*

Basically, the provision of auction places in Sendang Biru TPI can be said to be good but there are several standards that need to be added in connection with the Decree of the Minister of Maritime Affairs and Fisheries No. KEP. 01 / MEN / 2007, concerning Requirements for Fisheries Product Quality and Security Guarantee in the Production, Processing and Distribution Process, the requirements of Fish Auction Places (TPI) are as follows:

a. Have a waterproof floor that is easy to clean and sanitize, equipped with a drainage channel and has a hygiene waste disposal system;

b. Equipped with sanitation facilities such as adequate handwashing and toilets. The handwashing site must be equipped with one-time hand-washing and dryer;

c. Having sufficient lighting to facilitate supervision of fishery products;

d. Avoid or away from vehicles that emit smoke and animals that can affect the quality of fishery products;

d. Equipped with warning signs forbidden from smoking, spitting, eating and drinking, and placed in a place that is easily seen clearly;

e. Have special containers that are rust resistant and waterproof to accommodate fishery products that are not suitable for eating;

f. Fish auction sites must meet hygiene requirements and the application of cold chain systems;

    g. Must have a cooling room that can be locked to store fishery products and have container facilities for products that are not suitable for consumption at the place marked.

2. *Scales*
Associated with the direction of the policy regarding revamping the existing scales in each TPI as follows.
    a. Provision of scales with digital systems or maybe even standardized computing to obtain appropriate and valid numbers or weights
    b. Adding a number / unit of scales to speed up the queue process for weighing tuna

3. *Cold Storage*
Cold Storage is one of the important infrastructures to maintain the quality of existing Tuna Fish. The following are policy recommendations relating to the provision of cold storage.
    a. Provision / maximization of the existing cool storage function by paying attention to the standard treated by Tuna export companies to maintain fish quality
    b. Provision of cool storage is prioritized close to the fish port so that for fishermen who after getting Tuna fish can directly process it at the place

4. *Plant Management*
In order to save and reduce the risk of damage to the quality of existing Tuna, recommendations are needed regarding processing plants. The following are the details that need attention.
    a. It is necessary to provide a tuna fish processing plant to anticipate the failure of export of tuna fish related to the quality of the fish
    b. In addition, it can also improve the economy of the people / fishermen related to the diversification of Tuna fish products into processed with good factory quality

5. *Home Industry Center*
Community empowerment in the area where the Tuna fish auction needs to be done is developing a home industry to develop diversification of Tuna Fish products. The following are policy recommendations regarding home industry centers.
    a. Economic improvement and community empowerment around coastal areas need to be improved in relation to the household-based tuna management industry
    b. In addition to sustaining the economy, it can also be used as a backup when the results of fishing are not as expected and the excess catches can be used wisely without having to be discarded.

6. *Fish Handling*
Efforts to maintain and maintain the export of fresh tuna fish need to be supported by policies that can also accommodate the strengthening of the quality of tuna fish. Some policies that can be applied to fishermen / management of tuna in Sendang Biru are as follows.
    a. When the fish has climbed on the ship, it must be done carefully both when removing the fishing line or placing it on a deck, and avoiding injuries or bruising to the body.
    b. In the usual ice-filling method (chilling) the gill cavity and abdominal cavity are filled with ice grains (curai ice), then stored in the hatch by covering the body of the fish with ice beads.
    c. In the RSW (Refrigerated Sea Water) method, fish that have been cleaned/ wrapped in sacks / jute or plastic, and then stored in hatches.

Cultural, Social, Personal, and Psychological Factors on Influencing Purchasing Decisions of Citra Hand and Body Lotion at Students In The City of Jember

Sudaryanto[1], Ella Hailil Afida[1], Deasy Wulandari[1]
[1]Faculty of Economics and Business, Universitas Jember, Jl. Kalimantan no. 37, Jember (68121)
E-mail: sudaryanto.feb@unej.ac.id.

Abstract

This study aims to determine the influence of cultural, social, personal, psychological factors on purchasing decisions Hand and body lotion in Students in the City of Jember. Population in this research is Student in Town of Jember who know about Citra hand and body lotion. The sampling method used is purposive sampling with the number of respondents as many as 120 people. The method of analysis used is multiple linear rehresi analysis. The results of this study indicate that culture significantly positive effect on purchasing decisions hand and body lotion of 0.351 or 35.1% with a significance value of 0.000, social significant positive effect on purchasing decisions Hand and body lotion of 0.116 or 11.6% with a significance value of 0.033, personal significant positive effect on purchasing decisions Hand and body lotion of 0.124 or 312.4% with a significance value of 0.005, and psychological significant positive effect on purchase decision Citra hand and body lotion of 0.316 or 31.6 % with a significance value of 0.000.

Keywords: Culture, Social, Personal, Psychological, Purchase Decision

1. Introduction

The role of marketing is very important for the growth and development of the economy at this time. In line with the economy in the country of Indonesia this led to the emergence of diverse business sectors that offer products to meet consumer needs, and prices to support product quality. Human needs are a state of part of the perceived, perceived, basic satisfaction. Cosmetics is one of the necessities for women used every day to make it look more attractive. Women are creatures who love beauty, want to always look beautiful under any circumstances. Cosmetics can increase one's confidence.

The development of cosmetic products for women today is very fast, for women cosmetics is a daily requirement of women. These daily needs create opportunities for cosmetics manufacturers to create products that suit the needs of consumers. Women's cosmetic needs vary, manufacturers also create various types of cosmetic products in order to meet the desire.

Indonesia as a developing country is seen as a potential growth market. This condition is used by cosmetics producers. One company in Indonesia that already has a good brand image is PT. Unilever. PT Unilever continues to innovate to create new, higher quality, creative and distinctive product, packaging, marketing strategies and equipment. Category of cosmetic products produced by PT. Unilever include body lotion, facial care, shampoo, bath soap, perfume and deodorant. Body lotion products produced by PT. Unilever one of them is Citra. Hand body Lotion Image that is known by many consumers of these women have ten variants of aroma as a choice of consumers in determining the appropriate choice with the type of skin. Aroma offered are Image of White UV White, Citra Pearly White UV, Citra Light Touch White, Citra Night White, Lasting Glow Image, Youthful Radiance Image, Citra Nourished Radiance UV, Spotless White UV Image, Fresh Radiance Image, Advanced

White Image.

This image product is known as a beauty brand with natural ingredients from Indonesia's strong cultural heritage, and has been circulating in Indonesia for more than 30 years. Citra hand and body lotion is one brand that is very famous in Indonesia because it has many types of products that almost all wear them. Target consumers Citra hand and body lotion are women aged 15 to 35 years who want to be modern without forgetting the social norms of Indonesia. Citra is committed to always use natural ingredients of choice that have the efficacy of providing the best care for a typical Indonesian natural light skin. The ingredients of the natural ingredients used provide assurance that the Image is safely used for the skin. Comes with Vitamin C and B3 to make skin brighter and shine naturally. All Citra products have been certified halal (*source: www.unilever.co.id*).

Based on *www.topbrand.award.com*, shows that the Citra hand and body lotion occupies the first row position, obtained with a fluctuating percentage, in 2016 of 49.9%, in 2017 of 50.1%, and in 2018 by 42.9%. Where in 2016 - 2017 increased by 0.2% while in 2017 - 2018 there was a decrease of 7.2%. This shows that people are more interested Citra hand and body lotion in appeal with hand and body lotion other brands. Citra hand and body lotion is selected to be the object of research by researchers because Citra hand and body lotion became the top brand that is at home perched in the first position of personal care category in Indonesia. This makes the researcher interested whether Citra hand and body lotion is able to maintain its position in the market or not.

Many factors that influence consumer behavior on the decision to buy Citra hand and body lotion, but in this research is measured through cultural, social, personal and psychological variables. Cultural factor is a group of social values accepted by society as a whole and spread to its members through language and symbols (Anoraga, 2007: 227). Cultural factors provide the most extensive and profound influence on consumer behavior. Marketing must know the roles played by cultures, sub-cultures, and social classes. Culture refers to ideas, symbols that have meaning to communicate, value, do interpretation and evaluation as members of society.

Social factors are a group of people who are equally close considerations of equality in community status or awards that constantly socialize among themselves, both formally and informally (Lamb, 2001: 210). Consumer behavior is also influenced by social factors such as reference groups, families, and the role and social status of consumers. The personal factor is a way of collecting and grouping the consistency of an individual's reaction to the current situation (Lamb, 2001: 221). The behavior of a person in buying something is also influenced by the personality factors of the consumers concerned. Personal factors combine psychological order and environmental influences. Includes character, the basis of a person, especially their dominant characteristics.

Psychological factors are a way of identifying their feelings, collecting and analyzing information, formulating thoughts and opinions in taking action (Lamb, 2001: 224). The choice of buying a person is influenced by four main psychological factors, namely motivation, perception, knowledge, beliefs and attitudes. A person's motivation has several needs at one time, biogenic, which arises from physiological tensions, such as hunger, thirst, comfort, psychogenic needs, that arise from psychological tension, such as the need for recognition, self-worth and humiliation in the community.

The location of this research is the campus environment in Jember city, especially on three campuses in Jember city namely Jember University, Muhammadiyah Jember University and Jember State Islamic Institute, where the city of jember is a place for students to gain knowledge and is a strategic location. This makes the business activities growing, one of them Citra hand and body lotion marketing. In addition, today many students in the

city of Jember who knew and never used Citra hand and body lotion. Based on the above phenomenon, the researcher is interested to do research on Citra hand and body lotion with the aim to know whether the cultural, social, personal and psychological factor have positive effect to purchase decision of Citra hand and body lotion.

The hypothesis in this research is: (1) significant influencing cultural factors to the purchase decision; (2) social factors have a significant effect on purchasing decision; (3) personal factors have a significant effect on purchasing decisions; and (4) psychological factors have a significant effect on purchasing decision.

Based on the background that has been described above, it can be formulated problems in this study are: (1) whether cultural factors significantly influence the purchase decision Citra hand and body lotion at Students in the City of Jember?; (2) whether social factors significantly influence purchasing decisions Hand and body lotion image on Students in Jember City?; (3) whether personal factors significantly influence purchasing decisions Hand and body lotion in Student in Jember City?; and (4) whether the psychological factors significantly affect the purchasing decision Hand and body lotion image on Students in the City of Jember?

Based on the background and formulation of the above problem, the purpose of this study are: (1) to test the significant influence of cultural factors on the purchasing decision Hand and body image on Students in the City of Jember; (2) to test the significant influence of social factors on the purchasing decision of hand and body Image on Students in Jember City; (3) to test the significant influence of personal factors on purchasing decisions Hand and body Image on Students in Jember City; and (4) to test the significant influence of psychological factors on purchasing decision of hand and body Image on Student in Jember.

2. Method

1. *Research design*

   This research is an explanatory research that aims to test a theory or hepotesis to strengthen or even reject the theory or hypothesis of existing research results. According to Umar (1999: 36) explanatory research (explanatory research) is a research variable that aims to analyze the relationships between one variable with other variables or how a variable affects other variables.

2. *Types and Data Sources*

   The type of data used in this study is quantitative data, which is the type of data that can be measured or calculated directly, in the form of information or explanations expressed by numbers or shaped numbers (Sugiono, 2010: 15). Quantitative data in this research is the result of questionnaire and scale used in this method that is ordinal scale. Sources of data used in this study are primary data and secondary data. Primary data is data that refers to information obtained from the first hand by researchers relating to the variable of interest for the specific purpose of the study. Primary data sources are individual respondents, focus groups, the Internet can also be the primary data source if the questionnaire is distributed via the internet (Uma Sekaran, 2011). Technique to collect primary data in this research is quesioner. Secondary data is data that refers to information collected from existing sources. Secondary data sources are company records or documentation, publications, government, industry analysis by media, Web sites and so on (Uma Sekaran, 2011). Secondary data sources in this research are journal, article, document, and internet.

3. *Population and Sample*

   The population in this study are students in the city of Jember who know about Citra hand body lotion. The sampling technique used in this research is purposive sampling

method. According Sugiyono (2013: 218-219) purposive sampling is a technique of sampling the source data with certain considerations. The criteria to be sampled are: (1) respondents who had bought the product Citra hand and body lotion; and (2) respondents who already use Citra hand and body lotion products. According to Ferdinand (2006: 58) states that if the sample size is too large then the model becomes very sensitive so it is difficult to get goodness of fit good. For that suggested the sample size is 5 to 10 multiplied by the number of variables (indicators) of the overall variable. In this study, the number of research indicators as many as 15, so the maximum number of samples 8 multiplied by the number of indicators or as much as 8 x 15 = 120, for this study using the number of samples of 120.

4. *Data analysis method*
The method of analysis used in this study is multiple linear regression analysis.

3. Results and Discussion

Results

1. Characteristics of Respondents
Character of respondent used by researcher to give an information about respondent demographic data. Based on the results of data collection conducted, obtained data Students in the City of Jember who use hand and body lotion of 120 people. Characteristics of respondents reflected on age groupings, and the origin of the campus. The division of its characteristics are as follows:

Table 1. Characteristics of Respondents by Age

No.	Age	Number of Respondent	Percentage (%)
1.	18-20 years	53	44,16
2.	>21 years	67	55,84
	Amount	**120**	**100**

(Source: Primary data processed, 2018)

Table 1 shows that out of 120 respondents there are 53 people or 44.16% of those aged 18-20 years and 67 people or 55.84% are aged> 20 years old. The data shows that the majority of students in Jember who use Citra hand and body lotion are >20 years old.

Table 2. Characteristics of Respondents by Origin Campus

No.	Campus Origin	Number of Respondent	Percentage (%)
1.	UNEJ	41	34,7
2.	IAIN Jember	36	30
3.	UNMUH Jember	43	35,83
	Amount	**120**	**100**

(Source: Primary data processed, 2018)

Table 2 shows that from 120 respondents there are 41 people or 34.17% coming from Jember University, 36 people or 30% coming from State Islamic University of Jember and 43 people or 35,83% from Muhammadiyah University of Jember. The data shows that the majority of students in Jember who use Citra hand and body lotion come from University of Muhammadiyah Jember.

2. Multiple Linear Regession Analysis

Multiple linear regression analysis is used in data with the number of independent variables more than one type. This analysis is used to find out how big influence of independent variable to dependent variable. Multiple linear regression analysis results between independent variables (cultural, social, personal, psychological) and the dependent variable (purchasing decision). The results of multiple linear regression analysis in this study are presented in table 3 below.

Table 3. Multiple Linear Regression Analysis Results

Independent Var.	Standardized Coeff. Beta	T		T table	Description
Constant	1,721				
Cultural (X1)	0,351	4,159	>	1,981	Significant
Social (X2)	0,116	3,512	>	1,981	Significant
Personal (X3)	0,124	4,431	>	1,981	Significant
Psychological (X4)	0,316	3,772	>	1,981	Significant

(Source: Primary data processed, 2018)

Based on Table 3 above, we can obtain multiple linear regression equation as follows:

$$Y = 1{,}721 + 0{,}351X_1 + 0{,}116X_2 + 0{,}124X_3 + 0{,}316X_4$$

The constant of 1,721 is positive, meaning that if the score of social, cultural, personal and psychological variables is considered to be absent or equal to 0, then the purchase decision variable will increase by 1.721. b1 = 0.351 is the amount of Cultural contribution (X1) affecting purchase decision (Y). The regression coefficient (b1) of 0.351 shows a positive Cultural influence on Purchase Decision (Y). This means that if culture (X1) increases, then the purchase decision will increase with a coefficient of 0.351. b2 = 0.116 is the amount of Social contribution (X2) affecting purchasing decision (Y). The regression coefficient (b2) of 0.116 indicates a positive social effect on the purchase decision (Y). This means that if social (X2), then the purchase decision will increase with a coefficient of 0.116. b3 = 0.124 is the amount of Personal contribution (X3) that influences the buying decision (Y). The regression coefficient (b3) of 0.124 indicates a positive personal effect on the purchase decision (Y). This means that if personal (X3) increases, then the purchase decision will increase with a coefficient of 0.124. b4 = 0.316 is the amount of psychological contribution (X4) affecting purchase decision (Y). The regression coefficient (b3) of 0.316 shows a positive psychological effect on the purchase decision (Y). This means that if psychological (X4) increases, then the purchase decision will increase with the coefficient value of 0.316.

3. Hypothesis Testing

The t test is used to test whether the independent variable influences significantly or not to the dependent variable. In this case, t test is used to find out whether the partial cultural, social, personal, and psychological variables significantly or not affect the performance of employees. T test results can be seen in Table 4 below.

Based on Table 4:10 can be known from the influence of each independent variable to the dependent variable as follows: 1) The influence of cultural variables (X1) to the variable Purchase Decision (Y). Based on Table 4 it can be seen that t arithmetic of Culture variable (X1) is 4,159 and t value table 1,981 with significance level is 0,000. At the level of α = 5%, the value of t arithmetic> t table (4.159> 1.981) with significance value <α (0,000 <0.05), then H0 rejected and Ha accepted, which means that there is a significant influence of

culture on buying decision; 2) Influence of Social variable (X2) to variable of Decision of Purchase (Y). Based on Table 4 it can be seen that t arithmetic of Social (X2) variable is 3.512 and t value of table 1,981 with significance level is 0.000. At the level of α = 5%, the value of t arithmetic> t table (3,512> 1,981) with significance value <α (0,033 <0,05), then H0 rejected and Ha accepted, meaning that there is significant influence from social to buying decision; 3) Influence of Personal variable (X3) to variable of Decision of Purchase (Y). Based on Table 4 it can be seen that the t arithmetic of the Personal variable (X3) is 4.431 and the value of t table 1.981 with significance level is 0.005. At the level of α = 5%, the value of t arithmetic> t table (4,431> 1,981) with significance value <α (0.005 <0.05), then H0 rejected and Ha accepted, which means that there is a significant influence of personal against buying decision; 4) Influence of Psychological variable (X4) to variable of Decision of Purchase (Y). Based on Table 4 it can be seen that t arithmetic of Psychological variables (X4) is 3.772 and t value table 1.981 with significance level is 0.000. At the level of α = 5%, the value of t arithmetic> t table (3.772> 0,000) with significance value <α (0,000 <0.05), then H0 rejected and Ha accepted, which means that there is a significant influence of psychological against buying decision.

Table 4. Multiple Linear Regression Analysis Results

Variabel	T arithmetic	T table	Sig	Description
Cultural (X1)	4,159	1,981	0,000	H1 be accepted
Social (X2)	3,512	1,981	0,033	H2 be accepted
Personal (X3)	4,431	1,981	0,005	H3 be accepted
Psychological (X4)	3,772	1,981	0,000	H4 be accepted

(Source: Primary data processed, 2018)

Discussion

1. Cultural Influence with Purchase Decision

Culture is an important character of a social that distinguishes it from other cultural groups. The elements that need to be underlined for each culture are values, language, myths, customs, rituals, as well as possessions, or products, of behavior as they move it from one generation to the next (Lamb, 2001: 202).

Based on research results, culture has an influence on purchase decision because it has a significance value of 0.000 smaller than the specified significance value of 5% or (0.05), it can be concluded that cultural variables are proven to significantly influence purchasing decisions. It shows that cultural shift, greographic area, and social class on cultural indicator can lead to purchasing decision of Citra hand and body Students in Jember City.

Cultural shift caused the decision of purchasing at indicator of decision done rationally, because cultural shift happened in student life give influence to student consideration when buying Citra hand and body lotion. Geographic area causes buying decision on buying interest indicator due to the need, because the difference of climate in student area give influence to the student to buy Citra hand and body lotion which suitable with student requirement. Social class causes the decision of purchasing on indicator of decision done rationally, because class division on student based on education criterion in choosing Citra hand and body lotion give influence to student consideration when buying Citra hand and body lotion. Characteristics of the age and origin of the campus in the students are used because the characteristics of age can determine the differences in the tastes of each student in buying Citra hand and body lotion, while the characteristics of campus origin can distinguish the many interests of students in using Citra hand and body lotion.

The results of the research on the description of cultural variables can be seen that in general respondents perceive the average choose the score 5 (agree) "Cultural Shift" (X1.1) and "Cultural Shift" (X1.2), then it proves that Students in the City Jember agrees that Culture affects the Purchase Decision. Respondents gave the most responses to statements 1 and 2 of 29 respondents respectively or agreed on indicators of cultural shift and geographical area. It proves that the cultural changes that occur in student life in using Citra hand and Body Lotion and climate suit in student residence area can influence the student to decide to buy Citra hand and Body Lotion product.

The results of this study are in line with research conducted by Purimahua (2005) and Sriwardingsih, et al (2006) which shows that culture influences purchasing decisions. In addition, also confirmed by the opinion of Anoraga, 2007: 227) which states that cultural factors provide the most extensive and profound influence on consumer behavior. Marketing must know the roles played by cultures-cultures, sub-cultures, and social classes. Culture refers to ideas, symbols that have meaning to communicate, value, do interpretation and evaluation as members of society. Culture can be seen from beliefs, views and habits, consumers of a product. The higher the confidence in the product, the higher the consumer's decision to make a purchase.

2. Social Influence with Purchase Decision

Culture is an important character of a social that distinguishes it from other cultural groups. The elements that need to be underlined for each culture are values, language, myths, customs, rituals, as well as possessions, or products, of behavior as they move it from one generation to the next (Lamb, 2001: 202).

Based on research results, culture has an influence on purchase decision because it has a significance value of 0.000 smaller than the specified significance value of 5% or (0.05), it can be concluded that cultural variables are proven to significantly influence purchasing decisions. It shows that cultural shift, greographic area, and social class on cultural indicator can lead to purchasing decision of Citra hand and body Students in Jember City.

Cultural shift caused the decision of purchasing at indicator of decision done rationally, because cultural shift happened in student life give influence to student consideration when buying Citra hand and body lotion. Geographic area causes buying decision on buying interest indicator due to the need, because the difference of climate in student area give influence to the student to buy Citra hand and body lotion which suitable with student requirement. Social class causes the decision of purchasing on indicator of decision done rationally, because class division on student based on education criterion in choosing Citra hand and body lotion give influence to student consideration when buying Citra hand and body lotion. Characteristics of the age and origin of the campus in the students are used because the characteristics of age can determine the differences in the tastes of each student in buying Citra hand and body lotion, while the characteristics of campus origin can distinguish the many interests of students in using Citra hand and body lotion.

The results of the research on the description of cultural variables can be seen that in general respondents perceive the average choose the score 5 (agree) "Cultural Shift" (X1.1) and "Cultural Shift" (X1.2), then it proves that Students in the City Jember agrees that Culture affects the Purchase Decision. Respondents gave the most responses to statements 1 and 2 of 29 respondents respectively or agreed on indicators of cultural shift and geographical area. It proves that the cultural changes that occur in student life in using Citra hand and Body Lotion and climate suit in student residence area can influence the student to decide to buy Citra hand and Body Lotion product.

The results of this study are in line with research conducted by Purimahua (2005)

and Sriwardingsih, et al (2006) which shows that culture influences purchasing decisions. In addition, also confirmed by the opinion of Anoraga, 2007: 227) which states that cultural factors provide the most extensive and profound influence on consumer behavior. Marketing must know the roles played by cultures-cultures, sub-cultures, and social classes. Culture refers to ideas, symbols that have meaning to communicate, value, do interpretation and evaluation as members of society. Culture can be seen from beliefs, views and habits, consumers of a product. The higher the confidence in the product, the higher the consumer's decision to make a purchase.

3. Personal Influence with Purchase Decision

According to Kotler (1999: 232), the decision of a buyer is also influenced by personal characteristics, namely the age of the buyer and the stage of life cycle, occupation, economic circumstances, lifestyle, as well as personality and personal concept of the buyer. The personal factor is a way of collecting and grouping the consistency of an individual's reaction to the current situation (Lamb, 2001: 221).

Based on the result of the research, the person has an influence on the probability of the purchase decision because it has a significance value of 0.005 smaller than the specified significance value of 5% or (0.05), it can be concluded that the personal variable is proved to significantly influence the purchase decision. It shows that the influence of age, economic situation, and lifestyle on personal indicator can cause purchasing decision of Hand and body lotion image of Student in Jember City.

The influence of age causes purchasing decision on buying interest indicator due to the need, because of the difference of student's age causing the difference of taste in choosing Citra hand and body lotion give influence to student to buy Citra hand and body lotion according to the student's need. Economic situation causing decision of purchasing at indicator of decision done rationally, because condition which cover student in choosing Citra hand and body lotion give influence to student consideration when buying Citra hand and body lotion. Lifestyle leads to purchasing decisions on the indicators of choosing the best product, because the use of Citra hand and body lotion can describe the life of the students give effect to the use of Citra hand and body lotion in accordance with the tastes (tastes). Characteristics of the age and origin of the campus in the students are used because the characteristics of age can determine the differences in the tastes of each student in buying Citra hand and body lotion, while the characteristics of campus origin can distinguish the many interests of students in using Citra hand and body lotion.

The results of the research on the description of personal variables can be seen that in general respondents perceive the average of choosing a score of 7 (agree), then it proves that the Students in the City of Jember agree that the Personal effect on Purchase Decision. Respondents gave the most answer to statement 3 of 29 respondents or 24.4% who agreed on "Lifestyle". This indicates that the difference of student's age, circumstances or conditions surrounding the student, and student's habits can influence the student to decide to buy Citra hand and Body Lotion products.

The results of this study are in line with research conducted by Purimahua (2005) and Sriwardingsih, et al (2006) which shows that the behavior of a person in buying something is also influenced by the personality factors of the consumers concerned. Personal factors combine psychological order and environmental influences. Includes character, the basis of a person, especially their dominant characteristics. Although personality is one of the most useful concepts in studying consumer behavior, some marketers believe that personality affects the types and brands of purchased products. A person's personality is formed by a variety of indicators, such as parent work, economic circumstances and lifestyle. The higher

the position of parents in work, steadily in terms of economy and lifestyle are increasing, the higher the decision to buy a product.

4. Psychological Influence with Purchase Decision

According to Kotler (2005: 215), the choice of buying a person is influenced by four main psychological factors, namely motivation, perception, learning, and beliefs and attitudes. Individual buying decisions are strongly influenced by psychological factors, such as perception, motivation, learning, and trust, as well as attitudes. These factors are the things used by consumers in interacting. These factors are also a tool for consumers to recognize their feelings, gather and analyze information, formulate thoughts and opinions, and make decisions. Unlike the other three influences, psychological influences can be caused by one's environment because they use psychological influences when they are special (Lamb, 2001: 224).

Based on the results of research, psychological influence on the probability of purchase decision because it has a significance value of 0.000 smaller than the specified significance value of 5% or (0.05), it can be concluded that psychological variables proved to significantly influence purchasing decisions. It shows that choosing the best product, decision is done rationally, and buying interest because of requirement on psychological indicator can lead to purchasing decision of Hand and body lotion image of Student in Jember City.

Motivation causes purchasing decisions on indicators of decision made rationally, because the impetus that appears on the students to use Citra hand and body lotion gives influence to the consideration of students when buying Citra hand and body lotion. Perception leads to purchasing decisions on indicators of decision made rationally, because the response will be something received through the five senses of students about the image of hand and body lotion in order to form a picture before students decide a choice to give effect to the consideration of students when buying Citra hand and body lotion. Knowledge about the product leads to purchase decision on the indicator to choose the best product, because collecting various kinds of information about Citra hand and body lotion give effect to the use of Citra hand and body lotion according to likes. Characteristics of the age and origin of the campus in the students are used because the characteristics of age can determine the differences in the tastes of each student in buying Citra hand and body lotion, while the characteristics of campus origin can distinguish the many interests of students in using Citra hand and body lotion.

The results of the research on the description of psychological variables can be seen that in general the respondents perceive the average score of 7 (agree), then it proves that the students in the City of Jember agree that Ppsychological influence on Purchase Decision. Respondents gave the most answer to statement 3 as many as 33 respondents or 27.5% who agreed about the Experience of the Product. The answer is very agree only answered by one respondent that is on the indicator "Experience about the Product" (X4.3). This proves that the encouragement that appears to students to use Citra hand and body lotion products, awareness or responses will be something received through the students senses about the image of hand and body lotion in order to form a picture before the students decide a choice, and collection of various kinds of information about Citra hand and body lotion can influence the student to decide to buy product Citra hand and Body Lotion.

The results of this study in line with research conducted by Purimahua (2005) and Sriwardingsih, et al (2006) indicate that psychological influence purchase decision. The choice of buying a person is influenced by four main psychological factors, namely motivation, perception, knowledge, beliefs and attitudes. A person's motivation has several

needs at one time, biogenic, which arises from physiological tensions, such as hunger, thirst, comfort, psychogenic needs, that arise from psychological tension, such as the need for recognition, self-worth and humiliation in the community. The higher the motivation, perception, knowledge, beliefs and attitudes of a person towards a product, the higher the consumer's decision to make a purchase.

5. Conclusion

Based on the research results, it can be concluded as follows: 1) In the test results of multiple linear regression analysis shows that the variables Culture has a direct influence on the Decision Purchasing Image Hand and Body Lotion Students in the City of Jember of 0.351 or 35.1% with a significance value of 0.000, this means the coefficient of cultural variables significantly influence the direction of positive coefficient. The results of this study indicate that Culture affects the increase or decrease in purchasing decisions Citra hand and body lotion Students in the City of Jember; 2) a. In the test results of multiple linear regression analysis shows that Social variables have a direct influence on Purchasing Decision Citra hand and body lotion of Students Jember of 0.116 or 11.6% with a significance value of 0.033, this means the coefficient of Social variables significantly influence the direction of positive coefficient. The results of this study indicate that Social Affects increase or decrease purchasing decisions Citra hand and body lotion Students in the City of Jember; 3) a. In the test results of multiple linear regression analysis shows that the variable of Private have direct influence to Purchasing Decision Citra hand and body lotion Students in the City of Jember of 0.124 or 12.4% with a significance value of 0.005, this means the coefficient of personal variables significantly influence the direction coefficient positive. The results of this study indicate that personal affects the increase or decrease in purchasing decisions Citra hand and body lotion Students in the City of Jember; 4) On the results of multiple linear regression analysis showed that the Psychological variables have a direct influence on Purchasing Decision Image hand and body lotion Students in the city of Jember of 0.316 or 31.6% with a significance value of 0.000, this means the coefficient of variable Psychology significantly direction of positive coefficient. The results of this study indicate that Psychology affects the increase or decrease in purchasing decisions Citra hand and body lotion Students in the City of Jember.

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The Analysis of Rice Trade System By Institutional Approach (Study: Pancakarya Village Ajung Subdistrict Jember Regency)

Anifatul Hanim[1], Siti Nur Azizah[2], Ivana Rosediana Dewi[3]

[1,2]Faculty of Economics and Business, Universitas Jember, Jl. Kalimantan no. 37, Jember (68121)
[3]Faculty of Economics and Bussines, Universitas Airlangga, Jl. Airlangga no. 4, Surabaya (60286)
Email: hanim.feb@unej.ac.id

Abstract

Pancakarya village is an area where many people work in agriculture sector. The natural resources that support the agricultural sector as the main sector in this Pancakarya village, this agricultural sector in marketing is inseparable from the trading network that is played by the channeling institutions, to market their agricultural products to the hands of consumers. There are two channels of governance that exist in the pancakarya village, the first from farmers to middlemen, large-scale rice mills, retailers, consumers. Farmers' second channel to wholesale traders, small-scale rice mills, large-scale rice grills, retailers and consumers. Of the two existing commercial channels the first channel is more efficient because the institutions involved are fewer. The marketing margin on grain farming in Pancakarya village is at the merchant trader of Rp. 400, -, on a small-scale rice mill of Rp.3.700, - on a large-scale rice mill Rp.1650, - and the retailer is Rp.1.200, -. So the biggest margin lies in small-scale rice milling. And for the value of farmer share, the existing trading channel in Pancakarya village is not efficient because the value of Farmer Share is 35.34 ie <40%. and the factors affecting the farmers in the village are still involved with the inefficient administrative channel are: a) Petani do not have adequate facilities and equipment, b) The existence of bonds from capital loans, c) Fast and easy process.

Keywords: Grain Farming, Marketing Margin, Marketing Efficiency, Farmer Share.

1. Introduction

The Regulation of the Minister of Agriculture (Permentan) No. 21 / PP.2004 / 2015 the Guidelines for the Purchase Price of Unhusked Rice and Rice outside the quality of the government stipulates that the HPP is divided into two, namely the first HPP guidelines beyond the quality of the government in the mills, and the two HPP rice outside the quality of traders BULOG with premium quality. And grain outside of quality 1 (GLK-1) moisture content 14% -18% with a vacuum content of 11% -15% for Rp 3,900 per kg. For GLK-2 with moisture content 19% -25% void content of 11% -15% then the price Rp 3.500 per kg. While GLK-3 with water content of 26% -30% and vacuum content of 11% -15% at a price of Rp 3,300 per kg.

For dry grain harvest (GKP) with water content criteria 19% -25%, hampanya 7-10% for Rp 3,750 per kg. In addition, the HPP rice is out of quality at Bulog Warehouse with premium quality (KP) I at Rp 7,700 per kg. KP II is set at Rp 7,500 per kg, medium quality of HPP of Rp 7,300 per kg and low quality at Rp 7,150 per kg.

The low HPP set by the government makes farmers prefer to sell to high-yielding middlemen the range of Rp.3.800, - Rp.4,500, - thus making farmers involved with existing trading channels, although the channel is inefficient, farmers has no choice but to sell its produce. In addition to the higher prices the middlemen are able to lend to farmers during the planting season, the rapid process, and the bonding of capital makes the farmers prefer

to sell their crops to the middlemen rather than sell to the government.

Pancakarya village is an area where many people work in agriculture sector

The natural resources that support the agricultural sector as the main sector in this Pancakarya village. The natural resources that support the agricultural sector as the main sector in this Pancakarya village, this agricultural sector in marketing is inseparable from the trading network that is played by the channeling institutions, to market their agricultural products to the hands of consumers. Until now, the potential of existing resources has not really optimally empowered, this is because the lack of knowledge (education) the majority of farmers there in processing agricultural products based on knowledge only down. In addition, lack of supporting facilities such as institutions that shelter the farmers in the village. Lack of price information and slow knowledge of farmers related to harvest prices resulted in the farmers only as price taker of the rice traders in the village.

The length of the trading channel affects the channel's efficiency level, the longer its channel channel will become less efficient. this is because the marketing channel tends to minimize the share that the farmer receives and increases the cost to be paid by the consumer. Development of a disparity between high grain and rice prices is the result of long distribution chains of agricultural commodities. This situation will cause the high cost of distribution of marketing margin so that there is a part that must be issued as merchant profits. Although in general farmers are not involved in the product marketing chain, so the added value of processing and trading of agricultural products is only enjoyed by traders. This research is aimed to find out: How is yag trading pattern exist in Pancakarya Village Ajung Sub-district of Jember Regency, and how is the efficiency level of the marketing pattern with marketing margin and farmer share approach? And what factors behind the community in the village PancakaryaAjung District Jember regency still choose the channel of a longer trading system or can be regarded as a more inefficient trading system channel?

2. Literature review

The efficiency of a distribution channel can be seen with the concept of trade margin (UnggulPriyadi, et al, 2004). The trading margin is defined as the price difference or the price difference that the consumer pays at the price received by the producer farmer or may also be expressed as the value of the services of the commercial operation activity from the producer level to the point of the end consumer.

According to Hammond and Dahl (1977) states that trade margins describe price differences at the consumer level (Pr) at producer-level prices (Pf). Each distribution agency performs different functions, causing different selling prices from one institution to another to the level of the final consumer. The more marketing agencies involved the greater the price difference between producers and consumer prices. The merchant margin can be said to be the sum of the margin on every trading institution involved. The low cost of the trading system may not necessarily indicate a high level of efficiency. One that can be used in assessing the efficiency or absence of a trading system can be seen from the value of Farmer's Share by comparing the value obtained by farmers with the price yagdiayarkan by consumers.

Downey and Steven (1992) point out that the efficiency of the trading system is a benchmark for the productivity of the trading process by comparing the resources used to the output generated during the trading process. According to Soekartawi (1989), the efficiency of the trading system is measured by comparing the value of output and input and the efficiency of the trading system will occur if: (1) The trading cost can be reduced so that there is profit, (2) the existence of healthy market competition, (3) Percentage of

differentiation the price paid by consumers and producers is not too high, (4) Availability of physical facilities of trading system. It is hoped that with the pattern of efficient commercial channel, it can be known that the trading channel can bring benefits to the trading institutions involved from the efficient trading channel. The commodity trading process of a commodity requires trading institutions or called intermediaries. According to Philip Kotler (1997) states that distribution channels are a series of interdependent organizations and are involved in the process of making goods and services ready for use and consumption. The distribution channel is basically an intermediary that bridges between producers and consumers. The intermediary in the trading system will facilitate the trading activities, and each intermediary performs the task of bringing the product and its holdings closer to the end buyer which is a channel level. These intermediaries or trading institutions may be individuals or institutions. (Rismayani, 2007).

3. Research Methods

The method of this analysis the researchers used the analysis of data Farmer's Share and marketing margins which is the difference between the consumer price level and the price level consumers and prices at the producer level. Farmer Share is used to answer the major trading chains and prices that occur in each chain. *(FS) = Pf / Pr x 100%*

Where FS: Farmer share or number of parts received by farmers (%) and Pf: Purchase price at farmer level (Rp/kg) and Pr: retail price at consumer level (Rp/kg) if FS value> 40% is said to be.

Determination of respondents in this study based on purposive sampling and population of respondents consisting of farmers in the village of Pancakarya that is in the farmer group. The determination of respondents of rice trading institutions is done by using snowball sampling technique which is a non probability sampling technique which as a tool to learn the structure of social network. Snowball sampling is used where. There is little knowledge of the target population. Snowball sampling uses a small group of early informants. (salganik and hackathorn, 2004). With this method the trade channel trajectory.

4. Results and Discussion

Farmers in the village of Pancakarya many experiencing difficulties in agriculture one of them related to the price of agricultural products, when the harvest arrived grain prices fell drastically while the rice planting season tends to increase. During harvest season, farmers will put aside a small amount of grain for daily consumption, but most of them will sell most of their crops because they need capital for the next planting period. These conditions make farmers difficult to meet the needs of daily living, so that not a few farmers who choose to borrow money to traders.

Based on the above margin analysis, it is known that marketing margin on grain farming in Pancakarya village is the trader of middleman Rp. 400, -, on a small-scale rice mill of Rp.3.700, - on a large-scale rice mill Rp.1650, - and the retailer is Rp.1.200, -. So the biggest margin lies in small-scale rice mill. And for the value of farmer share, the existing trading channel in Pancakarya village is not efficient because the value of Farmer Share is 35.34 ie<40%. above explained that the existing trading channel in Pancakarya village shows that the existing trading channels are inefficient. According to Hammond and Dahl (1977) states that trade margins describe price differences at the consumer level (Pr) at producer-level prices (Pf). Each distribution agency performs different functions, causing different selling prices from one institution to another to the level of the final consumer. The more marketing agencies involved the greater the price difference between producers and consumer prices. The merchant margin can be said to be the sum of the margin on every

trading institution involved. The low cost of the trading system may not necessarily indicate a high level of efficiency. One that can be used in assessing the efficiency or absence of a trading system can be seen from the value of Farmer's Share by comparing the value obtained by farmers with the price yagdiayarkan by consumers.

The farmers in Pancakarya village still use the inefficient channel. In other words, farmers prefer to sell their crops to marketing institutions, especially middlemen, farmers prefer and sell in the form of GKS (dry paddy grain) rather than the form of rice that can be directly sold to consumer. Should if the farmers do not get involved with the marketing institutions, the profit that each of the trading institutions can be owned by the farmers in accordance with the opinion of Hammond and Dahl (1977) each distribution agency will perform different functions that cause the difference in the selling price of the institution one with the other up to the final consumer level. The more marketing agencies involved the greater the price difference between producers and consumer prices. And according to the results of interviews with farmers, the following factors are causing farmers to still use these inefficient commercial channels;

1. *Farmers do not have adequate facilities and equipment*
   Farmers prefer to sell their crops in the form of unhulled rice paddies to the middlemen, this is because the farmers do not have milling used to process the grain into rice, in addition to rice milling, farmers also difficult to dry dry rice paddy into dry grain dry, such as wide enough to dry grain or a modern rice dryer without dry rice grain dryers can not be processed into rice, although it can be ground and the result will be destroyed and easily moldy compared with grain that dried in the sun to dry first. As well as farmers do not have adequate storage facilities to store the grinding of rice, as we know that rice can not be stored too long, but will cause the smell of rice will be easily destroyed or fragile and lice. So if it does not have good storage advice then haga selling rice will go down.

2. *The existence of bonds from capital loans*
   As explained above the standard of living of farmers in Indonesia is still very unfeasible, many farmers who live below the poverty line. So it is common if farmers have difficulty capital and difficulties in meeting the needs of his life. This is what makes farmers in the village Pancakarya prefer to sell their crops to traders middlemen, because to meet the daily needs while waiting for the harvest season arrives farmers usually borrow money to traders middlemen with guaranteed sales of crops. Besides, farmers also need a quick fund for planting capital in the next planting season, farmers in this dsa prefer to borrow to traders middlemen rather than to the bank or cooperative, because it is considered difficult and complicated. In addition to farmers other marketing institutions such as middlemen, and small-scale rice mills are also bound due to capital problems. So middlemen get funds to buy farmers' crops from small-scale or large-scale rice mills, with the records they have to sell their purchases to the mill. This also applies to small-scale rice mills, they are tied to the capital givers of large-scale rice mills.

3. *Fast and easy process*
   The middlemen traders in their activities will immediately join the farmers to purchase the crops, so when the harvest season arrives the traders will see the condition of rice farmers to estimate the purchase price, after which the middleman will come to the farmers to discuss the problem of buying and selling of rice. after the match, usually the middleman will give advance as a binder so that farmers do not sell rice to other middlemen. When it is time to harvest the rice will be cut from the trunk and then separated and inserted into the sack to facilitate the process of penimbaan. After the process pemimbagan merchant traders will pay off the remaining payment from the farmers harvest. so when the harvest season arrives the farmers will only wait for the

middlemen to come and sell their crops.

5. Conclusion

Based on the results of research and discussion can be concluded some results as follows:

1. The commercial channel in Pancakarya village Ajung sub-district Jember there are two commercial channels: first, from farmers to wholesalers to small-scale rice mills to large-scale rice mills to retailers to consumers. The second is from farmers to middlemen to large-scale rice mills to retailers to consumers.

2. From the above explanation, it is known that the highest marketing margin is consecutively occurred in small scale rice miller (34.41%) of large-scale rice mills (15.6%) retailers (11.17%) of middlemen (3.72%). As for the profit margin is, large-scale rice mill Rp. 1,100, - per kilogram of small rice mill rice Rp.170, - per kilogram of rice retailers Rp. 820, - per kilogram of rice. merchant trader Rp. 125, - per kilogram of GKS.

3. Factors that affect farmers continue to use these inefficient channels are:
   a. Farmers do not have adequate facilities and equipment
   b. The existence of bonds from capital loans
   c. Fast and easy process

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Flypaper Effect and Economic Growth in Solo Raya

Binar Syabani Wulandari[1], Mulyanto[1], Guntur Riyanto[1]
[1]Universitas Sebelas Maret, Jl. Ir. Sutami no. 36A, Surakarta (57126)

Abstract

Regional autonomy is intended for the regions to be free to organize and manage their own affairs, including in terms of financial matters. Decentralization is an effective government policy tool for dealing with issues related to economic stability and growth. The purpose of this study is to know the phenomenon of flypaper effect on Local Expenditure in Solo Raya. Another aim is to know the influence ratio of independence, dependency ratio, and effectiveness ratio of PAD on economic growth in Solo Raya. Considering the previous research then this research was conducted in Solo Raya. This research uses quantitative method using panel data with secondary data from 2012 to 2016 to see both flypaper effect phenomenon on Local Expenditure and influnce of regional financial independence, regional financial dependence, and the effectiveness of regional finance to economic growth. The results found are flypaper effects that occur in local expenditure in Solo Raya. Another result is the independence ratio has a significant and positive effect on economic growth. While the dependency ratio and effectiveness ratio of PAD have a positive and insignificant effect on economic growth.

Keywords: Flypaper effect; PAD; DAU; DBH; Regional Expenditure; economic growth

1. Introduction

Regional autonomy is intended so that regions are free to regulate and manage their own affairs, including in terms of financial management. In Law Number 23 Year 2014 states that the region has the authority to regulate and manage the government and the interests of its people in the system of the Unitary State of the Republic of Indonesia. The existence of demands to prove the independence of a region makes regional autonomy a challenge that must be faced.

The success of regional autonomy, stated by [1], must be directed at allocating adequate funds through balancing funds between the central and regional governments, so that local government policies have the aim of improving services to the community and increasing participation in development.

[2] contains a way of life called regional autonomy, in which regions have their own responsibilities and authority in meeting the needs of the community and the interests of their respective regions. Regional autonomy is also intended to make people get fair prosperity.

Regional autonomy is also intended to make the community get equitable prosperity. According to [2] article 1 point 6, regional autonomy is defined as the right, authority and obligation of an autonomous region to regulate and manage their own government affairs and the interests of the local community in the system of the Republic of Indonesia. The implementation of regional autonomy makes regions free to take care of their own regions, including in the financial sector.

As stated by [3], that the implementation of regional autonomy which focuses on the regency and city regions is indicated by the handover of a number of authorities from the central government to the relevant regional government, both concerning regional financial management, economic planning and other planning, all of which are delegated from the center to the regions. Thus, the local government has the authority to allocate regional

expenditure in accordance with the potential of the resources they have.

Decentralization is a principle whereby regions have the authority to regulate and manage all government affairs, so that regions can make policies in order to provide services to the community, enhance community participation, and empower society.

The principle of decentralization regulates the transfer of authority from the central government to local governments, except for fiscal/monetary aspects, foreign policy, defense/security, religion, and the justice system. The main objective of implementing fiscal decentralization is to create regional independence which is characterized by the management of Local Own Source Revenue (PAD).

Decentralization gives the broadest authority to the regions to make a policy in order to provide services, increase participation, initiatives and empowerment of the community to improve the welfare of the community. Therefore, the driving force of development lies with the local government, where the local government is closest to the community. Decentralization is also considered as an effective government policy tool to deal with problems related to stability and economic growth.

[2] mention that decentralization is the transfer of government affairs by the Central Government to autonomous regions based on the principle of autonomy. While the principle of autonomy is the basic principle of implementing Regional Government based on regional autonomy. The existence of this authority makes the local government must have readiness because the affairs handled are increasing. Financial readiness is one aspect that must be prepared, where the region has the ability to explore the potential of its own financial resources that are used to finance the financing needs of the region without having to depend on transfers from the central government. But in reality the transfer from the central government to the regional government has increased every year. This shows that the local government has a dependency on the central government.

For this reason it is necessary to regulate a system of financial balance between the central government and the regional government. In [4] explain about a fair, proportional, democratic, transparent and efficient financial distribution system in the framework of funding the implementation of Decentralization, taking into account the potential, conditions, funding of regional needs, and the amount of funding for the implementation of Deconcentration and Co-Administration.

With the existence of fiscal decentralization, it is expected that the local government is able to provide good public services for its citizens. Good financial performance and public services will increase economic growth. However, the increasing balance of funds from the central government to the local government shows that local governments are still dependent on the central government, instead of increasing PAD by exploring the potential of the regions they have.

But in reality the local government uses the transfer funds as the main fund for operations included in the Realization of Regional Income and Expenditure Statements. Fiscal decentralization which initially aimed at creating regional financial independence became a dependency, seen from the large amount of funds transferred from the center to the regions.

Table 1. Fund transfers from the Center to the Regions (in millions)

Year	DEH	DAU	DAK	Total
2012	100.055.200	273.814.400	26.115.900	399.985.500
2013	102.695.000	311.139.300	31.697.100	445.531.400

Year	DEH	DAU	DAK	Total
2014	113.711.700	341.219.326	33.000.000	487.931.026
2015	110.051.994	352.887.849	58.820.675	521.760.517
2016	120.812.877	385.360.847	89.809.365	595.983.089

(Source: APBN, Ministry of Finance of the Republic of Indonesia)
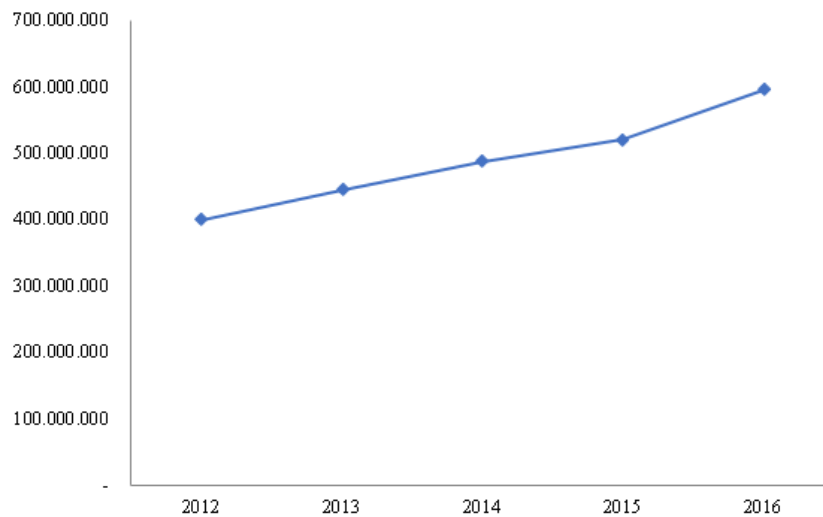
Figure 1. Total Funds for Central to Regional Transfers

Along with the increase in the amount of transfer funds, making autonomy which was originally aimed at creating regional independence actually created a new dependency problem. Increased transfer funds also make local expenditures larger so that financing of local expenditures becomes ineffective. This is because the greater local expenditure sourced from transfer funds so that it is called the flypaper effect.

Research conducted by [5] found that PAD and General Allocation Funds (DAU) have a positive effect on regional spending. And all regions despite having very high PAD, run into flypaper effects. Where this indicates that decentralization has not been successfully implemented in Indonesia. The results of this study are also supported by [6] research, where the variables of PAD, DAU, and Revenue Sharing Funds (DBH) have a positive effect on local expenditure, while the Special Allocation Fund (DAK) does not affect regional spending. The higher PAD, DAU, and DBH will increase regional expenditure, where the DAU's coefficient is greater than the coefficient of PAD. This indicates that the Regency/City in Indonesia has a dependency on the Central Government and fall on the phenomenon of flypaper effect.

[7] conducted research on flypaper effects that are associated with regional disparities in the eastern and western regions of Indonesia. The study shows that PAD and DAU affect local expenditure and there are gaps between the two regions. And flypaper effects occur in regions/cities in Indonesia. In Java, research was carried out by [8] with the result that there was no flypaper effect on local expenditure in Java. This indicates that the Local Government in Java does not rely on DAU for regional expenditure. However, DAU and PAD significantly affect operational expenditure, capital expenditure and overall local expenditure.

More conical research conducted by [9] in West Java Province. Unconditional grants or unconditional transfers aimed at ensuring fiscal equality between regions have a significant and positive influence on local expenditure. Similarly PAD has a positive and significant

influence on local expenditure. But GRDP has a significant and negative influence on local expenditure. The coefficient of PAD is greater than the unconditional grant coefficient value, so it does not indicate the existence of flypaper effect in West Java Province.

A similar thing was found [10] with research conducted in the Province of West Java. The result is PAD, DAU, and DAK which have a significant influence on local expenditure. The magnitude of the coefficient number of PAD makes the flypaper effect didn't occur in West Java Province.

Research [11] states that there is no flypaper effect on local expenditure or local sub-sections of expenditure in the Special Region of Yogyakarta (DIY). In sub-personnel expenditure, official travel expenditure, maintenance expenditure, social assistance expenditure the PAD's coefficient is greater than DAU's and DAK, which means that for these expenditures the Local Government uses PAD more than DAU and DAK. Whereas in the capital expenditure sub and unexpected expenditure the PAD's coefficient is smaller than DAU and DAK, thus indicating the occurrence of flypaper effect.

On a national scale, research on the impact of regional financial autonomy on economic growth is carried out by [12]. The results obtained are regional financial autonomy that has a positive and significant effect on economic growth, which means that the autonomy fiscal expenditure will encourage economic growth. [13] examined the fiscal potential for economic growth in Java. In this study shows that PAD and DBH have a positive and significant effect on economic growth. Whereas DAU and other legitimate regional revenues have a negative influence on economic growth.

[14] examined the influence of local government financial performance on economic growth in Bali Province. The results of the study stated that the independence ratio had a positive and significant impact on economic growth. While the effectiveness ratio, efficiency ratio and income growth have no significant effect on economic growth. In North Sulawesi, the influence of financial performance on economic growth was examined by [15], where the result is the independence ratio and effectiveness ratio have a positive and significant effect on economic growth. While the dependency ratio has a negative and significant influence on economic growth.

Whereas in Central Java [16] examined fiscal decentralization on inflation and economic growth. Fiscal decentralization in this study focused on the ratio of the realization of direct expenditure of the local government to the realization of direct expenditure by the central government. The results of the study found that fiscal decentralization had a significant positive effect on inflation and economic growth.

Based on previous research which has never been done in the local government in Solo Raya, this research was conducted in Solo Raya, which consists of 1 City and 6 Regencies namely, the City of Surakarta, Boyolali Regency, Sukoharjo, Karanganyar, Wonogiri, Sragen and Klaten. The temporary suspicion is that there is a flypaper effect on local expenditure in Solo Raya where PAD, DAU, and DBH have a positive and significant effect on local expenditure. Then the independence ratio, dependency ratio, and effectiveness ratio have a positive and significant effect on economic growth.

Regional finance as stated in [2], are all regional rights and obligations in the framework of the implementation of regional governance that can be assessed with money including all forms of wealth related to the rights and obligations of the region. Where the regional finances include :
1. Regional rights to collect local taxes and regional retribution and make loans
2. Regional obligation to carry out regional government affairs and pay third party bills
3. Regional revenue
4. Regional expenditure

Regional assets managed by themselves or other parties in the form of money, securities, accounts receivable, goods, and other rights that can be valued with money, including assets separated from regional companies

6. The wealth of another party controlled by the regional government in the framework of carrying out the tasks of the regional government and/or the public interest.

On its implementation, regional finance must be managed in an orderly manner, abiding by the provisions of the legislation, efficient, economical, effective, transparent, and accountable by taking into account the sense of justice, propriety and benefits for society.

Regional finance is also the dominant factor to measure the level of ability of a region in implementing autonomy. Regional financial conditions also determine the form of policies carried out by regional governments whose implementation is outlined in the Regional Budget (APBD).

According to [17], APBD is a regional annual financial plan that is discussed and agreed upon jointly by the Regional Government and the Regional People's Representative Assembly (DPRD), and determined by the Regional Regulation. The form and composition of APBD consists of : local income, local expenditure and local financing. Local income is the right of local government which is recognized as an increase in the value of net wealth. Local income consist of PAD, Transfer Revenues, and Other Legitimate Regional Revenues. PAD is revenue derived from local taxes, regional retributions, the results of regionally owned companies, the results of separate regional wealth management, and other legitimate local revenue.

Transfer revenues include transfers from the Central Government and transfers between regions. Transfers from the Central Government consist of balance funds, special autonomy funds, privilege funds, and village funds. Transfers between regions include income sharing and financial assistance.

Balance Funds are funds sourced from State Budget (APBN) revenues allocated to regions to fund regional needs in the context of implementing decentralization. Balancing funds consist of DAU, DBH, and DAK.

DAU is a fund sourced from APBN's revenues allocated with the aim of equal distribution of financial capacity between regions to fund regional needs in the context of implementing decentralization. DBH is a fund sourced from APBN's revenues allocated to regions based on percentage figures to fund regional needs in the context of implementing decentralization. While DAK is a fund sourced from APBN's revenues allocated to certain regions with the aim of helping fund special activities which are regional affairs and in accordance with national priorities.

Local Expenditures are the obligations of local governments that are recognized as a deduction from net wealth. Local Expenditures consist of Direct Expenditures and Indirect Expenditures. Whereas Regional Financing is all revenues that need to be repaid and/ or expenditures that will be received again, both in the fiscal year concerned and in the subsequent fiscal years.

Regional Financing consists of receipt of financing and financing expenditure. Financing receipts include the remainder of the previous budget year calculation (SILPA), disbursement of reserve funds, the sale of separated regional assets, regional loan receipts, re-acceptance of loans, and regional receivables. While financing expenditures include the establishment of reserve funds, investment in capital (investment) of the regional government, payment of principal debt, and regional lending.

Economic growth is a process of continuous change and the efforts of a country to enlarge or increase the income of its people. An economic growth is influenced by the

fiscal potency and financial ratios of a region. Fiscal potency is a region's ability to raise funds through legitimate sources. Regional fiscal potency is reflected in PAD which includes local taxes, regional retributions, Regional Owned Enterprises (BUMD) profits, and other legitimate income.

Financial ratios are a comparison betweezn the realization of one period and the previous period so that the trends that occur. By looking at the value of a region's financial ratios, it can be seen the level of regional financial independence to finance the implementation of regional autonomy, measuring effectiveness and efficiency in realizing regional income, measuring the level of government activity in spending its regional income, measuring the contribution of each source of income, and being able to see growth or development of revenue and expenditure gains over a certain period.

To analyze financial ratios, we can use independence ratios, dependency ratios, and effectiveness ratios. Independence ratio can be used to see the financial capacity of a region in the implementation of regional autonomy. So that a region that is independent in finance is expected to carry out development and services to the community without the transfer from the central government.

The regional dependency ratio is calculated by comparing the amount of transfer income received with total regional revenues. So as to reduce dependence, the local government is expected to explore the regional's potency to increase PAD.

Whereas the effectiveness ratio of PAD shows the ability of the local government in mobilizing the receipt of PAD in accordance with the target. The effectiveness ratio can be used to show the success or failure of the achievement of budget objectives based on the realization obtained.

Local Own Source Revenue (PAD)

According to [4], PAD is income obtained by regions collected based on Local Regulations in accordance with laws and regulations. PAD's aims to authorize local governments to fund the implementation of regional autonomy in accordance with regional potential as a manifestation of decentralization. PAD comes from local taxes, regional retributions, the results of the management of separated regional assets, and other legal PAD.

Other valid PAD includes the sale of unrestricted regional assets, demand deposits, interest income, rupiah exchange rate differences against foreign currencies, commissions, deductions, or other forms as a result of sales and/or procurement of goods and/or services by the region.

General Allocation Funds (DAU)

DAU is one component in the Balancing Fund. In [4] stated that the total amount of DAU is at least 26% of net domestic income in the APBN. Where the allocation is based on fiscal gap and basic allocation. The fiscal gap is a fiscal need minus the regional fiscal capacity. While the basic allocation is calculated from the total salary of Local Government Employees (ASN)

Regional fiscal needs are a regional funding need in the context of the administration of governmental affairs that are the regional authority, both compulsory affairs related to basic services and optional government affairs. Regional fiscal capacity is a regional funding source derived from PAD and DBH.

There is a difference in the proportion of government affairs that are handed over to the regions and there are differences in the fiscal capacity of each region so that the DAU is given to the regions. This is intended to prevent fiscal disparity between regions.

Revenue Sharing Fund (DBH)

DBH are funds sourced from the APBN's certain revenues allocated to producing regions is based on a certain percentage figure with the aim of reducing inequality in financial capacity between the central and regional governments. In [2] stated that the DBH is derived from taxes, excise and natural resources.

Taxes that can be included in the DBH are Land and Building Tax (PBB), and Income Tax (PPh) Article 25 and Article 29 of Domestic Personal Taxpayers and PPh Article 21. Revenue from excise is tobacco products in accordance with the provisions of legislation . Whereas DBH derived from natural resources in the form of forestry, mineral and coal mining, petroleum mining, natural gas mining, and geothermal mining.

Local Expenditure

According to [17], Local Expenditures are the obligations of Local Governments which are recognized as a deduction of net worth. The Local Expenditures are prioritized for the expenditure of Mandatory Government Affairs related to basic services which are determined by minimum service standards that are guided by technical standards and regional unit price standards in accordance with the provisions of the legislation.

Local Expenditures can be grouped into direct and indirect expenditure. Direct expenditure is expenditure that is directly related to programs and activities. Direct expenditure includes personnel expenditure, interest expenditure, grant expenditure, social assistance spending, profit sharing spending to provinces/districts/cities and village governments, and unexpected spending.

Indirect expenditures are expenditures whose budgeting is not directly related to the programs and activities carried out. Indirect expenditure in the form of personnel expenditure, goods and services expenditure, and capital expenditure.

Flypaper Effect

Several studies on the behavior of local governments in responding to transfers from the center have been carried out. When the response of the local government is greater to unconditional transfers from the central government than to the region's own source revenue, it is called flypaper effect. This flypaper phenomenon will have an impact on the amount of local expenditure compared to the amount of transfer received.

Independence Ratio

Regional financial independence is indicated by the ability of the region to self-finance the activities of government, development, and service to the community. Then the independence ratio is seen from the ratio of PAD to Balancing Funds and loans. So the higher the ratio, the more independent the area.

In some literature it is stated that the independence ratio relates to the pattern of relations between the central government and the regions. The pattern of relations between the central government and regions according to [18] can be grouped as follows:

1. Instructive Relationship Pattern, where the central government is more dominant than the local government or in other words the regions are unable to implement autonomy.
2. Pattern of Consultative Relations, in this pattern the intervention of the central government has begun to decrease, because the regions are slightly more able to implement regional autonomy.
3. Pattern of Participatory Relations, the central government has increasingly diminished its role given that the regions with a level of independence are able to implement autonomy.

4. The pattern of Delegative Relations, there has been no interference from the central government because the regions have been truly capable and independent in implementing regional autonomy.

Table 2. Relationship Pattern and Level of Regional Independence

Financial Capability	Independence (%)	Relationship Pattern
Very low	0-25	Instructive
Low	25-50	Consultative
Medium	50-75	Participatory
High	75-100	Delegative

Source: [18]

Table 3. Regional Independence Interval

Interval (%)	Regional Capability
0,00 – 10,00	Very less
10,01 – 20,00	Less
20,01 – 30,00	Enough
30,01 – 40,00	Medium
40,01 – 50,00	Good
>50	Very good

Source: [19]

Dependency Ratio

This ratio shows how much an area relies on transfer income from both the central government and the provincial government. In general, the largest contribution to the transfer income is from balance funds, such as DAU, DAK, and DBH.

The dependency ratio compares the total realization of transfer income with the total realized of Local Revenue. Therefore, in the implementation of regional autonomy the local government is expected to be able to increase PAD by digging deeper into its potency. The higher the dependency ratio, the greater the level of local government dependence on revenues from the central or from the province. In [19] states table of dependency level as follows:

Table 4. Regional Financial Dependency Interval

Interval (%)	Regional Capability
0,00 – 10,00	Very low
10,01 – 20,00	Low
20,01 – 30,00	Medium
30,01 – 40,00	Enough
40,01 – 50,00	High
>50	Very high

Source: [19]

Effectiveness Ratio of Region Own Source Revenue (PAD)

The effectiveness of budget execution is a measure of the success of local governments in carrying out the running of the government. So that it can be said that the effectiveness ratio is an illustration of the ability of the region in realizing the planned of PAD.

The Effectiveness Ratio of PAD is obtained from the comparison of the realization of revenue from PAD with the revenue target of PAD. So that the higher the ratio value the more effective the local government is.

Table 5. PAD Effectiveness Assessment Criteria

Interval (%)	Criteria
>100	Very effective
90 – 100	Effective
80 – 90	Effective enough
60 – 80	Less effective
<60	Ineffective

Source: [19]

Economic Growth

Economic growth in general is a development of activities in the economy which causes goods and services produced in society to increase and people's prosperity increases. So it can be said also that economic growth is the process of increasing output in the long run.

With the existence of fiscal decentralization, it is expected that there will be efficiency in development and service to the community because regions can better recognize and process their potency. A capable regional financial performance will encourage regional growth and improve the welfare of its people

2. Methods

This study uses quantitative methods using panel data, which is a combination of time series (2012-2016) and cross section (7 cities/regencies). Both to know the existence of the flypaper effect phenomenon and the influence of the regional financial performance with economic growth, an analysis was carried out using the Stata 12 program. Descriptive analysis is done by calculating and displaying the results of descriptive tests per variable, both on the subject as a whole (overall), per subject (between) and per year (within).

The next step is the selection of the estimation method. In the panel data there are 3 (three) estimation methods, namely by testing Pooled Least Square (PLS), Fixed Effect (FE), and Random Effect (RE). The first thing to do is to do a PLS test. Then test the Fixed Effect data panel regression. Next, test the Random Effect panel data regression. From the overall results of the test, conclusions will be drawn based on the selection method of the estimation method by performing the Chow Test, Hausman Test, and the Lagrange Multiplier Test.

Chow Test is used to determine the choice between PLS and FE. Where H_0 = PLS and H_1 = FE. If the value of $p < 0,05$ then H_1 is accepted, which is using FE. Then use the Hausman Test to determine which FE or RE will be used. H_0 = RE and H_1 = FE. If the value of $p < 0,05$ then H_1 is accepted, which is using the FE method.

If the Chow Test turns out that is using PLS, or in the Hausman Test that appears is using RE, then the next is to do the Lagrange Multiplier Test to determine PLS or RE. Where H_0 = PLS and H_1 = RE. So if the value of $p < 0,05$ then H_1 is accepted, which is using RE.

When using FE or PLS, a classic assumption test is performed to find out whether there are problems such as multicollinearity, heteroscedasticity, or autocorrelation. When the problem is found, it must be repaired.

To examine the effect of PAD, DAU, and DBH on local expenditures in Solo Raya

either simultaneously or partially as well as knowing the existence of flypaper effects in local expenditure in Solo Raya, this study uses three independent variables, namely PAD, DAU, and DBH. And the dependent variable, namely local expenditure.

Factors that affect Local Expenditures when described as functions are:

$$BD = f(PAD, DAU, DBH) \tag{1}$$

Then the multiple regression model used is:

$$BD_{it} = \alpha + \beta_1 \, PAD_{it} + \beta_2 \, DAU_{it} + \beta_3 \, DBH_{it} + e \tag{2}$$

Where:
α = constant
$\beta_{1, 2, 3}$ = Multiple regression coefficients of each independent variable
BD = Local Expenditure
PAD = Region Own Source Revenue
DAU = General Allocation Funds
DBH = Revenue Sharing Funds
i = Cross section
t = Time series
e = Random Error

While the regional financial performance is seen from the ratio of independence, dependency ratio, and the ratio of the effectiveness of PAD. Where is the independence ratio is the comparison of PAD with central transfers, provincial transfers, and regional loans.

$$Independence \ Ratio = \frac{PAD}{Central \ Transfers + Provincial \ Transfer + Regional \ Loans} \times 100\% \tag{3}$$

Dependency ratio is a comparison of transfer income with total local revenue. So that it can be formulated as follows:

$$Dependency \ Ratio = \frac{Transfer \ Income}{Total \ Local \ Revenue} \times 100\% \tag{4}$$

The effectiveness ratio of PAD is a comparison between the realization of PAD revenue and the revenue target of PAD.

$$The \ Effectiveness \ Ratio \ of \ PAD = \frac{Realization \ of \ PAD \ Revenue}{Revenue \ Target \ of \ PAD} \times 100\% \tag{5}$$

Therefore, the influence of regional financial performance with economic growth if described as a function is as follows:

$$ptumb = f(mndr, tgt, eftv) \tag{6}$$

Then the multiple regression model used is:

$$ptumb_{it} = \alpha + \beta_1 \, mndr_{it} + \beta_2 \, tgt_{it} + \beta_3 \, eftv_{it} + e \tag{7}$$

Where :

α	= Constant	i	= Cross section
ptumb	= Economic Growth	t	= Time series
mndr	= Independence Ratio	e	= Random Error
tgt	= Dependency Ratio		
eftv	= The Effectiveness Ratio of PAD		
$\beta_{1, 2, 3}$	= Multiple regression coefficients of each independent variable		

3. Findings and Argument

Before estimating the regression model, first determine the panel data to be used in this study. To determine the effect of Local Expenditures on PAD, DAU, and DBH by using the Stata 12 program, the data panel forms with the "code" subject and the time series "year" variable in the form of year intervals starting from 2012 to 2016. Strongly balanced means uniformly, or in other words each subject "code" has the same number of repetitions/ time series of 5 years.

Descriptive tests per variable, both on the overall subject, per subject (between) and within (within). In total variance local expenditure is 0.1962 = 0.038; where the variation is 0.182 = 0.032 or 0.84%. The overall variance of PAD is 0.4062 = 0.165; where the variation is 0.3192 = 0.102 or 0.62%. DAU has an overall variance of 0.1732 = 0.03; with variations of 0.1062 = 0.001 or 0.38%. The overall variance of DBH is 0.3092 = 0.096; with variations of 0.2212 = 0.045 or 0.51%. In the DBH variable, the population is 34 because there is 1 year whose value is 0.

The next step taken is to determine the Pooled Least Square (PLS) or Random Effect (RE) model. By using the Lagrange Multiplier Test to determine PLS or RE. Test results show that Prob> chibar 2 = 1.0000, which means that p value is greater than 0.05. Then the PLS model is used.

Chow Test is done to determine whether to use PLS or FE. FE test results, show that the value of prob> F = 0.3490, which means that p value is greater than 0.05, so using PLS. This is in line with the method in research conducted by [7] and [10]. Because PLS is the model used, then the next is to test the classical assumptions. The first classic assumption test is normality test. Because the number of observations is less than 50, then use the Shapiro-Wilk method. The results show that the Prob> z value for all variables shows values above 0.05 which means that the data is normally distributed.

Table 6. Shapiro-Wilk Test Result

Variable	Prob > z
lbelanja	0,26426
lpad	0,52812
ldau	0,80364
ldbh	0,84330

(*Source: Data Processed*)

The next classic assumption test is multicollinearity test. The result is VIF < 10, so there are no symptoms of multicollinearity.

Table 7. Multicollinearity Test Result

Variable	VIF
ldbh	0,26426
ldau	0,52812
lpad	1,13

(*Source: Data Processed*)

Heteroskedatis is a condition where variant (σ_2) of the disturbing factor or error term (disturbance term) is not the same for all observations or observations of the independent variable (X). To find out whether there is a heteroscedastic problem or not used Breusch-Pagan Test. The results show that the Prob> chi2 value is 0.3944 which is greater than 0.05 so that there is no heteroscedasticity problem. Similarly, the results of Woolridge test show that Prob> F is 0.1204 so there is no autocorrelation problem. Autocorrelation means that the error or residual component is correlated based on the time sequence (on time series data) or space sequence (in cross section data).

Table 8. PLS Model Regression Calculation Results

Lbelanja	Coef.	Std. Err.	t	Prob
Lpad	.2484397	.019416	12.80	0.000
Ldau	.983912	.0447136	22.00	0.000
Ldbh	.0355106	.025899	1.37	0.181
_cons	-6.308471	1.685449	-3.74	0.001
R-squared	0.9561			
Adj R-squared	0.9517			
F-stat	217.74			
Prob > F	0.0000			

(*Source: Data Processed*)

From Table 8 the multiple regression equation model obtained is:

$$BD_{it} = -6.308471 + 0.2484397PAD_{it} + 0.983912DAU_{it} + 0.0355106DBH_{it} + e \qquad (8)$$

F test value 0,0000. If the value is < 0,05 the F test accepts H1 at a significance level of 5% which means that PAD, DAU, DBH simultaneously have a significant influence on Local Expenditures. R square has a value of 0.9561 which means that all independent variables can explain the dependent variable of 95.61%. Then the remaining 4.39% is influenced by other variables outside the regression model. The partial t test value is said to be significant at the 5% level if the p value is <0.05. So it can be said that the PAD and DAU have a positive and significant effect on Local Expenditures. This is in line with previous research conducted by [10], [6], [9], and [5]. While DBH which has a positive but insignificant effect on Local Expenditures is not in line with research [6] and [9].

To see the phenomenon of flypaper effect seen from the magnitude of the coefficient of independent variable1 (PAD) and independent variable2 (DAU). Flypaper effect occurs when the DAU coefficient is greater than PAD, where more local expenditure comes from DAU than from PAD. By looking at the magnitude of the coefficient, flypaper effect still occurs in Solo Raya. This is consistent with the hypothesis that there is a flypaper effect in Solo Raya. The existence of this flypaper effect is in line with the research conducted by [20], [6], [7], and [5] which found the existence of flypaper effects in districts/cities in Indonesia. [21]

also found flypaper effects in local expebditure in districts/cities in Sulawesi. [11] found the flypaper effect occurred only in capital expenditure in districts/cities in Yogyakarta Special Region. The findings in this study are not in line with the research [8], which did not find any flypaper effect in the districts/cities in Java. Likewise, research [10] and [9] did not find any flypaper effect in districts/cities in West Java. This is because the average PAD owned is quite large, so it does not have a dependency on the transfer funds from the Central Government.

The existence of the flypaper effect phenomenon in Solo Raya indicates that central transfers only change hands from the Central Government to the Local Government. The transfer funds from the Central Government should be stimulated by the regional economy through local expenditure which then creates the regional fiscal potency such as through taxes, levies, and so on.

The implications that can occur from the existence of this flypaper effect is that the amount of local expenditure will be greater than the transfer funds received, as well as the tendency to wait for assistance from the Central Government rather than managing the regional resources themselves. In addition to this, there is also a gap in fiscal imbalance, management of PAD revenue sources that are not optimal, and an excessive response to the use of transfer funds.

In the analysis of the relationship between economic growth and regional financial performance using a data panel with the "code" subject and time series "year" variable in the form of year intervals starting from 2012 to 2016. Strongly balanced means uniformly, or in other words each subject "code" has the same number of repetitions / time series of 5 years. At the overall variance growth rate is 9.742 = 94.87; where the variation is 8.312 = 69.06 or 0.73%. The overall variance of the independence ratio is 10.252 = 105.06; where the variation is 4.992 = 24.900 or 0.24%. The dependency ratio has an overall variance of 10.252 = 105.06; with variations of 8,192 = 67.08 or 0.64%. The overall variance of the effectiveness ratio is 10.252 = 105.06; with a variation of 6.362 = 40.45 or 0.39%.

Selection of estimation method by conducting Chow Test to determine the choice of PLS or FE. By looking at the results of FE calculations where the results are obtained that Prob> F = 0.0000, which means <0.05, so the choice is to use FE. Furthermore, from the Hausman Test shows the Prob> chi2 value = 0.0000 which means <0.05 so that FE is the model used. This is in line with the method used by [22] in analyzing the effect of regional financial independence on economic growth.

The first classic assumption test is normality test. Because the number of observations is <50, then use Shapiro-Wilk W test to test it. The calculation results show that the Prob> z value is greater than 0.05, which means that the data is normally distributed.

Table 9. Results of Shapiro-Wilk W test

Variable	Prob > z
ptumb1	0,11119
mndr1	0,18196
tgt1	0,18196
eftv1	0,18196

(*Source: Data Processed*)

Multicollinearity test results show VIF value <10, so there is no multicollinearity.

Table 10. Multicollinearity Test Results

Variable	Prob > z
eftv1	3,18
tgt1	2,42
mndr1	2,17

(*Source: Data Processed)*

By using the Modified Wald Test, the Prob> chi2 value is 0.0000 or less than 0.05, indicating the presence of heteroscedasticity. While the Wooldridge Test Prob> F value is 0.3378 or greater 0.05, which means that there is no autocorrelation problem. Because there is only a problem of heteroscedasticity, it is used Robust to make it into homoskedastic. Regression calculation results are obtained as follows:

Table 11. FE Regression Results with Robust

ptumb1	Coef.	Robust Std. Err.	t	Prob
mndr1	-1.228301	.1.88151	-6.53	0.001
tgt1	.1464872	.133887	1.09	0.316
eftv1	.1449837	.1162148	1.25	0.259
_cons	33.23438	4.424202	7.51	0.000
R-squared	0.0348			
F-stat	36.81			
Prob > F	0.0003			
V	5.0			
U	7			

(Source: Data Processed)

From the results of Table 11, the regression equation that was originally (7) became FE regression, namely:

$$ptumb_{it}=(\alpha+u) + \beta_1\ mndr_{it} + \beta_2\ tgt_{it} + \beta_3\ eftv_{it} + V \qquad (9)$$

Where :

α	= Constant		i	= Cross section
ptumb	= Economic Growth		t	= Time series
mndr	= Independence Ratio		V	= Vector
tgt	= Dependency Ratio		u	= Data panel
eftv	= The Effectiveness Ratio of PAD			
$\beta_{1,2,3}$	= Multiple regression coefficients of each independent variable			

So the equation becomes:

$$ptumb_{it}=(33.23438+7)+1.228301mndr_{it}+0.1464872tgt_{it}+0.1449837eftv_{it}+5.0 \qquad (10)$$

That from the number of observations as many as 35 samples. F test value is 0,0003. If the value <0.05 then Test F rejects H0 at a significance level of 5% or that means the independence ratio, dependency ratio and effectiveness ratio simultaneously have a significant effect on economic growth. R square has a value of 0.0348 which means that all independent variables can explain the dependent variable of 3.48%. Then the remaining

96.52% is influenced by other variables outside the regression model. This is in line with the findings [16], which states that in general the model used is not sufficient to explain the variations that occur in economic growth. The partial t test value is said to be significant at the 5% level if the p value is <0.05. So that it can be said that the independence ratio has a positive and significant effect on economic growth. Research [22] and [15] shows that the level of regional financial independence has a positive and significant influence on economic growth. While the dependency ratio and the effectiveness ratio of PAD have a positive and insignificant effect on economic growth. [16] also found that fiscal decentralization has a positive but not significant effect on economic growth in districts/cities in Central Java Province. However, [15] found that dependency ratios have a negative and significant relationship to economic growth in North Sulawesi.

The existence of a fiscal decentralization system explains the contribution of PAD to total regional revenues, where local governments have an important role in providing public services. Research findings that the level of financial independence has a positive and significant influence on economic growth means that the higher the level of independence, the higher the PAD. High PAD will make the region more advanced and developing, so that the rate of economic growth is also higher. In other words, the greater the portion of PAD to total regional income, increasingly encouraging economic growth in Solo Raya.

4. Conclusion

From the results of the analysis conducted on the effect of PAD, DAU, and DBH on Locall Expenditures and financial performance on economic growth in Solo Raya from 2012 to 2016, can be concluded as follows :

1. The regression results show that PAD, DAU, and DBH simultaneously have a significant effect on Local Expenditures. Where in the Local Expenditures for the current year is affected by PAD, DAU, and DBH received in the current year as well.

2. While partially PAD and DAU have a positive and significant effect on Regional Expenditures. So it can be said that the amount of Local Expenditures is affected by the PAD and DAU received. While DBH does not have a significant but positive effect on Local Expenditures.

3. The greater coefficient of DAU than PAD indicates that the DAU has a greater influence on Local Expenditure than the effect of PAD on Local Expenditures. It can be said that the Local Government is doing more Local Expenditures using DAU than from its own PAD. This proves that the phenomenon of flypaper effects occurred in Solo Raya. The more responsive the region to DAU than the PAD in its expenditure shows that the regions are still dependent on the central government.

4. The independence ratio has a positive and significant influence on economic growth. But the dependency ratio and the effectiveness ratio of PAD have a positive and insignificant influence on economic growth. Thus the financial performance is not relevant to describe economic growth.

The limitation of this study is that the data obtained is secondary data in the form of APBD's realization from the Directorate-General of Regional Fiscal Balance (within the Ministry of Finance), and does not involve the relevant Regional Government. Therefore, the behavior of the Local Government is unknown in managing the resources they have and the efficiency of the allocation of the budget received, as well as the policies in allocating Local Expenditures. From these limitations, the recommendations that can be given are:

1. Subsequent research is expected to include aspects of government behavioral aspects in managing the potential of the region and efficiency aspects of budget absorption.

2. There are indications that the DAU is not only a fiscal gap in the ability of regional finances, but as the main source of revenue in the APBD, the Local Government is expected to further improve innovation so that PAD can increase and regions are able to finance their own expenses.

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The Influence of Gdp Revenue to Total Tax Revenue in Indonesia During 1988 – 2017

Indri Arrafi Juliannisa[1], MB. Nani Ariani[1]
[1]UPN "Veteran" Jakarta, JL. RS. Fatmawati no.1, Jakarta (12450)
Email: arrafi.juliannisa@gmail.com

Abstract

Indonesia's largest revenue comes from tax, that serve to fund expenditure. The enhancement of tax revenues should be in line with Indonesia's economic growth, that illustrated by the Gross Domestic Product (GDP). This study analyze the influence of GDP revenue to total tax revenue in Indonesia during 1988-2017 by using control variables among others; the money supply (M2), the total population, and number of exports and imports (XM). The GDP became the main variable because it has 9th economy's sectors which important in supporting the growth of economy and enchance the imposition of tax objects. The reason for selection the control variables because it describes the amount of money in the hands of community and increase the number of taxpayers in terms of the XM tax. This research uses quantitative descriptive method, time series model, and testing classical assumptions. The results show that this study is unbias, the GDP have the positive-significant effect, that indicated by the percentage in GDP growth with an average 7% during research time. The control variables that has positive-significant effect are the M2 and the XM, and the population is'nt significant because the enhancement of population don't support awareness to pay tax.

Keywords: Total Tax Revenue; Gross Domestic Product; The Money Supply; The Total Population; And Number of Exports And Imports.

1. Introduction

Indonesia's largest revenue comes from taxes. Taxes are the obligatory dues made by the people to the state which is payable by the obliged to pay it under the Constitution's rule. Tax payments do not get any achievements or rewards. Taxes are useful for financing general expenditures related to state duties in administering government functions (Waluyo, 2009).

Taxes are useful for funding state expenditures and activities. Based on the graph below, average tax revenue in Indonesia during 30 years of research period, specifically 1988 until 2017 is Rp 423937 Billion, with an increasing trend every year;
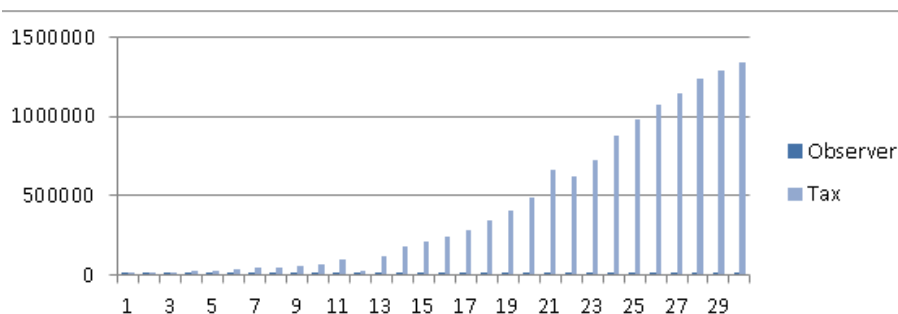
Source: APBN, 199-2017

Figure 1. Total Tax Revenue in Indonesia Year 1988-2017

Indonesia is a developing country that is promoting state development especially in infrastructure, Indonesia is in dire need of funds to finance the development, it turns out that the number of tax revenues increased each year is still somewhat less to cover the amount of expenditure available, so that the Indonesian government still desperately needs other income funds. The government can not continue to borrow funds from foreign parties, because it will increase the length of the list of state debts, and for a refund Indonesia should consider the interest and exchange rate of the country's currency lender. Therefore, foreign loans are considered to be less constructive for the Indonesian economy (Widharma, Sri Budhi, & Marhaeni, 2017).

Be think that the strategic position of tax revenue, the acceleration from the realization of enhancement tax revenue every year is expected, in order to support sustainable economic growth. Of course, the main source of state revenue that can still be excavated by the Indonesian government is tax, by increasing taxpayers or expanding the tax object. If all the potential can be maximized, so it will be able to increase tax revenue to finance the development of the state and improve the welfare of the community (Silvia, Wardi, & Aimon, 2013).

Based on the above explanation, the researcher is interested to investigate more about the factor that can make affect the total tax revenue in Indonesia within the period of 1988-2017, by using the main free variable is the Gross Domestic Product (GDP) and other free control variables are population, money supply, and Export-Import. The reason of selection The GDP as the main independent variable, because; GDP as economic statistics which is most noticed because they are considered the best single measure of community welfare. The underlying thing is that GDP measures two things at the same time : the total income of everyone in the economy sectors and the total spending of the country to buy goods and services resulting from the economy sectors (Mankiw, 2006).

There are 9 economic's sectors in GDP that can reflect the state of Indonesia's economy along with the potential for imposition of new tax objects, so the higher the GDP revenues will support the increase in tax revenue. As shown in Table 1 below, that GDP receipts increase annually, so that from each sector will potentially contribute to the tax revenue of Indonesia (Mutiara, 2015).

Tabel 1 GDP's Income During 2013-2017

Economy Sector	Year				
	2013	2014	2015	2016	2017
Agriculture, Forestry and Fisheries	1275048	1409656	1555207	1671330	1785880
Mining and excavation	1050745	1039423	881694	890868	1028772
Manufacturing	2007426	2227584	2418891	2545203	2739415
Procurement of Electricity, Gas and Water Supply	105895	122745	138380	151287	172060
Construction	905990	1041949	1177084	1287659	1409833
Trade, Hotel and Restaurant	1261145	1419239	1532876	1635259	1767718
Transportation and communications	1005814	1157488	1326037	1457244	1638586

Economy Sector	Year				
	2013	**2014**	**2015**	**2016**	**2017**
Finance, Rental & PRSH's Service	370132	369457	464399	520087	571128
Other Service	1326133	1479708	1668636	1804252	1951112
Total GDP	**9308328**	**10569705**	**11526332**	**12406774**	**13588797**

(Source: BPS, 2013-2017)

The relationship between GDP's revenues and tax revenues is also found in the Tax Ratio theory, which is how the government collects tax revenue in the form of absorption from the business field sector that contained in GDP. The performance of tax revenues is reflected in the annually tax ratio's enhancement (Setiaji, 2007).

Currently, amount of Indonesia's Tax Ratio is 10,3%, while the government targets as much as 10,9%. Certainly, 10,3% is a low number compared to the average tax ratio in the world, that is equal to 15%. Therefore, the government should pay attention in an effort to increase the tax ratio through the addition of tax objects or new taxpayers in the business field sector contained in GDP's (Joanito, 2017).

The reason for the selection of population, money supply, and export-import as a free control variable is the number of people in Indonesia has a diverse behavior, one of which is consumptive behavior. Consumptive behavior can be defined as buying excessive goods or services even if not needed. Consumptive can be marked by the increase of money supply in the community. The money supply is part of the monetary economy that has a major impact on the Indonesian economy (Solikin & Suseno, 2002).

With the increasing number of consumptive's population, then it will be an opportunity to increase tax revenue and expansion of tax objectives. Moreover, the foreign trade or export-import sector may also increase tax revenue in Indonesia with the sale of genuine domestic products and specialization of goods abroad especially those classified as luxury (Moningka, 2006).

So, based on the explanation above, researchers interested in this research entitled **"The Influence of GDP Revenue to Total Tax Revenue in Indonesia During 1988-2017"**. In this study refers to the purpose of research is to determine the effect of population, the money supply, export-import, and GDP's revenue to the tax revenues.

2. Methods

This study uses a Time Series Model, that is : is a forecast of future values based on past values of a variable and past mistakes. Time series models are usually use for forecasting. The research method used is quantitative descriptive, by using the Eviews test tool. This study refers to several previous studies that have been conducted, one of which is Kadir Karagoz (2013) "Determinants of Tax Revenue: Does Sectorial Compotition Matter ?" and modified in this study within the study period 1988-2017. In Karagoz (2013), informed that factors affecting tax revenues in Turkey by looking at the sectoral composition of agriculture and industry on GDP. The variables suspected to affect tax revenue in Karagoz research are; ratio of agriculture to GDP, ratio of the industrial sector to GDP, total foreign debt, money supply, the ratio of the villagers to the total population, and the ratio of total export and import trade to GDP. The Regression results show that tax revenue in Turkey is influenced by the ratio of agriculture and industry sector to GDP, total foreign debt, and money supply. But, the urban ratio to total populationand the total trade ratio has no significant effect. So the model in this research is:

$$TR = \beta_0 + \beta_1 Popt + \beta_2 M2_t + \beta_3 XM_t + \beta_4 PDB_t + e_t$$

Explanation (Karagoz, 2013):

TR : Tax Revenue   XM : Export dan Import
Pop : Population   PDB : Gross Domestic Product
M2 : Money Suply

This study was analyzed and estimated using ordinary least square method (OLS), which is one of the methods that can be used to estimate parameters in regression analysis. The working principle of OLS is to minimize the sum of squares error, data must be normally distributed, there is no problem multicollinearity, heteroscedasticity, and autocorrelation. If all assumptions are met then the estimation result with OLS is said to meet the Best Linear Unbiased Estimator properties (BLUE) (Gujarati, 2003).

Because at the beginning of testing this research experienced problems on the classical assumption test, then to overcome the problem of classical assumption test, the test continues using estimation method Newey-West HAC regression model (heteroscedasticity and autocorrelation consistent) standard error or more often called Newey-West HAC. Newey-west HAC is not only for large samples, but also can be used for small samples (Gujarati, 2003).

In the estimation of this study, it no longer contains problems of heteroscedasticity and autocorrelation, so no further testing of classical assumptions is required, but can still perform hypothesis testing based on the distribution of T or F. As previous research has been done by Rachmawati and Sumarminingsih (2014).

3. Findings and Argument
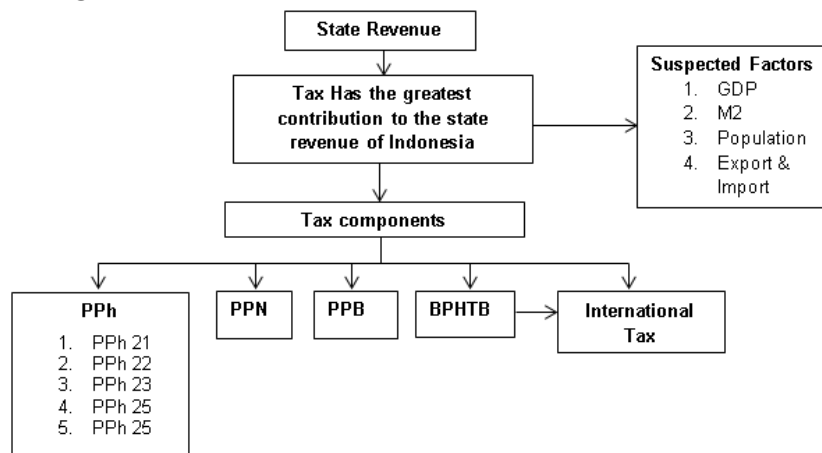
Figure 2. Component of Tax Revenue in Indonesia

Based on Figure 2 it can be seen that tax is the largest contributor to state revenue, tax revenue has components contained therein, such as; personal tax (PPh), Value-added tax (PPN), Acquisition of Land and Building Rights (BPHTB), and International's Tax. With the existence of a government tax can regulate and control the business world, obtain sources of development financing, and the welfare of the community increases. Therefore, the government must know what things can support the increase of tax revenue, either in terms of the addition of a new tax object or the expansion of potential tax, based on the results of this study contained in table 2, below this;

Table 2. Results of Time Series Regression Using HAC Method

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	91933.79	1103.540	0.828732	0.4151
PDB	0.044091	0.004937	8.929963	0.0000
M2	0.085904	0.044807	2.917228	0.0367
POP	-0.000581	0.000628	-0.925244	0.3637
XM	0.084851	0.037457	2.265295	0.0324
R-squared	**0.994809**			

Source: Data Processed

GDP that use as the main independent variable in this study has a positive and significant influence, Which is evidenced by the Probability Value of GDP is 0.0000 and positive coefficient is 0.044. Its mean that when GDP increases by 1% then the tax will increase by 0.044%, of course this is the same case like Karagoz's (2013), with the situation occurring in Indonesia the high rate of GDP revenue is predicted to increase every year to continue stimulating tax revenue. However, if seen from the tax ratio in Indonesia only 11%, its occurs because the proportion of GDP on tax revenues in developing countries is lower than developed countries.

The occurrence of fluctuations in GDP revenue can reflect how the state of the economy, the increasing growth of the business sector in the GDP can support a good economy in a country, of course a good country will have an increasing trend of GDP revenue in each sector of the business field (Handoko, Aimon, & Sofyan, 2013).

Most of the economic activities are mostly engaged in production and consumption. However, it's often difficult for the government to detect any existing business entities, then this will have an impact on the lack of maximum income tax on corporate income, so the government maximizes through building land tax, value added tax and international tax. Another problem that the government encounters is the difficulty of determining the income of traders. Therefore, it will have an impact on the receipt of personal income tax that is less than the maximum. Each sector of the economy has a different industry share in order to increase tax revenues, For example is the agriculture, agricultural activities are difficult to be objects of taxation, especially there are have low-income, which is most agricultural activities are regulated on a small scale, there are many farmers do not want to rely on industry for further farming, so triggering to lower tax revenues (Agbeyegbe et al., 2006).

On the other hand, Positive relationships can be expected between industry and services for taxe revenue. manufacturing companies are usually easier to tax objects because business owners have bookkeeping that follows accounting practices through the processing industry can also increase personal income tax, corporate income tax, and , serta setiap output yang dapat diolah akan meningkatkan PPN (Brooks, 2002)

The export and import variables in this study also have a positive and significant effect on tax revenue in Indonesia, with coefficient value of 0.084 and probability value of 0.03. By looking at the real situation in Indonesia, the main destination of Indonesia's non oil and gas exports is the first to the United States (US) valued at US 15.68 billion or its market share 11.94 percent, the second is China with a market share of 11.49 percent worth US $ 15.10 billion, and the third is Japan worth US $ 13.21 billion with a market share of 10.06 percent (Darman, 2013).
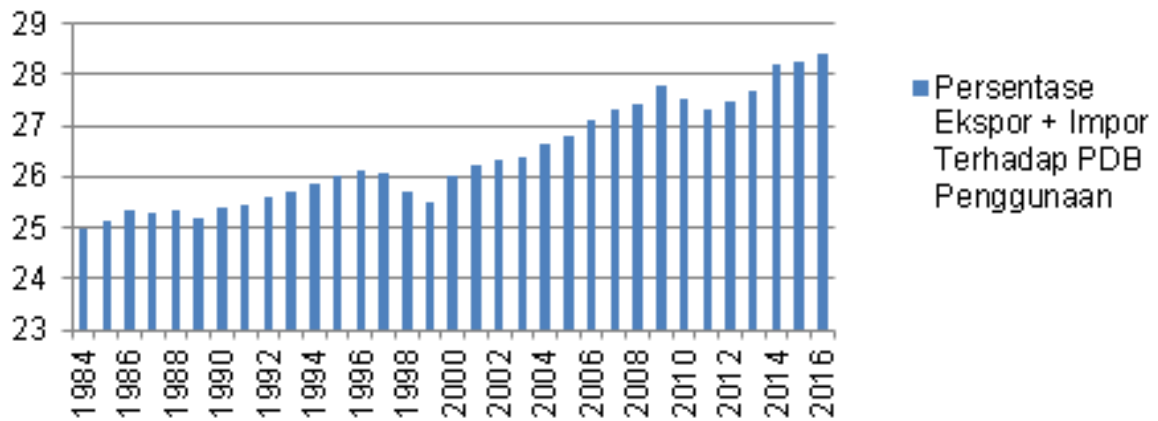
Figur 3. Percentage of Export + Imports Against the Acceptance of GDP in the Use Sector (2010 base year)

Based on the Figure 3 the percentage of the total exports+imports of the sector GDP usage in 1984 was 25%, then increased in 1996, which amounted to 26.12%, but due to the economic crisis that hit Indonesia, so in 1998-1999 the percentage of net exports decreased to 25.5%. Exports and imports contribute to growth in Indonesia by 1.25%, and to the total revenue of Indonesian state tax on exports and imports since 2010 accounted for approximately 30% and increased in 2016 to total 36%. Indonesia's export value reached 374 billion in December 2016, an increase of 27.58 percent over the previous year's period of US $ 293 billion. The most exported commodities from Indonesia to various countries throughout 2016 were crude palm oil and coal, while for 2017 komuditi wood press has increased the number of exports. Whereas in view of its role in Indonesia's total non-oil and gas imports during 2016, mechanical aircraft engines provide the largest role of 17.99 percent, followed by machinery and electrical appliances 15.15 percent, iron and steel by 8.80 percent, the vehicle and its share are 5.98 percent, organic chemicals by 5.54 percent, plastic and plastic goods by 4.16 percent, and iron and steel goods of 3.27 percent (Darman, 2013).

M2 variable also as significant variabel to tax revenue in Indonesia, this is seen with the coefficient value of 0.08 and probability value of 0.036. M2 have the influence to tax revenues in Indonesia, as expressed in Karagoz (2013). With the increase in the amount of money circulating in the community it can be interpreted that the community is very consumptive to meet their daily needs. This consumptive nature that can make someone more likely to satisfy his needs, with someone who is consumptive it will be easy to be charged as a tax potential. All goods that someone buys must contain a tax value, so it can potentially increase total tax revenue (Mahdavi, 2008).

For variable of population (Pop) in this research have negative and not significant effect to tax revenue with coefficient number equal to -0.005 and Probability equal to 0,363, this means that every increase in population is 1%, then tax revenue will decrease by 0.005. Indonesia's population in 2017 amounted to 262 million people, while those registered as taxpayers amounted to 36,031,972, increasing population in Indonesia is not accompanied by an increase in the number of taxpayers, this causes a lack of maximum absorption of tax potential. There are still many people who neglect their obligations to pay taxes, and low knowledge of the community to participate in becoming a taxpayer. The government must make more efforts to increase the awareness of the Indonesian people about the importance of paying taxes, and improvements to the tax system to make it easier to undesrstand and accessible to all taxpayers (Ananda , Suratman, & Paddu, 2010).

The things that make low tax payers are how to fill out a registration system that relies on voluntary or willingness. Public ignorance of this tax system is low, so the number of registered taxpayers will also be low, and another factor is the government which is considered not to have created the NPWP as registration system that is more easily digested by the public. The government's extensification and intensification programs are deemed not to target the new tax market share that is actually much more needed today (Suhendra, 2010).

The R-Square value shown in table 3.1 is 0.994, this means that between the independent variable and the dependent variable there is a connection, and explain that overall dependent variable can influence independent variable equal to 99% in this research model. This study has used the Newey-West HAC method, so there is no need for testing classical assumptions. The next test are T test and F test, below are the results of the two tests:

Table 3. T Test Results

Independent Variable	Coefficient	t-statistics	t-table	Prob.	Information
PDB	0.044091	8.929963	2.05559	0.0000	Significant
M2	0.085904	2.917228	2.05559	0.0367	Significant
POP	-0.00058	-0.925244	2.05559	0.3637	Not Significant
XM	0.084851	2.265295	2.05559	0.0324	Significant

Source: Data Processed

Based on table 3 it can be seen that the independent variables that have a t-statistic value greater than t-table and which has a significant influence on total tax revenue are variable GDP, M2, and XM.

Table 4. F Test Results

Dependent Variable	F-Calculate Valute	F-Table value	Information
Total Tax	1197,73	0.2217	Significant

Source: Data Processed

Based on table 4 by comparing the f-count with the f-table value, it is known that in this research model, f-count> f-table, thus indicating that all independent variables have a significant effect on the fixed variable.

4. Conclusions

In this study explained that the GDP is the main independent variable that became the focus in the research proved highly positive and significant influence on tax revenue in Indonesia. This is supported by the real conditions that exist in Indonesia that each year GDP has increased revenues, besides that there are 9 business sectors in GDP that can be further explored by the government as a potential new tax. For example, in 2017, the use of online services has been very widespread, so that it can make the new tax object source for the Indonesian government. In addition, the agricultural sector that has begun to switch for processing agricultural products with the industrial sector that has important role in tax revenue in Indonesia and facilitate agricultural goods to be exported abroad. Moreover to exploring new tax objects the government could impose a progressive tax for ownership of more land certificates.

Seeing that export conditions are starting to improve in 2017, certainly makes the government enthusiastic to accommodate exporters to expand the market share of merchandise, and then the large number of foreign products permitted to be sold in Indonesia can also provide additional state revenues through import taxes. The government must certainly strive to grow the sense of paying taxes to the people in Indonesia, because with the increasing number of taxpayers also certainly can help increase the amount of tax revenue.

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The Impact of the Fiscal Policy on Economic Growth in Indonesia: Study of 33 Provinces in Indonesia at 2006-2016

Inayatur Robbaniyah[1], Sebastiana Viphindrartin[1], Zainuri[1]

[1,2,3]Faculty of Economic and Business, Universitas Jember, Jl. Kalimantan No. 37, Jember (68121)

Email: ina7robbaniyah@gmail.com

Abstract

Economic growth is the economic progress of a country, especially the increase of goods and services so as to provide a trickle down effect. In an effort to encourage economic growth, fiscal potential consisting of government expenditure, income, tax revenue becomes an important capital in the development process. This study aims to determine the effect of fiscal policy in the form of government capital expenditure and provincial regional taxes on economic growth in Indonesia. This study uses panel data from 33 provinces in Indonesia during the period 2010-2016. The type of data used in this study is secondary data, which includes GRDP data, taxes and capital expenditure of the provincial government. This study uses a data analysis method of Vector Autoregressive (PVAR) panel. The dependent variable in the study is economic growth. While the independent variables in the study are fiscal policies in the form of government capital expenditure and provincial taxes. This study concluded that (1) government capital expenditure has a positive and significant effect on economic growth (2) tax has a negative and significant effect on economic growth. Based on this research, fiscal policy affects economic growth. These results indicate that the importance of optimizing fiscal policy in Indonesia to achieve the expected economic growth targets in each region in Indonesia.

Keywords: fiscal policy, provincial capital expenditure, provincial tax and economic growth

1. Introduction

Economic growth is the economic progress of a country, especially the increase of goods and services so as to provide a trickle down effect. Therefore, economic growth is targeted in development at the national or regional level. Economic growth is measured by GDP indicators in assessing economic performance, especially related to the ability of the region in managing the resources they have.

Economic growth is one indicator of the success of the development of a region. Rapid economic growth is the hope of each region. One indicator that can be used to measure the economic performance of a region in a given period is GRDP. GRDP size can be used as an indicator in assessing economic performance, especially those associated with the ability of an area to manage resources owned. According to Samuelson and Nordhaus (2001: 248), GRDP is the value of products produced by all factors of production, the magnitude of the rate of economic growth, and the structure of the economy in one period in a particular area. Economic growth in Indonesia from 2010-2017 is described in Figure 1.

Figure 1 explains Indonesia's economic growth which experienced fluctuating developments. In 2010 economic growth of 6.51% continued to decline until finally in 2017 until the economic growth rate of 5.07%.
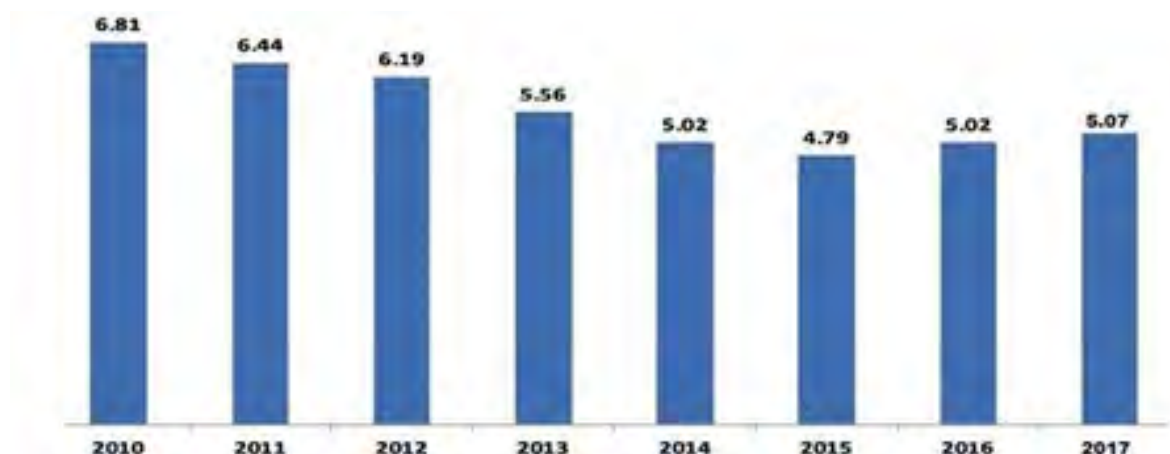
Figure 1. Indonesia's Economic Growth in 2010-2017
Source: BPS (2017)

Economic growth is influenced by various factors including human resources, natural resources, capital formation and technology. Samuelson and Nordhaus (2001:250) describe neoclassical economic theory that focuses on capital and labor, and technological change as a new element. Suryana (2000: 66) explains that Harrod-Domar's economic growth model of the "steady growth theory" is the development of Keynes's analysis, emphasizing the key role of the need for investment in the process of creating economic growth. According to Halim and Subiyanto (2008: 4-5), the government issued capital for development in financing development can increase economic growth.

This study examines fiscal policy on economic growth. Economic growth which is a process of change in a country in increasing the income of its people. According to Abdullah and Halim (2003), economic growth is also influenced by fiscal potential consisting of fiscal components including government expenditure, income, tax revenue in accordance with the rules of the Minister of Finance No. 224/PMK.07/2008. This fiscal potential will later increase economic growth that leads to public welfare.

Fiscal policy consists of policies on government spending and tax revenues. Expenditures by the government also increase economic growth. The government makes expenditures in the form of capital expenditure to finance its activities. The government finances government spending to drive the economy. There are government expenditures during 2010-2017 described in Figure 2 below.
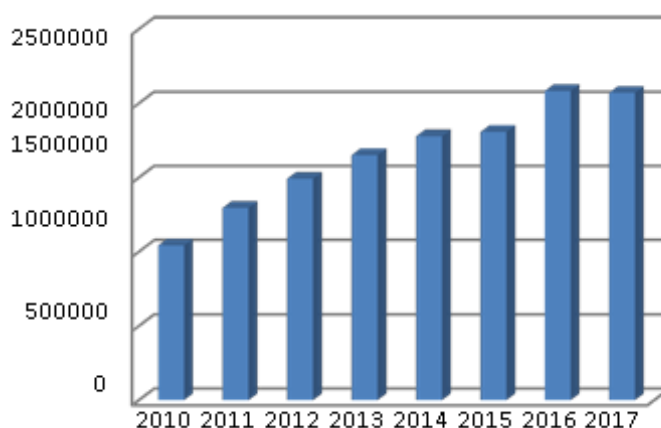
Figure 2. Government Expenditures for 2010-2017
Source: BPS (2017)

Figure 2 explains that government spending during 2010-2017 experienced fluctuating developments. Government expenditures occur in 2016 while the lowest government expenditure occurs in 2010. One government expenditure is capital expenditure. Yanikkaya (2011) shows that government spending negatively affects economic growth. Sakyi and Adams (2012) show that government spending has a positive effect on economic growth in the long run. Hendarmin (2012) and Patricia and Izuchukwu (2013) found that capital expenditure has a significant effect on economic growth

The objectives of this study include: (1) to analyze the effect of capital expenditure on economic growth; (2) to analyze the effect of provincial tax revenue on economic growth.

2. Literature Review

Economic Growth Theory

Taringan (2004: 4) explains that economic growth is an additional income of people in an area with an increase in value added. The theory of economic growth associated with the role of government is based on Adam Smith who explained that the market economic system will be free will create efficiency, bring the economy to full employment conditions and guarantee economic growth until a stationary position is reached. The role of government in Smith's view here is to ensure security and order and to provide legal certainty and justice for economic actors (Taringan, 2004: 45).

Furthermore, the theory used by Robert M. Solow (1970) from the United States and TW. Swan (1956) from Australia (Taringan, 2004: 46). Neo classical theory as the successor of classical theory suggests that conditions are always directed towards a perfect market. In perfect market conditions the economy can grow to its full potential. Further analysis of neo-classical understanding shows that the creation of a steady growth (steady growth), requires an appropriate saving level and all profits of entrepreneurs are reinvested in the region. The growth theory put forward by Harrod-Domar. This theory is based on assumptions (Jhingan, 2003: 67):

1. The economy is closed
2. The desire to save (MPS = s) is constant
3. The production process has a constant coefficient, and
4. The labor force growth rate (n) is constant and equal to the rate of growth.

Harrod-Domar's growth model explains that investment in the process of economic growth has a very decisive role, especially the dual character possessed by investments, namely (Jhingan, 2003: 66):

1. Creating income is called the impact of demand.
2. Increasing economic production capacity by increasing capital stock is often referred to as the impact of investment offers. As long as net investment continues real income and output will always increase.

Fiscal Policy Theory

Fiscal policy is an economic policy used by the government to manage/direct the economy to better or desirable conditions by changing government revenues and expenditures. Regional fiscal policy is one of the policies in the economy carried out by the government through the Regional Budget (APBD). The APBD is the provincial government's annual financial plan approved by the Regional People's Legislative Assembly. The APBD contains a systematic and detailed list that contains regional revenue and expenditure plans for one fiscal year.

APBD is an instrument to regulate regional expenditures and revenues in order to finance the implementation of government and development activities, achieve economic

growth, increase national income, achieve economic stability, and determine development directions and priorities in general.

According to Budiarto (2008), government revenue is assumed to come from taxes. The amount of tax received by the government is influenced by the level of income, tax should be influenced by patterns of production and consumption behavior. Economically, tax can be defined as the transfer of existing resources in the household sector and companies (business world) to the government sector through the collection mechanism without the obligation to provide direct compensation. If, the government levies give direct compensation, the claim is called retribution.

Effect of Fiscal Policy on Economic Growth

Economic growth is influenced by fiscal policy and monetary policy. The fiscal policy instrument consists of government expenditure and taxes while the monetary policy instrument consists of the money supply and interest rates. If government spending increases and taxes fall, economic growth will increase and vice versa. Government expenditure in the form of capital expenditure allocations is based on the need for facilities and infrastructure both for the smooth implementation of government duties and for public facilities in the form of land, equipment and machinery, buildings and buildings, roads, irrigation and networks, and other fixed assets. Through the increase in capital expenditure the APBD is expected to be a driving factor for the emergence of various new investments in the region in optimizing the utilization of various resources for production activities so that it can ultimately increase regional economic growth (Tambunan, 2011).

The role of the government in improving community welfare is also needed, one of which is through. Regional fiscal policy is one of the policies in the economy carried out by the government through the Regional Budget (APBD) instrument, which contains regional revenue and expenditure plans for one fiscal year. This is in accordance with Keyness's theory which argues that the government should intervene through fiscal and monetary policies to encourage full employment opportunities, price stability and economic growth.

According to Bati (2009), capital expenditure is a regional expenditure carried out by regional governments including the development and improvement of the education, health, transportation sectors, so that the community also enjoys the benefits of regional development. The availability of good infrastructure is expected to create efficiency and effectiveness in various sectors, the productivity of the community is expected to become higher and in turn increase economic growth. Yanikkaya (2011) shows that government spending negatively affects economic growth. Sakyi and Adams (2012) show that government spending has a positive effect on economic growth in the long run. Akpan and Abang (2013) found that government spending negatively affected economic growth. Hendarmin (2012) and Patricia and Izuchukwu (2013) found that capital expenditure has a significant effect on economic growth.

Another fiscal policy is tax revenue, namely a strong tax revenue capability will provide the government's ability to build. Pjak is still used as one of the important instruments to build strategic advantages that exist in a country. Tax revenues can increase economic growth. Lee and Gordon (2005) found that taxes can increase economic growth. Sumaryani (2015) found that taxes can increase economic growth. Gale and Samwick (2014) obtain results that the higher tax revenue will increase economic growth.

3. Research Methods

This research is a quantitative research used to analyze the influence of fiscal policy growth, namely provincial government local taxes, and provincial government capital

expenditure on economic growth in Indonesia. This type of research data is secondary data in the form of panel data with a period of 7 (seven) years, namely from 2010-2016, and cross section observations in 33 provinces in Indonesia. The conservation used is 7 x 33 which is 231 observations. This study uses Per Capita GRDP data from the Central Bureau of Statistics (BPS), realization of local tax revenues and realization of capital expenditures sourced from data on provincial APBD realization in BPS publications.

Research variables are: 1) economic growth proxied by the growth of GDP per capita at constant 2000 prices in each province, expressed in percent units, during the period 2010-2016; 2) Provincial Tax is the ratio of the realization of provincial government regional tax revenue to GRDP on the basis of current prices expressed in percent units; 3) Capital Expenditures proxied by the ratio of Realization of Capital Expenditures of each provincial government throughout Indonesia to GRDP in each province according to the prevailing price which is stated in percent units.

Data analysis method uses Random Effect Model (RE) panel data regression, used by calculating errors from the data panel with the Generalized Least Square (GLS) method. The form of panel data regression equation in this study can be mathematically formulated as follows:

Y = f (BLMit, TAXit,), i = 1,2, ..., 33; t = 1,2, ..., 7

$$Y_{it} = \beta_0 + \beta_1 BLM_{it} + \beta_2 TAX_{it} \tag{1}$$

Where:

Y : Provincial GRDP per capita growth   i : Province i (cross section), i = 1, 2, ……, 33
β_0 : Constants   t : Time series, t = 2010, ..., 2016
β_i, j = 1,2, ... : Regression coefficient e_{it}: Error term
BLM_{it} : Capital expenditure for the provincial government
TAX_{it} : Regional tax of the provincial government

The research model uses a random effect model estimating panel data whose residual variables are thought to have relationships between time and between subjects. This model is used to overcome the weaknesses of fixed effect models that use dummy variables (Widarjono, 2009). Panel data analysis method with Random Effect model must meet the requirements, namely the number of cross sections must be greater than the number of research variables. Before analyzing the data, the data is tested according to classical assumptions. If there is a deviation from the classic assumption, non-parametric statistical tests are used, whereas classical assumptions are met if parametric statistics are used to obtain a good regression model. the resulting data must be normally distributed.

Then, the Vector Autoregression Panel (VAR) method which is a dynamic estimation method is also used in this study. The VAR method was proposed by Smith (1980) as a dynamic model that is not based on theoretical concepts, but rather a model based on the basic assumptions of economic theory, so that this method is more directed to a model that adapts to changes in economic phenomena that occur. There are several stages of testing in the VAR method, namely stationary data testing using unit root tests, integration degree test, cointegration test, optimum lag selection, estimation with VAR model, impulse response function (IRF) and variance decomposition (VD). Basically the VAR model is written as follows:

$$X_t = \beta_0 + \beta_n X_{t-n} + e_t \tag{2}$$

Where:

X_t : is a vector element of: GRDP model = tax, capital expenditure

β_0 : is a vector of n×1 constants, β_0 is the coefficient of X_{t-n} while n is the lag length.

e_t : is a vector of shock to each variable.

Model Specifications

GRDP = f (tax, capital expenditure)

PDRB = f (pajak , belanja modal)

$$PDRB_{it} = \alpha_0 + \alpha_1 Tax_{it} + \alpha_2 BLM_{it} + e_{it} \tag{3}$$

$$Tax_{it} = \alpha_3 + \alpha_4 PDRB_{it} + \alpha_5 BLM_{it} + e_{it} \tag{4}$$

$$BLM_{it} = \alpha_6 + \alpha_7 PDRB_{it} + \alpha_8 Tax_{it} + e_{it} \tag{5}$$

4. Research Result

Based on the results of data analysis with panel data regression, the Random Effect model estimates panel data that the residual variables are suspected to have a relationship between time and between subjects. The Random Effect model is used to overcome the weaknesses of the Fixed Effect Model that uses dummy variables. The output of panel data regression analysis with the Random Effect model can be seen in Table 1 below.

Table 1. Regression Results with Random Effect Model

Variable	Coefficient	t-Statistic	Prob
Konstanta	0,301121	27.80224	0.0000
Belanja Modal (BLM)	0,009024	2.888404	0.0042
Pajak Daeah (TAX)	0,050919	6.044935	0.0000
R-squared Adjusted R-squared F-statistic Prob (F-statistic) Durbin- Watson stat	0.229842 0.216211 16.86156 0.000000 0.953090		

Source: Data Processed, 2018

Table 1 explains that the results of the statistical test t (t-statistics) to determine the effect of capital expenditure variables (BLM) with p value of 0.042 less than α of 0.05. This shows that capital expenditure has a significant effect on economic growth. While the capital expenditure variable (BLM) with a p value of 0.00 less than 0.05 indicates that capital expenditure has a positive and significant effect on economic growth.

Based on the estimation of panel data regression, the random effect model above obtained the equation of the panel data regression model as follows:

$$Y_{it} = \beta_0 + \beta_1 BLM_{it} + \beta_2 TAX_{it} + e_{it}$$

Where:

$$Y_{it} = 0,301121 + 0,009024 BLM_{it} + 0,050919 TAX_{it} + e_{it}$$

Based on the results of panel data regression, the Random Effect Model shows that capital expenditure and Regional Tax have a positive effect on economic growth. The estimation results of the regression equation model above are known as follows:

1. A constant value (C) 0.301121 which means that if the independent variable (BLM, TAX) is considered to be constant (constant), then economic growth is 0.301121. This shows that there are still other variables outside the model that affect economic growth;

2. Capital Expenditures with a coefficient of 0.009024 shows that if the TAX variable does not change (ceteris paribus), then Capital Expenditures will have a positive and significant impact on economic growth.

3. Regional Tax Variables with a coefficient of 0.050919 indicate that if the variable capital expenditure does not change (ceteris paribus), the Regional Tax will have a positive and significant effect on economic growth.

Vector Autoregressive Panel (PVAR) Test Results

1. Stationarity Test

The unit root test is the initial stage before estimating the model in time series data. Stationary test is a test to see the consistency of data in each variable used in the research model. The unit root test is done by comparing the ADF probability value with the α (alpha) used. To see the stationary data on each variable, either in the Times series data or panel data, the unit root test is used. There were several types of testing in the test including Levin, Lin & Chun (LLC), Im, Pesaran, & Shin (IPS), ADF Fisher and Philips, Peron, & Fisher (PPF). Table 1 presents the results of unit root testing for each variable.

Table 2. Data Stationary Test Results

Variable	Statistic Value	Level	LLC	IPS	ADF-Fisher	PP-Fisher
PDRB	Statistic (prob)	Level	0.0000*	0.03*	0.01*	0.0000*
	Statistic (prob)	First differences	0.0000	0.0000	0.0000	0.0000
	Statistic (prob)	Second differences	0.0000	0.0000	0.0000	0.0000
Tax	Statistic (prob)	Level	0.0000	0.0000	0.3402	0.1397
	Statistic (prob)	First differences	0.0000*	0.0000*	0.0000*	0.0000*
	Statistic (prob)	Second differences	0.0000	0.0000	0.0000	0.0000
BLM	Statistic (prob)	Level	0.0000*	0.0024*	0.0008*	0.0000*
	Statistic (prob)	First differences	0.0000	0.0000	0.0000	0.0000
	Statistic (prob)	Second differences	0.0000	0.0000	0.0000	0.0000

Source: Data Processed, 2018

Stationary values in each variable are compared with alpha values (5%). If the probability value of the unit root test is less than the alpha value then it is stated stationary and vice versa if the probability value of the unit root test is more than the alpha value then the data on the variable is declared not stationary. Table 1 describes that the data used in this study are generally stationary at the 1st Difference level. The next stage is cointegration testing to determine the use of the model using VAR or VECM (Vector Error Connection Model) systems.

2. Cointegration Test

The cointegration used to obtain long-term relationships between variables in this study is the Kao Residual Cointegration Test as follows:

Table 3. Cointegration Test Results

Kao Residual Co-integration Test			
ADF	t-Statistic	Probability	Co-integration
	-1.780082	0.0375	Cointegrating

Source: Data Processed, 2018

Table 3 shows the results of panel data cointegration test in this research model. The results of the analysis show that the probability value in the Kao test is smaller than the statistical t value of 0.037 > 0.05. These results indicate that in this model there is cointegration which means there is a long-term relationship in the model so that the tax and capital expenditure variables in the long term will affect growth in Indonesia. In accordance with the requirements, that when the model is not cointegrated, it cannot be estimated further with the VECM estimation, but estimation is done using the VAR method to follow up. In this method, aims to determine the response of all variables in response to the fluctuation or instability of the phenomenon that occurs through the impulse response function (IRF) test and variance decomposition to see the contribution of the independent variable response to the dependent variable shocks.

3. Optimum Lag

Optimal lag selection is to get the best VAR model that will be used in the study. VAR estimates are very sensitive to the length of lag used. Determination of the right lag will also have implications for the release of the model of autocorrelation and heteroscedasticity problems (Gujarati and Porter, 2009). This lag test is used to determine the length of the period of influence of a variable on its past variables and other endogenous variables. Determination of lag in this study uses Akaike Information Criterion (AIC) because it will provide additional variable intervals to reduce the degree of freedom.

Table 4. Optimum Lag Test Results

Lag	AIC
0	8.490197
1	3.251708
2	2.973483
3	2.741162
4	0.574703
5	-0.581358
6	-1.123778*

Source: Data Processed, 2018

From Table 3 it can be seen that the minimum AIC value occurs at lag 6 which is a value of -1.123778.

4. Impulse Response Functions (IRF)

The next step is the analysis of Impulse Response Functions (IRF). IRF can describe the effect of shock or shock from endogenous variables on other endogenous variables contained in the model. The IRF in this study will provide an interrelated influence between GDP, tax and capital expenditure variables.
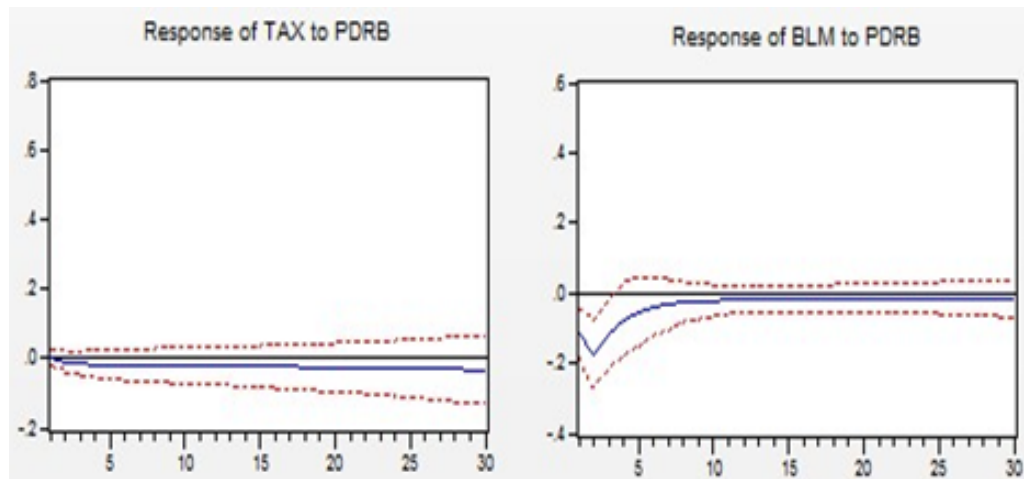
Figure 3. Government Expenditures for 2010-2017
Source: Data Processed, 2018

Each independent variable has a different response pattern in response to shocks to economic growth. Figure 1 shows the repon of the independent variable in response to shocks on the dependent variable until it reaches the stability point (steady state). Tax variables and capital expenditure have different response patterns in response to GRDP shocks. Figure 1 shows the response of tax and government capital expenditure to indicators of economic growth, namely GRDP. The first shock is between tax and GRDP. Shocks that occur from the beginning to the end of the period are likely to increase and not reach the balance position until the end of the period. The next capital expenditure also responded with an increasing trend. The capital expenditure response to the GRDP fluctuations was responded from the beginning to the end of the period and until the end of the period did not reach the point of balance.

5. Variance Decompotition Test Results

To see the contribution of macroeconomic independent variables, financial inclusion and labor mobility to changes in GDP, varince decomposition analysis is used. Table 4 shows the magnitude of the contribution of tax variables and government capital expenditure in changes in GDP.

Table 5. Optimum Lag Test Results

Period	S.E.	PDRB	TAX	BLM
1	3.087839	100.0000	0.000000	0.000000
2	3.368792	99.81065	0.112123	0.077232
3	3.453445	99.06458	0.147599	0.787826
4	3.487217	97.64132	0.149266	2.209411
5	3.516018	96.07692	0.147211	3.775866
10	3.588698	92.29622	0.238273	7.465503
15	3.604298	91.53820	0.485456	7.976343
20	3.612589	91.13499	0.865760	7.999252
25	3.622220	90.66267	1.378601	7.958731
30	3.634722	90.05157	2.040472	7.907956

Source: Data Processed, 2018

The results of this analysis will describe the highest contributors per period in the analysis of this study. In the second period, the Tax variable contributed to changes in GDP by 11.21% followed by the contribution of capital expenditure by 0.7%. In the 5th period, Taxes contributed greatly to changes in GRDP at a rate of 37.75% and was followed by a tax of 14.72%. And at the end of the period, namely the 20th period, the variable capital expenditure shows a large contribution of 79.99% but smaller than the contribution of taxes in influencing the GRDP of 86.57%.

5. Discussion

Effect of Capital Expenditures on Economic Growth

Based on the regression results with a random effect model on capital expenditure will have a positive and significant impact on economic growth. This means that increasing capital expenditure will also increase economic growth.

Government expenditure in the form of capital expenditure allocations is based on the need for facilities and infrastructure both for the smooth implementation of government duties and for public facilities in the form of land, equipment and machinery, buildings and buildings, roads, irrigation and networks, and other fixed assets. Through the increase in capital expenditure the APBD is expected to be a driving factor for the emergence of various new investments in the region in optimizing the utilization of various resources for production activities so that it can ultimately increase regional economic growth.

Capital expenditures are regional expenditures made by local governments including the development and improvement of the education, health, transportation sectors, so that people also enjoy the benefits of regional development. The existence of good infrastructure is expected to create efficiency and effectiveness in various sectors, the productivity of the community is expected to become higher and in turn increase economic growth.

The test results show that capital expenditure has a significant effect on economic growth. Capital expenditure increases economic growth. East Java government spending should have a role in economic growth with the assumption that the implications of government spending are for productive activities such as infrastructure spending. Shopping that is productive and in direct contact with public interests will stimulate the economy. Capital expenditure has a significant effect on economic growth.

The increase in capital investment (capital expenditure) is expected to improve the quality of public services and in turn be able to increase the level of public participation (contribution) to development as reflected in the increase in PAD (Mardiasmo, 2002). In other words, the construction of various public sector facilities will lead to economic growth.

Capital expenditure policy is a policy in the economy that needs to be implemented when facing serious unemployment problems. The results of this study are in accordance with the "steady growth theory" which is the development of Keynesian analysis, emphasizing the key role of the need for investment in the process of creating economic growth (Suryana, 2000: 66). Capital or capital as a factor of production in economic development is not in the form of money but real capital / capital goods. The results of this study found that capital expenditure has a significant effect on economic growth. Hendarmin (2012) and Patricia and Izuchukwu (2013) found that capital expenditure has a significant effect on economic growth. Sakyi and Adams (2012) show that government spending has a positive effect on economic growth in the long run. Akpan and Abang (2013) found that government spending negatively affected economic growth.

Tax Influence on Economic Growth

Based on the regression results with the random effect model, the Regional Taxes have a positive and significant effect on economic growth. This means that the increasing regional tax ratio will also increase economic growth. This situation indicates that if there is an increase in the economy, tax revenues will also increase, because the increase in the economy indicates that the production of goods and services has increased. Increased production of goods and services will certainly increase the excitement of the economy so that economic activities will also increase.

Provincial tax revenues based on Law No. 28 of 2009 consist of Motorized Vehicle Taxes, Motor Vehicle Transfer Charges, Motor Vehicle Fuel Taxes, Surface Water Taxes and Cigarette Taxes. Transfer of Motor Vehicle, Cigarette Tax and Motor Vehicle Fuel Tax is an indirect tax. With this indirect tax the public will pay for the goods or services they consume will increase the economy. Government policy to increase tax revenue from taxes will not directly increase economic growth.

The results of this study in accordance with Lee and Gordon 92005) found that taxes can increase economic growth. Sumaryani (2015) found that taxes can increase economic growth. Gale and Samwick (2014) obtained the results that higher tax revenues will increase economic growth.

6. Conclusions and Recommendations

Based on the results of the study it can be concluded that fiscal policy affects economic growth where: (1) capital expenditure has an effect on economic growth. The higher the capital expenditure, the higher government spending in the form of capital expenditure will increase economic growth; and (2) tax revenue affects economic growth. If the high tax revenue will finance the community's economic facilities so that economic activity runs and will increase economic growth.

Suggestions that can be submitted in this study are: (1) the government uses capital expenditure prioritized on efforts to create jobs for economic activities so that it will increase economic growth; and (2) the order increases efforts to make the public aware of paying taxes so that it redistributes the tax revenue results in the form of government spending, especially in the development of public infrastructure and social spending

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Regional Development Planning Through The Government's Participative Role, Case Study: Cibadak and Bojongcae Village- Banten's Province-Indonesia

Sugianto[1], Yul Tito Permadhy[1], Indri Arrafi Juliannisa[1]
[1]UPN "Veteran" Jakarta, JL. RS. Fatmawati No.1, Jakarta (12450)
Email: sugiantosemm@yahoo.com

Abstract

Regional development can begin with build the potential village in a way exploring all the potential resources, because from village development can support the country's economic growth, as stated in NAWACITA. The potential should be supported by the the participatory role of the village apparatus and local community. This research examines about regional development planning of Banten Province through exploring the potential village with the participatory role of the village's apparatus, study case: Cibadak & Bojongcae. This research uses Qualitative-Quantitative method, and potential village mapping classified by; economic, social, cultural, political, natural & human resources, and ideology. Subsequently, The SWOT (Strength, Weakness, Opportunity, and Threat) analysis for the overall potential and The Location Quotient (LQ) analysis to see the major economic activity. The results from LQ analysis show that in both villages agriculture is a superior sector and can be managed for increase the sales value, and then these villages have the economic potential in the field of trade, art, and animal husbandry, like: cow, goat, rabbit & chicken. Of course, the village's government has participative to build the village, as well as the citizens, but they are still constrained by the lack of knowledge.

Keywords: Regional Development; The Potential Village; The Government Participatory Role; The Economic Potential

1. Introduction

Regional development is an integral part that is inseparable from national development, various development activities carried out by the central government in the regions are intended to improve national development. Every regional government has freedom in the development of their respective regions, as stipulated in Law Number 32 of 2004. That is discussing the administration of government in the regions, especially the regency or city, which is based on the principle of autonomy and the task of assisting with the principle of autonomy to the greatest possible extent in the system and principles of the Unitary Republic of Indonesia (Rusdi, 2014).

Successful development will have an impact on a country's economic growth, if in a country there are many remote areas with the high poverty rates, so the country will be difficult to develop and even impossible to become a developed country. Countries with high poverty rates can cause income inequality, unemployment and declining health rates for citizens. Village development is a step to help the success of development activities (Rusdi, 2014).

The village is a manifestation or unity of geography, social, economic, political and cultural found in an area. According to Law Number 22 of 1999 concerning Regional Government article I, Village is the legal community unit that has the authority to regulate and manage the interests of the local community based on local origin and customs recognized in the national government system and in the district. Based on Permendagri No. 66 of 2007

concerning Village Development Planning, which is a participatory development model that is a system of development management in the village together in consultation, consensus and mutual cooperation which is a way of life that has long been rooted in Indonesian culture (Bappenas, 2016).

Lebak Regency is a district in Banten Province, Indonesia with the capital Rangkasbitung. Lebak Regency consists of 28 Districts, covering 340 villages, among them are Bojong Cae and Cibadak villages, Based on the observations of researchers, the two villages have a population of 3,499 people and 4905 people (BPS, 2017).

Figure 1. Google Earth Cibadak District - Banten

When viewed from the topography of the two villages, they are still surrounded by fields and paddy fields, therefore most of the population work as farmers and farm laborers, but it does not deny the existence of residents who choose to work in the trade sector, like trading or opening a wholesale business.

Bojongcae and Cibadak villages can also be developed in a better direction, because researchers see the potential of art, agriculture, plantations and livestock, and by utilizing human resources towards more productive. Of course, this is the same as the village development program launched by the President of Indonesia, if economic growth is directed to regions that have potential, and then regional facilities and strategic location, it will accelerate economic progress and push the country into a developed country. So, in this study researchers will conduct village potential mapping based on aspects, such as: 1) Social, Economic-Political, and Cultural, 2) Human resources - nature and environment, 3) Ideology.

These two villages have the potential to succeed in the development of the Lebak Regency in Banten province, because it is supported by the presence of citizens who have a spirit of change towards a better direction. But, village development is not only fixated on the spirit of the citizens, but it is also necessary to map the potential of the village as the initial stage of realization of village development planning which is expected to arise in terms of economic, socio-cultural, demographic and political background and certainly participatory role of village government which can move people's enthusiasm to face innovation in the future (Dwiyanto, 2009).

Based on the description above, the researcher is interested in conducting further research to find out the potential of the village and the participatory role of the village government, by raising the title of research about **"Regional Development Planning Through The Government's Participative Role, Case Study: Cibadak and Bojongcae Village- Banten's Province-Indonesia"**.

2. Method

This study uses a mix method consisting of quantitative methods for Location Quotient Analysis (LQ). LQ is an analytical technique to determine the potential for an area's specialization of the main economic activities found in Bojongcae and Cibadak Villages, LQ can divide the economic activities of an area into two groups (Wasil, 2012):

1. Industrial activities that serve markets in the region itself or outside the area concerned. Industries like this are called basic industries.
2. Economic or industrial activities that serve the market in the area, this type is called local industry (industry non basic).

Formulation of the amount of LQ with the formulation as follows (Wasil, 2012):

$$LQ = \frac{vI / vt}{VI / Vt} = \frac{vI / vt}{VI / Vt}$$

Information :
vI : GRDP of each sector / business field in the Regency / City
vt : Total Regency / City PDRB
VI : Provincial GRDP of each sector or business field
Vt : Total provincial GRDP

Based on the above formulation (Wasil, 2012):
1. LQ > 1, means that the regions are more specialized in the sector so they can export.
2. LQ = 0, meaning that both regions and regions have a high level of specialization.
3. LQ <1, means that the region does not have specialization in the sector so as to meet the needs of the region itself to import or obtain from other regions.

In addition, in this study to use qualitative methods to see the potential of Bojongcae Village and Cibadak Village with the following operational variables; Economy, Environment and Resources, Politics, Socio-culture and Ideology. In this study also used SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis techniques, this analysis techniques that identify various factors systematically to formulate strategies (Afrillita, 2013).

Whereas, to examine the participatory role of the government of Bojongcae and Cibadak villages in this study will use SPSS analysis tools with normality and validity testing techniques. Normality Test is a test carried out with the aim of assessing the distribution of data in a data group or variable, whether the data distribution is normal or not. Validity test is used to measure validity, or whether a questionnaire is valid or not. A questionnaire is said to be valid if the question in the questionnaire is able to reveal something that will be measured by the questionnaire (Sugiyono, 2012).

The object of filling out questionnaires was 155 residents, consisting of 31 neighborhood associations, Cibadak Village as many as 18 neighbors and Bojongcae Village as many as 13 neighbors. Each of the neighborhood associations was represented by 5 people to fill out the questions in the questionnaire. As for the techniques and types of data collection in a way; documentation, interviews, observation and literature studies.

3. Findings and Argument
General Picture of the Village

Bojong Cae Village is not a coastal area, but a lowland area located outside the forestry area, likewise for Cibadak Village. The area of Bojongcae village is 188 ha and Cibadak is 75 ha. The distance between these two villages to the sub-district is 2 Km. Rice fields in Bojongcae Village are 94 hectares and the village has 210 m of sea level. The population of Bojongcae village until 2017 is 3524 people, with a population density of 1874 people / km2. The number of people who work as farmers is 183 people, as many as 268 farm laborers, as many as 1 fisherman, 1 fisherman worker, 16 civil servants, 10 home industries, 58 people trade and work as services another 54 people.

While, rice fields in Cibadak Village are 94 hectares and the village has 240 m altitude above sea level. The population of Bojongcae village up to 2017 is 4950 people, with a population density of 2475 people/km^2. The number of people who work as farmers is 595 people, as many as 532 farm laborers, as many as 4 people as fishermen, as many as 18 civil servants, 5 home industries, 402 people trade and 245 other professionals. In this village there is also one resident who becomes an Indonesian Worker (TKI) in Saudi Arabia.

Potential of Bojongcae and Cibadak Village

Through adequate village potential, it will make it easier to create national development and increase the value of a country's economic growth. Like what happened in Indonesia, there are NAWACITA or nine ideals of the Indonesian people, one of them is developing Indonesia from the periphery by strengthening regions and villages within the framework of a unitary state.

Table 1. Results of Analysis of Potential of Bojongcae Village and Cibadak Village

No	Variables	Existing Potential	
		Bojongcae	**Cibadak**
1	Economy	In this village there are no domestic companies or foreign companies that stand, there are only entrepreneurs who are engaged in the field of business (umbia).	In this village there were no domestic companies or foreign companies that were established, there were only entrepreneurs such as; mechanic and ginger.
2	Environment and Resources	1. There are 88 family heads whose homes have been using electricity. 2. The road access is still inadequate. 3. There are lack of clean water and the frequent crop failures due to the dry season. 4. The unavailability of public transportation and internet networks. 5. Lack of facilities from the government to manage and dispose of waste 6. Plant excellence those in this village such as rice and pulses	1. There are 1683 family heads whose houses have been using electricity. 2. Access roads is very good. 3. The water supply in the village is quite adequate and harvest failure often occurs because of the dry season and irrigated rice fields are not available. 4. There is no public transportation, and nothing government facilities for manage and dispose of garbage. 5. The availability of independent internet services such as fizta nets. 6. The superior entrepreneurial products is "Labeur Ginger".
3	Political	In this village there are residents who are members of the political party council, management of branches, and community organizations such as LSM.	In this village there are several political party activists, but LSM did not play an active role in supporting the activities of the local government.

No	Variables	Existing Potential	
		Bojongcae	**Cibadak**
4	Social and Culture	1. The superior economic sector in this village is the agricultural sector, with a total production of 1,657.5 per ton / year. 2. The main fruit plants are mango, rambutan, duku, durian, papaya, banana, pineapple, jackfruit, guava, breadfruit and melinjo. 3. There is only 1 primary school, most of the residents have the last education in elementary school. 4. Pencak silat is a characteristic of culture. 5. There are 5 posyandu posts	1. The superior economic sector in this village is the agricultural sector, with a total production of 812,2 per ton / year. 2. The main fruit plants are mango, rambutan, duku, durian, papaya, banana, pineapple, jackfruit, guava, breadfruit and melinjo. 3. In this village often get a tractor subsidy from the government 4. There are 2 primary schools, 1 early childhood education and 1 junior high school (SANAWIYAH) 5. Pencak silat and marawis are typical of the village 6. There are 3 posyandu posts
5	Ideology	1. The village's life order is to make village agricultural products become superior and become a tourism area 2. Establishing elementary and junior high schools	The order of life of this village to move in the field of entrepreneurship and community productivity

The Results of the SWOT Analysis

1. Strengths

These two villages have a superior agricultural sector in the economy, for bojongcae village is very famous for its rice and palm products, while for cibadak villages in addition to rice and secondary crops, there are ginger plants which are superior products of UMKM. Karang Taruna and community institutions in Bojongcae village are very active to assist the government in development.

2. Weaknesses

In Bojong Cae village, there are no sectors that have the potential to be developed for tourism, while in Cibadak village there is a ginger plantations that have the potential to become tourist areas. Lack of educational facilities in these two villages, so that the education standards in these two villages are low, and there is no irrigation and waste management place that makes these two villages dry and easily polluted by the environment. For bojongcae villages, the damaged road access makes it difficult for residents to engage in activities.

3. Opportunity

Bojongcae and Cibadak villages are able to maximize agricultural yields, and should be assisted by processing industries. The waste contained in these two villages can be maximized for processing so that it can be used as fertilizer for plants and the abundant fruit yields of these two villages have the potential to produce candied fruits.

4. *Treath*

Because schools are too far from these two villages, it will cause a low level of enthusiasm for learning to continue to the next level, so that in these two villages there will be a lack of productive human resources. Both of these villages will be prone to drought, because of inadequate water resources, and inadequate internet networks can make it difficult to open up a society's insight.

Location Quotient Analysis (LQ)

In this study LQ analysis was calculated based on gross domestic regional income (PDRB) in 2017. The results show that the LQ value is more than 1, which means that regions are more specialized in the sector so they can export, are the sectors; Agriculture, Forestry and Fisheries, Mining and Excavation, Construction, Wholesale and Retail Trade; Car and Motorcycle Repair, Provision of Accommodation and Eating Drinks, Government Administration, Defense and Mandatory Social Security, Other services.

Whereas for sectors that have a LQ value <1, which means that the region does not have specialization in the sector so as to meet the needs of the region itself, import or get from other regions, are the sectors ; Processing industry, Electricity and Gas Procurement, Water Supply, Waste Management, Waste and Recycling, Transportation and Warehousing, Information and Communication, Financial Services and Insurance, Real Estate, Company Services, Education Services, Health Services and Social Activities.

Participatory Role Statistics Test Results of the Bojongcae Village Government and Cibadak Village

The village government or precisely the village head has the task of organizing government, development and community affairs. Governmental affairs are the arrangement of community life in accordance with village authority such as the making of village regulations, the formation of community institutions, the establishment of village-owned enterprises, and inter-village cooperation (Ulumiyah, Gani, & Mindarti, 2016).

The village potential will not be able to grow without the role of the village government, so in the discussion of this research will be presented the results of the analysis of statistical data tests on the role of the village government / village head of Bojongcae and Cibadak in giving servants to the local village community, as for the data obtained by the research team is the result of the assessment of the villagers of Bojongcae and Cibadak villages in the form of questionnaires. In this study 83 male respondents and 72 females. Susceptible age of respondents is 26 years to 41 years, characteristics of respondents' work for 103 farmers, 10 mechanics and 42 traders.

The questions contained in the questionnaire are based on aspects; suitability of type of service, ease, speed, cost, ability of officers, courtesy, as well as the overall service delivered by the community, with the following categories of choice; 1) Not Compliant, 2) Less Compliant, 3) Appropriate, 4) Very Suitable.
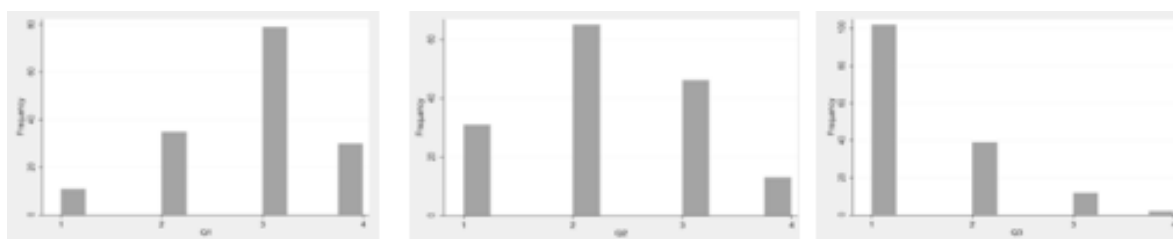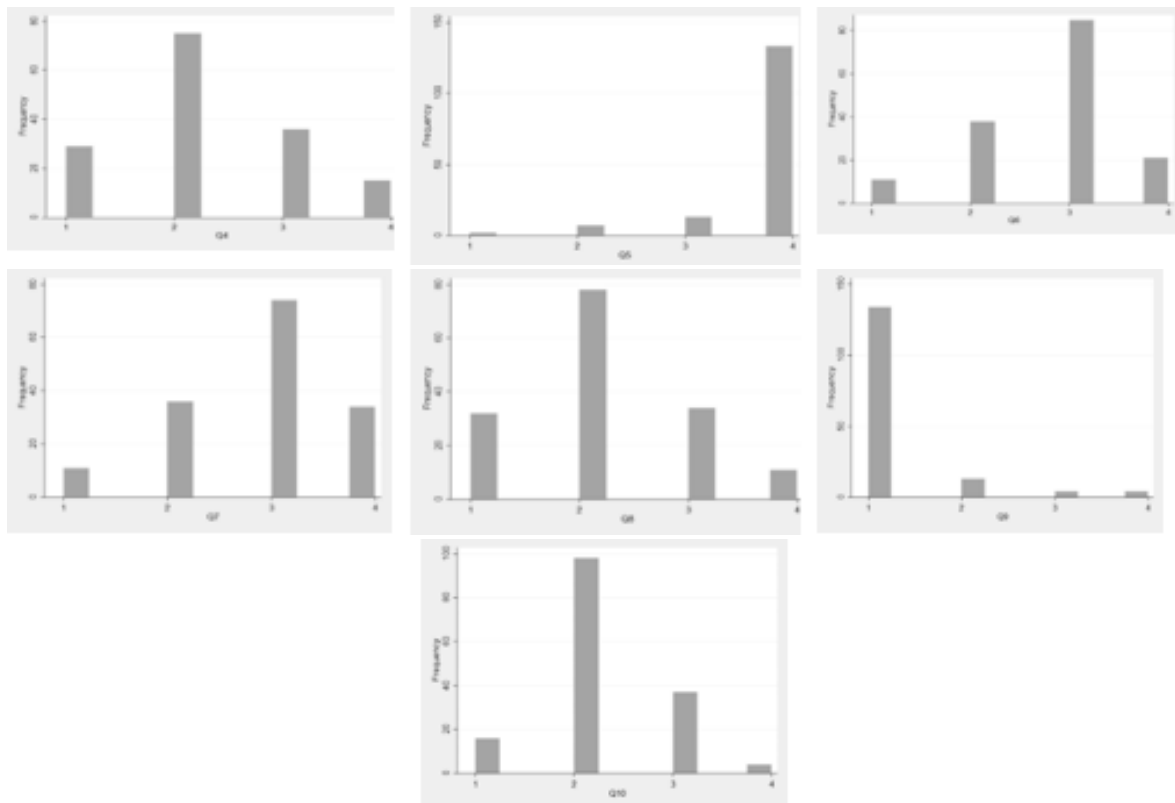
Figure 2. Histogram Questionnaire

Based on Figure 2, it can be seen below for the first question or Q1 about the suitability of service requirements with the type of service, most respondents answered accordingly, this indicates that all the requirements set by the village government can be fulfilled by the community. For the second or Q2 question about the ease of service procedures, most respondents answered that it was not appropriate, this indicated that the community was still having difficulties in obtaining services, an example of a problem of difficulty found is the problem when printing letters, sometimes the village government apparatus is difficult to correct the printer machine. For the third or Q3 question about the speed of service, the majority of respondents answered that it was not appropriate, this indicates that the village government is less responsive to the services that the residents have ordered. For the fourth question or Q4 about the suitability between the fees paid and the costs that have been set, the majority of respondents answered that it was not appropriate, this indicates that there was an indication of payment of fees that did not exist properly. For the fifth question or Q5 about the suitability between the results of services provided and the stipulated conditions / initial customer requests, most respondents answered it was very appropriate, this indicates that the residents were satisfied with the services proposed at the beginning and the results they received.

For the sixth or Q6 questions about the ability of officers to provide services, most of the respondents answered accordingly, this indicates that the apatarur in charge is capable people in the service sector. For the seventh or Q7 questions about the attitude (politeness and friendliness) of officers in providing services, most respondents answered accordingly, this indicates that the government apparatus has a good work ethic. For the eighth question or Q8 regarding the suitability of the implementation of services provided with the stipulated (service standard) stipulated, most of the responders answered that it was inappropriate, this indicated that there were officers who were not disciplined in carrying out the Worker's

Oprational Standards. For the ninth or Q9 question about handling complaints and suggestions, most respondents answered that it was not appropriate, this indicates that the criticism or suggestions given by the residents in the suggestion box or delivered directly to the village government apparatus was not realized, and for the last question or Q10 about the overall perceived satisfaction of the service, most respondents answered that it was not appropriate, this indicates that the villagers of Bojongcae and Cibadak villages still felt dissatisfied with the services provided by the local village government officials, such as the collection of fees. voluntary, lack of service provided so that residents have to wait long or even come many times, and criticisms and suggestions that are not heard.

Table 2. Normality Test Results

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Skewness/Kurtosis tests for Normality
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Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	joint Prob>chi2
q1	155	0.0246	0.7172	5.16	0.0758
q2	155	0.2548	0.0230	6.19	0.0454
q3	155	0.0000	0.0042	33.63	0.0000
q4	155	0.0336	0.2679	5.61	0.0605
q5	155	0.0000	0.0000	.	0.0000
q6	155	0.0231	0.8448	5.17	0.0753
q7	155	0.0353	0.3561	5.24	0.0727
q8	155	0.0205	0.6726	5.45	0.0654
q9	155	0.0000	0.0000	.	0.0000
q10	155	0.0398	0.1691	5.91	0.0520

Based on table 2, it is known that the results of the normality test of 10 questions regarding the quality of service provided by the Bojongcae and Cibadak village government to the local community, there are 6 questions that are normally distributed and 4 questions that are not normally distributed, including questions number 2, 3, 5 and 9. These questions are categorized as normally distributed if the Prob> chi2 value is greater than the trust standard of 5%, and vice versa if the Prob> chi2 value is smaller than the trust standard of 5%, it can be said that the question is not normally distributed. Questions 2,3,5, and 9 are not normally distributed because the number of vulnerable choices of answers that have been chosen by the respondents is not evenly distributed between choices 1 to 4, in which the 1st choice category is for the inappropriate category, the second choice is for the inappropriate category, option 3 is for the appropriate category and the last choice is 4 is the choice for the very appropriate category.

Part of the kurtosis value can be seen that it is greater than 0.263, it can be categorized into leptokurtic distribution, which means that this distribution narrows at the top or near point. This situation shows that the frequency tends to accumulate in the area around the mean value or shows only a few frequencies that spread further than the central tendency value, and based on table 4.8 it is also known that for the plan 1 to 10 the skewness is in the range -1.96 and +1.96, then the data is close to symmetrical (Arianto, 2010).

Validity test conducted by the research team used a Pearson correlation test or pairwise test. Can be seen below in var14 all questions, is that from Q1 to Q10 there is an asterisk (*), this indicates that all questions presented by the research team have been proven valid at the level of trust 1%, 5% and 10%.

Table 3. Validity Test Results

	q1	q2	q3	q4	q5	q6	q7	q8	q9	q10	var14
q1	1.0000										
q2	-0.2149* 0.0072	1.0000									
q3	-0.2043* 0.0108	0.0400 0.6211	1.0000								
q4	-0.0323 0.6899	0.1725* 0.0318	0.0165 0.8389	1.0000							
q5	0.1664* 0.0385	-0.0035 0.9659	-0.0694 0.3911	0.0628 0.4378	1.0000						
q6	0.0832 0.3031	-0.0923 0.2534	-0.0317 0.6952	-0.0259 0.7494	-0.1193 0.1392	1.0000					
q7	0.0356 0.6600	0.0118 0.8840	0.0959 0.2350	0.1036 0.1994	-0.0411 0.6118	0.0095 0.9068	1.0000				
q8	0.0967 0.2313	0.0951 0.2394	0.0261 0.7475	-0.1326 0.1001	0.0822 0.3092	0.1210 0.1338	-0.0026 0.9742	1.0000			
q9	-0.0032 0.9681	0.0033 0.9677	0.0657 0.4169	0.0137 0.8658	-0.1635* 0.0421	-0.1047 0.1947	-0.1987* 0.0132	-0.0141 0.8614	1.0000		
q10	0.1480* 0.0661	0.0730 0.3665	0.0159 0.8447	0.0242 0.7653	-0.0318 0.6948	-0.0741 0.3595	-0.1136 0.1594	0.0549 0.4978	0.1124 0.1637	1.0000	
var14	0.3384* 0.0000	0.3837* 0.0000	0.2708* 0.0007	0.4169* 0.0000	0.2207* 0.0058	0.2644* 0.0009	0.3381* 0.0000	0.4334* 0.0000	0.1579* 0.0498	0.3273* 0.0000	1.0000

Validity test conducted by the research team used a Pearson correlation test or pairwise test. Can be seen below in var14 all questions, is that from Q1 to Q10 there is an asterisk (*), this indicates that all questions presented by the research team have been proven valid at the level of trust 1%, 5% and 10%.

4. Conclusion

1. Bojongcae and Cibadak Village both have economic potential in the agricultural sector. The superior agricultural production results in these two villages are rice and secondary crops. The results of the LQ analysis also show that the agricultural sector is a superior sector that has the potential to produce goods for import. The cultural arts found in these two villages are pencak silat, gendang pecak, and marawis.

2. In Cibadak Village has a typical plant, namely ginger. Until now the results of the ginger product are packaged in the form of a beverage "Laber Ginger".

3. In Bojongcae Village there is not enough internet service available and there is no public transportation, only motorcycles base, besides that the road infrastructure is not good, many roads are hollow, and the village is still having trouble with clean water and irrigation for rice fields. The opposite situation is found in Cibadak Village, the village already has independent internet services such as Fizta Nets,

but the unavailability of public transportation equipment, the road infrastructure in Cibadak Village is fairly good and not too often the village is hit by drought.

4. The absence of junior high schools in Bojoncae Village, which caused most of its citizens to only have elementary school education, another situation occurred in Cibadak village, namely the village is still available, so that residents who want to continue their education are not too difficult.

5. The villagers of Bojongcae and Cibadak still feel dissatisfied with the services provided by the local village government apparatus, such as voluntary fees, the lack of services provided so that residents have to wait a long time or even come many times, and lack criticism be heard.

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Different Test Between Companies That Pay and Do Not Pay Dividends Initiation to Stock Returns

Desmintari
[1]UPN "Veteran" Jakarta, JL. RS. Fatmawati No.1, Jakarta (12450)

Abstract

Dividend initiation is the policy of a company to pay the first dividend after the IPO, although not all companies pay dividend initiation after the IPO. This study aims to analyze whether there is a difference in average return of stocks between companies that pay dividend initiation and those that do not pay dividend initiation. The analysis is carried out using dummy regression and different tests to determine whether the difference exists within the average stock returns between the two groups of companies.

From the test results obtained that there is a difference between companies that pay dividends initiation and those who do not pay it on stock returns. This is identified with a positive coefficient value or $\alpha > 0$.

Keywords: dividend initiation, yield different-test

1. Introduction

Dividend policy has a very important impact on investors as well as on companies that pay dividends. This policy is implemented as a result of the general meeting of shareholders (GMS). Investors generally expect to get compensation for investments they made in the form of dividends or additional capital (capital gains). On the other hand, the company also expects continuous growth by utilizing profits as an internal funding source and at the same time able to deliver welfare to its shareholders.

The company's readiness to implement the first dividend policy after an IPO called dividend initiation is the first indication of a company with the financial capability that is supported by the prospect of adequate corporate performance to distribute excess cash to shareholders. Therefore, it is expected that the company's decision through the GMS to immediately or delay the initiation of the dividend will give a signal about the company's financial performance. Companies that are able to pay their dividends early/faster are considered to have a better financial ability in terms of growth opportunities, leverage, size and profitability of the company as well as the company's ownership structure (Sharma 2001).

The ownership structure also determines how the company is running as it should be due to an agency problem between management and shareholders who share an interest in companies that conduct IPOs on the stock market.

The dividend initiation policy is measured by the dividend payout ratio (DPR). The reason for using the DPR as a dependent variable is because the DPR determines the portion of profit that will be shared with shareholders and retained as part of retained earnings. The dividend theory that is relevant to this research is the signaling theory. The theory of dividends as signals was developed by Miller and Rock (1985) who argued that dividend announcements contained information about current and future earnings. An announcement of increased dividends gives a signal that, in the future, profits will increase.

Sharma (2001) reveals that in the US, companies doing IPOs pay the first dividend not at the beginning of the year after the IPO, but mostly after more than 3 years. While Sugeng (2009) states that in Indonesia between 1990 and 2000 the payment of dividend initiation in the first year after the IPO was carried out by almost all companies doing IPO.

However, between 2000 and 2014 as can be seen in Table 1, not all companies pay dividend initiation, and most companies make payment of dividend initiation are between 0-1 to 5 years after the IPO. The dividend initiation payment policy in Indonesia in the period of 2000 to 2014 is different from the conditions in the period of 1990 to 2000 as a result of Sugeng (2009) and Sharma (2001).

In Table 1 we can see that of the 266 companies whose IPO or go public through the Indonesia Stock Exchange (BEI) in the span of 15 years (between 2000 and 2014), there are 159 companies (59.77%) who have made the payment of dividend initiation, while 104 companies (39.23%) do not make dividends initiation.

Of the 159 companies that made the first dividend payment or dividend initiation, as many as 113 companies or 71.07% initiated dividends between year 0-1 after IPO. Until the 5th year, there were 150 companies or 94.34% who paid dividend initiation, while there were 9 companies or 5.66% that did it after more than 5 years.

Based on the background explained above, this study tries to analyze the influence of company policy that pays and does not pay the initiation of dividends on stock returns. The sample of this study is companies listed on the Indonesia Stock Exchange (IDX) between 2000 and 2014.

Research Purposes

To analyze whether there are differences in stock returns between companies that pay dividend initiation and companies that do not pay dividend initiation. Analysis to prove the difference was conducted using dummy regression and different tests.

Table 1. Payment of Dividend Initiation After IPO on IDX 2000 to 2014

Year of IPO	IPO	No ID	No ID incomplete	ID	PAYMENT OF DIVIDEND INITIATION AFTER IPO (Year after IPO)													
					0-1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000	21	6	0	15	12	0	1	1	0	1	0	0	0	0	0	0	0	0
2001	31	11	0	20	11	2	0	3	0	1	0	0	0	0	2	1	0	
2002	22	4	0	18	10	2	1	2	0	1	0	1	0	0	1	0		
2003	6	1	0	5	5	0	0	0	0	0	0	0	0	0	0			
2004	12	5	0	7	7	0	0	0	0	0	0	0	0	0				
2005	8	1	0	7	5	1	0	0	1	0	0	0	0					
2006	12	5	0	7	4	2	0	0	0	1	0	0						
2007	22	6	0	16	13	1	0	1	1	0								
2008	19	12	0	7	4	1	1	1	0									
2009	13	5	1	7	3	1	3	0										
2010	23	11	0	12	6	5	1											
2011	25	12	0	13	10	1	2											
2012	22	10	0	12	10	2												
2013	30	15	2	13	13													
TOTAL	266	104	3	159	113	18	9	8	2	4	0	1	0	0	3	1	0	0
% ID	100%	39.10	1.13	59.77	71.07	11.32	5.66	5.03	1.26	2.52	0.00	0.63	0.00	0.00	1.89	0.63	0.00	0.00

Source: IDX, own calculation.

2. Previous Studies and Hypothesis Formulation

Previous studies prove the information content that is signaled through dividend distribution. Pettit (1972) found empirical evidence that markets react to dividend announcements as indicated by changes in stock prices that quickly adjust to dividend announcements. The results of research conducted by Pettit support signaling theory used by investors as a basis for analyzing information content or signals contained in dividend announcements of

future profitability / earnings. Some research then examines whether dividend distribution provides information about earnings quality. Hanlon et al. (2007) prove that investors can predict earnings in the future better for companies that distribute dividends. His research also proves that companies that distribute dividends have a current rate of return that is better associated with future profits than companies that do not distribute dividends.

Easterbrook (1984) states that companies that manipulate earnings tend to be less likely to distribute or increase dividends than companies that are not involved in profit manipulation. Profit derived from earnings manipulation has no cash basis and is not sustainable. Therefore, managers tend not to share or not increase dividends even though there is an increase in profits, because such profits are not sustainable (Lintner 1956).

Thus, the following hypothesis can be formulated:
H1: Companies that pay dividends have better earnings quality compared to companies that do not pay dividends.

3. Research Methods

1. Object of Research
   This study analyzes the company policy that pays and does not pay dividend initiation after the IPO (first dividend) and stock returns on companies listed on the Indonesia Stock Exchange in the period of 2000 - 2014.

2. Method of Collecting Data
   The type of data used in this study is annual secondary data from 2000 to 2014, which includes IPO data from 2000 to 2013 and the year the company first pays dividends or so-called dividends initiation in 2000 to 2014.

3. Population and Sample Research
   The sample in this study are all companies that conduct initial public offering (IPO) from 2000 to 2014 and are listed on the IDX either paying or not paying dividend initiation. Information about stock returns data, where operational variables are contained in the company's financial statements, is also taken from these companies.

4. Operational Definition and Variable Measurement
   Dependent Variable: Dependent variable namely Stock Returns is the yield (profit or loss) obtained from a stock investment.
   Independent Variable: The dependent variable in the logistic equation has a probability categorical value of policy to pay or not to pay dividend initiation which is part of the dividend policy where the company gives the first dividend after the IPO as can be seen from the dividend payout ratio. With a value of 1 if the company pays the dividend initiation and 0 if the company does not pay dividend initiation.

5. Data Analysis Method
   Difference Test: Independent Z test in principle compares the average of two groups that are not related to each other in order to find out whether the two groups that pay dividends and who do not pay dividends have the same average or not. Both groups have a large sample size and with the same sample as the logit model above. The test was conducted by dummy regression test to see the difference with a positive coefficient value.

4. Results and Discussion

Using Z-score, with the formula and method as follows:

Companies that perform dividend initiation:

$$\bar{x}_1 = \mu_1 = 0.39021$$
$$\sigma_1^2 = (1.31884)^2 = 1.73933$$
$$n_1 = 159$$

Companies that do not perform dividends initiation:

$$\bar{x}_2 = \mu_2 = 0.15297$$
$$\sigma_2^2 = (0.91037)^2 = 0.82878$$
$$n_2 = 104$$
$$D_0 = 0$$

$$Z\ score = \frac{(\bar{x}_1 - \bar{x}_2) - D_0}{\sqrt{\left[\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}\right]}}$$

$$= \frac{(0.39021 - 0.15297) - 0}{\sqrt{\left[\frac{1.73933}{159} + \frac{0.82878}{104}\right]}}$$

$$= \frac{0.23724}{\sqrt{[0.01094 + 0.00797]}} = \frac{0.23724}{0.0545} = 4.35$$

$$Z\ score = 4.35$$

With 95% confidence level or α = 5% = 0.05, then from the statistics table we get the value of $Z_{0.05}$ = 1.65.

Since Z score = 4.35 > $Z_{0.05}$ = 1.65, then we reject H_0.

Since Z-score = 4.35 is higher than Z-table = 1.65, then there is a significant difference between companies that pay dividends initiation and companies that do not pay dividends initiation on stock returns.

A dummy regression test is carried out to see whether companies that pay dividend initiation are better than companies that do not pay dividend initiation in terms of stock returns. Previously a classic assumption of heteroscedasticity was tested using a White-test where prob value generated is 0.4089. With an alpha value (α) = 5% then 0.4089 > 0.05 or *prob > α* then we reject H_0 or there is no heteroscedasticity in the model.

From the regression results with Y = stock return and X = dummy (1 = the company pays dividend initiation and 0 = company that does not pay dividend initiation), then the results obtained are as follow:

Table 2. Regression Test Results on Yields

Variable	Coefficient	Z-Statistic	Prob
Constant	0.1526	1.324	0.1865
Dummy ID	0.2378	1.605	0.1098

Source: Data Processed

Ri = ρ0   + ρ1Di
1.324 + 1.605 Di

From the results of the data calculation above with a coefficient value of ρ1 > 0 indicates that the company that pays dividend initiation has a better stock return than the company that does not pay dividend initiation with a positive coefficient value of 0.651.

4. Conclusion

There is a difference between companies that pay dividend initiation with companies that do not pay dividend initiation in stock returns. Companies that pay dividend initiation have better stock returns than companies that do not pay dividend initiation.

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Contribution and Effectiveness Ease Smoke to Earnings of Genuiness Area North Province Sulawesi of The Year 2014 - 2018

Alzefin Yolandi Roos Mareike Sinolungan
Faculty of Economics and Business, Universitas Negeri Manado, Jl. Tondano, Manado (95618)
e-mail: alzefinsinolungan@unima.ac.id

Abstract

Identify problem's is: Realitation is lower the than goals which it's it him resistance in and collection of management, like is circulation of cigarette of ilegal. Problem limited to regarding contribution and effectiveness Iease smoke to earnings of genuiness area (Earning's Of Genuiness) in North Sulawesi Province. **Formulation of problem** is: (1) How much is big of Iease contribution smoke to Earning's Of Genuiness North Sulawesi Province of The Year 2014-2018. (2) How is Iease effectiveness storey level smoke? *Research of Iease contribution aim to*: (1) Knowing to smoke to Earning's Of Genuiness North Sulawesi Province of Year 2014-2018, (2) Knowing to Iease effectiveness storey level smoke. **Hypothesis Research**: (1) Is anticipated Iease contribution smoke to Earning's of Genuinness North Sulawesi Province Of The Year 2014-2018 is to have good contribution to, (2) Is anticipated Iease effectivenness smoke is goodness. **Research method: quantitative descriptive. Operationalitation Variable:** (1) Contribution Iease of smoke, (2) Efectivitnness smoke taxes Iease cigarette, (3) Earning's of Genuinness North Province: Law Number 33 Year 2004 about Counter Balance Of Finance between Central Government and Local Government, Section 1, Sentence 18; such of Earning's Of Genuinness is obtained by acceptance is area from source of in region alone which is collected pursuant to by Law as according to Law and Regulation going into effect, (3) Earning's Of Genuinness is: Law,Number 33, Year 2004 about Counter Balance Of Finance between Central Government and Local Government, Section 1, Sentence 18; such of Earning's Of Genuinness North Sulawesi is obtained by acceptance is area from source of in region alone which is collected pursuant to by Law as according to Law and Regulation going into effect. **Type Data:** data of Earning's Of Genuinness North Sulawesi North Sulawesi Province Year 2014-2018 data acceptance of Iease Smoke. **Source Of Data:** Data Primary: passing observation process, direct interview; secunder of data: line on website, journal. **Technique Data Collecting:** (1) Riset Library, (2) Field Study: (a) Observation, (b) Interview, (c) Documentation. **Technique Analyse Data:** (a) Analyze Contribution, (b) Effectiveness Lease Cigarette. **Analysis Data:** contribution and effectiveness Iease smoke to earnings of area genuiness. **Model Analyse Data: (1) Analyze Contribution**: Acceptance Of Cigarette Lease/Earning's Of Area Genuinness X 100%. **(2) Analyse Effectiveness Lease Cigarette:** Analyze Smoke Taxes = Acceptance Of Cigarette Lease / Earnings Of Area Genuiness.

Keyword: Contribution, Effectiveness Lease Cigarette, Earnings of Genuiness Area

1. Introduction

Unity State Republic Of Indonesia represent divided archipelagic country of province area and province area consist of sub-province area. Construct in management of government,each of area have rights and obligations arrange and manage by exself its governance business to increase effectiveness and efficiency management of service and governance to society. Pursuant to Law, Number 23, Year 2014 about Governance of Local,

Local is entitled to arrange its own household, including managing acceptance, monetary expenditure and plan execution of development. To carry out governance of area entitled to impose collection to society, according to Constitution State Republic Of Indonesia Year 1945 placing taxation as one of the materialization of state,following that location of burden to other collection and people,is :taxes have the character of to force to regulate the. The collection used in order to management of service and governance to society. Because of it,local have to have the source of adequate earnings and enough in order to development and improvement of service of public .

Source of acceptance of area used to defray development come from some source one of them is lease. To be able to defray and move forward area can be gone through by an wisdom by is optimal of acceptance of lease, where each and everyone is obliged to pay for lease as according to its obligation. lease Area is lease specified by area for the sake of defrayal of governmental household of local. Each one(Earning's Of Genuiness) that is coming from lease Area. lease Area in Indonesia pursuant to Law, Number 28,Year 2009 divided to become 2 Province is:Taxes and lease Sub-Province / Municipality. This Division is conducted as according to imposition authority and collection of is each area lease type at administration region of Provinsi or Sub Province/pertinent municipality, there are difference of lease coverage among area of province sub-province area and/ municipality.

Law, Number 28, Year 2009, Section 2, Article 1 and 2 about lease Area and Retribution Area arrange about Source of Earnings each;every otonomous area good to storey;level of province sub-province and also / municipality According to Halim, (2015): for province storey; level, lease type collected to compose from: (1) Taxes Vehicle Of Motorcycle, (2) Bea Return the Name Of Vehicle Of Motorcycle, (3) Taxes Fuel Vehicle of Bermotor, (4) Taxes Water Surface, (5) Taxes Cigarette. For a while for the storey; level of sub-province /municipality,lease type can be collected to compose Hotel from: (1) Taxes, (2) Restaurant Taxes, (3) Taxes Entertainment amusement, (4) Lease Advertisement, (5) Taxes Lighting of Road; Street, (6) Taxes Mineral's is not Metal and Rock, (7) Taxes Parking, (8) Taxes Ground Water, (9) Taxes Nestle of Wallet, (10) Taxes Earth and Rural Building and Urban, (11) Bea Acquirement Of Real property. One of the spelled out members provinsi just contained in Law, Number 28 Year 2009 is lease Cigarette. lease Smoke is collection of cigarette collected by government. Applying of lease smoke equal to 10 % from duty value. lease Cigarette enter in lease Province category become completion of policy and Regulation of lease Area in the form of extension of area lease object. Especial target of applying of lease smoke to protect society to cigarette danger.

Province Sulawesi North as one of the province is in Indonesia formed pursuant to Law, Number 13, Year 1964, about Forming Of Province Sulawesi of North, located is upstate: Island Sulawesi, capital of: Manado. In running wheel governance of area, Province Sulawesi North have Set Of Activity Peripheral of Area (SKPD) most located in provincial capital. On Duty Earnings Of Area of Provinsi Sulawesi North is SKPD coordinated Earnings Of Area Mount Province have strategic function in supporting defrayal of activity of government in area very complex, earn operational, if when having in stock adequate budget.

Pursuant to data below, explained by lease realization Smoke to Earnings Of Genuiness Area Year 2014 a long way off from goals specified, differing year 2015 pursuant to existing data show growth of lease realization smoke to Earnings Of Genuiness Area enough year berkembang,sementara 2016 showing the existence of degradation compared to previous year. Realization of Earnings Of Genuiness budget year 2016 still spelled out members to lower, where On Duty Earnings Of Area (new Dispenda) Province   North Sulawesi collect 36,67% from determined goals, where many factor cause lease realization smoke less than determined goals, one of them that is: circulation of cigarette of ilegal,where

cigarette of ilegal is cigarette at its production phase do not enlist so that is not duty-bound, causing the target of applying of lease smoke is to service of enforcer and health punish by government officer in charge,but the level of acceptance of lease smoke very small big base on of effort done by Local Government side, specially Province Sulawesi North year 2014-2018 in doing collection and it is management, as according to condition of compared to among which is expected with existing result every year, causing researcher do research concerning: "Contribution and Effectiveness lease Smoke To Earnings Of Genuiness Area Year 2014- 2018".

Table 1. Amount Of Earnings Of Genuiness, Goals Acceptance of lease Smoke and Realization lease Smoke,Province Sulawesi North Year 2014- 2018 (Estimation)

Year	Amount Of Earnings Of Genuiness Area (Rp)	Goals Acceptance of lease Cigarette	Realization lease Cigarette
2014	938.583.020.354	96.000.000.000	69.377.472.983
2015	1.012.945.961.368	98.560.000.000	112.412.415.261
2016	980.925.824.286	127.900.000.000	107.158.711.896
2017	1.079.018.000.012	140.690.000.011	9.383.280.011
2018	1.186.920.000.012	154.759.000.011	103.216.100.012

Source: On Duty's Earnings Of Area of Provinsi Sulawesi North (Estimation Year 2014-2018)

Identifying Problem
*Realitation obtained lease Cigarette is lower the than determined goals.it is it him resistance in management and collection, like: circulation of cigarette illegal.

In limited of is problem of
Demarcation of Problem about Contribution and Effectiveness lease Smoke To Earnings Of Genuiness in Province Sulawesi North Year 2014- 2018.

Formula of is problem of:
(1) How is big of lease contribution smoke to PAD Province Sulawesi North 2014-2018?
(2) How lease effectiveness storey;level smoke PAD Province Sulawesi North to year 2014- 2018?

Target of Research
(1) Knowing area lease contribution to PAD Province Sulawesi North year 2014-2018.
(2) Knowing lease effectiveness storey; level smoke to PAD Year 2014- 2018.

Benefit Research
Usefull Theoretical
To science, expected can become reference materials for furthermore research to problem of is same at different object.
Usefull Practical
1. To local government side, expected can become to include and comparison of exploiting lease smoke to the make-up of Earnings Of Genuiness in Province North Sulawesi.
2. To taxpayer side and also Province Sulawesi North society, presumably can become one of the knowledge in executing obligation in paying lease Cigarette, utilize to improve area lease and of Earnings Of Genuiness, specially Province North Sulawesi and can become one of the source of information good for side have importance.

* Sinergi between research group woke up to utilize to yield innovation targeted:
- Law, Number 28, Year 2009, Iease Area, Area Special:Taxes Mount I/Province Iease
*) Iease Cigarette
- Tax Rate Area: equal to 10 % from Duty Smoke from Section 181.
- Law, Number 7, Year 2011, Section: Object Iease Cigarette: Consumption Cigarette: cigarette, cheroot, Cigarette Leaf. Is Not Object Cigarette: Law, Number 11, Year 199,5 altered by Law, Number 39, Year 2007, Section 26, Sentence 3, letter of a: and section 6, Article 2.
- Subjek Iease: Law, Number 7 Year 2011:Pajak Cigarette: cigarette consumer.
*) Taxpayer: manufacturer of cigarette / cigarette importer and producer have permit of each Number Fundamental of Entrepreneur Of Goods Hit Duty, according to Regulation of Minister for Finance Republic Of Indonesia.

Table 2. Variabel Solusi, Dimensi, Saran and Indicator

No.	Solution Variable	Dimention	Suggestion	Indicator
1	(X) Contribution and of Iease Cigarette vitas	1. Contribution Iease Smoke is analyzer used to know how big contribution can be rendered from acceptance of Iease smoke to Earnings Of Genuiness. 2. Efektivity Iease Cigarette represent ability to chosen correct target/ precise equipments for the attainment of target specified and represent an efficacy size measure/ failure of organization in reaching an target.	Government Center an Republic of Indonesian *People Province North Sulawesi	*Company of manure of urea national get adequate profit
2	(Y) Earnings Of Genuiness	*Earnings Of Genuiness according to Invitor – Invitor, Number 33 Year 2004 about Counter Balance Of Finance Between Central Government and Local Government, Section 1, Sentence 18, is obtained by earnings is area from source of in region alone which is collected pursuant to By Law as according to Law And Regulation go into effect.	* Law Number 33 Year 2004	*Earnings Of Genuiness Province North Sulawesi In The Year 2014-2018

*) Related/Relevant Previous Review Study [of] Contribution And Effectiveness Iease Smoke To Earnings Of Genuiness Area (PAD) Province Sulawesi North Year 2014-2018

Table 3. Research Of Contribution And Effectiveness lease Smoke To Earnings Of Genuiness Area (PAD) Provinsi Sulawesi North Year 2014 – 2018

No.	Writer, Institution and Year	Title Research	Finding, Conclusion and Suggestion
1	Ridwan Heriansyah Putra; Bursar State Monetary Majors Management, Politeknisk State'S Finance of STAN Provinsi Sumatra of Utara; 2016	Influence Of lease Smoke To Earnings Of Genuiness Area in Provinsi North Sumatra	Data used: primary data and data of secunder as supporter. Source of data from On Duty Earnings Of Area North Sumatra. Method used: Quantitative Method: lease Cigarette, owning contribution equal to 9,07 % from totalizeing PAD Province North Sumatra in Year 2014 and 13,46% in Year 2015
2	Kartika Permata Sari, 2017	Influence Of lease Smoke To PAD Of lease Area of Provinsi DKI Jakarta	" Result of this research indicate that endorsement of lease smoke every year natural of increase. Seen from year 2014 endor sement of lease smoke every year natural of increase. Year 2015:endorsement of lease smoke equal to Rp.47.453.918.878,00- Year 2016: Rp.69.350.088.861. Calculated by using formula:Meant endorsement TMA of year 2014-2015 equal to Rp.58.402.003.870 Estimate of endorsement of year lease 2017 for the Provinsi of DKI Jakarta equal to Rp.558.402.003.870

Hypothesis Research

1. Anticipated by lease contribution smoke to Earnings of Genuiness Area in Province North Sulawesi Year 2014 - 2018 is to have good contribution to.
2. Anticipated lease effectiveness smoke to Earnings of Genuiness Area in Province North Sulawesi Year 2014 - 2018 is goodness.

Method Research

Is quantitative descriptive method, representing technique analysing of data used by numbers to conclude from occurence can be measured (rikunto, 2010). **Quantitative Descriptive research** present data about realization and goals acceptance of lease smoke and is total of Earnings Of Genuiness Area Province North Sulawesi year 2014 – 2018.

Table 4. Operasionalitation Variable Research

Variable	Notation	Indicator	Size
(Dependent) Earnings Of Genuiness Area	(Y)	Local Taxes	(Rp/Year)
(Independent) Contribution and Effectiveness lease Smoke in Province Sulawesi North Year 2014- 2018	(X)	Contribution and Effectiveness lease Cigarette	(Rp/Year)

Source and Way Of Determination of Data / Information

Population, is all taxpayer smoke in Provinsi Sulawesi North Year 2014 - 2018
Sampel, is taxpayer smoke and acceptance of lease smoke in office On Duty Earnings Of Area of Provinsi Sulawesi North Year 2014 - 2018

Type and Source Data

1. Data of earnings of Genuiness Area of Provinsi Sulawesi North Year 2014 - 2018
2. Data Acceptance of lease Smoke in Province Sulawesi North Year 2014 - 2018
3. Other data correlate research

Source of data used by is

* Data Primary that is data obtained to through observation process and direct interview with related parties, in interview conducted with head side and officer involve direct in taxation administration at On Duty Earnings Of Area of Provinsi Sulawesi North Year 2014 - 2018.
* Data of Secunder that is data form other supporter literature and enclosure relate to this research.

Table 5. Model In The Form Of Equation: Technique Analyse Data

No.	Equation
1	$\text{Contribution} = \dfrac{\text{Acceptance of lease Cigarette}}{\text{Earnings of Genuiness Area}} \times 100\%$
2	$\text{Effectiveness lease Cigarette} = \dfrac{\text{Acceptance of lease Cigarette}}{\text{Targeted of Genuiness Area}} \times 100\%$

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Analysis of Regional Economic Growth and Inflation in Indonesia

MB Ariani[1], Ferry Hadiyanto[2], Yayan Satyakti[2], Indra Y. Mambea[2]
[1]Faculty of Economics and Business / UPN "Veteran" Jakarta, JL. RS. Fatmawati No.1, Jakarta (12450)
[2]Department of Economics, Universitas Padjadjaran, Jl. Raya Bandung Sumedang KM 21, Bandung (45363)
Email: nani.upnvj@gmail.com

Abstract

This study aims to analyze macroeconomic factors that affect economic growth and regional inflation. The data used in this study include macro data from 33 provinces in Indonesia from 2004 to 2014. We employ panel regression with the General Least Square method to analyze the influence of government expenditure variables, credit, the number of workers and the Human Development Index on economic growth as economic growth model. In addition, a regional inflation model is used to estimate factors that determine inflation by running probit panel regression with marginal effect. In order to capture the determinant of dummy inflation, we include labor productivity and the highest contribution rank from commodities contributing to regional inflation for the probability to reach the inflation target.

Keywords: economic growth, regional inflation, probit panel reggression

1. Introduction

Indonesia's dynamic economy with high output growth requires that inflation control is based on a good understanding of inflation. Monetary policy used by central banks in the short term to achieve two objectives, namely to maintain economic activity remained high and reached a low inflation rate[1]. Empirical facts indicate a trade-off between the two goals, where the increase in output growth (or decline in the unemployment rate since the creation of labor) tend to be followed by increases in the rate of inflation. AW Phillips describes the relationship between inflation and unemployment rates are based on the assumption that inflation is a reflection of an increase in aggregate demand. With the high price (inflation) then to meet the demand producers increase their production capacity by increasing the labor force (assuming labor is the only input that can increase the output). As a result of the increase in the demand for labor will increase prices (inflation), and reduce unemployment.

In regulation under the Act (UU) No. 3 2004 Article 7, the task of Bank Indonesia is to achieve and maintain the stability of the rupiah, which the stability of the Rupiah against the goods and services reflected through the stability of inflation. Therefore, monetary policy is directed to achieve and keep inflation at low and stable levels. According to the Act referred to, the inflation target set by the Government after coordination with Bank Indonesia which are intended to improve the credibility of monetary policy. To achieve this goal, since 2005 the Bank Indonesia implement monetary policy framework with inflation as the main target which is commonly called the Inflation Targeting Framework (ITF). This framework is applied, after previously using monetary policy to apply in base money (base money) as a monetary policy target. With this framework, Bank Indonesia explicitly announced to the public inflation target and monetary policy is aimed at achieving the inflation target set by the Government. In order to achieve the inflation target, monetary policy carried forward looking, which means that changes in the monetary policy stance is done through evaluation whether future inflation still in line with the inflation target has been declared [2].

Table 1. Actual Inflation

Year	Inflation Target	Actual Inflation (%, yoy)
2004	5.5 + 1%	6.4
2005	6 + 1%	17.11
2006	8 + 1%	6.6
2007	6 + 1%	6,59
2008	5 + 1%	11.06
2009	4.5 + 1%	2,78
2010	5 + 1%	6,96
2011	5 + 1%	3.79
2012	4.5 + 1%	4.3
2013	4.5 + 1%	8.38
2014	4.5 + 1%	8.36
2015	4.5 + 1%	3.35

Source: www.bi.go.id

It can be seen that the actual inflation still failed to reach the inflation target set. Of the twelve observations, there are only three observations to meet inflation targets, in 2004, 2007 and 2012. More actual inflation that occurred there are some that exceed the inflation target or lower than the target set. Bank Indonesia only has the ability to influence inflationary pressures from the demand side, while inflationary pressures from the supply side are beyond the control of Bank Indonesia [3]. Inflation comes from the supply side or that are shocks can be exemplified in forms such as rising global oil prices and the disruption of harvest or floods.

In micro perspective, Indonesia commodity prices of food stuffs often experience fluctuations in prices are rice, corn, soybean flour, sugar, cooking oil, onions, peppers, eggs, meat and milk [4]. Changes in prices of food commodities may be the largest contributor to the inflation rate due to the number of its large population, the demand for foodstuffs will be quite high. But sometimes deals not quite been able to meet the demand, so that eventually pushed the rate of inflation[5]. Stable inflation expected by every administration since inflation stability is a prerequisite for sustainable economic growth. Therefore, inflation control becomes very important because of the high inflation and unstable causing negative impacts on the socio-economic conditions of society. Inflation characteristics often associated with domestic factors such as aggregate demand, the behavior of wages, productivity, inflation expectations, the effect of the whole balance of the real factors and national monetary policy. In addition, inflation is also attributed to external factors or an external shock such as world energy prices and food prices.

Various studies on inflation using national aggregation of data has been done but there is still little research attention to inflation and build models of inflation based on the provincial data. Research that examines inflation dynamics using panel data regions or provinces should also be conducted to better understand inflation. The research is important because Indonesia large country with regional growth differences that cause variations in inflation. The study of the dynamics of inflation in Indonesia, among others carried the research found the specification forward looking than backward looking better in explaining inflation. Likewise, monetary surprises have a temporary effect on inflation [6].

Furthermore, several studies have discussed about the local inflation, among others by Wimanda (2005) and Ricardo D.Brito (2010) stated that inflation expectations had no

effect on local inflation [7]. Results of research Rahman Hakim (2016) suggest that inflation earlier period, inflation expectations and GDP significantly affect the rate of inflation, by contrast, Bank Indonesia's inflation target does not significantly influence the rate of inflation in Indonesia While research Silvia and Iqbal (2015) which made provision for the inflation target is achieved is -1 to 0, while not achieved is 0 to +1. A proxy for the market supply in the GDP and the rate of inflation prevailing prices. Such variations are not viewable using aggregate data but can be seen using the data area.

Mehrotra et al. (2007) stated that research using provincial data important for the country because the province has a different spread of institutional, economic performance, and level of market development. Economic obstacle between regions, such as trade barriers, also can be a source of differences in inflation formation process. Furthermore, inflation differences between regions reduce the ability to adjust the shock (shock) economy [8]. In addition, the role of inflation and inflation expectations in various areas that have varying inflation dynamics also influence the effectiveness of monetary policy. To overcome the problem of inflationary shocks on the supply side since inflation targeting is substantial [9] [10] [11].

2. Methods

The analytical method used is quantitative analysis approach is the development of a panel regression model, where this equation shows the interdependence (interdependency) between the explanatory variables with dependent variables resulting causality [12]. According to theory of sollow, output is function of labor and capital [13]. However, the proxy of labor could be expressed by employment whereas capital is outstanding credit. Specifications of the model that we employ in this study are panel regression model structural equation model as follows:

$$ln\ gdp_{it} = \beta_0 + \beta_1 (HDI)_{it} + \beta_2\ ln(Spend)_{it-3} + \beta_3\ ln(EMP)_{it} + \beta_4\ ln(CRI)_{it} + u_{it} \qquad (1)$$

As for the model, the authors use the economic growth model of development used by Mankiw-Romer-Weil (MRW) with the following specifications:

Q = f (K,L) the augmented model of Mankiw et. al. (1992) added variable of government exenditure into :

Q = f (K,L,G) to transform into a logarithm then [13]. In the model developed by the authors, the HDI variables being used to proxy variable L, then Credit for proxy K, and government spending is G.

$LnQ = lna + \beta lnk + \gamma lnL + \delta lnG$

$$Dummy\ target\ Inflasi_{it} = \gamma_0 + \gamma_1\ ln(PDRBh)_{it} + \gamma_2\ ln(labp)_{it} + \gamma_3 [\ \Sigma\beta_i] + e_{it} \qquad (2)$$

In the model into two, namely the inflation's model the authors apply binary probit regression. The model was used as the dependent variable in the model is the dichotomy that is using dummy variables. Using a dummy because want to know the probabilities of the regional inflation is contributing to the national inflation target. Operational definitions of study variables and the measurement is as follows: Economic Growth denoted by GDP is the development of activities in the economy that led to the goods and services produced within the community and increase the prosperity of society. Variables describing the economic growth of a region (province), namely the GDP based on constant price in 2010 divided by the total population that is expressed in nominal rupiah (Rp). Data published by the BPS are printed for each of the provinces in Indonesia, in this study expressed in

natural logarithm. Human Development Index denoted by HDI, is an indicator for education, health and expenditure per-capita for each province expressed in index numbers (0-100). Labor denoted by lnEMP. The variable amount of labor used in this research is the nominal number of people working in each province. These data were published online on the BPS website for each province. In this study, total employment is expressed as a natural logarithm. Government Spending denoted by SPEND is the sum of all government spending in nominal Rupiah (Rp). These data were published online on the BPS website for each province. In this study, the type of expenditure is expressed as a natural logarithm. Credit denoted by lnCRI. In this study, the investment is measured as the growth of bank credit granted to each province with a nominal unit rupiah (Rp). Labor productivity denoted by (labp). In this study, labor productivity measured by total GDP divided by the number of workers in each province with units of percent. Inflation is the rising prices of goods and services continuously in an area. Inflation measure used in the Consumer Price Index (CPI) base year of 2010. Commodities is the weight of each type of commodity goods and services contributor to inflation in each province. In determining the weights used basic consumption values based diagram weigh SBH SBH 2007 and 2012.

Besides, in order to capture the phenomenon in which the area is able to transmit national policy, local governments should be able to anticipate inflation in the region with both national inflation target despite the central bank authority. Thus, by comparing the model predictions made between inflation and the inflation target area (BI), with the following assumptions:

1 = if inflation area = target BI
0 = if inflation targets ≠ area

To determine the effect of independent variables on the dependent variable is a binary regression probit. In this model transformation function that maps a linear function x 'in the interval (0,1) is the cumulative normal distribution function. In addition to this model using a probit model of the second model, the study used regression panel models on the first model. Dummy variable for inflation is used to capture the target of inflation [14]. Whereas, panel regression possible to estimate by using a common, random, or fixed effect where the gain adjuster coefficient in the model allows for the use Generalized Least Squares (GLS), which is different from the ordinary least squares (OLS) where model-based OLS necessary to draft model test in which there are the classical assumption that heteroskedastis and autocorrelation [12].

3. Findings and Argument

To estimate the regional economic growth random effects regression using GLS. The estimation results of the Regional Economic Growth (lgdp) are presented in Table 4.2 below:

Table 2. Estimation Model of Regional Economic Growth

Economic growth	Coefficient
Human Development Index (HDI)	.027* (.0155)
Ln (Government Spending Lag-3)	.005*** (0.001)
Ln (Labor)	.078*** (.120)
Economic growth	Coefficient

Ln (Credit)	.063* (.327)
Constants	2.984 (1.954)

Source: results of data processing STATA 13
Description: *** significant at α = 1%, ** α = 5%, and * α = 10% Standardized error in brackets

Based on estimates found that the variable HDI has a positive direction with coefficient of 0.027, so if there is an increase of 1 unit on the HDI index will increase economic growth by 0,027 with a significant level of 10%. Another variable is the variable to government spending, the value of the regression coefficient of 0.005, meaning that if there is an increase in government spending at 1% in the 3rd lag period would increase economic growth by 0,005, with a significant level of 1%. Lag on government spending for the benefit of government expenditure to economic growth is not directly in the relevant year. After the results data obtained by the lag in government spending are on the highest significance parameter is the lag-3.

Wagner process in the province in Indonesia, that government spending significantly affects the economic growth of over 3 years, meaning that government investment will significantly influence the three years to come. For labor variables regression coefficient of 0.78 means that if the number of employees rose 1%, the regional economic growth would rise by 0.78, with a significant level of 1% For investment loans regression coefficient of 0.063, meaning that if there is an increase in the variable credit of 1%, the region's economic growth will rise by 0.063 with a significant rate of 10%.

In this study the model used to estimate the regression model used Inflation Probit estimation that the results can be seen in the tables below:

Table 3. Probit Regression Results[a]

Regional Inflation Target Dummy to National Inflation	Coefficient
Prediction (Growth)	-1.281247 (346.6471)
Labor Productivity	.0044571 (1.205887)
Commodities Cluster 1 Rating Contributor on Inflation (%)	.2007495 (54.33031)
Commodities Cluster 2 Rating Contributor on Inflation (%)	-.4520621 (122.3161)
Commodities Cluster 3 Rating Contributor on Inflation (%)	.2797786 (75.70161)
constants	21.79192 (5895.907)

Source: results of data processing STATA 13
Description: *** significant at α = 1%, ** α = 5%, and * α = 10% Standardized error in brackets

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[a] *In addition to our probit estimate compares with the estimated regression model panel Inflation = f (Economic Growth, Productivity Labor). Our initial model Regress with two stages of economic growth factors and outcome prediction in Regress inflation = f (Growth) with a coefficient of -0870 with no significant (z statistics = -.92; p value = 0360). In addition to the panel regressions, we try also using recursive estimation, only two provinces that have a significant sign that economic growth will be decreased the inflation that is in the province of East Kalimantan and North Maluku.*

The table shows the probability value (probit regression coefficient) and the value of significance (P> | z |) of each independent variable in the inflation equation area. Seen that the regression coefficient value varies, there are positive and some are negative. While the value of P> | z | varies, there is less than 0.05, and there are also more than 0.05. Furthermore, the significant value compared to alpha of 0.05

For the results of the probit regression model of regional inflation may be interpreted magnitude parameters via marginal effect as follows:

Table 4. Marginal Effect

Target of Inflation	dy / dx
lgdph	-.3919296 (.1018196) ***
labp	.0013634 (.001402)
com	..0614087 (.4114507)
com_B	-.1382845 (.4465499)
com_C	.0855834 (.2979625)

Source: results of data processing STATA 13
*Description: *** significant at α = 1%, ** α = 5%, and * α = 10% Standard error in parentheses*

From Table 4.4 can be explained that the economic growth predicted outcome variable of the model of economic growth has a marginal effect of -0.392 with a significance level of 99%. This means that economic growth has significant impact on achieving the inflation target. However, the coefficient is inverted for any increase in economic growth will cause the greater the inflation target. This means that economic growth will cause inflation target difficult to achieve. This is evident from marginal coefficient effect that whenever there is economic growth (lgdph) by 1 percent, then the probability to achieve the inflation target of the less that is likely to fall by 0.39 assuming other independent variables held constant.

While labour productivity with marginal effects of 0.001, meaning that if there is an increase in labor productivity by 1%, then the probability area inflation increased by 0,001. In other word, every increase of 1 unit of labour productivity, the average regional inflation is likely to rise by 0,001. As for Contributions commodity A (ranked commodity cluster I) have a marginal effect value of 0.061; meaning that every increase in the weight of a commodity contribution of 1%, then the probability Inflation 0.061 area increases. Contributions Commodities B (cluster ranked commodities II) the value of the marginal effect of -0,138, meaning that every increase in the weight of the contribution of commodity B by 1%, then the possibility / opportunity area inflation fell by 0,138. That is likely to rank inflation contributor both regions do not have the same pattern so that the individual effects negatively impacted. While commodity C (ranked commodity cluster III) have a marginal effect value of 0.085; meaning that every increase in the weight of the contribution of commodity C by 1%, then to commodities C possibilities Inflation increased area of 0.085.

4. Conclusion

During the period of the study found that the Human Development Index (HDI), Government expenditure, total workforce and the number of credit effect on the Regional Economic Growth. Of these four independent variables that have a significant effect of

99% is government spending and the amount of labor. This indicates that the amount of labor that many will be the subject of development. It requiredefforts to increase the skills, business development, business training, promotion, therefore the economy is growing, and increasing economic growth. This coherent since productivity is main source of income [15] [16]. The role of government spending is required by an area to explore and enhance the potential of the area so that the area has a good competitiveness locally, nationally and internationally

However, for both variables were significant effect of 10% is HDI and credit. It can be explained that the province has a high HDI will have an impact on people's purchasing power increases, the economy increasing, but must be balanced with the stability of prices. As for the credit should be directed to develop and enhance the potential of the area and given assurances that economic stability will be maintained, therefore investors are not worried in developing a business. Results of the test of the area by using Marginal Inflation effect shows that if economic growth increases, probability to achieve the inflation target of less Meanwhile, when rising labor productivity indicates that local inflation has a probability of achieving the inflation target increases. Similarly, the highest contributor to commodity inflation has the opportunity to achieve the inflation target through the contribution of the first rank is the group Foodstuffs such as rice as a staple, this phenomena occurs in several countries [17] [18]. Whereas the second contribution of group housing, water, Electricity and gas are contributing services or contract rental home is the community needs a place to live and third contribution of contributions group transport.

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The Impact of Infrastructure on Strategic Sectors Expenses For Poverty: The Case in ASEAN 4

Suryaning Bawono[1], Ati Musaiyaroh[1], Fawaid Hasan[1], Panji Tirta[1], Ida Kurnia[1]
Faculty of Economics and Business, Universitas Jember, Jl. Kalimantan no. 37, Jember (68121)

Abstract

The development of state infrastructure encourages economic growth. This is supported by the availability of adequate resources both in terms of quality of human resources, nature, and technology. This phenomenon is a reflection of the state government in development activities. Infrastructure development is a driver of growth by reducing poverty and reducing unemployment. The objectives of the study were to analyze Appropriate strategies in economic development especially on poverty issues in ASEAN 4 (Indonesia, Malaysia, The Philippines, and Thailand). The variables that Become the object of research are poverty, infrastructure (education and health), GDP per capita, the Gini index, government expenditure and the unemployment rate. The research method used is the Panel Generalized Method of Moment (PGMM). The results of PGMM estimates provide evidence that infrastructure in the form of health care, per capita GDP and government expenditure has significant implications for poverty in ASEAN 4. The results illustrate that the government for each country needs to a make improvement and additional Infrastructure as an investment in economic growth. This can be done by Mobilizing monetary and fiscal policies, especially Reviews those that lead to an emphasis on poverty.

Keywords: Poverty, infrastructure, economic growth, PGMM

1. Introduction

Economic growth reflected by gross domestic product. It means, increasing production able to grow economically. Gross domestic product affected by investment, consumption, government expenditure, and net export (Mankiw,2010). Production need's labour and capital. Capital obtained from investment and investment originate investor cash. An investor who invest their money in increasing production able to owe from the bank or take investment return from other investment or engage their salary. But without labour, production activity never happen. Increasing investment equals with increasing job available for people. It means investment available to decrease unemployment and in aggregate, increase people income. Saving equals with loanable supply. Loanable supply is the cash available to investor lending. Therefore, keyness explains that investment affected by interest rate and investor expectation.

We know, production output is a product. The product is not only goods for people consumption but also service. Goods need to distribute to customer and service need a place. The place is not just land but the server is placed too. Distribution and place need infrastructure support. For instance road, communication tower and internet network. But distribution and place of service are not enough to ensure production – consumption goes on. It needs security and justice. Road, telecommunication infrastructure, security, justice and other public goods for support production – consumption activity is infrastructure financed by goverment and it calls government expenditure. Government expenditure is determinants of economic growth because government expenditure support business operation which financed by Investment. Business operation able to provide jobs for people. In aggregatable to increase people earning or people revenue. Therefore government expenditure able to reduce poverty. Paul Spicker argues that poverty is an individual issue

caused by the weakness and choice of the individual concerned. Poverty will disappear if market power is expanded to the maximum and economic growth is driven to the highest possible level. Directly, poverty reduction strategies must be temporary residual and involve only families, self-help groups or religious institutions. The role of the state (government) is only as a guard may be able to carry out their duties.

Economic growth able to increase production. When production has increased, availability of Jobs is increasing too. When the availability of jobs increase, in aggregate people revenue increase and poverty is reducing.(Scoot Wisor,2011). People in the world become poor because of the culture of poverty with apathy character, surrender to fate, unsteady family system, lack of education, lack of ambition to build the future, crime and violence occur (Lewis,1968). Poverty is caused by injustice and imbalance in society due to clogging of group access to community resources (Thomas Meyer & Lewis P Hinchman,2007). equality is an essential prerequisite for gaining independence and freedom. Achieving freedom is only possible if everyone has or is able to reach sources, such as education, good health and sufficient income. Freedom is more than free from outside influences; but also free in determining the choices. In other words, freedom means having capabilities to do or not to do something. For example, the ability to meet basic needs, the ability to avoid premature death, the ability to avoid malnutrition, the ability to read, write and communicate. The State, therefore, has a role in ensuring that everyone can participate in community transactions that enable them to decide on their choices and meet their needs.
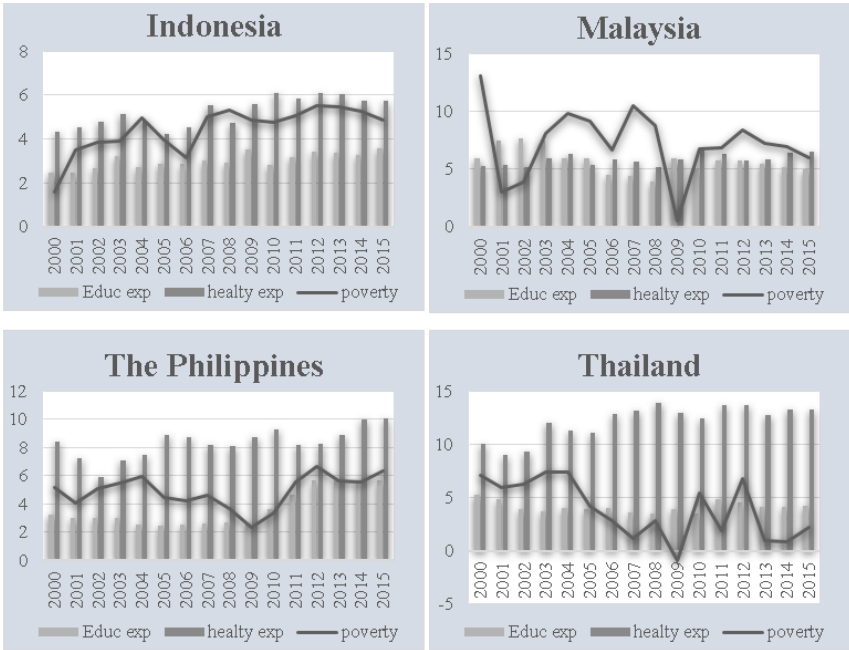
Figure 1. Development of infrastructure costs (education expenditure and health expenditure) and poverty in ASEAN 4 (The World Bank, 2000-2014)

The phenomenon of inequality, poverty and the movement of the economic growth of developing countries in ASIA which include low income or poor, viewed from the position in below the poverty line nationally and internationally namely income below $1 per day, gross revenue (gross domestic product / GDP) per capita as an indicator for economic development and generating measure income differences between population groups with the lowest incomes and the highest (The World Bank, 2017). Based on Figure 1, the ASEAN

4 is generally between infrastructure costs are proxied by the cost of education and health have a positive relationship and negative in certain periods. Sometimes the allocation of infrastructure costs incurred as a whole has not been accommodated so that the poverty rate is likely to increase [1] [2]. Therefore, this study has the objective to see influence between the cost of infrastructure and poverty, and policy recommendations, especially to overcome poverty.

The world is dominated by a single economy in such a way that all the countries of the world are integrated into the production environment of capitalism which causes backwardness in poor countries. Core countries attract surpluses from poor countries through a metropolis-satellite chain. As a result, poorer countries are becoming increasingly poor and rich countries are getting richer (Frank,1967). in macro terms, poverty can be overcome by enhancing mutually beneficial cooperation between countries. of course with the advantages of each interdependent and mutually build the economy so economic growth can be created with harmonious relations and mutual benefits socially and economically.

2. Data and Methodology

This research focuses on a phenomenon that occurs in the ASEAN 4 (Indonesia, Malaysia, the Philippines, and Thailand) especially those on the problems of poverty and the growth of infrastructure in each country. The data used are secondary data obtained from the World Bank Indicator (WDI). The definition of a variable which is the object penalties can be seen in Table 1. The period penalties 200-2015 is used that year by using panel data with a cross-section of four countries, namely Indonesia, Malaysia, the Philippines and Thailand.

Table 1. Definition Variable

Variable	Resources	Information
Poverty (POV)	WDI	Household final consumption expenditure (annual% growth)
EDU (Education Expenditure)	WDI	Government expenditure on education, total (% of GDP)
HE (Health Expenditure)	WDI	Health expenditure, public (% of government expenditure)
GDP (Gross Domestic Product)	WDI	GDP per capita growth (annual%)
GOVEXP (Government expenditure)	WDI	General government final consumption expenditure (annual% growth)
UNEMP (Unemployment)	WDI	Unemployment, total (% of total labour force) (national estimate)

The method used is the Panel Generalized method of Moment (PGMM). GMM is a method of analysis that serves to make the interpretation of the parameters of the expansion moment method, in which the moment method can be used when a smaller number of instrument variables dividing by the number of parameters that will do the interpretation [3], [4]. Pre Test PGMM estimation consists of a statistical test, the data stationary test, cointegration test. Furthermore, estimate panel data and GMM panel estimation.

Specifications research model adapted from the study [1], [2], so specification models research are as follows:

$$POV_{it} = \beta_0 + \beta_1\,EDU_{it} + \beta_2\,HE_{it} + \beta^3\,GDP_{it} + \beta_4\,GOVEXP_{it} + \beta_5\,UNEMP_{it} + \mu_{it} \qquad (1)$$

Estimate moment can be defined by entering into the sample analogues

$$\frac{\sum_{it}\,mit\,(y_{it},\theta)}{T} = 0 \qquad (2)$$

However, the estimated moment of the equation (3.63) has not been may meet obstacles θ obtained when M is greater than the parameter θ. Therefore, to meet these conditions, the estimate becomes:

$$\sum_{it}\,m(y_{it},\theta)A\,(y_{it},\theta)m(y_{it},\theta) \qquad (3)$$

A is a metric at each moment in a model used and any positive (A) will produce consistent estimates of θ. GMM method contains an endogenous variable that has a relationship with an error.

Model of methods GMM used in the study can be written so as to form a model:

$$POV_{it} = \beta_0 + \beta_1\,EDU_{it} + \beta_2\,HE_{it} + \beta^3\,GDP_{it} + \beta_4\,GOVEXP_{it} + \beta_5\,UNEMP_{it} + \theta_{it} \qquad (4)$$

E (eit) = 0

$$E(POV_{it} - \beta_0 - \beta_1\,EDU_{it} + \beta_2\,HE_{it} + \beta^3\,GDP_{it} + \beta_4\,GOVEXP_{it} + \beta_5\,UNEMP_{it} - \theta_{it}) = 0 \qquad (5)$$

Equation 5 is used to estimated between level 4 and macroeconomic condition in ASEAN poverty using GMM panel.

3. Results and Discussion

Analysis

Statistical tests in this study aim to look at the minimum and maximum values as well as distribution of each variable. In Table 2 gives an explanation that the minimum and maximum values of GOVEXP has a gap that is high enough that signifies GOVEXP growth quite fluctuating gap of 19.6 points. Further growth of the variables that have a gap height between the minimum and maximum values that POV, is known based on data from the World Bank (2017) among ASEAN 4 were thoroughly (see Figure1) that the growth of poverty in Malaysia is quite volatile, where the highest rate in 2000 and the lowest figure in 2009. Judging from the distribution of the visible variable that is normally distributed evidenced by the standard deviation value which is lower than their mean.

Table 2. Definition Variable

	POV	EDU	HE	GDP	GOVEXP	UNEMP
Mean	5.106151	4.134917	7.900773	3.437175	5.795718	5.262969
Median	5.152825	3.865025	6.614583	3.563961	5.220757	4.815000
Maximum	13.02843	7.662190	13.92774	7.445581	15.70289	11.85000
Minimum	-0.899216	2.425330	4.235455	-4.271241	-3.971871	0.190000
Std. Dev.	2.477173	1.336533	2.929090	2.073361	4.133765	3.375070
Jarque-Bera	3.226099	6.567904	7.454449	25.36340	2.487995	4.076167

	POV	EDU	HE	GDP	GOVEXP	UNEMP
Probability	0.199279	0.037480	0.024060	0.000003	0.288230	0.130278
Observation						
s	64	64	64	64	64	64

Results stationary or often unit root test is a test of pre-estimate of the support that the data are well used in the study. This study uses four methods of calculation, namely LLC, IPC, ADF and PP-Fisher Fisher. Based on the results of stationary data shown in Table 2, that the Communities and UNEMP stationery at a rate of 1st different that showed with a probability value alpha <5%. POV stationary at level LLC level on methods and PP-Fisher, while the IPC method, ADF-Fisher showed POV 1 stationary at levels.st different Furthermore stationary GDP [No current level on four methods, while HE stationary at the current level in the LLC and stationary method at a rate of 1st different on IPC method, ADF-PP-Fisher Fisher damn. In Table 2 also provides evidence that the method GOVEXPpada LLC, IPC and PP-Fisher stationary at the current level and the ADF-Fisher method stationary at the current level.

Table 3. Test Results Data Stationarity

Variable	LLC	IPC	ADFFisher	PP-Fisher
POV	-2.0447 [0.0204] *	-4.5250 [0.0000] **	34.3967 [0.0000] **	29.3103 [0.0003] *
Communities	-2.3796 [0.0087] **	- 2.9511 [0.0016] **	23.7025 [0.0026] **	50.0534 [0.0000] **
HE	-2.5755 [0.0050] *	-5.6387 [0.0000] **	42.3283 [0.0000] **	67.5378 [0.0000] **
GDP	-3.6257 [0.0001] *	-2.4428 [0.0073] *	19.6328 [0.0118] *	37.9067 [0.0000] *
GOVEXP	-1.6739 [0.0471] *	-1.6800 [0.0465] *	52.8373 [0.0000] **	2.5792 [0.0001] *
UNEMP	-2.2989 [0.0108] **	- 2.7715 [0.0028] **	22.0196 [0.0049] **	49.6288 [0.0000] **

*[]: probability; *: Levels levels; **: level 1st;***: level 2^{sd}*

Once the data stationary test next steps see cointegration data showing the connection between long-term or short of variables. Based on Kao approach Residual Cointegration Test showed that alpha probability value of <5%, so that the results indicate the presence of cointegration or their long-term relationship.

Table 4. Test Results Cointegration

Approach	Value	Cointegration
Kao Residual Cointegration Test	4.86708 [0.0000] *	cointegrated

: significant alpha <5%

This study uses data ASEAN panel 3 so that at this stage best compare models with test Chaoww, Hausman and LM. The model compared to that panel Least Square (PLS),

Fixed Effects Model (FEM) and Random Effects Model (REM). Based on estimates PLS and REM all variables have significant relations at the level of 1%, 5% and 10% except UNEMP variables that have relationship insignificant. In the FEM model provides results that GDP and GOVEXP which has a significant relationship as evidenced by a probability value alpha <10%. Selanjutnyas interconnect models to obtain the best model, the first test Choww the comparison of the PLS model and FEM FEM produce the best model is shown from the value of prof> f 0.00053 which is less than 5%. So based on test Chaow, Hausman and LM broadly provide results that FEM is a model of FEM.

Table 5. Estimation Results Panel Data

Variable		Panel Least Square (PLS)	Fixed Effect Model (FEM)	Random Effect Model (REM)
EDU	coefficient [prob]	0.7343 [0.0002] *	0.2785 [0.1899]	0.7422 [0.0002] *
HE	coefficient [prob]	-0.3688 [0.0001] *	-0.6158 [-0.6158]	-0.3675 [0.0001] *
GDP	coefficient [prob]	0.7024 [0.0000] *	0.7499 [0.0000] *	0.71678 [0.0000] *
GOVEXP	coefficient [prob]	-0.1318 [0.0097] *	- 0.0792 [0.0905] *	-0.1354 [0.0081] *
UNEMP	coefficient [prob]	-0.0770 [0.3887]	0.0523 [0.7530]	-0.0789 [0.3705]
Adjusted R-Squared		0.6888 0.6116		0.6115
F-statistic		0.6888 20.8429		20.83649
prob (F-statistic)		0.0000	0.0000	0.0000
Choww Test		17.5914		
Prob> f		0.00053		
Hausman Test			4.7508	
Prob> chi-Sq			0.4470	
testLM			1.8921	
Breusch-Pagan			0.1690	

*) significant at α = 1%, **) significant at α = 5%, ***) is significant in α = 10%*

Estimated Generalized next is used the method of moment (GMM) is useful for getting basic parameter estimator for a parameter. Besides the advantage of GMM method is to resolve the situation in the form of data with violations of the assumptions in the regression analysis. This stage data Panel GMM estimates using two different first is method and system GMM. GMM panel estimation results in Table 5 shows that the GDP difference fist method that had a significant association with POV with a probability value of 0.000 and 0.6566 parameter values. whereas the method of System GMM prove there are several variables that had a significant relationship with POV is HE, GDP and GOVEXP described with a probability value of less than 10% alpha. The results of System GMM HE has negative parameter values that indicate that there is -0.6158 relationship negative significant with POV influenced by economic phenomena that occur in the ASEAN 4, in addition, GOVEXP also used negative parameter value with the value of -2.7227. while. The next GDP discount positive parameter value of 0.7499 which indicates that when the POV that proxy for household consumption increases, due to the increasing value of GDP of ASEAN 4.

Table 6. Test Results GMM Panel

Variable		First Difference	System GMM
Communities	Parameter Value	0.2785	-0.2274
	t-statistics	1.3272	-0.5332
	Prob	[0.5960]	[0.1899]
HE	parameter Value	-0.6158	-0.3235
	t-statistic	-2.9155	-0.9708
	Prob	[0.3358]	[0.0051] *
GDP	parameter Value	0.7499	0.6566
	t-statistic	8.7173	6.8421
	Prob	[0.0000] *	[0.0000] *
GOVEXP	parameter Value	-0.0792	-0.0315
	t-statistic	-1.7227	-0.6035
	Prob	[0.5485]	[0.0905] ***
UNEMP	parameter Value	-0.0523	-0.0071
	t-statistic	-0.3161	-0.0220
	Prob	[0.9824]	[0.7530]
J-stats		54.9999	45.1163
Prob. (J-statistics)		0.0000	0.0000

*: significant α = 1%, *: * significant α = 5%, ***: significant α = 10%*

Aspects of equitable health services to be one of the important points in the implementation of the National Health Insurance program, especially in the availability of health services, both in terms of quantity and quality of health facilities [5] - [7]. Health care providers increasingly required to provide quality service, fast, affordable and scalable up to the expectations and needs of the community. For conditions that exist in Indonesia budgetary allocations during the last seven years has increased but the data presentation budget realization decreased (Ministry of Finance, 2016). Therefore, there is a need for a strategy for policy implementation in order to synchronize between the budget and realize. The difference between the budget and the realization made possible as a result of not sprightly government and stakeholders in mapping the existing conflict between countries.

The government can also intervene directly through activities funded by the government, which includes the activities of providing goods and public services [8] - [10], implementing activities or strategic initiatives, empower the powerless (empowering the powerless) or alignments , Nevertheless, the problem of poverty is very complex and multidimensional, not only the responsibility of government, but it becomes more responsible all stakeholders ranging from local governments, businesses, activists of non-governmental and international organizations.

Conditions occurring in Thailand tend to be caused by the existing financial conditions, for example when the economic crisis that hit Thailand in 1997, the unemployment rate increases that pushed the poverty rate. Based on some research conducted showed that poverty in Thailand tend to be caused by the equalization of financing has not been evenly distributed, because they are focused on Bangkok and surrounding areas [11] - [13]. Additionally, equitable distribution of income such as investments and large salaries are still concentrated in Bangkok and surrounding areas. So, in this case, labour market needs to be managed appropriately to maximize equity and economic stability objectives. In general,

the phenomenon of poverty in some parts of ASEAN due to planning or strategy developed by the government is less precise.

To alleviate the problem of poverty should not only emphasize on economic development approach alone. Economic development has an important role in alleviating poverty, but economic development often reaps a failure in creating public welfare, for example, the case of unemployment, social inequality, social disintegration, social injustice and others [14] - [16]. This is because poverty is a multidimensional problem.

Therefore, economic development must work together with social development, in which social development aimed at improving the quality of individuals, families, and communities through education, health, social security, public participation, and social justice. With the increasing ability of individuals, families, and society, it will have implications for their self-reliance in meeting basic needs, able to manage social problems, and is able to maximize the opportunities that exist.

4. Conclusion

Poverty is a public discussion that has the influence to economic growth. The problem of poverty in ASEAN based on the analysis PGMM prove that health expenditure, GDP and government spending has a significant relationship to poverty which in this study on proxy and consumption levels. These results indicate that consumption expenditure per household was affected by expenditure allocation especially the government's financial allocation for education and health. Education is a sector that explores human resource skills, so required proper planning strategy to improving the quality of education in each country. Besides health related to people's living standards, which meet the standards of health care if the survival rate of each country has increased. so for the preferred policy recommendations on infrastructure in the form of public service.

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Role of Banking Agencies and Village Crediting Institutions on Economic Growth Inclusion in Bali Province

Made Suyana Utama[1], Nyoman Djinar Setiawina[1], Made Agung Raharja[2]
[1]Faculty of Economics and Business, Universitas Udayana, Bali, Indonesia
[2]Faculty of Mathematics and Science, Universitas Udayana, Bali, Indonesia
Email: suyanautama@unud.ac.id

Abstract

As a development agency, Commercial Banks and Rural Banks (BPR) and Lembaga Perkreditan Desa (LPD) are financial intermediaries conducting activities to collect and channel funds for the smoothness of economic activity. The existence of BPR and LPD is expected to create inclusive or qualified economic growth, which is economic growth accompanied by poverty reduction, decreasing inequality of income distribution and decreasing unemployment rate. With the inclusive economic growth is expected to increase public welfare.

This study aims to analyze the role of banking institutions and Lembaga Perkreditan Desa (LPD) against changes in economic structure, inclusiveness of economic growth, and community welfare in Bali Province. The data used are obtained from secondary sources in the form of panel data of regencies / cities in 2010 until 2016. The design of this study uses a tiered causality model by applying the Structural Equation Model (SEM) with the application of Partial Least Square (PLS).

The result of the research shows that credit given by Commercial Banks and Rural Banks (RBs) and Lembaga Perkreditan Desa (LPD) gives the impact of changes in economic structure, namely the increase of capital formation, the increase of labor absorption, and the increasing contribution of modern sectors to economy. Changes in economic structure affect the inclusiveness of economic growth. Inclusiveness of economic growth is economic growth accompanied by poverty reduction, decreased inequality in income distribution and declining unemployment rate. Inclusiveness of economic growth also affects the welfare of the people in Bali Province.

Keywords: banking institutions, Village Credit Institutions, and inclusiveness of economic growth

The Effect of Government Expenditures and Inflation on Employment With Economic Growth As Intervening Variable in Indonesia 1997-2015

Nurma Kamelia Suryantoro[1], Siti Komariyah[1], Badjuri[1]
[1]Department of Economics Development Study, Faculty of Economics and Business,
Universitas Jember, Jl. Kalimantan no. 37, Jember (68121)
Email: sitikomariyah.feb@unej.ac.id

Abstract

This study aims to determine the effect of goverment expenditures and inflation on employment with economic growth as intervening variables. This research is a quantitative research using time series data (1997-2015) in Indonesia. Data used in this research is secondary data obtained from the Central Statistics Agency (BPS) and World Bank. The analytical method used is the method of path analysis used SPSS Statistics software 24. The results showed that, goverment expenditures and economic growth have a positive effect and no significant in Indonesia, 1997-2015. However inflation and economic growth have positive significant effect but negative significant effect on employment. Economic growth is still weak to be an intervening because the result showed positive and no significant on employment.

Keywords: Goverment Expenditures, Inflation, Economic Growth, and Employment.

1. Introduction

Economic development is the whole thing of development efforts conducted by the societies to develop ecenomy activities and the income level, that economic development is a process which causes the increase in per capita income of the residents in a certain region in the long term (Sukirno, 2006:53). The purpose of economic development is to improve the whole societies' welfare and prosperity. As the effort of improving society's welfare and prosperity, the government improve several sectors either in the short or long term. Economic growth is one of success standards of economic development in a region. If the economic growth increase, there must be an increase in the economic activities (Djojohadikusumo, 1994:6). The significant economic growth urges the availability of various economic facilities and infrastructure needed to accelerate the economic development. The economic development indicator of a country were on its economic growth and employment. Human resource is the most important factor in the economic growth. Economic growth does not only depend on the human resource, but it emphasizes more on the efficiency (Jhingan, 2004:220).

In the employment and economic growth theory stated by Okun, an economy experts that is well-known for his Okun Law stated that the joblessness level is related to the real GDP level, where there was a negative relation between the employment and real GDP, which means there was a positive relation between employment and GDP (mankiw, 2008:234). GDP aggresively showed certain region ability in producing income or recompensation to the production factor which participate in the production process at the region. GDP increase is very important on employment availability in Indonesia.

Monetary crisis occured in Indonesian economic in the middle 1997 had a serious impact on various economy sectors of Indonesia. They are: high inflation, disturbed labor activity, increased joblessness, flight of capital overseas, decreased local investment level

and in the end, the national economic growth become lower than the previous period. In this case, the financial sector become the center of attention in the monetary crisis recovery policy. Therefore, a set of policy was launched by the government to overcome the unstable financial sector (Krisnamurthi, 2002).

This activity gave a direct impact on a country's economic that was shown by the government expenditures, that if the government expenditures spent did not reach the target, it will harm the economic. Therefore, government expenditures may be the guideline of a country's economic improvement and be able to increase economic activities as the result of increasing investment. The investment increase will have an impact on the increase of output, employment, export, tax, government revenue, and current transaction (Sriyana, 2006).

According to Keynes, inflation happens because a society requires a life they cannot aford. The high inflation level causes joblessness. The high inflation level causes high joblessness level, which means the employment opportunity become smaller or in other words, the number of labor employed will be decreased. Then, the GDP growth cannot be separated from the investment increase. Investment is the determiner of economic growth rate, since beside pushing the output increase significantly, it also increase the input request that in the end it will increase the employemnt and society's welfare as the consequence of increasing the society's income (Makmun and Yaksin, 2003:63).

Historically, the highest inflation level and volatility of Indonesia is in 1998 caused by the economic crisis at that time. The condition at that time was hard and affected all economic factors of Indonesia. Initially, this crisis was caused by the depreciation of Indonesia exchange rate on foreign exchange (especially US Dollar). The economic condition and high inflation might cause changes in output and employment. There was a significant relation between inflation and economic growth (Bick, 2010). The employment rate becomes smaller because the high joblessness level as the result of the high inflation level. On the macro policy, government must control the inflation rate and suppress the revolving funds in the society.

2. Research Method

1. Research Framework
   This is the explanatori quantitative research, a research that explain the causal relation among variables trhough hypothesis testing.

2. Data Type and Source
   Data is a whole empirical and documentative information obtained from the location as the support to scientific and academic science construction (Mukhtar, 2013:11). The data type used in this research was the quantitative secondary data. The data obtained from documents which contained statistic data from various edition published by the related institution, such as Bapadan Pusat Statistik (BPS), World Bank, and other data gained from other supporting sources.

   The data was in the form of time series. Time series data was used to see the development from time to time, which was collected since 1997 until 2015. The data required in the modelling was GDP (Gross Domestic Product) value to proxy the economic growth, government expenditures for development, and inflation.

3. Data Analysis Method
   This research used Path Analysis assisted with SPSS application to analyze the causal relation of economic growth, government expenditures and inflation on employment in Indonesia 1997-2015 either directly or indirectly through intervening variable.

4. Path Analysis

   The causal relation among variables can be analyzed through path analysis. The model significance was based on the beta coefficient (β) that was significant on the path. The path analysis model used in this research were described at the following structural equation:

$$Z = \beta ZX_1 + \beta ZX_2 + \varepsilon_1 \qquad (1)$$
$$Y = \beta YX_2 + \beta ZY + \varepsilon_2 \qquad (2)$$

   Description:
   X_1 = Government Expenditures (GE) Y = Employment (KK)
   X_2 = Inflation (I) $\varepsilon_1, \varepsilon_2$ = Intervening Variable
   Z = Economic Growth (EG)

3. Result and Discussion

Data Analysis Result

Path Analysis

The path analysis was related to the dependence study of a dependen variable on one or more independent or intervening variable (s) on the dependent variable. There served the path analysis result of independent variables, the government expenditures and inflation, and the intervening variable, the economic growth, and the dependent variable, the employment. Based on the multiple linear regression analysis result (in this case was to test the effect partially), the result was stated as follows:

The government expenditures variable on economic growth was stated as $t_{count} < t_{table}$ (1,446 < 2,119) and significance 0,168 > 0,05. Thus, Ho was accepted and Ha was rejected which means government expenditures had no effect on economc growth. The inflation variable on economic growth was stated as $t_{count} > t_{table}$ (3,945 > 2,119) and significance 0,001<0,05. Thus Ho was rejected and Ha was accepted, which means the inflation had an effect on economic growth. tcount was positive, hence if there was an increase on the inflation variable, it will increase the economic growth. the inflation variable on employment was stated as $t_{count} > t_{table}$ (-2,582 < 2,119) and significance 0,020 < 0,05. Thus, Ho was rejected and Ha was accepted, which means the inflation had an effect on employment. tcount was negative, hence an increase in the inflation variable will decrease the economic growth level. The economic growth variable on employment was stated as $t_{count} < t_{table}$ (1,698 < 2,119) and significance 0,109 > 0,05. Thus Ho was accepted and Ha was rejected, which means the economic growth had no effect on employment.

Trimming Theory

Based on the calculation on the path analysis, there were two paths which had no significant effects or were over the predetermined alpha (α) value. The trimming method will be used to fix a path analysis structure model by removing the independent variable which had no significant path coefficient (Heise; Ridwan and Engkos, 2012:127). The multiple linear regression analysis result was used to determine the effect of inflation and the intervening variable, the economic growth, and the dependent variable, the employment. Based on the multiple linear regression result analysis (in this case was to test the effect partially), the result was stated that the inflation variable on economic growth was stated as $t_{count} < t_{table}$ (3,565 > 2,109) and significance 0,002 < 0,05. Thus Ho was rejected and Ha was accepted, which means the inflation had an effect on economic growth. tcount was positive, thus an increase on the inflation variable will increase the economic growth. The

inflation variable on employment was stated as $t_{count} > t_{table}$ (-2,313 < 2,109) and significance 0,034 < 0,05. Thus Ho was rejected and Ha was accepted, which means inflation had an effect on employment. tcount was negative, hence an increase in inflation will decrease the economic growth.

Path Coefficient Calculation

The path coefficient test was conducted directly to determine "how much the direct effect of independent variable on the dependent variable."

1. Direct Effect
   a. The direct effect of inflation on economic growth was 65,4%
   b) The effect of inflation on employment was -48,9%
2. Total Effect
   Total Effect: Y ← X2 → Z , 0,654 + 0,489 = 1,143 or 114,3%

Classical Assumption Test

After determining the model, then the next step was testing whether the developing model was BLUE (Best Linear Unbiased Estimator). The BLUE Assumption Test that must be fulfilled was that the model had normal distribution, there was no multicolinearity, and there was no heteroscedacticity.

Discussion

The data analysis result showed that the government expenditures gave positive insignificant effect on economic growth. This result was in line with the previous research stated that simultaneously the government expenditures had no effect on economic growth, the effect of governemnt expenditures through economic growth was not considered as intervening because it was negative (Tandiawan et al, 2014). The research of Hadiyanti (2013) stated that the government expenditures had indirect negative and insignificant effect on employment through GDP. However, it was not in line with the research of Sunusi et al (2014) stated that the government expenditures can directly affect the economic growth, which means the number of government expenditures was in line with the economic growth level. Government expenditures which can not affect the economic growth had no significant result because of these following conditions:

The proportion of government expenditures for the central government and regional expenditures

The ministry of finance (Kemenkeu, 2017) stated that the fund proportion for the central government was greater than the regional expenditures by 63,2% where the central government expenditures was allocated to develop the infrastructure, overcome poverty and joblessness, and distribute the development and repair the connectivity. However, in this case, the impact of central government expenditures has not been yet depicted. This is due to the too much number of fund spent by the central government for employee expenses, goods expenses, debt rate payment, and subsidy that cannot be seen at the short term since the government expenditures impacts on certain people such as the civil servant. The civil servant will perform consumption where the consumption itself will trigger investment. Those two were the most essential elements for an economy.

There are a lot of reasons stated that the macro economy analysis should pay more attention to the household consumption. The first reason, the household consumption contribute to the national income. Most of countries has 60-75 percent consumption of the whole national income. Second, the household consumption had an impact in determining

the economic activity fluctuation through times. Someone's consumption is in line with his/her personal income (Sukirno, 2008:338). That the impact of an investment cannot be seen in the short term, though the central government expenditures is greater than the regional expenditures still the impact for economic growth cannot be seen directly.

There was a government policy for infrastructure

The governing period of President Joko Widodo and Jusuf Kalla will have entered the third year at Oktober 20th 2017. Various policies and infrastructure development has performed to increase the economy of Indonesia. The Program Director of Institute for Development of Economics and Finance, Berly Martawardaya, said that the time has come for Jokowi-JK to shift their focus from the infrastructure development. Because if they keep on developing the infrastructure, there will be no rapid income for the country. According to Berly, it is time for Jokowi-JK to find investors. Thus, it will increase national revenue for the society's welfare (economy.okezone.com). However, with the imbalance infrastructure availability among regions in Indonesia, the infrastructure development is the essential requirement for the even national development framework. If it cannot be fulfilled, it would be a "devil's circle", where the investment attraction take place only at Java region. When such kind of condition rise, it will urge the infrastructure development to befocused at Java Region. The government should avoid this condition. The infrastructure development cannot be enjoyed in the short term. This made the government expenditures for other region focused on public service improvement, increasing the employment level, and decreasing the imbalance among regions had no significant effect on economic growth of Indonesia (Kemenkeu, 2018).

Based on the path analysis result, it is concluded that inflation had positive significant effect on economic growth, it proved that the level of economic growth is in line with the level of inflation. This result was not in line with with the prervious research said that the effect of inflation on growth was negative significant (Mawardi et al, 2016). However, this result was in line with the research of Bick (2010) and Pramesthi (2013) who also stated that inflation had a positive effect on economic growth.

So that this research was supported by a theory expressed by Sukimo (2000:11) where the economics policy especially the monetary policy of a country tried to suppress the inflation to keep being on the level of creeping inflation because inflation was able to create a good effect in an economy. The company's profit will increase and attract the investors. That the employment and income will also increase and lead to an economic growth. inflation can increase the production. Because when inflation happens, the goods cost rise earlier than the wages, that the profit of the company will increase. However, when the inflation rate was too high (Hyperinflation), it will cuse the other hand, the output decrease. On the hyperinflation situation, the real value of money will decrease drastically, the society tends to have no cash fund, transaction lead to barter, which was usually followed by the decreased goods production. Inflation will be accompanied by the output increase or decrease. But in normal case, usually, the hyperinflation will increase the output, and it will make the business man or company invest their capital. This is due to the investor hope to get more profit because of the inflation. This is in line with the trade off relation on the Phillips Curve stated that the higher the joblessness level means the lower the wage inflation level and vice versa. Because the Phillips Curves has proved that the price stability and employment will not happen simultaneously, which means that to reach high employment, low joblessness, and high economic growth, the consequence is we are willing to carry on the hyperinflation.

The data analysis result showed that economic growth had a positive insignficant effect on employment. this was not in line with the research of Saman (2005) who stated

that employment was affected positively by the economic growth, and Situmorang (2005) also stated that the effect of economic growth on employment can be affected by other factors such as interest rate and employment response on the inelastic minimum wages. In the theory of employment and and economic growth expressed by Okun, an economics expert that is well-known by his Okun Law stated that the joblessness level was related to the real GDP level, where there was anegative relation between joblessness and real GDP which means there was a positive relation between employment and GDP (Mankiw, 2008:234). However, in line with the research conducted by Isti et al (2015) stated that the economic growth affect positively yet insignificant on the employment.

This research stated the small effect of the economic growth on employment was the quality of economic growth which was affected by the increased population growth without being accompanied by the good quality human resource. As what has been expressed by Darlis Darwis (2011) there were several factors affect the economic growth and development, but initially, those factors can be grouped into two, the economics factor and the non economics factor. One of the econimics factors affect the economic growth and development was the human resources which will determine the national development success through quantity and quality of the society. The great number of pupulation was the potential market for production results, while the quality determined the existing production capacity. The other economics factor that affect the economics growth and development was the natural resources which includes land and natural wealth such as soil fertility, climate/weather condition, woods, mines, and ocean's wealth, really affect the industrial growth of a country, especially in the production material provision.

Therefore, the great number of population will decrease the employment. The workforce number increasing without being accompanied by the economic growth rate in creating new employment, at the end will cause the high number of jobseeker, and if it was not overcome by the government it will cause several problems such as the increase of joblessness level which will lead to poverty that trigger economic degeneration, and the economic growth was too weak to be considered as intervening variable.

The other result of this research showed that inflation affect negative significantly on employment, which means if the inflation rate increase will decrease the employment rate and vice versa. This research was in line with the previous research conducted by Dewi (2016) which stated that the effect of inflation on employment was negative significant. This showed that the calculated inflation was the general price inflation, that the inflation rate increase will impact on the loan rate. Therefore, the high loan rate will decrese the investment to develop the productive sectors. This will cause the low employment as the result of low investment which will impact on the productivity. By considering that the inflation level and joblessness increase their position (no trade off) then it showed through Phillips Curve where there was a trade off between low inflation or low joblessness. If the required inflation was low, then the joblessness will rise and vice versa.

4. Conclusion And Suggestion

Conclusion

The path coefficient result obtained several new assumptions that can be used as a future research. These are the path analysis result obtained by the writer:

1. Government expenditures had a positive and insignificant effect on economic growth. This was cused by the first, there was a proportion of government expenditure for central government and regional expenditures. Second, there was government policy for infrastructure.

2. Inflation had significant positive effect on economic growth, this proved that the increase of economic growth will also increase the inflation rate.

3. The economic growth had positive significant effect on employment. this research stated that the small effect of economic growth on employment was caused by the number of icreasing population was not accompanied by good quality of human resources.

4. Inflation had negative and significant effect on employment, which means the increase of inflation rate will decrease the employment rate.

Suggestion

1. It is better for the government to optimize the workforce quality through work training and enterpreneurship that it will increase the knowledge of the workforce in the future. Such treatment will affect the the workforce productivity and decrease the joblessness rate as the result of the emploment increasing.

2. Government should increase the employment rate by paying attention on the enterpreneurship sector since there are many people start working there. Enterpeneurship will create many job vacancies with a giid support from the government.

3. Government should review more about government expenditures for the unrealized regions, because the government expenditures will affect the economic growth that will impact the employment.

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Analysis of the Influence of Credit Growth and Asset Prices on the Global Financial Cycle in ASEAN 3

Firda Nisfia Nurfadilah[1], Siswoyo Hari Santosa[1], Aisah Jumiati[1]

[1]Department of Economics Development Study, Faculty of Economics and Business, Universitas Jember, Jl. Kalimantan no. 37, Jember (68121)

Email: siswoyohari68@gmail.com

Abstract

The global financial crisis that hit the United States in 2008 prompted a risk-taking behavior. It also increased the vurnerability of the capitalist economic system, namely in the sector of money and capital market which is aimed at investment financing activities. Credit growth has been known to have a positive causality relationship with economic growth. Movements in the global financial cycle would show changes in market sentiment which will eventually affect financial markets in emerging market. The research method used in the study was the Data Panel Method with a span of time starting from 2000 to 2016. This method was used to see the effect of credit growth and asset prices on the global financial cycle in ASEAN 3 countries, namely Indonesia, Malaysia, and Thailand. Tests which used Panel Data Method found that the credit growth of ASEAN 3 had negative influence on the global financial cycle after the global financial crisis. However, different results were shown by the variable 'Asset' that has a positive influence on the global financial cycle.

Keywords: Emerging Market, Global Financial Cycle, Risk-taking behavior

1. Introduction

The financial crisis that hit the United States (US) in 2008 has led to an increase in risk-taking behavior, a condition occurring when bank housing loans were increasingly rampant and then securitized and traded into the financial system. Bruno and Shin (2013) considered that the shocks due to the financial crisis in the United States of America against global finance occured because of some factors that drove fluctuations in financial markets in the world. Foreign investors tended to reduce portfolio investments in asset markets in developing countries because it could increase global risks and uncertainty of monetary policy in developed countries (Adler, 2016).

The global financial crisis also caused an increase in the amount of funds entering developing countries. This increase in capital inflows not only increased the real economy of the concerned country, but also had the potential to become a serious financial problem. The amount of capital inflows in developing countries is a major cause of financial sector instability (Byrne and Fiess, 2016). In addition to the increase in capital inflows that cause financial sector instability, high levels of volatility can also show potentials that lead to a higher reversal of funds which can cause changes in national financial conditions and global finance. This instability in the financial sector might disrupt economic growth in a country. It can be said that good economic growth will be achieved when instability of financial sector can be suppressed or minimized.

Capital inflows within the countries of Indonesia, Malaysia and Thailand had different levels but not very significant. In 2008, following the global financial crisis in the United States, capital inflows increased. This was because investors for ASEAN countries assumed that to continue their businesses they must look for other countries for gaining more profits. ASEAN countries then were chosen since they were classified as developing countries with

resources abundant. This was quite interesting for investors, especially foreign investors from developed and powerful countries such as the United States, Britain, the Netherlands, and others whose capital funds were substantial. Investments made by investors with large capital made the destination countries experienced an increase in their net foreign direct investment.

An empirical study conducted by Ebeke and Kyobe (2015) focused more on the impact of global financial risk on government bonds in the markets of EMEs countries. The study modeled bond sensitivity in the markets of EMEs that were conditioned at the level of foreign participation and concentration of the investor base. The foreign participation would be higher than the local currency in the bond market which is useful to increase the transmission of global financial shocks especially at the threshold that had been reached which is above 30% in the participation. Indonesia and Malaysia had foreign ownership of government bonds in local currencies around or above 30%. In countries with a threshold of more than 30%, government bonds in foreign currencies tend to be mostly owned by foreigners. Meanwhile, a higher concentration of investor base would cause EMEs in local currencies to be more sensitive to global financial shocks.

The results of a study showed that changes in the Fed's policy direction became the driving force in the global financial cycle that would affect the flow of funds, asset prices, and credit growth. Claessens, Kose, & Terrones (2012), Borio & Zhu (2012), Drehmann, Borio, & Tsatsaronis (2012) analyzed the pattern and duration of the property price cycle, stock price, and credit cycle, but did not provide an intensive understanding of the causing factors and effects of the global financial cycle. A study was also conducted by Alamsyah, Adamanti, and Yumanita (2014) in Indonesia, but they focused on the duration of the cycle.

Based on the background described above, after the global financial crisis that occurred in the United States, research problems can be formulated, namely: What is the influence of the global financial cycle on the growth of credit and assets in ASEAN 3? What is the response of credit growth and assets in ASEAN 3 to the global financial cycle after the global financial crisis?

2. Method

The type of research used was quantitative in which data were in the form of numbers and based on time series. This type used Panel Data analysis method to determine the effect of credit growth and asset prices on the global financial cycle to be studied.

The type of data used was secondary data in the form of panel data with a study period from 2000 to 2016 in the form of annual data. Data sources used in this study were partly obtained and processed from the World Bank, International Financial Statistics, Bank Indonesia (BI), Monetary Authority of Singapore, Bank Negara Malaysia, and several related internet sources.

The research model used to answer several problem formulations in the research conducted is as follows:

Volatility Index: f(Credit,Asset)

The Econometric Model is:

Volatility Index$_{it}$ = α + β$_1$ (Credit)$_{it}$ + β$_2$ (Asset)$_{it}$ + e$_{it}$

3. Results and Discussion

The Chow test that was done to choose the most appropriate model between common effects and fixed effects indicated that the most appropriate model to use in this study was Fixed Effect Model. Similarly, the Hausman test that was conducted to choose the most appropriate model between random effects and fixed effects also suggested that the most appropriate model to use in this study was Fixed Effect Model.

This panel data linear regression analysis was used to estimate the effect of credit growth and asset prices on the global financial cycle.

Table 1. Data Panel Regression Estimation Results with Fixed Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	13.50015	2.178674	6.196497	0.0000
Credit	3.670010	3.060010	1.200281	0.0623
Asset	0.099886	0.052281	1.910580	0.0263

Based on table 1, it can be seen that the results of the regression estimation values show the effect of Credit and Assets on VIX, so the following equation can be obtained:

$$VIX = 13.50015 + 3.670010Credit + 0.099886Asset + x_{it}$$

Based on the results of panel data regression using Pooled Least Square method, as seen on the table, it can be explained that the constant of the regression equation is 13.50015. It means that if Credit and Assets are considered constant, the level of VIX will reach 13.50015 per year. The coefficient of regression of Credit is 3.670010. It means that if Credit increases by one percent, there will be an increase in the VIX of 3.670010, assuming that other variables are considered constant. The coefficient of regression of Asset is 0.099886. That is, if there is an increase in Asset by one percent, there will be an increase in VIX of 0.099886, assuming other variables are considered constant.

Table 2. Statistical Test Results

R-squared	0.209695	Mean dependent var	17.869020
Adjusted R-squared	0.140973	S.D. dependent var	5.322571
S.E. of regression	4.933157	Akaike info criterion	6.122730
Sum squared resid	1119.458	Schwarz criterion	6.312124
Log likelihood	-151.1296	Hannan-Quinn criter.	6.195103
F-statistic	3.051342	Durbin-Watson stat	0.568359

F test is seen from the Probability (F statistic) that is 0.025967. This means that based on the regression results, it is proven that the Probability (F statistics) is smaller than the significance level $\alpha = 0.05$, then H_0 is rejected and H_a is accepted, which means that simultaneously Credit and Asset affect VIX in ASEAN countries 3. Meanwhile, the Determination Coefficient test shows the adjusted R-squared is equal to 0.140973 or 14.0973%. This indicates that 14.0973% of the global financial cycle is influenced by Credit and Assets, while the remaining 85.9027% is influenced by other variables outside the model.

Table 3. Resuts of t test

Variable	Probability	Note
Credit	0.0623	Insignificant
Asset	0.0263	Significant

Based on the table above, it appears that the independent variable 'Credit' has no significant effect on the dependent variable 'VIX'. This is because the probability value is greater than the significant level α = 0.05, which is 0.0623. Then, the value of another independent variable 'Asset' shows the opposite result, which is a significant effect on the dependent variable 'VIX'. This is because it has a smaller probability value compared to a significant level of α = 0.05, which is 0.0263.

Multicollinearity was used to determine whether there is a relationship between independent variables in a regression model or not. If the correlation coefficient of the relevant variable is located outside the acceptance limit (critical value), then the correlation coefficient is significant and multicollinearity occurs. To find out a variable affected by multicollinearity, a basic belief, which is 0.8, can be used. If the number found is greater than 0.8, then multicollinearity occurs in the concerned variable. Vice versa, if the result obtained is less than 0.8, then there is no multicollinearity in that variable.

Table 4. Multicollinearity Test Results

	VIX	CREDIT	ASSET
VIX	1.000000	0.321831	-0.144191
CREDIT	0.321831	1.000000	-0.549662
ASSET	-0.144191	-0.549662	1.000000

The results above show that there are no variables that experience multicollinearity because the numbers obtained from the multicollinearity test on each variable show results that are less than 0.8, respetively.

Heteroscedasticity occurs when errors or residuals of the observed models do not have a constant variance from one observation to another. That is, each observation has different reliability due to changes in the background conditions not summarized in the model specifications (Imam Ghozali, 2005).

Table 5. Heteroscedasticity Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.348672	1.396101	2.398589	0.0206
CREDIT	-1.09E-10	1.96E-10	-0.554451	0.5820
ASSET	0.022801	0.033502	0.680596	0.4995

The results of the study show that there are no variables that experience heteroscedasticity problems because the numbers obtained from the heteroscedasticity test for each variable show a probability value greater than 0.05.

Normality test aims at testing whether, in the regression model, there are confounding variables that have normal distribution or not. In this study, to test the normality of data distribution, the jarque-Bera test (J-B test) was used. The criteria for testing Jarque-Bera (JB test) are, among other things, if JBcount ≥ X2table or the probability of JBcount ≤ the probability value (α = 5%), then the hypothesis which states that the residual error term is normally distributed is rejected. Meanwhile, if JB_{count} ≤ $X2_{table}$ or the probability of JB_{count} ≥ the

probability value (α = 5%), then the hypothesis which states that the residual error term is normally distributed is accepted.
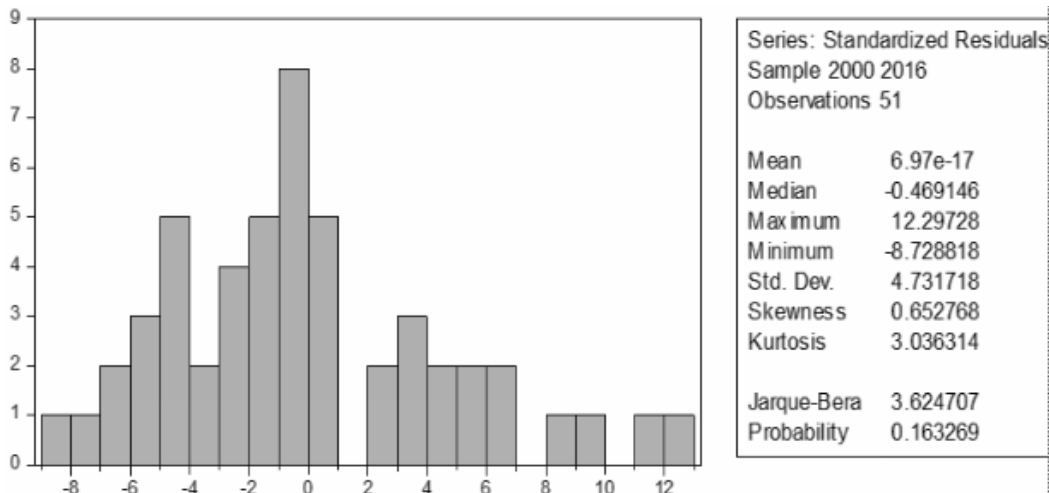
Figure 1. JB Analysis Results

The probability value JB_{count} is 0.163269 ≥ 0.05, so that it can be concluded that the empirical model is normally distributed.

Table 6. Individual Effect Test Results

No	Country (Crosside)	Effect
1	Indonesia	4.242828
2	Malaysia	-1.550004
3	Thailand	-2.692824

The table of the Cross-Section Effect estimation results above shows the influence between variables in each country; when the effect is positive, the dependent variables have an influence on the independent variables used, whereas if the effect value is negative, the dependent variables have no effect but other factors influence the independent variables. Judging from the results of the estimation, it appears that in Indonesia, the influence of the independent variables on the dependent variables is 4.242828. The results obtained are positive, which means that the global financial cycle has an influence on credit growth and asset prices in Indonesia.

Meanwhile, Malaysia shows different results, where the value of the effect is negative, namely -1.550004. This result indicates that the global financial cycle has no effect on credit growth and asset prices in Malaysia, or that there are other factors that affect the two independent variables. Similar to Malaysia, Thailand also shows negative results, namely -2.692824. This means the dependent variables of the global financial cycle do not have an influence on the independent variables, and there are other factors that affect the independent variables.

The estimation results have shown that in Indonesia, Malaysia and Thailand, after the global financial crisis in 2008 in the United States, credit growth has no influence on the global financial cycle, or in other words, has a negative response. The results are the same as the research that has been done regarding the response of credit growth of ASEAN 4 countries in 1990 to 2016 using the VAR Panel method which resulted negative numbers. That is, in a stable and stationary condition, there is no relationship or influence on global

financial cycle and credit growth in each of these countries. This can occur due to the movement of the credit cycle of each country is more driven by the domestic sector than by the foreign sector.

Meanwhile, the results of estimation that have been carried out in ASEAN 3 countries (Indonesia, Malaysia and Thailand) using Data Panel Method show that the variable 'Asset' has an influence on the global financial cycle. Asset is significantly positively related to the global financial cycle. The impact of the Asset response to the global financial cycle can be in the form of an increase in foreign capital entering each country. In the research, it is known that Asset refers to Net Foreign Asset data in the form of domestic assets originating from foreign people or, in other words, foreign investment in developing countries. In addition to increasing capital inflows, based on research conducted in ASEAN 4 countries regarding response of asset prices to the global financial cycle, the excess of global liquidity that reflects the global financial cycle used to measure global investor sentiment has a positive impact on asset prices. The increase in global financial risks will lead to an increase in asset prices. However, excess liquidity will cause an increase in output and property prices in developing countries will not affect asset prices significantly.

4. Conclusion

Testing the concept of credit and asset growth response to the global financial cycle variables in ASEAN 3 using the Panel Data Method provides the conclusion that credit growth that occurs in Indonesia, Malaysia and Thailand which were still developing countries responded negatively to shocks caused by the global financial cycle. Credit growth in each country is not affected by the global financial cycle. When the financial cycle shocked, ASEAN 3 countries' credit growth did not respond. This could happen because economic growth in each country weakened so that their credit growth experienced a decline because people could not do credit. In addition, the domestic sector which was more dominant than the foreign sector also triggered the weakening of credit in each country so that there was no response to global finance.

Different results are shown by the variable 'Asset' that provided a positive response to the shock caused by the global financial cycle. In each ASEAN 3 country, the increase in Assets owned was also influenced by the global financial cycle. Excess liquidity would cause an increase in the number of assets in each country, so that it could be used to reduce financial risks that might occur and would affect changes in the amount of assets owned. As developing countries, ASEAN 3 had an economy that generally was still influenced by cycles from developed countries, including the financial sector.

Policies that have been carried out in suppressing the shock of the global financial cycle require the role of financial authorities in each of ASEAN 3 countries to overcome these problems. The government as a decision maker on policies taken by the central bank in each ASEAN 3 country can conduct an evaluation and review of the financial sector, especially on credit growth and assets owned.

The policies in the financial sector that can be applied by the central banks in each ASEAN 3 countries are, as discussed in the previous chapter, implementing a macro prudential policy to reduce credit growth, so that the credit in each country that is still developing will not experience credit excessiveness which will affect its economic growth. In addition to policies that can be determined, central banks in each country can set minimum foreign investment limit. This can be done so that ASEAN 3 countries would not experience asset bubbles which can cause a financial crisis in their countries.

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Enviromental Impact of The Proceesing Industrial Activities in Central Java

[1]Elok Fatia Kirana, [2]Evi Gravitiani

Faculty of Economic dan Business, Sebelas Maret University, Jl. Ir. Sutami no. 36A, Surakarta (57126)

Abstract

Economic growth in Central Java cannot be separated from the role of the industrial sector which is the highest contributor to GDRP (Gross Domestic Regional Product). The growth of the industrial sector cannot be separated from the negative impacts of environmental pollution. This research aims to analyze the effect of processing industry activities towards water and air pollutions in Central Java. The data used in this research is secondary data in the form of input-output table of Central Java in 2013 by means of pollution intensity and pollution cleaning costs. The data were obtained from Industrial Pollution Projection System (IPPS) published by World Bank and Badan Perencanaan Pembangunan Daerah (BAPPEDA). This research applies modified input-output model by adding anti-pollution sectors in analyzing the data. According to (the) available data, the types of air pollutants added to the table are sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and total suspended particulates (TSP). While the types of water pollutants added are biological oxygen demand (BOD) and total suspended solids (TSS).The final result shows that the industrial sector plays a major role in the environmental pollution as indicated by the pollution effect index (IEp), pollution effect multiplier index (IMp), cleaning cost index (IEc), and cleaning cost multiplier index (IMc) more than 1 both from air pollution and river water pollution. Based on these results, the government is expected to be more assertive in overseeing the activities of the processing industry so that environmental pollution is not worse than before..

Keywords: Processing industries, pollution intensity, pollution cleaning costs, enviromental pollution.

1. Introduction

Economic growth and improving the welfare of the people in Central Java Province are the objectives of economic development related to the vision and mission of Central Java, namely creating an independent, competitive, prosperous, sustainable Central Java and a pillar of national development based on devotion to God Almighty in the container of the Republic of Indonesia. Economic growth in Central Java continues to experience a fairly good increase. The industrial sector that continues to progress has led to an increase in the Central Java GRDP. The economic structure of Central Java in 2017 was dominated by the manufacturing industry sector with a contribution of 34.96% and the industrial sector in Central Java alone accounted for 40% of Central Java's GRDP.

Economic growth is a process of increasing output over time to become an important indicator to measure the success of a country's development (Todaro, 2006: 125). One of the government's efforts to increase economic growth is to open up foreign investment opportunities to Indonesia. Based on a US News & World Report survey in 2016, from 80 countries that opened up foreign investment opportunities to invest in the country, Indonesia was considered the second best investment destination in the world. As a province that is opening investment opportunities, the industrial sector in Central Java Province is considered to have a very strategic role in increasing economic growth. The Central Java

Provincial Government continues to innovate and open up opportunities for investors to invest their capital with the ease provided.

The development of the industrial sector is directly proportional to environmental pollution caused by the industrial production process. Waste treatment in the industrial sector that does not pay attention to the environment causes pollution in both river and air water. The manufacturing industry sector is the sector that has the most impact on environmental pollution. The production process will produce residues in the form of wastes that become pollutants. There are several industries that do not pay attention to government appeals about policies that should be carried out at the time of disposal of waste to the environment, resulting in adverse impacts on the surrounding community. The government must be firm in calling on the economic players in the manufacturing sector who have a role in environmental pollution. This study limits its analysis to air and river water pollution problems. This is because: 1) The trend of air and river water populations in Central Java experienced a very rapid decline. 2) The negative impact of pollution on health and other damage that is difficult to avoid. Due to data limitations, this study only focuses on the processing industry sector.

2. Theoretical Basis

Economic growth

Economic growth is a condition of increasing income due to an increase in production of goods and services. Economic growth can also be interpreted as a process of changing the country's economy in a certain period of time to lead to better economic conditions. An economy is said to experience growth or develop if the level of economic activity is higher than that achieved in the previous period. Countries that experience economic growth can be indicated that the welfare of their people increases better. A country can experience rapid economic growth but can also experience slow growth. This situation is influenced by factors that exist in society and nature, namely; natural resources, human resources, advances in science and technology, etc.

Economic growth is one indicator of the success of a country's development. In real economic activities, economic growth has the meaning of physical economic development that occurs in a country, such as the increase in the number and production of industrial goods, the development of infrastructure, the increase in the number of schools, the development of manufactured goods, and so on. Meanwhile, economic development is economic growth which is followed by changes in economic structure and style of economic or business activities in order to increase per capita income by processing potential economic power into the real economy through investment, the use of technology, the addition of knowledge, increased skills, and the addition of organizational and management skills.

Industry

The general understanding of industry is the activity of processing raw materials into semi-finished goods and finished goods so that they have added value as benefits. The term "industry" comes from the Latin industria which means "labor". According to Law No. 5 of 1984 concerning industry, the definition of industry is an economic activity that processes raw materials, raw materials, semi-finished goods, and / or finished goods into higher value items for their use, including industrial design and engineering activities.

Industry and economic principles are two interrelated things. Economics is a social science that deals with production, distribution, and consumption, while the economic principle is the combination of economic activity in order to achieve a rational comparison between the sacrifices incurred and the results obtained. The principle of economics

teaches that in economic activities, people can maximize profits as much as possible with the smallest sacrifices. Economic principles apply in three economic activities, namely, production, distribution and consumption.

Industrial Impact

Development of the industrial sector is part of the national development process in enhancing economic growth that brings changes to people's lives. These changes include the impact of industrial development on socio-economic, socio-cultural and environmental aspects. The impact of industrial development on the socio-economic aspects includes the livelihoods of the population from the agricultural sector to the industrial and trade sectors, as well as the opening of wider employment opportunities for both the local community and the migrant community. The impact of industry on the socio-cultural aspects includes a reduction in the power of binding on existing cultural values and norms due to the inclusion of new cultural values and norms brought by immigrant communities, while the impact of industrial development on the environment is the emergence of pollution caused by industrial waste that disrupts the survival of living things.

Environmental Pollution

Environmental pollution according to the Basic Law on Environmental Management No. 4 of 1982 is the entry of living things, energy substances, and/or other components into the environment, or changes in the environmental order by human activities or natural processes so that the quality of the environment drops to a certain level which causes the environment to be less or unable to function according to its designation. Pollution events are called pollution. Substances and materials that can cause pollution are called pollutants. A substance is called a pollutant if its existence causes harm to other living beings.

Water pollution is the entry or inclusion of living things, energy substances or other components into the water by human activities so that water quality drops to a certain level which causes water to not function according to its designation. Water that deviates from its normal state is called polluted water. Polluted water will change both in color, odor and content. Wastewater plays a role in life because in addition to containing water there are also organic substances in it, which may be needed at certain limits. Therefore, there are two roles of wastewater, namely a positive role if wastewater with the quality contained is appropriate for its designation, among others for irrigation, fisheries, plantations, industry, households, recreation and others, while the negative role if wastewater is not in accordance with the quality standards of liquid waste and detrimental to the surrounding environment.

The definition of air pollution is gases and particulates, both obtained naturally from volcanoes, weathering plants, volcanic explosions, forest fires, as well as those obtained from human activities. The particulates will interfere with the cycle in the air so that it can cause air pollution. Human activities are the highest contributors of air pollutants compared to air pollution caused by nature.

Regional Regulation on Central Java about Environment

Environmental pollution in Central Java is increasingly severe, encouraging the local governments to make regulations or policies that regulate the environment. The Central Java Provincial Government is authorized to regulate the environment in its territory so the community can utilize the existing natural wealth that it can improve its welfare. Central Java Provincial Regulation Number 2 of 2017 regulates the corporate social and environmental responsibility. The regional regulation states that the Central Java Provincial Government is authorized to regulate the company's social and environmental responsibilities to

increase corporate awareness of the implementation corporate social and environmental responsibilities in Central Java Province, so that environmental pollution caused by the industrial sector can be reduced. The regulation was made with the aim of increasing capacity, awareness, legal certainty, corporate social and environmental responsibility and institutionalizing and sustaining synchronization of regional development planning in Central Java Province.

The implementation of corporate social and environmental responsibilities includes several scope, that is; planning, implementation, coaching, supervising, and reporting. Goverment responsibility covers several scope to minimaze the fraud from what the industry will do. The existence of control by the government in each stage of implementation provides a little gap for the industry to cheat in giving its influence on the environment.

3. Research Methods

The scope of this research is analyzing the influence of processing industry activities in Central Java Province on environmental pollution by using a modified input-output model by incorporating environmental elements to analyze the interaction of economic and environmental activities. The data used in this research is secondary data. Due to the limitations of existing data, this study limits the pollution problems in the manufacturing industry in Central Java. The main focus of this research is on the case of river water pollution and air pollution.

The data used in this study is the 2013 Central Java Input-Output table issued by the Central Statistics Agency (BPS). The table used is the I-O table on domestic transactions based on producer prices with 19 sector classification, then the I-O table was developed by incorporating elements of air pollution, river water pollution, and pollution cleaning costs. According to available data, the types of air pollutants added to the table are sulfur dioxide (SO_2), nitrogen dioxide (NO_2), and total suspended particulates (TSP), while the type of river water pollutants added are biological oxygen demand (BOD) and total suspended solids (TSS). Data regarding air pollution loads, river water pollution, and cleaning costs were obtained from the Industrial Pollution Projection System (IPPS) issued by the World Bank.

The method used in this study is the Input-Output model or often referred to as Table I-O. The Model I-O was first introduced by W. Leontief in 1930. The purpose of table I-O is to provide information about transactions in goods and services that occur between productions sectors in an economic activity represented in a matrix form.

Estimated Pollution Cost

Conventional estimated pollution cost in this research focus on Industrial Pollution Projection System (IPPS) model. Industrial Pollution Projection System (IPPS) model provides emision factor based on three economics variable that is in total output, value-added, and amount of labor. The industrial statistical data obtained is data per industry. In order to be used in the IPPS model, this data must be grouped according to the industrial sector. The industrial sector grouping are based on the ISIC (International Standard Industrial Classification) code which consist of 79 sectors. The estimation of pollution costs are done by multiplying the number of workers in one industrial sector with the selected emission factor.

Conventional Input-Output Analysis

Inter-industrial relations are an important aspect of the economy and this relationship is interdependent. Changes in input will affect the amount of output produced and this

changes the input for other industries. Thus, the relationship between sectors in a chain will affect. In addition to inter-sector transactions, there are other transactions recorded in Table I-O, namely the final consumption balance, payment of services to workers and capital owners ("value added" lines), and import transactions.

This matrix shows the relationship between increased productions from a sector (industry) that will lead to the development of other sectors. The condition of each sector has different patterns of buying and selling so that the impact of changes in the production of a sector to the total production of other sectors will be different. The Leontief reverse matrix summarizes all the effects of changes in the production of a sector to the total production of other sectors into the coefficients called output multipliers (a_{ij}). This multiplier is the numbers contained in the matrix $(I-A)^{-1}$.

Environmental Input-Output Analysis

Applications from the environmental I-O table created by Leontief require anti-pollution data that pollutes the environment in great detail. Some countries do not have anti-pollution data, including Indonesia. Thus, the development of environmental I-O tables in Indonesia does not have a different anti-pollution sector and analysis techniques. The development of environmental I-O tables in Indonesia was applied to the calculation of the relationship of economic activities to environmental activities in Central Java.

Resosudarmo (2000:5) adapts the Leontief Environmental I-O model for Indonesia by placing pollution variables and pollution cleaning costs on the line to n + 1 (outside the system of goods/services flow matrix between sectors), where n is the number of sectors. Pollution and cleaning costs are treated like added value (primary input), but the meaning is negative added value (negative externality).

Based on the Indonesian environmental I-O model that has been adapted, several indices can be found, including; 1) The pollution effect index (E_j^p) is an impact caused by an increase in one rupiah final demand for a sector to increase the pollution load. 2) Pollution multiplier index (M_j^p) is an additional pollution burden in all sectors of the economy due to an increase in pollution load of 1 kg in certain sectors. 3) Index of the effect of cleaning costs (E_j^c) is the magnitude of the impact of a one-rupiah increase in the final demand of a sector on increasing the cost of cleaning up the environment. 4) Cleaning cost multiplier index (M_j^c) is the amount of additional costs required by the entire sector to clean up the environment due to an increase in cleaning costs of one rupiah in certain sectors.

Based on the explanation of the above indices, it can be suggested that the environmental policy strategy for the government can be applied to maintain environmental sustainability. These strategies are; First, clean up the sector that has a high pollution multiplier index (IM_i^p) and a low cleaning cost index (IM_i^c). The sector that has the magnitude of the index belongs to the heavy pollutant sector but the cost of cleaning is relatively cheap. Mathematically, to be able to choose a sector belonging to this type, it can be calculated using the index of industrial effectiveness, namely $\acute{M}i = (IM_i^p) / (IM_i^c)$.

Secondly, suppressing the high demand for the sector that has a high pollution effect index (IE_i^c) and a high index of the cost of cleaning costs (IE_i^c). This is because the increase per unit of output from a particular sector will cause a high level of pollution and also consume high cleaning costs. Mathematically, a new index has been developed, namely the index of the effectiveness of pollution prevention in order to select the sectors classified as above. The index is as follows $\hat{E} = IE_i^p . IE_i^c$.

4. Data Analysis and Discussion

Linkages Between Sectors

Backward linkage index is the linkage of a sector with its input provider sector (upstream) or the relationship between the influence generated by one final demand unit in the sector on the total purchase of inputs in all sectors in an economy, while the linkage index in the future (forward linkage) shows the relationship between the influence caused by a unit of final demand of a sector to the total sales output (downstream) of all sectors in an economy. The sector that has index numbers of future and backward linkages of more than 1 (one) means that the sector has a higher capability than other sectors in terms of increasing the growth of its upstream or downstream sectors.

Based on the inter-sectorial linkages, key sectors in an economy can be determined. The key sector is a sector that has a forward and backward linkage index of more than 1. These sectors are said to be key sectors because they have strong linkages, both with the upstream sectors and the downstream sectors so that the increase or decrease in output in the key sector greatly affects the increase or decrease in output in the economy.

Table 1. Key Sectors of the Central Java Economy

Code	Sector	FL	BL
8	Food, beverage and tobacco industries	1,27	1,21
9	Other industries	1,51	1,18
15	Transport and communication	1,15	1,14

source: Resudarmo, Budi P., dkk. (2000)

The community income index shows the magnitude of the increase in total community income for every one unit of increase in output produced by a sector. A sector is said to have a high role in attracting community income if the community income index is more than one. The income index of the people in Central Java is the highest in the general government and defense sector with a figure of 2.2, while the lowest index is in the electricity, gas and drinking water sectors with an index of 0.40. This shows that the sectors of general government and defense, livestock and their products, mining and quarrying, the oil refining industry, trade, transportation and communication, and services have a high role in attracting people's income.

Environmental pollution by industry sector in Central Java

The environmental pollution caused by industry sectors has entered a dangerous stage. The development of the industry push the increase of environmental pollution. The pollution has reached detrimental stage for people or other living creature.

The pollutions caused by industry influences the environment river water and air near the industry. In total of 136 rivers scattered in Central Java has been in polluted conditions which can endanger other living things near the river. The water river pollutions are resulted by domestic waste from household and industry waste. The polluted rivers such as; Babon river, flood canal Semarang City river, Bengawan Solo river, Pekalongan river, etc. These conditions indicate that there is still low public awareness in protecting or preserving the environment.

Pollution and Processing Industry Sector Activities

Input-output analysis of this research environment only covers the manufacturing industry sectors, so that adjustments are made between IPPS data that follows the four-

digit International Standard for Industrial Classification (ISIC-4) with input-output tables in Central Java classification 19 sectors. The following is a table that has adjusted sectors.

Table 2. Processing Industry Sector with Air/River Water Pollution in the Central Java Environmental I-O Table

I-O Code	Sector
8	Food, beverage and tobacco industries
9	Other industries
15	Transport and communication

source: Resudarmo, Budi P., dkk. (2000)

Analysis of air and river pollution data in the i-o table in Central Java environment produces several indices in accordance with those described in the methodology chapter. The index includes the pollution effect index, pollution effect multiplier index, cleaning cost index, and cleaning cost multiplier index.

Table 3. Results of Central Java Environmental Input Analysis for Air Pollution

Code	Sector	SO_2				NO_2				TSP			
		IE_p	IM_p	IE_c	IM_c	IE_p	IM_p	IE_c	IM_c	IE_p	IM_p	IE_c	IM_c
8	Food, beverage and tobacco industries	14,13	13,50	2,76	2,38	11,04	7,00	1,49	1,33	10,41	8,39	1,79	1,53
9	Other industries	14,63	10,07	9,39	5,80	6,16	42,95	6,92	4,48	5,36	40,35	6,74	4,37
10	Oil refining industries	12,62	13,12	3,11	2,36	12,62	7,07	1,84	1,34	2,38	28,58	3,28	6,06

source: Resudarmo, Budi P., dkk. (2000)

Table 4. Results of Central Java Environmental Input Analysis for River Water Pollution

Code	Sector	BOD				TSS			
		IE_p	IM_p	IE_c	IM_c	IE_p	IM_p	IE_c	IM_c
8	Food, beverage and tobacco industries	5,67	20,18	1,70	9,14	5,68	10,33	2,44	1,14
9	Other industries	9,65	72,20	1,28	7,44	9,65	6,37	1,25	7,30
10	Oil refining industries	3,43	6,92	2,68	6,06	3,43	6,22	5,03	3,50

source: Resudarmo, Budi P., dkk. (2000)

Based on the results of the above analysis, it can be used to search for sectors that need to be prioritized to be cleaned up with criteria in the form of pollution cleaning effectiveness index ($\acute{M}i$) and pollution prevention effectiveness index ($\hat{E}i$).

Table 5. Priorities for Cleaning Air and River Water Pollution

Rating	Air		River Water	
	Code	Sector	Code	Sector
1	9	Other industries	9	Food, beverage and tobacco industries
2	8	Food, beverage and tobacco industries	8	Other industries
3	10	Oil refining industries	10	Oil refining industries

source: Resudarmo, Budi P., dkk. (2000)

Table 6. Priorities for Air and River Pollution Prevention

Rating	Air		River Water	
	Code	Sector	Code	Sector
1	9	Other industries	9	Oil refining industries
2	8	Food, beverage and tobacco industries	8	Other industries
3	10	Oil refining industries	10	Food, beverage and tobacco industries

source: Resudarmo, Budi P., dkk. (2000)

From table 5 and table 6 it can be concluded that in the priority of cleaning and preventing air pollution, the most priority sectors are other industries, then the food, beverage and tobacco industries, and finally the oil refining industries, while for cleaning and preventing river water pollution there are difference. If the first rank cleaning is the food, beverage and tobacco industries, priority prevention is the oil refining industries. The second rating between cleaning and preventing pollution of river water is the same as other sectors.

Economic Growth and Pollution

This paper shows that the reduction in pollution loads is achieved by lowering output. In other words, to control the pollution burden there is an opportunity cost that must be sacrificed and must be borne by the economy. Therefore, the government must be firm in taking policies that will be implemented. In addition, also must consider the opportunity costs that will be wasted so that the policy implemented can run optimally.

Based on the analysis of the input output model, it is known that in the effort to control air pollution, there are 2 key sectors included in the priority of pollution prevention. This means that the sectors that are the main priority of preventing air pollution have a large opportunity cost (the decline in output is very influential). Similar to river water pollution control, there are key sectors that are included in the priority of pollution prevention. The food, beverage and tobacco industry sectors and other industrial sectors are key sectors that are included in the priority of preventing river water pollution.

5. Conclusion

This study shows that the industrial sector has a major influence on environmental pollution. With the increase in the industrial sector, the output produced is increasing so that the level of pollutants produced is also higher. The processing industry in Central Java has a pollution effect index (IE_p), pollution effect multiplier index (IM_p), cleaning cost index (IE_c),

and cleaning cost multiplier index (IM_c) more than 1 from both air pollution and river water pollution. These conditions indicate that the manufacturing sector in Central Java is a heavy pollutant sector.

Environmental pollution can affect economic growth. This condition is caused because in controlling the pollution load there is an opportunity cost that must be sacrificed and borne by the economy. This study shows that there are key sectors of the Central Java economy that are included in the priority of cleaning and preventing pollution, where controlling pollution loads in these key sectors will reduce economic output.

Cleaning and prevention of pollution caused by the processing industry sector is important so that environmental pollution can be controlled. The main focus in cleaning and preventing air pollution can be adjusted to priority cleaning and prevention sectors so that they can be carried out optimally, effectively and efficiently.

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Elevating Fisherman Welfare: Designing Patterns of Marine Governance

Lailatul Sah'ro[1], Maulana Surya Kusumah[2], Harry Yuswadi[2], Agus Trihartono[3]
[1]*Program Pascasarjana Ilmu Administrasi Fakultas Ilmu Sosial dan Ilmu Politik Universitas Jember*
[2]*Program Studi Sosiologi, Fakultas Ilmu Sosial dan Ilmu Politik Universitas Jember*
[3]*Program Studi Hubungan Internasional, Fakultas Ilmu Sosial dan Ilmu Politik Universitas Jember*
*Email: rozah84@yahoo.com.

Abstract

This article examines the welfare of fishermen by designing patterns of marine governance. So it is very necessary a patterned marine management. Where the role of the state is very important in this marine governance. As for designing these patterns of governance, it should get basic ecological and social strategies. The study of ecological strategy itself is interpreted as the establishment of arrangements that are to restore and maintain the expected ecological conditions. Whereas for the social governance strategy is a governance model that is able to improve welfare and reduce social conflicts of fishermen, even able to build social awareness in fisheries and marine affairs to be involved as a marine guard. Therefore, there are 3 models of the role of the state in this study, namely hierarchical, co-governance and the government itself or known as the triple helix theory.

Keywords: Prosperity, Fishermen, Welfare, Patterns and Governance

1. Pendahuluan

Negara Indonesia termasuk salah satu wilayah dengan keanekaragaman hayati laut tertinggi di dunia (Hughes et al. 2002). Secara umum laut disebut sebagai wilayah yang bersifat *open access* dan milik bersama (*common property*). Perjuangan nelayan atas laut merupakan konsep tentang upaya nelayan dalam mengelola dan menjaga lautnya. Kenyataan ini menampilkan dua realita pengelolaan sumber daya laut, yaitu pengelolaan perikanan yang buruk dan mengancam keberadaan sumberdaya alam dan keanekaragaman spesies laut (Bryant et. al. 1998) dan konflik-konflik atas pengelolaan laut (Conner Bailey, 1988).

Indonesia termasuk negara dengan keanekaragaman hayati laut tertinggi di dunia (Hughes et al. 2002). Dimana wilayah laut Indonesia memiliki fungsi, makna dan arti peranan yang sangat penting dalam kaitannya dengan sumberdaya laut yang terkandung didalamnya dapat dikelola secara baik dan efisien serta berkelanjutan sejalan dengan tujuan pembangunan nasional. Kesadaran akan tanggung jawab pengelolaan wilayah laut didasarkan pada kenyataan bahwa potensi sumberdaya laut dan pesisir merupakan asset bangsa yang potensial bagi pengembangan wilayah serta juga menyimpan berbagai permasalahan yang signifikan.

Sebagaimana dalam Undang-Undang Dasar 1945 Pasal 33 terutama ayat 3 yang berbunyi: "Bumi, air dan kekayaan alam yang terkandung didalamnya dikuasai oleh negara dan dipergunakan untuk sebesar -besarnya kemakmuran rakyat", hal tersebut merupakan salah satu tujuan negara mengenai sumberdaya alam dan kawasan perairan laut perlu dimanfaatkan sebaik-baiknya, ditata dan dikelola sungguh-sungguh untuk meningkatkan kesejahteraan rakyat. Artinya wilayah laut Indonesia memiliki fungsi, makna dan arti peranan yang sangat penting dalam kaitannya wilayah laut beserta sumberdaya terkandung didalamnya dapat dikelola secara baik dan efisien serta berkelanjutan sejalan dengan

tujuan pembangunan nasional yaitu untuk kesejahteraan. Kesadaran akan tanggung jawab pengelolaan wilayah laut didasarkan pada kenyataan bahwa potensi sumberdaya laut dan pesisir merupakan aset bangsa yang potensial bagi pengembangan wilayah tersebut.

Studi ini secara khusus melakukan pengkajian pada perilaku nelayan dalam mengelola laut. Perjuangan nelayan atas laut menjadi pilihan topik untuk mengungkap upaya nelayan dalam menjaga lautnya sebagai bagian dari "*survival of the fittest*". Studi tentang perjuangan ini terutama melihat hubungan manusia dengan lingkungan terkait dengan perubahan ekologi (lingkungan) (Kusumah, 2016b).

Pengelolaan sumber daya yang buruk sumber daya alam dan sumber daya ikan banyak dilakukan oleh nelayan. Penangkapan yang bersifat *overfishing* dan bahkan *illegal fishing* yang mengarah pada perusakan lingkungan menjadi fenomena yang terus berlangsung dalam eksploitasi hasil laut. Studi dan pendekatan sosiologis tentang perilaku penangkapan, yang berakibat pada kerusakan laut, merupakan topik yang kurang menarik perhatian di Indonesia. Sebagian besar studi dan kajian sosiologis tentang nelayan menghubungkan pengelolaan laut ini dengan konflik-konflik nelayan dan perebutan wilayah di laut (Kusumah, 2015). Studi-studi tersebut lebih mengedepankan dua pokok pikiran utama, yaitu perlindungan hak atas wilayah penangkapan dari infiltrasi nelayan luar dan perlindungan terhadap sumber daya ikan dari *illegal fishing* dan perusakan lingkungan.

Perebutan atas hak laut dapat pula dinyatakan sebagai konflik pengelolaan atau perjuangan pengelolaan atas laut. Konflik terkait penangkapan ikan merupakan gejala sosial yang sering ditemukan di berbagai wilayah perairan (Adhuri, 1993;1998; 2002a; 2002b; Adhuri, Kanagaratnam, and Dey, 2006; Adhuri, dan Wahyono, (editor), 2004; Satria, 2009; Kusnadi, 2000, 2002; Bailey, 1986, 1988; Indrawasih, 2007; Kusumah, 2010a; 2010b). Gejala konflik sosial tersebut dapat dilihat dari perspektif sumber daya bahwa konflik yang terjadi karena perebutan sumberdaya ikan yang jumlahnya semakin terbatas. Perebutan ini muncul karena karateristik sumberdaya perikanan yang bersifat open access. Dengan kondisi sumberdaya yang bersifat open access, seolah-olah sumber daya dapat dikuasai sembarang orang, di sembarang waktu, dan dengan sembarang alat tangkap. Namun jika ditelusuri lebih jauh, sebenarnya kondisi sumberdaya yang benar-benar terbuka hampir sulit ditemukan (Satria, 2009; Kusumah, 2015; 2016a; 2016b).

Konflik-konflik di perairan Indonesia tersebar dari perairan pesisir timur Sumatra sampai kawasan Timur Indonesia (Adhuri,1993, Adhuri, Kanagaratnam, and Dey1, 2006; Adhuri dan Wahyono,2:2004). Perebutan atas laut di pantai Utara Jawa Timur terkait dengan sejumlah problema sosial ekonomi dan sumber daya perikanan merupakan sebuah fenomena lama yang terjadi sejak awal tahun 1970, ketika modernisasi perikanan mulai diperkenalkan (Emmerson, 1975; Kusnadi, 2000; 2002; 2007; Satriyati, 2006: hal. 525; Kusumah, 2010a; 2010b; Wahyudi, 2010; Suharyanto, 2009). Di era sebelum tahun 1980, konflik antara nelayan "tradisional" dengan nelayan trawl sangat sering terjadi, dan seringkali bersifat brutal (violent) sehingga memakan banyak korban jiwa yang cukup banyak (Bailey, 1986, Betke, 1988).

Akan tetapi sampai saat ini belum diterapkan teknik pengelolaan yang memadai. Penetapan jumlah alat tangkap pukat cincin (*purse seine*) yang boleh beroperasi tidak didasarkan pada potensi stok ikan lemuru yang ada, akan tetapi lebih berdasarkan pada jumlah alat tangkap yang telah ada. Kesenjangan ini dapat terjadi karena setiap peraturan yang dibuat tidak disertai dengan pengawasan dan pelaksanaannya yang cukup optimal. Kondisi demikian merupakan salah satu faktor penyebab rendahnya tingkat efesiensi kegiatan penangkapan ikan lemuru di Selat Bali.

Penangkapan berlebih (*over fishing*) menguras sumber daya dan berdampak pada hilangnya sumber mata pencaharian nelayan. Pemerintah melalui Departemen Kelautan

dan Perikanan (DKP) mendapat mandat untuk mengatur tata kelola kelautan yang termasuk mengenai perikanan tangkap, sedemikian rupa untuk mencegah terjadinya penangkapan berlebih, mencegah terkurasnya sumber daya dan memaksimalkan keuntungan jangka panjang bagi nelayan. Dibawah ini merupakan grafik penangkapan ikan lemuru yang terjadi penurunan setiap tahunnya, yaitu:
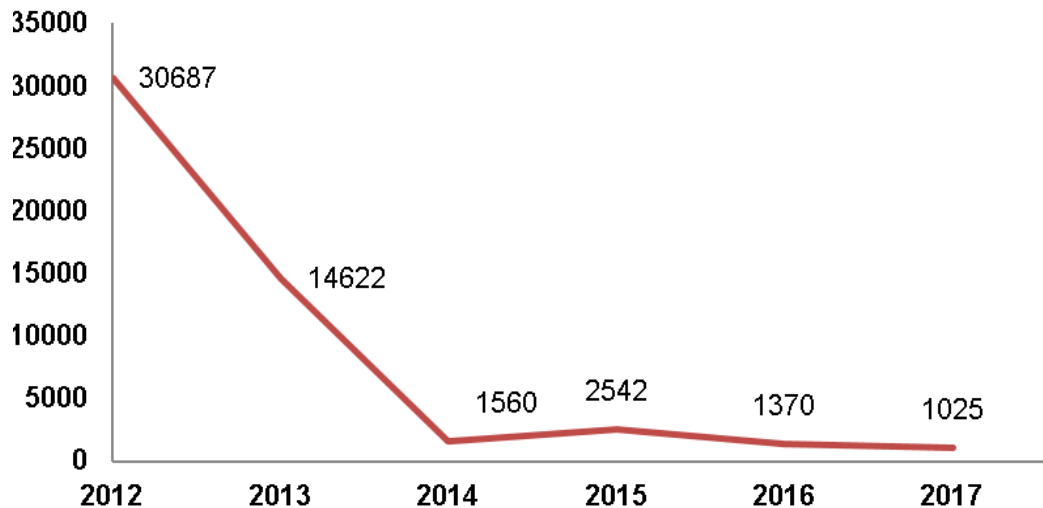
Gambar 1. Perbandingan Jumlah Ikan Lemuru di Selat Bali
(Sumber: Data DKP Provinsi Bali)

Berdasarkan data Dinas Kelautan dan Perikanan yang didaratkan di Selat Bali, selama periode tahun 2011-2017 terjadi 5 kali fluktuasi kenaikan yang puncaknya terjadi tahun 2012 dan mengalami 4 kali penurunan pada tahun 2014, 2015, 2016, 2017 (Gambar 1). Hasil tangkapan ikan lemuru berfluktuasi yang diduga disebabkan oleh siklus upwelling di Selat Bali. Ikan lemuru di perairan Bali kelihatan berhubungan erat dengan faktor-faktor lingkungan, terutama terjadinya kenaikan massa air atau *upwelling* (Setyohadi, 2010).

Padahal jika kita lihat ikan adalah salah satu kekayaan laut Indonesia yang sangat berharga dan menjadi penggerak roda perekonomian bangsa. Sedangkan laut merupakan kekayaan sumber daya alam dan telah berkontribusi besar terhadap pembangunan di Indonesia untuk mewujudkan kesejahteraan nelayan. Namun kenapa kekayaan laut yang terkandung didalamnya belum mensejahterahkan nelayan, terlebih lagi semakin berkurangnya ikan lemuru yang terjadi di Selat Bali.

2. Metode

Bogdan & Biklen, S (1992:21-22) menjelaskan bahwa penelitian kualitatif adalah salah satu prosedur penelitian yang menghasilkan data deskriptif berupa ucapan atau tulisan dan perilaku orang-orang yang diamati. Pendekatan kualitatif diharapkan mampu menghasilkan uraian yang mendalam tentang ucapan, tulisan dan atau perilaku yang dapat diamati dari suatu individu, kelompok, masyarakat dan atau organisasi tertentu dalam suatu setting konteks tertentu yang dikaji dari sudut pandang yang utuh, komprehensif dan holistik. Penelitian kualitatif bertujuan untuk mendapatkan pemahaman yang sifatnya umum terhadap kenyataan sosial dari perspektif partisipan. Pemahaman tersebut tidak ditentukan terlebih dahulu, tetapi didapat setelah melakukan analisis terhadap kenyataan sosial yang menjadi fokus penelitian. Penelitian kualitatif juga disebut dengan: *interpretive research, naturalistic research, phenomenological research.*

Penelitian kualitatif mempunyai pengertian yang berbeda-beda untuk setiap momen, meskipun demikian definisi secara umum bahwa penelitian kualitatif merupakan suatu metode berganda dalam fokus yang melibatkan suatu pendekatan interpretatif dan wajar terhadap setiap pokok permasalahannya. Ini berarti penelitian kualitatif bekerja dalam setting yang alami, berupaya memahami, memberi tafsiran pada fenomena yang dilihat dari arti yang diberikan orang-orang kepadanya. Penelitian kualitatif melibatkan penggunaan dan pengumpulan berbagai bahan empiris, seperti studi kasus, pengalaman pribadi, instropeksi, riwayat hidup, wawancara, pengamatan, teks sejarah, interaksional dan visual yang menggambarkan momen rutin dan problematis, serta maknanya dalam kehidupan individual dan kolektif (Denzim & Lincoln, 1994:2)

Dari paparan di atas dapat diketahui bahwa penelitian kualitatif nantinya akan menghasilkan data deskriptif atau pengertian berupa kata-kata tulisan maupun lisan dari orang dan perilaku yang diamati. Untuk itu alasan mengapa peneliti menggunakan metode penelitian kualitatif adalah dapat mempermudah peneliti dalam melaksanakan penelitian, selain itu juga lebih menyeluruh, rinci, mendalam dan bisa mengenal orang (subyek) secara pribadi serta dapat melihat pengalaman-pengalaman yang mungkin belum kita ketahui sama sekali.

3. Hasil dan Diskusi

Triple helix merupakan metafora untuk pemerintah, masyarakat dan *stakeholders* yang berinteraksi secara dekat dimana masing-masing mempertahankan identitas independesinya. Dalam *triple helix*, peran pemerintah, masyarakat dan *stakeholders* mengambil kesempata dari yang lain, meskipun masing-masing mempertahankan peran utama dan identitasnya. Menurut Leydesdorff dan Meyer (2013), model *triple helix* merupakan satu dari bentuk sistem inovasi yang berbasiskan pengetahuan (*knowledge-based innovation system*) yang mencoba menangkap dinamika komunikasi maupun organisasi dengan mengenalkan gagasan suatu hamparan pertukaran relasi yang bolak-balik (*feed back*) pada penyusunan institusi. Institusi dan relasinya menyediakan suatu infrastruktur pengetahuan yang (secara paradoks) membawa basis pengetahuan. Setiap elemen (*helic*) berkembang secara internal, namun juga berinteraksi dalam wujud pertukaran barang, jasa, dan fungsi.

Konsep Kooiman (2003) terdapat 3 model sebagai peran negara, yaitu pemerintah hierarkis, dimana hierarkis pemerintah ini dilakukan secara *top-down*. Kedua *co-governance* terjadi dalam kemitraan antara pemerintah, masyarakat sipil dan pemangku kepentingan industry. Terakhir pemerintah itu sendiri.

Demikian pula, *welfare state* atau negara kesejahteraan tidak dapat dipisahkan dari konsep mengenai kesejahteraan (*welfare*) itu sendiri. Dalam *Encyclopedia Americana* disebutkan bahwa welfare state adalah "*A form of government in which the state assumes responsibility for minimum standards of living for every person*" (bentuk pemerintahan dimana negara dianggap bertanggung jawab untuk menjamin standar hidup minimum bagi setiap warga negaranya).

Pola tata kelola penangkapan ikan yang selama ini mengarah pada eksploitasi secara tidak terkendali, akan berakibat pada sumber daya ikan dapat mengalami degradasi bahkan pemusnahan. Karena konsep dasarnya adalah mengelola. Perlu ada perubahan konstruksi pengelolaan menjadi tata kelola.

Meski sumber daya ikan merupakan sumber daya yang dapat pulih (*renewable resources*) secara langsung kondisi ini akan mempengaruhi keberlangsungan mata pencaharian nelayan. Tata kelola perikanan berkelanjutan adalah pemanfaatan perikanan dengan memperhatikan keberlanjutan bagi lingkungan alam dan tata kelola yang memperhatikan masa depan sumber daya ikan. Tata kelola adalah mengutamakan prinsip penataan dan

pada bagian ini pelibatan masyarakat menjadi syarat mutlak. Pelibatan masyarakat se-cara penuh dalam pemanfaatan sumber daya ikan (perencanaan, pelaksanaan sampai pe-ngawasan termasuk rehabilitasi dan konservasi) dimaksudkan agar seluruh *stakeholders* merasa memiliki dan bertanggung jawab terhadap kelestarian sumber daya ikan.

Upaya lain yang dapat dilakukan untuk menghindari konflik antar nelayan adalah pengembangan usaha alternatif, misalnya di bidang budidaya ikan, pengolahan ikan, perbengkelan dll. Dengan adanya usaha alternatif diharapkan nelayan akan memperoleh penghasilan tambahan, sehingga ketergantungan terhadap hasil tangkapan ikan dapat dikurangi dan keinginan nelayan untuk menangkap ikan sebanyak-banyaknya juga dapat ditekan.

Kerusakan alam dan kelangkaan ikan tangkapan telah diakui sebagai akibat dari *illegal fishing* dan *over fishing*. *Illegal fishing* dapat dikendalikan dengan peningkatan pengawasan dan penegakan hukum sehingga dapat menghindari terjadinya konflik antarnelayan. Pengaturan penangkapan ikan sesuai aturan main perlu ada penegakkan aturan hukum yang melarang penggunaan teknologi penangkapan yang merusak lingkungan.

Untuk menghentikan penggunaan teknologi penangkapan yang merusak lingkungan dan memutus siklus hidup ikan dilakukan dengan strategi sosial berupa insentif usaha perikanan. Insentif usaha perikanan adalah bantuan berupa hibah yang dapat dilakukan oleh negara melalui kredit penangkapan ikan. Kredit ini harus tanpa bungan, yang diberikan sebagai jaminan sosial ekonomi yang di dapat nelayan selama tidak melaut.

Dalam setiap terjadinya konflik nelayan, selalu dianggap bahwa pemerintah bertindak terlambat. Banyak peraturan, baik perda Propinsi maupun Kabupaten bahkan juga UU untuk perikanan dan kelautan tetapi masalah utama adalah pada penegakan hukum. Negara selama ini hanya melakukan tindakan polisional dalam meminimalisasi konflik nelayan melalui penegakan hukum dan menjadi mediator dengan melaksanakan musyawarah mempertemukan pihak yang bertikai.

Kehadiran negara dapat menjadi pendulum resolusi konflik nelayan. Konflik dan perdamaian adalah dua sisi berdampingan dengan pendulum yang terus bergerak sesuai kepentingan. Sebagai hasil penelitian asumsi tentang dorongan konflik dapat disejajarkan berseberangan dengan dorongan untuk melakukan perdamaian.

Pendulum kepentingan adalah bola virtual (maya atau tidak nyata). Pendulum yang nyata adalah dorongan konflik dan dorongan perdamaian. Pendulum kepentingan diatas tergantung pada perhatian dan kehadiran negara dalam kancah persaingan nelayan. Artinya pendulum ini merupakan konsep yang mempertemukan negara dengan nelayan. Nelayan sebagai komunitas sosial adalah masyarakat yang sudah memiliki kelengkapan nilai dan budaya. Dalam struktur pengetahuan nelayan telah tertanam nilai konflik dan sekaligus juga nilai perdamaian.

Jika mempelajari alur realita peran negara dan konflik serta resolusi konflik yang berlangsung sebagaimana telah diuraikan diatas, maka gerakan pendulum akan sangat dipengaruhi oleh 3 hal yaitu konsolidasi nelayan dalam bentuk permufakatan, pembangunan nilai harmoni dan perdamaian, penumbuhan kesadaran dan kepedulian.

Dari uraian tentang konflik terungkap bahwa meskipun terlambat, negara mampu meredakan konflik horisontal antar nelayan. Ketegasan dalam penegakan hukum sangat dibutuhkan untuk membuat pendulum kepentingan tidak membawa konflik mencapai titik puncak konflik. Sejumlah pertemuan dalam bentuk musyawarah untuk mempertemukan antara pihak yang bertikai sangat penting.

Dalam hal pengaturan, Menteri Kelautan dan Perikanan membuat kebijakan Nomor 18/MEN-KP/I/2015 tentang Penangkapan Lobster (*Panulirus spp.*), Kepiting (*Scylla spp.*)

dan Rajungan (*Portunus spp.*). Penerbitan surat edaran ini untuk memberikan kejelasan pada publik terkait pelaksanaan Peraturan Menteri Kelautan dan Perikanan Nomor 1/PERMEN-KP/2015 tentang Penangkapan Lobster (*Panulirus*), Kepiting (*Scylla*) dan Rajungan (Portunus) khususnya terkait dengan ukuran berat yang boleh ditangkap dan diperjualbelikan. Surat edaran ini menjelaskan soal pembatasan penangkapan lobster, rajungan dan kepiting yang boleh ditangkap. Ketentuan pembatasan ini dilakukan secara bertahap, antara lain: bahwa larangan dan pembatasan penangkapan lobster, kepiting dan rajungan dikecualikan untuk kegiatan penelitian, pengembangan dan pendidikan. Seperti diketahui selain pembatasan penangkapan tiga jenis hewan laut tersebut juga berdasarkan ukuran. Menteri Kelautan dan Perikanan Susi Pudjiastuti juga melarang penangkapan lobster, kepiting dan rajungan yang bertelur.

Sejak lahirnya undang-undang No. 22 tahun 1999 tentang pemerintahan daerah sering terjadinya konflik antar nelayan di Indonesia telah terjadi sejak lama dan makin marak akhir–akhir ini (Solihin, Akhmad dkk, 2005). Namun, karena implementasi desentralisasi pengelolaan wilayah laut belum tergambar secara jelas maka timbul penafsiran yang berbeda-beda baik dikalangan pemerintah daerah maupun nelayan. Akhirnya pemanfaatan sumber daya wilayah pesisir dan kelautan masih jauh dari optimal. Maka diharapkan dengan dilaksanakannya otonomi daerah dapat mendorong pertumbuhan yang lebih merata ke seluruh daerah, serta peran masyarakat dalam pembangunan dapat lebih diberdayakan.

Berdasarkan kebijakan diatas, maka berlakunya UU No. 23 Tahun 2014 tentang otonomi daerah, dimana terjadi perubahan kewenangan pengelolaan laut Provinsi yang semula 4-12 mil kini menjadi 0-12 mil, pengelolaan perairan yang dilakukan sebelumnya oleh Pemerintah Kabupaten/ Kota diambil alih oleh Pemerintah Provinsi, sebagaia salah satunya kewenangan zonasi laut yang dahulu 4-12 mil, kini menjadi 0-12 mil. Sebelumnya zonasi laut 0-4 mil menjadi kewenangan Pemerintah Kabupaten/ Kota. Sebagaimana sesuai dengan Rancangan Peraturan Daerah (Raperda) nomor 7 tahun 2016 tentang bendega atau nelayan, dimana tentang perlindungan dan pemberdayaan nelayan, pembudi daya ikan dan penambak garam memberikan kewenangan kepada pemerintah provinsi untuk menetapkan kebijakan. Sedangkan dalam kaitannya dengan pasal-pasal yang mengatur tentang "awig-awig" (aturan adat tertulis) adalah suatu bentuk pengaturan terkait dengan adanya upaya pencapaian keadilan bagi bendega dalam kegiatan yang bersifat sosial religius sebagai cerminan dari konsep "Tri Hita Karana".

Peran negara ini sangat diperlukan dalam tata kelola kelautan untuk mensejahterakan masyarakat, karena peran negara masih lemah dalam manajemen kelembagaan dan pengawasannya. Selama ini peraturan pemerintah daerah bertujuan untuk menanggulangi masalah-masalah yang dihadapi diantaranya, seperti tata kelola sumberdaya kelautan yang belum optimal dan berkelanjutan, tata ruang laut dalam hal kewenangan pengelolaan serta konflik kepentingan antara tujuan pelindungan lingkungan laut atau ekonomi.

Sementara itu, upaya memanfaatkan sumberdaya ikan secara optimal, berkelanjutan dan lestari yang merupakan tuntutan sangat mendesak untuk sebesarnya-besarnya kemakmuran rakyat, terutama meningkatkan kesejahteraan nelayan dan pembudidaya ikan, pemenuhan kebutuhan gizi masyarakat, memperluas lapangan kerja dan kesempatan berusaha serta peningkatan ekspor untuk menghasilkan devisa negara. Berdasarkan hal ini, guna memberikan manfaat yang maksimal bagi masyarakat dan negara Indonesia serta menjamin keberlangsungan usaha perikanan itu sendiri, maka sudah seharusnya pembangunan dan aktivitas perikanan nasional secepatnya diarahkan dengan menerapkan kaidah-kaidah perikanan berkelanjutan (*sustainable fishing*). Pada dasarnya pembangunan berkelanjutan, termasuk bidang perikanan mencakup tiga aspek utama, yaitu: ekologi, ekonomi dan sosial (Munasinghe, 2002:53).

Tanpa keberlanjutan ekologi, misalnya penggunaan teknologi yang merusak atau tidak ramah lingkungan, akan menyebabkan menurunnya sumber daya ikan bahkan juga bisa punah, sehingga akibatnya kegiatan ekonomi perikanan akan terhenti dan tentu akan berdampak pula pada kehidupan ekonomi dan sosial masyarakat yang terlibat kegiatan perikanan. Kemudian, tanpa keberlanjutan ekonomi, misalnya rendahnya harga ikan yang tidak sesuai dengan biaya operasional, maka akan menimbulkan eksploitasi besar-besaran untuk dapat menutup biaya produksi yang dapat merusak kehidupan ekologi perikanan. Begitu pula tanpa keberlanjutan kehidupan sosial para stakeholder perikanan maka proses pemanfaatan perikanan dan kegiatan ekonominya menimbulkan berbagai konflik sosial di masyarakat penggunanya. Dengan demikian, agar perikanan yang berkelanjutan tersebut dapat segera terwujud, maka tentunya harus diimbangi dengan regulasi dan kebijakan yang tepat dan efektif.

Persoalan perumusan kebijakan pembangunan sebagai pemanfaatan sumber daya kepulauan dapat didekati dengan dua pendekatan penting: dinamika sistem dan teori permainan. Pendekatan dinamika sistem (Forrester, 1969) adalah aplikasi teori pengendalian pada sebuah sistem. Langkah pertama untuk mengelola sebuah sistem alamiah (*natural resource system*) agar memberi manfaat dalam jangka panjang adalah dengan memperlakukan sistem tersebut sebagai sebuah *managed system* (sistem yang dikelola). Ini berarti menciptakan sebuah komponen buatan pada sistem alamiah tersebut melalui pembentukan kelembagaan atau pengaturan (*governance*) atas sistem ini. Salah satu komponen buatan yang penting adalah informasi dan umpan balik (*feed back*) sistem

Sedangkan untuk menentukan bentuk intervensi (kebijakan/*policy*) atas sistem alamiah ini, pendekatan permainan dapat membantu (Ostrom,1997). Pendekatan permainan berarti bahwa persoalan pemanfaatan sumber daya kepulauan dipahami sebagai sebuah multi players game. Ini berarti hasil akhir pemanfaatan sumber daya kepulauan merupakan hasil interaksi antara berbagai strategi pemanfaatan oleh setiap pemain dalam permainan tersebut. Isu terpenting dalam pengelolaan sumber daya kepulauan sebagai sumber daya bersama (*common pool resources*) adalah isu *free riding*. Oleh sebab itu, untuk memanfaatkan sumber daya atau sistem kepulauan ini, para pemanfaat sumber daya kepulauan dapat mempertimbangkan kluster baru teknologi kapal ikan dengan memanfaatkan layar yang telah dikembangkan untuk negara berkembang saat harga BBM belum semahal saat ini (Rosyid and Johnson, 2005). Teknologi ini telah diimplementasikan untuk Kabupaten Jembrana dan NAD.

4. Kesimpulan

Partisipasi nelayan dalam meningkatkan kesejahteraan merupakan kunci pokok dalam implementasi kebijakan pemerintah untuk kesejahteraan nelayan. Peran Negara sangat dibutuhkan bagi nelayan dalam menerapkan tata kelola yang baik. Pemerintah dalam hal ini pemerintah daerah harus proakatif menjadi mediator sekaligus pengendali pendulum perubahan dalam tata kelola kemaritiman.

Berdasarkan uraian diatas paling tidak terdapat 5 arena pemerintah untuk hadir dalam tatakelola kemaritiman, yaitu, penguatan kelembagaan, perubahan perilaku pola penangkapan, perlindungan ekologis, pengaturan kemaritiman dan perlindungan pasar produk hasil tangkapan. Pemerintah perlu hadir pula dalam penguatan kelembagaan nelayan mulai dari fundamen dasar budaya pengelolaan kelautan sampai dengan perlindungan pasar produk tangkapan untuk menjamin terwujudnya kesejahteraan nelayan.

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Coastal Community's Economic Empowerment Through The Processing Mangroves Minapolitan Agribusiness Fruits With Concept *(Case Study of Mangrove Conservation Area Baros, Tirtohargo, Kretek, Bantul, Special Region of Yogyakarta)*

[1]*Agung Slamet Sukardi,* [2]*Bimo Rizky Samudro*
[1,2]*Sebelas Maret University Surakarta, Indonesia*

Abstract

Mangroves are typical plants found in coastal areas. Mangroves have natural resource components such as landscapes, flora, and fauna. So that mangrove has an influence on the local community where the interaction of surrounding communities that have one unity that is ecological, economic, and social functions. This research is based on the powerful interaction of the economic community, in this case is MSME the which will bring changes to the coastal economy. The concept of minapolitan agribusiness applied will prioritize the development of adequate infrastructure and process of marketing mangrove processing with the role of local government to create an environmentally friendly economy. The purpose of this research is (1) to know the participation of coastal communities in the processing of magrove fruit, (2) to find out how the concept of agribusiness minapolitan effect on mangrove fruit processing. This research is designed as a field study with qualitative descriptive method. The case study is in the Mangrove Conservation Area Baros Bantul, Yogyakarta. The hope of this research with the concept of minapolitan agribusiness community and the role of government can the make the mangrove as new economic commodity in coastal areas, coastal MSME community can use to improve the processed of mangrove fruit.

Keywords: Coastal Communities, Mangrove, Agribusiness, Minapolitan

1. Introduction

The mangrove ecosystem has unique characteristics. This ecosystem is located in the brackish areas, namely the meeting between land and sea. Many species of plants and organisms that live in the mangrove ecosystem. Plants that live in it consisted of native plants that grow in swampy areas, as well as plants that generally live on land and then brought up to live in the mangrove ecosystem. Muddy soil is also a characteristic of the present mangrove ecosystem. Various types of crab, shellfish, snakes, and lizards can live in the mangrove. Mangrove itself also has economic value when utilized properly and correctly will make the unique characteristics of the coastal area.[1]

The existence of mangroves as a typical plant of the coastal area and plays an important role for the sustainability of community activity around the coast. Of the approximately 16.9 million hectares of mangrove forest in the world, approximately 27% were in Indonesia that mangrove forests are found in almost all coastal and marine areas of Indonesia have a direct relationship with the tide along the coast.[2]

One of the areas that are the mangrove ecosystem is the southern coastal district of Bantul, precisely in the estuary or meetings between the southern ocean with Opak River estuary. Based on the Decree of the Regent of Bantul, No. 284 of 2014 on Backup Conservation Areas Coastal Park, an area of mangrove forests Baros designated as a conservation area with a total area of area 132 hectares, divided into three zones, namely

the core zone (10 ha), the other zones (94 ha) and limited use zones (28 ha).[3]

The main obstacle encountered in efforts to conserve the mangrove ecosystem is increased awareness and community empowerment. Increased awareness of coastal communities will aim to convince long-term benefits of the management of mangrove areas. The cause of failure in the process of community development is the use of a centralized management approach that is both top-down means people only have little authority on the ecosystem. Community ownership of resources mangrove ecosystem will also be very small. An important strategy in the planning and management of mangrove ecosystems that involve the community through community-based management.[4]

Development and utilization of mangrove forest can run optimally in line with good management and correct by the local community and the support of the local government, with a good cooperation will create a proper utilization of the target without damaging the mangrove ecosystem. Development and utilization of mangroves for economic activities in the form of empowering community businesses to be more efficient, productive, and competitive, namely by creating a conducive business climate and business opportunities as broad as possible.[5]

Resolving the problems facing the coastal region required an innovative strategic policy and measures of effective breakthrough. Necessary sector development system based region with the concept minapolitan region. Minapolitan is the conception of economic development of region-based marine and fisheries based on the principles of integration, efficiency, quality, and speed. Minapolitan is a part of the region that has a primary function of the economy that consists of production centers, processing, marketing of fishery commodities, services, or other supporting activities. Linkages with minapolitan, how the concept can be a solution minapolitan and landing in the coastal area management and utilization of mangrove as the economic potential of environmentally friendly,

Agribusiness Minapolitan concept is a concept of particular agricultural development, in this case in the coastal areas of mangrove forest areas of agricultural development in the broad sense are introduced to the concept of "Agropolitan". In its development, the mangrove areas serve as the activity of economic activity with the concept of city facilities. Not mengkotakan coastal areas, but develop activity in coastal regions with the support by the urban infrastructure. In other words Minapolitan is an area with a functional system of the villages on the coast, the village hierarchy of growth centers (DPP) with villages in the vicinity (hinterland).

In Act No. 26 of 2007 on Spatial Planning, paragraph 2, section 51, is loaded on the development of agriculture known as "Agropolitan". Agropolitan zone is a region consisting of one or more activity centers in rural areas as agricultural production systems and management of certain natural resources represented by an association-functional and hierarchical spatial linkage system unit housing, and agribusiness systems. The structure and hierarchy Minapolitan development can consist of:

1. City District as a strategic city (Strategic City);
2. Fishing town / area of mangrove (Minapolis) who is administratively can be either district or village;
3. Production Location administratively can be either the village or region. Villages or areas of mangrove though production has urban infrastructure, but is not designed to be a city[6]

In the development of the Minapolitan expected to form a panorama of mangrove forests and mangrove village lush, cool and peaceful with urban infrastructure, such as road networks, financial institutions, markets, offices, counseling and technology transfer

institutions, educational institutions, and research. With urban facilities will be available the water infrastructure, institutional offices, medical institutions, and social and public facilities. This means that the development of agriculture (mangrove) is done with an agribusiness approach that is closely associated with the industrialization of agriculture (agro-industry development). The agribusiness development include: agribusiness sub system upstream (upstream), agriculture (on farm system), agri downstream (downstream) and support services (support system institution). As the driving force of agribusiness is a sub-system downstream agribusiness (down stream) in this case is the agro-industry, not just on the sub on farm system only. The strategy implemented by the assumption that the development of agribusiness/agro-industry:

1. Is a continuation of the agricultural sector development strategy that has been implemented previously.
2. Approach to agribusiness / agro-industry and its spatial orientation on the air-based systems increased production of biological resources (farming system production) and on demand (market oriented);
3. An economic activity on which the majority of the people;
4. Able to accommodate dam empower stakeholders and their linkages between macro and micro economic performance.[7]

Table 1. Agribusiness Minapolitan Concept For Processed Mangroves

Promotion, Information Market, Market Intelligence (Government)				
Subsystem Marketing				
Subsystem upstream		Subsystem cultivation		Downstream subsystem
Technology developers (National park hall / groups observer coastal areas) and training	→	The activity of farming / livestock (communities and local governments)	→	Industry argo (Housing industries and channeling institutions such as cooperatives, Pokdarwis, rural enterprises)
Subsystem Support Services				
R & D, Rural, Information Systems, Services Keswan, Transportation, Etc. Awareness Training				

Minapolitan development mechanism contained several steps, among others:
1. Socialization program (at the central, provincial, district, and region)
2. Selection and determination of the location (by the Regent, the Governor and the Minister)
3. Minapolitan Working Group drafting the District (the Regent)
4. Compilation MASTER PLAN / RPJM minapolitan (by governments and diasistensi POKJA)
5. Preparation of DETAIL DESIGN
6. Minapolitan development implementation (funding across sectors with stimulants from the center)
7. Monitoring and evaluation (by the task force team agro / minapolitan central, provincial, district)
8. After 3 years development facilitation minapolitan (towards minapolitan independently by the community with the facilitation of local authorities)
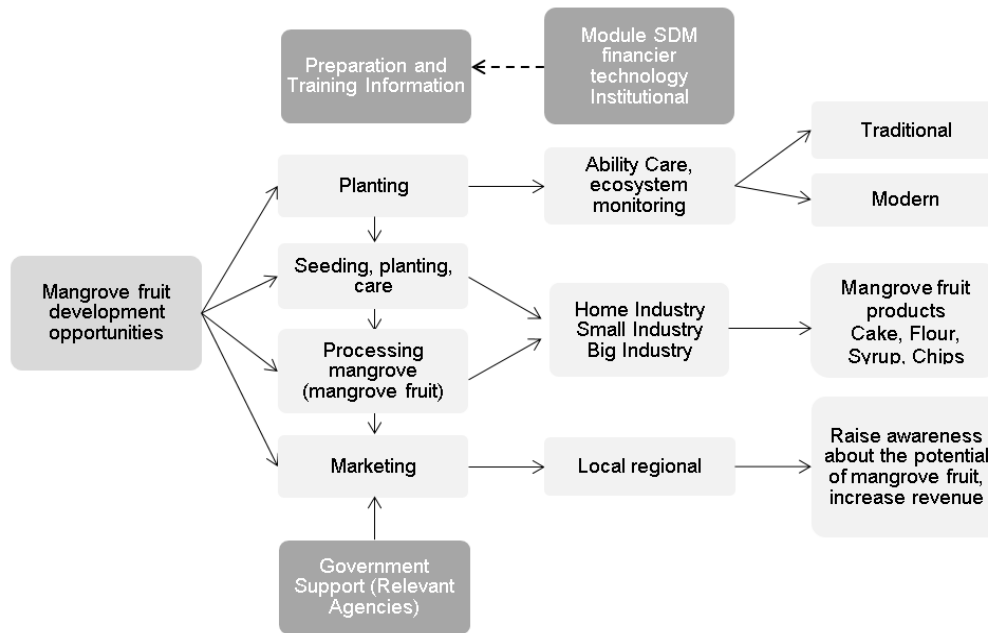
Figure 1. Chronology of Development Opportunities and Mangrove Fruit Processing

Infrastructure development (cultivation) the development of coastal areas by agribusiness concept minapolitan region is expected to serve agricultural production, in this case the mangrove and can become the center of agribusiness activities for the area surrounding the Hinterland region. As for the infrastructure to be provided include [8]:

1. Characteristically Infrastructure Software
   a. Rules related to infrastructure policy minapolitan (spatial masterplan / RPJM, RPIJM, DED)
   b. Service empowering farmers, namely the extension of technology and institutional empowerment model.

2. Environmental Infrastructure / Cultivation
   a. Marine Aquaculture (collectively jankar, KJA, nets step, dock harvest, handling space, office management / saung meeting / warehouse, drying seaweed
   b. Aquaculture Pond / Pool (sluice, irrigation network revenue and disposal, production road, bridges, culverts and handling space, mini ice plant / warehouse es).

3. Region infrastructure
   Road access (bridges, roads, culverts), the electrical grid, telephone network, drainage network, and the network of water

4. Supporting infrastructure
   a. Input Means of Production: such as fertilizers, seeds, medicines, equipment, and others.
   b. Supporting Production: enlargement of production facilities, means of seed, feed mills, drug stores, ice plants, brodstock center.
   c. Supporting Processing: mangrove industrial area, cold storage, transportation, packing industry for mangrove results.
   d. Support Marketing: modal transportation, where the promotion, information centers and other markets. The location can be in the centers or sub-terminal consumer market in the production centers.
   e. Production Support Facilities: such as banking institutions, cooperatives and others.

2. Methods

This research is designed as a field study using the method of data collection interviews and direct observation. This research is a qualitative descriptive study describes a phenomenon in the context of socio-economic in nature by promoting the process of interaction-depth communication, the state of perception, participation and community and local government in the economic empowerment of coastal communities through the processed fruit mangrove with the concept of agribusiness minapolitan area of mangrove conservation Baros, Yogyakarta.

3. Findings and Argument

Mangrove Areas condition Baros

Baros mangrove area located between Depok Beach and Samas Beach. Baros mangrove area located at the mouth of the River Opak is the estuary of the 10 rivers around him with Merapi as upstream and also across the karst region of Mount Sewu (Oyo River). Based on the Decree of the Regent of Bantul, No. 284 of 2014 on Backup Conservation Areas Coastal Park, an area of mangrove forests Baros designated as a conservation area with a total area of area 132 hectares, divided into three zones, namely the core zone (10 ha), the other zones (94 ha), and limited use zones (28 ha). Currently the mangrove forest area of Bantul was still less than 10 hectares that is necessary to expand gradually.

Opak River estuary region does have a high level of abrasion even if the water is rising, sea water can enter into the fields of society which resulted in damage to land and crop farmers. Mangrove plants can not directly prevent abrasion. This plant still be at risk for strokes lost big waves and strong winds. Therefore, we recommend planting mangroves along the coastal belt development. The coastal belt serves as a breakwater and stabilize water to facilitate the development of mangrove.

Damaged coastal ecosystems can be restored by planting mangrove forest. Forests can also restore biota that live in the ecosystem. Mangrove become a food source for small biota and fish that live in the vicinity. Mangroves can also be used as spawning sites. In addition, if the mangrove rehabilitation is successful it will eventually be able to restore land lost due to the effects of abrasion.

Table 2. Characteristics of Mangrove Ecosystem Baros

No.	Indicator	Mangrove Ecosystem Condition
1	Mangrove Species Diversity	*Avicennia, Bruguiera gymnorrhiza, Rhizopora sp, Nypa, Sonneratia, egrets, Periphotalamus, Wipe SP, SP coenobita, Telescopium*
2	Ecosystem damage	Still there (the accumulation of garbage on the beach)
3	Mangrove standard Good Condition	1. Age 3 years since planting has begun to be utilized 2. Mangrove height of 1.3 M 3. High conservation of mangrove minimum of 3-4 m
4	In Ecological Mangrove benefits	1. Inhibit the rate of abrasion 2. Inhibiting tsunami 3. restore ecosystem 4. The leaves and fruit can be used 5. Reducing wind during rainy season 6. Creating a cool air
5	Biota type Living In Mangrove Ecosystem	Prawns, mud crabs, several species of fish, snakes, lizards, and birds

No.	Indicator	Mangrove Ecosystem Condition
6	Already mangrove to Utilized	Inhibit the rate of abrasion
7	Mangrove Cause Damage	Hit by wave Wind
8	Strengthening Mangrove Ecosystem	The coastal belt (greenbelt) and socialization right

source: observation and interviews with stakeholders, processed

Ecosystem management is still so up due to the physical condition of areas which were not well-organized, and there are still many unresolved problems.

Table 3. Business mangrove ecosystem Baros

No.	Indicator	Condition
1	Nurseries	Less fulfilling aspect of the nursery
2	Parties associated with the management	KP2B
3	Damage	Stacking bins, big waves, and wind
4	Limitations of mangrove management	Nurseries, supervision, maintenance
5	Citizen's awareness	Very high
6	Plans for strengthening the mangrove ecosystem	Nurseries

source: observation and interviews with stakeholders, processed

Less than the maximum management has resulted in less development and utilization of mangrove plants optimally. It takes the cooperation of several parties to be able to process the mangrove well, like society, government, marine and fisheries department, department of environment, BKSDA, tourism agencies, and others. However, in the management of Coastal Mangrove Baros is still constrained by lack of coordination and cooperation between the parties concerned. The government should be able to understand what is required and how risks will occur by looking at the state of mangroves in Turkish Baros today. When one party has been trying to manage for example by seeding but the other party can not support, then the management also can not be maximized and the results are not optimal.[9]

How Coastal Community Participation in Mangrove Fruit Processing

In the case of mangrove fruit processing, because people still do not enthusiastically productive mangrove forests Baros yet to be exploited physically. Currently Baros mangrove fruit production is relatively small. The fruit will be used for breeding and seedlings will be planted in the area of mangrove forests Baros. According to KP2B, mangrove forests Baros is still necessary to expand because there are still a lot of land that has not been planted mangroves. Until now the expansion is still running with the help of the community and the government. KP2B party is trying to develop Baros mangrove forests that can be used as an educational tourist attractions, not mass tourism. But still constrained because the government has not fully plunge to handle Baros mangrove forest. Baros Turkish coastal communities enthusiastically in activities conducted in Mangrove Beach Baros, such as

cleaning trash from the sea and the installation of the net net. When there is a guest aimed at studying or doing activities such as planting, the KP2B excited to welcome and assist needs of visitors.

Counseling about the mangroves have been done, but there is no significant movement to make this area really became the mangroves and make economic resources which are environmentally friendly. So far the utilization of mangrove extent of abrasion and a protective barrier for the fields of society, because the livelihoods of surrounding communities are farmers. Obstacles in the mangrove forest management Baros Beach is a great southern ocean waves and strong winds brought increasingly disturbing marine litter Baros mangrove ecosystem.

The role of the government and the public is needed to create the mangrove area that has a characteristic of the region, development of the area that is being done there should be good communication between elements for later development of this area can be precisely targeted and can be used as an economic resource friendly alternative would environment.

How Influential Minapolitan Against Agribusiness Concepts Processed Fruits Mangrove

Mangrove utilization for the benefit of communities that are environmentally friendly economy requires a large amount of mangrove. Mangrove condition in Baros is not currently allow for the utilization of mangrove to make economy products. So far the concept of minapolitan agribusiness cannot be applied in mangrove fruit processing because the condition of mangroves that have not fulfilled to be processed as food or drinks, but the concept minapolitan already underway in terms of regional infrastructure improvements in infrastructure has been started since 2006, ranging from the manufacture MCK, praying, gazebo, as well as access roads, other supporting infrastructure development is still very necessary.

Minapolitan argribisnis concept should be applied properly in the implementation, no communication is established with good and intense, so far only limited Minapolitan in Baros but in its implementation plan is still lacking.

4. Conclusion

The effort to empower the mangrove community through the concept of Minapolitan angribusiness is wrong to provide good for environmentally friendly economic alternatives, but in fact the concept of Minapolitan angribusiness for processed mangrove fruit in baros cannot be applied properly because the raw material conditions have not been met.

5. Acknowledgements

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Sustainable Development Strategies for Micro, Small, and Medium Enterprises (MSME) Using SWOT: A Case Study of MSME in Banyuwangi and Tulungagung Regencies in East Java Province

Shofwan[1], Nurul Badriyah[2], Marlina Ekawaty[3]
[1,2,3]Faculty of Economics and Business University of Brawijaya, Jl.M.T. Haryono 165, Malang 65145, Indonesia

Abstract

Evaluating the current situation of micro, small, medium enterprises (MSME) activities in Banyuwangi and Tulungagung in East Java province and offering strategies for its sustainable development are the main objectives of this study. To this end, different decision making tools were used including questionnaires and interviews with experts, local owners of MSME and consumers of the MSME's products. Strengths, weaknesses, opportunities and threats (SWOT) analysis techniques were conducted to identify the required management strategies. Results showed that the existing MSME business activities within two regencies not in line with the sustainability requirements. Although the result of the present study showed that Banyuwangi and Tulungagung have an unsustainable situation with regard to its current management strategies, if authorities take its great opportunities and strengths more into consideration, it can have positive effects on developing sustainable strategies to increase level of sustainability in business activities for SMME in the both of regions and to reduce the adverse effects on the environment.

Keywords: Sustainability; Development Strategy; SMME; SWOT analysis

1. Introduction

Sustainable development in a business strategy is increasingly popular for some literatures of drivers of business transformation more than twenty years. Sustainable development, according to Brien and Hamburg (2014), is adopting business strategies and activities that fulfill the companies' needs and its stakeholders while protecting, sustaining and enhancing the human and natural resources needed. It is important to measure progress of a company transition to more sustainable, however, more important is to establish and to find ways in which the enterprise has ability to move toward a sustainability level. Elkington (1994) argued that a company should prepare three different bottom lines; first bottom line is the company maintains its orientation to increase profits through financial performance, return on investment, shareholder value and the broader economic size; the second bottom line is to measure interaction with neighbor societies where the company operates; the third one is to measure the company's environmental responsibility. The company with a positive triple bottom line should have a positive impact on the 3Ps (profit, people, planet). Roles of a skillful, experiential, competent manager are needed to apply changes within a company moving toward sustainability. Achieving sustainable development of companies also defined as one that is economically feasible, socially acceptable and ecologically benign, is dependent on environmental protection and reconciling shareholders' purposes with social values.

For micro, small, and medium enterprises (MSMEs) as companies which employ less than 100 people, sustainable development is relatively new trend which has impact to people's lives and would be demanded by consumers in the coming years. Despite the fact

that many admit to confusion over what sustainability is and how to introduce sustainable measures into MSMEs' daily activities and how to evaluate its benefits (Hill, 2016). Moreover, MSMEs managers do not fully understand and are not ready to prepare resource allocations to sustainability initiatives, when their main focus tends to how to increase sale values for survival. Those may motivate the MSMEs to conduct sustainable business to be more competitive, even though the MSMEs' have only smaller-scale production than other companies' size.

The role of micro, small and medium enterprises (MSMEs), in Indonesia has been recognized by various groups to help many communities to improve living standards and reduce unemployment with all its effects. But without realizing it, the activities of the economic agents (production, distribution and consumption) of MSMEs with the application of the latest simple technology have resulted in side effects, namely the production of waste or waste substances that are discharged into the environment. Wastes that are wasted in the environment tend to damage the ecosystem with different scales in the long run and potentially reduce the quality of the environment (Greenan, Humphreys, dan McIvor, 1997; Colyer, 2003).

The characteristics of the existence of MSMEs in Indonesia, especially in the areas observed in Tulungagung and Banyuwangi districts, has product-scale is limited with not many product variations. Lack of well-administration and financial management have been points of inefficiency for the owners and managers. Even though some MSME could access banking sector for financing, the role some non-banking institutions has been dominating financing assistance of MSME living for years. Another feature is low level of the ability of human resources that are not evenly distributed in terms of technical production. This condition certainly requires special handling and treatment by the regional government to be able to become a regional economic buffer.

The purpose of this study is to evaluate the current situation of MSME management and the implementation of sustainable business development strategies that is environmentally friendly in Tulungagung and Banyuwangi districts. Observed MSMEs in two regencies have been trying specific strategies for developing environmentally friendly products. The development focused on how the production process adopted a triple bottom line which involved three aspects, namely economic, environmental and social aspects. Therefore, the SWOT analysis method can be used to analyze this study. With the SWOT approach, it can be analyzed the strengths and weaknesses (internal factors) and opportunities and threats (external factors) of MSME in Banyuwangi and Tulungagung for implementing of sustainable development with a triple bottom line approach. Achieving sustainable development with this approach, stakeholders and owners of MSME are tested through questionnaires, structural interviews and focus group discussion (FGD).

From the analysis of research conducted, it was discovered empirical facts that the triple bottom line based sustainable development strategies are being not in line with the environmental development policies in which government issue. This is because some factors including the supervision of managerial board of MSMEs who is in charge not discipline doing those strategies. From government side, there is still no encouragement for law enforcement of business units which violate environmental laws in the production process. The reluctance of local governments in the enforcement of environmental law is in doubt because this policy is less popular and have an effect in local general elections. If the local government really considers the strengths and opportunities in the SWOT analysis, it can have a positive effect on the achievement of strategies for achieving sustainability in the production of MSME production. Other implications certainly have an effect on efforts to prevent harmful impacts on environmental sustainability in the long run.

2. Methods

Study Site

This study takes place in two regencies in East Java which are the centers of MSMEs, namely Banyuwangi and Tulungagung districts. Both regions have characteristics of MSME products produced. For Tulungagung, for example, many export-oriented convection, mukena, handicrafts, regional souvenirs and so on. One of the typical and prominent culinary products from this area is chicken lodho cuisine which is much loved by local tourists from the surrounding area. While for Banyuwangi regency dominated products derived from marine products and then followed by batik products and typical Banyuwangi headbands.

Banyuwangi and Tulungagung districts have two different cultures. Banyuwangi consists of three strong cultures: Javanese, Madurese and Osing who coexist peacefully, while Tulungagung is dominated by a strong Javanese Mataraman culture. Both styles of typical regional cultures influence the mindset of its citizens how to manage business. Likewise, in developing sustainable and environmentally friendly businesses, they have their own style and ways of managing sustainable businesses.

Survey respondents

Respondents from this study consisted of business owners, employees, relevant government officials and product consumers with questionnaire instruments and focus group discussions. They are selected through multi-stage stratified random method so as to minimize the occurrence of bias in selected respondents. With a varied background of respondents, they are considered to have complete knowledge regarding business continuity issues and environmental sustainability to complement the SWOT analysis of sustainable development strategies.

Data collection

In collecting data, primary and secondary data are collected. Primary data is collected from observations and the results of the focus group discussion on the strength of the Stakeholder group, namely business owners, employees, consumers and government officials. Secondary data was obtained from the Cooperative and UMKM Service related to the number of UMKM and the type of business. After the questionnaire data was collected, the data was analyzed with MS Excel to determine the opinion index. SWOT is determined and several policies related to development are recommended according to the results of the SWOT analysis.

SWOT analysis and development strategies

SWOT analysis is derived from the assessment of S, W, O and F faced by industry organizations, companies, sectors and every organization. The roots of SWOT come from strategic management research conducted in the 1960s and 1970s. SWOT analysis can also be used to identify potential projects and plans to be completed in a development strategy. S and W (Local analysis) are internal factors when O and T (global analysis) are external factors. Internal evaluations and external factors are an important part of strategic planning which is an instrument in the adoption of strategies and a component of the development of sustainable business units.

SWOT analysis aims to identify key internal and external factors as important aspects in achieving goals. This analysis classifies key parts of information into internal factors consisting of S and W and external factors that consist of O and T from outside the company.

Scanning factors outside and inside environment and considered as a major component of the sustainable development process. An analysis of this kind of strategic environment is an instrument in the formulation of strategies and can help researchers benefit from past events and think of possible solutions to existing problems. In this study, SWOT analysis was conducted on MSMEs to test the behavior of MSMEs in conducting SDS (Sustainable Development Strategies). First, internal factors in MSME are classified as Strengths or Weaknesses and external cyclical factors as Opportunities or Threats.
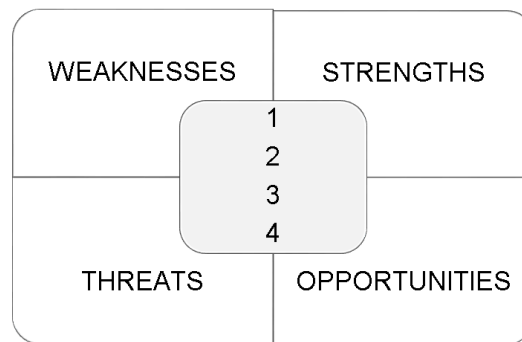
Figure 1. Variables based on SWOT Analysis

Accordingly, a list of Ss and Ws and a list of Os and Ts were drawn. The first group was tabulated into Internal Factor Estimate Matrix (IFEM), while the second ones were tabulated into External Factor Estimate Matrix (EFEM). These factors are given weight and score by selected respondents and the final score is calculated. Following is the scoring process for the SWOT analysis:

1. Factors are given coefficients between 0 and 1, to "not important and" most important. This coefficient represents the relative significance of factors at the success rate and is represented by the weight in IFEM.
2. Each factor is scored between 1 and 4 where *1 = Very weak, 2 = weak, 3 = strong and 4 = very strong.*
3. To determine the final score of each factor, the weight is multiplied by the score
4. The total score is totaled all to calculate the final IFEM score
5. If the total IFEM value is less than 2.5, then the strength is smaller than the weakness and vice versa, if the value is more than 2.5, the strength exceeds the weakness.

3. Findings and Argument
External factor estimation

There are 25 pertaining to O and T factors with weights between 0.01 to 0.05 and effectiveness scores between 2 and 4, while T has a weight between 0.02 and 0.4 and an effectiveness score between 2 and 5. According to the results, the most important to be obtained with the highest weight identified (for opportunities) as "Environmentally Friendly products of MSMEs are preferred by global consumers". The next important factors, including followed by "Reducing of fossil fuels for machines of production processing, will be implemented for "environmental auditing for production processing in the coming years". On the other hand, the first less important factor is the "Product-scale is relatively larger than ordinary SMEs 'product scale", followed by "Communities has taken benefits for existing of MSME" and "MSMEs' potential products are exported to frequently into developed countries". For the highest threats is the "Global economic conditions tend to be able" to be followed by each of "the national economic recovery process is not as fast as expected" and

"Green public space is going down city areas". Conversely, "the level of forest fire is quite high in Kalimantan and Sumatra islands" followed by the "Decreased rate of water reserves in alarming levels", each of which has the lowest score. The total value of EFM is 2.36 more than 2.5, which means Opportunities exceeds Threats (Table 1).

Table 1. External factor estimation matrix (EFEM)

	Weight	Effectiveness Score	Final Score
Opportunities **Economic**			
1. MSMEs' potential products exported frequently into devel-oped countries	0.03	3	0.09
2. Environmentally Friendly products of MSMEs are preferred by global consumers	0.05	4	0.20
3. Exhibition of newly local products for foreign consumers is prioritized for the owners of SMEs	0.03	2	0.06
4. Good relationship between suppliers and SMEs' owners	0.02	3	0.06
5. Product-scale is relatively larger than ordinary SMEs' product scale	0.01	3	0.03
Environment			
1. Enforcement of environmental law is more strict in the future	0.03	4	0.12
2. Environmental audit would be implemented for production processing in the coming years	0.05	3	0.15
3. Reducing of fossil fuel for machines of production processing	0.06	3	0.18
Social			
1. Implementation of corporate social responsibility for neigh-bourhood is realised	0.03	2	0.06
2. Communities has taken benefits for existing of MSME	0.02	3	0.06
3. Labour law is protecting labour rights	0.03	3	0.09
4. Environmental law protects people	0.05	3	0.15
Threats **Economic**			
1. Global economic conditions tend to be instable	0.05	3	0.15
2. National recovery economic process is not as fast as expected	0.04	3	0.12
3. People purchasing power tend to decrease	0.03	3	0.09
4. Exchange rate of Indonesia rupiah against United State dollar is fluctuated currently.	0.04	3	0.12
5. Interest rate of banking sector is going up	0.04	3	0.12

Environment			
1. Level of forest fire is quite high in some forest areas in Kalimantan and Sumatera islands	0.02	2	0.04
2. Level of pollution seems uncontrollable rate	0.03	2	0.06
3. Decreased rate of water reserves is in alarming level	0.02	3	0.06
4. Green public space is going down city areas	0.03	3	0.09
Social			
1. Individualism in communities increases currently	0.04	2	0.08
2. No interaction among other people is due to busy matters	0.03	3	0.09
3. ASEAN Economic Community has been applied since 2015 and has affected social life of people	0.03	3	0.09

Internal factor estimation

Regarding strengths and weaknesses, 15 and 10 factors are surveyed and respectively is selected (Table 2). The weights of strengths were allocated for factors between 0.01 and 0.05 and scores ranged between 2 and 3. For weaknesses, weights were allocated 0.02 and 0.05 and scores were between 2 and 4. For strengths, "Government giving tax incentives for MSME products which have export orientation", return rates of capital in faster than other SMEs", "SMES recruits its clients who the most of them from villages" have the highest final scores, while "More active in the communities' events are prioritized", "Family approaches are used to bond with people around SMEs" and "Reducing water programs are applied within the production process of SMEs" are having the lowest final scores. In relation to weaknesses, "Finance management of SMEs is not being separated with household finance management", "Low punishment for pollutants is unavoidable", "the competition to capture both national and global markets has been defeated by other non-SMES competitors" have a high weight. On the contrary, the "Local power is afraid to lose popularity for local general election" because the environmental law is enforced and "Environmental matter is government business not ordinary people" have the lowest weight. The total value of internal factors is calculated as 2.26, which means more than 2.5, meaning that strength exceeds weakness (Table 2).

Table 2. internal factor estimation matrix (IFEM)

	Weight	Effectiveness Score	Final Score
Opportunities			
Economic			
1. SMEs products selling is higher than non SMEs products	0.02	3	0.06
2. Segmented market of SMEs products is wider for low and middle income people	0.03	2	0.06
3. Return rates of capital in SMEs is faster than other compa-nies	0.05	3	0.15
4. Government is giving tax incentive for MSME products which have export orientation	0.06	3	0.18
5. SMES recruits its labors who is most of them from villages	0.04	3	0.12

Environment			
1. SMES installs instruments to manage waste of production processing	0.03	2	0.06
2. Input of production process is recycle materials	0.03	3	0.09
3. Saving energy machines have been used for production pro-cess in SMEs	0.03	2	0.06
4. Reducing water program is applied within production process of SMEs	0.02	2	0.04
5. Design and products SMEs are environmental friendly	0.04	3	0.12
Social			
1. Family approach is used to bond with people around SMEs buildings	0.02	2	0.04
2. More active in the communities' events is prioritised	0.01	2	0.02
3. No violence of environmental law during production process of SMEs	0.04	2	0.08
4. The SMEs owners always give a tax report to authorised insti-tution routinely	0.03	2	0.06
5. Reputation of SMES is high for social activities	0.03	3	0.09
<u>**Threats**</u> **Economic**			
1. Finance management of SMEs is not being separated with household's finance management	0.05	4	0.2
2. Using much unskilled labour has caused low productivity in SMEs	0.03	3	0.09
3. Competition to capture both national and global markets has been defeated by other non-SMES competitors	0.04	3	0.12
Environment			
1. Supervision for violence of an environmental law is not effec-tive	0.04	3	0.12
2. Low punishment for pollutants is unavoidable	0.05	3	0.15
3. Supervision of production processing for SMEs which cause pollution is not working well	0.03	3	0.09
4. Environmental matter is government business not ordinary people	0.03	3	0.09
Social			
1. Low level of people disciplines for obeying the law is a hard problem to law enforcement	0.03	3	0.09
2. Relationship between employees and employers need a third party	0.02	2	0.04
3. Local power is afraid to lose popularity for local general elec-tion because an environmental law is enforced	0.02	2	0.04

SWOT Strategies

After selecting and evaluating the most important internal and external factors and identifying internal and external feature relationships, four strategies are developed through SWOT analysis that can be used effectively for the Sustainable development strategies of MSMEs. For example, strong bonds between strengths and opportunities can represent the good conditions of MSMEs and allow aggressive strategies. On the other hand, a strong relationship between weakness and threat can be considered as a warning and inform the use of defensive strategies. Further strong relationships between strength and threat can use different strategies. And finally a strong relationship between weakness and opportunities can be analyzed as a potential use of an overview strategy. Results are shown in table 3.

Table 3. Sustainable development strategies for MSMEs

SO strategies
1. Special tax incentives for MSMEs whose products are environmentally friendly and export-oriented
2. Reducing the use of fuel oil in production to accelerate the rate of return on capital
3. Environmental audits can maintain the sustainability of MSMEs
ST strategies
1. Export of products that have strong brands in the midst of the global economic crisis
2. Suppress production costs by recruiting workers from the countryside
WO strategies
1. Separation of business finances with family finances to encourage exports
2. Providing legal sanctions for pollution makers so that consumers are sure of the UMKM products purchased
WT strategies
1. Convincing the public that the government has the power to approve regulations
2. The implementation of 30 percent of the area becomes green public space

To Explain the combination of SO and WO, ST and WT pairs in the table 3, the strategic key is determined by SO of MSME. The SO strategies propose to maintain sustainability is the provision of special tax incentives for MSMEs whose products are environmentally friendly and favored by local and global consumers. As for the ST strategy, MSMEs should reduce production costs by employing people from the villages. Meanwhile the WO identifies ways to overcome weaknesses in UMKM management, namely the separation of financial management between businesses and households and encourage products to be exported. WT strategies announced a defensive plan to better convince the community that the government was eager to conquer environmental law.

4. Conclusion

This study presents an assessment of sustainable development strategies using SWOT. The main issue is used the use of SWOT analysis to get the best strategy in sustainable in the MSME sectors. From the analysis it is known that sustainable development strategies for MSMEs' identification of its their own potentials. Special intensive tax provision for the friendly environmentally MSME products and is able to penetrate the export market. To streamline production costs, the strategy of recruiting rural workers can be taken into consideration and separates the company's finances from family finances. And the government's assertiveness in the enforcement of environmental violators is an important factor driving the sustainability of MSMEs in the future. Thus, this article provides an important and valuable technique in the use of SWOT analysis in investigating sustainable

development stability for MSMEs in a region. These results can help MSME owners in the observed areas to identify sustainable development in those areas

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Environmental Quality and Economic Growth in Indonesia: Vector Autoregressive Approach

Nofita Wulansari[1], Sebastiana Viphindrartin[2], Zainuri[3]
[1]Student, Master of Economic and Business, University of Jember
[2,3]Lecturer, Department of Economic and Development Studies, Faculty of Economic and Business,
University of Jember, Address: Kalimantan street No. 37, Jember, East Java, Indonesia (68121)

Abstract

The paper investigates the relationship between environmental quality and economic growth in Nigeria using a Vector Autoregressive analysis over the period 2000-2016. It seeks to examine the effect of growth on environmental performance by controlling for the role of institutional quality, trade openness and population density. The paper found that early stages of development in Indonesia accentuate the level of environmental degradation. It also finds that weak institutions and unrestricted trade openness increase the extent of environmental degradation due to environmental dumping. Finally, the paper shows that a larger population density enhances the promptness of environmental abatement measures and consciousness for cleaner environment. The study, however, failed to attain a reasonable turning point and hence a non-existence of EKC in Indonesia. The paper recommends the need to restrict the importation of emission intensive products, check the activities of multinationals which invest in producing high CO2 emitting goods in LDCs and exports to home countries. Finally, there is need to strengthen institutional quality to ensure adoption of clean technologies as income rises.

Keywords: Vector Autoregressive, Institutional quality, Environmental

1. Introduction

Debates in the relationship between environment and economic growth when observed and very large increases in living standards in the past decades have not come at no cost. Air pollution (smoke and noise), municipal waste problems, loss of forest areas, habitat destruction, threats to biodiversity, depletion of resources, and global greenhouse problems related to economic growth. When the growth process continues, a critical collapse of the world economy due to environmental problems becomes evident. This is a situation where successful growth leads to its own destruction and produces adverse effects on the economy (Kemp-Bendict, 2003; Smulders, 2000); especially in economies with weak institutional quality.

Increased growth increases economic productivity and allows it to access more advanced levels of technological knowledge. This increases productivity per unit of natural resources used so as to allow greater production volumes at lower levels of environmental degradation. Progress in technological progress coupled with increased economic growth will create opportunities and resources to finance investment in new technologies that are environmentally friendly, to solve waste problems and reduce material and resource use. Poor quality institutions, weak legal rules, lack of accountability and high levels of corruption have been responsible for increasing levels of environmental degradation (Simulders, 2000).

EKC originally came from an inverted U income distribution from Simon Kuznets, known as the Kuznets Curve. The Kuznets Curve hypothesis argues that at lower levels of per capita income, the distribution of income tends towards a higher level of income which implies that high inequality but when income rises, slope decreases (Yandle et al., 2004). In 1991, the Kuznets hypothesis took a new dimension. This is a view to illustrate where the

income-pollution relationship, environmental quality (such as the concentration of sulfur dioxide emissions) is related to per capita income. Kuznets shows evidence of a U-shaped inverse relationship between the degree of environmental degradation for some pollutants and per capita income.

Lakshmi and Sahn (2012, p. 2) said that "EKC's statistical relationship shows that as industrialization progresses and advances, environmental damage increases due to greater use of natural resources, more pollutant emissions, less efficient and relatively dirty technology operations, high priority to increase material output and pay less attention to the environmental consequences of growth ". When the rate of economic growth increases, life expectancy is increased; improved quality and cleaner habitat becomes more valuable. When the economy reaches the post-industrial stage, clean technology switches to information and service-based activities and a willingness to improve environmental quality to improve environmental quality - which is the realization of EKC (Lindmark, 2002).

Several similar studies have found bell-shaped relationships between levels of environmental quality such as concentrations of sulfur dioxide emissions, and per capita income (Azomahou and Van plus 2006; Stern, 2004; Kemande 2010; Yi et al. 2008). Therefore, it is important to investigate the impact of growth on environmental degradation and estimate the feasibility of EKC in the face of small or zero reductions (Ecological footprint Atlas, 2010).

Due to Kuznets' original observations from EKC, several studies have examined various types of pollutants in estimating the EKC pattern depending on the nature of pollutants. Research has shown that local externalities that produce pollution tend to gradually disappear even at low income levels, that is, pollution increases even at lower incomes. For some local externalities such as water particles (Fecal Coliform) and indoor pollution in the room, pollution tends to continue to decline with economic growth without a turning point. This is not contrary to EKC because pollution must have increased at some point to decrease with increasing income. Some empirical investigations show that pollution involving highly dispersed externalities tends to have a turning point in the highest income or no turning point at all, as pollution seems to continue to increase with income. An example is carbon emissions where the improved technology to reduce these emissions is capital intensive. This is not a sufficient condition for EKC rejection because the turning point for such pollutants might come at a higher level of per capita income than in today's richest economy (Arik, 2007).

Brock and Tylor (2005) look at EKC relationships from three different perspectives: scale, composition and technique. Growing the scale of all economic activities proportionally increases pollution along with economic growth. If the growth is disproportionate but accompanied by changes in the composition of the goods produced, pollution can decrease or increase with income. Similarly, when rich countries are involved in the production of goods that are less pollution intensive, due to changes in tastes or varied trade composition; the resulting effect will reduce pollution caused by growth. The increasing use of less pollution intensive production techniques will ultimately increase growth and produce a decreased level of pollution.

Beyond some EKC decomposition and assumptions where Kuznets' inverted U-shape pollution patterns can be realized, Stokey (1998) argues that many economies show angular solutions at first. This implies that residents of poor countries are willing to trade environmental quality for income at a rate faster than imagined using technology or available resources (for example the case of local gold miners in Ghana). Levinson (1970, p. 2) argues that "as the economy becomes more prosperous and their environment gets dirty, the utility of marginal income decreases and marginal disutility of pollution increases, to the point

where people choose a cost reduction mechanism. After that, the economy is in an interior solution where marginal reduction costs equal the marginal rate of substitution between environmental quality and income, and pollution decreases with income. The conclusions of the EKC examination coincided with the main findings of Grossman and Krueger (1995) who found no evidence that economic growth did not endanger the inevitable natural habitat.

The EKC Hypothesis describes the long-term relationship between the level of pollution concentration - the flow of emissions and the depletion of resources and economic growth. This study attempts to postulate whether there is a U-shaped curve between emissions and economic development (Kemande, 2010). The EKC hypothesis postulates a U-shaped inverse hypothesis that exists between income and environmental quality. The EKC hypothesis shows that with increasing income levels, pollution increases and environmental quality deteriorates; beyond some turning points of pollution reduction and environmental quality increases with income (Yi et al., 2008; Yandle et al., 2002).

2. Methods

The type of data used in this study is secondary data in the form of annual time series data which is periodic reports by the World Bank in the period of research. The time span of the research that will be used in this research is in the period 2002-2014 with the object of Indonesian research.

The method in this study uses Vector Autoregressive (VAR) method which is a dynamic model estimation method that does not refer to a structural model that is a model based on theoretical concepts, but a model that uses a minimum of basic assumptions from economic theory means that this model is more of a model which adjusts the economic phenomena that occur. The special nature of the VAR model developed by the variables in the VAR model is no longer distinguished from the endogenous variables and the exogenous variables are all applied equally (Gujarati, 2004; Nachrowi; 2006). The basic VAR model is described as follows:

$$X_t = \beta_0 + \beta_n X_{t-n} + e_t \tag{1}$$

Where β_0 is a constant vector $n \times 1$. β_n is the coefficient of X_t whereas n is lag length. e_t is a vector of shock to each variable.

The influence between variables can be seen from the VAR analysis derived into the following equation by adopting the model used by Alege and Agundipe (2013) as follows:

$$CO2_t = \alpha_0 + \alpha_1 Y_t + \alpha_2 Y_t^2 + \alpha_3 Y_t^3 + X_t + e_t \tag{2}$$

Then the model is derived into the following equation that will be used in this study:

$$CO2_t = \alpha_0 + \alpha_1 GDP_t + \alpha_2 FDI_t^2 + \alpha_3 TOPN_t^3 + PD_t + \alpha_4 CC_t + e_t \tag{3}$$

Where CO_2 is the dependent variable and the dependent variable includes GDP as a proxy of economic growth, Foreign Direct Investment (FDI), Trade Openes (TOPN), and Control of Corruption (CC) as a proxy of institutional quality in Indonesia.

3. Findings and Argument

Estimation of panel VAR Test Result

1. Data Stationary Test
    The stationary data test or unit root test is the initial stage before estimating the model. The root test unit is a test to see the consistency of data on each variable used in the study. In this study, the data stationary test was carried out using the Augmented Dicky Fuller (ADF) unit root test. This test is done by comparing the probability value with alpha (α). If the probability value is smaller than α then the data is stationary. The stationary data test results are described in the following table:

Table 1. Data Results of Augmented Dickey-Fuller Stationary Test

Level	CO2	GDP	FDI	TOPN	CC
Level	0.2994	0.9994	0.9299	0.1001	0.2971
First differences	0.1918	0.1274	0.0496**	0.0746**	0.0004**
Second differences	0.0004***	0.0002***	0.0017***	0.0018***	0.0000***

Source: Data Processed, 2018

Table 1 describes that the data stationary test results using the ADF test all variables in this study include: CO2, GDP, FDI, TOPN and CC studied in Indonesia stationary at the second difference level as indicated by the ADF probability value smaller than α where each - each variable has a probability value of 0.0004 for the variable CO2, variable GDP of 0.0002, 0.0017 for the FDI variable, 0.0018 for the TOPN and CC variables of 0.0000.

2. Cointegration Test
    After the data stationary test, the next step is cointegration testing to determine the use of the model whether to use the VAR or Vector Error Connection Model (VECM) panel. Cointegration tests are carried out to eliminate confined regression. Time series data regression tends to produce smooth regression because the time series data has a root unit or is not stationary so that e_t will contain the root unit as well. In addition, this cointegration test is used to analyze the long-term relationship of the model variables. Cointegrated data shows that the data has a long-term relationship. The stationary data test results in this study show stationary results at the level of first difference, then the analysis model used is VAR. This study uses Johansen cointegration test. The results of cointegration tests of financial deepening and financial inclusion models in Indonesia are illustrated in the following table:

Table 2. Cointegration Test Result

Hypothesized	Trace	0.05		
No. of CE(s)	Statistic	Critical Value	Prob.**	Cointegrating
None *	96.41397	69.81889	0.0001	
At most 1 *	56.46878	47.85613	0.0063	Cointegrating
At most 2 *	34.23594	29.79707	0.0144	Cointegrating
At most 3	15.33326	15.49471	0.0529	Not Cointegrating
At most 4 *	4.469700	3.841466	0.0345	Cointegrating

Source: Data Processed, 2018

Based on Table 2 shows that in the research model conducted on average proved to provide an overview of the occurrence of cointegration except in at most 3 there is no cointegration. This is indicated by a smaller critical value compared to the value of trace statistics. Based on these results, it can be said that there is a long-term relationship between the independent variables on the dependent variable in Indonesia.

3. Optimum Lag Test

Optimum lag test is used to get the best VAR model in this study. Determining the optimum optimum value of lag will free the model from autocorrelation and heteroscedasticity problems (Gujarati and Porter, 2009). Determination of this optimum lag aims to find out the vulnerable time period of influence on the previous period variables and other endogenous variables. The optimum value of lag is determined by using Akaike Information Criterion (AIC) because it will provide additional variable intervals to reduce the degree of freedom. According to Wardhono et al. (2015) says that the optimal interval will be found in the model specification which gives the minimum AIC value.

Table 3. Optimum Lag Test Result

Lag	AIC
0	57.90556
1	41.57589
2	38.36319*
3	38.54283
4	38.57281

Source: Data Processed, 2018

Based on Table 3, shows that in this research model the minimum AIC value is in the second lag with an AIC value of 38.36319.

4. Impulse Response Function Test

The impulse response function (IRF) test is one of the steps in the VAR panel analysis that describes the response of the dependent variable due to the influence of shock or shock from the independent variables contained in the model both in the short and long run. The IRF results in this study illustrate the interrelationships between the independent variables and the dependent variable. The results of the IRF analysis are shown in Figure 1 as follows:
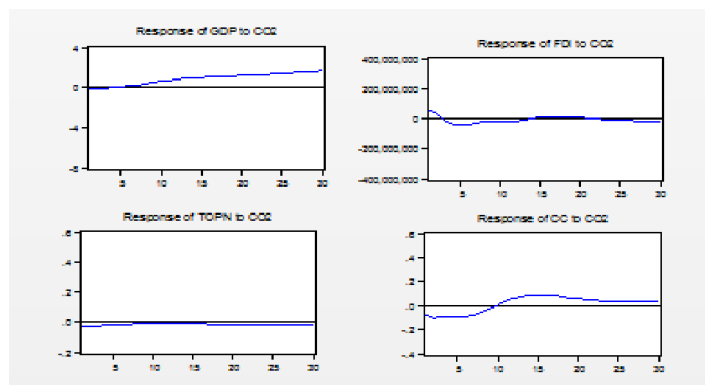
Figure 1. Impulse Response Function Test Result
Source: Data Processed, 2018

Figure 1 shows the response indicators of CO2, GDP, FDI, TOPN and CC to the GDP variable in Indonesia. Response indicators of independent variables on economic growth indicate shocks from the beginning to the end of the period. But in the response of the variables FDI, TOPN and CC to shocks on the GDP variable, find the equilibrium point at the end of the period. While the GDP variable until the end of the period does not return to the steady state position (or the balance point).

5. Variance Decomposition Test

The last stage in the VAR panel estimation is the variance decomposition (VD) test. This test is used to see the magnitude of the shock contribution variables of GDP, FDI, TOPN and CC to the CO2 variables in Indonesia. The VD test results are shown in the following table:

Table 4. Variance Decomposition Test Result

Variance Decomposition of CO2:					
Periods	S.E.	CO2	GDP	FDI	TOPN	CC
1	0.017848	100.0000	0.000000	0.000000	0.000000	0.000000
2	0.031769	99.21277	0.319963	0.362249	0.017340	0.087681
3	0.042481	96.56864	1.228959	1.690208	0.161038	0.351151
4	0.050146	92.30501	2.384697	3.820418	0.540052	0.949828
5	0.055371	87.47849	3.155429	6.046167	1.149469	2.170450
10	0.067489	65.27588	4.399278	8.614945	3.438060	18.27184
15	0.071244	58.61691	5.716202	7.906096	3.944502	23.81629
20	0.072999	56.01324	6.699404	8.039570	5.830279	23.41751
25	0.075160	52.92413	7.303368	7.810791	7.554086	24.40762
30	0.077193	50.43000	7.214095	7.412815	8.347054	26.59603

Source: Data Processed, 2018

In table 4 shows the results of the Variance Decomposition Test in this research model. In the second period the variable CO2 provides the largest contribution to CO2 itself in Indonesia with a value of 99.21%. The second largest contribution to CO2 is the control of corruption (CC) variable, which is 26.59% in the 30th period. While the variables of GDP, FDI and TOPN to CO2 have a contribution of 7.21%; 7.41% and 8.34% of Indonesia's economic growth during the 30th period.

Discussion

In general, attention to environmental problems stems from the perception that the carrying capacity of resources on earth is limited (Todaro, 2006). The theory that links environmental degradation with a country's per capita income level is known as the Environmental Kuznets Curve (EKC). This hypothesis suggests that when a country's income is still relatively low, the country's attention will be focused on ways to increase state revenues, both through production, investments that encourage an increase in income by ignoring environmental quality issues. Income growth will be accompanied by an increase in pollution levels, and then decline again with the condition of steady income growth. This theory is based on the demand for environmental quality that increases social supervision and government regulation so that the community will be more prosperous (Mason and Swanson, 2003).

Indonesia is in the category of Developing Countries (NSB) which is seen from average wealth, equity, quality of life, environmental quality, social justice and sustainability. During

the New Order era, Indonesia's economic structure began to experience changes from the agricultural sector to the industrial sector. Changes in Indonesia's economic structure make economic growth increase while reducing environmental quality.

Economic growth also has a negative impact on the environment, because the acceleration of economic growth is usually followed by an increase in the industrial sector. The increase in the industrial sector will be followed by an increase in the level of pollution to the environment due to the waste of the production process so that it causes pollution for water, soil, and also air. Other additional indicators play an important role in the dynamics of carbon emissions in Indonesia. Institutional quality, especially control of corruption has been considered a necessity in the economy. The degree of openness of trade helps to reduce the disposal of the environment or shelter pollution from globalization and large population densities help raise awareness for cleaner environmental hygiene and pollution reduction measures. The introduction of fractional cointegration in examining the relationship of income and pollution and the inclusion of institutional indicators are the main contributions in this study.

The decline in environmental quality in the industrial sector is caused by air pollution due to the smoke released resulting in global warming and various health problems; water pollution as well as land around the industry by unprocessed industrial waste; sound pollution resulting from the use of production machines; reduced forest area due to illegal logging without reforestation.

Based on the background of the findings above, policy drivers are advised to initiate policies that limit the import of carbon intensive products and examine the activities of multi-national companies that produce carbon-dense goods in poor countries for use in their home countries. Likewise, institutions need to be strengthened to ensure appropriate reduction measures and adoption of cleaner technologies to mitigate the increase in emissions associated with the initial stages of development..

4. Conclusion

Growth indicators such as institutional quality, investment, trade openness play an important role in the dynamics of carbon emissions in Indonesia. Institutional quality, especially in controlling corruption, has been considered a necessity in the economy. Based on the background of the findings above, policy drivers are advised to initiate policies that limit the import of carbon intensive products and examine the activities of multi-national companies that produce carbon-dense goods in poor countries for use in their home countries. Likewise, institutions need to be strengthened to ensure appropriate reduction measures and adoption of cleaner technologies to mitigate the increase in emissions associated with the initial stages of development.

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Fiscal Policy, Urbanization and Education: Analysis of EKC Porvince in Indonesia

Priyagus[1]
[1]Faculty of Economics and Business, Mulawarman University, East Kalimantan
Email:priyagus@feb.unmul.ac.id

Abstract

This study investigated the EKC hypothesis for Total Suspensed Solid (TSS) and Fecal Coli (FCOLI) pollutants in Indonesia with a quadratic model and several control variables (fiscal policy for natural resources revenue sharing, foreign investment, urbanization and education). Using a pool data of 33 provinces in 2011-2014. The results of the study support the EKC hypothesis significantly for TSS pollutants and not significant for FCOLI pollutants. Foreign investment, urbanization and education tend to increase pollutants even though they are not significant. Fiscal policy is significant for reducing TSS pollutants but does not apply to FCOLI pollutants. The government must increase inclusive green growth and environmental competencies in education.

Keywords: TSS, FCOLI, Urbanization and Education, Fiskal, EKC

1. Introduction

Environmental degradation is difficult to avoid in line with development progress, especially in developing countries. Colole et al. (1997). Nature as one of the factors of strategic production, has not been calculated proportionally or is considered external cost, so its availability decreases. This condition is in line with Asici (2013) finding that the current paradigm of economic growth is not sustainable, especially in middle-income countries. Therefore, one of the important agenda of the 2030 Suitanable Development Goal (SDG's) is to preserve the environment and UNDP (2016) asserts that water resources have economic, social and ecological strategic significance.

Classical economists are pessimistic that long-term economic growth will be stationary along with the limitations of natural resources. The World Bank (1992) reports that the pattern of relationships between development and environmental degradation (air pollutants) follows an inverted U pattern. That is, degradation increases at the beginning of growth to a certain point, then decreases in tune with the increase in income. This statement is supported by the findings of Cropper and Griffith (1994) for deforestation in Africa, Latin America and Asia. This relationship model was later popularly known as EKC (Environmental Kuznet Curve)

The Indonesian government is very committed to improving the environment and has scheduled in the Medium Term Development Plan (RPJMD, 2015-2019). As an effort to realize sustainable development, through the Ministry of Environment and Forestry is programmed, that the final environmental quality index of the RPJMD will reach the intermediate level.

Indonesia's economic growth in 2011-2014 is relatively high (5.7%/year). This condition is related to the contribution of the industrial sector that continues to grow on average (21.30%). The strategy of developing capital-intensive industrial sectors has become a prima donna, because it is able to provide large and fast added value compared to the relatively traditional and less productive agricultural sector.

Changes in economic structure to industrial sectors located in urban areas, causing

the population to continue to increase. The city becomes an attraction for the workforce, because it not only provides employment, but social status, lifestyle and opportunities.

Unbalanced increase in facilities and infrastructure has driven urban areas to become less healthy, because Total Suspensed Solid (TSS) solid waste caused by industrial activities and Fecal Coli (Fcoli) parasite waste from households continues to increase, causing a decrease in water quality and can threaten human life.

As an institution that is obliged to preserve the environment, the government has formulated regulations in a fiscal manner, so that environmental costs become a mandatory part of the production process. Strict requirements for foreign investment, reducing business and improving education are policies that are expected to improve the environment.

Environmental degradation is not only related to economic growth, but many factors so that the pattern of inverse U relations between degradation and development is very diverse (Roka et al. 2001). Therefore the contribution of this research is:

First, investigating the pattern of TSS and Fcoli reverse U relationships which are two water pollutants causing silting and sources of various diseases. The model used is the square that is added by several control variables. Secondly, investigating the impact of the policy of migration in the field of fiscal, foreign investment, urbanization and education as an instrument to reduce environmental degradation.

Some studies use quadratic models with several control variables such as: Cropper and Griffith (1994), Antle (1995), Andreoni and Levinson (2001). This study was arranged in a format, section 2 contains a literature review, section 3 methodology, section 4 Analysis and discussion and final conclusions and recommendations.

2. Literature Review

Economic Growth.

Economic growth is a necessary condition for development. In terms of production, economic growth illustrates the increase in GNP. Some factors that cause growth according to Samuelson and Nordahus (2005) summarize into 4 factors, namely: 1. Human resouce, 2. Natural Resource, 3. Capital formation, 4. Technological. Whereas Mankiw (2007) summarizes into: physical capital, human capital, natural resource and technological knowledge, as a system to produce output.

Barro (1996) explains, economic growth in 100 countries in 1960-1990 was caused by factors of education, life expectancy, government consumption, legal improvement and inflation and trade. Capolupo (2009) economic growth is caused by a combination of institutional, geographic, socio-cultural factors. The role of technology in the production process, making growth can take place continuously and the complexity of variable relations to produce output, indicates that degradation is not only caused by growth.

Sustainable Development and EKC

Sutainable Development was first introduced by the Brundtland commission in 1987. World Bank (1992) explains, Sustainable development is a development activity to meet the needs of the present generation without sacrificing the interests of future generations. These concerns are reasonable because some environmental indicators are deteriorating (degradation) along with the increase in output in developing countries and the world.

Environmental degradation can be reduced, if the government applies consistent environmental policies. Therefore Dinda (2004) asserted, a green growth strategy is a prerequisite for sustainable development, namely growth by taking into account the reduction of pollution, waste, greenhouse gases, depletion of natural resources, energy

efficiency, protection of biodiversity and local ecosystems.

The relationship between environmental degradation and per capita income is known as the EKC (Environmental Kuznet Kurve) hypothesis. That is, at the beginning of the degradation development tends to increase along with the increase in income to a certain point (peak point), then decreases along with the increase in income or resembles an inverted U letter. This pattern is like the Kuznet hypothesis, about the relationship between income and inequality (Kuznet, 1955), so EKC is the analogy. (Taguchi, 2012), (Kasman and Duman, 2015).

Asici (2013) the relationship between income and natural pressure (CO2) is stronger, in the middle and low income groups, than in the group of high income countries. Uchiyama (2016) the EKC pattern is naturally in accordance with the level of economic growth of each country, there is no consensus on the level of turning point for environmental improvement. Cole et al. (1997) the relationship between per capita income and environmental quality cannot be avoided. Lim (1997) some pollutants deteriorated and then improved with economic growth.

The study of the relationship between economic growth and environmental pollution generally investigates several problems: Does EKC really exist, what factors other than income, the relevance of cross-country data statistics, the implications of damage and the role of environmental policy (Panayotou, 2003). Dasgupta et al. (2002) the inverse U relationship only applies to some pollutants and regulation is the dominant factor to reduce pollution, Kasman and Duman (2015). Divide the relationship pattern to 3. First, the EKC pattern. Second, income and energy. Third, the combination of both and focus on emissions, energy consumption and income.

The basic model of the relationship between income and environmental degradation by Shafik and Bandyopadhyay (1992) is divided into 3, namely: linear, square and cubic log. Kijima et al. (2010) EKC models in the form of: dynamic and static; macroeconomics and microeconomics; short and long term and deterministic and stochastic. Uchiyama (2016) First, country-based. Second, data-based and estimation methods. This study uses a static quadratic model with several control variables and adopts the Kahuthu (2006) research pattern. Estimation method uses Fixed Effect and Random Effect.

3. Research and Methodology

Types and sources of data

The data in this study uses secondary data, in the form of a combination of time and cross (pool data), covering 33 provinces throughout Indonesia, within the period 2011-2014 and sourced from the Ministry of Environment and Forestry and the Central Statistics Agency (BPS).

Empirical Model

The analysis model used is:

Ln (TSS) = *βo + β1 ln (GRDP) + β2 (ln (GRDP2)2 + β3 ln (INVAS) + β4 ln (FISCAL) + β5 (EDU)* ....(1)

Ln (FCOLI) = *βo + β1 ln (GRDP) + β2 ln (GRDP2)2 + ln β3 (URBAN) + β4 (ULITERA) + β5 ln (FISCAL)* .... (2)

Theoritically, the EKC hypothesis Inverted U accurs when:
β1> 0, β2 <0 and, the peak point will be obtained for - β1 / 2 β2,Taguchi (2012).
(*, **, ***, significant, 10%, 5%, 1%)

Table 1. Definition and Expectations of Variable Relations

No.	Name Variable	Notation	Units	Expected
1	Polutan TSS	TSS	Mg/l	Dependent var.
2	Polutan Fecal Coli	FCOLI	Num/100ml	Dependent var.
3	GRDP per Capita	GRDP	million Rp	+
4	GRDP per capita quadrat	GRDP2	million Rp	-
5	Foreign Investment	INVAS	million $	-
6	Funds for sharing natural resources	FISCAL	million Rp	-
7	Population of City	URBAN	person	+
8	School Enrollmen Ratio (19-240	EDU	Percen %	-
9	Number of Illiterates (15-44)	ULITERA	Percen %	+

4. Results and Discussion

The results of the regression analysis of TSS and FCOLI are presented in Tables 2 and 3.

Table 2. Results of TSS Regression Analysis

Variabel	Fixed	Prob	Random	Prob
Constanta*	-35.17094	0.0284	-6.252580	0.0912
GRDP**	20.48937	0.0209	4.981642	0.0163
GRDP2**	-2.507127	0.0441	-0.602311	0.0270
INVAS	-0.111277	0.2933	0.057356	0.3695
FISCAL**	-0.018806	0.8959	-0.128071	0.0482
EDU	-0.002806	0.9446	0.021710	0.1007
R Square	0.629328		0.096070	
F	3.670921	0.00000	2.380674	0.0430

Table 3. Results of FCOLI regression analysis

Variabel	Fixed	Prob	Random	Prob
Constanta**	-399.8095	0.0338	13.29337	0.2686
GRDP	24.07729	0.2372	-14.87915	0.0214
GRDP2	-3.800769	0.1812	1.948275	0.0233
URBAN	25.17642	0.0519	0.995926	0.0049
ULITERA	0.101121	0.8531	-0.180180	0.0166
FISCAL	0,466726	0.1557	0.223072	0.2375
R Square	0.858999		0.156570	
F	12.34899	0.0000	3.972573	0.0024

The results of TSS pollutant regression analysis in Table 3 and FCOLI in Table 4, explain that the reverse U curve does occur both with the Fixed Effect and Random Effect methods because the value of the positive GRDP coefficient and the GRDP2 coefficient is negative, Taguchi (2012). FCOLI is only significant with the Random method. These results have answered Panayotou (2003) question of the existence of an inverse U-shaped relationship between degradation and growth.

Based on the Redundant test the Chi-Square value is 5% significant, while Haousman is not significant, so the TSS model that is feasible to use is REM, Juanda and Junaidi (2001). Whereas for FCOLI pollutants using the FEM method because of the Redundant and Housman tests both are significant at the 5% level.

Research that supported U inverted patterns were significantly like: Shaw et al. (2010) for SO2 pollutants and Particle Deposite, Cole et al (1997), Taguchi (2012), Kahuthu (2006), Shahbaz (2013), Kasman and Duman (2015), Andreoni and Levinson (2001), Liu et al (2007) pollutants in the Dasha river, Xuemi et al (2011) for ESD pollutants (Supphur Dioxide and ES (Soot) but not for EWW and EISW pollutants, Wu (1998) for WE (Water Examination) pollutants

The foreign investment coefficient (INVAS) is positive and insignificant, meaning that an increase in foreign investment will increase the amount of TSS pollutants in an unrealistic manner, this positive sign supports the research of Hakimi and Hamdi (2016) for Co2 pollutants, Halkos and Paizanos (2013), but does not support Wheeler (2000), Dasgupta et al (2002) and Cole et al (1997). Foreign investment is widely used in the industrial sector and tends to produce pollutants that cause sedimentation, such as solids from coal washing and red mud from aluminum industries.

The school enrollmen ratio coefficient (EDU) is positive and not significant, meaning that an increase in the educated population will increase TSS pollutants not significantly. This result supports the Orubu and Omotor research (2011) for OWP pollutants (Organic Water Pollutants) and does not support Wu's research (1998) and Asici (2013), Orubu and Omotor (2011) for SPM (Suspended Particulate Matter) pollutants. The educated workforce generally migrates to urban areas and works in industrial sectors. So that the increase will increase the city population and increase the contribution of the industrial sector which will eventually add pollutants.

The fiscal policy coefficient (FISCAL) has a negative and significant sign, which means that the increase in funds for sharing natural resource can reduce TSS pollutants significantly. These results support the research of Cole et all (1997) Pollution will be reduced in response to policy, (Asici, 2013) Institutionally negative and significant impact on environmental pressure. Dasgupta et al. (2002) Regulation is the dominant factor for reducing pollution, but does not support Taguchi's research (2012) for Asian countries, including Japan. Shafik (1994) most of the environmental costs are external so the pollutants that cause degradation continue to grow.

The population of city coefficient (URBAN) and the number of illiterates (ULITERA) is positive, and not significant, meaning that the increase of city population and illiterate population will increase the number of FCOLI pollutants not significant (unrealistically). This condition illustrates that urbanization and lack of education are still a source of pollution due to limited sanitation and ignorance about a healthy environment. The population of city coefficient (URBAN) results support the research of Mohaputra and Giri (2009) for NO2 pollutants and do not support SO2 and SPM pollutants, while (ULITERA) supports the research of Torras and Boyce (1998) for Sanitation and Fecal Coli and do not support Sulfur Dioxide and Heavy pollutants. particles.

The fiscal policy coefficient (FISCAL) is positive and insignificant, meaning that fiscal policy in the form of an increase in the funds for sharing natural resources can increase in FCOLI pollutants. The results are in line with Taguchi research (2012) for Asian countries, including Japan. Shafik (1994) most of the environmental costs are external so the pollutants that cause degradation continue to grow

5. Conclusions and Recommendations

Conclusions

Based on the analysis and discussion, some conclusions are formulated: First, The EKC hypothesis for TSS and FCOLI pollutants occurs in Indonesia, because the GRDP co-efficient is positive and the negative GRDP2 is eligible to produce a significantly inverted U curve for TSS and not for FCOLI.Second, The education variables and foreign investment increase TSS pollutants are not significantly.Third, City population and illiterate variables increase FCOLI pollutants are not significantly. Fourth, Fiscal policy significant impact on reducing TSS pollutants, but does not apply to FCOLI pollutants.Finally, Education cannot yet be a reliable instrument for reducing environmental degradation.

Recommendation

This research has several recomendation as follows: First, improve education competency for the environment. Second, implement strict rules and supervision on the realization of foreign investment. Third, increase allocation and distribution for environmental improvement. Finally,strive for economic growth that remains green and inclusive

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Existence of Actors Authority in Migrant Labour Problems

Anita Kristina[1]

[1]*University of Trunojoyo Madura, Raya Telang Po Box 2 Kamal-Bangkalan, Madura 69162, Indonesia*
E-mail: anita.kristina@trunojoyo.ac.id/anita_amanda_ali@yahoo.com

Abstract

The paper provide general condition under which principal agent problems, that are optimal existence of actors mechanisms in migrant labour. The research has a crucial to analyses the existence of actors cause for disfunction authority. Case study in east java, Indonesia. This mechanism appears theoretically coherent with the principal agent theory. The paper allow multi dependent actions and authority, as well as an existence of actors. Consequently, the optimal mechanisms are optimal authority for migran labour.

Key Words : Actor Authority, Migrant Labour, Principal Agent Problem

1. Introduction

This study aims to describe the findings on the problems of Indonesian Workers which focused on the issue of protection. That portrait of the relationship between actors/agencies in the protection mechanism will be obtained. Institutional design in the implementation of protection schemes (insurance for Indonesian migrants labour) shows governance by involving roles, powers and authority through the delegation of actors. This happens because the government is unable to do it alone in a regulation (Ljungholma, 2014). In implementing regulations, it is needed information, costs and resources. It caused partnerships with the private sector are needed (Minkoff, 2013). The consequence of this relationship is the granting of power and authority to the partners (private) to jointly provide services. It is occurred because of the involvement of the private sector in the service is intended to be a reason for budgeting and seeking service innovation through the relationship (Roehrich et al, 2014).

This delegation can be regarded as an important tool for attracting resource development (Medda et al, 2013). When there are many resource developments, it will provide benefits which lead to efficiency (Otčenášková et al, 2014), and it will bring the consequences of combining the resources which used for serving the community (Zhang & Shu Chen, 2013). The goal of delegation is actually a form of innovation in finding solutions (Felina & Todd R.Z, 2014), which is used in public services. It has aimed to distribute public infrastructure in various sectors (Brinkerhoff & Brinkerhoff, J.M., 2011). Thus, Indonesian migrant labour and the government as principals who have given their power to the insurance consortium (agents) have the right to benefit from the relationship. The consequence of the relationship is Indonesian migrant labour obtain services as needed.

The real benefits of the principal-agent relationship depend on the institutional environment, capacity, needs, traditions for the creation and building coordination (Mahalingam et al, 2011). Each party (principal and agent) can contribute and be able to explain its behaviour in an agreed institutional design (Elsig, 2011). Institutional relation shows that the principal-agent relationship, where the actor coordinate and play a role in a different realm even though the agent should be the arm of the principal. Thus, the agent is trusted to manage public goods/services. But this principal-agent relationship is born in a different environment and in different power that it has different interests. These differences are possible to bring conflict, and conflict will reduce the effectiveness of policies (Elias

& Mohammad, 2011). Thus, the accuracy of the selection of mechanisms (the division of authority patterns) becomes important for achieving policy success.

The choice of institutional mechanism depends on the institutional environment (relating to property rights, contracts, credibility, judiciary, norms, customs, etc.) which can lead the changes in comparative costs, hybrid hierarchical and organizational relationships (companies and bureaucracy) (Williamson, in Suli, 2013). The institutional environment is related to the rules of the game in a community. This environment regulates the interaction of the community. If there are errors in the community in using the power related to the environment without regard to ethics and norms, then this indicates a weak control of control and rules of the game in a social service (Greer, 2010).

Governance mechanisms (principal-agents) can be through patterns of collaboration, collaboration, interaction, and contractual/negotiating relationships. Relational and contractual mechanisms are the complete form of government and private governance (Lewis, 2002). The mechanism contains factors which are related to governance which depends on the characteristics of each actor (Abdi, 2014). Then, the provision of authority is carried out through the provision of institutional infrastructure. This is the main characteristic of private government partnerships (Engel et al, 2013). As in the mechanism of Indonesian migrant worker protection management (insurance), there are also interactions, collaboration or even negotiations. Considering that there is a division of roles and responsibilities in the implementation, each actor who plays a role should participate in each other to create changes in the service system. That is, there are actions to prioritize the interests of members who are partnering, who should not "hand off" when there are problems in practice. Thus, the mechanism of institutional governance illustrates how the roles of each actor work in the mechanism which has been agreed upon. The superior mechanism which becomes ideal is each actor plays a role in the working mechanism who competes to be the best (N. Balasubramanian & Rejie George, 2012).

2. Methods

This study used a phenomenological qualitative approach, with interpretive methods. The purpose of the analysis is proven by the specific meanings which occurred in the results of the analysis. That is, the institution which responsible for Indonesian labour migrants (East Java Indonesian labour migrant), analyzed by the principal theory of agency approach. Furthermore, it is describing the domains found and mapped. Then explaining the relationships between these domains. This analysis produces a meaningful relationship between structures in a particular phenomenon. The study was conducted in 2013-2016. This disorder was the main rule but it did not occur in the phenomenon of migrant workers which is still an important requirement for Indonesian labour migrants. Data were collected through interviews with Indonesian migrant workers, former migrant workers from East Java, parties who make policy for East Java TKI (UPT. P3TKI of East Java), representatives of the consortium, and representatives of recruitment agencies or implementing private placement of Indonesian migrants labour.

3. Findings and Argument

The power relations between principals and agents illustrates the pattern of the actor authority. Born from dependency which is identical to the ability of actors to play an unbalanced role with actor played by other parties. The occurrence of this dependency pattern is due to an imbalance in the bargaining position of each actor in making decisions and in using the authority it has in charge (principal and agent). There are two types of elements contained in institutional relations in the social security protection of Indonesian

migrants labour in this study, namely principal and agent. The principal and the agents are actors who have power and who has an interest. Thus, in the relationship between the principal and the agent, there is a power and interest relationship. Thus, when the actor controls all sources which are interesting and profitable for him, then he will exercise his authority by means of fulfilling his profits. Efforts to carry out this power are carried out through certain transactions and carried out in a certain design.

It is same for Indonesian migrants labour as the principal who gives authority over the premium paid to the insurance company to manage the premium cost and the right to receive what is their right in accordance with their interests. The government as the principal who plays the regulator and gives its authority to the insurance consortium to manage the guarantee of Indonesian migrants labour as social security for Indonesian migrants labour. An insurance consortium which acts as an agent who is authorized to manage Indonesian migrants labour insurance also has its power and interests, and the role of the recruitment agencies in facilitating migrant workers as well as partnering with a consortium related to the management of migrant workers.

The role of each actor is dependent. This dependency pattern occurs because of the limited resources and assets owned by each actor. Indonesian migrants labour is very limited in financial and information. They depend on the role of the recruitment agencies or implementing private placement of Indonesian migrant labour. Independent Indonesian migrants labours also have financial limitations, they also depend on other parties (banks), or if the prospective independent Indonesian migrants labours have some money and are able without asking for help from other actors, Indonesian migrants labour does not have the dependence on other institutions. While the implementing private placement of Indonesian migrant labour plays a role in facilitating meetings/interactions between Indonesian labour migrants and the insurance consortium. An insurance consortium which has the authority to manage insurance depends on the role of the recruitment agencies and the government. Likewise with the government, in its authority as a regulator is strongly influenced by the insurance consortium and Indonesian migrants labour. This dependency relationship is mutually binding that there is a limited authority over actors due to the authority of other actors. That is, to cover the limitations of this authority, actors really need the authority of other actors.

There is a Great Wall Obstructing Governmental Authority on Foreign Affairs

The government as a regulator has limited in making decision, as there are strong and large restrictions which prevent them from playing a role in certain matters. Such as, differences in working areas, existing powers and limited interests make the government have no effort if there are problems. Limited resources and asset management which limits the authority that the authority of the government (Manpower and Transmigration office) is only limited to the country, if the problem occurs at the time of placement, then it is no longer the authority. This dependence is made and supported also by the framework and institutional protection of Indonesian migrant labour or citizens who are abroad. As, Indonesia has established services in foreign missions which focus on protecting migrant labour (Farbenblum, 2013). The embassy protection division in the embassy is a division whose duty is to protect and assist all Indonesian citizens who are abroad. In article 78 of Law No. 39 of 2004 states that Indonesia's foreign mission is responsible for the protection of migrant workers. Even in the President's instruction in 2006, the policy of reforming the placement and protection system of Indonesian labor migrants considered the role of embassy protection. After the President's instructions, the Minister of Foreign Affairs adopted regulations on citizen services, guidelines on services and protection of Indonesian citizens abroad. The Minister of Manpower and transmigration also adopted a regulation in 2011 to

place his own staff at the embassy as labour attachés to carry out labour-related activities. The   office has a protective function for Indonesian labor migrants, that is; facilitating and mediating the settlement of disputes or disputes between Indonesian labor migrants and users in the country of placement, and facilitating the advocacy of Indonesian labor migrants based on the law and the provisions of legislation in the country of placement, and international customs.

In fact, government regulation No. 3 of 2013 that this regulation underlines that the Indonesian government is responsible for the protection of migrant labour during their overseas placement, and Indonesian representatives (embassies and consulates) are assigned to provide this protection in line with international standards and law in the destination country. And in this regulation requires that recruitment agencies in Indonesia must assist Indonesian representatives in providing protection and legal assistance to migrant workers if necessary during the placement period. However, the regulation does not include provisions for aid assistance or sanctions if the employment agency does not help/play a role in protection.

Advantageous Insurance Consortium In Insurance Management

The limited authority of the government in supervising the work of insurance companies (agents) is shown by claiming a right to the management of limited resources and assets. Also with insurance companies as agents who claim that the full right to manage resources and assets is the insurance consortium. Therefore, based on the full management rights of the consortium, it can be said that if someone claims the right to take certain actions, but the other party does not recognize the right (for its limitations), then he or she does not have the right to take any decisions regarding that matter. If the government as a principal does not have an interest in the consequences of managing the most resources and assets owned by the insurance consortium, it is possible that the government as a principal insists on having power in using limited resources and assets. This is a moral obligation that the government also has the right to know about the management of the resources and assets of Indonesian migrants labour insurance management, and can be done through an informal decision making.

As same as the decision making on the management of resources and insurance assets of Indonesian migrant workers, in accordance with Law No. 39 of 2004 also states that those who manage Indonesian migrants labour insurance are the consortium of Indonesian migrants labour insurance. The limitations of decision making illustrate the existence of strong authority. This authority is the right to decide, direct other parties to take action, or carry out tasks in terms of achieving goals (Preameaux, in Stainland, 2003). The authority which occurs between the division of the role of government work, and also related to the management of insurance for migrant workers in this insurance consortium can be interpreted as having a classification of certain actors in terms of their use of rights (decision making). Thus, the existence of this authority has an impact on the need for coordination, communication and supervision. This is intended to maintain the integration of interaction in achieving common goals. According to Jones (in Stainland, 2003), integration of interaction as a coordination process in the execution of tasks, the function of the role of division and division of labour to achieve common goals.

Indonesian Migrants Labour Can not Register For Insurance Other Than Inuarnce Consortiums

The provision of insurance management facilities received by the insurance consortium has the consequence that everything done by the actor with one purpose is to

increase the realization of the interests of each actor, and this depends on the power and authority he has. The authority of the government as a principal describes the power over resources which are of interest and which they control, in order to fulfil their interests based on the provisions of laws and other regulations. However, on the other hand, the insurance consortium has broader authority, where decision making will tend to be able to control the resources and assets of the insurance management of migrant workers and for this. It is very interesting and powerful. The process of managing resources and insurance assets of Indonesian migrant workers will be based on the power and interests of each actor. And the process will follow all the objectives of each actor's interests. It is assumed that the insurance consortium will allow itself to realize whatever interests it has in respect of the resources and assets it controls. Likewise, for Indonesian labour migrants, the magnitude of their dependence on the role of the consortium causes no other option to not participate in insurance as an obligation to carry out the law. Thus, the decision-making authority is entirely in the agent (insurance consortium).

The consortium together with its partners (recruitment agencies or implementing private placement of Indonesian migrants labour) who have an interest in managing Indonesian migrants labour insurance, even though the recruitment agencies or implementing private placement of Indonesian migrants labour has an interest only to provide information to Indonesian migrants labour and register Indonesian migrants labour to the insurance consortium. There are certain interests in this information. The impact is that migrant labour as principals do not have the effort to make decisions related to insurance for Indonesian migrants labour. This is what makes the dependence of Indonesian migrants labour on the consortium because Indonesian migrants labour admit that participation in insurance is an obligation.

Indonesian Migrants Labour Resign To Private Labour Placement Decisions (PPTKIS)

The dependence of migrant workers on recruitment agencies when registering insurance brings the consequences of Indonesian migrants labour having no power over important events/incidents. Even though Indonesian labour migrants will lose power over the right to make decisions which are in accordance with their interests. This condition will make migrant labour only have partial power, meaning that there are other important parts in their interests that they cannot afford to do alone, highly dependent on the Private labour Placement Decisions, even there is an authority in decision making. This implies that Indonesian labour migrants do not have the power to make decisions related to Indonesian migrants labour insurance, which should have full authority over decision making because this is related to itself. Especially, later the insurance contract applies between them and the insurance consortium. However, the Indonesian migrant labour surrender the right to control their decisions to the Private labour Placement Decisions that those who control the information on insurance are in the hands of the Private labour Placement Decisions and the decision authority is also at the Private labour Placement Decisions, not the Indonesian migrant labour. Although in reality, the decision to register for this insurance, only when registering. It means that the Indonesian migrant labour only gives power to the decision to choose the consortium when registering, does not give full authority on all information and power attached to the registration process. This can be observed that Indonesian migrants labour has "surrendered the right to control", even "surrender control" to Private labour Placement Decisions for all events and decisions related to the process of registering insurance. Unless the Indonesian migrant labour independently registers.

Indonesian Migrants Labour Is Forced to Follow The Decision of The Recruitment Agency

In fact, in the process of "giving up control" there is complete compulsion. This happens because the Indonesian migrants labour has no other choice and does not have the amount of money to pay for the insurance. The insurance registration arrangement and related to the process is borne in advance by the Private labour Placement Decisions. Indonesian migrants labour will pay it with debt or deduct the salary later. The compulsion experienced by Indonesian migrants labour has the effect that the recruitment agency has full power over the decisions of Indonesian labor migrants who should not only give full authority to the process but the right to control the action. This compulsion is an opportunity for Private labour Placement Decisions to master the right to choose insurance for migrant labour. Indonesian migrants labour will also lose their right to control every act of the recruitment agency when registering insurance because the migrant labour does not have the effort and opportunity to sort out which insurance company to choose. Private labour Placement Decisions holds full rights that the Indonesian migrants labour can no longer disagree (Indonesian migrants labour automatically agrees/is forced to agree), and if Indonesian migrants labour agrees then that right becomes fully controlled by the Private labour Placement Decisions. Such as, migrant labour do not have power over other resources, even providing relevant ideas/suggestions or opinions related to insurance for Indonesian migrants labour. Indonesian migrants labour has never been present in the process of "choosing" and "deciding" related to insurance for Indonesian migrants labour, even when Indonesian migrants labour participate in government recruitment programs.

The granting of authority to the recruitment agency or Private labour Placement Decisions by Indonesian migrants labour began when registering as prospective Indonesian migrants labour. It does not happen when registering insurance. The right to vote and the power of migrant workers was never presented by the recruitment agency or Private labour Placement Decisions. It is clear that when prospective Indonesian migrants labour comes to see the recruitment agency or Private labour Placement Decisions. Then all of his power is indirectly given to the recruitment agency or Private labour Placement Decisions. Thus, Indonesian migrants labour has given recruitment agency or Private labour Placement Decisions to control all actions which should be the power of Indonesian migrants labour, meaning that recruitment agency or Private labour Placement Decisions has treated its right to control the actions of Indonesian migrants labour as a resource. Even though it is in the process that migrant labour issue all costs during the process of becoming Indonesian migrants labour. The transfer of the right of control over decisions and actions taken by Indonesian migrants labour to recruitment agencies is carried out by compulsion and inability to make decisions.

If the pattern of authority to manage the protection of Indonesian migrants labour is agreed with the management format as reflected in Law No. 39 of 2004 and Permenakertrans No. 7 of 2010 along with the amendments No. 1 of 2012. Then the next question arises, can the Law and Regulations guarantee the sovereignty of the institutional independence of each actor?. Even the principal with the agent's partner. In the end, the traps have the potential to create conflicts and the existing rules are very binding/highly dependent among actors. Especially, the government and insurance consortiums. Meanwhile, the interaction of the conflict between Indonesian migrants labour and recruitment agency or Private labour Placement Decisions is due to the helplessness of Indonesian migrants labour to be financial and decision-making. Based on this reality, policy attainment among conflicts can be overcome if there is a high level of achievement or minimizing low risk or failure (despite conflicts) through a cost approach, profit sharing, or risk sharing (Nugroho, 2011). Justifying Nugroho's opinion, it can be said indirectly that the policy will still be achieved by

its objectives and will succeed. Even though the policy direction will be determined based on the many possibilities that will be accepted by all actors. That is, the government and migrant workers as principals can issue a certain amount of money (costs) as a consequence of conflicts caused by resource powerlessness (financially for Indonesian migrants labour, and information for the government), or there is a clear profit sharing among actors. Thus, the success of the Indonesian migrants labour insurance policy as the implementation of social security for Indonesian migrants labour is very much determined by the design of the agreement, even though in the implementation of the design there will be the conflict between actors.

The power that describes Law No. 39 of 2004 actually provides a trap for the mastery of certain actors in the management of Indonesian migrants labour insurance. In the description of previous identification, it was found that the insurance consortium is a strong actor because of its full authority, and recruitment agency or Private labour Placement Decisions has full power over the information it has. Meanwhile, the government has limitations in information resources and authority which result in decision making. As well as prospective migrant labour who are powerless to give full power to the recruitment agency for the use of their voting rights and various related matters. Although Indonesian migrants labour has the individual right to choose a consortium based on his/her own choice, because of his/her limitations and incapacity, they remain with those who are not in power. Even though the actual cooperation relationship in terms of Indonesian migrants labour insurance is very individual. It can be concluded that insurance consortium actors and recruitment agencies have the power to pressure migrant labour and the government. Due to their powerlessness. The power centre is in the agent (insurance consortium) and recruitment agency or Private labour Placement Decisions as the power of mouth for Indonesian migrants labour (recruitment agency or Private labour Placement Decisions is also a consortium partner). This picture of power has an impact on the rationality of decisions made by each actor. Because each actor will continue to act in accordance with their respective interests which is to maximize their respective utility (Holmstrom B & Milgrom R, 1991). Whereas, Indonesian migrants labour and the government cannot raise the position of power. Law No. 39 of 2004 and other regulations have positioned it that certain designs are needed to balance/benefit many parties.

4. Conclusion

Based on the findings and analysis carried out, it can be concluded that the pattern of the existence of actors involved in the issue of protection of Indonesian migrants labour forms a pattern of power between principals and agents. The division of authority carries certain consequences that the government is unable to regulate it independently. Thus, it chooses to partner with insurance consortiums and recruitment agencies. The pattern of authority in the relationship forms a pattern of dependence between actors (principals and agents). Another consequence is that Indonesian migrants labour is powerless in choosing (forced) protection needed. This study has limitations on the approach used by using institutional analysis which is focused on principal-agent theory. The depth of analysis is only able to photograph the phenomenon of authority patterns between principals and agents, not in the whole institutional pattern.

The implication of the research on the theory is that it is able to present employment issues. Especially, the problem of migrant labour with the principal agent's institutional theory approach that the findings are able to contribute to the theoretical development. The principal-agent theory is able to present in answering labor policy issues, which have been resolved with policy theory. The principal-agent theory which has developed so far is

a micro approach. While the research findings are able to develop results on the macro-institutional theory approach (policy environment). Meanwhile, the practical implications of the findings of this study are able to provide an overview of the management of protection policies for Indonesian migrants labour who have never been completed. Thus, the findings of this study will be able to provide recommendations for changes in policy management. Especially, in the protection of East Java migrant labour.

The recommendation which can be given based on the findings is that the government is the actor who is fully responsible for the protection of Indonesian migrants labour. The failure of protection services has the consequence of changing the rules of the game. The Ministry of Manpower as a representative of the government must design a standard agreement as a formal game rule regarding the protection of Indonesian migrant labour.

5. Acknowledgments

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Culture and Bargaining Power Influence on Schooll and Working Participation of Child in East Java

Faishol Amir[1], Khusnul Ashar[2], Devanto Shasta Pratomo[3]
[1,2,3]Department of Economics, Faculty of Economics and Business, Brawijaya University, Malang, Indonesia

Abstract

This paper examines the influence of cultural and bargaining power on work and school participation of children in East Java. The prevalence of children aged 10-17 years who work in East Java is around 4.74%. About 28.03% of children who work are still in school. Whereas school dropouts reach 11.28%. Referring to the theory of collective model and using the method of multinomial logit regression analysis on the Intercensal Population Survey (SUPAS) data in 2015, this paper concludes that culture proxied through tlatah had a significant effect. Children who come from Arek tlatah are most likely to work. Children from the Pandalungan tlatah are the least likely to go to school. While children from Madura Island tlatah are most likely to go to school while working.. Interestingly, Children who have good Indonesian language skills will have 20.2% greater chance of going to school than those who do not have good Indonesian language skills.

Keywords: multinomial logit, collective model regression, work and school participation of children

1. Introduction

East Java is the second largest contributor to the national economy after DKI Jakarta, with a GDP share of 14.61% in 2017. In addition, East Java is also the second most populous province in Indonesia with a population of 39.29 million 2017 [1]. So that, East Java has opportunity to be a superior province in all sectors if maximizes the available resources. It also supported by the demographic bonuses experienced East Java and lasted until 2030

But with the potential they have, there is still one problem that needs to be overcome, the number of children working high enough. From BPS data (2017), around 4.67% of children aged 10-17 years in East Java are children who work in 2016.

In household decision theory, children working or not working and school or not attending school depend on household decisions. The approach in the latest household decision theory, Collective Model, assumes that husband and wife can have different preferences and bargaining power towards the welfare of their children. Will involve children working or not and going to school or not?

several empirical studies of cultural influences are proxied through ethnicity and language on work and school participation of children. McEwan & Trowbridge (2007), Vasquez & Bohara (2010), and Contreras et al. (2007) show that indigenous ethnic people are more likely to be child laborers and less likely to be schooled than non-indigenous populations. While the ability to communication with the national language as a means of communication has a significant impact on children's performance in school, dropout rates and children's income if they work Patrinos & Psacharopoulos (1995).

According to the typical values and products of the culture, Sutarto (2004) divides East Java into ten cultural areas (Tlatah). Four largest tlatah include: tlatah Arek, Mataraman, Madura Island, and Pandalungan. Each tlatah has uniquely behavior characteristics of its people, including work and school participation of children in East Java.

As far as the author's knowledge, there is not previous research about the influence of culture on work and school participation of children in East Java. So this study was conducted to examine the effect of cultural and the other determinants on work and school participation of children in East Java using data of SUPAS 2015.

Collective Theory Model: Work And School Participation Of Children

The theory of work and school participation of children is developed from the concepts of Ahmed & Ray (2011) and Basu & Ray (2002) who adhere to the Collective Model concept. Where parents can have different preferences about their children's school.

Consider a household consisting of father ($j = f$) and mother ($j = m$) and a number of K children at a certain point in time. Fertility is assumed to be exogenous. Every parent cares about their own consumption and the quality (achievement) of their children's education. All decisions made by parents are altruistic, and children are treated as recipients.

Assume each parent has a different utility function and household maximizes the average weight of these two functions by θ ϵ [0,1] that showing the balance of the strength of the parent's partner in the household.

$$max \ U_i = \{θ[U_m (C_m, C_h, S, Z)] + (1-θ)[U_f(C_f, C_h, S, Z)]\} \qquad (1)$$

with $j = m.f.$

Where C_j is the total personal consumption goods of each parent, C_b is shared consumption goods of all household members (exclude children's school fees and C_j), S is the educational achievement of children, and Z is a vector of individual and household characteristics and exogenous. Whereas θ is a function that depends on other variables contained in Z and is also exogenous.

In contrast to the concept of Ahmed & Ray (2011) who only cares about individual consumption goods of each parent. In this study, consumption goods are distinguished between personal consumption items of parents and shared consumption goods of all household members (other than children's school fees).

Parents allocate the total amount of time children (T) between the child's school time (S) and working time (L). Therefore, maximizing the utility function above is subject to the following time limits:

$$T= S +L \qquad (2)$$

Consider household income, Y is a function of non-working income (symbolized by Aj) from parents and work income of parents (symbolized wjLwj). Because household income Y and children's income if working must meet household needs and school fees for children. Then the budget limit can be written as follows:

$$C_t = Y(Z, A_i \ w_i \ Lw_i) - p_sS + wL_w \qquad (3)$$

Where $C_j + C^b$ is the combined consumption goods price, which is Ci which is normalized to 1 and shows the school fees. Therefore, the problem of optimization of parents can be written as follows:

$$max \ U_i = \{θ[U_m (C_m, C_b, S, Z)] + (1-θ)[U_f(C_f, C_b, S, Z)]\} \qquad (4)$$

That is subject to limitations:
$$C_t = Y(Z, A_i \ w_i \ Lw_i) - p_sS + wL_w$$
and $T= S +L$

Where according to Basu & Ray (2002), the solution in solving the above boundary equation by forming the following equation:

$$C_t{}^* = C_t(\theta, A_i, w_i, Lw_i) - p_s S + wL_w$$

The problem of limited maximization results a system of equality of demand for children attending school, namely:

$$S_i{}^* = f(Z, L_i, \Omega, \theta_i), i = 1,...,K \tag{5}$$

Where Ω shows the total household income.

According to Basu & Ray (2002), L_i that a function of Ω_j, θ_j, is

$$L_i{}^* = f(\Omega_j, \theta_j), i = 1,...,K$$

So as to eliminate the endogenous effect of Li in equation (5), the $S_i{}^*$ equation becomes:

$$S_i{}^* = f(Z, \Omega_j, \theta_j), i = 1,...,K \tag{6}$$

Then the child labor supply equation can be expressed as:

$$L_i{}^* = f(Z, \Omega_j, \theta_j), i = 1,...,K \tag{7}$$

So that from equations (6) and (7), the equation for working children and schools can be expressed as a function of:

$$SL_i{}^* = f(Z, \Omega_j, \theta_j), i = 1,...,K \tag{8}$$

Where SL_i is a function of children going to school or work that is influenced by the characteristics of children and households (social), household income (economy), as well as differences in the bargaining power of both parents.

By referring to some empirical evidence about the influence of culture on work and school participation of children, equation (8) above can be written into:

$$SL_i{}^* = f(Z, \Omega_j, \theta_j, \sigma), i = 1,...,K \tag{9}$$

Where σ is a cultural factor that is proxied by tlatah and ability to communication in Indonesian language.

2. Methods

We analyzed the influence of culture and bargaining power on child labor and school participation using multinomial logistic regression. This study uses secondary data cross section derived from the Intercensal Population Survey data (SUPAS2015) at 2015 in 38 cities of East Java by BPS.

The dependent variable (Y_i) is the status of working and school children divided into four categories, namely: 0 = children who schooling only, 1 = children who working only, 2 = children who go to school while working, and 3 = children who neither working nor schooling. the status of working and school children, is based on the activities of working the last week of observation time interval.

While the independent variables include several characteristics of children & households and culture such as tlatah, Indonesian language skills, bargaining power, gender, age, area of residence, education, cooking fuel, type of work, employment status

The marginal effects are presented to make it informative and to directly compare within different categories.

3. Findings and Argument

Data Description

The number of observations in this study were 34,928 children aged 10-17 in East Java. From the characteristics of children, there were 17,970 boys and 16,958 girls.

The prevalence of working children is 4.74%. While children who drop out of school reach 11.28%. In full, a description of the status of working and school children is shown in Table 1 below.

Viewed from the last level of education, 38.24% of children did not graduate from elementary school; 60.49% of children pass basic education; and 1.27% passed secondary education.

The prevalence of children living in rural areas reached 51.92% and those living in urban areas reached 48.08%. Of the total sample, there were 34.20% of children living in the Mataraman Tlatah area; 27.41% in the area of Arek Tlatah; 12.21% in the Madura Island Tlatah area; 20.54% in the Pandalungan Tlatah area; and the remaining 5.65% in other regions. Viewed from the ability to speak Indonesian, there are still 1.75% of children who are unable to speak Indonesian properly and correctly.

We analyzed the influence of culture and bargaining power on child labor and school participation using multinomial logistic regression. This study uses secondary data cross section derived from the Intercensal Population Survey data (SUPAS2015) at 2015 in 38 cities of East

Table 1. The Status of Working and Schooling Children in East Java, SUPAS2015

The status of working and school children		Tlatah of children					
		Madura island	Arek	Matara-man	Panda-lungan	Lainnya	Total
Schooling	Σ	3.551	8.550	10.561	6.100	1.763	30.525
	%	83,26	89,31	88,42	85,03	89,4	87,39
Working	Σ	209	273	374	269	66	1.191
	%	4,9	2,85	3,13	3,75	3,35	3,41
Schooling and Working	Σ	122	88	163	62	29	464
	%	2,86	0,92	1,36	0,86	1,47	1,33
Neither School-ing nor Working	Σ	383	662	846	743	114	2.748
	%	8,98	6,92	7,08	10,36	5,78	7,87
Total	Σ	**4.265**	**9.573**	**11.944**	**7.174**	**1.972**	**34.928**
		100	100	100	100	100	100

Source: Supas 2015 in East Java
Note: The definition of a working child is children who engage in any activity in production activities (economic) for at least one hour in the reference period. Whereas according to Law No. 13/2003, child laborers are those who work and are less than 18 years old (BPS, 2009)

Estimation Results with Marginal Effects

In this study, parents were proxied from the household head and their partner. In addition, children who only have one parent or who don't have both parents are not included in the analysis with the aim to further strengthen the results of research on bargaining power. So the number of samples after this restriction is 31,843 children aged 10-17 years.

Table 2. Multinomial Logit calculation results with Marginal effects on working and schools participation children

Independent Variables	Working		Schooling		Schooling and Working		Neither Schooling nor Working	
	M.E	P.Value	M.E	P.Value	M.E	P.Value	M.E	P.Value
Tlatah (Madura Island):								
Arek	0,011	0,002 ***	-0,019	0,004***	-0,010	0,000***	0,017	0,001***
Mataraman	-0,001	0,810	0,005	0,398	-0,007	0,003***	0,004	0,408
Pandalungan	0,003	0,342 **	-0,022	0,000***	-0,013	0,000***	0,031	0,000***
Tlatah lain	0,001	0,773	0,016	0,039**	-0,007	0,069*	-0,011	0,079*
Indonesian Languange (good)	-0,025	0,015	0,202	0,000***	0,004	0,314	-0,182	0,000***
Household head (Male)	-0,025	0,000**	0,048	0,000***	-0,012	0,001***	-0,011	0,067*
Mother Education (Not graduating from elementary school):								
Graduated from elementary school	-0,023	0,000***	0,048	0,000***	-0,002	0,220	-0,023	0,000***
Graduated from Middle School	-0,044	0,000***	0,090	0,000***	-0,006	0,021**	-0,041	0,000***
Graduated from High School	-0,032	0,000***	0,099	0,000***	-0,011	0,000***	-0,055	0,000***
Residence area (rural)	0,005	0,024**	-0,023	0,000***	0,004	0,011**	0,013	0,000***
Gender of Child (Male)	0,016	0,000***	-0,006	0,106***	0,003	0,018**	-0,013	0,000***
child's age (10)								
11	0,000	0,502	-0,005	0,167	0,001	0,605	0,004	0,244
12	0,000	0,510	-0,021	0,000***	0,005	0,007***	0,015	0,000***
13	0,007	0,000***	-0,053	0,000***	0,006	0,007***	0,041	0,000***
14	0,016	0,000***	-0,085	0,000***	0,010	0,000***	0,060	0,000***
15	0,043	0,000***	-0,148	0,000***	0,016	0,000***	0,090	0,000***
16	0,080	0,000***	-0,211	0,000***	0,019	0,000***	0,112	0,000***
17	0,145	0,000***	-0,329	0,000***	0,016	0,000***	0,168	0,000***
Child Education (Not graduating from elementary school):								
Graduated from elementary school	-0,012	0,017**	0,045	0,000***	0,004	0,042***	-0,037	0,000***
Graduated from Middle School	0,026	0,006***	-0,163	0,000***	0,001	0,860	0,137	0,000***
Main Cooking Fuel (LPG):								
Firewood	0,018	0,000***	-0,039	0,000***	0,003	0,084*	0,019	0,000***
Other	-0,004	0,484	-0,003	0,790	0,002	0,698	0,005	0,589

Independent Variable	The Status of Working and Schooling Children (dependent variable)							
	Working		Schooling		Schooling and Working		Neither Schooling nor Working	
	M.E	P.Value	M.E	P.Value	M.E	P.Value	M.E	P.Value
Employment of Household head (Agriculture):								
Industry	-0,005	0,222	0,011	0,107	0,005	0,143	-0,011	0,055*
Services	-0,015	0,000***	0,031	0,000***	0,001	0,706	-0,017	0,000***
Trade and Transportation	-0,014	0,000***	0,014	0,009***	0,003	0,139	-0,003	0,466
Other	-0,006	0,082*	0,002	0,751	0,006	0,021**	-0,002	0,684
Status in Main Work of household head (entrepreneurs):								
laborers / employees	-0,001	0,499	0,003	0,427	-0,007	0,000***	0,005	0,090*
Family Worker	0,003	0,730	0,009	0,540	0,004	0,548	-0,015	0,166
Bargain Power (father's education higher):								
Father educ.= mother educ.	0,015	0,000***	-0,022	0,000***	0,001	0,598	0,006	0,134
mother's education higher	0,024	0,000***	-0,049	0,000***	0,006	0,040***	0,019	0,001***

Source: Supas 2015 in East Java
*Note: *=Sign.at 10%, **= Sign.at 5% ***= Sign.at 1%*
The definition of a working child is children who engage in any activity in production activities (economic) for at least one hour in the reference period. Whereas according to Law No. 13/2003, child laborers are those who work and are less than 18 years old (BPS, 2009)

Culture and work and school participation of children in East Java

Culture is proxied from Tlatah Indonesian language skills. The four largest tlatah groups in East Java include: Madura Island Tlatah, Arek Tlatah, Mataraman Tlatah, Pandalungan Tlatah. Madura Island were chosen as a reference in this study, because the largest proportion of children work compared to other subjects.

From the marginal effects value on the four categories of school activities and working children, it can be concluded that children from Arek tlatah are most likely to work (ME = 0.011) compared to children from other tlatah.

Whereas children from tlatah pandalungan have the least chance of going to school (ME = -0,022) but the most likely is not going to school and not working (ME = 0,031) compared to children from other tlatah. Children who come from Madura Island tlatah most likely to go to school while working than children from other tlatah.

These findings support the role of culture in work and school participation of children (McEwan & Trowbridge ,2007; Vasquez & Bohara, 2010)

Children who have good Indonesian language skills will have 20.2% greater chance of going to school (ME = 0.202) than those who do not have good Indonesian language skills. Conversely, Children who have good Indonesian language skills will have fewer opportunities to work or not go to school and do not work.

This results support the research by Patrinos & Psacharopoulos (1995) which states that the ability to speaking the national language as a means of communication has a

significant impact on children's achievement in school, school dropout rates and children's income if working.

Parental Bargaining Power and work and school participation of children in East Java

The influence of parental bargaining power is proxied from the relative level of education of the household head and his partner. The higher father education category than mother is used as a reference for other categories of bargaining power.

When mother's education is equivalent to father or even higher than father's, the opportunity for children to work or work while attending school is greater. Conversely, the chance of children going to school actually decreases. This indicates that the level of drop out of children actually increases when the mother's bargaining power is higher than father. Interestingly, the chances of children not going to school and not working more than the opportunities for school children while working.

It support the findings of Ahmed & Ray (2011) and Basu & Ray (2002), where relative maternal education higher than fathers has a stronger marginal impact on school trade off and child labor.

Household Characteristics work and school participation of children in East Java

Several following household characteristics show significant influence on school participation and child labor.

Children with female household head are more likely to work than children with male household head (ME=-0,025). Conversely children with male household head (ME=0,048) are more likely to attend school than children with female household head. This indicates that female household heads are more likely to involve their children to work when there are job offers for their children. The assumption is that female household heads feel need is helped on the household economy (with a position still or not having a husband) by involving their children to work.

This research is different from Pratomo (2017) but is similar to Pitriyan (2006) which states that children with female household head are more likely to work than school.

The higher the level of education of the mother, the greater the chance of the child going to school. In addition, the smaller the opportunity for children to go to school while working and the less chance of children not going to school and not working. But the influence on the involvement of children working purely becomes biased because initially the level of child participation works decreases when maternal education increases to graduate high school (ME-0.044). But when maternal education has reached higher education, child labor participation has risen again (ME = -0,032).

This support findings of Edmonds (2007), Mehrotra & Biggeri (2010), and Setyari (2013). Where in their study stated that the higher the level of education of mothers the higher the likelihood that children will attend school.

Children living in rural areas have a 0.5% greater chance of working; has a 0.4% greater chance for school while working and has a 1.3% greater chance of not working and not going to school than children who live in urban areas. In addition, children living in rural areas are 2.3% less likely to attend school than children who live in urban areas.

This results support several previous studies by Edmonds (2007), Tang et al. (2016), and Mehrotra & Biggeri (2010). It is said that children living in rural areas are more susceptible to work than children who live in the urban area. In contrast, urban children are more likely to attend school than children living in rural areas.

Boys are more likely to work or school while working than girls. But the chance for a boy to work alone is greater than his chances of going to school while working or not going to school and not working. While girls more likely to not going to school and not working than boys. For the category of school children only, the gender variables of the child have no significant effect.

The results of this study are different from the findings of Edmonds (2007) but in line with the research of Contreras et al. (2007) and Pratomo (2017) which states that boys are more likely to working.

With increasing the age of the child, the chances of children working, going to school while working and not going to school and not working are getting bigger. Conversely, the chance for children to go to school is getting smaller with increasing age. This indicates that the tendency of children to work and drop out of school is greater with increasing age. The underlying assumption is that with increasing age, a sense of responsibility to help the household economy is increasing. So as to encourage children to become more involved in the world of work, even though they have to drop out of school though.

The results of this study support the findings of the research from Pratomo (2017) which shows that with increasing age, the chances of children working increasingly large. But on the contrary, the chance for children to go to school is getting smaller.

There is a bias in the influence of children's education. At first the opportunity for children to work decrease and opportunities for school children to rise when children graduate from elementary school. But the opportunity for children to work rises again and school children actually decreases when children graduate from high school.

This can be seen from the value of the marginal effects that were initially negative when the child graduated from elementary school became positive when the child graduated from high school in the category of working children.

The bias of the influence of children's education is based on the assumption that there is nine years compulsory education program and a free school program from the government that helps children to continue school at least until primary school (elementary and junior high school equivalent). Whereas after graduating from high school (equivalent high school), the tendency of children to work is very high. The assumption is that the child after graduating from high school feels obliged to ease the household economic burden. So the choice to work rather than school is normal.

But what is interesting is the tendency of children to drop out of school and not work the most among other categories of children's activities for the variable of children passing secondary education. This implies that not always after graduating from high school, children work immediately. This may be due to the unavailability of employment opportunities or are reluctant to work on an employment that is not in accordance with their educational qualifications

Children whose households use cooking fuel in the type of firewood are more likely to work, more likely to go to school while working, more likely not to go to school and not work, and less likely to attend school than children whose households use LPG gas fuel.

Children with household head working in the agricultural sector are most likely to work than children with household head working in other sectors. Children with household heads work in the trade and transportation sectors most likely to attend school compared to other sectors. As well as children with household head working in other sectors most likely to go to school while working compared to other sectors. While children with household heads work in the industrial sector and in the service sector, the least chance is not to go to school and not work.

The results of this study support the findings in the studies of Edmonds (2007) and Tang et al. (2016) which shows that the type of employment of parents (in this case the agricultural sector) has a significant effect on the involvement of children working and schooling.

Children with household head work as laborers/employees less likely to go to school while working than children with household head working as entrepreneurs. But what is worrying is the opportunity to drop out of school but unemployment is greater for children with household head working as laborers/employees.

The results of this study differ from the findings of Edmonds (2007) who suggested that there were differences in the involvement of children working in households that had a household business and did not have. In this study, it was found that there was no difference between a child and a household head working as an entrepreneur with a child whose household head worked as a worker/employee/family worker.

4. Conclusion

From the analysis above, it can be concluded that culture and bargaining power have a significant influence on school participation and child labor. Children who come from Arek tlatah are most likely to work than children from other regions. While children who come from the tlatah pandalungan have the least chance to go to school, but the greatest chance is not to go to school and not work compared to children from other schools. Children who come from Madura Island tlatah most likely to go to school while working than children from other tlatah.

Whereas when the mother's education is equivalent to the father or even higher than the father, the opportunity for children to work or work while attending school is greater. On the contrary, the chance of children going to school actually decreases. This indicates that the level of drop out of children actually increases when the mother's bargaining power is higher than that of the father.

The implication of this study is to forcefully enforce Law Number 23 of 2002 concerning Child Protection which seeks to eliminate child exploitation activities. In addition, it is necessary to establish a regional action committee that is tasked with eradicating the worst forms of employment for children and educating about the negative impacts of working children. Especially in areas where culture has an influence on the higher work participation of children and the low level of children's schooling.

5. Acknowledgements

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Does Human Capital Investment on Demography Bonus Promote Indonesia GDP per Capita?

Dien Dadeka Vebrianti*[1], Sebastiana Viphindrartin[2], Zaenuri[3]
[1]Student, Master of Economics and Business Faculty, Jember University, Jember 68136, Indonesia
[2,3]Lecturer, Economic and Business Faculty, Jember University, Indonesia
*Email: dien.dadeka93@gmail.com

Abstract

In this article we discuss about the quantity-quality trade off theory reduction fertility would induce more human capital investment per child. In 2015 then, Indonesia is a country that ranks 4 big population in the world, with a population of about 253 million people. based on BPS data, the population of productive age is greater than the number of non productive population indicating that Indonesia has demographic bonus. Demographic bonuses will be a blessing when the productive age population has excellent education and skills. Literature review and previous studies related to government spending on educational improvements and skills are used to support the hypotheses in this article. Surveys conducted by previous researchers prove that developed countries (OECD) which are now able to achieve the high average labor productity growth, has long invested a lot of money to build its human capital. Government expenditures for human capital investment are not positively correlated with human capital productivity so the government needs to divert such expenditures to improve education or knowledge with experiential learning as well as to improve skills supported by international certification in order to compete with other productive age population of ASEAN countries.

Keywords : Human Capital Investment; Demography Bonus; Education; Skill Intensity; GDP per capita

1. Introduction

The Quantity-quality tradeoff theory gives greater access to each child in a small family setting where the number of children in a small family (Becker and Lewis, 1973). The small number of family members will encourage parents to maximize the allocation of resources they have in each child that promotes the quality of the child in the family. Human capital is an important factor in long-term economic growth (Galor and Weil, 2000; Glaeser et al., 2004). Thus, developing countries that typically have low levels of human capital and impeded economic progress can apply this quantity-quality theory to improve the quality of human capital.

Indonesia is the fourth most populous country in the world. The population of Indonesia in 2017 reached 263,991,379 inhabitants and reached 266,794,980 in 2018. Here is a table showing the ranking of countries with the largest population in the world.

Tabel 1. Populasi Penduduk berdasarkan Negara

Rank	Country	Population 2018	Population 2017	Growth Race
1	China	1.415.045.928	1.409.517.397	0.39%
2	India	1.354.051.854	1.339.180.127	1.11%
3	United States	326.766.748	324.459.463	0.71%
4	Indonesia	266.794.980	263.991.379	1.06%

source: World Population in Review

Indonesia as a developing country has a large population. Intercensal population surveys (SUPAS) conducted by the Central Bureau of Statistics showed that the dependency numbers of Indonesians reached 49.2%. This shows that every 100 residents who are included in the productive age bear 49% of the population who are included in the nonproductive age. The figures released by SUPAS show that Indonesians who are included in productive age are more than those who are nonproductive. The National Development Planning Agency (Bappenas) estimates that by 2020-2013 with a large population of productive age, Indonesia will experience demographic bonuses.

Changes in population structures where a larger population of productive age than nonproductive age populations will drive substantial per capita income growth (Cutler et al., 1990). Structural changes in these populations cause differences between population growth and growth of working age in the population (Sang Hyop Lee and Andrew Mason, 2007). Demographic bonus will certainly be very beneficial for Indonesia in improving economic growth and development due to the availability of large working capital. However, when the demographic bonus does not have a good quality of labor productivity and competitive in the global world, the demographic bonus will be a burden for Indonesia.

In relation to the Quantity-quality tradeoff theory, the abundant population of productive age should be supplemented by the quality of the population's quantity. Humans as human capital have three essential options for quality living by having a healthy and long life, acquiring knowledge and gaining access to resources to improve decent living standards (Lyakurwa, 2007). The Government of Indonesia has set various policies in realizing the welfare of the population for a decent standard of living in accordance with that proposed by Lyakurwa (2007). The emphasis on the growth of the Indonesian population has been made through the empowerment of Family Planning (KB) with two children is adequate, but not all Indonesians follow Family Planning (KB) program with two such children. The government also promotes a compulsory nine-year education program to realize the right of the population to gain knowledge and gain access to resources including science and technology.

Based on the explanation, the following questions emerged: (1) related to the efforts made by the Indonesian government in improving the productivity of human capital, it has been done maximally; (2) In addition, according to the author there are other things that need to be done and strived by the government in improving human capital productivity in addition to efforts that have been done by the government of Indonesia.

2. Methods

The method used is literature review through research journals and other literature on human capital investments, demographic bonuses and increased GDP through human capital. The literature review uses research journals and other libraries that are used to support the hypothesis compiled by the author on the basis of the phenomenon. The hypothesis that the writer tried to prove is that the demographic bonus that is expected to be owned by Indonesia and investing human capital on human capital will increase the GDP owned by Indonesia. As discussed in the above background exposure, demographic bonuses with changing age structures have an effect on income disparities between generations (Sang Hyop Lee and Andrew Mason, 2007). In addition, demographic bonuses will also enhance economic growth with a productive and competitive human capital.

3. Finding and Arguments

Xuebo Wang and Junsen Zhang (2017) in his research on population control policy and Human Capital Investment in China revealed high population growth is the cause of poverty and is considered detrimental to the developing economy so that policies for special

popoluasi control are deemed necessary and a rational choice for the government. China is the country with the largest population in the world, as well as Indonesia which has a lot of population so that policy is needed to reduce the number of population. Population-related policies in China using China's one-child policy (OCP) are able to reduce population growth in the country.

Indonesia has not issued a policy on reducing the number of residents binding to communities unlike China. The Indonesian government provides socialization and promotes Family Planning (KB) program with two children enough to the people of Indonesia in the hope that the community will reduce the birth rate. However, the fact is that the program is mostly followed by people who have better levels of knowledge, education and life if. It is true that demographic bonuses will be enjoyed by Indonesians by 2030 because the number of people of productive age is more dependent on the high birth rate, but if the government does not make serious and binding efforts in limiting birth rates, large populations will become boomerang for Indonesia. High birth rates can lead to poverty, although this relationship is ambiguous but poverty is one of the causes of high rates of birth (Dasgupta, 1995).

By reducing the birth rate is believed to increase investment in human capital. According to the quantity-quality tradeoff theory (Becker and Lewis, 1973) a family with more family members will allocate more resources to each child that will lead to an improvement in the average quality of the child. With the increase in the average quality of the child will lead to an increase in income per capita when the child is included in the workforce. In addition to helping to increase income per capita, the productivity it has also increased and encourage economic growth in the long term. The accumulation of human capital is one of the greatest fundamentals in long-term economic growth (Galor and Weil, 2000; Glaeser et al., 2004). Therefore, according to the quantity-quality tradeoff theory (Becker and Lewis, 1973) the Indonesian government can adopt population control policies to reduce family size and promote human capital investment from an early age so that human capital owned by Indonesia does not impede economic progress.

Sang-Hyop Lee and Andrew Mason (2007) in his research on demographic dividend found that population age structure and the family age structure affect per capita income. Changes in the age structure of the population relate to demographic bonuses. Demographic bonuses explain that the population of productive age is more than the nonproductive age population. Other empirical results from Sang-Hyop Lee and Andrew Mason's research (2007) show that population dependency ratios have much greater force than the family dependency ratios. This suggests the social reallocations of the gains from the fertility decline that limit the extent to which they are captured by those who have the option of having fewer children. This shows that those who enjoy demographic bonuses are those who have low birth rates and a productive and competitive human capital. So it is necessary to invest in increasing human capital.

Andrew Mason, Ronald Lee and Jennifer Xue Jiang (2016) in his research on demographic dividends, human capital and saving explain education has an influence on economic growth through cross-national regressions (assumed that the human capital in health and education) enters an aggregate production and contributes to economic growth. The regression shows a positive effect on the rate of economic growth (Lutz, Cuaresma et al., 2008). The measure of cognitive ability used as a substitute for class achievement will have a greater effect (Hanushek, 2010; Woessmann 2012).

The curriculum used in Indonesia often varies according to the minister in office. Professor of University of Indonesia Education (UPI) Prof. Dr. Nanang Fattah revealed curriculum changes are often done by the government considered ineffective, inefficient and not have much effect on the progress of education in Indonesia. Investment to education that needs to be done by the Indonesian government is to increase the competence of

teachers who become the spearhead as a provider of knowledge for students at school. In addition, the government can also improve students' cognitive abilities in the classroom which will improve their knowledge and skills, not just pace the achievement of the class. In addition, the curriculum applied in schools in Indonesia limits students' ability to further improve their skills. Not only the knowledge required but sufficient skill is also needed to improve the productivity of Indonesian human capital that can compete with other countries.

Efforts to invest in human capital that can be done by the Indonesian government is to intensify and transmit human capital that belongs to other countries more advanced, to encourage the exchange of science, information, technology that encourages the quality of the human capital. This is in line with Jones's (2014) and Lucas (2015) views. Trade and political cooperation undertaken by the Indonesian government with other countries can be utilized in terms of human capital exchange. Trade may exacerbate economic differences across countries (Bajona and Kehoe, 2010) through its impact on endogenous educational attainment. Emily Blanchard and William W. Olney (2017) in his research on Globalization and Human Capital Investment found that exporting skill-intensive goods generates important long-run benefits via an empirically demonstrated increase in human capital. Human capital investment with knowledge and skills through education will encourage return on investment knowledge which will stimulate efficiency in production method.

Bambang Suprayitno, Tejo Nurseto and Supriyanto (2017) in his research on human capital investment by the provincial government in the era of decentralization in Indonesia found that the provincial government's expenditure in human capital investment did not affect the increase of labor productivity due to the lack of quality government spending so it was not effective in increasing the growth real regional provinces. Government expenditure made more composition on personnel expenditure. Local governments should in terms of investing in human capital to make regional expenditures on public facilities that have a positive effect on labor productivity. Public facilities including schools, libraries and other public facilities are the right of the community, including labor in improving productivity.

4. Conclusion

According to The Theory Quantity-Quality Tradeoff (Becker and Lewis, 1973), reduction in fertility would induce more human capital investment per child. Greater allocation of resources is provided to improve the quality of human capital per child that will encourage an increase in economic growth (Galor and Weil, 2000; Glaeser et al., 2004). Human Capital Investment with improving knowledge, skill and opportunity to improve will stimulate the efficiency of production methods which will also encourage economic growth (Andrew Mason et al., 2016). Indonesia as the fourth most populous country in the world should begin considering binding adoption in birth arrangements such as China which applies the one-child rule in one family. Human capital investment that needs to be done by the Indonesian government in relation to the effort in preparing demographic bonus which will be enjoyed by Indonesia in 2030 is human capital investment in education by increasing the distribution of educational resources for all Indonesian citizens, increasing students' cognitive ability as human capital, improve skill and entrepreneur ability, intensify human capital exchange between Indonesia and developed countries to improve human capital productivity. The human capital investment undertaken by the government through expenditure spending is not focused on the composition of large personnel expenditure but the improvement of public facilities that can support the increase in human capital productivity.

In addition, the Indonesian government in relation to existing productive age workers should also consider the availability of employment for these workers. Providing capital for businesses with low credit interest will encourage people to open businesses that will create new jobs and increase economic growth. The need for early entrepreneurship skills training

and entrepreneurship coaching for people who are in productive age will encourage the productive age population to not think of finding a job but to create new jobs.

Finally, with the human capital investment that has been done will increase the human capital of Indonesia is more productive and quality and increase GDP. So when demographic bonuses occur, the demographic bonus is not a problem anymore because the human capital is not able to compete and the lack of employment but a bonus that really bonus, which can be enjoyed by Indonesia.

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Analysis of Internal Control and Accounting Information of Sales In Alfamart Branch of East Bekasi

Danty Ajeng Dwiyani[1], Erna Hernawati[2]
[1,2] Fakultas Ekonomi dan Bisnis, Universitas Pembangunan Nasional Veteran Jakarta
Email: erna_hernawati@yahoo.com

Abstract

The purpose of this study to determine the application of accounting information systems sales on Alfamart and to determine the application of internal controls in accounting information systems sales. The method used in this research is qualitative method with intepretif paradigm and phenomenology approach Martin Heideger. The sample in this research is Alfamart Pondok Hijau. The results show that there are still weaknesses in internal controls that occur in Alfamart, such as lack of supervision on employees and lack of information and communication between the cashier and salesperson. must improve the system and procedures of cash sales system with adequate internal control support by adding some function or part so there is no interruption of task in carrying out its duties.

Keywords: Internal Controls, Sales Accounting Information System, Cash Sales

1. Introduction

Background

The advance change on sectors as technology and information, social and economy, has effected major half of population to realize that information is a pivotal necessity. As so an organization needs a system of information, whether it aims to seek profits or not. Therefore, to achieve its goals and maintaining its existence in the society, each organization need a satisfactory system of information. A satisfactory information is one that accessible in timely manner, useful and accountable.

The accounting information systems is one of the pivotal needs in a trading company. A system of information is a series of transaction receipts, documents, accounting records, reports, as well as tools, procedures, policies, human resources, and other resources in a company that are coordinated in achieving the company's objectives. The aim of accounting information system is to secure a company's properties/wealth, generating various information for decision makings, resulting information for external parties, and resulting information for employees' performance reviews. The accounting system also is a mean of control for a company to secure its wealth.

In a company, sales are crucial and one of the machines of the company's growth. Sales is the source of cash flow for the company. Therefore, sales activity is a pivotal activity in supporting the success of marketing a product or the services provided by a company. Therefore, the sales activity has to be well and properly managed to result a major benefit for the company.

One of the factors achieve the effectivity of sales process is by creating a proper internal controlling in a company. Knowing the importance of sales activity in a company, then the elements within the internal controlling which are the foundation for a company's effectivities has to be paid a major attention.

Granted that managing sales activity is not controlled by a well-managed controlling system, it can cause a loss for a company.

Based on the pre-research conducted by Alfamart that is located in Jatimulya, East Bekasi. Bapak Wandi as the head of the Alfamart store in Jatimulya. He stated that he had applied the computerized accounting information systems in Alfamart that's is directly connected to the head office. There was no discprepancies between the price of stocks that available on the store and the price written in the receipt in this Alfamart, which proven the controlling system has not been well-applied. The unavailability of discrepancies of prices on the store's label and on the receipts has applied a proper internal control. Below are the local franchise data:

Table 1. Local Franchise Data

Franchise Type of Micro Retails	Average Revenues per Day	Franchise Investment	Products Sold
Local Franchise Data			
Indomaret	10 million	400 – 600 millions	Laundry Soap, Food and Beverages, and others
Alfamidi	15 million	750 million	Laundry Soap, Food and Beverages, and others
Alfamart	10 million	397 – 417 millions	Laundry Soap, Food and Beverages, and others

The company's objective can be achieved accordingly to the plans; it is important to apply internal controlling. Internal controlling is established to ensure the operation system runs effectively and efficient, as well as ensuring qualified financial records. The internal controlling system will create a mean to construct, collecting information related to companies' transactions which is indirectly can be well-managed.

Focus of the Research
The availability of different price between the label and the receipt that is occurring in Alfamart, caused by the lack of internal controlling of the company, resulted the employee cannot change the price on the labels directly, while the price has been updated within the accounting information in that company.

Statements of the Problem
a. How is the accounting system of sales information being implemented at Alfamart?
b. How is the internal controlling of the accounting information systems being applied?

2. Literature Review

System of Information
According to Cenik & Hendro (2016, p.5) a system of information can be technically defined as a sequence related components to collect (and re-collect), process, save and distribute the information to sustain decision making and controlling the company.

Accounting System of Information
According to Cenik & Hendro (2016, p.5) a system of information can be technically defined as a sequence related components to collect (and re-collect), process, save and distribute the information to sustain decision making and controlling the company.

The Objectives and Benefits of System of Accounting's Information
Anastasia & Lilis (2011, p. 5) concluded the frame of accounting information systems can be explained based on the benefits produced by accounting information. The benefit or the

aim of this system are as listed below:
a. To secure company's properties/wealth
b. To create various information for decision making.

Information System of the Sales Accounting
The cycle of sales is a series of selling activities which occur repeatedly and followed by the process of data's recording and business information. The series of activities in sales' cycle initiated by receiving orders from customers, followed by deliveries/handling goods (or services), preparation of invoices, receivables claims, ended with payment receipt of customers' claims. It is called a cycle since it is started by receiving orders and ended by receiving claims, as the process is progressive and repeatedly (Cenik & Hendro, 2016 p. 127).

1. Unit/Function of the Sales Accounting Information Systems
   According to Cenik & Hendro (2016, p. 128), a cycle of business's s activity has the tendency to involve more than one unit and one person. The number of people and unit that involve can be varied, depends on: size of the company, types and characteristics, as well as the applied technology. However, if seen by the related function, generally it does not look like it depends on the size, types of the company and the applied technology.

2. Flowchart of the Accounting Information System
   The diagram of the flow of cash sales: (a) Distributor, (b) Sales, (c) Stockroom, and (d) Leader.

3. Governance
   IT Governance is a commitment, awareness, and the process of controlled organization's management to TI resource/information system that is bought expensively from the computer's sources (software, brainware, database and etc.) to the Information Technology and LAN network/internet.
   "Governance" is a derived from the word "government", which means to make the policies that are aligned with society's aspirations or constituent (Handler & Lobba, 2005). Whilst the use of governance's definition for the Information Technology (IT Governance) means the application of TI's policies within an organization so the use of TI can be directed accordingly to the organization's objectives.

4. Fraud
   Fraud consists of forms and methods, as well as many experts define the fraud. Below are the definitions of fraud according to some experts. Definition of fraud according to Tuanakotta (2013, p. 28): *"Any illegal act characterized by deceit, concealment or violation of trust. These acts are not dependent upon the application of threats of violence or physical force. Fraud are perpetrated by individuals, and organization to obtain money, property or service; to avoid payment or loss of services; or to secure personal business advantage."*
   The statement points out that fraud is each illegal activity marked by deception, concealment or violation of trust. This action relies on the acts of threat of violence or physical force. Fraud committed by individuals, and the organization in a way to obtain money, wealth or service; to avoid payment or service's loss; or to secure the benefits of the private business.

5. Internal Controlling
   Anastasia & Lilis (2011, p. 82) define the internal controlling as all organizational plans, methods and the measurement chosen by a business activity to secure its wealth, accuracy checking, and the reliability of accounting data from this activity, increasing operational efficiency, as well as supporting the complied the applied managerial policies.

The internal control is crucial because whether the company likes or dislikes, can face many threats that can be the obstacles in accomplishing the objectives of accounting information system. One of the objectives of the internal control is to produce the reliable and trusted financial information. In case that the information system that does not have the control, after an employee inputs the sales' transaction, the number in the application can be easily changed or the invoice that relates to the sales can be damaged.

a. The Model of COSO Internal Control
   COSO (The Committee of Sponsoring Organizations) is a group of privates which consists of American Accounting Associations, the AICPA, the Institute of Internal Auditors, the Institute of Management Accountants, and the Financial Executives Institute. In1992, COSO developed a definition of internal control and direction member in evaluating internal control system. *"As a process, effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories: effectiveness and efficiency of operations, reliability of financial reporting, and compliance with applicable laws and regulations".*

b. Control Area
   According to Anastasia & Lilis (2011, p. 83-86) each organization whether it is major or minor, has to possess the stable control area. An unstable control area has the possibility to be followed by other weaknesses of the other internal control components. The control area as the first components of control, includes the factors below:
   • The philosophy of management and operational system
   • Commitment of the integrity and moral values.
   • Auditory committee and the board of directors.
   • Organization's structure
   • Methods of determining the authorities and responsibilities
   • Policies and the practice of human resource

c. Risks Estimation
   Anastasia & Lilis (2011, p. 87-88) point out that all companies, minor or major, will surely counter both internal and external risks in the effort of accomplishing the company's objectives.

d. Control Activities
   Anastasia & Lilis (2011, p. 88-90) stated that the control activities that are related to financial reports include the followings:
   • A proper documents' design and possess the printed serial numbers
   • Tasks divisions
   • The well-managed authorization of all bossiness activities
   • Protecting the properties and company's records
   • Creating independent observation on the other employees' tasks.

e. Information and Communication
   According to Anastasia & Lilis (2011, p. 90), information has to be identified, processed and to be communicated to the right person so then each individual within a company can run their responsibilities properly. Accounting information system has to be able to create accountable financial reports.

f. Performances' Observation
   Anastasia & Lilis (2011, p. 91) mentioned the main activities in the performances' observation includes: (a) Effectively supervision, (b) Accounting responsibilities, and (c) Internal audit.

3. Research Methodology

Qualitative Research Methodology

Qualitative research is a research with the aim of understanding the phenomenon experienced by the subject of the research like behaviours, perception, motivation, acts and etc., holistically, by describing in the forms of words and language, in a natural particular context by utilizing all natural methods (Moleong, 2010 p. 6).

Researcher uses the qualitative method since this research is conducted to explore deeper about the implementation of applied accounting information system in Alfamart as this is the aim of the researcher to apply the qualitative method in the research.

Interpretive Paradigm

In the qualitative research, the researcher uses the interpretive paradigm. According to Neuman (2003, in Efferin et al 2008 p. 38) interpretive approach assumes that the understanding of social phenomenon can be gained by studying a text in detail where the text can be defined as a discussion, writing or images. This approach emphasizes more on the researcher's direct and intensively involvement in the case as his object of the study to dig the deepest meaning of a phenomenon. The aim is to result a valid comprehension, a comprehensive multidimensional of the phenomenon.

Whilst, Efferin et al. (2008, p. 38) stated that interpretive approach is a systematic analysis to a deeper action that has social meanings by direct and detailed observation of the individual or the object of the study in the natural setting, in order to obtain an understanding of how a social environment is created and works.

Phenomenology Approach

As stated in Meleong (2010, p. 14), phenomenology can be defined as subjective experience or phenomenological experience, a study about the awareness of main perspectives of an individual.

Phenomenology can be defined as studies about the phenomenon that appears form a researcher's awareness. In a broader definition, phenomenology is a study about indications or all appeared matters. Nevertheless, it has to be comprehended that a phenomenon is basically an awareness and interaction. In the context of a qualitative research, phenomenon is something that appears and shows in the researcher's awareness by utilizing particular methods.

Research Site

Research site is the most crucial component in a qualitative research since the selection of the site is expected to answer the stamen of the problems of a research (Widiastuti, 2014 p.15). In the relation to the analysis on internal control and the accounting information system in Alfamart, the researcher visited Alfamart in Bekasi Timur at Pondok Hijau. Here is the brief history of PT. Sumber Alfaria Trijaya,Tbk (Alfamart)

Alfamart was established in 1989 by Djoko Susanto and the family of PT Sumber Alfaria Trijaya Tbk (Alfamart/ Company), started its business on the trade and distribution sectors, then entered the mini market sector. The expansion exponentially started in the form of company in 2002 by acquiring 141 branches of Alfaminimart and changed the name into Alfamart. Currently, Alfamart is on the of the leading retails that serve more than 2.1 million customers daily in almost 6,000 branches spread around Indonesia. Alfamart provides daily necessities with the affordable prices, a comfort shopping area, and easy accessible spots. Supported by more than 60,000 employees makes Alfamart is one of the biggest job providers in Indonesia.

The information system that has been applied by Alfamart is the Point of Sales (POS).

By the vast growth of Alfamart's branches with more than 40 transactions monthly receipts, it can be implemented as it is supported by integrated system on each point of sales (POS) cashiers on each branch which include sales system, stocks and goods receipts, the technology in POS is designed to fulfil the development needs and future transactions.

Therefore, each cashier who works at Alfamart has been given the ID and PIN to access the system in a way to fasten the service and the convenience of shopping on the casa, Alfamart has utilized the scanning barcode system, so the payment allows satisfaction for the consumers by using BCA debit, Mandiri debit and all listed banks. Alfamart can also conduct all kinds of transactions as purchasing train tickets, electricity tokens, online transactions, even yor phone credit can also be accessed easily in Alfamart.

Research Location

Research location is where the researcher conducts the research. Determining the research location in a research is used to identify the suitability between the data and facts on field. Generally, this research will be conducted in Pondok Hijau since it occurs that the lack of internal control can appear because of the employee's negligence in changing the price of an item on the store's receipt and the price on Alfamart's receipt. This information is obtained from a customer namely Yuli. At first, she does not know that there are changes of the price in Alfamart, however after she shopped again on the next days and saw that the price on the label was around IDR 6.500, she directly purchased the item and handed to the cashier which the price later on changed into IDR 7.000. Researcher then experienced the same thing, there were few times researcher shopped in Alfamart and found there were differences between the price on the label and the ones on the receipt.

Object, Subject of the Research, and Data source

This research took some objects, subjects, and data, these are explained as follow:

1. Research Object
   The object to be studied are the objects that appear in the research. Basically, as stated above, the problems raised are the particular phenomenon as the foundations of each problem appear on the surface. The object in this research is about the discrepancy of accounting information system between the price on receipt on the shelves, and the lack of the internal control between the cashier and the saleswoman/salesman.

2. Subject of the Research
   Qualitative research that plays the role of the subject is the researcher. Researcher is a student in the Faculty of Economy and Business with the accounting as study program in the University of Pembangunan Nasional Veteran Jakarta. The specification of the researcher in conducting the study of accounting information system in Alfamart is supported by the experience in taking the subject of accounting information system. The researcher's knowledge about accounting information system is obtained through the subject of accounting information system. Hence, the researcher feels he has the competencies to study the phenomenon of accounting information system.

3. Research Data Resource
   Sugiyono (2016 p. 146) points out that in the qualitative research, the sample of data resource are chosen by purposive and using the snowball sampling. The selection of samples, is temporarily in the proposal, and will be developed after the researcher is on the field. Furthermore, it is stated that, samples as data resource or as informant is expected to fulfil the criteria: (a) Those who master or comprehend something through process of enculturation, so that it is not only to be known, but also to be understood, (b) Those who are labelled as in the current process or involve within the studied activities.

Based on the above criteria, the researcher determines the informants as follow:

a. Key informant in this research is the owner of Alfamart. Since he is the one who manages all activities in Alfamart, therefore this study is conducted to observe how the accounting information system is applied in Alfamart, and how the internal control is applied in Alfamart.

b. Supporting Informants, which are: (a) The employee of Alfamart. This informant plays the role as the supporter of the application of the accounting information system, and (b) Customer in Alfamart. This informant plays the role supporter of the discrepancy of price that occurs in Alfamart.

Data Collection Technique and Data Management

Afrizal (2014 p. 20) points out that there are four techniques in data collection process: deep interview, documents collections (writings), conducting observations. This study uses the data collection techniques as follows: (a) Comprehensive Interview, and (b) Documents collection (writings), collecting written materials as news, correspondences and reports to obtain the related information.

Data Analysis Technique and Research Design

Data analysis technique and the research design will be explained as follow:

1. Data Analysis

This research adopts the Miles and Huberman's model of analysis that points out the activity in analysing qualitative data is completed interactively and progressively to the completion, until the data is saturated. The data's saturation is marked by the un-availability of the new data or information. The activity in data analysis, is data reduction, data display and conclusion drawing/verification. The steps in analysing the data are: (a) Data reduction, (b) Data display, and (c) Conclusion drawing and verification.

In this study, the researcher conducts interview in continuing pre-research data in obtaining more accurate information. The technique of examining data's reliability is conducted to identify the further process of the accurate data that has represented the studied phenomenon. Sugiyono (2016 p. 121), stated that it need s the data triangulation which is to analyse the answers from the owner of Alfamart by studying the truth with the empiric data (other data resources). The applied data's triangulation is the resources' triangulation which is comparing or re-checking the trust level obtained from different resource. As an instance, comparing the observation's result by interviewing, comparing what has been stated publicly and privately

2. Research Design

The research design used by the researcher is adjusted with the interpretive paradigm and phenomenology approach. Basically, the most crucial determination of work flow in this study itself still needs to adjust with the latest findings of the main problems that occur from this study itself. If the researcher cannot find it, then it can be stated that this study is no longer in accordance with the initial phenomenon and cannot be further processed, so compatibility is pivotal.

After we briefly knew the core of appeared phenomenon on the field in the form of pre-research, and conducted to adjust with the initial phenomenon, we can then know what are the further steps to be taken. Furthermore, the researcher verifies the problems with the natural concepts and identifying object or actor who is directly involves in the activity. The verification is conducted to assist the researcher in decision making, whether the phenomenology study will be further processed or to change the actor or another research site. If the research can be processed, then the researcher collects the actual data collection by interviewing (Yusuf, 2014 p.357).

During the data collection process, the analysis of the obtained data is progressively conducted, which means that the definitions will be given accordingly to the perspectives of studied object, not by the researcher's conclusion. The steps in data analysing are: data reduction, data display, conclusion and verification. Final step of phenomenology study is constructing the result of the study.
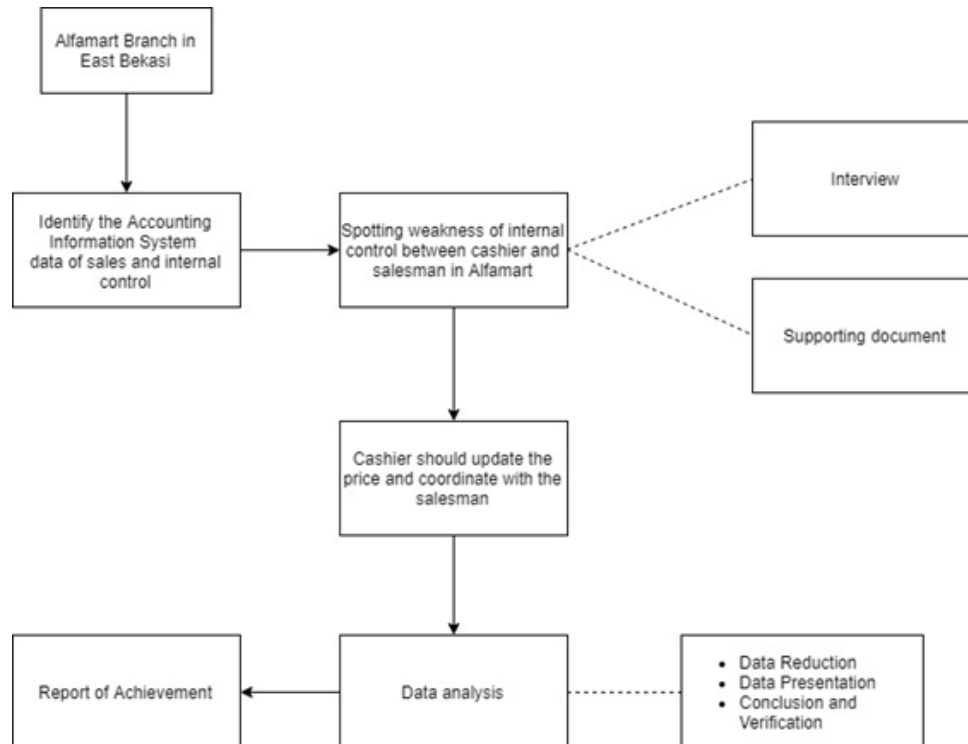
Figure 1. Research Design

4. Finding and Discussion

The research process that has been done is conducting initial study in Alfamart Pondok Hijau, East Bekasi by interviewing the head of the store namely Tono and two employees namely Tia Damayanti and Amri. Besides interviewing these informants, it is incomplete juts by observing directly the condition in Alfamart, so it can be concluded the initial explanation of the study is the researcher is interested to choose the topic about internal control and accounting information system of the sales. The first pre-research was conducted in February 15th, 2018. The second interview was initially aimed to observe the initial observation about the studied object.

The second interview then was conducted on 21st of February in 2018 since a particular condition where the researcher has to return to Alfamart Pondok Hijau, because the data was not sufficient yet to be analysed. The second interview was aimed to capture information about accounting information system of sales and internal control by interviewing the head of Alfamart. It is founded that in that Alfamart, there were discrepancies between the price on the receipt and the price on the store's label caused by lack of communication between cashier and saleswoman, so it interests the researcher to examine cursorily the accounting information system and internal control in Alfamart.

Point of Sales System

In the business world, Point of Sales(POS) app can be defined as check-out counter with the cash register. In accordance to its name, POS is the check-out point where trans-

action can be marked as complete. This is where buyer and seller conduct payment of received goods/service. In POS, the seller will count the total of price purchased by buyer and give the options for the buyer to make payment, and also printing the transaction's receipt which called as receipt. Below is the description of POS app:

Based on the statement from Avin Kurniansyah, POS is a system that is utilized to make retail's sales transaction, to fasten the service and comfort of shopping at the cashier only, the payment now is also create satisfaction for the consumer. The same statement given by Tono that POS is a software that enables user to find the desirable item faster and also it saves time to browse the category of the item. Impacted on the check-out process which is faster and a better shopping experience.

Nevertheless, there was a different opinion from Tia Damayanti who stated that POS that's is initially applied to fasten the service and the satisfaction of shopping in Alfamart can be also causing the rareness of giving the shopping bon since the machine works slower sometimes. The similar statement came from Amri, who stated that the system can also get error, as well as the shopping receipt is rarely given to the customers due to slower work of the machine.

Flowchart of the Accounting Information System in Alfamart

Below is the explanation of the sales accounting information system's flowchart in Alfamart:
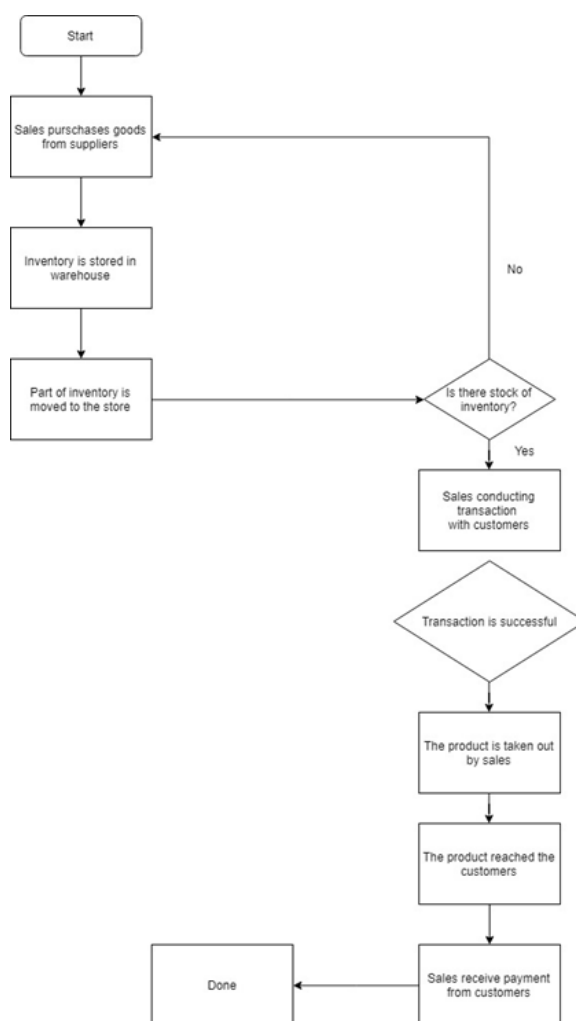
Figure 2. Flowchart of Accounting System in Alfamart

Seller purchases the product from supplier like food product, drinks, soaps, and etc. After that, these products are stored in the main warehouse of Alfamart. After they are stored, some of the products are distributed to the Alfamart's branches. If the stocks are available, the seller makes the sales transaction with consumers. After transacting, the products are handed to consumers and cashier receive payment from consumer.

Commitment to the Integrity and Moral Values

It is essential for management party to create a structured organizational that emphazies integrity and moral values. A company can legalize integrity as basic foundation in operating, by actively teaching and practicing it. All fraud behaviours have to be fully investigated, and those who are conflicted has to be released. A dishonest employee has also to be charged to ensure all employees are aware of this kind of behaviour is forbidden.

According to Avin Kurniansyah and Tono, if the fraud is occurring, employees are obligated to report to the supervisor so that those who conduct fraud can be charged with the sanction. Nonetheless, Tia Damayanti and Amri stated that if there is someone conducts the violation, the employees are obligated to report to supervisor, and still they are not directly being given the sanction.

Commitment to the Competency

To reach the entity objective, personal of each level within the organization has to possess the knowledge and skills needed to run their tasks effectively. Avin Kurniansyah pointed out that knowledge and particular skill are needed to finish the tasks given to individual. Prior to the allocation of staff, employees are given the training.

Organizational Structure

Avin Kurniansyah stated that management of controlling assigned tasks and responsibilities of each level of company is marked by the accomplishment of tasks and responsibilities properly accordingly to company's organizational structure.

However, a different statement came from Tono, each management controls assigned tasks and responsibilities on each level of a company. Nevertheless, the assistant of the store's head also plays the role of administrative function since Alfamart does not hire more employees. Here is the organizational structure in Alfamart Pondok Hijau:
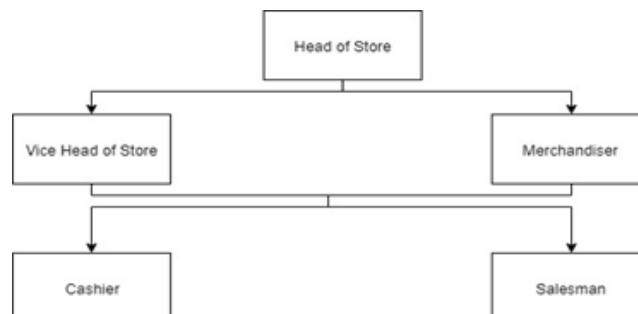
Figure 3. Organizational Structure in Alfamart Pondok Hijau

Policy and Human Resource Practice

An effective internal control is crucial that the policy and procedure of allocating human resource will ensure that personal entity possesses integrity, moral values and expected competency.

According to Avin Kurniansyah, performance review itself is aimed to measure each

employee's performance in the effort of developing ad boosting qualified work, in a way to reach an effective act.

Control Activity

The activities that have been established through policies and procedures in ensuring that management's instructions to reduce the risks of accomplishing the objectives. Control activity is completed in all level of entity, in all stages of business process and to the technology environment. Tono stated that control activity has several goals and applied in all acts and organization's function.

Information and Communication

Information is pivotal to all entities to complete internal control's responsibilities in order to sustain the accomplishment of the objectives. Information is obtained or resulted through communication process between internal or external parties, progressively repeated and shared. Most organizations build an information system to fulfil the need of reliable, relevant and timely manner information. Identification, obtaining and exchanging information in a format and allocated time which allow people to do their tasks.

Based on Tono's statement, the lack of information from employees, especially between cashier and saleswoman/man. Cashier does not communicate directly with saleswoman/man if changes on the price has been updated. So, the price on the store's label are not updated yet.

Performance Review

The process of establishing the measurement of performance and actions taken to support expected achievement is hoped to be in accordance with the predetermined performance. According to Avin Kurniansyah and Tono, in Alfamart, each head of divisions is responsible to conduct review on their own division. A cashier is supervised by the supervisor, whilst saleswoman/man is supervised by the assistant chief of store.

Nonetheless, Tia Damayanti gave a statement that the supervision for the cashier is also part of the tasks of a supervisor. However, the supervisor is rarely conducting supervision to the cashier.

Whilst, Amri stated that if supervision for saleswoman/man is conducting only through CCTV, while some store does not have CCTV. Hence, stealing is often occur in this Alfamart and the employee has to compensate for the missing item.

The Crappy Service

Ideally as the seller, Alfamart party should treat consumers properly. Nonetheless, there is a crappy service in this Alfamart. As an example, if someone wants to purchase "Chicken Nugget", the available stock is massive and has no price on it. Consumer then tried to ask the saleswoman/man who was in charged, it is unfortunate that he/she answered "to check the price, please ask the cashier by yourself." It can be concluded that the saleswoman/man did not serve the consumer improperly.

Prices have never been Updated/ Incompatibility of the goods' price

The price on store's label in Alfamart has never been updated whilst the price on receipts are always updated. The price on the store's label has significant discrepancy with the price on the receipt. Consumers found fraud on this price's discrepancy few times evry time they shopped in Alfamart.

Figure 4. The price on the label and the price on the receipt

The Negligence of Cashier in Counting the Price of Goods

Since fraud is often occurring, consumers paid detailed attention when cashier counted the items. It is found that one of the purchased items was double counted whilst the item was only one. This incident is not supposedly happening, since it is potential to embarrass the consumer. Since if the item's price is doubled until hundreds of thousand Rupiah, while the consumer has already prepared sufficient amount of money.

The Negligence of Cashier in Counting the Price of Goods

For some people, receipts are important. To check the price, to compare the price (whether expensive or cheap), or if it is had to be claimed in their office. Consumer noticed that within a month, receipts got unclear and almost unreadable since the ink has vanished. Below is the image of unclear receipt from a consumer:
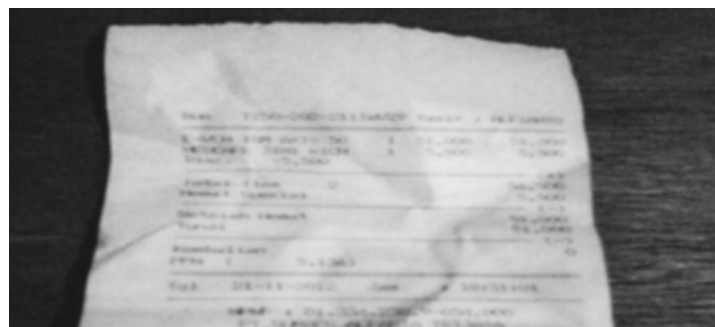
Figure 5. Unclear Receipt

Point of Sales System

Davis et.al (1989) developed Technology Acceptance Model (TAM) to study determinant factors of the implementation of information system from the user. The result of the study indicated that information system is till influenced by intention of utilization of information system, where this intention is shaped by perceived technology usefulness and perceived ease of use. TAM is aimed and estimate the users' acceptance to a technology within an organization. TAM details the causality between trust (of the benefits of a system of information and the accessibility for the usefulness) and behaviours, objectives/needs, actual utilization from a user of information system.

Alfamart applied the POS app where according to the employee is yet effectively. Since, POS can only enable vast the service and ensuring shopping comfortability in the

casa, yet the system of receipts is rarely distributed due to the delay. So, this incident is contradictive with the Tam theory where users are still experiencing difficulties in utilizing POS.
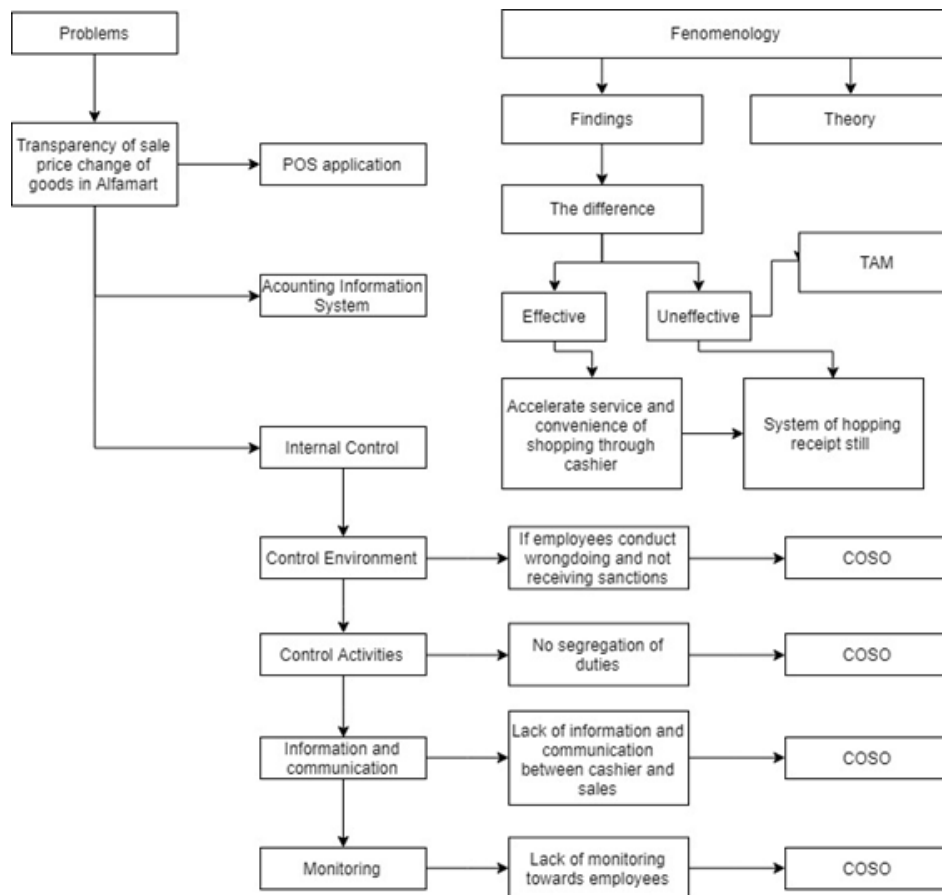
Figure 6. Technology Acceptance Model (TAM)

Commitment to the Integrity and Moral Values

Integrity and moral values are the products of ethic standard and entity behaviours, as well as how the standard is communicated and coordinated in practices. It is important for the management to create an organization's culture that emphasizes integrity and moral values. Ethical and unethical behaviours can generate a massive implication to the internal control. These behaviours can also shape the validity of financial reports.

Every company must hold ethical behaviours to array management's acts, both supervisor and employee. The management has to take pro-active actions in assuring that all employees are fully-aware of standardized behaviours. Besides that, the management must perform good examples in daily behaviours. The decision of management to hold the principles of moral values, although it faces tough decision, will serve as a positive message for all employees. The management has to sustain the long term objectives.

This is contradicting with the head of Alfamart' store if an employee committed mistake, he/she did not get the sanction, as an instance supervisor does not uphold the discipline in working nuance, maintain the honesty, facts, justice and collaboration among employees. Supposedly, the supervisor has to be given sanction through reprimand or an official warning letter.

Commitment to Competence

The Commitment to competence is the required knowledge and skill to complete tasks as: management's consideration towards level of competencies of particular tasks and how this level transforms into required knowledge and skill.

A company must recruit competent and trusted employees to elevate creativity and initiative in countering current dynamic condition. Therefore, it is essential for the HR to fill in the job vacancy with individuals who possess the knowledge and skills as expected.

Alfamart is very attentive to employees' skills they are recruiting. A skilful individual accordingly to each job description is suitable in shaping his/her productivities and resulting a qualified performance. Alfamart often select its employees to be further involved within trainings. Alfamart also allocates employee based on the skills and knowledge they possess.

Philosophy and Management Operational Style

The philosophy and management operational style is a character of a management whether it is risk taker or risk avoider. The manager has to be pro-active as the example of ethical worker by behaving accordingly personal ethical codes. The manager also responsible to construct company's code of conducts, and treat each employee fairly and respectfully. Manager holds the responsible to emphases the importance of internal control.

The philosophy of management occurs in Alfamart is to ease the daily goods' supply of consumers and provides the best service. It is accomplished in order to meet consumer's satisfaction. In a well-managed relationship within a company, an excellent collaboration among employees must be sustained to provide best service for consumers and in the consideration of suggestion or an idea. As an instance, consumer asks a question to one of the employee and the employee does not answer the question.

Organizational Structure

A company's organizational structure describes the authorities' and responsibilities' division in meeting the objectives. This organizational structure has to be presented explicitly in graphic formats in order to provide clear information of the responsible person. The organizational structure of a unit within a company, limits the existed responsibilities and authorities. This is also connecting the line of communication.

Alfamart has applied an organizational structure which describes a connection between related sections. There is no proper job's separation. Nevertheless, in the current organizational structure, the written characterization of authorities and responsibility are still unavailable. Also, the assistant of the head's store plays the role as the person in charge for administrative matters, as Alfamart does not hire more employee for this specific role.

Policy and Human Resource Practice

The policy and human resource practice which includes staffing's management system to produce competent and trusted employee in a way to contribute an effective control, the methods of recruiting them, evaluate and paid. Human resource practice includes employees' recruitment, orientation, training, motivating employees, evaluating, promoting, compensating, counselling, protection for the employees and releasing them.

A proper human resource practice will enable the company to meet efficiently operation system and preserving data's integrity. Alfamart has its own policies in recruiting new employees. This selection process is aimed to pull qualified employees as well as being committed in running tasks and responsibilities.

Control Activity

Within a company, the job's separation as the function of authority is unavailable. Authorisation is carried out by each head of divisions in order to be monitored in the transaction process. Alfamart has not applied the separation of sales, finance and accounting yet.

Alfamart has provides fitting authorization accordingly to each level ad activities within the company. One of them is the authorization of discount proposed by the existed branch. This needs to be authorized in order to avoid the discrepancies of counting in branches.

Information and Communication

Information is essential for each entity to perform internal control's responsibilities in supporting the accomplishment of the goals. Information required by management are relevant information both external and internal in sustaining the function of other components of internal control.

The obtained or resulted information through communication process between both internal and external parties are accomplished continuously and repeatedly, also all information and communication are considered as identification, and exchanging information in a form and time that enables individuals to perform their responsibilities.

Alfamart has conducted the identification process and its activities' records properly, shown by records of transaction of the sorted stocks from their storage. The lack of communication between cashier and saleswoman/man causing discrepancy of prices on the store's label and receipt is still un-updated.

Monitoring

Monitoring includes process of reviewing performances of the internal control all the time, and ensuring whether it has been properly run as expected, also whether it has been updated with the current updates. Monitoring should be accomplished by an assigned individual, whether it is on design stage or operating the control in timely manner, in order to determine whether the internal control has been adjusted with the dynamic changes.

The lack of performances' monitoring between employees in Alfamart has caused frauds conducted by some employees. The monitoring in Alfamart usually conducted by progressive activities and enabling the determination of qualities and internal control. Internal control of this monitoring has to be reported to the head of store according to the facts on field. Data possessed by company as in documents about sales transactions applied by Alfamart are as cash registration, cash deposit reports, sales reports of each cashier, and other supporting documents. Data obtained from the company shows that the company has handed the procedural data that is applied in Alfamart.

Consumers' opinions about Alfamart

In a world of retail's industry, specifically in countering current competition, consumers' satisfactory is one of the keys of success of a business. By satisfying the consumers, an organization can elevate its profit and resulting a wider market (Barsky,1992).

So it can be stated that, consumers' satisfaction is a feeling, hope, or emotional judgement to the use of service or product. There are three assessments of satisfaction; better performance from expectation, performance is equal to the expectation, and lower performance as expected. Consumers' satisfaction assessment (Kotler,1994) can be measured by asking directly to the consumers by using range. The other method is by asking consumers to create the suggested lists for improvement.

Consumers' opinions for Alfamart has indicated that Alfamart has lower performance as expected by them, since the employee serves consumer in a poor way, prices have never

been updated, negligence of cashier in calculating stocks' prices, the ink on the receipt is unclear. These contradict to the theory of consumers' satisfaction since the employee's performance is lower than consumer's expectations.

5. Conclusion, Limitation, and Suggestion

Conclusion

The conclusion of this thesis entitled analysis of internal control and sales accounting information system in Alfamart is the discrepancy of the prices on the store's label and the receipt indicated the weakness in internal control in the cashier and saleswoman/man, where it is required for these individuals to collaborate, cashier must updating the price periodically on each day, then there will be no discrepancies between prices on the store's label and receipt, since the change of selling price can be changed from the headquarter.

Dual functions between assistant of the head store and administrative division, which implicated the person cannot run automatic checking of employees' accuracy, also potentially creating frauds and mistakes. Therefore, it is suggested that the dualism has to be separated, assistant of head's store will fully concentrate to his/her responsibilities which is to control employees and producing sales reports.

Cash deposit in where the assistant of head's store, head of the store entrusts goods' deliveries through driver along with the stores' receipt, can be seen as the lack of effectiveness and less secure from security point of view. It is recommended that the assistant of the head's store deposits the sale through the bank, which is safer and more effectively. It does not have to wait for the deliveries conducted by driver, and also to avoid a massive amount of money stored in the store's safe. If there are extra money after the deposit, it is recommended that Alfamart should create petty records in a book by using the fluctuation method to replace the lack of cash caused by mistakes or frauds.

Suggestion

1. Theoretical Suggestion
   For the future researcher who desires to conduct further research about internal control and accounting information system of sales in Alfamart, it is recommended that adding the sales by utilization of credit card.
2. Practical Suggestion
   - It is recommended to have firmness and clarity in running all cash sales activities, and the internal control of carrying out obligations.
   - Sumber Alfaria Trijaya, Tbk. must improve the system and procedure of cash sales system with the full support proper of internal control by adding some functions or divisions to avoid dualism in carrying out tasks.
   - PT. Sumber Alfaria Trijaya, Tbk must shaping more perfect organizational structure by applying separating the function of assistant of the head's store and administrative tasks or merchandiser that is currently also acts as head of the storage since Alfamart does not hire more staff. Therefore, each division's tasks can be identified clearly.

Limitations

Limitation is one of the obstacles in conducting this research. The researcher is aware of the limitations in conducting this study in Alfamart Pondok Hijau East Bekasi as written below:
1. The inability of interviewing the supervisor and head of the storage that cause the researcher could not dig deeper in relation to the internal control of the cashier.
2. Limited time with the informants which causing lack of information about analysis of internal control and accounting information system of sales in Alfamart, East Bekasi.

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Porter's Value Chain Analysis in the Flat Stone Industry as the Determination of Efficiency Strategy

Desita Natalia G[1], Priandini Rahmawati P[2], Desi Fatmawati[3], Moh. Adenan[4]
[1,2,3,4]Economic and Business Faculty, Jember University, 68 121 Jember, Indonesia

Abstract

The flat stone is a natural stone product commonly used as a complementary material to beautify the building. The flat stone is a natural stone product typically from Jember that digged from dune (small hill). The existence of 437 dune Becomes a potential resource that should be developed. But most of the new companies that run in the flat stone industry have a tendency not to last long. Many new companies go bankrupt in just one year. The problem is being expected comes from the inefficiency of company activities. Therefore, there needs an analysis of the company's activities to enable the company to operate and efficiently. Value chain analysis is analytical tools that Identifies the primary and secondary activities of the company that aims to calculate how much value added in each chain of company activity from upstream to downstream.

Keyword: Value Chain Analysis; Porter's Value Chain; Efficiency; Flat Stone

1. Introduction

The existence of dunes will be a great potential to be developed for Jember, supported the statement of the results of the study noted that the number 379 is still untapped dune [1], Gumuk (dunes) is a place of raw material flat stone (also known as stone plates)[2], The existence of flat stone (the next we will use stone plates) are used as an ingredient in dishes stone handicraft industry Jember (complementary materials of houses and buildings). When you see the potential dune Jember plate stone handicrafts industry is possible to develop well. However, problems always arise from the production and absorption of market demand resulted in activity is always decreased. In addition to the stone plates substitute products, the emergence of other Performance Management which has a strong bargaining created a situation which is detrimental to the stone plate industry handicraft activities Jember. The concept of Competitive Advantage in the sphere of small companies is an important factor to consider would provide a wide range of financial influence on industrial activity such as refund and compensation [3], [4]found competitive advantage is the heart of a company, the concept of competitive advantage can be seen in several as follows: 1) New Entrant; 2) Supplier Bargaining; 3) Buyer; 4) Substitute 5) and Intensity of Rivalry. Unisex jam it important enough other factors to consider such as knowing the strategy of competition between other companies. Bargaining (bargaining) among suppliers with buyers such as, in determining the price as it has been known when more complete information, the more stringent the bargain price of raw materials and intermediate products supplier (supplier) with the company and the company with the buyer (buyer). In addition the needs of buyers who are relatively well be the thing to note, Consumers who are competent are usually trying to compare similar products among enterprises of the company before making a transaction. The growth rate is generally influenced by the purchase of interrelationship of three elements such as industrial growth, growth in major market segments, as well as changes in industry and market share in its main segments.

In addition to explaining the concept of competition [4]also suggested a concept of Value Chain as a supporter of a good competitive strategy formulation. Value Chain

of the value chain is a series of activities by the company in processing the input into output[5]ie the entire value added activities ranging from suppliers, manufacturers, up to the hands of the end consumer (buyer). The inputs used can be goods, time, equipment, skill, knowledge and system services that will be processed by adding utility value so as to produce output worth more to consumers / customers. The concept of dividing the company/industry into two parts. The first is the primary activity that consists of Inbound Logistics, Operations (operations management), Outbound Logistics, Marketing and Sales, and Service. The second is supporting activities that consist of Procurement (procurement), Technology Development, Human Resource Management (HRM), and Firm Infrastructure. Furthermore[6] also theorized that the structure of an industry it is necessary to create a good strategy which focuses on the analysis contained in the introduction of the industry structure underlying characteristics of an industry which form the arena where strategies can be developed. [7]stated that the concentration consists in two types, namely the concentration of industry (market concentration) and the concentration of aggregate, industry concentration reflects the role of several large companies in a market or industry while aggregate concentration reflects how important number of major companies in the overall economy. While the industry concentration can be expressed in a variety of factors such as good luck (the company's first-to- market), technical factors (level of the breadth of the product market), economies of scale enterprise, the scarcity of economic resources, technological advances, increasing of product markets, as well as the number of firms there are in the industry (newcomers), policy and regulatory factors.

2. Methods

This research use descriptive qualitative approach. The focus of the study is to formulate a new strategy for industrial enterprises Jember stone handicrafts plate according to the indicators obtained from literature and previous research. This study using snowball sampling techniques and there are four categories of the population and the sample on the research conducted, which consists of the entire population of industrial enterprises plate stone handicrafts and marble industry Jember Regency Tulungagung, suppliers and buyers for the stone industry handicraft plate Jember. Data collected by observation and semi-structured interviews. Test the validity of test data using triangulation. Triangulation is a data checking interviews to different sources and compare the suitability of the answer. As for the data analysis techniques are:

1. Determining the structure of the industrial market through the concentration ratio of four largest companies in East Java (CR4). And identify the structure through a characteristic stone corporation handicraft plate.
2. Data identifying the internal and external activities of the companies belonging to the industry and in accordance with the samples was determined using the method of interview
3. Analyzing the value added at each of the company's activities
4. Sort and identify the factors that are less optimal and less efficient in the company through the analysis of the activities that have been found (sorting unnecessary activities and reduce costs to a minimum on a stone plate handicraft company Jember)
5. Determining a good competitive position and strategic steps in the stone industry Jember handicraft plate so as to create a good strategy

3. Findings and Argumetnt

Market Structure Analysis

Judging from the common characteristics that include the large number of small and medium scale industries (SMEs) than large-scale industry as well as by the many types

of natural stone industry in accordance with the types of natural stone in each the natural stone industry is a fragmented industry. Based on CR4 value is equal to 0, then it can be identified that the structure of the stone plate industrial market is perfectly competitive market. However, when seen from the characteristics and features of the company in the form of a large entry barriers in terms of capital, labor and experience, then the stone plate industry has a monopolistic market structure where there is a high barrier to entry however free to exit. So the company out of the market do not affect prices.

Table 1. Concentration Ratio of Flat Stone Industry

2014 (in Tons)	
mineral Fuel 1,011,169,270.00 Share **Category**	Flat Stone 1,800.00 0.00000178 **low**

Judging from the common characteristics that include the large number of small and medium scale industries (SMEs) than large-scale industry as well as by the many types of natural stone industry in accordance with the types of natural stone in each the natural stone industry is a fragmented industry. Based on CR4 value is equal to 0, then it can be identified that the structure of the stone plate industrial market is perfectly competitive market. However, when seen from the characteristics and features of the company in the form of a large entry barriers in terms of capital, labor and experience, then the stone plate industry has a monopolistic market structure where there is a high barrier to entry however free to exit. So the company out of the market do not affect prices.

Value Chain Analysis

Identification of activities in the value chain activities are divided into two categories namely primary activities and support activities. The main activities in the value chain analysis consists of inbound logistics, operations, outbound logistics, sales, and service. While supporting activities consist of the company's infrastructure, human resources, technology development and supply of raw materials.

In the process of identifying existing activities on the CV Grace, the author divides into several categories as the main activity starting from the process of obtaining raw materials, processing of raw materials to finished goods, the sales process, as well as the distribution of products and services to customers. While the category of supporting activities in the company CV Rahmat includes the company's infrastructure development, human resource management, to the provision of raw materials and production equipment. While Marble Industries has almost the same activities.
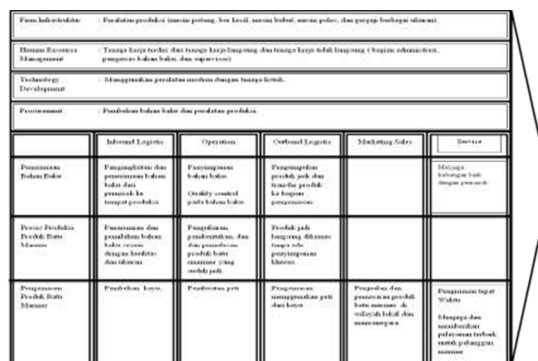
Figure 1. Value Chain Structure of Flat Stone Industry
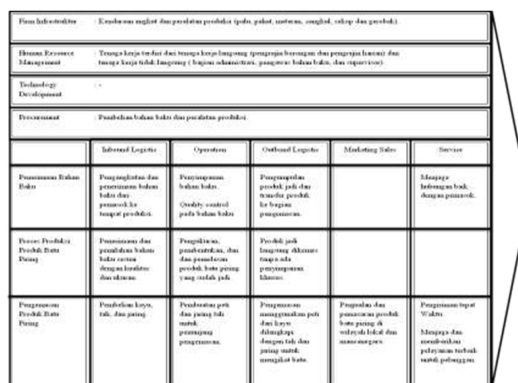
Figure 2. Value Chain Structure of Marble Stone

Table 2. Cost Composition on Each Value Activity in Flat Stone Industry

No.	Subject	Cost per 285 meter (Rp)
	Primary Activities	
1	Inbound Logistics Checking Material Cost	150,000
2	Operation packaging Cost Case packaging Net string	 3,000,000 3,500,000 1,000,000
3	outbound Logistics fuel Cost Shipping Cost Jember- FOB shipping Surabaya Surabaya-Japan	 2,000,000 - 12,000,000 9,450,000
4	Marketing and Sales Fee Informal Promoters (5%)	2,483,561
5	Services Consumer Service Cost	2,700,000
Total Cost		**36,283,561**
	Secondary Activities	
1	Procurement equipment Cost	500,000
2	Technology Development	-
3	Human Resource Management Secretary Wage Manager Wage Craftsman Wage (10,000 / meter2) consumption Support Health and Safety Support	 500,000 1,250,000 2,850,000 1,400,000 325,000
4	Firm Infrastructure Disposal Tax (1%) Depreciation Cost of Vehicle	 496.712 833.333
Total Cost		**8,155,045**

Source: Rahmat CV 2018, processed by journalist

Table 3. Cost Driver on Each Value Activity in Production 285 m²

No.	Activity	Cost drivers	Value
1	Freight-in material	Number of material	7,000,000
2	Controlling	Working hours	50,000
3	Material sorting	Working hours	100,000
4	Stock holding cost	Number of stock	-
5	Selling	Number of orders	49,671,225
6	Packaging	Number of shipping	6,500,000
7	Shipping	Number of shipping	12,000,000
8	Processing order	Number of orders	-
9	Complain handling service	Number of consumer complaints	2,700,000
10	Informal promotion	Number of new consumer	2,483,561
11	Controlling the quality product	Checking hours	150,000

Source: Rahmat CV 2018, processed by journalist

Table 4. Activity Classification

No.	Activity	RVA	BVA	NVA
1	Freight-in material		7,000,000	
2	Controlling		50,000	
3	Material sorting	100,000		
4	Stock holding cost			-
5	Selling	49,671,225		
6	Packaging	6,500,000		
7	Shipping	12,000,000		
8	Processing order	-		
9	Complain handling service	2,700,000		
10	Informal promotion	2,483,561		
11	Controlling the quality product			150,000
Total Percentage		**73,454,786 (91%)**	**7,050,000 (9%)**	**150,000 (0%)**

Source: Rahmat CV 2018, processed by journalist

Activities on the CV Rahmat every 285 square meters of production of stone plates asymmetry is 91% including the activities of the Real Value Added, ie activities that provide added value to customers, amounting to 9% including the activities of Bussiness Value Added, the activity that adds value to the production process and 0 % including non-value added activities, ie activities that do not give added value for customers and the company. Through the analysis of the classification of the activity, it can be concluded that the activities undertaken Rahmat CV has been effective and efficient because it does not have the Non Value Added activities.

Table 5. Cost Composition on Each Value Activity in Marble Stone Industry

No.	Subject	Production cost per 300 meters
	Primary activities	
1	Inbound logistics Checking material cost	-
2	Operation Packaging cost	9,000,000
3	Outbound logistics Holding cost Fuel cost Shipping cost Tulungagung - jakarta expedition Fob jakarta - europe	1,000,000 1,250,000 1,750,000 -
4	Marketing and sales Fee informal promoters (5%)	-
5	Services Complaint handling service	-
Total cost		**13,000,000**
	Secondary activities	
1	Procurement Equipment cost	26 Million
2	Technology development	-
3	Human resource management secretary wage Manager wage **Craftsman wage (per day rp 90.000, -)** **Support cost**	350,000 900,000 2,700,000 2,300,000
4	Firm infrastructure disposal Tax (1%) depreciation cost of machine Depreciation cost of vehicle	496,712 2,000,000 883,333
Total cost		**11,890,045**

Source: Home Industry Tulunggagung 2018, processed by journalist

Table 6. Cost Driver on Each Value Activities in Production 300 m²

No.	Activity	Cost drivers	Value
1	Freight-in material	Number of material	24,000,000
2	Controlling	Working hours	-
3	Material sorting	Working hours	-
4	Stock holding cost	Number of stock	1,000,000
5	Selling	Number of orders	90,000,000
6	Packaging	Number of shipping	9,000,000
7	Shipping	Number of shipping	3,000,000
8	Processing order	Number of orders	-

No.	Activity	Cost drivers	Value
9	Complain handling service	Number of consumer complaints	-
10	Informal promotion	Number of new consumer	-
11	Controlling the quality product	Checking hours	-

Source: Home Industry Tulunggagung 2018, processed by journalist

Table 7. Activity Classification

No.	Activity	RVA	BVA	NVA
1	Freight-in material		24,000,000	
2	Controlling		-	
3	Material sorting	-		
4	Stock holding cost			1,000,000
5	Selling	90,000,000		
6	Packaging	9,000,000		
7	Shipping	3,000,000		
8	Processing order	-		
9	Complain handling service	-		
10	Informal promotion	-		
11	Controlling the quality product			-
Total Percentage		**103 million (80%)**	**24,000,000 (19%)**	**1,000,000 (1%)**

Source: Rahmat CV 2018, processed by journalist

Activities at Home Industry Tulungagung to 300 square meters production of marble stone is 80% including the activities of the Real Value Added, ie activities that provide added value to the customer, at 19%, including the activity of Business Value Added, the activity that adds value to the production process and 1 % including non-value added activities, ie activities that do not add value for the customer and the company. Through the analysis of the classification of the activity, it can be concluded that the activities undertaken Home Industry Tulungagung yet effective and efficient because it has a 1% Non Value Added activities.

Based on the above analysis, the authors formulate a strategy based on two main categories that is based on the strategy of structural and generic strategy. If seen from industry structure, plate stone industry has fragmented monopolistic market structures. So that the structural strategy that can be done is to act cooperatively with the natural stone industry in collaboration with others to form a new product innovation and minimize fragmentation of the market. Examples of product innovation that can be done is to make the tiles or wall hangings with several combinations of different rock types such as a mixture of stone and marble plates. Other suitable strategy applied to the monopolistic structure is to determine the target marketing is focused on the middle and upper class consumers and foreign community.

Based on the results of the analysis of the generic strategy is to focus on customer service differentiation of services to build a good image of the company, retain old customers (customers) and to support promotional activities engineering word of mouth through the customer testimonials to potential new customers. The action is also applied in the

selection of the focus of market segmentation is the burgeoning middle class society and the international market have bid a higher price. Event services differentiation consumers will reduce the need for a low cost position.

When costumers have added value is dominant, it is important to make the selection of buyers and implementing purchasing strategies, the most important point in the selection of the buyer is to improve services and good relations with customers to reduce the bargaining power of buyers and expand the marketing area for collect new customers. While purchasing strategy includes the purchase of raw materials at different suppliers and implement standardization of raw materials to avoid switching costs and reduce the bargaining power of suppliers.

4. Conclusion

Decreased productivity Jember stone handicrafts plate caused by the decline in domestic and international demand. The drop in demand caused by inefficient production activities as well as the lack of ability to compete, resulting in many new companies went bankrupt. Productivity can be increased again through the implementation of competitive strategies are formulated based on the analysis of Value Chain. The strategy takes the company a handicraft Jember plate is divided into 2 formulation of strategies: (1) structural strategy that determines the position of the company in the market in which the market is monopolistic fragmented stone plate so cooperative strategies can be utilized for this type of market then, (2) the generic strategy is the company's internal strategy includes cost advantage, differentiation and focus on value added activities of consumers where the most appropriate strategy is to add activities that can increase the value added from the consumer side.

Then the strategy of the buyers covering the buyer selection strategy through targeted marketing in order to eficiency promotion costs and reduce the bargaining power of customers and through purchasing strategies to reduce the bargaining suppliers. Of the existing overall strategy, in cooperation with similar companies to acquire innovative new products and increase customer service activities aimed to strengthen the differentiation and increase range of promotional products. differentiation and focus on value added activities of consumers where the most appropriate strategy is to add activities that can increase the value added from the consumer side.

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Comparative Analysis of Electronic Procurement and Conventional Proucurement at the Coordinating Ministry for Political, Legal and Security Affairs

Irma Puspita[1], Eko Sembodo[2], Tri Suratmi[3]

[1,2,3]*Universitas Respati Indonesia, Jl. Bambu Apus I No. 3 Cipayung, Jakarta Timur, 13890, Indonesia*

Abstract

Electronic procurement is a comprehensive process in which the government use IT system to establish agreement for the acquisition of product or service. E-procurement is expected to improve the efficiency of time and cost and increases transparency in procurement process. The purpose of this study is to compare the efficiency of time, cost and transparency between electronic procurement and conventional procurement. The research was conducted at the Coordinating Ministry for Political, Legal and Security Affairs. This study used a quantitative and qualitative approach with a comparative retrospective design. The subject of this research consisted of members of the Procurement Services Unit and the Procurement Project Leader at the Coordinating Ministry for Political, Legal and Security Affairs. Data analysis using paired sample t test. The results show that there is a significant difference in time aspect with a conventional mean value of 25.125 and an electronic mean of 29,575. There is a significant difference in the transparency aspect with a conventional mean value of 20,525 and an electronic mean of 30,875. There is a significant difference in the cost aspect with a conventional mean value of 20,775 and an electronic mean of 31,700. The conclusion of this research is the e-procurement has brought a better change in procurement process at the Coordinating Ministry for Political, Legal and Security Affairs. Suggestions for improving the implementation of e-procurement at the Coordinating Ministry for Political, Legal and Security Affairs are socialization of regulations and technical guidance of the application, adequate maintenance of information technology infrastructure and facilities and coordinating with LKPP to complete the e-procurement application features.

Keywords: Eprocurement, Efficiency, Transparency, Public Policy

1. Introduction

Since the reform era, the demands for good governance have grown. Good governance is interpreted as a participatory, effective, honest, fair, transparent and accountable government to all levels of government. Now good governance becomes the most prominent issue, the society is very demanding the government to implement good government administration in order to improve public services to the society.

Excellent public services should be supported by the adequate and quality facilities and infrastructure for society and the government agencies who provide public services. This is the important purpose of the procurement. Based on Presidential Decree Number 80 Year 2003 concerning Guideline of Public Procurement Article 2 paragraph 2 stated that the purpose of procurement of goods / services is to obtain goods / services required by Government Agency in sufficient quantities, with quality and price that can be accounted for, in a certain time and place, effectively and efficiently, under applicable terms and ordinances.

Public procurement is regulated in Presidential Decree Number 80 Year 2003 which contains mechanism or procedure of public procurement. However, in the presidential decree, the procurement mechanism is still carried out manually by bringing together

directly between the prospective provider and the procurement committee. Conventional procurement felt to have some weaknesses such as inefficiency in time, less transparent and procurement costs are quite high.

The government of Indonesia try to improve the effectiveness of the public procurement by issuing of Presidential Decree No. 54/2010 about procurement of goods/services in government. One of the difference from the previous regulation is that in Article 131 paragraph 1 stating that the State Ministry / Agency / Department/Institution must use e-procurement in public procurement since year 2012. With the implementation of e-procurement, it is expected that the public procurement can be implemented more efficiently, effectively, transparently, competitively, non-discriminatory, open and accountable.

The regulation of eprocurement is continuously improved by the government. One of the improvement is by the issuance of Presidential Regulation No. 4 of 2015 about fourth change of presidential regulation number 54/2010 about the procurement of goods / services in government. There is some new mechanisms to support the implementation of electronic procurement in this regulation. These mechanisms include e-tendering and e-catalog. E-Tendering is the procedure for the selection of the Provider of the Goods / Services which is done openly and can be followed by all Providers of Goods / Services registered in the procurement system electronically by delivering 1 (one) time offering within a predetermined time. E-catalog is an electronic information system that lists, types, technical specifications and prices of certain goods from various providers of government goods / services.

Coordinating Ministry for Political, Legal and Security Affairs (Kemenko Polhukam) is one of the central government agencies that implement e-procurement policy. Kemenko Polhukam is a central government agency that help the President in synchronizing, coordinating and controlling the planning, compilation and implementation of policies in the fields of politics, law and security. To be able to carry out its duties and functions properly, so as to produce quality policy recommendations for the President and beneficial to the community, Kemenko Polhukam requires the support of facilities and infrastructure both in the form of goods and services of quality. Therefore, the implementation of effective procurement at the Coordinating Ministry for Political and Security Affairs is urgently needed.

The Implementation of E-procurement at the Coordinating Ministry for Political and Security Affairs has began in year 2013 with the issuance of the Decree of the Coordinating Minister for Political and Security Affairs Number Kep-80 / Menko / Polhukam / 10/2012 about the Procurement Services Team. The implementation of e-procurement within Kemenko Polhukam brings a better in work behavior. Open bidding through internet facilities that can be accessed from anywhere will make the auction easier. Providers may enter the auction without coming directly. This will reduce direct contact between the procurement committee and the bidders. This change is expected to increase transparency in the process of procurement, improve the efficiency of the time aspect and reduce costs in the implementation of procurement in Kemenko Polhukam. This research will analyze the comparison of electronic procurement and conventional procurement at Kemenko Polhukam seen from time aspect, transparency and cost.

2. Literature Review

Electronic Procurement (e-procurement) is defined as the use of information technology to facilitate business-to-business (B2B) purchase transactions for materials/ goods and services (Wu et al, 2007). According to Oliviera (2001) e-procurement is the process of purchasing the necessary goods and services for operational needs of organizations by using information technology. This is in line with Neef (2001) which

identifies e-procurement as adopting an internet-based system in the buying process. The use of information technology systems in e-procurement explained by the above opinions are in line with Presidential Regulation No. 4 of 2015 which defines electronic procurement is the procurement of goods/services implemented by using information technology and electronic transactions in accordance with provisions of legislation.

Siahaya (2013) in accordance with article 3 of Presidential Regulation 54 of 2010 states that in the implementation of procurement activities must apply the below principles:
1. Effective, in accordance with the needs that have been set and can provide maximum benefits in accordance with the goals set by the company
2. Efficient, cultivated by using funds, power, and facilities as small as possible to achieve the target in a short time and can be accounted for and contribute as much as possible
3. Competitive, done through selection and fair competition among providers of equivalent goods/services and meet certain requirements/criteria based on clear and transparent provisions and procedures
4. Transparent, all provisions and information, both technical and administrative including evaluation procedures, evaluation results and awarding of winners shall be open to interested providers of goods/services
5. Fair, non-discriminatory in giving treatment to all providers of goods/services and does not lead to profit to certain parties
6. Responsible, achieving goals in physical, financial and benefits in accordance with the principles and policies and provisions applicable in supply chain management
7. In favor of domestic products, it means supporting and nurturing national capabilities to better compete at the national, regional and international levels
8. Environmentally sound, support and develop activities with regard to environmental capabilities and impacts

Based on Presidential Regulation No. 54/2010 about public procurement, basically the stages in the procurement process are as follows:
1. Announcement stage
   This stage is the initial stage of the procurement of goods/services. The procurement announcement contains the name of the package of work, place and time of registration as well as the conditions that must be met. The announcement of goods/services procurement package on a conventional system is announced through the agency board announcement as well as through print media. While the announcement on the electronic system is announced on the national procurement portal that can be accessed by all communities from all over Indonesia.
2. Registration stage
   The registration stage is the stage that shows how many participants are interested in following the procurement. In conventional procurement, registration is done manually by coming directly to the agency conducting the auction. While on electronic procurement registration is done online through Electronic Procurement System or Sistem Pengadaan Secara Elektronik (SPSE).
3. Document retrieval stage
   At the document retrieval stage, registered entrants will receive a package of procurement documents which include the Terms of Reference, Estimate Prices, Technical Specifications of Goods/Services and the contract design. In conventional procurement, procurement documents are given in hardcopy or document softcopy form on CD. Participants must come directly to take procurement documents to the Procurement Unit of the agency holding the auction. While on electronic procurement, procurement documents can obtained by downloading from the portal procurement agency that held the auction.

4. The job description/aanwijzing stage
   At the job description stage, participants who have taken and studied the procurement document may ask questions if there are other requirements or concerns that need more explaining or that are inconsistent with applicable regulations. In the conventional procurement, the description/aanwijzing carried out directly face to face between the participants and the committee. While in the electronic system, aanwijzing is done online through the portal procurement agency concerned.

5. Submitting and opening bidding documents stage
   One day after the job description, the participants can now enter the bidding document. The bidding will then be opened at the time specified in the procurement schedule. In the conventional system, document submission is carried out manually by submitting a single original document and two copies of the photocopied document to the procurement committee. This document will then be opened together to be checked for completeness by two witnesses from the other participants. On electronic procurement, the bidding document submitted by uploading softcopy that has been encrypted or secured by method of coding into procurement portal. Documents can only be opened by the committee listed in the system as the package committee concerned. The opening of the document encryption is using APENDO, an application designed by the State Code Institution so that the security and confidentiality of the bidding documents are maintained. Documents that have been opened will then be evaluated by the committee covering administrative, technical and pricing evaluations.

6. Winner announcement stage
   After performing administrative, technical and price evaluation then based on the order of the rate, three providers candidate which are the winner of serial number 1, 2 and 3 are determined. The announcement of the winners in conventional system is done through board announcement institution. While on electronic procurement, the announcement of winners is through procurement portal.

7. Protest Stage
   After the announcement of the winner, if there is any participant who is not satisfied with the result of the evaluation of the committee in determining the winner then they can file a protest. Protest period is set for 5 days. The first objection is addressed to the Procurement Services Unit. If they still not satisfied with the answer from the Procurement Service unit then the participant can file an appeal directed to the minister/head of institution/head of region concerned.

8. Contract signing stage
   The final stage of the procurement process of goods/services is the signing of the contract. After the winner of the auction is obtained and there is no objection then the winner may be appointed as the provider of goods/services by the Proxy of Budget User and may then sign the contract with the Committing Officer. The points of agreement between the two parties should be set forth in the draft contract in the procurement document.

3. Research Method

This study used a quantitative and qualitative approach with a comparative retrospective design, it is a study that compares a process that has occurred in the past then performed a synthesis to determine the predominances of the two processes studied. This research was conducted at the Coordinating Ministry for Political, Legal and Security of Indonesia which is located at Jl. Medan Merdeka Barat No. 15 Central Jakarta. The population in this study was all people involved in the procurement of goods/services in all the state ministries and institutions in Indonesia. In this context, researchers are only researching in

the Coordinating Ministry for Political, Legal and Security of Indonesia. The total population in Coordinating Ministry for Political, Legal and Security of Indonesia was only 40 people, consisting of employees of Kemenko Polhukam who were involved in the procurement process at Coordinating Ministry for Political, Legal and Security Affairs since 2013 until the 2016 which was stipulated through the Decree of Proxy of Budget User of Coordinating Ministry for Political, Legal and Security Affairs. Furthermore, the total population of research which amounted to 40 people was used as research samples. The sample of the study was chosen in accordance with the purposive sampling, which is a technique of determining the sample with a specific purpose. The entire sample population was the parties involved and who understand the mechanism of procurement of goods/services electronically and conventionally in Coordinating Ministry for Political, Legal and Security of Indonesia.

The instrument used in this study was a questionnaire consisting of question items related to aspects of time, transparency and cost on electronic and conventional procurement. The instrument was then used directly to conduct research after it went through expert validation. The validity of the instrument was tested by using the Pearson Correlation validity test and Cronbach Alpha reliability test.

To determine the comparison of aspects of time, transparency and cost on electronic and conventional procurement, the researcher used paired sample t test. As a preliminary analysis, the researchers conducted the Kolmogorov-Smirnov normality test and homogeneity test.

4. Result and Discussion

The comparison of electronic and conventional procurement at Coordinating Ministry for Political, Legal, and Security Affairs viewed from the aspect of time, transparency and cost are as follows:

Comparison of Time Aspects in Electronic and Conventional Procurement

Siahaya (2012: 11) states that one of the principles of procurement is the principle of efficiency, meaning that the procurement is cultivated using the least amount of funds, resources and facilities to achieve the objectives in a short time and can be accounted for and contribute as much as possible. Setiyadiharja (2016: 19) states that time-consuming for the conventional procurement process are more time-consuming in paperwork than by servicing suppliers or negotiating prices. Meanwhile, Setyadiharja in Mutiarin & Zainudin (2014) stated that e-procurement is more efficient in terms of time and operational cost when compared to conventional tender.

The research conducted at Coordinating Ministry for Political, Legal and Security affairs shows results that are in line with the opinions of the experts above. Time variable in this research is in the form of the long duration of an activity conducted by research subjects in carrying out each stage of the procurement process from the announcement of procurement until the signing of the contract. Time aspect measurements were performed by distributing questionnaires to 40 research samples. The questionnaire consisted of 8 questions relating to the time of conventional procurement of goods/services and from 8 questions related to the electronic procurement time of goods/services. The average comparison of time aspects between procurement of goods/services electronically and conventionally is as follows:

Table 1 . The average comparison of time aspects between electronic procurement and conventional procurement

Number of Question	Procurement Stage	Mean Conventional	Mean Electronic	Nilai Sig. (2-Tailed) Paired Sample Test	Sig Limits	Explanation
1	Announcement	2,85	3,5	0,005	0,05	different
2	Registration	2,95	3,95	0,000	0,05	different
3	Document retrieval	2,9	3,88	0,000	0,05	different
4	Job Description	3,18	3,8	0,007	0,05	different
5	Submitting and bidding document evaluation	3,3	3,18	0,641	0,05	Not different
6	Winner announcement	3,2	3,85	0,001	0,05	different
7	Protest	3,1	4,08	0,000	0,05	different
8	Contract signing	3,65	3,35	0,258	0,05	Not different

From table 1 it is found that in the time aspect there is a significant difference between electronic and conventional procurement of goods/services at the announcement, registration, submitting the document, job descriptions, announcement of winners and protesting. As for in the evaluation stage of the contract and the signing of the contract, there is no significant difference. Details of differences for each stage of procurement of goods/services are as follows:

1. Announcement stage

    Based on table 1 at the announcement stage, the conventional mean value is 2.85 while the electronic mean is 3.5 and has a significance value of 0.005<0.05 limit. The results show that at the announcement stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that the length of time required to process the announcements for electronic procurement of goods/services is faster than conventional systems.

    Based on interviews with experts this can be explained that the conventional procurement has to publish the announcement of procurement of goods/services through a manual system, that is through bulletin board and print media, so that the committee of procurement of goods/services takes longer only to process delivery announcement. With the implementation of electronic procurement system, the time required by the procurement service unit to process the procurement of goods/service announcements is only one hour and can be done through computer, laptop or smartphone with internet network access

2. Registration stage

    Based on table 1 at the Registration stage, the conventional mean value is 2.95 while the electronic mean is 3.95 and has a significance value of 0.000<0.05 limit. The

results show that at the Registration stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that the length of time required to process the Registration for electronic procurement of goods/services is faster than conventional systems

Based on interviews with experts it can be explained that conventional procurement registration process seized the long working hours of the members of the procurement service unit because they are required to stand by at the place of registration for 7 working days in accordance with the provisions of the length of registration and filing documents specified in the Presidential Regulation. With the electronic procurement system, the registration can be done anytime and anywhere. The calculation of time does not use workday but calendar day. Procurement service unit does not have to stand by at the place of registration because registration can be done online. Prospective providers also do not have to come directly to the agency, only by opening a procurement portal then they can directly register as a candidate. Even within a day a company can follow several packages of procurement at different agencies

3. Document retrieval stage

Based on table 1 at the Document retrieval stage, the conventional mean value is 2.9 while the electronic mean is 3.88 and has a significance value of 0.000<0.05 limit. The results show that at the Document retrieval stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that the length of time required to process Document retrieval stage for electronic procurement of goods/services is faster than conventional systems

Based on interviews with experts this can be explained that conventional procurement document retrieval is done manually. The procurement committee prints and duplicates the documents in hardcopy form, the applicant candidate comes directly to the agency and collects the procurement documents in hard copy. In an electronic procurement system, document retrieval is carried out by downloading a procurement document file from an electronic procurement system that can be done from anywhere and anytime during the time frame of the document retrieval

4. Job Description stage (*Aanwijzing*)

Based on table 1 at the Job Description stage, the conventional mean value is 3,18 while the electronic mean is 3,8 and has a significance value of 0.007<0.05 limit. The results show that at the Job Description stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that the length of time required to process Job Description stage for electronic procurement of goods/services is faster than conventional systems

Based on interviews with experts this can be explained that conventional procurement job description is done face to face. All registered participants are invited so that the implementation of aanwijzing requires the place, time and preparation of a skilled committee just like when preparing for a coordination meeting. In the implementation of aanwijzing there is also some verbal intimidations between prospective providers with the other prospective providers or with the committee, arguments and debate length in order to maintain, adding auction requirements that are perceived as able to be met by certain companies and are felt not owned by other companies and vice versa, or to eliminate certain requirements that are not owned by the company.

In the electronic procurement system, *aanwijzing* is implemented through online communication through the procurement portal so that participants do not need a long time to attend the agency, but can view aanwijzing from anywhere. Verbal intimidation is rare because there is no direct face to face between the participants and the committee

5. Submitting and bidding document evaluation stage

    Based on table 1 at the Submitting and bidding document evaluation stage, the conventional mean value is 3,3 while the electronic mean is 3,18 and has a significance value of 0,641 > 0.05 limit. The results show that at the Submitting and bidding document evaluation stage there is no significant difference between electronic and conventional procurement. This means that research subjects argue that the length of time required to process Submitting and bidding document evaluation stage for electronic procurement of goods/services is same as conventional systems.

    Based on interviews with experts it can be explained that for document evaluation process although there is already electronic procurement system existed, but there is still a stage of procurement that needs to be done manually, that is evaluation of substance or technical evaluation. This stage takes a long time because it involves the user who understands the substance of the work. The Coordinating Ministry for Political, Legal and Security Affairs (Kemenko Polhukam) carries out many studies requiring the assessment of echelon I and II officials who understand the substance of the political, legal and security fields. Most echelon I and II officials in Kemenko Polhukam have a hectic working schedule whether it is a working meeting in Jakarta or a visit to the region so that the substance evaluation should be adjusted to the work schedule of echelon I and II officials

6. Winner announcement stage

    Based on table 1 at the Winner announcement stage, the conventional mean value is 3,2 while the electronic mean is 3,85 and has a significance value of 0.001<0.05 limit. The results show that at the Winner announcement stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that the length of time required to process Winner announcement stage for electronic procurement of goods/services is faster than conventional systems

    Based on interviews with experts it can be explained that in conventional procurement, the announcement of the winners is done manually through bulletin board in the institution. Auction participants should come to the agency to see who is named as the winner. At electronic procurement, the announcement of winners can be seen from procurement portals that can be accessed from anywhere and anytime.

7. Protest stage

    Based on table 1 at the Protest stage, the conventional mean value is 3,1 while the electronic mean is 4,08 and has a significance value of 0.000<0.05 limit. The results show that at the Protest stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that the length of time required to process Protest stage for electronic procurement of goods/services is faster than conventional systems

    Based on interviews with experts it can be explained that in conventional procurement, if there are dissatisfied participants on the decision of the committee in appointing the winning bidder then the filing of the protest is done by a written letter addressed to the procurement service unit. It is in contrast to the electronic procurement system. At the time the participant filed a protest through the spse application by filling the form refutation on the application then at that time also the form is sent and can be read by the procurement committee. So filing a protest through electronic procurement system is faster than conventional

8. Contract signing stage

    Based on table 1 at the Contract signing stage, the conventional mean value is 3,65 while the electronic mean is 3,35 and has a significance value of 0,258>0.05 limit. The results show that at the Contract signing stage there is no significant difference between

electronic and conventional procurement. This means that research subjects argue that the length of time required to process Contract signing stage for electronic procurement of goods/services as same as conventional systems

Based on interviews with experts it can be explained that for contract signing process both in conventional system and in electronic system still executed manually, that is with direct face to face between officer of commitment with provider of goods/services so there is no significant difference from time aspect at this stage. It also takes a long time to draft the contract because of the limited knowledge of the implementers on the types of contracts and contract management

Comparison of Transparency Aspects in Electronics and Conventional Procurement of Goods/Services stages

The definition of transparency is explained by Agus Dwiyanto (2008: 236) which suggests that the concept of transparency refers to a state in which all aspects of the service delivery process are open and can be easily identified by the users and stakeholders in need. Transparency variable in this research is in the form of long duration of an activity carried out by research subjects in carrying out each stage of the procurement process from the announcement of the procurement until the signing of the contract

Transparency aspect measurements were performed by distributing questionnaires to 40 research samples. The questionnaire consisted of 8 questions relating to the transparency of conventional procurement of goods/services and from 8 questions related to the electronic procurement transparency of goods/services. The average comparison of transparency aspects between procurement of goods/services electronically and conventionally is as follows:

Table 2. The average comparison of time aspects between electronic procurement and conventional procurement

Number of Question	Procurement Stage	Mean Conventional	Mean Electronic	Nilai Sig. (2-Tailed) Paired Sample Test	Sig Limits	Explanation
1	Announcement	2,25	4,3	0,000	0,05	different
2	Registration	2,3	3,53	0,000	0,05	different
3	Document retrieval	2,23	4,43	0,000	0,05	different
4	Job Description	2,15	3,4	0,000	0,05	different
5	Submitting and bidding document evaluation	1,95	4,38	0,000	0,05	different
6	Winner announcement	3,4	4	0,001	0,05	different
7	Protest	3,15	3,88	0,000	0,05	different
8	Contract signing	3,1	2,98	0,585	0,05	Not different

From table 2 it is found that in the transparency aspect there is a significant difference between electronic and conventional procurement of goods/services at the announcement, registration, submitting the document, job descriptions, Submitting and bidding document evaluation, announcement of winners and protesting. As for in the contract and the signing of the contract, there is no significant difference. Details of differences for each stage of procurement of goods/services are as follows :

1. Announcement stage

    Based on table 2 at the announcement stage, the conventional mean value is 2,25 while the electronic mean is 4,3 and has a significance value of 0.000<0.05 limit. The results show that at the Announcement stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that the electronic procurement of goods/services is more transparent than conventional systems.

    Based on interviews with experts this can be explained that in conventional procurement, there are only few candidate providers of goods/services who know the existence of procurement of goods/services announcement. This is because the announcement is still done manually through the board announcement agencies and print media. So the provider of goods/services must come to the institutions one by one or to buy some print media to be able to know the existence of procurement of goods/ services.

    In contrast to electronic procurement system. Announcements are made through procurement portals that can be accessed anytime, anywhere and by anyone so that all employers whose fields correspond to work packages have equal opportunity to participate in the auction

2. Regristation stage

    Based on table 2 at the regristation stage, the conventional mean value is 2,3 while the electronic mean is 3,53 and has a significance value of 0.000<0.05 limit. The results show that at the Regristation stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that the electronic procurement of goods/services is more transparent than conventional systems.

    Based on interviews with experts this can be explained that in conventional procurement, not all entrepreneurs get the same opportunity and treatment at the time of registration. One of them is due to the location factor and the opportunity to obtain information. Entrepreneurs whose business location is close to the agency will have greater opportunity compared to entrepreneurs whose business location is far from the agency. Nepotism is also prone to occur, ie entrepreneurs who are invited to register are entrepreneurs who already know or have a relationship with one of the officials in the agency.

    With an electronic procurement system, all entrepreneurs whose field of business corresponds have equal opportunity to register as participants. Registration is done through the procurement portal by filling in the qualification form on the SPSE application.

3. Document retrieval stage

    Based on table 2 at the document retrieval stage, the conventional mean value is 2,23 while the electronic mean is 4,43 and has a significance value of 0.000<0.05 limit. The results show that at the Document retrieval stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that on document retrieval stage the electronic procurement of goods/services is more transparent than conventional systems.

    Based on interviews with experts it can be explained that in conventional procurement,

procurement documents are taken manually and printed in hard copy. Participants must come directly to the agency to be able to obtain procurement documents comprising the Terms of Reference, Estimate Prices, Technical Specifications, Work Plans and Terms and Standards Biding Procurement Documents.

In contrast, in the electronic procurement systems, all such documents can be obtained by downloading from the procurement portal and can be done anytime and anywhere. Documents downloaded are standard in accordance with the template of the Government Procurement Policy Agency.

4. Job Description stage (*Aanwijzing*)

Based on table 2 at the job description stage, the conventional mean value is 2,15 while the electronic mean is 3,4 and has a significance value of 0.000<0.05 limit. The results show that at the Job Description stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that on Job Description stage the electronic procurement of goods/services is more transparent than conventional systems.

Based on interviews with experts this can be explained that in conventional procurement, aanwijzing is implemented face to face and require participants who come directly to attend aanwjzing. Participants who are not attending aanwijzing then do not get any information or explanation of job details.

While in the electronic procurement system, the aanwijzing is implemented online. The list of questions and answers discussed during aanwijzing can be read and downloaded by all registered participants without exception.

5. Submitting and bidding document evaluation stage

Based on table 2 at the Submitting and bidding document evaluation stage, the conventional mean value is 1,95 while the electronic mean is 4,38 and has a significance value of 0.000<0.05 limit. The results show that at the Submitting and bidding document evaluation stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that on Submitting and bidding document evaluation stage the electronic procurement of goods/services is more transparent than conventional systems.

Based on interviews with experts this can be explained that the conventional procurement is evaluated manually by the committee. In this stage, it is difficult to assess whether there is a subjective element of the committee or not. On electronic procurement, because there is no form or feature to carry out technical evaluation. So technical evaluation is still executed manually by the committee. After the evaluation is done manually, the news event evaluation results uploaded into the procurement system electronically.

Viewed from the aspect of transparency, the experts argue that the element of subjectivity is still very strong in this evaluation method because the evaluation process is not carried out openly.

6. Winner announcement stage

Based on table 2 at the Winner announcement stage, the conventional mean value is 3,4 while the electronic mean is 4,0 and has a significance value of 0.001<0.05 limit. The results show that at the Winner announcement stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that on Winner announcement stage the electronic procurement of goods/services is more transparent than conventional systems.

Based on interviews with experts it can be explained that in conventional procurement, the announcement of the winner is done manually through bulletin board in the institution. Auction participants should come to the agency to see who is named

as the winner.

At electronic procurement, the announcement of winners can be seen from procurement portals that can be accessed from anywhere and anytime

7. Protest stage

Based on table 2 at the Protest stage, the conventional mean value is 3,15 while the electronic mean is 3,88 and has a significance value of 0.000<0.05 limit. The results show that at the Protest stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that on Protest stage the electronic procurement of goods/services is more transparent than conventional systems.

Based on interviews with experts it can be explained that in conventional procurement, if there are dissatisfied participants on the decision of the committee in appointing the winning bidder then the filing of the protest is done by a written letter addressed to the procurement service unit. Participants who submit an objection can not monitor whether the letter has reached the procurement committee or not. The minister also cannot be sure when to get an answer or response to the protest submitted.

In contrast, the electronic procurement system. At the time the participant filed a protest through the spse application by filling the form on the application then at that time also the form is sent and can be read by the procurement committee. So filing a protest through electronic procurement system is more transparent than conventional system.

8. Contract signing stage

Based on table 1 at the Contract signing stage, the conventional mean value is 3,1 while the electronic mean is 2,98 and has a significance value of 00,585 > 0.05 limit. The results show that at the Contract signing stage there is no significant difference between electronic and conventional procurement. This means that research subjects argue that the transparency of process on Contract signing stage for electronic procurement of goods/services as same as conventional systems.

Based on interviews with experts it can be explained that the contract signing process is still executed manually both in conventional system and electronic system, that is by direct face to face between commitment maker with provider of goods/service so there is no significant difference from transparency aspect at this stage.

Comparison of Cost Aspects of Electronic and Conventional Procurement of Goods/ Services stages

Siahaya (2012: 11) states that one of the principles of procurement is the principle of efficiency, meaning that the procurement is cultivated using the least amount of funds, resources and facilities to achieve the objectives in a short time and can be accounted for and contribute as much as possible

Wijaya, Indriyani, and Putri (2011) stated that the cost dimension in procurement of goods/services related to administrative costs, opportunity cost of copied and total cost per tender. Kaming and Kurniawan (2012) argued that the cost aspect in the procurement of goods/services related to all expenditures that occur to carry out every stage in the procurement process of goods/services.

Shaw and Subramaniam (2004) state that e-procurement can reduce coordination costs such as supplier search, negotiation, communications, follow-up, and fault reconciliation with suppliers. Meanwhile, Burn and Ash (2003) stated that early adoption of e-procurement emphasizes cost reduction and administrative efficiency.

The research conducted at Coordinating Ministry for Political, Legal and Security of

Indonesia shows results that are in line with the opinions of the experts above. The cost variable in this study is a measure of the duration of the activity carried out by the research subjects in carrying out each stage of the procurement process from the announcement of the procurement until the signing of the contract.

The cost aspect measurements were performed by distributing questionnaires to 40 research samples. The questionnaire consisted of 8 questions relating to the cost of conventional procurement of goods/services and from 8 questions related to the electronic procurement cost. The average comparison of cost aspects between procurement of goods/ services electronically and conventionally is as follows:

Table 3. The average comparison of time aspects between electronic procurement and conventional procurement

Number of Question	Procurement Stage	Mean Conventional	Mean Electronic	Nilai Sig. (2-Tailed) Paired Sample Test	Sig Limits	Explanation
1	Announcement	2,13	4,1	0,000	0,05	different
2	Registration	2,28	3,73	0,000	0,05	different
3	Document retrieval	2,05	3,93	0,000	0,05	different
4	Job Description	1,98	4,18	0,000	0,05	different
5	Submitting and bidding document evaluation	3,53	3,43	0,618	0,05	Not different
6	Winner announcement	2,2	4,18	0,000	0,05	different
7	Protest	2,38	3,7	0,000	0,05	different
8	Contract signing	4,25	4,48	0,183	0,05	Not different

From table 3 it is found that in the transparency aspect there is a significant difference between electronic and conventional procurement of goods/services at the announcement, registration, submitting the document, job descriptions, announcement of winners and protesting. As for Submitting and bidding document evaluation and the signing of the contract, there is no significant difference. Details of differences for each stage of procurement of goods/services are as follows :

1. Announcement stage

    Based on table 3 at the announcement stage, the conventional mean value is 2,13 while the electronic mean is 4,1 and has a significance value of 0.000<0.05 limit. The results show that at the Announcement stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that on Announcement stage the electronic procurement is cheaper than conventional systems.

    Based on interviews with experts it can be explained that the publishing of the

procurement announcement of goods/services must be through manual system, that is through bulletin board and print media, so the committee of goods/services procurement require cost to publish the announcement in media print. The average cost required for a package of the announcement is Rp 1,500,000.

While from the provider side, the cost required to obtain information announcement procurement of goods/services are, among others, the cost of purchasing print media and transportation costs to the agency that organizes the auction.

With the introduction of electronic procurement system there is no cost required to publish the procurement announcement of goods/services. From the provider side, announcements can also be accessed for free, only requiring internet packages

2. Regristation stage

Based on table 3 at the regristation stage, the conventional mean value is 2,28 while the electronic mean is 3,73 and has a significance value of 0.000<0.05 limit. The results show that at the Regristation stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that on Regristation stage the electronic procurement is cheaper than conventional systems

Based on interviews with experts it can be explained that in conventional procurement, the cost that the committee has to take out for the registration process in the conventional auction are, among others, the cost of consumption and printing of administrative documents registration. On the participants' side, the costs include transportation costs and the cost of duplicating corporate administration documents.

With the implementation of electronic procurement system, there is no cost that need to be incurred to implement the procurement of goods/services because the entire registration process is carried out online and paperless

3. Document retrieval stage

Based on table 3 at the document retrieval stage, the conventional mean value is 2,05 while the electronic mean is 3,93 and has a significance value of 0.000<0.05 limit. The results show that at the Document retrieval stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that on Document retrieval stage the electronic procurement is cheaper than conventional systems.

Based on interviews with experts it can be explained that in conventional procurement, the procurement documents are taken manually and printed in hard copy. Participants must come directly to the agency to be able to obtain procurement documents comprising the Terms of Reference, Estimate Prices, Technical Specifications, Work Plans and Terms and Standards Biding Procurement Documents. Costs incurred by the participants include transportation costs. While from the committee side the procurement costs incurred include the cost of consumption and cost of printing and duplication of documents.

While in the electronic procurement system, all documents are presented in softcopy form which can be downloaded from the relevant procurement portal so there is no cost incurred because the document can be obtained from anywhere and presented in softcopy (paperless)

4. Job Description stage (*Aanwijzing*)

Based on table 3 at the job description stage, the conventional mean value is 1,98 while the electronic mean is 4,18 and has a significance value of 0.000<0.05 limit. The results show that at the Job Description stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that on Job Description stage the electronic procurement is cheaper than conventional systems

Based on interviews with experts this can be explained that in conventional procurement, the aanwijzing is implemented face to face and require participants to come directly to aanwjzing. Costs incurred at this stage include the cost of transport for participants, the cost of consumption and duplication of documents for the committee.

While the electronic procurement of goods/services, the job description is carried out online so that no cost required for this stage.

5. Submitting and bidding document evaluation stage

Based on table 3 at the submitting and bidding document evaluation stage, the conventional mean value is 3,53 while the electronic mean is 3,43 and has a significance value of 0,618 > 0.05 limit. The results show that at the Submitting and bidding document evaluation stage there is no significant difference between electronic and conventional procurement. This means that research subjects argue that on Submitting and bidding document evaluation stage the electronic procurement cost as same as conventional systems cost.

Based on interviews with experts it can be explained that the evaluation stage is still carried out manually although there is already the stage of technical evaluation in Electronic Procurement System

6. Winner announcement stage

Based on table 3 at the winner announcement stage, the conventional mean value is 2,2 while the electronic mean is 4,18 and has a significance value of 0.000<0.05 limit. The results show that at the Winner announcement stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that on Winner announcement stage the electronic procurement is cheaper than conventional systems.

Based on interviews with experts this can be explained that the announcement of the winner in conventional procurement is done manually through bulletin board in the institution. Costs incurred at this stage include the cost of transporting bidders to the agency to see the winner's announcement. Meanwhile, from the committee side the cost incurred in, among others, the cost of telephone and communication if it turns out the winner of the auction did not get the announcement of the winner information through bulletin board.

With the application of electronic procurement system there is no cost that need to be incurred to post the announcement of winner of goods/service procurement.

7. Protest stage

Based on table 3 at the protest stage, the conventional mean value is 2,38 while the electronic mean is 3,7 and has a significance value of 0.000<0.05 limit. The results show that at the Protest stage there is a significant difference between electronic and conventional procurement. This means that research subjects argue that on Protest stage the electronic procurement is cheaper than conventional systems.

Based on interviews with experts this can be explained that to propose a protest on the conventional procurement system, is by sending a letter to the institution. The cost incurred here is the cost of mail delivery. These costs may be judged to be immaterial so that respondents' answers show no significant difference between the electronic procurement system and the conventional procurement system

8. Contract signing stage

Based on table 3 at the contract signing stage , the conventional mean value is 4,25 while the electronic mean is 4,48 and has a significance value of 0,183 > 0.05 limit. The results show that at the Contract signing stage there is no significant difference between electronic and conventional procurement. This means that research subjects argue that

on Contract signing stage the electronic procurement cost as same as conventional systems cost.

Based on interviews with experts it can be explained that the contract signing process is still executed manually both in conventional in electronic system, that is by direct face to face between officer making commitment with provider of goods/services so there is no significant difference from cost aspect at this stage.

After analyzing the average comparison per procurement stage, then the average comparison of the overall analysis comes with the following results:

Table 4. The result of *Paired Sample t test*

Dimension	Mean Conventional	Mean Electronic	Sig Value	Sig Limit	Explanation
Time	25.1250	29.5750	0,000	0,05	different
Transparency	20.5250	30.8750	0,000	0,05	different
Cost	20.7750	31.7000	0,000	0,05	different

1. The time aspect dimension of the conventional mean value is 25.1250 while the electronic mean is 29.5750 and has a significance value of 0.000<0.05 limit, it can be concluded that the time aspect dimension in the test of average difference can be expressed differently significantly. This means that there is an effect of transition usage from the conventional time aspect to the electronic time aspect

2. The transparency aspect dimension has a conventional mean value of 20.5250 while the electronic mean is 30.8750 and has a significance value of 0.000<0.05 limit it can be concluded that the transparency aspect dimension in the mean difference test can be expressed differently significantly. This means that there is an effect of transition usage from the conventional transparency aspect to the electronic transparency aspect

3. The cost aspect dimension has a conventional mean value of 20.7750 while the electronic mean is 31.7000 and has a significance value of 0.000<0.05 limit, it can be concluded that the cost aspect dimension in the test of average difference can be expressed differently significantly. This means that there is an effect of transition usage from the conventional cost aspect to the electronic cost aspect

5. Conclusions

Based on the results of the research described above, it can be concluded that the implementation of electronic procurement of goods and services at Coordinating Ministry for Political, Legal and Security Affairs has brought a better change in the governance of procurement mechanisms of goods and services in Coordinating Ministry for Political, Legal and Security of Indonesia. Although the policy of e-procurement at Coordinating Ministry for Political, Legal and Security of Indonesia is still in the early stages of implementation, but during the four-year implementation of the policy of e-procurement has brought positive changes in the procurement process of goods and services in Coordinating Ministry for Political, Legal and Security of Indonesia seen from the aspect of faster procurement time, more transparent procurement and more efficient cost of procurement.

1. Time Aspect

The results show the time allocated to process the electronic procurement of goods and services is faster than the time allocated to process the conventional procurement of goods and services, especially at the auction announcement stage, registration,

document retrieval, job description, the announcement of winners and protest. This is because e-procurement utilizes information technology to process each stage so that procurement committee can process it faster.

But there are still stages that are still processed for a long time which is the stage of evaluation and signing the contract. The length of the evaluation process is due to the lack of knowledge of the procurement committee related to regulations and policies of goods/services and work substance. In addition, the technical evaluation process is still executed manually because there is no feature to perform technical evaluation in e-procurement application.

The signing the contract takes a long time due to the lack of committee knowledge of contract management, the forms of contract are designed according to the type of work so that it takes a long time to prepare the concept of contract until the signing process of the contract.

2. Transparency Aspect

The results show that the electronic procurement process of goods/services is more transparent compared to the conventional procurement of goods/services. This is because the electronic procurement of goods and services can be accessed more widely by the people throughout Indonesia. Conventional procurement goods and services can only be accessed in a limited way.

But there are still stages that are considered less transparent which is the evaluation stage of technical documents. The evaluation of technical documents is still carried out manually so that the participants can not monitor the evaluation process. This is because there is no technical evaluation feature in e-procurement application.

3. Cost Aspect

The results showed that the implementation of e-procurement has increased cost efficiency in Coordinating Ministry for Political, Legal and Security of Indonesia. Some costs that can be reduced by the implementation of electronic procurement are, among others, the cost of announcements in the mass media, duplication of document cost, and stationery costs. This is because the process of electronic procurement of goods/ services does not require the printing and duplication of documents, the frequency of the meeting is also lessening, the announcements are posted on the website of the Ministry so it does not require the cost of newspaper announcements in the mass media.

Although the overall research results indicate a positive change, but there are still stages that require high cost, which are document evaluation and signing the contract. This is because both processes are still manually implemented, requiring meeting costs, transportation costs, and printing and duplication costs.

6. Recommendation

Based on the discussion that has been done and after concluding the research results, it is suggested to the Coordinating Ministry for Political, Legal and Security Affairs to be able to apply e-procurement thoroughly to all packages of goods and services procurement at Coordinating Ministry for Political, Legal and Security affairs. In addition to improving the effectiveness of the implementation of e-procurement policy, there are also some suggestions that can be implemented to enhance transparency and efficiency of time and cost in the implementation of procurement of goods and services in Coordinating Ministry for Political, Legal and Security affairs:

1. To speed up the process of procurement during the evaluation stage and contract signing, it is necessary to increase the knowledge and insight of the human resources related to the regulation in goods/services procurement, procurement transformation

from the manual system to the electronic system, and the knowledge in the field of contract management. Measures that can be done to improve knowledge and insight of human resources are :

- Socialize the regulation on procurement
- Hold technical guidance of e-procurement application
- Conduct procurement certification
- Conduct training on contract management

2. To improve the transparency of the procurement process of goods and services, it is necessary to improve the infrastructure of information technology as a means of supporting the implementation of electronic procurement policy of goods and services. By adequate means of information technology infrastructure, electronic procurement process can be implemented more maximally and more open to all people of Indonesia. Measures to provide an adequate means of information technology are:

- Maximize the use of the server at the data center of Coordinating Ministry for Political, Legal, and Security Affairs to process e-procurement applications
- Provide adequate Internet data to be able to execute procurement of goods/services electronically
- Carry out adequate maintenance of internet network and information technology equipment in Coordinating Ministry for Political, Legal, and Security Affairs

3. To reduce procurement costs at the technical evaluation stage there is a need for additional features in e-procurement applications so that the evaluation process is no longer implemented manually. Steps to add technical evaluation features to e-procurement applications include:

- Coordinate with Government Procurement Policy Institution as application provider related to user requirement of adding feature in e-procurement application.
- Create a standard and uniform technical evaluation work paper template for all work packages at Coordinating Ministry for Political, Legal, and Security Affairs
- Establish standard and uniform technical evaluation indicators for all work packages in Coordinating Ministry for Political, Legal, and Security Affairs

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Quality Control of Stone Plate Products (Case Study: Industrial Craftsman Plates Stone-Indonesian Jember)

Rudi Hartono[1], Siti Nurainul Jannah[2], Mitha Istia Mulyadewi[3],
Desi Fatmawati[4], Hadi Paramu[5]
[1,2,3,4,5]Universitas Jember, 68121 Jember, Indonesia

Abstract

This study was conducted to assess the extent to which the quality of the products manufactured enhanced the competitiveness of stone plate craftsmen in Jember. This research applied purposive sampling method to collect production data produced by stone plate craftsmen in Jember area with saturated sampling technique. The data used in this study was the primary data obtained through direct observation of the research object. The tool used in assessing quality was Statistical Process Control using range 1 and 2 for Japanese standards and CMT standards (China, Malaysia and Taiwan) based on three research attributes. Based on the results of the analysis of research data, many products of all stone plate craftsmen were out of the limit of tolerance or defects. The competitiveness of stone craftsmen in Jember area was strongly influenced by the quality of the products they produced. Therefore, it is necessary to improve the product quality for improved competitiveness of stone plate craftsmen in Jember area through quality control in increasing the income of the district's stone plate craftsmen.

Keywords: quality assessment, SPC, competitiveness, Jember stone plate craftsmen.

1. Introduction

Stone plate comes from the hills/dune resulting from the collision of lava and volcanic hot lava. This is one of the stone mines that are often used as building materials, such as floor materials, wall hangings, fence decorations, and others. Due to the typical use of aesthetics, the demand for stone plates has been relatively high recently. From 2010 to 2014, the demand for stone plate increased by 7%, according to the data of Jember Department of Industry and Commerce (DISPERINDAG).

Jember, located in East Java, Indonesia, is known as one of stone plate producers. Geographically, there are 1666 hills that potentially produce stone plates. Stone mining activities have been operated in the sub-districts of Jember, such as Kalisat, Jelbuk, and Pakusari, since the 1970s. Initially, handcrafter processed plate stones into various types of products sold in the domestic (local) market. Recently, craftsmen in Jember have expanded the stone plate market. They not only sell their products in local market but also in overseas markets. According to Liputan6.com report, the export has grown from 3,000 tons in 2003 to 20,000 tons in 2016. This shows that the handicraft industry is growing significantly.

Overseas markets offer promising economic opportunities. Local price is only about 30% - 40% of the global price. Local prices range from Rp40,000 to Rp75,000 per square meter while the global price ranges from Rp75,000 to Rp100,000. Despite offering higher prices, the global market demands strict quality specifications. Some household handcrafting stone slabs cannot meet these quality specifications. As a result, the competitiveness of the domestic industry is in danger in recent years.

One way to improve the obedience of the home-industry of stone craft is to assess the quality of its products. The tool used in the assessment is Statisical Process Control (SPC) (Ross, M.1991). Li (2013) points out that there are many methods for assessing quality in

SPC, such as attribute control charts and variable control charts. In this research, the analysis of attribute control chart is employed. This method will end with the identification of quality issues and the cause of the issues. Based on the identification, several recommendations to improve the quality of performance can be formulated so as to improve the competitiveness of stone-based home industry, especially in Jember region. This article aims to assess the quality performance of the stone plate home-based industry and recommend several strategies to improve its quality.

2. Literature Review

The main purpose of a business is to maintain its business continuity (going concern). In running a business, it is important to put some special attention to maintain the sustainability of the business. One of the important things that must be taken into account by all businesses is the quality of products they manufacture. Erdos (2014) states that a business should not be concerned about product and market quality alone, but rather focus on innovation. Quality is one of the factors that are often debated in supporting a competition. Poor quality will directly have a negative impact on the development of trade as a whole. It is not uncommon for countries that apply standards of quality to benefit more because of the barriers to enter other countries (Hu and Lin, 2016). Poor quality and damage to the product will also become a significant financial loss in product development. Oftentimes the damage due to quality lapses cause the product rejected in the market (Kritzinger, 2017).

Assessment of the quality of a product is crucial in assessing the competitiveness of a business. Competitiveness is a condition in which there will be adjustments to market standards in every product and service provided (Purnasari and Yuliando, 2015). In assessing quality, an indicator that comes from a guideline is required (Angela, 2017). Guidelines that serve as a standard for assessing quality in this research are Japanese product standards and product standards CMT (China, Malaysia and Taiwan). The existence of a standard will exert effect to the production result in the process of quality improvement to achieve outcomes which have been targeted. This will increase the competitiveness of Jember district's stone craftsmen.

Product competitiveness

It is well known that quality improvement will be directly related to market competition to support a company's activities. The competitiveness of a company/country is a situation where a company can supply products and services on a market that has been adjusted to existing market standards (Fathi and Ahmadian, 2016). The notion of competitiveness also has numerous variations each year. Nazemi and Mashayekhi (2015) in their research define the competitive activity of a product as an economic calculation related to the cost of the resulting product. In their research, it is found that in order to create and measure the product competitiveness, a record concerning routine about product results each year is required.

It is well known that there are various types of competition in a market and not all types of competition are good. Competition is a perfect competition that will facilitate the regulators in organizing and managing the competition (Littlechid, 2017). The expected competition in a market is a normal competition without any disfunctional competition factor that comes up with injustice or maturity and is often illegitimate (Li and Li, 2009). In empirical study, it was found that a company's strategy will directly impact the competition of the company. This strategy is a step in probing the level of failure or damage within the company itself (Zhang and Gallagher, 2016). So, it can be said that the determination of a competition of a company should be based on the determination of strategy to overcome the damage to the company's production process. As a corollary, the need for control to create and maintain

business' competitiveness is a must. Competition in outline can force companies to focus more on seeking effective strategies (Du, Kim and Aldrich, 2016).

Statitical Process Control (SPC) as a Quality Indicator

Statistical Process Control (SPC) is a tool that operates measurements to monitor processes and look for major changes (Ling, 2006). The measurement indicators of a quality must be able to describe the quality of care and service proven through observation (Edward, 2017). SPC provides analytical tools to understand the variations shown by quality measures to make improvements (Alan, 2012).

To monitor the variation of quality performance on the basis of the level of facilities and the level of individual use, cross-sectional analysis as shown in the control chart using SPC is used. Control limits are set within the coverage of empirically justified values and theories (Kabeya, Y. et al 2013). The control limit will be a chart that gives a mark indicating that the data has exceeded the control limit of the distribution process at a time. The design of the SPC chart can apply the p value or percentage observed and be calculated based on the assumption of the process in control. The p value approach provides the benefit of sign strength information and how the performance of the process is stable at a given point in time (Li, Z. et al., 2012). Statistical process control (SPC) is a popular technique for maintaining process control charting. Statistical process control is applied to secure the suitability between cluster and the established standards. The control chart to monitor the mean or variance of chosen variable is significant to affect the quality of the process or product. The basic characteristics of unvariate Shewhart charts are cover the center line (CL), the upper control limit (UCL), and The Lower Control Limit (LCL) (Koutras, M. et al., 2017). Retrospectively, the application of statistical process control (SPC) uses the average parameters and range (Xbar-R) in detecting changes, whereas to monitor the process that occurs 2 control charts are at work, i.e. the average chart for X subgroups and range charts for subgroups B (Able, C. et al., 2011). The specific cause information on the variation required determines the performance significantly good or bad for statistical process control (SPC).

The SPC can be analyzed using a range of 3 and 2 standard deviations from the mean to find upper and lower limits of control. Smaller range aims to reduce the likelihood of incorrectly assuming a common cause of variation (Dey et al.1994). Control process can be done based on 3 transformations of logarithmic parameters for the variation coefficient in dealing with size aspect of variable sample, gaining formula to calculate Average Run Length (ARL), standard deviation of ARL, and average sample size. Tables with optimal graph parameters and compare graphs (Castagliola, P. et al. 2015). Broadly speaking, integrated SPC is used as a slow-trend monitoring tool (Yuniarto, H. and Sriwijaya, R. 2006). There are several tools used in SPC. One tool used in solving decision-making problems is fishbone through identification of problems as a prefix. Furthermore, fishbone is used in building and finding alternative solutions related to process (Yazdani, A. and Moghaddam, R. 2012). Charts are tools for monitoring processes when items of the process are examined and classified into defective or non-defective categories. The purpose of monitoring is to detect changes in the proportion of p-value (Reynold, M. et al 2000). Small shifts in the process of production variation tend to increase due to new sources of variation, such as people and materials (Sheu, S. and Tai, S. 2006). Control chart generally has constant normal mean distribution process and variance will be one of the most effective techniques in Statistical Process control (SPC) to improve the quality of ownership and productivity of production process. As change occurs in the mean and/or standard deviation, the control chart should trigger an alarm according to out-of-control circumstance. However, there are many quality characteristics having in-control means μ fluctuate over time and the standard deviation σ varies with mean (Amdouni, et al. 2005).

3. Research Method

Research Context

This research operationalized exploratory approach (exploratory research) and aimed to evaluate the quality of plate stone products from various aspects (attributes) which served as the research crux, that is the standard attribute of quality of thickness, color, and flatness. Assessment of quality served as the basis for identifying the causes of poor quality, with countries namely Japan, China, Malaysia and Taiwan being the target market. Evaluation of the stone plate quality produced by craftsmen was needed as a strategic material to improve the competitiveness of stone craftsmen in Jember District.

The quality assessment results on the quality performance of handicraft stone stone industry as the object of research will be obtained through the use of Statistical Procces Control (SPC). In this study, the standard quality of stone plate products consists of 2 standards, namely Japanese product standard and product standard CMT (China, Malaysia and Taiwan) using range 1 and 2. Data were be analyzed using three lines in the control diagram, inter alia: the center line CL), which was the average of the defective proportions, the upper control limit (UCL), the lower control limit (LCL), all of which are illustrated by the formula. Efforts to improve the quality obtained from the analysis conducted were recommended through fishbone in the form of alternative solutions related to the production process.

Population and Sample

The research involved all stone craftsmen in Jember Regency of Indonesia who had not been able to export their products. The sampling technique used was saturated sampling technique. There were 6 stone plate craftsmen who become the classified samples into two groups, namely the craftsmen who become benchmarks and craftsmen are analyzed. Craftsmen who became benchmarks were CV. Grace while the craftsmen under investigation were non-exporter craftsmen, Bambang Sutrisno, Imam Sugianto, Abd Laisis, Karimullah, and Moh. Pony Pin.

Data Description

This study analyzed primary data on the quality of plate stone from benchmark craftsmen and craftsmen analyzed. The data obtained were quantitative and qualitative. Data collection was done by interview, observation, and documentation. Data analysis was executed in several stages. The first stage is the identification of quality standard specifications of Japanese stone products. This specification was obtained by conducting in-depth interviews with the craftsmen who became the benchmarks. The standard quality control attributes of Japan and the CMT standard (China, Malaysia, Taiwan) were determined based on the results of the interview. The second stage was the collection of data regarding the attributes of the quality of stone plate products on 5 craftsmen under investigation. This data collection was done by direct observation (using check sheet) at 9,195 units of products produced by craftsmen which were analyzed within one month of production. The third stage was an attribute quality analysis using a control chart, that was a Statistical Process Control tool. This analysis resulted in a conformity level of the quality of craftsmen products analyzed against standard specifications of export products. The fourth stage was to find the most dominant attribute that caused quality mismatch by applying Pareto Diagram. The last stage was identifying the cause of quality mismatch by using causal diagram. Based on the identification of these quality nonconformities, several quality improvement efforts were recommended.

4. Result and Discussion

The first step to be done was the identification of Japanese quality standard specifications and the CMT (China, Malaysia, Taiwan) standard of stone plate products. Based on in-depth interview at CV.Rahmat (benchmark of stone plate industry), the study obtained standard specification on stone quality plate with the destination countries including Japan, China, Malaysia and Taiwan. In-depth interview was conducted on 1 and 2 April 2017 and direct observation was done on 10 x 10 cm stone plate samples, consisting 1600 samples. The results obtained were the sales system calculated in the number of meters by using manual techniques (handicraft) with the workmanship using a simple hammer tool and iron cutter peg. Stone plate had 2 types, rough and smooth one. For the production of handicraft materials, smooth-stone plates were used. In addition to these types of stone plates, 2 colors, red and green, were evident. Export standards obtained from interviews conducted were 3 basic attributes of flatness measured based on the surface of stone plate products relative on one side. The thickness iwas measured based on a measuring standard of 1.5 cm to 4 cm. If the stone plate product thickness ranges from 1.5 cm to 4 cm and there is a tilt of about 0.5 cm, the product could be said to be defective. Also, the color of the stone plate product had to have a uniform color composition.

The second stage was the collection of attribute data on non-export craftsmen consisting of craftsmen Bambang Sutrisno, Imam Sugianto, Abd Laisis, Karimullah, and Moh. Pony Pin. There were seven kinds of batunoiring products produced by the craftsmen, including product A, B, C, D, E, F, and G. This data collection was done by direct observation (using check sheet) on 9.195 data regarding products manufactured by the craftsmen within one month of production.

Based on the Table of the total production involving 9,195 products manufactured within a period of one month for the Japanese-standard products, 6,615 (70%) products did not meet the criteria of quality products while for China, Malaysia and Taiwan standards 4,887 (53%) products were found damaged. Observations were done on 5 craftsmen grouped by type of size coded as A, B, C, D, E, F and G. The largest number of samples were C and E product types tailored to the production of all stone craftsmen in Jember. This grouping was done to generate the quality bases of stone craftsmen in Jember District.

The data analysis was done by using two types of standards, namely Japanese quality standards consisting of 3 attributes with very critical acceptance criteria, i.e. flatness on one side, which must be flat in terms of surface. Furthermore, if there was one uneven side then the product was still said to pose fine quality according to the flatness attribute. The second attribute was the thickness seen in the range of 1.5 cm to 4 cm with a tolerance difference and tilt of 0.5 cm between sides. The third attribute was the color with the criteria by which one product had to have a uniform color (red and green). If there was any color variation in one product then it was considered defective in the color attribute.

The second standard was the CMT standard (China, Malaysia, and Taiwan) using only one quality control attribute in terms of thickness only. The attribute focus in standard CMT in terms of thickness was measured by a range of 1.5 - 4 cm with 0.5 cm side tilt tolerance. Therefore, the production of the products manufactured by the five industries in Jember district was more defective when scrutinized by Japanese product standards.

The third stage was the analysis phase of the previous stage by using the attribute control diagram. The attribute control diagram was measured by the value of the product data recorded by the standards used by range 1 and 2 for the Japanese product standard and the CMT product standard (China, Malaysia and Taiwan). The control chart presented the distribution of production data plots from product data produced by the five industries of Jember district's stone craftsmen. The production data plots were measured by UCL (Upper Control Limit), CL (Center Line) and LCL (Lower Control Limit) lines based on product quality

standards operative. The UCL, CL, and LCL lines illustrated the product quality capabilities generated by the five industries, evincing whether the production data plots were still within the control line or out of the control line.

There was a clustering of 9,195 small samples that were sampled by the size of plate stone products. The grouping was done every half square meter of plate stone product dimension, which was different for each kind. In code A stone plate products with a size of 9 x 9 cm, there were 12 large samples. Product code B stone plate with a size of 10 x 10 cm included 31 large samples. Product code B stone plate with a size of 20 x 5 cm covered 59 large samples. Product code D stone plate with a size of 25 x 5 cm included 19 samples of large products. Code E stone products plate with a size of 30 x 5 cm consisted of 83 large samples. Product code F stone plate with a size of 30 x 15 cm there included 21 great samples. For code G products stone plate with size 30 x 30 cm included 51 large sample.

Large sample in the diagram were as control plots to be measured production data using three lines, including UCL (Upper Control Limit), CL (Center Line), and LCL (Lower Control Limit). The third line was calculated based on the number of ranges used and the number of range 1 and range 2. As a result, that produced 12 lines, inter alia: Japan CL1, CL2CMT, CL1CMT, Japan CL2, Japan UCL1, UCL2CMT, UCL1CMT, Japan UCL2, Japan LCL1, LCL2CMT, LCL1CMT, and Japan LCL2. UCL line showed the control limit lines, CL represented a cap on the average, and the LCL was the lower control limit lines. Each plot of production data was spread between the three lines. Plot production data was said to pass the test if the quality control of the data plot did not exceed the line UCL and should not be less than LCL or plot line production data were within UCL and LCL.

From the overall large sample on each product code analyzed using Japanese standard control charts applying the 1st range figures, the following conclusions are drawn. A plate stone product of code A was 12 out of 12 production data plots out of tolerance lines, plate stone product B code was 31 of 31 Plot production data out of tolerance line, stone product plate C code included 59 out of 59 plot of production data out of tolerance line, stone product plate code D included 18 of 19 plot production data out of tolerance line, stone product plate code included 81 out of 83 production data plots out of the tolerance line, the F-plate stone product contained 19 of the 21 production data plots out of the tolerance line, and the G-plate stone product has 51 of 51 production data plots out of the tolerance line.

From the overall large sample on each product code analyzed using Japanese standard control charts using the range 2, the present study drew the following conclusions: Plate products of code A included 6 of 12 production data plots out of the tolerance line, the plate stone products of code B included 28 out of 31 Plot production data out of tolerance line, code C stone plate products covered 41 out of 59 plots of production data out of tolerance line, stone product plates with code D included 13 of the 19 production data plot out of tolerance line, stone product plates with code E included 61 out of 83 production data plots out of tolerance lines, the F-plate stone products included 10 of the 21 production data plots out of the tolerance line, the G-plate stone products consisted 17 of 51 production data plots out of the tolerance line.

From a large sample of each product code analyzed using the standard CMT control charts (China, Malaysia, and Taiwan) using the 1-point range, the following conclusions were drawn: code A plate products included 12 out of 12 production data plots out of tolerance lines, stone plates of code B included 30 out of 31 production data plots out of tolerance line, stone plate product of code C covered 59 out of 59 production data plot out of tolerance line, stone plate products with code D consisted 19 out of 19 plot production data out of tolerance line, stone plate products with code E covered 83 of 83 production data plot out of tolerance line, stone plate products with code F covered 17 of 21 production data plot out of tolerance line, stone plate products with code G encompassed 34 of 51 plot production

data which came out of the tolerance line.

From a large sample of each product code under analysis using the standard CMT control charts (China, Malaysia, and Taiwan) using the range 2 figures, the following conclusions were drawn: plate stone products of code A consisted of 10 of 12 production data plots out of tolerance lines, stone plates of code B covered 28 out of 31 production data plot out of tolerance line, stone plate product of code C covered 47 out of 59 plot of production data out of tolerance line, stone plate products of code D consisted of 15 out of 19 plot production data out of Line tolerance, stone plate products of code E covered 50 out of 83 plots of production data out of tolerance line, stone plate products of code F covered 11 out of 21 plots of production data out of tolerance line, stone plate products of code G consisted of 21 of 51 plot data production which were out of the tolerance line.

The analysis based on the number of products of each type using the Japanese standard with a classification of 1 range evinced that almost all of the products were found unfeasible for exports and some codes were found to have defect rate below 100% such as code D (95%), E (98%) and F (90%). When looking at the results of the analysis in using 3 basic attributes of jember district, the stone craftsmen hardly reached the Japanese quality standards. While in the analysis done using standard CMT with the classification of range 2 (medium criterion), the study corroborated, for plate stone products manufactured by stone plate craftsmen in Jember, the following percentages of product defect: code A (83%), code B (90 %), code C (80%), code D (79%), code E (60%), code F (52%), and code G (41%). Based on CMT analysis, the craftsmen under investigation barely met the specified CMT standard. The other results obtained in the analysis proved the tendency of defects decreasing when the product size increased.

Figure 5. Pareto Diagram

The next stage, the fourth one, was the data analysis done in the form of pareto which described the percentage of attribute quality regarding the cause of defect product. Based on the analysis done using pareto diagram, the bigger dominant attribute classification was evident, including thickness (47,33%), flatness (44,22%), and color (8,46%). The attributes of thickness and flatness significantly affected the quality of plate stone products in meeting the quality standards. The color attribute was not significant in affecting the quality of plate stone products manufactured by the plate stone craftsmen in Jember district.

The results of pareto analysis found that there was a relationship between the product size and the quality of plate stone products manufactured. The larger the size of plate stone products, the greater the possibility of defective products. This was evident of the difficulty in the process of producing stone plates in meeting predetermined quality standards. With regard to flatness attributes, the flatter area which had to be met, the more difficult it was for the craftsmen in meeting the qualification. By contrast, in the case of plate stone products measuring 30 x 15 cm and 30 x 30 cm, which were marked with code F and G, such defects were not evident. The reason for the fine quality of product F and G in that they were not affected by the size of the product was because the raw material used was high-quality plate stone.

The next stage was data analysis using cause-effect diagram or fishbone to find the cause of defective product. Based on the overall analysis, there were factors that affected and caused damage to the products. The causal diagram was classified into five factors as follows: 1) Man, there was a clear need for Standard Operating Procedure (SOP) in the production process, training of craftsmen from senior stone craftsmen in accordance with established quality standards, evaluation, and control on the performance of the craftsmen; 2) Method, it was necessary to sort the raw materials based on attributes to be processed. If the raw materials were less suitable to be sorted back for reprocessing and if the raw

materials could not be reprocessed, it would be used as waste products in the form of cast stone, random cut stone plates, and random comb plate stone; 3) Machines, treatments and standard selection of tools were necessary. For example, the peg coating, the type of pegs and hammers used and when they were used had to be well adjusted. Also, the equipment had to be adapted to the type of plate stone size; 4) Materials, raw materials used in producing plate stone of codes A, B, C, D, and E used fine stone plates with standardized quality/normal. By contrast, the type of stone plate products of code F and G used fine stone plate with the number-one or high quality material; 5) Managerial, it was inevitable to establish planning, organizing, and good supervision to make better industry performance that directly impacted on the quality of the resulting products.

5. Conclusion

The assessment using exploratory approach (exploratory research) on the quality of stone plate products conducted in Jember-Indonesia on 6 plate stone craftsmen scrutinized two groups, the first CV. Rachmat (benchmark) and non-export craftsmen Bambang Sutrisno, Imam Sugianto, Abd Laisis, Karimullah, and Moh. Pony Pin (the object of analysis). The analysis was based on two quality standards, namely Japanese standard and CMT standard (China, Malaysia and Taiwan) using range 1 and 2. Based on the data comprising of 9,195 plate stone products analyzed through control diagram, these products were hardly commensurate with the 1st ranked quality standard of Japan products which implemented rigorous evaluation. The data obtained evinced that only 3 types of products were found to pose defect below 100%, i.e. product of code D (95%), E (98%) and F (90%). On the other hand, within the standard quality of CMT at range-2 product (China, Malaysia and Taiwan), there were variant data stating that the product could not reach the quality of these countries. The data indicated the following percentages of product defect: A (83%), B (90%), C (80%), (79%), E (60%), F (52%), and G (41%). Another result of the overall collection of products based on 3 attributes using the pareto diagram corroborated that overall attribute defects pertained to thickness (47.33%), flatness (44.22%), and color (8.46%). The resultant data and analysis result were put into another analysis using fishbone analysis, resulting in the following recommendations of quality improvement: 1) improvement of Standard Operational Procedure (SOP), training, evaluation and control on the performance of the craftsmen is urgently required; 2) improvement in the method of selecting attributes to be processed is called for. It is also necessary to carry out sorting for further re-process, and if material can not be re-processed, it is suggested to be a product of economic value added waste in the form of cast stone, random cache and random combs; 3) standard care and selection is required for the equipment used such as the peg coating, the type of pegs and hammers used; 4) need the existence of the election of the type of smooth stone standard / normal as a plate stone handicraft Code A, B, C, D and E. While the production of plate stone code F and G using raw materials in the form of fine stone plates with high quality; 5) There needs to be planning, organizing, and good supervision as improvement endeavour to the craftsmen's performance.

6. Acknowledgment

G20 Impact on Industrial Development in Indonesia

Lutfiah Cahya Firdani[1], Ni Wayan Shintya[2], Anggraini Dwi Sa'idah[3],
Mochamad Adi Kurniawan[4], Ahmad Iqbal Pamungkas[5]
[1,2,3,4,5]*Majoring Economics and Development Studies Jember University*
Email: riza.umami07@gmail.com

Abstract

G20 (group of twenty) is an international economic movement in which developing and developed countries gather to form a high level converences summit to maintain the stability of the global economy. Background G20 formation due to the world economic crisis in 1998 which consists of 20 countries that affect the world economy where 20 countries hold 85% of world GNP 75% of total world trade and 2/3 of the world population. Indonesia is one of the G20 member countries. By becoming a member of the G20 certainly has an impact on the sectors of the Indonesian economy including the industrial sector. This study was conducted to determine the impact of the high level converences G20 summit on the Indonesian industrial sector. Researchers focus on non oil and gas industry where non oil industry contributes 30.75% from 44.92% of industry to GDP. The method used is the result of thinking by contrusion through literature study that comes from journals and websites. The results of the thought show that Indonesia as a member of the high level converences G20 summit has a significant impact on industrial sector of Industry which is increasing every year and industrial sector contribute 1 trillion US $ to Indonesia's GDP.

Keyword: Non oil, sector industry, high level converences G20

Determinant of Stock Return
(Study on Cosmetics and Household Firms)

Isti Fadah[1], Hevi Fitriani[2], Ana Mufidah[3], Yustri Baihaqi[4]

[1,2,3,4]University of Jember, Indonesia

Email: istifadah1966@gmail.com

Abstract

This study aims to determine the effect of gross profit, cash flow consisting of operating cash flow, investment cash flows, and funding cash flow as well as ROA and company size to return the company's shares in the cosmetics sub-sector and household needs. The population in this study is the company on the cosmetic sub-sector and household needs listed on the BEI in the period 2009 to 2016. Sampling technique used in this study is purposive sampling with the final total of 4 companies that meet the criteria. There are six variables used in this research. The analysis method used is multiple linear regression analysis. The results showed that the gross profit and ROA partially no significant effect on stock returns. Operating cash flows, investment cash flows, funding cash flows and firm size partially have a significant effect on stock returns.

Keywords: Gross Profit, Cash Flow Operation, Cash Flow Investments, Cash Flow Funding, ROA, Company Size, Stock Return

1. Introduction

In an increasingly competitive era of business world, the survival and development opportunities of the company are strongly influenced by the availability of funds and access to funding sources. One source of external funding for companies is the capital market. "The capital market is where various parties, especially companies selling stocks and bonds with the purpose of the sale will be used as additional funds or to strengthen the company's capital" (Fahmi, 2012: 52). The capital market is a tool used to channel funds from the community to various sectors to carry out investment activities in the form of securities. One type of securities investment is stock. "Shares are proof of participation or ownership of capital or funds in a company" (Fahmi, 2012: 85).

Manufacturing companies listed on the Indonesia Stock Exchange (IDX) are divided into three types: basic and chemical industry, miscellaneous industry, and consumer goods industry sector. The company manufacturing the consumption sector is a company that produces the most basic needs of the community. The sub-sector of manufacturing sector of consumption sector is industrial sector which is engaged in food and beverage, cigarette, pharmaceutical, cosmetic and household utilities, and household appliances. Cosmetic and household needs sub-sectors are high demand industries in Indonesia. Increasing demand for cosmetic products and household needs is closely linked to the number of sales companies means more demand for the product means the number of sales is also higher. Here is a diagram of the amount of sales based on the financial statements of each company on the cosmetics sub-sector and household needs for the period of 2009 to 2016:

The result of this research shows that the number of sales in each company each year during the period 2009 to 2016 tends to increase. The high level of demand that is closely related to the level of sales is influenced by the increase in the population. Increasing number of residents shows also increase the number of people who have purchasing power. Increasing public purchasing power affects the level of demand for cosmetic products and

household needs. The number of companies that try business profits in Indonesia makes investors difficult in choosing the most profitable company shares. Increase in the number of product demand from the public will make the stock price changes so that investors are difficult to predict the results to be obtained from investments that have been made in the form of shares. Changes in stock prices that occur also affect the stock return changes that will be accepted by investors.

The purpose of investors when choosing to invest their funds in the capital market is to get a high return from the investment. "Investments are likely to increase, indicating that the country's economy is on the rise. Conversely, decreased investment can mean that the country's economy is also declining "(Isti Fadah, 2016). "Return is an important motivation and principle in investment and key that allows investors to decide on alternative investment options" (Setiyono, 2016). Investors who will invest in the stock market first see which company shares are most profitable by assessing the performance of the company concerned. Companies that perform well enough will be more in demand by investors because the company's performance affects stock prices in the market. Investors will buy shares according to the company's current performance and prospects in the future. Therefore, the increased performance of the company will affect the rising stock prices and stock returns that can be accepted by investors. A benchmark of company performance that can attract investors and creditors is profit and cash flow. To evaluate the company's performance the existence of profit and cash flow is considered as complementary. Not only profit and cash flow but financial ratios and firm size are also needed by investors to assess company performance. One of the financial ratios in this study used by investors to assess the company's performance is Return On Assets (ROA).

Gross profit is profit derived from net sales less the cost of goods sold (HPP). According Syamsuddin (1992: 61) the greater the gross profit (gross profit) then the better state of operation of the company, because this indicates that the HPP is relatively lower than the sales. The profit used in this study is the gross profit to see the effect

According to PSAK No. 2 cash flows are the inflows and outflows of cash or cash equivalents. Cash equivalents can be defined as short-term, liquid investments that can quickly be converted to a certain amount of cash without facing significant risk of value changes. Since the enactment of PSAK No. 2 financial reports have undergone many changes mainly related to cash flow. The statements of financial position should not be presented in the form of a cash flow statement, but must be in the form of a detailed cash flow statement into the cash flow components of operating activities, investment activities, and financing activities. The effect of cash flows on stock returns is when changes to published cash flows provide a positive signal to investors and cause investors to react to buy or sell stocks, which is further evidenced by increasing stock returns, and that means cash flow statements have a very important information investors.

Return On Assets (ROA) is one type of profitability ratio which is the main ratio in all financial statements because the main purpose of the company is the result of operation or profit. According Syahyunan (2004: 85) ROA shows the ability of companies to generate profits from the assets used. The amount of the calculation of return on assets shows how much the ability of the company to generate profits available to ordinary shareholders with all assets owned. Return On Assets (ROA) reflects how much the company has gained on the financial resources invested in the company (Munawir, 2002: 269). The existence of ROA needs to be considered by investors in investing because ROA acts as an indicator of company efficiency in using assets to earn profit. The higher the ROA, the greater the level of profit earned by the company and the effect on the amount of returns obtained by investors after investing. According to Ginting (2012) if the ROA of a company is high then it

can be said that the company operates effectively and this can attract investors. Increased attractiveness of investors will affect the increase in stock prices and stock returns of the company.

The study adds firm size as independent variable on the grounds that investors invest their capital by considering the size of the company. The size of the company will affect the ability to bear the risks that may arise due to various situations faced by the company related to its operation. Investors and creditors also consider the financial characteristics of each company. The different financial characteristics of each company leads to unrelated relevance of accounting numbers in all firms. The size (size) of the company can be used to represent the financial characteristics of a company (Indriani, 2009).

This study aims to analyze the effect of gross profit, operating cash aru, investment cash flow, funding cash flows, ROA, and company size to the company's stock return on the cosmetics sub-sector and household needs. The population in this study is the company on the cosmetic sub-sector and household needs listed on the BEI in the period 2009 to 2016. Sampling technique used in this study is purposive sampling with the final total of 4 companies that meet the criteria. There are six variables used in this research. The analysis method used is multiple linear regression analysis.

2. Research Methods

Research Design

According Sugiyono (2014: 2) understanding of financial methods is basically a scientific way to get data with a specific purpose and usefulness. The type of research above is descriptive and quantitative research conducted through data collection of each company. Quantitative research method is a research method based on the nature of positivism, used to examine the population or a specific sample that aims to test the hypothesis that has been established (Sugiyono, 2014: 14). Type of research used in this research is explanatory research. Explanatory Research is a research used to explain the causal relationship between independent variables to the dependent variable through testing the formulated hypothesis.

Population and Sample

Population is a generalization region consisting of objects or subjects that have certain qualities and characteristics set by researchers to be studied and then drawn conclusions (Sugiyono, 2014: 34). The population in this study is the company on cosmetic sub-sector and household needs listed on the BEI in the period 2009-2016.

According Sugiyono (2014: 35) sample is part of the number and characteristics possessed by the population. Sampling is done by purposive sampling is a technique of intake of samples done intentionally and has been in accordance with all the requirements of the sample that will be required. The criteria used to select the sample as follows:

1. The Company made a profit in 2009 through 2016
2. The Company is not delisting during the period 2009 to 2016
3. The Company has published and published audited financial statements for the period 2009 to 2016
4. The company has data on the variables required in the full research

Based on all sample criteria mentioned, it is found that from 6 companies in cosmetic sub sector and household sector there are 4 companies that meet the criteria specified and 2 companies do not meet the criteria because the first KINO did not publish the audited financial statements in 2009 until with 2014 and the second new MBTO offering IPO shares in 2011 so that for stock return variables can not be calculated.

Types and Data Sources

The type of data used in this study is quantitative. Sources of data used are secondary data. Secondary data is a source of research data obtained by researchers indirectly but through intermediary media. This study received secondary data from the Indonesian Stock Exchange (IDX) to see the names of companies and data audited company financial statements.

Method of Collecting Data

Data collection time in this research is cross section and time series data. Cross section data is data collected at a certain period on some objects in order to describe the situation. Time series data is data collected from time to time on a single object in order to illustrate the development of the object (Siregar, 2013: 16). Data collection method in this research is pooled data. Pooled data method is a combination of cross section data and time series data. So in this study obtained the number of observations (data) based on pooled data for 8 periods that is as much as 32 (4 samples x 8 period).

Data Analysis Method

Data analysis used in this research use application with data normality test, multiple linear regression analysis, classical assumption test, and hypothesis test.

3. Research Results

Test Data Normality

The data normality test aims to test whether the research data is normally distributed or not. A good regression model is one that has a normal or near-normal distribution of data. Because the data in this study amounted to less than 50 samples then this study using Shapiro Wilk test using a significance level of 0.05. Data is otherwise normally distributed if the significance is greater than 5% or 0.05. If the value p> α, then received, it means that the variable is distributed norm.

Based on the data normality test results can be seen that the level of all significant variables of more than 0.05 or 5% so it can be concluded that the research data has been distributed normally.

Classic Assumption Test

After doing Classic Assumption Test that is Multicolinierity Test, Autocorrelation Test, and Heteroskidasticity Test can be concluded that there is no problem of classical assumption in this research or can be said that the test result obtained BLUE (Best Linear Unbias Estimator).

Multiple Linear Regression Analysis

According to Siregar (2013: 301) multiple linear regression analysis is the development of simple linear regression, which is equally a tool that can be used to predict future demand based on past data or to know and measure the influence of independent variables on variables bound (independent). Multiple linear regression tests the effect of two or more independent variables (explanatory) on one dependent variable (Ghozali, 2014: 19). In this study tested the effect of independent variables in the form of gross profit, operating cash flow, investment cash flow, funding cash flow, ROA and company size to the dependent variable in the form of stock returns. Here are the results of multiple linear regression equations using SPSS. Based result of this research, we can compile the following equation:

Stock Return=12,773-4,484E-15+6,705E-13+4,699E-13-7,343E-13+1,334-0,468+e

From the multiple linear regression equation above the gross profit (X_1) has a coefficient value of 4.484E-15. The positive coefficient value indicates that gross profit positively influence to stock return of cosmetic sub sector company and household need period 2009 until 2016.

Operating cash flow (X_2) has a coefficient value of 6.705E-13. The positive coefficient value indicates that the operating cash flow variable has a positive effect on stock return of cosmetics sub-sector and household needs from 2009 to 2016 period.

Investment cash flow (X_3) has a coefficient value of 4.699E-13. The positive coefficient value indicates that investment cash flow variable has a positive effect on stock return of cosmetics sub-sector and household needs from 2009 to 2016 period.

Funding cash flow (X_4) has a coefficient value of -7.343E-13. The negative coefficient value indicates that the variable of cash flow of funding has a negative effect on stock return of cosmetic sub sector company and household necessity for period of 2009 until 2016.

ROA (X_5) has a coefficient value of 1.334. The positive coefficient value indicates that ROA variable has a positive effect on stock return of cosmetic sub sector company and household needs from 2009 until 2016 period.

Company size (X_6) has a coefficient value of -0.468. The negative coefficient value indicates that firm size variables have a negative effect on stock return of cosmetic sub sector company and household need period 2009 until 2016.

Hypothesis testing (Test t)

The t test according to Ghozali (2014:23) basically shows how far the influence of an individual explanatory or independent variable in explaining the variation of the dependent variable. T test is done to determine the effect of independent variables partially to the dependent variable. To test the influence of independent variables partially to dependent variable used sig level α = 5%.

Hypothesis decision making:
1. If ρ-value> α then accepted, it means partially independent variable has no significant effect on the dependent variable.
2. If ρ-value <α then rejected, it means partially independent variables significantly influence the dependent variable.

Here are the results of statistical tests t to determine the effect of independent variables partially to the dependent variable:

Based on the result. it can be seen from the influence of each independent variable to the dependent variable Gross Profit (X_1). It can be seen that the significance level (α) of the gross profit variable (X_1) is 0.231> 0.05. This means that gross profit variable has no significant effect on stock return (H_1 is rejected). Operating Cash Flow (X_2) . it can be seen that the significance level (α) of the operating cash flow variable (X_2) is 0.035 <0.05. This means that the operating cash flow variable has a significant effect on stock return (H_2 received). Investment Cash Flow (X_3). It can be seen that the significance level (α) of the investment cash flow variable (X_3) is 0.021 <0.05. This means investment cash flow variables have a significant effect on stock return (H_3 accepted). Cash Flow Funding (X_4) based on Table 3. it can be seen that the significance level (α) of the funding cash flow variable (X_4) is 0.029 <0.05. This means that the variable of cash flow of funding has a significant effect on stock return (H_4 received). ROA (X_5) based on Table 3. It can be seen that the significance level (α) of the ROA (X_5) variable is 0.277> 0.05. This means that ROA variable has no significant effect on stock return (H_5 is rejected). Company size (X_6) based on Table 3. it can be seen that the significance level (α) of the firm size variable (X_6) is 0.040 <0.05. This means that firm size variables have a significant effect on stock return (H_6 accepted).

4. Discussion

Effect of Gross Profit on Stock Return

Based on regression analysis obtained significant value> 0,05 that is equal to 0,231 mean not significant mean hypothesis rejected. Partial gross profit has no significant effect on stock returns. The company's gross profit is not considered to reflect the overall condition of the company so it can not affect the stock return rate (Margareth, 2012). In addition, based on financial statement data in this study shows the total gross profit obtained from net sales minus HPP owned by the company during the period 2009 to 2016 is unstable so that investors can not predict the return that will be obtained after investing funds in the company. This makes investors pay less attention to gross profit factor in making investment decisions. This research is not in accordance with research conducted Utari (2006) which states that partially gross profit affects the stock return. The mismatch of research results is caused by differences in capital market conditions studied, sample characteristics, number of observations, and period of study. The results of this study are also not in accordance with the theory of Febrianto (2005) which shows that the gross profit has a better profit quality compared to operating profit and net income presented in the income statement, because it is more operative and able to provide a better picture of the relationship with the profit stock prices are closely related to stock returns.

The Influence of Cash Flow from Operating Activities to Stock Return

Based on regression analysis obtained significant value <0.05 that is 0,035 means significant mean hypothesis accepted. Operating cash flow is partially significant effect on stock return. Operating cash flow can be a parameter in predicting stock returns because the management of the company and the investors are aware that operating cash flow guarantees the company in carrying out its business activities in the future. This research is not in accordance with research conducted by Triyono and Hartono (2000) which states operating cash flow has no significant effect on stock return. The insignificant effect of operating cash flows on stock returns as investors in the year of observation focused on the instability of the global economy. The instability of the global economy greatly affects stock prices. Therefore, an increase in operating cash flow does not affect investors' decisions. But the results of this study in accordance with research conducted by Adiwiratama (2012) which states cash flow from operating activities partially have a significant effect on stock returns. The results of this study indicate that investors see reporting changes in cash flows from operating activities as information that can be used for investment decision-making. The amount of cash flows generated from operating activities generates sufficient cash flows to repay the loan, maintain the operating capability of the company, pay dividends and make new investments also seen by investors in making investment decisions. So that the changes in cash flow from operating activities is a positive signal for investors.

The Influence of Cash Flow from Financing Activities To Stock Return

Based on the regression analysis obtained significant value <0.05 that is 0.29 means significant mean hypothesis accepted. The partial funding flow has a significant effect on the stock return. This means any increase in expenditures for financing activities is followed by an increase in stock returns. Cash flows from financing activities are considered as relevant information by investors as a basis for investment decision making. The effect of funding cash flows on stock returns as funding cash flow reflects a more direct relationship with corporate funding. A positive cash flow resulting in changes in the amount and composition of the company's capital and lending. While the amount of the loan repayment, the addition of paid up capital or cash dividend payment is very dependent on company policy, so that the condition of funding cash flows can affect the performance of the company in general

and consequently also can affect changes in stock price of the company. This is not in accordance with research conducted by Adiwiratama (2012) stating that cash flow from financing activities has an insignificant effect on stock returns because investors do not see or have not used the cash flow of funding as a consideration in making investment decisions and investors assume that high funding cash flows are less well considered in corporate performance.

Influence Return On Assets (ROA) Against Stock Return

ROA has a significance level of 0.277> 0.05. It shows that partially ROA has no significant effect on stock return, so the hypothesis that ROA has a significant effect on stock return is rejected. This is because the company is less efficient in managing its assets and inadequate in managing the existing investment so that the profit is not maximized and the increase of company's assets is not accompanied by the increase of stock return (appendix 8). This is in line with research that has been done by Setiyono (2016) that ROA has no significant effect on stock returns. ROA shows the effectiveness of the company utilizing its assets to generate net profit after tax. But in this research found that ROA has no significant effect on stock return. This shows that the effectiveness of the use of company-owned assets in generating net profit after tax does not become a reference for investors in making an investment decision. Investors do not always use ROA as a measure in assessing company performance to predict a company's return.

Effect of Corporate Size on Stock Return

Company size has a significance level of 0.040 <0.05. It shows that partially firm size has a significant effect on stock returns, so the hypothesis that the size of the company significantly affect the stock return is accepted. The influence of firm size variables on stock returns due to cosmetic sub sector companies and household purposes that become the object of this study has a large amount of assets during the observation period, so the variable size of the company calculated by menggunkaan total assets company can give a significant influence on stock return . The results of this study are not in accordance with research conducted by Setiyono (2016) which states that the size of the company does not significantly affect the stock return because the growth of a company not only seen from the size of the company size. The amount of an asset owned by the company if not managed properly by a company for the operation of a company, it will not be able to generate large profits. Profit that is not maximal will make the stock price decline. Therefore, the large and small of an asset owned by the company will not be able to predict the amount of profits to be gained by a company and return that will be obtained by investors. This causes the investor's lack of interest in seeing the size of the assets owned by the company will make a decision for investment.

5. Conclusion and Suggestion

Conclusion

1. Partial gross profit has no significant effect on stock returns of cosmetic sub sector companies and household needs in the period 2009 to 2016.
2. Operating cash flow is partially significant effect on stock return of cosmetic sub sector companies and household needs in the period 2009 to 2016.
3. Cash flow investment partially significant effect on stock returns cosmetics sub-sector companies and household needs in the period 2009 to 2016.

Suggestion

1. For Investors
   The results show that operating cash flow, investment cash flow, funding cash flow and firm size have a significant effect on stock returns while gross profit and ROA have no significant effect on stock returns so before finally deciding to invest, investors are advised to not only consider the gross profit value and ROA but also other factors that affect stock returns.

2. For the Company
   The company is expected to improve the performance of the company each year in order to be able to compete in obtaining trust from investors making it easier to obtain capital from outside the company. The better the performance of the company then the investor will be more interested to invest funds in the company. This study shows that gross profit and ROA have no significant effect on stock return so that company is suggested to further increase the value of gross profit and ROA in order to be considered in making investment decision.

3. For Academics
   Academics are advised to further explore the factors that may affect the stock return and are expected to be able to choose other sectors that have many companies so that the data obtained more. Disadvantages in this research is expected to be a correction in the development of further research, especially on the effect of gross profit, cash flow, ROA and company size to stock return. Researchers can further improve and refine the limitations of this study and expand the study sample. In addition, further research is expected to add other variables besides variables that have been studied in this research.

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Performance and Ownership in Relation With the Initiation of Dividend Policy

Desmintari
Faculty of Economics and Business, UPN "Veteran" Jakarta
Email: desmintari@yahoo.com

Abstract

Dividend initiation is the company's policy to pay or not to pay the first dividend post- IPO, in this dissertation modeled as dependent variable, influenced by company performance (consisting of size, growth, leverage, profitability, equity ratio) and ownership structure (institutional, managerial, government, and multiple ownership). The dissertation also examines the difference in average of impacts on stock returns between paying companies and those not paying dividends.

The model used in 4 logit models examines the relationship between company performance and each of ownership structure with dividend initiation. While the 5th model examines the relationship between company performance and all 4 ownerships together with dividend initiation.

From the study results obtained that from all models made, the company's performance variables that significantly influence are growth, ROA, and equity ratio. As for ownership variables that have significant influence is only government ownership. By using marginal effect is known opportunity to pay or not pay dividend initiation. The results on all models that show negative or decreased the chance of paying dividend initiation are size, growth, equity ratio, institutional ownership and managerial ownership variables. While for variables that show a positive or increased opportunity to pay dividend initiation is leverage, ROA, government ownership and multiple ownership variables. The difference between paying companies and non-paying ones of dividend initiation in a stock return is identified by a positive coefficient value or α> 0.

Keywords: dividend initiation, marginal effect, company performance, ownership structure

1. Introduction

The dividend policy has a very important impact whether viewed from investors or from companies that will later pay dividends from the policies undertaken through general meeting of shareholders. Investors generally expect to get rewards for investments made in the form of dividends and capital gains. On the other hand, the company also expects the company's continuous growth by using profits as a source of internal funding and at the same time able to provide welfare for its shareholders.

The company's readiness to make the first dividend policy after an IPO called dividend initiation is the first indication of a company with financial capability supported by the prospect of adequate corporate performance to distribute the cash surplus to shareholders. Therefore, it is expected that the company's decision through the GMS to immediately or delay the initiation of its dividend will signal the financial performance of the company. For companies that are able to early / quickly pay their first dividend is seen to have better financial capability in terms of growth opportunities, leverage, size and profitability of the company as well as corporate ownership structure (Sharma, 2001).

The ownership structure also determines how the company runs as it should be because of the agency problem between management and shareholders who share interests in the company's IPO in the stock market.

Dividend initiation policy is measured by dividend payout ratio (DPR). The reason for using the DPR as a dependent variable is because the DPR determines the share of profit to be shared with shareholders and held as part of retained earnings. The dividend theory relevant to this research is signaling theory. The theory of dividends as a signal was developed by Miller and Rock (1985) who argue that dividend announcements contain information about current and future profits. If the dividend announcement is increased it means having confidence that profit will increase.

In a study by Sharma (2001) which stated that in the US the company conducting the IPO would pay the first dividend not early in the year after the IPO, mostly over 3 years, while in Bambang Sugeng's (2009) study which stated in 1990 to 2000 seen that the payment of dividend initiation in Indonesia tends to the company in the first year after the IPO is done by almost all companies whose IPO, but in the year 2000 to 2014 seen from the data collected (table 1.1) not all companies pay dividend and dividend initiation the most is between the years 0-1 to 5 years after the IPO. The current policy of dividend payout initiation in Indonesia from 2000 to 2014 is in contrast to the conditions from 1990 to 2000 in accordance with Babang Sugeng (2009) and Sharma (2001).

In Indonesia, there are data (table 1.1), from companies whose IPO or go public through Indonesia Stock Exchange (BEI) in 2000 to 2014, within 15 years there are 266 companies whose IPO and those who have paid the initiation of dividend are 159 companies or equal to 59.77%, while 104 or 39.23% of companies did not initiate dividends.

Of the companies that make the first dividend payment or dividend initiation, most (113 companies or 71.07%) do it between the years 0-1 and those who do it up to the fifth year are 37 companies or 24.93%, thus from years 0-1 up to the 5th year as many as 150 companies or 96%, while those who pay dividend initiation more than 5 years is 4%.

On the basis of this idea, this research tries to analyze the policy of dividend initiation influenced by company performance and ownership structure at companies listed in Indonesia Stock Exchange (BEI) year 2000 until 2014 which modified with some model such as company performance variable (size, growth, leverage, profitability and equity ratio) with each variable of ownership structure such as institutional ownership, managerial ownership, government ownership, and multiple ownership.

Formulation of the Problem:
1. To figure out whether the company's performance (size, growth, leverage, profitability, equity ratio) and ownership structure (Institutional, Managerial, Government, and Multiple ownership respectively) influences the policy of paying or not paying dividen initiation, with a multivariate approach.
2. To analyze is there any difference between companies whose paying dividend initiation with companies that do not pay dividend initiation against returns or return on stock.

Research purposes:
1. To analyze whether company performance and ownership structure influence policy to pay or not pay dividend initiation, with multivariate approach.
2. To analyze whether there are differences in companies paying dividend initiation with companies that do not pay dividend initiation in term of stock returns.

Framework
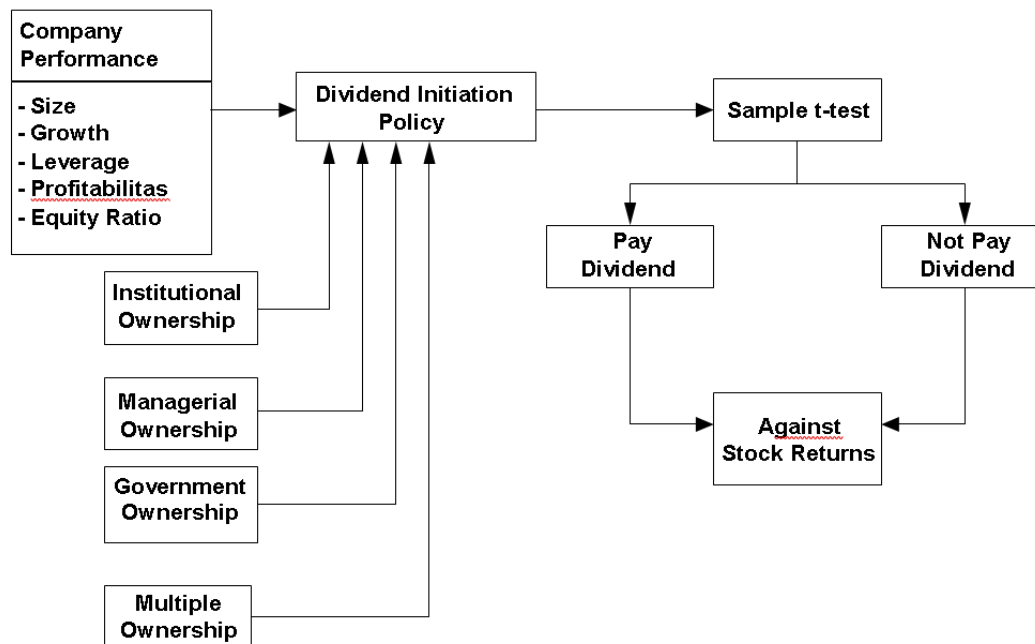
Source: Data Processed
Figure 1. Diagram of Framework

Table 1. Payment of dividend initiation after IPO in BEI from 2000 to 2014

Year of IPO	IPO	NO ID	No ID incomp	ID	DIVIDEND INITIATION PAYMENT AFTER YEAR OF IPO													
					0-1	2	3	4	5	6	7	8	9	10	11	12	13	14
2000	21	6	0	15	12	0	1	1	0	1	0	0	0	0	0	0	0	0
2001	31	11	0	20	11	2	0	3	0	1	0	0	0	0	2	1	0	
2002	22	4	0	18	10	2	1	2	0	1	0	1	0	0	1	0		
2003	6	1	0	5	5	0	0	0	0	0	0	0	0	0	0			
2004	12	5	0	7	7	0	0	0	0	0	0	0	0	0				
2005	8	1	0	7	5	1	0	0	1	0	0	0	0					
2006	12	5	0	7	4	2	0	0	0	1	0	0						
2007	22	6	0	16	13	1	0	1	1	0								
2008	19	12	0	7	4	1	1	1	0									
2009	13	5	1	7	3	1	3	0										
2010	23	11	0	12	6	5	1											
2011	25	12	0	13	10	1	2											
2012	22	10	0	12	10	2												
2013	30	15	2	13	13													
TOTAL	266	104	3	159	113	18	9	8	2	4	0	1	0	0	3	1	0	0
% ID	100%	39.10	1.13	59.77	71.07	11.32	5.66	5.03	1.26	2.52	0.00	0.63	0.00	0.00	1.89	0.63	0.00	0.00

source: IDX BEI, processed

2. Research Methods

Object of research

This study will analyze the policy of the company paying and not paying the first dividend after the IPO (dividend initiation) listed on Indonesia Stock Exchange in period 2000 -2014 and the data used is annual data. This study covers the effect of company performance which includes company size, Growth, leverage, profitability using ROA as proxy, equity ratio and company ownership covering institutional ownership, managerial ownership, government ownership, multiple ownership of initiation policy dividend. For the

type of independent variables that include company ownership, a dummy variable is used which includes institutional ownership, managerial ownership, government ownership and multiple ownership if the company has more than one ownership with more than 10% shares.

Method of Collecting Data

The type of data required in this study is annual secondary data from 2000 to 2014, covering IPO data from 2000 to 2013 and the year the company paid the first dividend or called dividend initiation from 2000 to 2014.

Population and Sample of Research

The sample in this study are all companies that do IPO and listed on the Stock Exchange between 2000 and 2014 either pay or not to pay a dividend initiation in which the operational variables contained in the financial statements of the companies that go public.

Operational Definition and Variable Measurement

1. Dependent Variable
   a. The dependent variable on the logistic equation has a categorical value of the probability of policy to pay or not paying for dividend initiation as part of a dividend policy in which the firm gives the first dividend after the IPO is seen from the dividend payout ratio. With a value of 1 if the company pays dividend initiation and 0 if the company does not pay dividend initiation.
   b. Return of Stock is the result (profit or loss) obtained from a stock investment.
2. Dependent Variable
   a. Size Company X
      The larger the size of the firm indicated by total assets, the company will use large amounts of debt as well. The larger the size of the company indicates that the company has a higher amount of assets.

$$\textit{Size = Total Aktiva}$$

   b. Growth Opportunities
      Is the company's ability to maintain stock prices in accordance with the research.

$$\textit{PBV = Market Value per Shares/Book Value per share}$$

   c. Leverage
      It is the ratio used to measure the extent to which a company's assets are financed with debt to measure or test the company's financial strength.

$$\textit{DER = Total Liabilities / Total Assets}$$

   d. Profitability
      Is a ratio that shows the company's ability to generate net income.

$$\textit{ROA = (Earning after Taxes / Total Assets) x 100\%}$$

   e. Equity Ratio indicate the amount of the company's assets financed by equity (shareholders)

$$\textit{Equity Ratio = Total Equity / Total Assets}$$

   f. Institutional ownership is the proportion of share ownership by the institution, as measured by the percentage of total shares owned by internal institution investors. With a dummy variable the value of 1 for company with 10% or more institutional ownership and 0 for company with less than 10% institutional ownership.

g. Managerial ownership is measured using the ratio between the number of shares owned by managers or directors and the board of commissioners to the total outstanding shares. With a dummy variable of 1 for firms with 10% or more managerial ownership and a dummy variable of 0 for firms with less than 10% managerial ownership.

h. Government ownership is the amount of share ownership by the government compared to the total managed share capital. With a dummy variable of 1 for firms with 10% or more government ownership and a dummy variable of 0 for firms with less than 10% government ownership.

i. Multiple ownership is the possession of more than one type of ownership of institutional, managerial, and/or governmental ownership. Dummy variable value 1 if the company has more than one type of ownership that controls at least 10% of the shares and 0 otherwise (Malkawi, 2007).

Data Analysis Method

1. Logit Model
   The logit model is a non-linear regression model that produces an equation in which the dependent variable is categorical. The most basic category of the model produces binary values such as the numbers 0 and 1. Furthermore, applying natural logarithms to the odds ratio will produce the following equation:

$$L_i = L_n \left(\frac{P_i}{1-P_i} \right) = Y_i = \beta_i + \beta_2 X_i$$

2. Multicolinear Test
   Aims to test whether in the regression model found the correlation between independent variables. A good regression model should not be correlated among independent variables. If independent variables are mutually correlated, then these variables are not orthogonal, where the correlation values among the independent variables are equal to zero.

Hypothesis Testing Technique

1. Significance Test of each Model
   The significance test of each model in the equation using logit method can be done by analyzing the value of Likelihood Ratio (LR) statistic. This test is conducted to see in each model the influence of independent variables to the dependent variable, whether the independent variable in a model affect the dependent variable.

   If the value of p-value is less than alpha (α) then with the confidence level of $(1- \alpha)$ we can reject the null hypothesis or in other words independent variables in the model of the equation together have a significant effect on the dependent variable at the level of confidence of $(1 - \alpha)$.

2. Coefficient of Determination
   Similar to the coefficient of determination in regression in general which can be seen from the value of R^2 and adjusted R^2, on the regression equation using the logit method, the determination of an equation varies based on the device used. The use of Eviews will produce the coefficient of determination pseudo-R^2. The value of R^2 has a range of values between zero to one $(0 < R^2 < 1)$. The closer to the value of one then almost all independent variables can explain the dependent variable and the model can be said the better.

3. Different (t/Z) Test
    An independent Z test basically compares the mean of two groups that are not related to each other for the purpose of whether the two groups have the same average or not and have a large sample size and with the same sample as the above logit model. And dummy regression test to see the difference with positive coefficient value.

3. Results and Discussion

Multicolinearity Test

Multicollinearity test aims to test whether in the model we have created found the correlation between independent variables. A good model is a model that does not occur correlation between independent variables.

Table 2. Multicolinearity Test Results

	SZ	LVRG	GRW	ROA	EQR	INST	MNJR	GVMT	MULTPL
LOG_TA	1.000000	0.268836	-0.028325	0.212792	-0.439190	-0.263675	-0.197203	0.332745	-0.143720
LVRG	0.268836	1.000000	0.001347	-0.046490	0.119732	-0.052415	-0.154830	0.125006	-0.144554
GRW	-0.028325	0.001347	1.000000	0.047092	-0.017134	0.019410	0.052460	-0.028249	0.058299
ROA	0.212792	-0.046490	0.047092	1.000000	0.037521	-0.027279	-0.066941	0.014374	-0.101541
EQR	-0.439190	0.119732	-0.017134	0.037521	1.000000	0.085534	0.089615	-0.165020	0.088155
INST	-0.263675	-0.052415	0.019410	-0.027279	0.085534	1.000000	-0.025049	-0.543412	0.139193
MNJR	-0.197203	-0.154830	0.052460	-0.066941	0.089615	-0.025049	1.000000	-0.110274	0.707269
GVMT	0.332745	0.125006	-0.028249	0.014374	-0.165020	-0.543412	-0.110274	1.000000	0.096022
MULTPL	-0.143720	-0.144554	0.058299	-0.101541	0.088155	0.139193	0.707269	0.096022	1.000000

Thus, in this research data does not occur multicollinearity problem. The results of company performance data and institutional, managerial, government and multiple ownership influence the decision to pay or not to pay dividend initiation.

Likehood Ratio Test

Table 3. Test Results Model 5
MacFadden and LR statistic

Mc Fadden R-Squared	0.178
Prob (LR statistic)	0.00000

Source: Data processed

This test is conducted to find out whether independent variables together significantly influence the dependent variable or at least there is one independent variable that has a significant effect on the dependent variable. This test is similar to the F test in multiple linear regression analysis. The value of this test can be seen on LR χ2 or when using p-value can be seen on the item Prob (LR statistic). For simplicity, we can see directly by using p-value, where the value of Prob (LR statistic) shows the number of 0.000. This value is smaller than the level of significance test of 0.05 so that we can reject the null hypothesis that states that there are no independent variables that significantly affect the dependent variable. Thus, with a confidence level of 95 percent can be concluded that at least one independent variable has a significant effect on the dependent variable.

McFadden R-Square

Is the likelihood comparison index. This value is equivalent to the value of the multiple regression model, the value is always between 0 and 1. The value of Mc Fadden in this

model is 0.178, meaning that only 17.8% of the variations that occur in the ID can be explained by the variables in the model, while the remainder is explained by other variables outside the model.

Partial Test

Table 4. Model 5 Test Results

Variable	Coefficient	Z Statistics	Prob
Constant	2.484	1.249	0.212
SIZE	-0.128	-1.244	0.214
LVRG	0.220	0.305	0.761
GRW	0.111	-2.036	0.042**
ROA	16.487	4.976	0.000***
EQR	-1.269	-1.737	0.082*
INST	-0.233	-0.236	0.814
MNJR	-0.250	-0.310	0.689
GVRMT	2.296	1.865	0.062*
MULT	0.278	0.434	0.664

Source: Data processed
*Note: *** if = 0.00; ** if =0   0.05; * if = 0.05   0.10*

This test is conducted to determine the influence of each independent variable to independent variable partially. This test is similar to t test on multiple linear regression analysis. However, the statistical value t does not apply in the logit model because of the probability that is between the values 0 and 1. Instead, statistical Z is used or when using p-value can be seen on the item Prob / significance. For variable SZ Prob value is 0.214. This value is greater than the value of significance test of 0.05 so as to fail to reject H0 which states that the variable SZ has no significant effect on the variable ID. In other words, at 95% confidence level it can be concluded that SZ variable has no significant effect to ID variable. Similarly, the LVRG, EQR, INST, MNJR and MULT variables have a probability value of 0.761 each; 0.082;

0.814; 0.680 and 0.664. The six variables have significance value greater than test significance value of 0.05 so it can be concluded at 95% confidence level LVRG, EQR, INST, MNJR and MULTPL variables have no significant effect on ID variable. But for EQR variable with value of 0,082 will have significant effect if we use test significance value equal to 0.10 or level of confidence 90%.

Meanwhile, for GRW variable has Prob value of 0.042, this value is smaller than the value of significance test of 0.05 so that H0 which states that the GRW variable has no significant effect on the ID variable can be rejected. So with 95 percent confidence level can be concluded that the GRW variable has a significant effect on the variable ID. Similarly, for the ROA variable that has a Prob value of 0.000 is much smaller than the significance of the test value of 0.05, so we can reject H0 and conclude that the ROA variable significantly influence the variable ID. GVRMT variable that has Prob value equal to 0.062 which is smaller than test significance value of 0.10, so we can reject H0 and conclude that GVRMT variable has significant effect to variable ID

Discussion
The results of the above table analysis if expressed in terms of equations are as follows:

Log Odd Ratio =
2.484 + -0.128SZ +0.111GRW+ 0.22 LVRG +16.487 ROA+-1.269 EqR
1.249   -1.244   0.305   -2.036   4.976   -1.737
+-0.233 DINST +   DMNJR + 2.296DGVMT+ 0.278 DMULT …..4.5
-0.236   -0310   1.865   0.434

The marginal effect value of the coefficient of each variable for model 5 can be seen in Table 5 below:

Table 5. Marginal Effect Model 5

Variable	Coefficient	Marginal Effect
SZ	-0.128	-0.024
GRW	0.110	-0.021
LVRG	0.220	0.042
ROA	16.487	3.122
EQR	-1.269	-0.240
INST	-0.233	-0.044
MNJR	-0.250	-0.047
GVRMT	2.296	0.435
MULT	0.278	0.053

Source: Data processed

For Size variable with marginal effect value of -0.024 the larger the size of the company, the less chance of dividend initiation. In other words, every 1 unit increase in size will decrease the chance of dividend initiation by 2.4%.

For Growth variable with marginal effect value equal to -0,021 the higher the company growth rate, the less chance of conducting dividend initiation. In other words, every increase of growth (growth of company) 1 unit will decrease the chance of dividend initiation equal to 2,1%.

Leverage variable with marginal effect of 0.042, the greater the leverage owned by the company, will increase the chances of the company to initiate dividends by 0.042 times compared to companies that have less leverage. In other words, every increase of 1 leverage unit will increase the chance of dividend initiation by 4.2%.

For ROA variable with value odd ratio 3,122 in this model return on assets (ROA) is found as variable which most significant influence variable ID. The greater the value of ROA, the greater the chance of dividend initiation by 312.2%. In other words, every 1 unit increase on ROA will increase the chance of dividend initiation by 312.2%.

Variable Equity Ratio with marginal effect is -0,240, equity ratio affects inversely to the initiation of dividend. In other words, the greater the value of the equity ratio, the less likely it is to initiate dividend by 24%. In other words, any increase in the equity ratio of 1 unit will decrease the chance of dividend initiation by 24%.

The institutional ownership variable with a marginal effect of -0.044, although statistically insignificant, the institutional ownership variable affects inversely with the dividend initiation decision. Given the institutional ownership within a company, it will minimize the opportunity for dividend initiation within the company by 4.4% compared to

companies that do not have institutional ownership. Or in other words, every 1-unit increase in institutional ownership will decrease the chance of dividend initiation by 4.4%.

Managerial ownership variable with a marginal effect of -0.047 is not statistically significant, managerial ownership variables barely affect dividend initiation decisions. Given the managerial ownership within a company, it will slightly lessen the probability of dividend initiation within the company by 4.7% compared to those without managerial ownership, in other words a 1 unit increase in managerial ownership will decrease the chance of dividend initiation by 4.7%.

For Government variable with a marginal effect of 0.435 is statistically significant, government ownership variable positively affects dividend initiation decisions. Given the ownership of government within a company, it will increase the chances of dividend initiation within the company by 43.5% compared to companies that do not have government ownership. In other words every increase of 1 unit of government ownership will increase the chance of dividend initiation by 43.5%.

Multiple variable with a marginal effect of 0.053, although not statistically significant, multiple ownership variable affects inversely with dividend initiation decisions. With multiple ownership within a company, it will increase the chances of dividend initiation within the company by 5.3% compared to companies that do not have multiple ownership. In other words each increase of 1 unit in multiple ownership will increase the chance of dividend initiation by 5.3%.

Using Z_{count}, with formulation and method as follows:

Companies that initiate dividends

$$\bar{x}_1 = \mu_1 = 0.39021$$
$$- \quad \sigma_1^2 = (1.31884)^2 = 1.73933$$
$$n_1 = 159$$

Companies that do not initiate dividends

$$\bar{x}_2 = \mu_2 = 0.15297$$
$$\sigma_2^2 = (0.91037)^2 = 0.82878$$
$$n_2 = 104$$
$$D_0 = 0$$
$$- \quad Z\ hitung = \frac{(\bar{x}_1 - \bar{x}_2) - D_0}{\sqrt{\left[\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}\right]}}$$
$$- \qquad = \frac{(0.39021 - 0.15297) - 0}{\sqrt{\left[\frac{1.73933}{159} + \frac{0.82878}{104}\right]}}$$
$$-$$
$$= \frac{0.23724}{\sqrt{[0.01094 + 0.00797]}} = \frac{0.23724}{0.0545} = 4.35$$

$$Z_{count} = 4.35$$

With a degree of confidence 95% or α = 5% = 0.05, then from the statistical table we get the value $Z_{0.05}$ = 1.65.

Since Z_{count} = 4.35 > $Z_{0.05}$ = 1.65, then reject H_0

With Z_{count} = 4.35 greater than Z_{table} = 1.65, then there are differences of companies who initiate dividends with companies that do not initiate dividends against its returns.

4. Conclusion

1. Using the likehood ratio test, company performance (size, leverage, growth, profitability with ROA proxy and equity ratio) and institutional ownership together influence the company's policy to pay or not pay dividend initiation in all models in model 1 to model

4 in which company performance combined with their respective ownership, while in Model 5, company performance combined together with all ownership structures that include institutional, managerial, government and multiple ownership.

2. Using the Z test which is the test of each variable get the results within the model 1 to 5 variables that affect the policy of pay or not pay dividend initiation is growth, ROA, equity ratio and government ownership.

3. To see an opportunity to pay dividend initiation using a marginal effect that indicates a chance of dividend initiation will have positive impact / increased dividend initiation opportunities on variables of leverage, ROA, government ownership and multiple ownership. While the negative impact or decreased the opportunities of dividend initiation caused by variables size, growth, equity ratio, institutional ownership and managerial ownership.

4. There is a difference between companies that pay dividend initiation with companies that do not pay dividend initiation to stock returns. And companies paying dividend initiation are better than companies that do not pay dividend initiation.

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Portfolio Formation and It's Performance Evaluation in Indonesian Capital Markets

Renea Shinta Aminda[1]
[1]Program Doktor Ilmu Ekonomi Terapan, Universitas Padjajaran Bandung

Abstract

This research aims to: find out how many n issuers and portfolio forming components are in portfolios in the Indonesian capital market to achieve a minimum level of risk with a certain return; and knowing how Portfolio performance is from the number and components that are formed in the portfolio on the Indonesian capital market and performance evaluation.

The population in this study were all companies listed on the Indonesia Stock Exchange during the observation period (January 2008 - December 2016) totaling 540 issuers from 9 sectors and then 50 issuers selected as samples based on the proportional combination of 336 issuers with active transaction criteria and complete prices, with sampling technique by purposive sampling. The analytical method used begins with the formation of a portfolio with 9 sectors diversification, then the portfolio performance is measured by Jensen's alpha index.

The results of the analysis show that the number of issuers in the portfolio is the most optimal in obtaining the benefits of diversification in the portfolio in Indonesia as many as 12 issuers in one portfolio, with a combination of issuers that provide the smallest risk with a certain level of return and become an Optimal portfolio consisting of a combination of 6 industrial sectors. The result of the formed portfolio performance measurement shows the performance of the portfolio below the market performance or negative value but the systematic risk value is also below the market, the beta value is <1 so it is in accordance with the purpose of its portfolio formation.

Keywords; Diversification, Portfolio Formation, and Portfolio performance

1. Research Background

An investor in the face of risks and uncertainties in choosing and determining his investment shares requires rationality based on 1) maximum returns at a certain level of risk or 2) at a minimum risk level with certain returns. (Markowitz, 1952). To reduce the risk on investment, theoretically, according to Mao (1970) (Poon, Taylor and Ward, 1992), it is done by diversifying shares through the formation of a stock portfolio, although the nature of the stock portfolio does not eliminate risk but is reducing. Thus to minimize risk and maximize the returns, it must be achieved by forming an optimal portfolio by simulating several available stocks to get the minimum risk value for certain returns, to get the value done by certain calculation procedures.

The basic theory of portfolio selection was first coined by Harry M. Markowitz (1952). Portfolio selection discusses the problem of how to allocate funds to bring returns but with the smallest risk. The establishment of a portfolio involves identifying which shares will be selected and what proportion of the funds will be invested in each of these shares. Portfolio selection from many issuers is intended to reduce the risk borne. The first research is to determine how the most ideal number of shares in obtaining optimal diversification benefits is done by Evans and Archer (1968) where it is said in his research that there will be very few benefits of diversification, when the portfolio has reached eight to ten stocks with the same weight, even though randomly diversified. Evans and Archer's opinions above are

supported by the results of Fisher and Lorie (1970) and Jacob (1974).

Elton and Gruber (1977) continued similar research with the above research where the results were also almost the same, namely some of the benefits of diversification in the form of a 51% total risk reduction, with a total portfolio share of 10 shares. Furthermore, when the portfolio amounted to 20 shares, the risk decreased to 56% or experienced a decrease of 5% compared to Portfolios with a number of 10. If the portfolio amounted to 30 he was only able to reduce the risk by 2% when compared to portfolio 20. So the benefits of diversification are almost non-existent in the portfolio with 50 shares. While Bloomfield et al (1977) stated that a portfolio of 20 stocks is the minimum required to obtain the benefits of diversification in equity. While Statman (1987) compares the marginal benefits of diversification to marginal costs and concludes that at least 30 stocks are needed optimally for portfolio diversification, investors can calculate the marginal benefits of diversification by comparing the expected results from a portfolio of 30 stocks, to the expected return of a 500-share portfolio , leverage so that the expected standard deviation is equal to the expected standard deviation of the 30 share portfolio.

Then Campbell et al (2001) in his study found almost identical to the results of Statman's study that the optimal number of shares of around 50 shares, the correlation value of marginal benefits compared to marginal costs decreased, would increase the marginal benefit of diversification.

Another extreme opinion was expressed by Wasik (1995) and the National Association of Investor Corporation (representing 8,000 stock club options), recommending that investors in their portfolio be at least 5 shares (this rule is known as the Rule of Five). From the understanding of the rule of five, if only a portfolio of 2 stocks, then there will be a tendency for both stocks to become losers, while if the portfolio is only three, it will give mediocre results, but with a portfolio of 5 shares the results can be said to be true winners.

Some research and other writings, which explain the size of the recommended minimum stock portfolio, can be explained as follows; 1). loy, Jennings, and Stevenson in (1989) stated that a good minimum number of shares was 8 to 16 shares, 2). M.D. Joenk and Gitman (1990) revealed the amount of the minimum number of shares in the portfolio should be as much as 8 to 20 shares to minimize risk, 3). Francis J.C (1991) and Chenney-Moses (1989) state that the recommended size of the minimum number of shares in the portfolio is 10 to 15 shares. 4). Pittalis-Reward (1990) states that the recommended value of the minimum number of shares in the portfolio is represented at least 12 to 15 shares 5). F.K Relly (1992) states that the number of minimum shares in the portfolio is 12 to 18 shares, 6). while 3 research results in the book written by French Dw (1989), G. Alexander. Share (1990) and Myers Sd-Brailey obtained a stock portfolio recommendation of at least 20 shares (quoted from Percy.s and Newbold, 1993), 7). Tandelilin (1998) states that in the Indonesian capital market the minimum number of shares in the portfolio is 15 shares and in the Philippine capital market the minimum number of shares in the portfolio is 14 shares

Based on the research and the things mentioned above, it can be concluded that portfolios can be diversified in the amount of between 5 to 10 shares, or at least 12 shares to obtain a minimum risk value without reducing the amount of yield. Where the average value of the stock portfolio of retail investors is large enough so that the portfolio size is not a dominant factor. So it is necessary to do an in-depth analysis and understanding of the number of shares in the portfolio including assessing the performance of portfolios formed in the Indonesian capital market.

Based on the above, then it can be formulated in the form of questions as follows:
1. What is the number of issuers and components that form portfolios in portfolios in the Indonesian capital market to achieve a minimum level of risk with a certain return?

2. What is the portfolio performance of the number and components formed in the stock portfolio in the Indonesian capital market?

2. Methodology

Population and Research Sample

The population in this study was the stock price index on the Indonesia Stock Exchange from January 2008 to December 2016. The reason for the selection of 2008 to 2016 in the Indonesia Stock Exchange was because the length of the period (in monthly) research allowed observations of various influences to the next number of samples representing the population issuers on the Indonesia Stock Exchange will be chosen based on representation Gay and Diehl (1992) in Hill Robin (1998) assumes that the more samples were taken, the more representative and the results can be generalized. But the sample size received will depend on the type of research. The opinion expressed by Gay and Diehl (1992) that descriptive research requires a sample of at least 10% of the population. So in the population consisting of 336, this Issuer required a minimum sample of 34 Issuers to meet 10% but to better represent the representation of all issuers in 9 sectors the researchers completed it into 50 samples of issuers or 14.8% of the population.

In accordance with the provisions according to Gay (1976) of 10% if descriptive research can be represented 10 percent of the population (minimum 20% for a very small population) and for research the population represented 30 objects, in this case, the number of issuers that exist, meet the qualifications and transaction criteria active companies in other words companies or issuers with inactive trades and incomplete prices for the period January 2008 to December 2016 were excluded from the sample, and a daily share price of 336 listed companies was obtained. Then the random number method according to Roscoe (1975) was quoted by uma sekaran (2006) the reference for determining the sample is more than 30 and less than 500 is appropriate for most studies that take the use of excel where the machine will randomly select a sample of proportional percentages which proportional percentage distribution. Gay (1976) in Sevilla (1993) says that the minimum size that can be accepted is based on the type of research that is descriptive research = 10 percent of the population, but for a very small population it takes a minimum of 20 percent, according to Arikunto (2006; 112) saying that: if the object is less than one hundred, it is better to take it all so that the research is a population, but if the number of objects is large, 10-15% or more can be taken. The opinion is according to Roscoe in Sugiono (2011; 90)

The following is an operational definition and measurement of variables related to the formation of a portfolio, namely:

Return Portfolio Hope (R_p)

Return expectations of the portfolio can be estimated by calculating the weighted average return of each individual asset in the portfolio, the percentage of portfolio value invested in each individual asset in the portfolio is referred to as the weight of the portfolio symbolized by "W" (Tandelilin 2010: 120). The formula for calculating the expected return from a portfolio:

$$E(R_p) = \sum_{i=1}^{n} W_i E(R_i) \qquad (1)$$

In this case:

$E(R_p)$ = Expected Return From portofolio $\qquad$ $E(R_i)$ = Expected Return From Emiten-i
W_i = The i-Emiten portfolio weight $\qquad$ n = Number of Emiten in the portfolio
$\sum W_i$ = Total Portfolio Weight= 1,0

Varians Return Portfolio (σ_p^2)
The formula for calculating portfolio risk consisting of n-issuers, the measure used is the return variance of the n-issuers in the portfolio mathematically are as follows (Tandeliling, 2010)

$$\sigma_p^2 = \sum_{i=1}^{n} W_1^2 \sigma_1^2 + \sum_{i=1}^{n} \sum_{j=1}^{n} W_1 W_j \sigma_{ij} \tag{2}$$

Where:
σ_p^2 = Varians return portfolio
σ_i^2 = Varians return Emiten i
σ_{ij} = Covarian Between return emiten I and j
W_i = Weight or portion of funds invested in emiten i
$\sum_{i=1}^{n} \sum_{j=1}^{n}$ = double addition sign, means that n^2 will be added simultaneously

(all pairs of i and j that may be paired)

If part of the first equation $\sum_{i=1}^{n} W_1^2 \sigma_1^2$, we assume that the portfolio weight is the same for each issuer, and then the portion of the funds invested (w), will be:

$$\sum_{i=1}^{n} (1/n)^2 \sigma_i^2 = \frac{1}{n} \sum_{i=1}^{n} \sigma_i^2 / n$$

Next, the equation is simplified to:
$$\sigma_p^2 = \sum_{i=1}^{n} \sum_{j=1}^{n} W_1 W_j \sigma_{ij}$$

Portfolio Variation Coefficient (CV_p)
This ratio is used to measure risk per unit relative to the level of portfolio return expectations (Tandelilin, 2010):

$$CV_p = \frac{\sigma_p}{E(R_p)} \tag{3}$$

Where:
CV_p = Portofolio Covarians
σ_p = Portofolio Standard Varians
$E(R_p)$ = Expected Return Portfolio

The following in table 1 will be explained the Operational Variable definition:

Table 1. Operational definition Research Variables

Variable	Definition	Skala	Measurement
Portfolio Performance with Alpha Jensen (CAPM adoption)	Jensen's Alpha formula is a Jensen index which shows the difference between the level of actual return obtained by a portfolio and the level of expected return if the portfolio is derived from the capital market line	Rasio	$R_p - R_f = \alpha + \beta_p [R_m - R_f] + ei$ $x_p = (\overline{TR}_p - \overline{R}_{BR}) - \beta_p (R_m - \overline{R}_{BR})$ in this case x_p = Jensen's Alpha $\overline{TR}_p$ = Average portfolio return certain period $\overline{R}_{BR}$ = Average return of free assets risk-free periodu R_m = Average market return period t Certain β_p = Beta portofolio p $\overline{TR}_p - \overline{R}_{BR}$ = Average portofolio premium (risk premium portofolio) $\overline{R}_m - \overline{R}_{BR}$ = Premium (market risk premium)

Source: Summary of several references

3. Results and Discussion

Determination of the size of the number of issuers in the establishment of Optimal Portfolios

Comparative determination of stock size in the formation of a portfolio can be taken based on the simulation of risk value and portfolio return on ranking one combination of stock portfolios at each value of stock size in the portfolio where the analysis can be seen in table 2 and figure 1 as follows:

Table 2. Ranking One Value Risk and Return Portfolio at various sizes n in N 50 Establishment of Optimal Portfolios

No	Portfolio Combination Size	Portfolio Risk	Portfolio Return
1	Size n shares = 10 from N = 50 shares	0.0448791	0.0059531
2	Size n shares = 12 from N = 50 shares	**0.0278567**	**0.0055077**
3	Size n shares = 14 from N = 50 shares	0.2772008	0.019227
4	Size n shares = 12 from N = 50 shares	0.2457016	0.0179054
5	Size n shares = 12 from N = 50 shares	0.1981391	0.0164481

Data Resource: Data Analysis

From table 2 and Figure 1 the value of risk and optimal portfolio return on various sizes of issuers in the portfolio with the lowest risk value in each portfolio category, the lowest portfolio risk is found in the size of the issuer as many as 12 shares of 50 existing issuers with a risk value (standard deviation of) 2.78% then for the second optimal portfolio size with a stock size of 10 shares out of 50 shares in the portfolio with a risk value of 4.48%, then the third portfolio that has the smallest risk is n size size n = 18 with the magnitude of portfolio risk 19.81% so that it also proves that the more value n in the portfolio, the smaller the risk faced by the analysis will be different from the research conducted by Tandelilin regarding the optimal portfolio size in Indonesia as many as 14 shares in its portfolio, while the calculations and simulations on various sizes of combinations are theoretical and simula The research carried out differs from that used and applied by mutual funds in Indonesia in the formation of stock portfolios in orchid mutual funds, rose mutual funds and sector commodity rose mutual funds arranged in 10 shares in each portfolio it offers. On the basis of the results of calculating the smallest risk in a portfolio combination with the size of 12 of the 50 selected issuers, then proceed to make a modeling on the optimal portfolio return that is formed and calculates the performance of the existing optimal portfolio compared to its market performance. For Investors with characteristics of investors that Risk Taker will consider taking the number of emiten N = 14 per portfolio because the highest return value compared to the N combination of issuers 10, 12, 16 and 18, with the amount of return 1.9% and the risk faced by the portfolio amount N = 14 is greater than N = 12, it has been in accordance with the theory which states that the highest yield with a certain amount of return. Technically, the higher the expected return, the higher the risk faced by the investor and vice versa. The relationship between risk and return is linear and unidirectional (Husnan; 2015).

Determination of the size of the number of issuers in the establishment of Optimal Portfolios

From the results of research conducted through a series of processes and procedures in the formation of portfolios in accordance with Markowitz portfolio theory including calculation of returns, correlation between issuers, portfolio deviation standards, portfolio variance and covariance, the optimal number of shares available in the portfolio through

technical and fundamental analysis can be concluded as many as 12. Theoretically, almost all investors understand the benefits of diversification in reducing risk, in practice, many investors as transactions in the Indonesian capital market do not apply it. After simulating the various sizes of issuers in one portfolio (with sizes N = 10, N = 12, N = 14, N = 16 and N = 18), out of 50 samples of issuers that are available, the results show that the smallest risk value is in line with the objectives of portfolio formation by (Poon, Taylor and Ward, 1992).

The hypothesis that was formed was in accordance with the results of The Rewards and Pitfalls of High Dividends Stocks research, The Wall Street Journal, August 2, 1990, was 12-15 shares, then F.K. Reilly, Investment Analysis and Portfolio Management, 3rd ed., Chicago, IL, The Dryden Press pad in 1992, 12-18 shares and J. Bamford, J. Blyskal, E. Card, and A. Jacobson, Complete Guide to Managing Your Money, Mount Vernon, NY, the 1989 Union Pad Consumers were 12 or more. in a different view of practical practice regarding the optimal size of the portfolio in Indonesia the establishment of a temporary portfolio based on preference and basis for superior stocks, for example in the focused 10 mutual fund the Mutual Fund will only invest in 10 shares in the same proportion. Second, this Mutual Fund is managed in a semi-active manner, where the choice of shares that can be purchased is determined by the market (the top 16-30 JCI is based on capitalization), but the selection of 10 shares is carried out with certain fundamental criteria.

The results in the above studies are very different from the findings of this study, which turns out that with the number of shares as much as 10 in the portfolio, the risk faced by investors is in the second position with a risk of 4.48%. in portfolios represented by all sectors in the capital market in Indonesia or the sector rotation strategy is not an assumption of the approach in calculating and forming portfolios in previous research.

Another interesting finding of this research is that the criteria for establishing portfolio investment are not based on asset classification that has been determined by investment fund companies on the preference of investment management companies based on the leading sectors, but the optimal portfolio formed is represented on several stock sectors, so that it is in accordance with the theory presented by Mao (1970), who suggests that investors should not only be in one type but diversify in several investment sectors in the hope that it can minimize risks and maximize returns or otherwise maximize returns and minimize risk.

The results of the stock size in the optimal portfolio are 12 obtained from simulating various sizes of stocks, in one portfolio (with sizes N = 10, N = 12, N = 14, N = 16 and N = 18) from 50 samples of issuers there is a risk value and return from 1000 portfolio combinations that are performed on all stock sizes in all portfolios (can be seen in appendix 6), combination restrictions refer to that the number of minimum portfolio size combinations in accordance with the research conducted by Christen Hsu in 2003.

Calculation of portfolio risk and calculation of portfolio return in each N share in the portfolio is carried out, taking a sample of 1% (top 10 portfolios in each portfolio size formed) in each combination of N portfolio shares based on the smallest portfolio risk value criteria that are carried out details and details are shown in Table 5, the portfolio with the smallest risk in each size of the portfolio is taken by 10 Portfolios in each size with the smallest risk of 1000 combinations per each portfolio.

Discussion of Portfolio Performance of the amounts and components formed in the stock portfolio in the Indonesian capital market

The purpose of knowing performance (systematic) and systematic risk of the 10 optimal portfolios that have been formed based on the Jensen "s Alpha measurement model adopted from the Capital Asset Pricing Model (CAPM), Why alpha Jensen' s chosen as a measure

of portfolio performance is formed due to the Sharpe gauge index (Reward to variability = RVAL) and Treynor Gauges (Reward to volatility = RVOL) are actually angular gauges from the Portfolio. The greater the angle or slop of the portfolio, the better the performance of the portfolio (Jogiyanto, 2010: 654), in addition to the angle of portfolio performance, also determined by the intercept the higher the intercept, the higher the portfolio return so that in this study used the approach to calculating portfolio performance with alpha Jensen's method As for the factors that are expected to affect the performance of the 10 optimal Portfolios that have been formed (AJ Portfolio) N optimal portfolio issuers, by using BI interest rates as benchmark benchmarks and index issuers that are generally issuers with large stock capitalization and investor tolerance levels to risk, by taking data from January 2008 to December 2016 (total data series / n = 108 months), for optimal portfolio data is formed, Risk Free Market (RFM) data is obtained from the monthly performance index of Composite Stock Price (IHSG) as Market I and performance monthly LQ 45 as Market II and Risk Free Rate (RFree) from the BI Rate divided by 12 months.

CAPM theory states that in equilibrium (alpha) the value of alpha is zero ($\alpha = 0$), but to assess and identify whether the mutual fund and the value of the portfolio product is the superiority or inferiority of the portfolio's performance, Jensen's opinion needs to be added the alpha value where Alpha Jensen's criteria as follows: (1) if the positive alpha (α) value shows superior performance (outperform the market), (2) if the negative alpha (α) value shows inferior performance (underperform the market), (3) if the alpha value (α) Zero shows its performance is proportional to market performance (Magdalena, 2012: 3)

From the analysis carried out by using Tools Eviews 9 by way of regressing the portfolio risk premium ($TR_p - R_{BR}$) as dependent by reducing the return value 10 Portfolios that are formed Risk Free Market 1 reduction in this case represented by the return from monthly performance The JCI was reduced by the Risk Free Rate (BI Rate) as independent, which obtained the results of the analysis output in table 3 as follows;

Table 3. Jensen's Alpha Index and Significance Value 10 Portfolio (A-J) with Market I (IHSG)

Portofolio	Alpha Value (α)	Prob	Beta Value (β)	Information
A	-0.112941	0.0102	0.762397	significant
B	-0.107348	0.0039	0.775837	**significant**
C	-0.096918	0.0250	0.797944	significant
D	-0.120385	0.0024	0.745576	significant
E	-0.074156	0.0743	0.832612	significant
F	-0.139026	0.0021	0.709087	significant
G	-0.085999	0.0461	0.815926	significant
H	-0.064876	0.1041	0.850948	Not significant
I	-0.161502	0.0003	0.661322	significant
J	-0.109618	0.0055	0.764951	significant

Source of Data: Operate data eviews 9

From Table 3 above it is obtained that all optimal Portfolios formed have significant alpha and beta values, only the H portfolio is not significant, also known that the portfolio with the best performance is the optimal portfolio formed E, the best among existing portfolios, because even though the portfolio return performance underperform is minus 7% significant with a 10% confidence level. It is known that the alpha Jensen model is negative

(α), meaning that the performance of the 10 Portfolios formed shows inferior performance (underperform the market), or it can be said that the performance of 10 Portfolios formed under market performance is the return of JCI (Market 1) with a negative value on alpha 0.10 means that Ho is not rejected, which is reflected in the probability value below 0.000 <0.005, because the probability value for all portfolios other than H portfolio is 0.0000, then the coefficient value is significant meaning that the market is efficient so the product 10 Portfolio formed cannot take the advantages of Market1 (IHSG) that exist.

The value of β is a systematic gauge of the issuer relative to market portfolio risk can be seen from the beta value below 1 (β <1) means that the return return 10 Formed portfolio is smaller than the return Market (Return IHSG), This occurs because the basis of the portfolio formation is the issuer with the lowest risk so that although it is quite safe but the return value is below the market return, the β value for the market portfolio is 1, a portfolio that has a beta <1 is said to be less risk than market portfolio risk or has a smaller systematic risk rather than market risk of 0.83 although the portfolio return expectation value is smaller than the market portfolio expectations return.

Then data processing is done using Tools Eviews 9 by regressing the reduction in the return value. 10 Portfolios that are formed Risk-Free Market 2 (LQ45) reduction in this case represented by the return from monthly performance LQ45 is reduced by RiskFree Rate (BI Rate), obtained the results of its analysis output on table 4 as follows:

Table 4. Jensen's Alpha Index and Significance Value 10 Optimal Portfolios (A-J) with Market II (LQ45)

Portofolio	Alpha Value (α)	Prob	Beta Value (β)	Information
A	-0.148863	0.0003	0.695202	significant
B	-0.156133	0.0001	0.689604	**significant**
C	-0.147909	0.0014	0.707848	significant
D	-0.171047	0.0001	0.656186	significant
E	-0.072808	0.0586	0.832696	significant
F	-0.139027	0.0011	0.707176	significant
G	-0.143822	0.0021	0.713998	significant
H	-0.120638	0.0059	0.752481	significant
I	-0.144621	0.0004	0.688657	significant
J	-0.148863	0.0003	0.695202	significant

Source of Data: Secondary Data Operations eviews 9

From table 4 above it is known that all alpha optimal portfolios are significant at 1% and 5% confidence levels. From table 4.42 also known that the portfolio with the best performance is the optimal portfolio E formation is the best among existing portfolios because even though the performance of the portfolio return underperforms is minus 7% significant with a 5% confidence level. known by the Alpha Jensen model model, it is obtained that the alpha value (α) is negative, meaning that the performance of the 10 portfolios that are formed shows inferior performance (underperform the market), it can be said that the performance of 10 Portfolios formed below market performance is Return LQ45 (Market II) is negative at alpha 0, 10 means that Ho is not rejected which is reflected in the probability value below <0.10, because the probability value f or all portfolios is 0.000, then the coefficient value is significant meaning that the Market is efficient so that the product 10 Formed Portfolios cannot take advantage of the existing Market II (LQ45) . While the β value is a systematic

gauge of the issuer relative to market portfolio risk, it can be seen from the beta value that the value is below 1 (β <1) meaning. The value of β for the market portfolio is 1, an emiten that has Beta <1 is said to have a smaller risk than market risk, whereas issuers that have Beta> 1 are said to have the systematic risk that is greater than market risk. If an issuer has a beta equal to the market portfolio beta or equal to 1 by 0.82, it is expected to get more than expected market return expectations

4. Conclusions and Suggestions

This research is based on the formation of optimal portfolios, which are obtained from selected stocks in the 9 existing industrial sectors in the Indonesian securities market, followed by modeling the return portfolio formed and assessing the performance of the portfolio resulting from the formation. Based on the results of the analysis, several conclusions can be made as follows;

1. In the portfolio in the Indonesian capital market to achieve a minimum level of risk with a certain return is as many as 12 issuers in one portfolio where the formation combination consists of 6 industrial sectors, while the conventional issuer's portfolio size is 10 in its portfolio, with a combination of portfolio formers consists of 3 industrial sectors,

2. Optimal Portfolio performance results show that the performance value (α) of 10 optimal portfolios is formed below the market performance where the optimal portfolio return is below the JCI return (Market I) and the LQ45 (Market II) returns, however, at the β value is a systematic gauge of the issuer relative to market portfolio risk, optimal portfolios are formed having a beta <1 meaning that the risk is smaller than the risk of a market portfolio or has a systematic risk less than market risk.

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Relationship of International Trade and Energy Consumption to Economic Growth in Indonesia 1980 – 2014

Harris Eka Sidharta[1], Lilis Yuliati[2], Teguh Hadi Priyono[3]
Development Study Science Department Faculty of Economy and Business, University of Jember, 678121
Email: lilisyuliati.feb@unej.ac.id

Abstract

International trade and energy consumption are factors that can increase economic growth. Indonesia's exports decreased while Indonesian imports increased. In addition, Indonesia's primary energy consumption is increasing every year causing the availability of primary energy to decline. The purpose of the research is to know the relationship between exports and energy consumption to Indonesia's economic growth in the long term and short term. This research use Error Correction Model (ECM) with period 1980 to 2014. The result of this research is that export has a significant positive relationship to economic growth on long-term and short-term. Energy consumption has a significant positive relationship to economic growth on long-term and short-term.

Keywords: Export, Energy Consumption, Error Correction Model (ECM)

1. Introduction

Economic growth indicates the succesful country development. According to Kuznetz, country development is defined as the capacity increasing at the long term periode of a country to provide various economic things (Todaro and Smith, 2004:99). The economic growth improvement will also improve the society's life. However, not all country are able to fulfill their societies' needs that they need an assist from other countries in the form of international trade.

Haberler (in Jhingan, 2014:447) said that international trade provides significant contribution for country development in the future and the good or deviated free trade was the best policy considered from the economic development point of view. In line with the statement, trade can be the main activator and contributor in improving economic growth (Awokuse, 2005; Halicioglu, 2009; Gries dan Redlin, 2012). Haberler's statement was argued by several economic experts, one of them was Myrdal (in Jhingan, 2014:450), the impact of international trade between two countries was the beginning of poverty accumulation and country's stagnation called retardation. International trade is the export and import activities , because both activities are the cores of the international trade (Ningsih, no year).

Indonesia performs international trade as the result of implementing the open trade system. The oil and nature gas and other commodities are exported and imported based the needs of Indonesian society's needs. However the export proportion on Indonesia's GDP tends to increase. The 1998 and 2008 economy crisis phenomena had an impact on Indonesia's trade.

Other factor that can affect the economic growth is consumption (Kuncoro, 2003:26). Economic growth did not inlude energy as variable, but energy is important in the modern economic activity to improve the growth. The country's economic growth is inline with the societies' income that the demand on energy will also increase. Energy consumption takes a role in a country such as country's revenue source, industrial fuel and material, economic activity driver (TD, 2009). The energy consumption may be used as the economic growth stimulus (Chebbi 2009 and Ozturk, 2010).

During 1980 until 2014, the energy consumption in Indonesia tend to increase. In 1980, the energy consumption in Indonesia was 377 kg, and the significant increase on energy consumption was 543 kg in 1990. In 2014, the energy consumption was 883 KG. Energy consumption affects the economic growth, however, the constant increase on the energy consumption has negative impact such as increasing the carbondioxides which can damage the ozon layer and environment. (Kazman and Duman, 2014). Industrial, transportation, and electricity are the sectors that caused global warming as the result of primary energy consumption (World Bank, 2017).

International trade and energy consumption in Indonesia affect the internal economic growth. The economic growth of Indonesia tend to be fluctuative as the result of economic crisi in 1998 and monetary crisis in 2008.

International trade is one of factors in increasing the economic growth, however the export sector that was expected to support the economic growth tend to decrease while the import tend to increase as the result of various phenomena that caused the trade balance deficiency in Indonesia. Meanwhile, the main problem of the energy sector in Indonesia is the efficiency because the energy consumption in Indonesia was considered as wasteful (Sekretariat Jendral Dewan Energi Nasional, 2014: 2).

Various opinions from several theories, empirical studies, and phenomena in Indonesia such as export, energy consumption, and economic growth attract the writer on the relation of export and energy consumption on the economic growth of Indonesia.

2. Method

Research Type

The research approach in this study is the quantitative research. According to Arikunto (2006:12), the quantitative research tend to use numbers, started from data collection, data interpretation, and result interpretation. An opinion from Nasution (2008:4) stated that the quantitative research showed the relation of variables and providing the clear description based on the current situation with the descriptive method.

Research Location and Time

This research was conducted in Indonesia. The research data used were the 1980 until 2014 in the form of annual data.

Data Type and Source

The data source in this research was the secondary data. Secondary data was data that indirectly gave data to the data collector (Sugiyono, 2008:402). The secondary data used in this research is in the form of times series from the World Bank.

Model Specification

The model formation of export and energy consumption relation on economic growth was modified from Ginting's research (2017). Economic growth is a dependent variable while export and energy consumption are independent. The model used was:

GDP = f (Export, Energy) (1)

The mathemathic model (1) above was changed into the econometrics model, would be:

$GDP_t = \beta_0 + \beta_1 EXPORT_t + \beta_2 ENERGY_t + e$ (2)

Where GDP was Gross Domestic Product (%), EXPORT was the total export (Million US$), ENERGY was primary energy consumption (kg), β_0 was constanta, β_1, β_2, were coefficients, and *e* was error term.

Data Analysis Method

ECM method was one of methods applied in the time series research to see the dynamic motion in short-term, that will also showed the relation among variables in the short-term. The long-term time series can be proved through cointegration regression or the existance of relation in the long-term. However, in the short term, the time series model did not reach the balance as the result of error term (ε_t). There were several stages in performing estimation by using ECM model such as Data Stationarity Test, Integration Degree Test, Cointegration Test, Estimation with ECM Model, and Classical Asumption Test.

The basic model of ECM are:

$$\Delta Y_t = \alpha_0 + \alpha_1 \Delta X_t + \alpha_2\ EC_t + e_t \qquad\qquad (3)$$
$$EC_t = (Y_{t-1} - \beta_0 - \beta_1\ X_{t-1})$$

The short term ECM model equation is:

$$\Delta GDP_t = \beta_0 + \beta_1\ EKSPOR_t + \beta_2\ ENERGI_t + ECT_{t-1} \qquad\qquad (4)$$

The long term ECM model equation is:

$$\Delta GDP_t = \beta_0 + \beta_1\ EKSPOR_t + \beta_2\ ENERGI_t \qquad\qquad (5)$$

3. Result and DIscussion

Data Analysis Result

1. Stationarity Test
    Stationarity test or test of unit roots was the first step before estimating the time series data model. Stationarity test was used to test the variable stationarity in a research. The stationarity test in this research used Augmented Dicky Fuller (ADF) method by comparing the ADF probability value with the determined α (alpha) in the research.

Table 1. Stationarity Test Result

Indonesia	Prob. GDP	Prob. Export	Prob. Energy
Level	1,0000	0,9959	0,8417
1st	0,0289	0,0000	0,0000
2nd	0,0000	0,0000	0,0000

Table 1 described the data used in this research were generally stationary at the level 1st difference. The energy consumption variable was not stationary at the level stage which could be seen from its probability value of 0,8417 which was higher than the α (5% = 0,05). Then the economic growth variable was not stationary at the level stage because the probability value was 1,0000, which was higher than α value (5%). Besides, the international trade variable was not stationary at the level stage because the probability value was 0,9959 higher than α (5%).

Therefore, the stationarity test was descended to the 1st difference level that the three variables which inclued economic growth, international trade, and energy consumption had probability value lower than 0,05 such as the economic growth probability was 0,0289, the international trade probability was 0,000, and the energy consumption probability was 0,000. This result indicated that the three stationary data were at level 1st difference and the next ECM step could be performed.

2. Cointegration Test

If all data has been stationary, then the next step in ECM estimation is the cointegration test to determine the existence of long term relation among variables. ECT was defined as the residual of simple linear regression equation between Y_t and X_t, that *ect=Y_t - α - βXt*. If there was a cointegration, then there will not be a false regression problem and ECT will put the short term relation of Yt and Xt in balance state by using the residual of the long term relation. Besides, in the cointegration condition, then the regression equation $Y_t = α + βX_t + ECT$, the cointegration regression equation and parameter β could be interpreted as long-run multiplier which measured the long term effect permanently from X_t on Y_t.

Cointegration test had two steps, first, by performing dependent and independent variables equation regression with OLS (Ordinary Least Square) estimation method. Second, obtaining long term ECM estimation result from the OLS estimation result. Besides, there would be residual which would be used for the cointegration test.

Table 2. Cointegration Test Result

Variable	ADF	Mac Kinnon Critical value			Proba.s ADF
		1%	5%	10%	
ECT	-4,40	-3,63	-2,95	2,62	0,0013

Table 2 explained residual had ADF statistic value of 4,405777 higher than the ADF critical value of 1%, 5%, and 10%. The ADF probability value from ECT was 0,0013 lower than α (5%) that it could be stated that ECT was stationary. So the ECT variable can be used in the short term ECM estimation and it can be stated that there was a long term relation among variables in the research.

3. Long Term ECM Estimation Result

Table 3. Long Term Error Correction Model Estimation Result

	C	Export$_t$	Energy$_t$
Coefficient	7.650.000.000	2,85	2.600.000.000
t-Statistic	0,308840	16,33	4,266990
Prob.	0,7594x	0,0000*	0,0002*
R-Square	0,986056		
Prob. F Statistic	0,000000		

*) significant on α=5%, ˣ) insignificant on α=5%,

The result showed the R-Square value was 0,986056 with α (5%) which means the accuration level of this research is 0,986% while the rest 2% were affected by other variable outside the model. Constanta had a long term and insignificant relation on economic growth, which can be seen from the C probability value of 0,7594 higher than α (5%).

International trade had a long term and significant relation on economic growth in Indonesia which was proved by the EXPORT probability value of 0,0000 lower than α (5%). International trade had positive effect on economic growth which was proved by the coefficient value of 2,853191. When the international trade increase US$ 1, it will increase US$ 2,85391 for the economic growth in Indonesia.

Energy consumption had a significant relation with economic growth in Indonesia in the long term which can be seen from the ENERGY probability value of 0,0002 lower than α (5%), energy consumption had a positive effect on economic growth in Indonesia with coefficient value of 2.600.000.000, which means that when there was an increase in energy consumtion of 1 kg equal to oil will increase US$ 2.600.000.000 for economic growth in Indonesia.

The independent variables in this research, the international trade and energy consumption may simultaneously affect the economic growth in Indonesia in the long term which can be seen from the F-Statistic probability value of 0,0000.

4. Short Term Estimation Result

Table 4. Short Term Error Correction Model Estimation

	C	Export$_t$	Energy$_t$	ECT$_{t-1}$
Coefficient	**10.800.000.000**	**1,070548**	**337.000.000**	-0,37
t-Statistic	2,253292	-2,821331	2,34	-2,13
Prob.	0,0317*	0,0063*	0,0261*	0,04*
R-Square	0,254146			
Prob. F Statistic	0,030129			

*) significant on α=5%

The test result showed R-Square value was only 0,251969 with α (5%) which means the accuration level of this research is 25% while the 75% affect by other variables outside the model. The constanta had a sort term and significant relation on the economic growth in Indonesia which was proved by the EXPORT probability value of 0,0063 lower than α (5%). The international trade had a positive effect on economic growth which was proved by the coefficient value of 1,070548, means when the international trade increase by US$ 1 will increase US$ 1,070548 for the economic growth in Indonesia.

Energy consumption had a significant relation with economic growth in Indonesia in the shirt term which can be seen from the ENERGY probability value of 0,0261 higher than α (5%). Energy consumption had a positive effect on economic growth in Indonesia wth coefficient value of 377.000.000, means when the energy consumption increase by 1kg equal to oil will increase US$ 377.000.000 for the economic growth in Indonesia.

International trade and energy consumption simultaneously affect the economic growth of Indonesia in the short term which can be seen from the F-Statistic probability value of 0,030129. On the short term ECM estimation there was the ECT value which showed the speed of the balance in the long term. The ECT negative value explained that last year's disequillibrium has been corrected at the current year and shows the balance in the long term. That the ECT value (-1) of -0,368044 explained that the speed to re-reach the long term was 37% which is considedred as slow.

Discussion

1. The relation between Export and Economic Growth

The estimation result using Error Correlation Model (ECM) showed that export had positive effect on economic growth of Indonesia in the long term and short term. Indonesian Trade was suitable with the production factor proportion theory, where Indonesia which has a great number of workers will be specialized in producing labor intensive goods to be exported to the needing country to increase Indonesia's foreign exchange or generally called Labor Intensity.

The research resul by using ECM showed that export has significant effect on economic growth of Indonesia. The result was in line withe the research of Ginting (2017) stated that there was a positive effect of export on the economic growth of Indonesia during the Quartal 1 2001 until Quartal 4 2015 in the long and short term that support the ELG hypothesis. Rahmaddi and Ichihashi (2011) who researched the export and economic growth of Indonesia year 1971 until 2008 by using VAR found that there was a relation between export and economic growth in the long and short term that support the long term ELG hypothesis.

This research result was different with Mustika et al (2015) research that export had no significant effect on economic growth of Indonesia because export considered to have small contribution on the economic growth. This was because Indonesia still exported the primary industrial commodities with low productivity value and the commodity produced was from imported capital goods that insignificantly affect the economy. The country economic change and social factors may caused export affect negatively on the economic growth (Gibba and Molnar, 2016).

Based on the research result, export was considered as the economic growth activator in Indonesia because it can increase national income. However government of Indonesia should keep maintaining the export condition, because based on Alhayat and Muslim (2016) projection, the export growth of Indonesia in 2019 will only be 1,56%, while the import growth is projected to be 7,8% in 2019 will trigger Indonesian trade balance deficiency.

2. The relation between Energy Consumption and Economic Growth
    The estimation result by using Error Correction Model (ECM) showed that energy consumption had a positive effect on economic growth of Indonesia in the long and short term. The research result was in line with the research of Adyajel (no Year), which stated that there was an effect of energy consumption on economic growth in Indonesia. Belke (2010) who researched the energy consumption on economic growth in 25 OECD countries also found the relation between energy consumption on econimic growth in the long term. The research result was different with Noor and Siddiqi (2010) who said that energy consumption had a negative effect on the GDP of five Asian countries (pakistan, Bangladesh, Nepal, Sri Lanka, and India).

Based on the research result, the energy consumption was one of factors to increase economic growth of Indonesia because it can increase the national income. Khan and Qayyum (2006) said that energy consumption had a vital role in accelerating the country;s economic activities. According to Kabede et al (2010) and Sekretariat Jendral Dewan Energi Nasional (2016:6) energy consumption can be affected by the number of residents, when the number of resident increase, the energy consumption will also increase each year that will affect the economic growth of Indonesia.

4. Conclusion

This research concluded that export had positive significant effect on economic growth of Indonesia in the long and short term. Energy consumption had positive significant effect on economic growth of Indonesia in the long and short term. Some suggestions which can be applied by Indonesian Goverment are:

1. Improving export performance especially strengthen offers, such as strengtehen the commodities competitiveness, developing infrastructures, conducting research and devdeloping potential product to create an innovation for Indonesian exports.

2. Government of Indonesia may try to find a renewable energy and energy conservation that the energy consumption keep contributing for the economic growth.

3.

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Shares and Bonds in International Trade

Kiki Aprilia Tiningsih[1], Sebastiana Viphindrartin[2], Zainuri[3]
[1]Student, Master of Economics and Business, University of Jember
[2,3]Lecturer, Department of Economics and Development Studies, Faculty of Economics and Business,
University of Jember
Email: kikiapriliatiningsih@gmail.com

Abstract

Almost all countries embrace an open economy by trading systems by individuals or institutions from one country to another under a mutually agreed agreement called international trade. In international trading activities there are bonds and shares that play an important role as a letter of agreement. The purpose of this journal is to estimate the effect of stocks and bonds on international trade in Indonesia. The results show that stocks and bonds have a significant effect on international trade.

Keywords: Volatility, Stock Market, Bonds

1. Pendahuluan

Sistem perekonomian dunia hampir semua menganut system perekonomian terbuka hal ini dibuktikan dengan adanya system perdagangan internasional. Fungsi dasar kegiatan ekonomi adalah bagaimana mengalokasikan berbagai sumber daya dan sumber daya manusia dalam suatu proses industri untuk menghasilkan barang dan jasa di dalam memenuhi kebutuhan masyarakat pada umumnya, sehingga hal ini perlu mendapat perhatian serta konsentrasi antisipasi agar pasokan sumber daya senantiasa memenuhi kuantitas jumlah produksi dan kesesuaian terpenuhinya sumber daya manusia dan modal dalam suatu proses manajemen yang digeneralisasikan ke dalam output produk dan jasa yang dihasilkannya. Dengan demikian kegiatan perekonomian merupakan suatu sistem keterkaitan dan keterikatan antara aspek input tersedianya kontinuitas suplai sumber daya dan sumber daya manusia serta modal yang ditransformasikan dalam proses produksi untuk menghasilkan output produk barang dan jasa.

Secara integratif dapat digambarkan telah terjadi hubungan emosional antara pelaku bisnis, pemerintah dan masyarakat konsumen di dalam menunjang system perekonomian yang mengatur perputaran arus barang dan jasa. Dalam sistem perekonomian modern dijelaskan bahwa kontributor utama yang memberikan jaminan terselenggaranya proses kegiatan ekonomi adalah bergantung dari keterlibatan langsung masyarakat konsumen. Keterkaitan antara pelaku bisnis, Pemerintah dan masyarakat konsumen dalam sistem perekonomian ditujukan untuk membangun terciptanya proses pasar yang antara penjual dan pembeli atas berbagai kebutuhan akan permintaan barang, pelayanan dan sumber daya lainnya serta kontinuitas terjaminnya pasokan barang yang ditawarkan dengan membentuk kontinum arus perputaran pendapatan / penghasilan, pembayaran dan produksi.

2. Metodologi

Metode penelitian yang digunakan adalah Deskriptif Kualitatif, yaitu data yang diperoleh seperti hasil pengamatan, hasil analisis dokumen, catatan lapangan disusun peneliti di lokasi penelitian, tidak dituangkan dalam bentuk angka-angka. Peneliti melakukan analisis data dengan memperkaya informasi dan hasil analisis data berupa pemaparan mengenai situasi yang diteliti yang disajikan dalam bentuk uraian naratif (Hadi, 2002).

Disini peneliti langsung menuju populasi yaitu Negara Indonesia dengan menggunakan

teknik analisis deduksi yakni menarik kesimpulan dimulai dengan pertanyaan umum menuju pertanyaan-pertanyaan khusus dengan penggunaan penalaran da rasio. Dalam konteks ini peneliti berusaha menggali dasar-dasar secara teoritis yang dikemukakan oleh para ahli yang selanjutnya penulis ambil suara kesimpulan. Dan menggunakan random sampling, peneliti secara acak memilih narasumber sebagai informan kunci untuk memberikan informasi akurat yang meliputi aparatur pejabat pemerintah yang memahami obligasi dan saham dalam perdagangan internasional.

3. Hasil dan Pembahasan

Fenomena terbentuknya pasar keuangan (*financial markets*) sebagai sistem keua-ngan (*financial system*) yang melakukan kegiatan dengan fungsi utamanya adalah terselenggaranya kegiatan menabung dan investasi (*savings and investment*) yang secara atraktif menampung berbagai sumber keuangan secara surplus dari masyarakat yang kelebihan dana (*over liquid*) dan disalurkan kembali kepada masyarakat yang membutuhkan (*under liquid*) baik itu untuk keperluan konsumtif maupun dalam pembentukan modal dan investasi. Adapun beberapa fungsi dari sistem keuangan tersebut meliputi antara lain:

1. *Saving function.* Fungsi tabungan yang dimaksud adalah menjelaskan tentang ter bentuknya sumber dana yang diperloleh dari tabungan masyarakat , begitu pula halnya dengan fungsi obligasi dan saham yang merupakan instrumen pasar uang dan modal sebagai pembiayaan proyek investasi dan pembangunan infrastruktur dan fasilitas lainnya yang diperlukan masyarakat.

2. *Liquidity function.* Fungsi likuiditas yang dimaksud adalah menjelaskan instrumen keuangan sebagai alat yang likuid, karena pada saat kapan pun dapat dicairkan sesuai dengan yang dibutuhkan oleh investor. Sehingga hal ini mendorong para investor untuk cenderung menyimpan dananya dalam berbagai instrumen keuangan dan hanya mencairkannya sesuai dengan urgensi kebutuhannya.

3. *Payment function.* Fungsi pembayaran yang dimaksud adalah sebagai alat pembayaran atas sejumlah ransaksi yang dilakukan antara penjual yang menawarkan produk barang dan jasanya dengan pembeli selaku konsumen yang menikmati produk dan jasa yang diperolehnya.

4. *Policy function.* Fungsi sebagai alat kebijakan, adalah menjelaskan tentang prosedur pengambilan keputusan yang dilakukan pemerintah (government) di dalam merumuskan dan mengimplementasi berbagai kebijakan untuk mengatur dan mengawasi perputaran uang yang beredar di masyarakat sehingga dapat dijadikan strategi di dalam mengukur stabilitas moneter.

5. *Wealth function.* Adalah fungsi kekayaan atas nilai perolehan dari investasi yang dilakukan oleh para investor sebagai sumber pendapatan tetap dan tidak tetap sebagaimana sesuai dengan pilihan investasi yang dilakukannya baik itu hasil dari transaksi pasar uang maupun pasar modal.

6. *Credit function.* Fungsi kredit disini diartikan sebagai alat likuiditas menciptakan hubungan keterkaitan antara investor penyimpan dana yang secara tidak langsung dipergunakan sebagai sumber pembiayaan untuk memfasilitasi kepentingan debitur (individu maupun organisasi) serta alokasi kebutuhannya, baik untuk alat investasi, pembentukan modal kerja serta untuk keperluan konsumtif.

7. *Risk function.* Fungsi sebagai alat untuk menghindari risiko, dimaksudkan bahwa pasar keuangan sebenarnya menawarkan instrumen keuangan berupa asuransi sebagai produk yang memberikan perlindungan (protection) terhadap para pelaku bisnis, masyarakat konsumen dan pemerintah, baik itu perlindungan jaminan pelayanan kesehatan, jaminan hari tua serta perlindungan maksimal atas sejumlah properti

(bangunan dan kendaraan), baik itu disebabkan karena terjadinya kebakaran maupun faktor-faktor lain yang dapat mengurangi nilai investasi.

Dari beberapa fungsi sistem keuangan tersebut tiada lain ditujukan untuk memberikan pelayanan jasa keuangan baik instrumen pasar uang maupun pasar modal sebagai alat investasi di dalam mengatur dan merencanakan sistem keuangan sebagaimana sesuai dengan kepentingan investor baik itu yang dibutuhkan masyarakat, pemerintah maupun kalangan pebisnis. Pasar uang sesuai dengan sifatnya di desain sebagai produk pinjaman jangka pendek (kurang dari setahun) yang dapat diilustrasikan sebagai tempat bertemunya masyarakat secara individual maupun institusional yang memiliki kelebihan dana (unit surplus) dengan kelompok debitur yang membutuhkan dana untuk keperluan jangka pendeknya yang akan dipergunakan sebagai sumber pembiayaan modal kerja dan juga dipakai sebagai alat investasi pemerintah untuk memaksimalkan nilai uang dari hasil pendapatannya serta senantiasa dipergunakan untuk kepentingan efektifitas penyaluran dana serta sebagai transaksi yang bersifat spekulasi dalam pembelian produk pasar saham maupun pasar komoditas.

Dalam aktivitas transaksi instrumen pasar uang dikenal beberapa produk alternatif investasi bagi kepentingan para pemodal (investor) dan para debitur baik individu maupun lembaga untuk memproteksi kerugian yang ditimbulkan atas pergerakan nilai tukar mata uang (*hedging*) yang tujuannya adalah memberikan keseimbangan nilai tingkat suku bunga, nilai tukar spot rate serta forward rate. Keseimbangan tingkat suku bunga tersebut memberikan implikasi tentang bagaimana para investor maupun para debitur untuk mengamankan nilai tukarnya di pasar uang yang direalisasikannya sesuai dengan kondisi suatu negara yang bersangkutan ataupun menyamakannya dengan tingkat suku bunga pinjaman sehingga memberikan alternatif tentang kondisi yang ideal apakah layak untuk berinvestasi atau mengajukan pinjaman yang dilakukan di dalam negeri maupun di luar negeri.

Volatilitas nilai mata uang dapat berpengaruh terhadap instrumen investasi keuangan , baik dalam sistem perekonomian nasional, regional maupun global. Apresiasi nilai tukar rupiah terhadap dolar di dalam perdagangan valas dapat mendorong spekulan untuk memborong dolar sebagaimana hal ini ditunjukkan dengan tren menguatnya rupiah yang dalam minggu2 terakhir ini menembus level tertinggi di posisi Rp.9.638,- dan di pasar spot pada hari yang sama ditutup Rp.9.436,-. Penguatan kurs didukung faktor eksternal sebagaimana hal ini ditunjukkan pelemahan dolar terhadap hampir semua mata uang karena sentimen negatif fundamental perekonomian AS yang mengalami defisit anggaran serta antisipasi dari beberapa bank sentral untuk mengalihkan cadangan devisa dalam bentuk emas dan mata uang lain seperti euro.

Secara internal penguatan rupiah lebih disebabkan membanjirnya investor asing di pasar modal sebagaimana hal ini berdasarkan hasil laporan Bank Indonesia selama kuartal III pemburuan saham oleh investor asing mencapaui US$ 608,7 juta atau senilai 6 triliun rupiah. Sinyal positif penguatan rupiah ini merupakan angin segar bagi para investor pasar modal baik pemula maupun investor senior untuk membuat pundi-pundi investasi baru yang lebih menjanjikan dibandingkan dengan menginvestasikannya secara konvensional di dalam tabungan dan deposito. Fenomena ini merupakan hal biasa dalam berinvestasi karena secara alamiah perubahan investasi tersebut dapat bergeser dari satu investasi ke investasi lain sesuai dengan kebutuhan pasar dan faktor-faktor teknikal analisis investor. Secara garis besar, lahan investasi dibagi menjadi tiga bagian, yaitu investasi keuangan (financial investment) yang terdiri dari pasar uang (money market) dan pasar modal (capital market), pasar komoditas (commodity market) serta investasi pada sektor riil.

Momentum perpindahan investasi tersebut memberikan harapan baru sebagai dampak penguatan rupiah sehingga hot money akan terus terpacu yang dipicu sentimen positif dalam negeri yang secara ekonomi dan politik kondusif menjanjikan keuntungan yang berdampak pada pemulihan struktur investasi keuangan (investment financial structure) di dalam menggerakkan roda pembangunan serta memacu percepatan pertumbuhan perekonomian nasional.

Ada berbagai macam pilihan investasi sebagai peluang mendapatkan keuntungan yang lebih tinggi atas pilihan investasi tertentu dengan meminimalkan risiko serendah mungkin (low risk high return), yang dengan demikian diperlukan pengamatan secara seksama dan kejelian dalam bersikap untuk menentukan arah dan gaya (style) secara maksimal dalam strategi pengambilan keputusan investasi. Sebagaimana kita ketahui nilai investasi dalam sistem keuangan merupakan struktur bagian dari pelayanan jasa keuangan di dalam memproduksi dan mendistribusikan serta menawarkan produk jasa keuangan untuk memenuhi permintaan masyarakat. Peter S. Rose (1997:10) mengemukakan bahwa:

"The financial system operates to bring planned savings by business, house hold, and government in to balance with planned real investment by businesses, households and governments. The financial system also makes possible the supplementing of savings with borrowing so that both real investment in capital goods and inventories and financial investment in stocks, bonds and other financial assets can occur at the level the public whises."

Bentuk pelayanan jasa keuangan tersebut secara garis besar dapat berupa instrumen pasar uang maupun pasar modal sebagai alat investasi di dalam mengatur dan merencanakan sistem keuangan sebagaimana sesuai dengan kepentingan investor baik itu yang dibutuhkan masyarakat, pemerintah maupun kalangan pebisnis.

Pasar modal memiliki peranan penting dalam kegiatan perekonomian suatu negara yang layak dijadikan sebagai indikator keadaan perekonomian suatu Negara karena pasar modal merupakan sumber dana alternatif bagi perusahaan-perusahaan sebagai agen produksi yang secara nasional membentuk Gross Domestic Bruto (GDP) sehingga pesatnya perkembangan pasar modal akan mendorong kemajuan perekonomian suatu negara. Ironisnya perkembangan pasar modal nasional belum seluruhnya dapat menyentuh masyarakat investor lokal atau hanya memberikan kontribusi masih dibawah 10 persen penduduk di Indonesia sehingga pemanfaatannya belum menjadi prioritas utama pilihan investasi apabila dibandingkan negara lainnya di Asia Tenggara seperti di Malaysia dan Singapura yang memiliki kecenderungan akan pengetahuan pasar modal dapat dijadikan sebagai alternatif investasi yang menguntungkan. Investasi jangka panjang lainnya selain saham adalah produk investasi obligasi. Obligasi merupakan kontrak antara pemberi pinjaman dengan yang diberi pinjaman yang diwujudkan dalam bentuk surat obligasi sebagai investasi harta tetap (fixed asset investement) dengan perolehan yield secara tetap pula.

Nilai obligasi senantiasa berubah (variable) sesuai dengan perubahan suku bunga secara umum yang digunakan sebagai indikator suku bunga secara umum yang mengacu pada suku bunga tabungan dan deposito sehingga kondisi ini cenderung terbalik karena jika suku bunga pasar tabungan dan deposito meningkat lebih tinggi secara umum mempengaruhi perubahan suku bunga obligasi. Obligasi merupakan kontrak antara pemberi pinjaman dengan yang diberi pinjaman yang diwujudkan dalam bentuk surat obligasi. Obligasi merupakan investasi harta tetap (fixed asset investment) karena mendapat yield secara tetap pula. Obligasi dogolongkan sebagai investasi tetap karena nilai perolehan dari hasil investasi tersebut suku bunganya telah ditentukan terlebih dahulu. Disamping pendapatan dari yield tetap tersebut diperoleh dari bunga (coupon yield) dan juga pemegang olbigasi

dapat memperoleh capital gain, yaitu apabila dilakukan penjualan sebelum jatuh tempo.

Nilai obligasi senantiasa berubah (variable) sesuai dengan perubahan suku bunga secara umum yang digunakan sebagai indicator sku bunga secara umum (mengacu pada sku bunga tabungan dan deposito) sehingga kondisi ini cenderung terbalik karena jika suku bunga pasar (tabungan dan deposito) meningkat lebih tinggi secara umum mempengaruhi perubahan suku bunga obligasi. Kinerja pasar obligasi pemerintah saat ini menunjukkan ke arah perbaikan, hal ini dapat dilihat dari penurunan yield curve Surat Utang Negara (SUN) di pasar sekunder nencerminkan kepercayaan pasar terhadap kondisi ekonomi nasional semakin meningkat. Penurunan *spread* antara bunga obligasi pemerintah dengan Sertifikat Bank Indonesia (SBI) dan *US Treasury* mencerminkan premium risk yang menurun sehingga mendorong investor asing membelanjakan dollar nya ke produk SUN (surat Utang Negara) sebagai alternatif investasi yang cukup menjanjikan seperti tercermin dalam pencapaian net buying hingga april 2007 mencapai 15,3 triliun dan hal ini akan memberikan sentimen positif pula hingga pada kwartal ke empat total dana asing yang dibelanjakan kepada SUN mencapai 141,317 triliun rupiah atau mencapai 97,76 persen dari target 144,5 triliun (*Tempo, 15 November 2009*). Kekhawatiran akan pemenuhan kebutuhan pembiayaan Anggaran Pendapatan dan Belanja Negara (APBN) tidak menjadi ganjalan karena strategi front loading yang terukur dengan jadual yang teratur dan diversifikasi instrumen pembiayaan menjadikan anggaran cukup aman baik untuk pembiayaan defisit maupun debt financing dengan tetap mengutamakan bargaining position atas tawaran investor untuk mendapatkan yield tinggi serta disamping itu pula senantiasa tetap menjaga likuiditasnya dengan tidak memberikan liquidity premium.

Sinyal volatilitas secara dinamis akan terus tetap terjaga sesuai dengan fundamental perekonomian Indonesia sebagaimana hal ini terjadi pula pada mata uang asing lainnya dari dampak global sehingga dengan demikian Bank sentral tidak akan mengubah posisi kebijakan dalam mengelola aliran dana asing yang masuk ke pasar dalam negeri dan akan diserahkan sepenuhnya pada mekanisme pasar. Investasi jangka panjang ini diharapkan akan terus meningkat seiring dengan tetap terjaganya inflasi di akhir tahun yang diprediksikan mencapai pada kisaran antara 3,5 - 3,9 persen.

Meningkatnya nilai investasi saham dan obligasi merupakan sinyal positif membaiknya perekonomian nasional dan hal ini akan secara cepat pula memberikan sinyal negatif bagi perekonomian nasional apabila Pemerintah Indonesia tidak secara sungguh-sungguh menjamin kepercayaan investor dan harus tetap menjaga situasi politik dalam negeri yang kondusif sehingga dapat memberikan rasa aman bagi investor, seperti terbangunnya kehidupan pemerintahan yang demokratis, jujur, akuntabel dan transparan di dalam menyikapi situasi dan kondisi ekonomi dan politik dalam negeri yang berkembang saat ini sebagai perwujudan penyelenggaraan pemerintah yang good governance yang menstimulan iklim investasi dan bisnis.

Faktor lainnya yang perlu dipertimbangkan adalah bagaimana pemerintah Indonesia secara arif menyikapi situasi dan kondisi perkembangan ekonomi internasional seperti ketidakpastian harga minyak dan komoditas primer, ketidakseimbangan global dan volatilitas pasar keuangan, ketidakstabilan moneter internasional, kesenjangan global serta memperhatikan peningkatan persaingan sebagai sasaran investasi diantara negara-negara di Asia yang memberikan kontribusi penting bagi perumusan kebijakan investasi terutama mensiasati terjadinya guncangan peralihan arus modal jangka pendek (*capital flight*) ke luar negeri. Dengan demikian stabilitas ekonomi makro merupakan prasyarat keberlanjutan ekonomi (*suistanability growth*) yang berpengaruh terhadap sasaran-sasaran pembangunan nasional yang memaksa pemerintah harus tetap konsisten menjaga laju inflasi dan stabilitas nilai tukar sehingga gairah berinvestasi dapat dijadikan komoditas

perdagangan global yang menghasilkan devisa guna memenuhi neraca pembayaran internasional yang memiliki kecenderungan meningkat setiap tahunnya seiring dengan meningkatnya pula arus kebutuhan barang modal dan investasi industri dalam negeri.

4. Kesimpulan

Pasar modal memiliki peranan penting dalam kegiatan perekonomian suatu negara yang layak dijadikan sebagai indikator keadaan perekonomian suatu Negara karena pasar modal merupakan sumber dana alternatif bagi perusahaan-perusahaan sebagai agen produksi yang secara nasional membentuk *Gross Domestic Bruto* (GDP) sehingga pesatnya perkembangan pasar modal akan mendorong kemajuan perekonomian suatu negara.

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Empowering Indonesia and Mauritius Investment Based on LQshift LQshare Analysis and Policy on Tax Haven Country

Ratri Ardianto[1], Sebastiana Viphindrartin[2], Zainuri[3]
[1]Student, Master of Economics and Business, University of Jember
[2,3]Lecturer, Department of Economics and Development Studies, Faculty of Economics and Business, University of Jember
Email: ardianto.ratri@gmail.com.

Abstract

BKPM or the Investment Coordinating Board is a government-owned entity of the Republic of Indonesia at the ministerial level in charge of encouraging direct investment both domestically and abroad. Based on BKPM's investment realization report, Mauritius occupies the top 10 positions as the largest FDI country within period of 2015-2017. Mauritius itself known as a tax haven country that used as an investment destination by developed and developing countries. Indonesia and Mauritius have no bilateral relations yet both on economic, politic and social & culture. Cooperation between these two countries is done through third party countries such as Dubai and Singapore. Purpose of this study is to examine potential possibility to level up investment within two countries from third party managed cooperation into bilateral cooperation. Data used in this research are time series data from 1990 – 2017. Variables used in this research are FDI level, following indicator economic including GDP, interest rate, exchange rate, and trade balance. The LQ analysis is commonly used as a general method of analysing interregional comparative advantage. This evaluation method aims to identify what sectors are an advantage in a certain period. From the results of this study, obtained the potential to be the advantage of both countries and how the Indonesian government maintain a conducive economic climate from the negative effects of tax haven country adopted by Mauritius.

Keywords: LQshift LQshare; FDI; Institutiona;, Tax Haven

1. Introduction

Investment is one of the economic activities found in various economic activities both economic and micro-macro life. Investment is the activity of buying capital goods or cash expenditures to increase real assets, adding production equipment to increase the ability to produce goods and also providing services, as well as adding financial assets to obtain greater income in the future (Haming & Basalamah, 2003:3; Sukirno, 2003:5; Samuelson, 2004:198). Investment activities in the form of placement of cash, funds or other assets held for a certain period of time to obtain capital gains in the future which also correlate with the long-term capital association to obtain profits from capital is also another understanding of investment (Ahmad, 2004:3; Suratman, 2001:6; Sunariyah, 2003:4).

International trade itself is part of foreign investment carried out by a country in another country. Investments made by a country are known as Foreign Direct Investment. Foreign Direct Investment (FDI) is an integral investment that has an open and useful and effective nature in the international economic system. FDI is also the main catalyst for development in a country because FDI will increase state revenues which will directly have a positive impact on development in a country. However, the benefits of FDI do not increase automatically because of their nature in the form of units and production installations that have deadlines to operate and produce goods and services that will provide additional income for a country. The application of products and applications of FDI itself is applied evenly in regions that

have the potential to support production within a country. Its application is also in various sectors and diverse social fields. National policies and forms of international investment architecture are the main factors that can attract FDI to most developing countries that want to get the full benefits of FDI. The main challenge faced by the host country of this investment is the need to establish an institutional and policy environment that is transparent, covers various aspects, and is effective in its implementation (OECD, 2016).

The Investment Coordinating Board is a government-owned entity of the Republic of Indonesia, which is a ministry-level institution and reports directly to the president of the Republic of Indonesia with the task of encouraging direct investment, both from within and outside the country through the creation of a conducive investment climate (http://www.bkpm.go.id/id/about-bkpm/profil-lembaga). BKPM routinely issues reports related to investment in Indonesia in accordance with its main duties and functions, namely carrying out coordination of policies and services in the field of investment based on statutory provisions. This report is used by various parties as a basis for consideration for various investment-related interests. The graph of the realization of quarterly investment and project realization from the first quarter of 2015 to the first quarter of 2018 is indicated by the following graph:

Figure 1. Realization of Quarterly Investment and Project Realization

From the graph above, it is known that investment realization in the first quarter of 2018 was Rp. 185.3 T increased 1.7% from the fourth quarter of 2017 amounting to Rp. 179.6 T. Where the realization of the first quarter 2018 alone increased by 11.8% from the realization of the first quarter of 2017 which amounted to Rp. 165.8 T. The growth of FDI investment realization from 2013 to March 2018 on a quarterly basis shows an increasing trend according to the following graph:
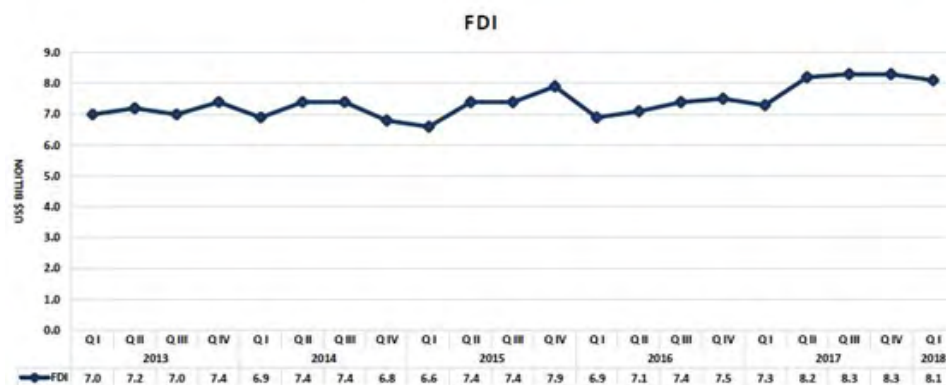
source: BKPM, data processed
Figure 2. The Growth of FDI Investment Realization

From the BKPM report related to the realization of investment in the first quarter of 2018 also mentioned the country of origin of investment in Foreign Direct Investment to Indonesia as shown in the following figure:

NO	COUNTRY OF ORIGIN	INVESTMENT (US$ Million)	PROJECT
1	Singapore	2,648.2	1,331
2	Japan	1,361.0	375
3	South Korea	940.0	517
4	China	676.2	529
5	Hong Kong	516.1	336
6	British Virgin Islands	378.0	280
7	United States of America	372.4	83
8	Malaysia	274.6	312
9	Netherlands	170.4	140
10	Australia	135.3	176
11	Switzerland	105.8	36
12	Thailand	92.2	47
13	Mauritius	87.7	14
14	Austria	55.0	6
15	Cayman Islands	52.1	19
16	Luxembourg	41.2	22
17	Taiwan	39.0	84
18	United Kingdom	37.0	96
19	Germany	25.5	45
20	India	15.7	84
21	Seychelles	14.7	34
22	Canada	8.9	20
23	France	8.4	96
24	Norway	7.9	3
25	Brazil	7.4	5
26	United Arab Emirates	6.4	18
27	Sweden	5.8	15
28	Belgium	5.7	21
29	Spain	5.1	17
30	Italy	4.2	46
31	The Philippines	4.2	6
32	Yemen	3.2	9
33	Jordan	3.0	5
34	Saudi Arabia	2.8	16
35	Uruguay	2.2	3
36	Turkey	1.8	15
37	Finland	1.5	3
38	Cyprus	1.2	4
39	Mali	1.1	3
40	West Samoa	1.1	7
41	Pakistan	1.0	4
42	Hungary	0.9	2
43	South Africa	0.7	3
44	Syria	0.7	5
45	Romania	0.6	1
46	Ethiopia	0.6	1
47	Egypt	0.5	1
48	New Zealand	0.5	8
49	Russia	0.5	11
50	Czech	0.4	4
51	Bulgaria	0.3	4
52	Guernsey	0.3	1
53	Ireland	0.3	7
54	Bangladesh	0.3	2
55	Iran	0.3	7
56	Malta	0.3	2
57	Kuwait	0.3	3
58	Ukraine	0.2	2
59	Cook Islands	0.3	3
60	Latvia	0.1	1
61	Anguilla	0.1	1
62	Argentina	0.1	3
63	Tunisia	0.1	2
64	Bahrain	0.1	1
65	Kazakhstan	0.1	3
66	Channel Islands	0.1	2
67	Chili	0.1	2
68	Netherlands Antilles	0.1	1
69	Morocco	0.0	2
70	Nigeria	0.0	4
71	Denmark	0.0	8
72	Columbia	0.0	1
73	Portugal	0.0	1
74	Niger	0.0	1
75	Mexico	0.0	2
76	Lebanon	0.0	2
77	Slovakia	0.0	1
78	Sudan	0.0	1
79	Djibouti	-	1
80	Suriname	-	1
81	Slovenia	-	1
82	Lithuania	-	1
83	Estonia	-	1
84	Puerto Rico	-	1
85	Afghanistan	-	6
86	Iraq	-	1
87	Namibia	-	1
88	Bermuda	-	1
89	Algiers	-	1
90	Vietnam	-	1
91	Croatia	-	1
92	Brunei Darussalam	-	1
93	Marshall Island	-	2
94	British Columbia	-	1
	TOTAL	8,130.83	5,010

source: BKPM, data processed

Figure 3. The Country of Origin of Investment In FDI to Indonesia

Singapore, Japan and South Korea are still ranked as the top 3 countries of origin of Indonesia's largest FDI investment. Followed later by China, Hong Kong, British Virgin Island, United States. The Netherlands as a European country that is consistently in the top 10 countries originating from Indonesian FDI investment. Australia itself is quite active in FDI investment in Indonesia, occupying the number 10 position. Countries ranked 1-8 are countries that have profit factors such as proximity (Singapore, Malaysia, Australia) and historical proximity (Japan, the Netherlands) and economic cooperation the massive (China, Hong Kong, United States). What interests me is the existence of several countries known as the Tax Haven Country such as Mauritius, British Virgin Islands, Seychelles, or Cayman Islands. Because these countries are countries that have the issue as Tax Heaven Country where this is contrary to Bank Indonesia Regulation No. 11/28 / PBI / 2009 concerning the Application of Anti-Money Laundering and Prevention of Terrorism Funding Programs for Commercial Banks, so that whether this institution is economically justified, and how the bilateral cooperation between the two countries (Indonesia - Mauritius) is realized as real cooperation

2. Introduction

LQ analysis is a formula used to determine the extent of the level of specialization / concentration of regional sectors (Bendavid-Val, 1991:73; Shaver, 1989:268). This analysis can be used as an illustration of the attractiveness of the region by paying attention to the existing infrastructure and supporting activities. This method can be a preliminary analysis of the area then continued with other analyzes, (Amien, 1996:92, 113:114). The LQ coefficient can be explained as follows:

$$LQ = \left[\frac{(Q_{ir}/Q_r)}{(Q_{in}/Q_n)} \right] \qquad (1)$$

Where:

Q_{ir} = Economic indicators sector area i

Q_r = Economic indicators all area

Q_{in} = Economic indicators sector area i greater reference area

Q_n = Economic indicators all area greater reference area

LQ > 1 sector with specialization/concentration higher than compared area

LQ < 1 sector with specialization/concentration lower than compared area

LQ = 1 sector with specialization/concentration same as compared area

Shift Share Analysis Tool is used to determine the regional economic performance reflected in the form of regional growth, the relative growth rate of regional sectors, and the competitiveness of regional sectors. (Bendavid-Val, 1991: 67, Amien 1996: 106). Shift-Share analysis starts with the assumption that the growth of the observation area sector is the same as the reference area (Isard, 1960; Hustede, 1984; Blair, 1991: 190).

This analysis divides changes or growth in local economic performance in three components: i) Component of growth (growth component): reflects economic growth in the area of observation, with the assumption of growth equal to the growth rate of the reference area during that period. ii) Mix-industry or proportional shift component: measures the difference in growth of economic sectors in the observation area compared to the reference area. iii) Components of shifting or regional market share growth (differential shift or Regional share): to measure the growth of the observation area sector compared to the same sector in the reference area.

$$PEW = \left[\frac{Y^*}{Y} - 1 \right] + \left[\frac{Y'_k}{Y_k} - \frac{Y^*}{Y} \right] + \left[\frac{y'_k}{y_k} - \frac{Y'_k}{Y_k} \right] \qquad (2)$$

Where:

Y* = economic indicators greater reference area in end of research year

Y = economic indicators greater reference area in early of research year

Y'_k = economic indicators greater reference area of sector k in end of research year

Y_k = economic indicators greater reference area of sector k in early of research year

y'_k = economic indicators area of sector k in end of research year

y_k = economic indicators area of sector k in early of research year

PEW = area's economic growth

LQShare and LQShift analysis was developed from the LQ analysis model. This analysis is dynamic because it takes into account the development of the sector in two time points. In addition, the analysis of LQShare and LQShift can identify specialization/concentration and regional sector development because it is based on a very similar calculation concept, so that the results of the calculations support each other in determining the relative progress or decline of the regional sector. Based on the explanation, it is expected that the results can be used to apply the sector development priority scale.

To identify the level of specialization/concentration of the regional sector in two time points, equation 2 is changed in the formula for the median average value ratio, namely:

$$LQshare = \left[\frac{\frac{1}{2}(Q_{Rkn}+Q_{Rko}) \Big/ \frac{1}{2}(Q_{Rn}+Q_{Ro})}{\frac{1}{2}(Q_{Nkn}+Q_{Nko}) \Big/ \frac{1}{2}(Q_{Nn}+Q_{No})} \right] \qquad (3)$$

And this equation simplified into following equation:

$$LQshare = \left[\frac{(Q_{Rkn}+Q_{Rko})/(Q_{Rn}+Q_{Ro})}{(Q_{Nkn}+Q_{Nko})/(Q_{Nn}+Q_{No})} \right] \qquad (4)$$

Where:

Q_{Rko} = economic indicators area sector k in early period
Q_{Rkn} = economic indicators area sector k in end of period
Q_{Ro} = economic indicators total area sector in early period
Q_{Rn} = economic indicators total area sector in end of period
Q_{Nko} = economic indicators sector k reference area in early period
Q_{Nkn} = economic indicators sector k reference area in end of period
Q_{No} = economic indicators total sector reference area in early period
Q_{Nn} = economic indicators total sector reference area in end of period

$\left[\frac{(Q_{Rkn}+Q_{Rko})}{(Q_{Rn}/Q_{Ro})} \right]$ = share component observed area sector k

$\left[\frac{(Q_{Nkn}+Q_{Nko})}{(Q_{Nn}/Q_{No})} \right]$ = share component reference area sector k

LQShare > 1, sector with specialization/concentration higher than reference area
LQShare < 1, sector with specialization/concentration lower than reference area
LQShare = 1, sector with specialization/concentration same as reference area

To get the regional development / competitiveness formula in two time points (period), equation 2 is changed to the ratio of change values, namely:

$$LQshift = \left[\frac{(Q_{Rkn}-Q_{Rko})/(Q_{Rn}-Q_{Ro})}{(Q_{Nkn}-Q_{Nko})/(Q_{Nn}-Q_{No})} \right] \qquad (5)$$

$\left[\frac{(Q_{Rkn}-Q_{Rko})}{(Q_{Rn}-Q_{Ro})} \right]$ = shift component observed area sector k

$\left[\frac{(Q_{Nkn}-Q_{Nko})}{(Q_{Nn}-Q_{No})} \right]$ = shift component reference area sector k

LQShift > 1, sector with growth/competitiveness higher than reference area
LQShift < 1, sector with growth/competitiveness lower than reference area
LQShift = 1, sector with growth/competitiveness same as reference area

Determination of sector relative positions based on the following criteria:
• LQShare≥1 dan LQShift≥1 = Progressive sector. It shows degree of specialization/ concentration and the rate of change/competitiveness of the sector is high, then the sector itself very instrumental.
• LQShare<1dan LQShift ≥1 = Developing sector. It shows that the level of specialization/ concentration of the sector is still low, but the rate of change is relatively high, so that the sector has good prospects to play a role.

- LQShare≥1danLQShift <1 = Slow sector. It shows that the specialization/concentration of the sector is high but with a rate of change / low competitiveness. The sector is competed by the same sector from other regions.

- LQShare<1danLQShift <1 = Backward sector. Demonstrating that sector specialization / concentration and the rate of change / competitiveness of the sector are low, the sector has unfavorable prospects to play a role.

3. Findings and Argument

To determine the effect of specialization / concentration in the regional sector on income disparity between regions, the following criteria can be used: i) The sector with low WIk (sector k Williamson Index) does not affect the gap. ii) Sectors with low WIK and RK (correlation coefficient between GRDP and sector K forming GDP as regional concentration index) are high, constituting sectors concentrated in developed regions. The gap will increase if this sector develops. iii) Sectors with high and low RK are sectors that are concentrated in less developed regions, and the gap will decrease if this sector develops. However, this method does not clearly establish a low size of the value of WIk and rk, so as a rule the criteria for average values are used (Nurzaman, 2002: 111-115).

Based on the above ideas, an econometric model was developed with the dependent variable value of the sector Williamson index k (WIk) and the independent variable Location Quotient value of sector k (iQ). The use of the LQ value as a regional concentration index is based on the results of Kuncoro's study (2002: 125-126) on several research results using regional concentration indexes on econometric models. According to him, the LQ value as a regional concentration index gives the best results compared to the values of other concentration indexes. The econometric model for estimating the influence of the concentration of sector k on the distribution of labor sector income k is as follows:

$$WISec_{kt} = \alpha_0 + \alpha_1 \sum\nolimits_{i=1}^{7} LQsec_{ikt} + y_1 D_p + y_2 D_k + e \qquad (6)$$

Where:
$WISec_{kt}$ = Index Williamson of labour on sector k in period t
$LQsec_{ikt}$ = LQ value area i sector k on period t
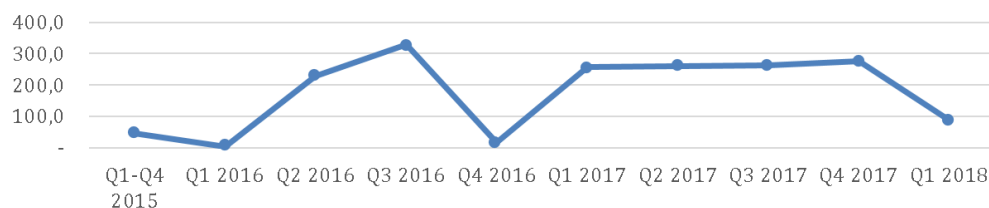D_p = Dummy FDI
D_k = Dummy economic crisis
e = error term

4. Conclusion

From the empirical data it is known that the development of the magnitude of Mauritius FDI investment to Indonesia on a quarterly basis from Q12015 - Q12018 is shown in the graph as follows:
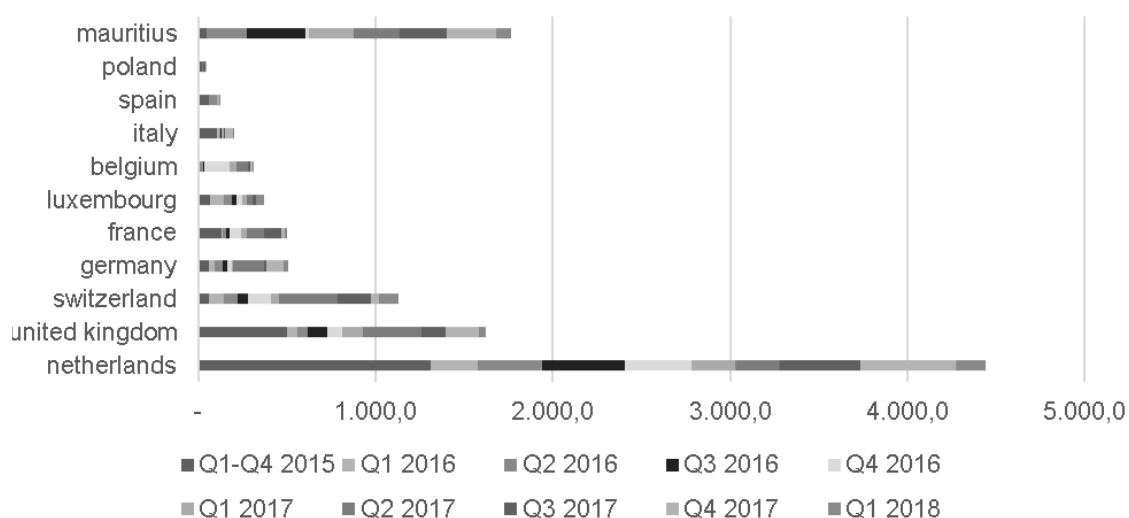

source: BKPM, data processed

Figure 4. Magnitude of Mauritius FDI investment to Indonesia (Q12015 - Q12018)

From the graph above, it is known that Mauritius's FDI investment is in the average range of 176.514 million USD, where the average is even higher than European countries which tend to be more advanced in the economy. The investment value also increased after Q1 2016 and continued to rise exponentially until Q3 2016 and dropped significantly in Q4 2016 with reasons unknown. However, throughout 2017 starting from Q1-Q4 Mauritius's investment value was stable at around 260 million USD.

When compared to Mauritius's investment value with several European countries, it was found that Mauritius has a better investment performance which shows that the country has better economic conditions than more developed European countries. This is illustrated in the following graph:

source: BKPM, data processed

Figure 5. The Comparison Between Mauritius FDI Investment to Indonesia (Q12015 - Q12018) with European Countries

Mauritius has a geographical similarity with Indonesia in the form of an archipelago. The leading sectors are the tourism, culture and handicraft industries and fisheries which support Mauritius's exports and imports. Until now there has been no bilateral cooperation between these two countries because Indonesia has severely restricted cooperation with the Tax Haven Country as part of the institutional economy to prevent money laundering practices carried out by private companies in the process of business development. Mauritius's collaboration with Indonesia is carried out through third party countries, namely Dubai and Singapore, to ensure accountability in the international fund transfer process. To increase cooperation into bilateral cooperation, transparency is needed from Mauritius and ensure that there are no practices that violate Indonesian law as the rule of the game from this international collaboration.

Both countries attend IORA Conference which part of its MOU is cooperation between Indonesian Corruption Eradication Commission and Mauritius Independent Commission Against Corruption (ICAC) through regional conference on effectiveness of anti-corruption and money laundering. This MOU agreed on: (1) sharing on anti-corruption and money laundering strategy (2) capacity development on both countries through training, project & workshop in implementing international of law in war against corruption and money laundering (3) effective investigation techniques and best practices on collecting information and intelligent operation of detecting corruption and money laundering.

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Analysis of the Influence of Economic and Institutional Factors on Foreign Direct Investment

Tunjung Sekar Laksmi Pandhit, Siti Aisyah Tri Rahayu

Abstract

Foreign Direct Investment is a source of capital for some developing and developed countries. The entry of foreign direct investment to various countries is adapted to the economic conditions and conditions of the constitutional terms of the host country. This study aims to analyze the economic factors and institutional factors that can affect of foreign investment inflows in 10 Asia Pacific countries during 2008-2016.

The data used in the study are secondary data obtained from several institutions such as World Bank, UNCTAD, Heritage Foundation, Transparency International, and World Governance Indicators. The model used is the estimation of GLS Fixed Effects.

The results of the analysis suggest that foreign direct investment is influenced by economic factors, namely market size, while the institutional factors affecting foreign direct investment are economic freedom, corruption, and political stability. Therefore, institutional factors need to be considered by the government because it directly affects the direct inflow of foreign investment in a country.

The inflow of foreign direct investment requires a favorable investment climate for host country and home country. The investment climate can be conditioned by economic, social, and political arrangements. If the economic and political conditions of a country stable, then foreign investors believe more invest in a country,

Keywords: Foreign direct investment, market size, economic freedom, corruption, political stability, GLS Fixed Effects

1. Introduction

Foreign direct investment in a country can describe the economic condition of a country in the global era. Every country in the world tries to attract foreign investment from abroad in the hope of having a positive impact on the domestic economy as income. This is in accordance with the opinions of Classical and Neo Classical economists regarding international trade that can encourage economic growth in a country (Nopirin, 1994: 125).

Multinational theory according to Krugman and Obstfeld (1997: 171) explains the expansion of companies from one country to another. Expansion from the origin company is called a home company that provides capital to subsidiaries in the form of direct foreign investment flows. Multinational companies often become loans or international capital flows (Krugman and Obstfeld, 1997: 171).

According to Erdogan and Atakli (2012) foreign investment as a resource that can move to another country by people and organizations. According to him foreign direct investment can overcome the crisis in several countries. Research conducted by Erdogan and Atakli (2012) mentions the crisis in the last quarter of 2008 appeared in the United States, then spread to Europe and other countries. Therefore, this study determines the beginning of the year 2008 to see the development of foreign direct investment in several Asia-Pacific countries (Erdogan & Atakli, 2012). In addition, the ASEAN Investment Report 2012 also mentions that in 2008 and 2009 the impact of global economic uncertainty.

Foreign direct investment occur when a company from a country (home country)

invests in a company in another country (host country). Host country will receive benefits from investment inflows and home country can expand so that the company is categorized as a multinational company. In reality, investment always contains risks both economically and in the political situation of a country. Bodie, Kane, and Marcus (2006) analyze there are several risk factors in international investment such as exchange rate risk and country-specific risk. One country-specific risk is political risk and economic risk. Some political risks such as government stability, corruption, internal and external conflicts. Financial risks in the PRS assessment are foreign debt, interest on foreign debt, exchange rate stability, and current account. Economic risk through GDP per capita, annual real GDP growth, inflation rate , budget balance, and current account balance.

Even though investments are identical with various risks, investors do observe the host country before investing. Economists argue that trade policies applied in practice are dominated by political interests rather than seeing profits for the state (Krugman and Obstfeld, 1997: 222). A good international policy is when there is synchronization between economic and non-economic aspects such as cultural aspects, political aspects, and security aspects (Boediono, 2015: 153).

According to Castro and Nunes (2013) the inflow of foreign direct investment is not only influenced by economic factors but also business facilities and institutional frameworks, in this case corruption is considered an important determinant. According to Dickie and Layman (1988: 143-162) that there are several factors that can affect investment such as: (1) the tax system; (2) flexibility; (3) other sources of capital; (4) stock prices; (5) expansion; (6) politics. Research conducted by Freckleton, Wright, and Craigwell (2011) quotes from The World Bank (2000) that each year there are funds that are lost about 1 trillion US Dollars or about 5% of world GDP lost due to corruption. According to Rose-Ackerman (1999) the greater the government's contribution to the bureaucracy can increase corruption.

The value for measuring the level of corruption in a country uses the corruption perception index published by Transparency International. The Corruption Perception Index is a combination index of various international surveys and corruption assessments collected by various reputable institutions. The index consists of thirteen independent institutions specializing in government and business climate analysis that includes expert judgment and the views of employers (Transparency International, 2017) . The criteria set by Transparency International for countries with values close to 0 mean that they are increasingly corrupt, while the closer to the value of 100 countries has a low level of corruption. This is consistent with the explanation of Hamidi and Hmadi (2017) that the index in Transparency International is measured from the interval 0-100 where 0 (very corrupt) and 100 (not corrupt).

Various studies prove the positive and negative effects of corruption on foreign direct investment. Therefore, this research is considered important by examining the relationship of corruption to foreign direct investment. The year of observation was carried out in 2008-2016 so that it became the latest year of previous research. The selection of state objects is carried out by listing 7 Asia-Pacific countries which are members of ASEAN plus Australia, Japan, Hong Kong because the three countries have a high corruption index in the Asia-Pacific. This study included several independent variables such as paar size variables measured through real GDP, trade openness variables measured through net exports, economic freedom variables through the economic freedom index, corruption variables, corruption control variables, and political stability variables.

2. Literature Review

Research that did by Castro and Nunes (2013) finds out whether corruption inhibits FDI flow in 73 countries during the period 1998-2008 controlled by economic and political

variables. The results of this study indicate that countries with lower levels of corruption, FDI inflows are greater, and the presence of corruption control can be an important strategy to increase FDI inflows. The study uses the GLS Fixed Effects regression research model to see the effect of corruption as a significant determinant of FDI inflows or not. Research by Castro and Nunes (2013) found that large market sizes attract more FDI. In addition, more open markets tend to attract foreign companies. More open economic variables have the potential to offer more efficient allocation of resources, providing economic benefits. Trade openness statistically significant in the expected direction. In this study it is clear that corruption is an important determinant of FDI inflows. The results also show that tax policies, low regulatory burdens that facilitate company installments and growth, and a stable political environment are important factors for foreign investors.

Research that did by Sambharya and Rasheed (2013) uses several independent variables to analyze the effect on FDI consisting of GDP per capita, economic freedom, trade and investment, economic management, government participation in the economy, state interference and corruption, and wages and price. This study uses panel data regression method with a sample of 96 countries during the period 1995-2000. The high level of government participation in the economy has an inverse relationship to the influx of FDI. The high level of state intervention and corruption have a significant negative relationship to FDI inflow. Wages and prices are significantly positive related to FDI inflows and finally political freedom has a positive relationship to FDI inflows.

Another study conducted by Ketkar, et al (2005) regarding the impact of corruption on FDI and income tax. studied 54 countries from 1995-1998 which consisted of developing countries and developed countries, seven of which were the largest source countries for FDI: US, Japan, Germany, Britain, France, Canada and Italy. The independent variables used see the effect on FDI, namely economic growth with GDP proxy, openness of the economy with the proxy of exports and imports (as a percent of GDP), capital control, US FDI returns in various countries obtained from Survey of Current Business, size government with a proxy for government spending, and tax revenue from income tax obtained from Government Finance Yearbook, 2000. The method used by Ketkar, et al is panel data regression. The results of the research by Ketkar, et al (2005) found that high levels of corruption reduce FDI flows. Mathur and Singh's (2011) study also found the effect of corruption on investment decisions. This article shows that foreign investors pay attention to economic freedom (proxy for property rights protection index), in making decisions to invest. Therefore, more democratic countries will probably receive less flows of Foreign Direct Investment (FDI) if economic freedom is not guaranteed. As long as democracy is able to provide greater economic freedom to its citizens, they will also become more attractive places for investors.

Unlike previous studies, Bayar and Alakbarov (2016) did not get the same results regarding the effect of corruption on FDI. This study investigates the interaction between corruption and foreign direct investment in 23 emerging market countries in the 2002-2014 period. The method used is the Durbin-Hausman cointegration test to investigate the long-term relationship between FDI, corruption, and law enforcement. The conclusion obtained is that there are long-term relationships between variables, but corruption and law enforcement do not have a statistically significant impact on FDI flows.

3. Methodology

This study uses panel data with 100 observations outlined in 10 observation countries and 10 years of research. The country used as the object of the study consisted of ten countries in the Asia-Pacific consisting of the Philippines, Indonesia, Malaysia, Singapore, Thailand, Vietnam, Laos, Australia, Japan and Hong Kong. The initial election period was

caused by a crisis in various countries in 2008. This study uses secondary data, namely data collected by other parties (Mubyarto and Suratno, 1981: 50). Some data sources in this study are World Bank for market size data, UNCTAD for trade openness data (export and import), Heritage Foundation for data on economic freedom indexes, Transparency International for perceptions of corruption index data, and World Governance Index (WGI) for corruption control index data and for political stability index data. The specification model used is Fixed Effects GLS which is a Fixed Effects regression estimation form that is given weighting. The GLS method is an OLS method that is applied to the model and transformed so that it meets the requirements of classical assumptions (Gujarati and Porter, 2009: 372). Autocorrelation problems can occur in time series data, whereas heteroscedasticity problems can occur when the variance of UI disturbances, to explanatory variables varies (Gujarati and Porter, 2009: 412 and 471). According to Gujarati and Porter, the two problems of classical assumptions can be overcome through several ways, one of which is to change the OLS estimation method into GLS estimation method by giving weight.

4. Results and Analysis

This study analyzes whether there is an influence of independent variables consisting of non-economic and economic factors on foreign direct investment (FDI) during 2008-2016. Fixed Effects estimation results experience heteroscedasticity and autocorrelation problems, so it is necessary to cure the problem of classical assumptions with GLS estimation. Based on Table 1 the probability variables of market size (GDP), economic freedom variables (EF), corruption variables (CPI), and political stability variables (PS) are smaller than 0.05 so that the independent variables have a significant effect on the dependent variable. The probability of trade openness variable (OT) is 0.42 so that the trade openness variable does not have a significant effect on FDI variables.

Based on the value of the t-Statistics variable market size (GDP), economic freedom (EF), and political stability, (PS) has a positive influence on FDI. This means that the greater the size of a country's market has a positive impact on the entry of FDI in the country. One of the economic considerations considered by international corporations (MNC) in placing FDI is location-specific advantage. The location chosen in placing FDI in a country is expected to be profitable for MNC companies (Bakry, 2015: 198). Economic freedom in a country also provides opportunities for the entry of FDI funds in a country. According to Goel and Nelson (2005) shows that economic freedom reduces bureaucracy, disruption of bureaucracy and government interference. The stability variable also has a positive impact on the entry of FDI in a country because stable political conditions give investors confidence.

Variable corruption has a negative influence on the entry of foreign investment in a country. Corruption, which can be caused by one or several factors, such as excessive bureaucracy, high policies in the formulation and implementation of policies, inefficiencies and slowness of the legal system, low wages of civil servants and low levels of economic freedom, has the potential to affect many economic aspects such as foreign investment and economic growth (Castro and Nunes, 2013). From the overall regression results, market size variables, economic freedom variables, corruption variables, and political stability variables are in accordance with the theory and several previous studies.

Table 1. The Results of Fixed Effects Regression

Variabel	Koefisien	Std. Error	t-Statistic	Probabilitas
C	1.076871	2.904712	0.370733	0.7119
GDP?	0.249291	0.035015	7.119591	0.0000

Variabel	Koefisien	Std. Error	t-Statistic	Probabilitas
OT?	-2.93E-06	3.66E-06	-0.801178	0.4256
EF?	0.114321	0.053831	2.123717	0.0370
CPI?	-0.100773	0.032186	-3.131006	0.0025
PS?	0.062921	0.025600	2.45861	0.0163
Weighted Statistic				
R Squared	0.870460			
Adjusted R-Squared	0.846279			
F-statistic	35.99796			
Fixed Effects				
(Cross)				
_FILIPINA—C	-5.461603	-4.22544		
_INDONESIA—C	-5.302311	-4.384732		
_MALAYSIA—C	-4.612408	-3.535537		
_SINGAPURA—C	9.734290	10.811161		
_THAILAND—C	-3.875484	-2.798613		
_VIETNAM—C	-2.351749	-1.274878		
_LAOS—C	-4.642374	-3.565503		
_AUSTRALIA—C	-4.095084	-3.018213		
_JEPANG—C	-6.868663	-5.791792		
_HONGKONG—C	27.47539	28.552261		

source: Secondary data (processed, see Appendix 10)

5. Conclusion

Based on the results of the analysis and discussion in Chapter IV can be concluded as follows:

1. Market accounts have a significant effect on foreign direct investment inflows in 10 Asian-Pacific countries. The effect is positive.
2. Economic freedom has a significant effect on foreign direct investment inflows in 10 Asian-Pacific countries. The effect is positive.
3. Corruption has a significant effect on foreign direct investment inflows in 10 Asian-Pacific countries. This effect is negative
4. Political stability has a significant effect on foreign direct investment inflows in 10 Asian-Pacific countries. The effect is positive.

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The Potential of Earnings Management on Wealth Transfer of Society and Managers

Retno Indah Hernawati[1], Imam Ghozali[2]
[1]PhD Candidate at Doctoral Program-Faculty of Economics and Business, Diponegoro University;
Faculty of Economics and Business, Dian Nuswantoro University
[2]Faculty of Economics and Business, Diponegoro University
Email: retno.indah.hernawati@dsn.dinus.ac.id

Abstract

Earnings management is often defined as opportunistic management behaviour that results of information asymmetry between managers and the other of stakeholders. Referring to Positive Accounting Theory which sees three parties related to earnings management are managers, society and funds providers. This paper is based on the possibility of wealth transfer from one stakeholder to another. This study aims to examine whether earning management to design transactions so as to affect the possibilities of wealth transfer between the company and society (political costs), or managers (compensation bonus). The earnings management is measured using discretionary accruals. The possibility of wealth transfer to society is measured using tax payment (political cost) and manager's wealth transfer is measured using managerial remuneration (compensation bonus). Manufacturing companies listed in Indonesia Stock Exchange were used as sample. This paper finds when managers create an increasing income was affected the potential wealth transfer to society and managers.

Keywords: Earnings management; Political cost; Compensation bonus

1. Introduction

Information on financial statements contains important information to predict future earnings. The more information about the company's performance in the future, the easier it will be for investors to assess their profit trends in the future. This information will cause changes in current stock prices and as a result, changes in investor expectations of the value of the company [1]. Managers use earnings management as a tool to convey positive signals to investors about future performance through current profits [2]. Companies with good governance will encourage earnings management to be efficient and have a positive effect on company value [3]. Earnings management must be configured in such a way as to place the company's comparative advantage in risk management so as to provide management opportunities to increase shareholder value ([4],[5]). Efficient earnings management can bring a number of advantages along with increasing earnings persistence [6] and the company's profitability in the future [7].

Earnings management research focuses more on the opportunistic behavior of managers 9[8], [9]). Whereas Watt & Zimmerman [10] stated that earnings management can be opportunistic or efficient. Managers tend to regulate reported earnings by managing accrual components in an effort to reduce reported earnings fluctuations by increasing (decreasing) earnings at a low (high) profit in an effort to reduce the variability of reported earnings [11]. Earnings management through discretionary accruals can increase earnings information content; thus encouraging increased corporate value ([12], [8]). This interesting fact is interesting to study further.

Manager is carrying out management activities with planning and controlling. Planning focuses management's attention to the future by developing actions that can be taken to

realize the company's goals. Controlling is done by determining the actual conditions that occur and comparing the results with the planned goals. This activity encourages managers to build the overall goals of the company, by considering various problems and developing future policies [1]. Earnings management is part of management's policy in realizing company goals. Although in the case of earnings management, managers have a strong incentive to manage earnings numbers in a financial report [13].

When manager reports current earnings higher, manager will enjoy compensation bonuses as a result of profit-based performance appraisal ([14], [15]), and the government representing the society will receive higher taxes as a result of the increase earnings before tax ([16], [17]). This reasoning refers to Stolowy & Breton [18] which states that earnings management is an effort to create a welfare transfer potential between companies and providers of funds (cost of capital), society (political cost) and managers (compensation plans). The greater the potential of welfare transfers that managers can create through financial reporting, will have an impact on increasing the assessment of future market performance and increasing corporate value ([19], [20], [21], [22]).

Managerial compensation is seen as the result of a market-based mechanism that ensures that managers have adequate incentives to maximize shareholder value. Executive remuneration is considered as a market mechanism that ensures rational managerial decision making and is able to create value for shareholders [23]. If management performance is based on profit performance, then the opportunity for management to increase profit value will also result in higher managerial compensation..

H1: Earnings management will increase the value of the company by increasing managerial compensation.

The political cost hypothesis in positive accounting theory [10] explains that the politics of welfare distribution applied by political authorities will influence the company's accounting policies. In line with H1, when managers make earnings management through increasing profits, the company's profit will be higher. The higher profits give the government the opportunity to get higher tax. This tax payment to the government is referred to as political costs [24]. The greater the tax paid, the greater the potential for community welfare transfer, so that the legitimacy of the company becomes stronger and the value of the company increases.

H2: Earnings management will increase the value of the company by increasing political cost.

2. Methods

The data used in this study include financial statement data and managerial remuneration from annual report of manufacturing companies listed on the Indonesia Stock Exchange in 2012-2015. There are 89 firms being sample during this period. We measured the dependent variable, firm value, with Tobin's Q (TQ). Tobin's Q value describes a company's investment opportunity condition [25] or company growth potential ([26], [27]) and can be used as a measure of company performance in terms of the potential market value of a company. Tobin's Q ratio have succeeded in creating value if the return of investment is greater than the cost of investment. On the contrary, the company is called to fail to achieve the value-maximizing goal if the value of the Tobin's Q ratio is less than 1 [28]. So the greater of Tobin's Q value indicates that the company has good growth prospects.

Earnings management (EM) is an independent variable that is measured through the accrual method using the Modified Jones model [29]. The application of accrual-based accounting systems will affect the allocation of income and expenditure, thus providing opportunities for management to manage earnings through its accounting policies [30].

Dechow et al. [29]   modify the Jones model to adjust growth in credit sales (ΔREV - ΔREC) in an effort to reduce failure to detect earnings management. Credit sales are often manipulated; thus this modification increases the strength of the Jones model to produce residuals that are not correlated with expected income accruals and are able to reflect earnings management actions. In this study the earnings management used a positive descretionary accruals. That means manager does earnings management by increasing profits. This measurement is used to align with the hypothesis.

This study uses management remuneration as a measure of compensation bonuses (BC). Financial Services Authority Regulation No. 34 / POJK.04 / 2014 concerning the Nomination and Remuneration Committee of Issuers or Public Companies, explaining that the issuer's remuneration is a reward determined and given to members of the Board of Directors and members of the Board of Commissioners because the position and role given are in accordance with the duties, responsibilities and authority of members Directors and members of the Board of Commissioners. The Remuneration Structure as referred to in paragraph (1) letter a can be in the form of salaries, honoraria, incentives, and / or allowances that are fixed and/or variable. The compensation bonus is measured by the amount of remuneration paid in the current year.

Mills, et al. [31] defines political costs as tax payments to the government issued by providers of goods/ services based on the effective tax rates applicable. Therefore, to determine the payment of taxes made by the company in the current year is calculated from the current tax expense compared to earnings before interest and tax (EBIT). The greater EBIT will increase potential of the government to receive tax from the company, which means that the greater of potential wealth transfer created.

We are interested in the drivers of firm value and on the incremental impact of earnings management makes on firm value. This study used path analysis through direct and indirect effect. An empirical model construct of five interdependent equations: an equation with firm value (TQ) as the dependent variable, which as a direct effect analysis; four equations measured total effect. The coefficient of direct effect indicated by c, whereas c' and c" represent the coefficient of indirect effect. The following equations as bellow:

$$TQ = \alpha_1 + cEM \qquad \qquad (1)$$
$$BC = \alpha_2 + \alpha_1 EM \qquad \qquad (2)$$
$$PC = \alpha_3 + \alpha_2 EM \qquad \qquad (3)$$
$$TQ = \alpha_4 + c'EM + b_1 BC \qquad \qquad (4)$$
$$TQ = \alpha_5 + c''EM + b_2 BC \qquad \qquad (5)$$

Subsequent testing is carried out with Sobel Test, where if the t value is more than t table, it can be concluded that there is a mediating effect. The description of sample as follows:

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Earnings Management	89	.400	7.200	2.18202	1.466951
Political Cost	89	22.80	29.43	26.3522	1.52165
Firm Value	89	.40	7.20	2.1820	1.46695
Compensation Bonus	89	20.67	25.21	23.2444	1.21704
Valid N (listwise)	89				

3. Findings and Argument

Our objective is to assess the earnings management is able to increase the potential wealth transfer of stakeholders. Path analysis to examine the effect of earnings management on compensation bonus, the effect of compensation bonus on firm value and the total effect between earnings management on firm value and mediation compensation bonus. The result of regression procedure appear in Table 2.

Table 2. Path Analysis With Compensation Bonus As Intervening Variable

Mediation variable: Compens ation Bonus				
Direct effect: Dependent Variable Independent Variable	Firm Value (Tobin's Q) Earnings Management	B $0.348_{(c)}$	S.E 0.165	Sig. 0.001
Indirect Effect: Dependent Variable-1 Independent Variable-1	Compensation Bonus Earnings Management	$0.250^{(a)}$	$0.086^{(sa)}$	0.018
Dependent Variable-2 Independent Variable-2	Firm Value (Tobin's Q) Compensation Bonus Earnings Management	$0.2555^{(b)}$ $0.325^{(c)}$	$0.270^{(sb)}$ 0.160	0.010 0.001
Total Direct (c' + (axb))	0.41575			

H_1 predicts a direct effect of earnings management will be positive and significantly increase firm value. Table 1 show that coefficient regression of earnings management is positive (c' = 0.352) and significant (0.001). This result is consistent with the conjecture that the accounting policies taken by management are aimed at increasing the value of the company. This fact is different from the accusation of most people that earnings management is opportunistic. Therefore the impact of earnings management on managerial welfare will be tested. We will analysis the indirect effect of earnings management to firm value with compensation bonus as mediation. The coefficient regression of earnings management to compensation bonus (a) is 0.0250 (significant 0.018), and the coefficient regression of compensation bonus to firm value (b) is 0.0255 (significant 0.010). So we can calculate the total effect is 0.41575. We can be concluded that compensation bonus as a mediator between earnings management and firm value.

This finding shows that efforts to increase the value of the company through earnings management will be even greater because managers get compensation for their efforts. Managerial compensation can consist of all the following components: basic salary, annual bonus, shares and stock options, insurance, pension benefits, and severance pay. The level and form of compensation is an important means to provide incentives to executives and to align their interests with those of shareholders. The greater opportunity for managers to get compensation bonuses, the higher perceived welfare transfers will make managers increase their contribution to the company. Finally the achievement of the maximum performance of the manager will encourage higher firm value.

Table 3. Path Analysis With Political Cost As Intervening Variable

Mediation variable: Compens ation Bonus				
Direct effect: Dependent Variable Independent Variable	Firm Value (Tobin's Q) Earnings Management	B $0.348_{(c)}$	S.E $0.165^{(sa)}$	Sig. 0.001

Indirect Effect:		B	S.E	Sig.
Dependent Variable-1	Political Cost			
Independent Variable-1	Earnings Management	0.442[a]	0.100[sb]	0.000
Dependent Variable-2	Firm Value (Tobin's Q)			
Independent Variable-2	Political Cost	0.388[b]	0.209[sb]	0.000
	Earnings Management	0.271[c]	0.155	0.005
Total Direct (c' + (axb))	0.442496			

Table3 show that coefficient regression of earnings management in direct effect to firm value is positive (c' = 0.348) and significant (0.001). Further analysis of indirect effect of earnings management to firm value with political cost as mediation. The coefficient regression of earnings management to political cost (a) is 0.0442 (significant 0.000). It means, when increased earnings management will have an impact on increasing political costs. The coefficient regression of political cost to firm value (b) is 0.388 (significant 0.000). So we can calculate the total effect is 0.442496. The coefficient of total effect is greater than direct effect. We can be concluded that political cost as a mediator between earnings management and firm value.

Mills, et al. (2013) explain that political costs can be in the form of tax payments to the government by providers of goods / services based on the effective tax rates applicable. The greater profit reported by management in its financial statements, have meaning a greater of chance of wealth transfer from the company to the public through the payment of taxes. If managers do earnings management (through increasing profits) will have an impact on the increasing political costs paid, and that means the potential for welfare transfers will increase between the company and the government.

4. Conclusion

Prior studies have documented a positive, significant relation between earnings management and firm value. The question of this study is how can earnings management increase a potential wealth transfer not only to manager but also the society, too. Our results indicate that both compensation bonus and a political cost have a positive value-driven for earnings management effective to increase firm value. This paper finds when managers create an increasing income was affected the potential wealth transfer to society (through increasing tax received) and managers (through increasing managerial remuneration). When the increasing of potential for welfare transfers for stakeholders that can be created, the greater of opportunity for earnings management to play an effective role in improving company performance.

Our findings also imply that stakeholder focus which is increase a potential wealth transfer, is value additive for firm value as well. Earnings management is just a tool to increase potential wealth transfer from company to managers, society or funding fund. This finding supports Watt & Zimmerman (1986) that earnings management can be opportunistic, but also can be effective to increase the value of the company.

Future research is expected to add a wealth transfer enjoyed by providers of funds as a result of earnings management. This will be a counterweight to the notion that earnings management is not only seen as opportunistic behavior but also able to contribute positively to the company. Earnings management is seen as part of management strategy in managing the company, with a note that earnings management is not fraud.

5. Acknowledgements

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Model of Acceleration of Halal Industry Development through Implementation of Sharia Law in Indonesia

Ajeng Sonial Manara[1], Arif Rachman Eka Permata[2]
[1]Student Master of Science in Islamic Economic, Airlangga University
[2]Student Master of Economics, Trunojoyo University of Madura
Email: ajengmanara93@gmail.com

Abstract

Optimizing the development of Halal Industry becomes one of the interesting topics in Indonesia. Especially began to increase public awareness of healthy and good life. these suggestions already exist in religious advice, especially Islam, the world's Muslim population needs a lot of Halal products as obligations to be obeyed as Muslims. So the discourse of Halal Industry is widespread. Especially for Indonesia as the country's largest Muslim population. Since the enactment of Law No. 22 of 1999 on Regional Autonomy that has been updated with Law No. 32 of 2004 on Regional Government as the implementation of regional autonomy, the Regional Government has independent authority in the management of the region. With this authority, it can be utilized to develop strategic sectors in accordance with socio-economic conditions of the community, especially local wisdom directed to support other sectors such as halal industry. Research method, descriptive qualitative approach with qualitative research type, secondary data type. Methods of collecting literature study data. And the method of data analysis is qualitative descriptive data analysis technique. The acceleration model of Halal Industry in Indonesia is very important. Especially if you see the growth of the financial industry and sharia business is quite rapid. So it is necessary to accelerate the development of Halal industry based on the divine economy to the regions. To improve the Halal Industry in Indonesia, the need for proper Regulation and in accordance with the religious local wisdom by implementing and enacting the Sharia Law.

Keywords: Acceleration, Sharia Law, and Halal Industry.

1. Introduction

Today the concept of halal has become a trend in Islamic economic development in Indonesia, ranging from the emergence of halal products (food and drinks), halal cosmetics, halal fashion and halal tourism to lifestyle (Adinugraha, et al, 2018). Optimizing the development of the Halal Industry is one of the interesting topics in Indonesia. Especially starting to increase public awareness of healthy and good life. This can be seen from the appearance of sharia concepts on various aspects of life ranging from food and beverage products, finance, to lifestyle (Permadi, et al, 2018). Islam introduces the concept of halal, haram and redundant as basic principles in regulating the needs of human life both dharuriyat (primary), hajiyat (secondary) and tahsiniyat (tertiary) (Muhammad: 2004, 152-153). Healthy and good life is a recommended religion, especially Islam, the Muslim population of the world needs a lot of Halal products as an obligation that must be obeyed as Muslims. Recommendation in Islam is like the derivative of the holy verses of the Qur'an, one of which is contained in the Q.S. al-Baqarah [2]: 168, which reads:

$$\text{يَاأَيُّهَاالنَّاسُ كُلُوْا مِمَّا فِى الْأَرْضِ حَلالاً طَيِّبَآ}$$

Which mean:
"O people, eat what is 'halal' and good from what is on earth." (Q.S. al-Baqarah [2]: 168)

In the above verse, "halal" becomes the basis of the command to consume halal and thayyib foods and drinks. Al-Sa'dî (in his book Taysîr al-Karîm al-Rahmān) in Muchtar Ali (2016) explains that this (khithâb) verse shows as a call addressed to all humans, both Mukmin and Kafr. The problem of things and harms in Islam has a very important position, because the problem covers almost most of the teachings of Islam (Adam, 2017). If the Shari'a aims to maintain the benefit, it can be understood that the Shari'a aims to prevent and eliminate damage (Muchtar Ali, 2016).

Public awareness of their need for halal products shows their development of halal products. In 2010 in London the World Halal Forum Europe was held, wherein many experts, including legal experts, discussed the theoretical and praxis developments brought together regarding the main issues discussed: "Halal Products and Services - Going Mainstream" (Charity , 2017) In the Indonesian Trade Promotion Center of Budapest, Hungary, which was quoted by the Public Relations Bureau of the Ministry of Trade, at the 2016 World Halal Day exhibition held on 2-4 November 2016 in Opatija, Croatia, halal products are believed to have become the world's new consumer lifestyle. submitted by the Center for Halal Quality Certification, the halal food shopping market is expected to grow to reach USD 2.54 trillion in 2019 and constitute 21.2% of total global expenditure (www.kemendag.go.id). So the discourse on the Halal Industry is expanding. Especially for Indonesia as the largest Muslim population. Therefore, the guarantee of halal products is an important thing to get the attention of the country (Charity, 2017).

Basically the role of government in an Islamic economy, has the same basic function, namely to realize all collective obligations or public obligations in realizing falah (P3EI, 2014: 446). Since the enactment of Law No. 22 of 1999 concerning Regional Autonomy that has been renewed with Law No. 32 of 2004 concerning Regional Government as the implementation of regional autonomy, the regional government has independent authority in the management of its region. With this authority, it can be used to develop the strategic sector in accordance with the socio-economic conditions of the community, especially local wisdom which is directed to support other sectors such as the halal industry, both from the food, medicine and tourism sectors. Minister of National Development Planning/ Head of National Development Planning Agency Bambang P.S. Brodjonegoro said, Indonesia has great potential to continue to contribute to increasing state revenues through Muslim friendly tourism (www.industri.bisnis.com). In addition to the progress of economic relations of Islamic countries that are members of the Organization of Islamic Conference, the investment of multinational companies and digital technologies that facilitate relations between countries also contribute to the advancement of Islamic economics (Kemenpar in Permadi, et al, 2018). This is a strategy to face the challenges of globalization with the entry into force of a free market system within the framework of the ASEAN-AFTA, NAFTA, the European Economic Community, and the International Trade Organization (World Trade Organization).

2. Research Methodology

Types of research

In a study entitled "Acceleration Model of Halal Industry Development through the Implementation of Sharia Law in Indonesia" this research method uses descriptive qualitative approach with data sources namely secondary data obtained from literature study as a reference in researching the implementation of Law No. 32 of 2004 concerning Local government. The researcher tries to elaborate on some of the main articles and points that can be used as a basis for the Sharia Law to develop the halal industry in Indonesia.

Data Type

Data types are secondary data, namely data obtained from previous studies, books and other reference sources. Secondary data is used to analyze Law No. 32 of 2004 concerning Regional Government consists of several articles and important points in it which can be used as the basis for the establishment of Sharia Law, including the following:

1. Chapter I, General Provisions, Article 2, in points 1-9, which read as follows:

   a. Point 1, the Unitary State of the Republic of Indonesia is divided into provincial and provincial regions divided into regencies and those of us who each have local governments;

   b. Point 2, the regional government as referred to in paragraph (1) regulates and manages its own government affairs according to the principle of autonomy and co-administration;

   c. Point 3, the regional government as referred to in paragraph (2) carries out the widest possible autonomy, except for government affairs, with the aim of improving community welfare, public services, and regional competitiveness.

   d. Point 4, the regional government in carrying out government affairs has relations with the government and with other regional governments;

   e. Point 5, the relationship referred to in paragraph (4) includes the relationship of authority, finance, public services, utilization of natural resources, and other resources;

   f. Point 6, authority, finance, public services, utilization of natural resources, and other resources;

   g. Point 7, Financial relations, public services, utilization of natural resources, and other resources are carried out fairly and in harmony. The relationship of authority, finance, public services, utilization of natural resources and other resources led to administrative and territorial relations between government structures.

   h. Point 8, the State recognizes and respects the units of regional government that are special or special in nature which are regulated by law;

   i. Point 9, the State recognizes and respects the customary law community units and their traditional rights as long as they are alive and in accordance with the development of society and the principles of the Unitary Republic of Indonesia.

2. Chapter II, Establishment of Special Regions and Regions, Part One Formation of Regions, Article 5, point 1 and point 4, which read as follows:

   a. Point 1, Establishment of the area as referred to in article (4) must meet regional administrative, technical and physical requirements;

   b. Point 4, Technical requirements as referred to in paragraph (1) include factors that form the basis for the formation of regions which form the basis for the formation of regions which include economic capability, regional potential, socio-cultural, socio-political, population, area, defense, security, and other factors that allow the implementation of regional autonomy.

Method of Collecting Data

Data collection methods used in this study are literature studies, which include:

1. Finding and registering all the variables listed in Law No. 32 of 2004 concerning Regional Government which can be used as the basis for the establishment of Sharia Law,
2. Choose a description of the ingredients needed from available sources,
3. Looking for articles, books, and previous research that is very helpful to get materials that are relevant to the problem under study,

4. After the relevant information is found, the researcher then reviews and compiles library material in accordance with the order of importance and its relevance to the problem being studied,
5. The information material obtained is then read, recorded, arranged and rewritten,
6. The last part, the process of writing research from materials that have been collected is put together in a research concept.

Data analysis method
Data analysis method is a qualitative descriptive data analysis technique, in which the researcher will analyze by approaching several important points in the object of the study (Law No. 32 of 2004 concerning Regional Government) which corresponds to the establishment of Sharia Law and describes in a way compare to previous studies, books, and other reference sources by explaining known empirical generalizations and predicting empirical generalizations that are unknown.
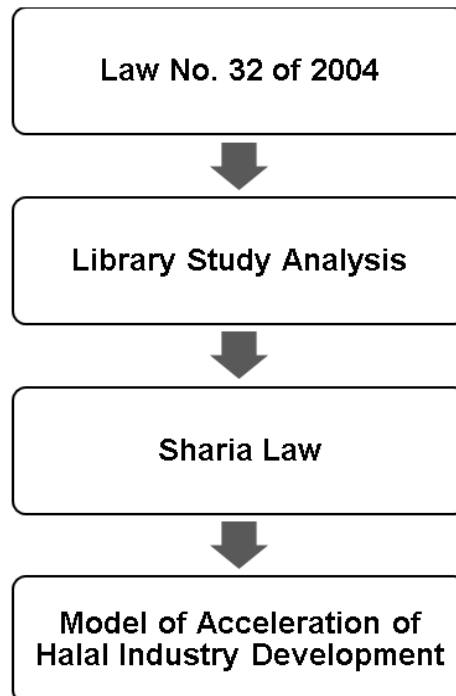
Figure 1. Framework for the Analysis of the Acceleration of Halal Industry Development through the Implementation of Sharia Law

3. Discussion

At present the concept of sharia has entered an important part of its growth. This can be seen from the appearance of sharia concepts on various aspects of life ranging from food and beverage products, finance, to lifestyle (Permadi, et al, 2018). Increased purchasing power among Muslims around the world also contributes to increasing demand for halal products (Lodhi, 2010). The current market segmentation of halal products is very potential, estimates of consumers reaching two billion Muslims in the world need halal products and the potential of global halal products 600 billion US dollars and an increase of 20-30 percent per year, estimated in 2018 Muslim tourists shopping for tourism through the US $ 181 billion (Adinugraha, et al, 2018). Najiha, et. al. (2018) added, the Muslim population is a sizeable segment of the current food market, representing 23.4% of the world's estimated population of 6.9 billion. In connection with this explanation, Indonesia will develop the halal industrial

area, along with the large demand for halal products. Efforts made by the government in developing Islamic tourism are preparing 13 (thirteen) provinces to become sharia tourism destinations, namely West Nusa Tenggara (NTB), Nangroe Aceh Darussalam, West Sumatra, Riau, Lampung, Banten, DKI Jakarta, West Java, Java Central, Yogyakarta, East Java, South Sulawesi, and Bali. However, the 13 provinces were declared ready, namely Jakarta, West Java, NTB, Yogyakarta and East Java (Kemenparekraf, 2013). Based on the presentation of the Director General of Industrial Regional Development of the Ministry of Industry (Kemenperin) Imam Haryono said, his party had prepared its regulations with the Indonesian Chamber of Commerce and Industry (Kadin) and the Indonesian Ulema Council (MUI) (kemenperin.go.id).

The current and future model of accelerating the development of the Halal Industry through Sharia Law in Indonesia will be needed. Especially if you see the growth of the financial and sharia business industry which is quite fast. So it felt very necessary to accelerate the development of halal-based halal industrial development to the regions. To improve the halal industry in Indonesia, there is a need for proper regulation and in accordance with religious local wisdom by applying and enforcing Sharia Perda. Determination of a regulation is closely related to local government policies and people's attitudes towards the object of regulation (Muttaqien, 2008). Although in an Islamic society we can expect an Islamic behavior as well, but the implementation of Islamic values and morality will be more effective if accompanied by government intervention (P3EI, 2014: 461). Therefore, it can further emphasize that halal certification guarantees all Muslim consumers because it fully meets the requirements as determined by Sharia Law, which is mandatory for Muslims to be obeyed (Samori, et. Al., 2015).

Seeing several regions in Indonesia that have had Sharia-based Regional Regulations such as in West Nusa Tenggara through the Governor of West Nusa Tenggara Regulation Number 51 of 2015 concerning Halal and D.I Aceh through the Aceh Qanun Number 8 of 2013 concerning Tourism, has a patent right on the sharia-based tourism industry. the two sharia regional regulations provide an overview of the role of sharia in the regulation of halal industry in the tourism sector. This definition considers Islamic law (sharia) as the basis for providing tourism products and services to customers who are mostly Muslim, such as Halal hotels (according to hotel sharia), Halal restaurants, halal restaurants, and halal travel (Battour and Ismail, 2015). With the Sharia tourism regulation, there is a positive response from the community. The existence of a new sector, namely Islamic tourism is expected to have implications for increasing income and community welfare (Ramadhany & Ridlwan, 2018). The development of the tourism sector is expected to encourage the remembrance of the welfare of local communities through the provision of employment for the community (Adinugraha, et al, 2018).

Referring to Law No. 32 of 2004 concerning Regional Government which requires local governments to regulate and manage their own government affairs according to the principle of autonomy and co-administration, NTB and D.I. Aceh has realized it by developing the syar'i social and cultural conditions, so that the halal industry, especially sharia tourism in both regions is growing and developing well. In addition, to make Indonesia have labels as Islamic tourism as other countries have long been labeled (including Saudi Arabia and Malaysia). This must be achieved by producing halal products and services in other Muslim countries in food products, trade, logistics, banking systems and halal certification (Samori and Saturday, 2014). In this case Indonesia is one of the countries that has the potential to increase foreign exchange in the country with the sharia industry. So there needs to be special attention so that the Indonesian halal industry is increasingly viewed by the world.

Implementation of Law No. 32 of 2004 concerning Sharia Perda Sharia Regional Regulations

It can be argued that in realizing the halal industry it is necessary to have a government regulation that binds all legal actions relating to all aspects of halal industrial activities, and can provide legality that is able to provide a value of trust for the community as consumers. According to the opinion expressed by Friedrich Julius Stahl in Awaluddin (2010), that which provides elements or characteristics of a rule of law is the recognition of basic human rights, the distribution of power, governance based on regulations, and the existence of a judicial court State Enterprises.
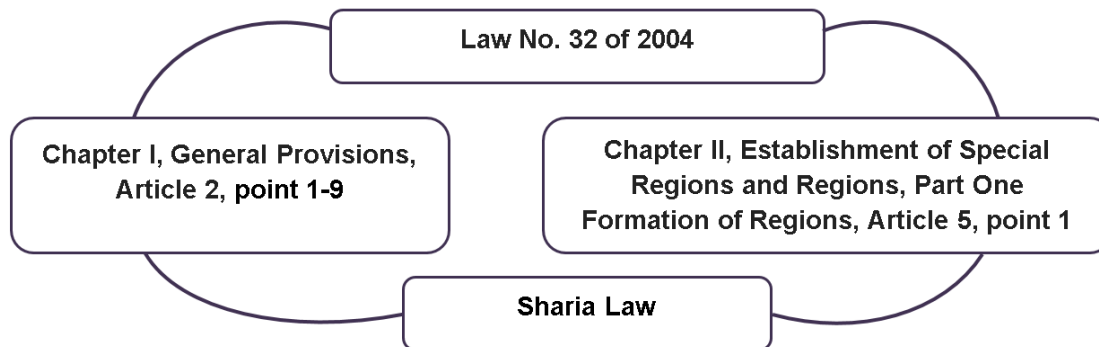

Figure 2. Implementation of Law No. 32 of 2004 concerning Sharia Regional Regulation

Law No. 32 of 2004 Chapter I, General Provisions, Article 2, has the implementation of the establishment of Sharia Perda, based on *point 1, the Unitary State of the Republic of Indonesia is divided into provincial and provincial regions divided into districts and those of us who each have a regional government; point 2, the regional government as referred to in paragraph (1) regulates and manages its own government affairs according to the principle of autonomy and co-administration; point 3, the regional government as referred to in paragraph (2) carries out the widest possible autonomy, except for government affairs, with the aim of improving community welfare, public services, and regional competitiveness.*

Point 4, the regional government in carrying out government affairs has relations with the government and with other regional governments; Point 5, the relationship referred to in paragraph (4) includes the relationship of authority, finance, public services, utilization of natural resources, and other resources; Point 6, authority, finance, public services, utilization of natural resources, and other resources; Point 7, Financial relations, public services, utilization of natural resources, and other resources are carried out fairly and in harmony. The relationship of authority, finance, public services, utilization of natural resources and other resources led to administrative and territorial relations between government structures.

Point 8, the State recognizes and respects the units of regional government that are special or special in nature which are regulated by law; Point 9, the State recognizes and respects the customary law community units and their traditional rights as long as they are alive and in accordance with the development of society and the principles of the Unitary Republic of Indonesia.

Furthermore, based on Law No. 32 of 2004, Chapter II, Establishment of Special Regions and Regions, Part One Formation of Regions, Article 5, *Point 1, Establishment of regions as referred to in article (4) must meet administrative, technical and physical requirements of the region;* and in *Point 4 (as explained in Point 1), the technical requirements as referred to in paragraph (1) include the factors that form the basis for the formation of*

regions which form the basis for the formation of regions which include economic capability, regional potential, socio-cultural, socio-political, population, broad regional, defense, security, and other factors that enable regional autonomy.

In Chapter I, General Provisions, Article 2, points 1 through point 3, it has been explained that each region has an obligation to develop regional potential for the welfare of its people both in terms of health services, community mobilization and facilities, and regional economy. Because Indonesia is a Muslim country with the largest population in the world, it is only natural that the culture and climate of its people cling to the teachings of Islam. Thus, the local government should develop the potential of the region in accordance with the characteristics of Islamic culture to be able to generate industry that can provide halal guarantees for Muslim communities both domestically and abroad.

Furthermore, in Chapter I, General Provisions, Article 2, points 4 to 7, in accordance with the discussion in points 1 to 3, the government's obligation in addition to managing regional finances, and public services, is obliged to manage natural resources in its territory. This aims to increase regional foreign exchange through natural resource management based on the climate of an Islamic society and to improve the welfare of its people.

In Chapter I, General Provisions, Article 2 points 8 and points 9 and Chapter II, Establishment of Special Regions and Regions, Part One Formation of Regions, Article 5, point 1 and point 4 explain, the state does not prohibit an area to uphold customary rules local to be implemented in the midst of the community as far as it does not violate all statutory provisions of the Republic of Indonesia. By looking at the population that is predominantly Muslim, in forming a regional autonomy can uphold the cultural potential and customary law that adheres to sharia in the context of regional development.

Acceleration model for Halal Industry Development through Sharia Regional Regulations

To sustain and motivate the development of the halal industry in Indonesia, until now what has always been in the spotlight is the role of the government as a regulator. Basically, the role of the government in an Islamic economy has a solid basis for rationality. In the view of Islam, the role of government is based on several arguments, namely: a) Derivation of the concept of the Caliphate; b) Consequences of collective obligations (fard al-kifayah); c) The existence of market failure in realizing falah (P3EI: 2014, 446). the government can act as a planner, supervisor, regulator, producer and consumer for market activities (Kahf, 1992: 30). With the awareness of the government in accelerating halal industry development, Afroniyanti (2014) added that the MUI even took the initiative to make a halal statement to later offset the government's steps in issuing halal certification. In the halal industry also has a relationship to the issue of certification or label on the product. Halal certified products provide guarantees to consumers, especially Muslims, that the product ingredients and the production process of their products are sharia compliance (Islamic law) (Yunos, et. Al., 2014). In this regard, the halal industry integrates with the rules that are bound to the sustainability of Islamic Economics.

There is a close relationship between maslahah and falah. because Islamic economics gives the teaching that all aspects of life are to get good in the world and the hereafter, the halal industry can actually realize economic activities that can create the welfare of the people to achieve His blessings. Life that is noble and prosperous in the world and in the hereafter (falah), can be realized if the needs of human life are balanced in a balanced manner (Ghofur, 2017: 24).

The government as the initiator of the rules in sovereignty with the welfare dimension of the people, saw the implementation of Law No. 32 of 2004 as a reference to the Sharia

Regional Regulation has a responsibility in regulating and creating prosperous regional conditions in security, health, education that integrates in guaranteed economic conditions. A good economy is formed from the productivity of the community in innovating to produce local products that are always in demand by consumers. In this case the government synergizes with the community to build local industries in order to increase regional foreign exchange. By focusing on the cultural potential and social conditions of Islamic society, this will boost the development and existence of the halal industry, and will be more globally known. Some halal industries in Indonesia that have the potential today are sharia tourism destinations which include culinary and fashion products. Through Sharia Law, it is expected to boost the halal industry.
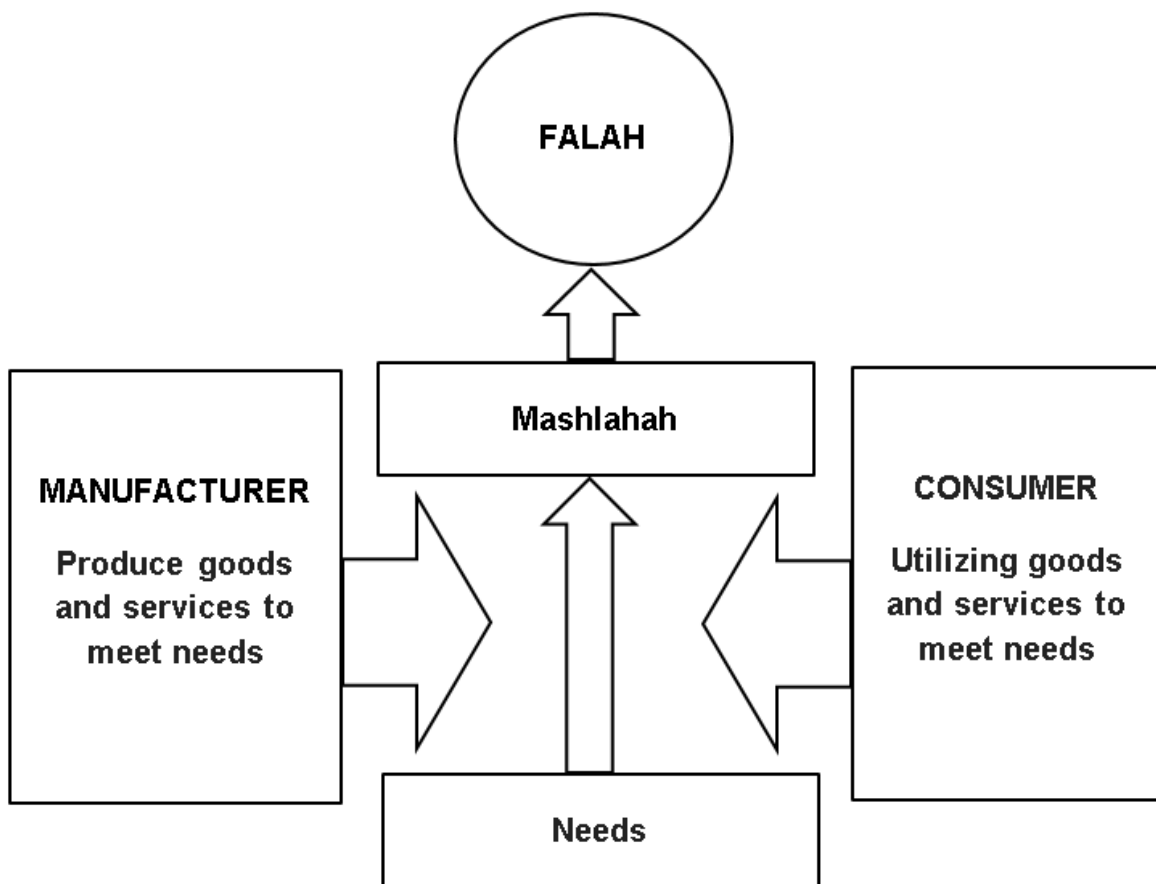
Source: P3EI, 2014: 232
Figure 2. Chain of Consumption and Production Activities

In the face of increasingly open and hypercompetitive global competition like now, every effort to seek excellence can compete. Every product, business, and company that does not have excellence, will not have much progress, and will not win in competition (Suryana, 2013: 276). Therefore, it is necessary to the preparation and realistic effort to make it happen. One of the halal industries is increasing Islamic tourism destinations. Assessment of the readiness of tourist destinations seen from several main aspects of tourism, namely (Kemenparekraf, 2013):

1. Product
   Product development must be based on the General Criteria and Standards that are applied to Sharia Tourism Enterprises and Attractiveness.

2. Human Right (HR) and institutions
   Professional Competencies of Sharia Tourism Personnel must also be supported by Training and Education in accordance with the target of Competency Standards needed by Muslim Tourists.
3. Promotion
   Forms of promotion and marketing channels are adjusted to the behavior of Muslim tourists, the World Islamic Tourism Mart (WITM), the Arabian Travel Mart, Emirates Holiday World, cresentrating.com, halaltrip.com, others.

In addition, in order for the implementation of this Sharia Regional Regulation to be realized in its entirety to realize the progress of halal industry, it is necessary to have government and community cooperation. This is also a challenge when seeing the Muslim community itself still does not have a good defense in the halal industry. In republika.co.id, As stated by the Executive Director of Indonesia Halal Watch (IHW), Ikhsan Abdullah, seeing, there are several challenges in boosting the halal industry in Indonesia, which until now is still related to the lack of awareness and concern of the community towards the product halal. Therefore, Ghofur (2017: 31) explains, Islamic economic education must change people who were capital oriented to become maslahah oriented.

4. Conclusion

Seeing several regions in Indonesia that have had Sharia-based Regional Regulations such as in West Nusa Tenggara through the Governor of West Nusa Tenggara Regulation Number 51 of 2015 concerning Halal and D.I Tourism. Aceh through the Aceh Qanun Number 8 of 2013 concerning Tourism, has a patent right on the sharia-based tourism industry. the two sharia Law provide an overview of the role of sharia in the regulation of halal industry in the tourism sector.

To sustain and motivate the development of the halal industry in Indonesia, until now what has always been in the spotlight is the role of the government as a regulator. In this regard, the halal industry integrates with the rules that are bound to the sustainability of Islamic Economics. There is a close relationship between maslahah and falah. because Islamic economics gives the teaching that all aspects of life are to get good in the world and the hereafter, the halal industry can actually realize economic activities that can create the welfare of the people to achieve His blessings. Life that is noble and prosperous in the world and in the hereafter (falah) can be realized if the needs of human life are balanced.

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Analysis Leading Indicator of Exchange Rate and Fundamentals Economy in Indonesia

Fara Dila Sandy[1], Sebastiana Viphindratin[2],Zainuri[3]
[1]*Student, Master Degree of Science in Economics, University of Jember, Jember*
[2,3]*Lecture, Master Degree of Science in Economics, University of Jember, Jember*
Email: faradilasandy9@gmail.com

Abstract

The movement of economic fluctuations that occur in countries that cause some macroeconomic problems. Also the need for policies to stabilize the economy. The determination of economic policy requires accurate information input in every stages of its determination. Economic fluctuations that occur or called a business circle provide information separately for economic times. The policy in this business cycle is to provide preliminary information. This paper uses time series data starting 2000Q1-2016Q4 with reference series of Rupiah exchange rate and economic fundamental candidate variable. This research purpose to know the main indicator of exchange rate and fundamental condition of economic that happening in Indonesia. The results show that there are four variables that become the main indicator as the main contributor of exchange rate. By knowing some of these indicators, then these variables will provide data in accordance with the conditions that are or will the data.

Keyword: Exchange Rate, Fundemental economy, Economy growth, Institutional economy

1. Introduction

The 1997-1999 currency crises series, which began in August 1997, was an unanticipated major shock to Indonesian economy. All in a sudden,Indonesia became one among victims of contagious currency crises across Asia Pacific. Starting from Thailand in June 1997, followed by the Philippines and South Korea, currency crises disease finally grabbed Indonesia.

Many financial institutions in Indonesia, either domestic or foreign institutions, had failed to predict the occurence of the crisis. In fact, these institutions were very optimitic in jugding the performance of Indonesian economy, and even some analysts believed that Indonesia would not suffer currency crisis as happened in other Asian countries. The Jakarta Composite Index (JCI) reached its peak (740.8) on 8th July 1997, only six days after Thailand abandoned its fixed exchange rate regime. Meanwhile, country risk for interest rate did not change significantly, reflecting market optimism to Indonesia's resilience toward crisis attack.

Indonesia's economic condition turned bad as Bank Indonesia failed to stabilize Rupiah. In July 1997, Rupiah was depreciated by 0.2% toward US Dollar from its average exchange rate in June 1997. On 11th June 1997, Bank Indonesia widened the exchange rate band from 8% to 12%, but this effort was fruitless. Compared to the average exchange rate of Rupiah to US Dollar in June 1997, Rupiah had dropped by 12.6% in August, 19.9% in September, 32.3% in October, 29.9% in November, and 50.2% in December 1997.

In general, it can be concluded that most financial institutions in Indonesia were failed to anticipate the 1997-1999 currency crises series. Learning from past failures in anticipating currency crises, many economists have tried to develop early warning system to deal with the possibility of currency crisis ocurrence in the future. The system will be very

useful if it can prevent policy makers and business practitioners from severe losses caused by crisis. This study is an attempt to develop early warning system for Indonesia. Unlike some previous early warning system studies (which use panel data of many countries accross the time, or time series data of a single country other than Indonesia), this study uses Indonesian time series data only. It is expected that this study will capture special characteristics of Indonesian economy, that cannot be revealed by panel data nor by other-country single data studies.

The purpose of this study is to construct early warning system of currency crises for Indonesia. The early warning system should be useful to predict possibility of currency crises occurrence in the future. In order to achieve this big goal, two smaller objectives are involved:

1. Constructing early warning system of currency crises models. Individual leading indicators and composite leading indicator models are the focus in this study, hence they are constructed to be ready-to-use early warning system models.

2. Determining robust variables in all models, which will be useful for further early warning system development. These variables should be best individual leading indicators and become elements of the best composite leading indicators.

The hypothesis behind this study is that there are some variables, among all variables in examination, which perform as best individual indicators to predict currency crisis occurrence in the near future. Some of these variables may also serve as elements of the best composite indicators.

2. Methods

Based on their methodology, early warning system models in previous studies can be classified into two main categories: (1) leading indicators models; and (2) "discrete dependent variable" models. The following part is a brief explanation of both types of early warn- ing system models. In leading indicator models, economic variables, both individually or in a group (com- posite), can be used as indicators to predict currency crisis occurence in the near future. Kaminsky-Lizondo-Reinhart's model (1998), for instance, is a prototype of early warning system model based on individual leading indicators. The next section will describe each type of leading indicator models, along with its weaknesses and strengths. Composite leading indicator model is an enhancement from individual leading indicator model. A composite leading indicator is made of several individual indicators. It is ex- pected that the composite indicator can achieve higher accuracy in mapping actual cur- rency crises, higher efficiency (lower number of noises than correct signals), and higher probability of crisis following a signal issuance, compared to individual indicators. The main handicap of composite leading indicator model is exactly the same as the weakness of individual indicator model, i.e. the loss of information caused by the use of discrete value for the indicators.

Table 1. Trade-of Between Type i and Type Error

	Crisis within the window	No crisis within the window
Signal was issued No signal was issued	Current Signal Missing Signal	Noise Curet Event of Non-signal

There are two possible errors that can happen in an early warning system model, i.e. not issuing any signal when currency crisis occurs in upcoming months (also called as type I error), or giving signal when currency crisis does not occurs in upcoming months (noise or type II error). From decision makers perspective, type I error causes bigger social loss than

type II error. Basic set up for critical threshold of independent variable signals plays very important role in determining whether type I or type II error will likely to occur. The lower the critical threshold level, the higher probability of type II error occurrence. On contrary, the higher the critical threshold level, the higher probability of type I error to occur. Although the social loss caused by type II error is lower than by type I error, it does not mean that the model should use the as-low-as- possible threshold level. The higher the probability of type II error caused by lower level of critical threshold, the more inefficient the early warning system. In this circumstance, the early warning system is no longer be able to differentiate between normal and precrisis condition.

3. Findings and Argument

The composite leading indicators in this study are made from combinations of the overall-criteria five best individual leading indicators. A restriction is imposed so that "financial account surplus" variable will not meet "ratio of financial account surplus to GDP" variable in the same combination. Overall, 18 possible combinations of composite indicators can be made. From all of these combinations, 9 combinations are made of two elements, 7 combinations of three elements, and only 2 combinations of four elements. The restriction causes combination made of five elements ineligible for composite indicators.

Examination results show that 17 out of 18 composite leading indicators can meet the overall criteria. The only composite indicator with poor result is "XY", a combination of "financial account surplus" and "M0 growth" variables. The seventeen composite indicators perform better than the five best individual leading indicator, mainly by their higher efficiency level and higher probability of crisis following a signal issuance. These composite indicators can also map actual currency crises occurence with higher than 80% level of accuracy, and even nine among them reach 100%.

The table shows that the nine best composite leading indicators contain either "Rupiah REER misalignment over its trend value" or "Deposit Money Banks' foreign assets growth" variables as its element.
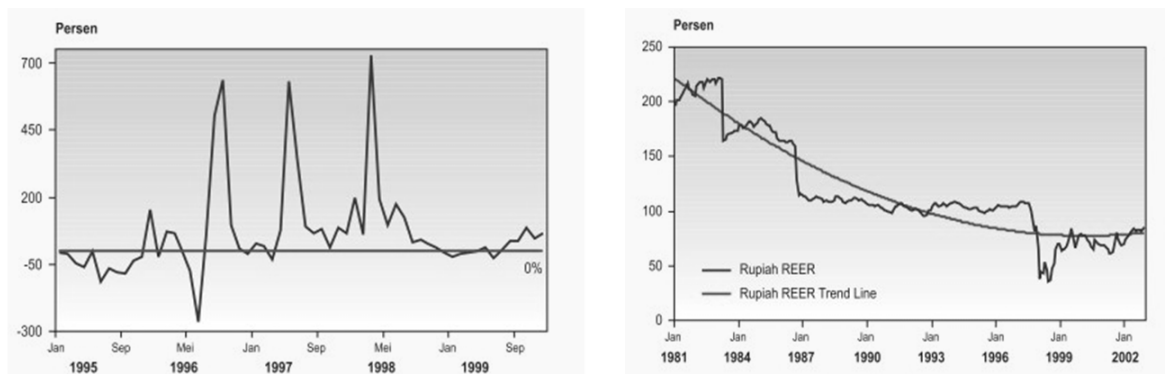
Figure 1. Indonesia's Trade Balance Surplus Growth 1995-1999 (Left)
Figure 2. Real Effective Exchange Rate (REER) of Rupiah and Its Trend (Right)

"Rupiah REER misalignment over its trend value" indicator can issue a signal as early as 24 months prior to a crisis, as in September 1997 crisis. In average, "Rupiah REER misalignment over its trend value" indicator can issue a warning signal at least in 21 months prior to a currency crisis. However, the indicator does not consistently issue warning signals in every months within the window, as in 1983 and 1986 Rupiah devaluation cases. It only issues nine warning signals prior to April 1983 devaluation, and seven signals prior to October 1986 devaluation.

4. Conclusion

In brief, several conclusions can be made from this study: First, composite leading indicator model should be used as the core model for early warning system in Indonesia, since it is better than the individual indicator model. Nine from seventeen best overall-criteria composite indicators have 100% accuracy in mapping all of actual crises in Indonesia, while only two from five all-criteria best individual indicators can predict all of ex-post currency crises correctly. The composite leading indicator model is also far more better than the individual model as the composite indicators are more efficient in issuing warning signals and have higher probabity of crisis following a signal issuance.Second, two variables are considered as robust variables both in individual and composite leading indicator models. The variables are "Rupiah REER misalignment over its trend value" and "Deposit Money Banks' foreign assets growth", with the previous have better performance in its efficiency and higher probability of crisis occurrence following a signal than the later. Direct combination of these two variable is the overall-criteria best composite indicator, which have better performance than its elements.

Third, best individual and composite indicators in some cases can issue a warning signal in 24 months prior to a crisis occurence. In average, best individual and composite indicators can issue a warning signal at least one year prior to a crisis. The time horizon of warning signal issuance by these indicators is sufficient to enable policy makers and business practitioners to anticipate the possible upcoming crisis. Fourth, real misalignment of Rupiah over its trend value is a possible cause of cur- rency crises occurrence in Indonesia. Real overvaluation of Rupiah leads to lower competitiveness of Indonesian exports, hence deteriorates trade balance, and in turn results in higher pressure for Rupiah to depreciate. This claim is also supported by historical data of trade balance surplus growth, which shows that trade balance tends to get worsen prior to a currency crisis occurrence. Fifth, all of actual currency crises in Indonesia were preceded by excessive foreign assets growth in Deposit Money Banks. Excessive foreign assets growth puts banking system in a very fragile condition toward exchange rate exposures, hence it can worsen an ongoing currency crisis. This fact supports Glick and Hutchison's findings that in emerging countries currency crises tend to occur at the same time with banking system crises.

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The Dynamics of Indonesia Inflation in Response to Exchange Rate Shocks

Eni Supriyanti[1], Sebastiana Viphindratin[2],Zainuri[3]
[1]Student, Master Degree of Science in Economics, University of Jember, Jember
[2,3]Lecture, Master Degree of Science in Economics, University of Jember, Jember
Email: eni.supriyanti@bps.go.id

Abstract

The paper uses data beginning in 2000Q1-2016Q4, in an attempt to explore and analyze behavior in Indonesia. It will also happen with the emergence of interest rates. The results of the study reveal that price behavior in Indonesia exhibits heterogeneity, and automatically impacts the Direction and speed in the quasi-quasi market balance formation that has changed with the emergence of interest rate shocks. Different prices occur in specific sectors and then propagate in other sectors. This study aims to provide a credible reference to decision-making institutions in the determination of the rules of the game relating to conditions that are or will occur.

Keywords: Inflation, Interest Rate, M acroeconomic, institutional economy

1. Introduction

Public purchasing power or inflation proxy becomes a reference in seeing how the quality of development and economy of a country. An important indicator that has a strategic role in an economy. Inflationary movements have a wide influence on the economic aspect, especially related to the purchasing power of the people that mangacu on price development. The inflation rate movement is like a double-edged sword which if too low would be a bad thing for the economy, moving into a high one would be something that would cloud the conditions of a country's economy. For a developing country like Indonesia the ideal inflation is a point that is at the equilibrium stage.

Indonesia which has an open economy system in terms of trade and exchange rate is a floating exchange rate system, which will affect the movement of inflation. With the phenomenon that occurred in Indonesia which is at the stage of the trend of the Rupiah exchange rate against the Dollar weakened with a fairly fast tempo and exceeded the price of Rp. 14,000. Thus, in this paper will analyze how the dynamics of inflation in response to fluctuations in the Rupiah exchange rate against the dollar.
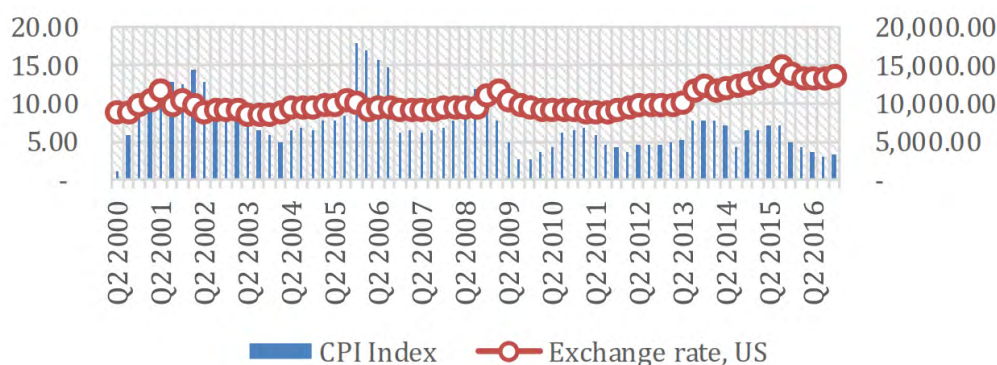
Source. CEIC: 2018, processed

**Figure 1. Indonesia's Inflation and Exchange Rate Fluctuations
Year 2000Q1 - 2016Q4**

The fundamental question of price stiffness remains a center of extensive debate in macroeconomic literature. One of the agreements reached is that the change in monetary policy has a transitory effect on the volume of goods and services, when the price rigidity exists. The magnitude and persistence vary depending on the degree of rigidity of the price. In general the existing literature uses aggregate price data and concludes that the aggregate price does not react instantaneously but requires a lag time in response to unanticipated monetary policy. Bils and Klenow (2004) examined 350 categories of goods and services and found that prices in the United States are very volatile Bunn and Ellis (2012) examined price behavior in the UK using micro data, and concluded that the frequency of price changes is not fixed over time. Golosov and Lucas (2007) also use micro data from Bills and Klenow (2004) to calibrate the menu cost model. They also found that prices were more flexible. Using disaggregated price index data, Boivin, Giannoni and Mihov (2009) can explain why the impulse response of aggregate and disaggregated price data is different. They concluded that one must differentiate sources of shock. Rigidity is found at the aggregate level affected by macroeconomic shocks, while flexibility is found at the disaggregated level associated with shocks in a particular sector.

Based on the research question above, this paper has the potential to contribute highly to policy makers, since the empirical findings obtained will be able to assist them in determining monetary policy. In addition, this is the first analysis that uses discriminated pricing data for Indonesia. The next section of this paper reviews the theory and related literature studies. And reviewing methodology and data usage. The empirical findings will be presented in the fourth section, while policy conclusions and implications will be presented in section four.

2. Methods

There are many methodologies applied in evaluating inflation at the aggregate level. Meanwhile, the evaluation of inflation data at the discontgregated level requires a specific methodology. We use the Vector Autoregressive (VAR) model, a dynamic factor model used when macroeconomics faces degrees of freedom because the number of variables exceeds the number of observations. The premise of the dynamic factor model is that a very large number of variables can be represented by several latent factors and idiosyncratic disorders. This latent factor describes the harmonic movements of those variables that follow a certain time-dependent process, and usually the VAR process. Furthermore, these idiosyncratic disorders are specific to each variable, and include measurement errors in the relevant variables. Mathematically, the dynamic factor model is described as follows:

$$X_t = \lambda(L)F_t + e_t$$
$$Ft = \psi(L)F_{t-1} + \eta_t$$

The author follows the information criteria of Bai and Ng's (2002) to determine how many factors will be included. This method is appropriate for large number of variables and observations. This method also allows for limited interdependence across periods and cross-section, as well as heteroscedasticity in the idiosyncratic component. For the time lag, information criteria are commonly applied in the VAR model.

3. Findings and Arguments

First, we compare aggregate and dispersed aggregate statistics with respect to volatility and persistence. These two statistics are the basis of price behavior analysis,

and specifically to see if the prices are more rigid or more flexible and how they respond to shocks. From the monetary policy aspect, this behavior is important to provide clarity in the control of inflation.

Table 1. Comparison of Aggregate and Dispersed Aggregate Statistics With Respect to Volatility and Persistence

	Volatilitas dan Persistensi Inflasi Bulanan						
	Standar Deviasi			R^2	Persistensi		
	Inflasi	Komponen Umum	Komponen Sektoral		Inflasi	Komponen Umum	Komponen Sektoral
Aggregated CPI							
CPI	0.791	0.251	0.750	0.101	0.234	0.855	0.134
Core	0.308	0.137	0.276	0.198	0.358	0.833	0.567
Vol. Food	1.345	0.481	1.256	0.128	0.196	0.728	0.906
Adm. Prices	2.421	0.674	2.325	0.078	0.085	0.951	0.893
Disaggregated CPI							
- Average	2.453	0.837	2.256	0.202	0.003	0.430	-0.119
- Median	1.260	0.529	1.100	0.153	0.034	0.508	-0.095
- Minimum	0.003	0.000	0.003	0.008	-2.192	-1.043	-1.590
- Maximum	25.809	6.914	24.991	0.866	0.853	0.897	0.724
- Standard deviation	2.967	0.894	2.869	0.167	0.396	0.345	0.338
Disaggregated-Core							
- Average	1.271	0.511	1.132	0.231	0.114	0.459	-0.038
- Median	0.814	0.364	0.692	0.195	0.120	0.541	-0.019
- Minimum	0.053	0.030	0.044	0.008	-1.291	-0.870	-0.970
- Maximum	7.489	3.315	7.446	0.866	0.770	0.897	0.642
- Standard deviation	1.244	0.455	1.188	1.188	0.308	0.341	0.284
Disaggregated-Non Core							
- Average	4.309	1.347	4.020	0.155	-0.171	0.384	-0.247
- Median	3.226	1.109	2.968	0.094	-0.101	0.437	-0.230
- Minimum	0.003	0.000	0.003	0.008	-2.192	-1.043	-1.590
- Maximum	25.809	6.914	24.991	0.832	0.853	0.862	0.724
- Standard deviation	3.819	1.142	3.725	0.158	0.453	0.347	0.375

Table 1 above summarizes these two statistics. Using the standard deviation as a proxy for volatility, we found that the volatility of the dispersed aggregate was higher than that of aggregate inflation. The standard deviation of CPI inflation is 0.791, while the average CPI inflation rate is 2.453. This can be explained by the fact that the volatility of each sector tends to eliminate each other, resulting in aggregate inflationary volatility declining. The main factor contributing to inflation volatility is sectoral volatility. This is the fact of aggregate and disaggregated inflation. The R^2 statistic, which mengukurras io common component variants to inflation, shows that the general component only exposes less than 50 percent inflation volatility. If we compare R^2 statistics between core and non-core inflation, the result will be higher in core inflation. This implies that the common component plays a large role in core inflation compared to non-core inflation.

The following table also shows heterogeneity in volatility between inflationsectoral. The distance is from 0.003 to 25.809 percent, with an average of 2,453 percent. If we test the core and non-core inflation groups, as has been estimated, volatilit y is higher in non-core inflation. This is related to inflation figures in food, transportatio n and cigarettes (which are price holders). The increase in taxes on cigarettes and subsidized fuel during the investigation period is the cause.

4. Conclusion

This paper examines the dynamics of inflation in Indonesia using dispersed aggregated CPI data. We use FAVAR, as in BGM. This technique allows us to analyze both aggregate and price prices undisgregated with the same framework simultaneously. The use of these aggregation data provides a limited number of observation problems, and the FAVAR model provides a solution to these conditions. The finding of this paper is that price behavior in Indonesia is heterogeneous, not only in terms of the magnitude of the response, but also in the direction and speed of adjustment to a new equilibrium. This heterogeneity becomes more pronounced when testing is done on the behavior of price groups in the period after the ITF implementation. We find that monetary policy shocks have varying impacts on these price groups. More sectors responded by lowering prices as interest rate policy increases, reflecting the dominance of demand-side factors. The sectors are food and beverages; housing; transportation; communications and financial services; clothes; and others. They also respond with different levels. Meanwhile, prices in the entertainment, health and education sectors have responded with rising prices. There are several things that can explain this phenomenon, firstly, the dominant supply-side effect on the price group; secondly, the sector is classified as non-tradable and the cost-adjusting process by a convex company (Rotemberg, 1982), where the firm may have raised prices gradually, resulting in a response to price changes to an increase in interest rates, takes longer.

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Balinese Culture and Poverty: Multidimensional Perspectives

Ni Putu Wiwin Setyari[1], I Komang Gde Bendesa[2], Ida Ayu Nyoman Saskara[3]
[1,2,3]Development Economics Department, Economics and Business Faculty, Udayana University
Email: wiwin.setyari@gmail.com

Abstract

Many practitioners outside Bali view traditional ceremonies as one of the causes of poverty. This is justified by the large portion of revenues to be spent on various traditional ceremonies that must be carried out by the Balinese, including the frequency of their implementation. On the other side, there is no empirical study that clearly shows how the influence of traditional ceremonies and the various dimensions of Balinese social life affect the poverty in Bali. As well as the development of theory and various empirical studies, poverty is no longer solely caused by the lack of a person (household) income under the minimum standard, but can be seen from various points of view. Poverty turns into a multidisciplinary nature, so the measurement must also be holistic. The study aims to answer the fundamental question, whether it is customary and cultural causes of increasing poverty in Bali? Do customs and cultures also affect the happiness of the people?

The data used here is primary data collected from 350 respondents through survey in all regencies and cities in Bali Province. Quantitative analysis with the regression method was applied to examine the influence of adat on the poverty and happiness of the respondents. The result of the analysis shows that custom and culture, which is characterized by *Yadnya* (*Dewa, Manusa*, and *Pitra Yadnya*), both from frequency and expenditure tends to have positive effect both for the income of society and the level of happiness. Therefore, there is no good reason to say that the customs and culture have caused the Balinese to be poorer. We also want to show that there are big impact this expenditure in term of customs and culture to regional income through multiplier effect. This reason can answer a question why Bali regions's economics can survive when crisis hit globally.

Key words: belief, custom and culture, happiness, income, poverty, regional development

1. Introduction

Poverty is one of issues not finished. The cause of poverty like never endless, and poverty rate couldn't tap until zero percent. Displacement the methods by measurement of poverty is one of the problem. Furthermore, the methods and indicators of poverty in every region could be different. When World Bank report their result about Poverty in 2006, in the report revealed that the number of poor people in Indonesia almost half of all Indonesians. In the same time, BPS also release poverty data and the result 39,1 million people in poverty group. Two of the data was different and will be raise questions. However, BPS or World Bank used different indicator to measurement poverty. World Bank used two criteria to determine poverty, that is national poverty (equal to consumed 2.100 calories/day) and internatio nal poverty line (PPP as US$ 1 and as US$ 2). The two of criteria used to different analysis (http://www.kompasiana.com).

Bali has controversy about the issues, when BPS Bali reveal that poverty in Bali increase from 3,95 percent in September 2013 to 4,76 percent in September 2014. The interesting of the problem is public expenditure. Data from the survey with expenditure nonfood component, necessity for religion ceremonies occupy the second position after

housing. Meanwhile, health expenditure and education expenditure gets a smaller portion (https://www.beritabali.com). This phenomenon created the new problem if a religious ritual and customs become inescapable poverty in Bali.

The perspective given by sociologist is an important role from this research. Poverty seen as a human condition, embedded in society. The problem condition describe that poverty has context must considered. Generic strategic to reduce poverty is impossible. One of the factor determine society is religious and custom. Religious and custom as social activities which determine comprehension and responsible to poverty.

Culture is an important agenda in this research about poverty. For decades behind, both sociologists, demographers and even economics have tried to find out about the role of culture in various aspects of poverty and even explicitly explain the behavior of low-income residents. Culture often considered a structural change in society, compared to hereditary inheritance. Although it is difficult to distinguish between structural and cultural differences because of both are still being debated. In some cases, the definition of culture is easier defined, relatively easier to measure, and more likely to enter if you want to fake (Small et.al., 2010).

Geremek identifies capitalism as the origin of poverty. This is of course not responsible for reducing the origin of poverty into just one aspect. Along with capitalism emerging the process of industrialization and commercialism, pushing a machine an unstoppable economy (Beyers, 2014). For centuries capitalism was considered by some people as solutions to poverty. At present the introduction of technology is considered by some people as solutions to poverty. For examples technology can cause the development of more advanced agricultural machines that reduce poverty through techniques better agriculture. The study conducted by Geremek shows that the cause poverty must be divided between internal and external causes. Certain human behavior, like laziness, can contribute to conditions of poverty. In some cases, the poor however, they become victims of oppressive or discriminating systems.

The contribution of unique religious contributions can be debated about poverty. First, religion can direct human attention to what it should become a major concern. Secondly, religion provides ethical fiber to the community so that it can respond to poverty appropriately. Finally, it is religious responsibility to alleviate poverty (Beyers, 2014).

Religion can play a role in overcoming poverty. Religion is not just an awareness morals that remind people will be generous to the poor, but also seen poor people as fellow humans. Religion can also create new thinking matrices, which affects community values. A society with attention materialism and consumption, it is necessary to note the existence that extends farther than worldly life which includes relationships with the spiritual realm. The existence of worldly material is the reduction of human existence. The mind of the community needs to be diverted. Religion is not only function in ethical and ideological capacity when responding to poverty. Religion can motivate people to be actively involved in participating in poverty alleviation activities. Balance is restored when poverty is not only measured in terms of ethical actions and spiritual, but also in an effort to provide the material needs of the community poor. True wealth does not lie in property. Freedom to have merry is asset. Religion can contribute to experiencing the fullness of life in all its forms.

In addition to religion, several in-depth studies show that culture is also correlated with poverty (including by Heath and Li, 2015; Norcia and Risotto, 2013). In a country like India, wealth, poverty, and charity have been arranged with social values in the form caste system. In Indian Hindu teachings, wealth is seen as beneficial and positive. Social ratings in ancient India are dominated by groups that have religious prestige while economic success and accumulated wealth do not lead to position higher social.

There is an opinion said that religious and customary activities are carried out by Bali's Hindu community has led to an increase in poverty rates seems to be supported with data on the amount of expenditure for this activity. This research tries to provide an empirical study to answer whether religious activities and Balinese Hindu culture make the community poorer. The study was conducted using primary data from 350 poor families in all regencies and cities in Bali. Quite interesting results shown with results that tend to differ from opinions so far.

2. Literature Review

Indicatore of Measuring Poverty and Welfare

Poverty is often associated with family welfare (rather than individuals). Absolute poverty associated with some money for meet basic needs. This measure of poverty is not related to balance in society, so that it is not in its position in the social and cultural community. This size get a lot of criticism in terms of the depth of human needs. Human needs interpreted as fulfilling physical rather than social needs (Anwar, 2005). Sayogyo (1971) proposed a level of consumption equivalent to rice per capita as one indicator of poverty measurement. Almost similar to the poverty indicator proposed by Sayogyo (1971), the Badan Pusat Statistik (BPS) calculates the amount of poverty with use the level of consumption of the population to meet their basic needs referred to here are not using the amount of rice as a food measure, but an indicator that is equivalent to 2,100 calories per day. In addition, BPS also includes non-food needs that are not only in the form of clothing and shelter but also education and health (Center for International Forestry Research, November 2004). Measure of poverty until now it is still used by BPS.

The poverty indicator issued by BPS is divided into a depth index poverty (P1) and poverty severity index (P2) (https://sirusa.bps.go.id). Index Poverty Gap (Poverty Gap Index-P1) measures the gap in the average of each population poor from the poverty line. The higher the index value, the further the average of population expenditure from the poverty line or in other words an increase in inequality poor people's expenditure. Whereas Poverty Severity Index (Poverty Severity IndexP2) provide an overview of the spread of expenditure among population groups poor yourself. The higher the value of this index shows the higher inequality expenditure between the poor.

On the other, the World Bank itself determines the absolute poverty line by using size of US$ 1 and US$ 2 PPP (purchasing power parity) per day with the aim of being able to do comparison of poverty rates between countries and the development of their poverty from time to time. This is intended to assess the progress of each policy and priority government in the world in fighting poverty.

The study of poverty experienced a significant development. Since 2010, United National Development Program (UNDP) and Oxford Poverty and Human Development The Initiative (OPHI) agreed on measuring new poverty through Multidimensional Poverty Index (MPI) (Budiantoro et al, 2013). This new measurement indicator is relatively different from measurement of poverty so far, because it sees a wider poverty structure and not just just income or consumption. The definition is relatively multidimensional like limitations access to education, health and quality of life. There are three dimensions that are referred to by UNDP and OPHI in MPI.

1. Health Dimensions that use two general indicators, namely nutrition and numbers child mortality. These two indicators are selected because they are part of the basic access to health which must be accessible to every household.

2. The Education Dimension also uses two indicators, namely school length and access towards education. Both can be a reflection of the ability of the community to access

education, although it cannot be used as a reflection of quality education itself.

3. The Dimensions of a Living Standard that has six indicators. First, access to drinking water clean. Second, access to good sanitation and not shared. Third, access to electricity. Fourth, House floor materials are not made of soil or sand. Fifth, fuel for cooking non-charcoal or wood. Sixth, more than one physical asset ownership (can in the form of radio, TV, bicycle, motorcycle or refrigerator).

Each country is basically given the opportunity to develop MPI indicators according to the characteristics of poverty in the country. It's just that, the indicator is chosen must meet the standards as stated in the MDGs. The flexibility in developing indicators in MPI causes measurement MPI in Indonesia is relatively different. Although the measurement dimensions are fixed, there are some indicators that must be adjusted from the three dimensions.

Cultural and Social Aspects in Welfare Measurement

Indicators of development measurement that tend to focus on the final material aspects often ignoring important aspects of life that are actually very relevant in individual's welfare (individual or subjective well-being). With incorporating one's values, this subjective welfare becomes relevant for pay attention in debates about development and strategy. Measurement giving recognition of human universality in the experience of being prosperous but still allows heterogeneous relationships between these immersions and their forming factors. This heterogeneity arises from a process of past history which then forms culture and influence values. Because of this, warmth is considered better measured with a measure of subjective happiness (Rojas, 2018).

Researches related to individual happiness indicate existence the phenomenon of a significant influence between the happiness of the population and success development (one of them by Forgeard et al., 2011). Various indicators of happiness begin developed in a world that is expected to be an illustration of the level of individual welfare, which is more subjective in relation to essential and meaningful aspects of life for human life (Statistics, 2017).

In Indonesia, the terminology of happiness is chosen more than the term subjective well-being. This refers to the survey instrument used. This instrument developed by BPS from a measure of objective conditions and subjective welfare levels, includes three major dimensions, namely (1) evaluation of ten domains of human life considered essential / important by most people, (2) affect (feeling or condition emotional), and (3) eudaimonia (meaning of life). Therefore a measure of happiness is a result from the composite index of the three dimensions above.

These measures of happiness then make the happiness of the people between The state can be compared so that it is possible to do statistical tests against the causal factors. The review carried out by (Rothstein, 2009) shows if the government of a country is generous and has concern for welfare, then the population will be happier. Life quality indicators that are usually used usually are unemployment, level of social trust, GDP per capita, level of individualism.

Subjective indicators, such as life satisfaction and happiness begin to be the main goal in political conversation. One of the advantages of using these measurements is non-elite groups can be a determinant of goals from politics (economic prosperity, good health, personal ability, active in religion) can convey how much satisfied with their lives.

3. Methodology

Data collection in this study uses survey and interview methods in depth with an openly made questionnaire guide. In 2016, BPS noted there are 178,180 poor families in Bali. The

number of samples is calculated using the Slovin method and it is planned that 400 poor households are divided based on the proportion of the population poor in each regency/city. Only, after data cleaning, only 361 respondents who meet the qualifications for further processing. Initial data is obtained from the Office Social and Community Empowerment in every Regency/City in Bali.

The main objective of this research is to analyze the influence of adat and ritual religious and social life dimensions of the level of poverty of Balinese people. Therefore, it is important to include these variables in the model. The model will be tested here are:

$$lny_i = \alpha + \beta_1 ln\_mkni + \beta_2 ln\_nmkni + \beta k X_i^k + e_i 1$$

Where this is the log of total household income, this is the log of expenditure for daily food consumption, while *ln_nmkni* is the expenditure log intended for traditional activities and religious rituals. *Xik* is a collection of individual characteristics considered to have an effect on income, namely the number of household members and levels education. The level of education used is the school level that has been successfully completed. Other household characteristics included are customary status (d = 1) or whether no (d = 2), as well as the frequency of following traditional activities and religious rituals that become obligations. Both of these variables are used to measure the social dimensions that are characteristic community life arrangements in Bali.

Different poverty indicators are proposed using the happiness index or happiness index. The happiness scale used here is the level of happiness perceived by respondents and subjective. The proposed model is relatively the same as the model first, it's just that the dependent variable used is the perceived happiness scale in living a life that ranges from 1-10 (lowest - highest). Analysis model used are as follows:

$$happy_i = \alpha + \beta_1 ln\_mkni + \beta_2 ln\_nmkni + \beta k X_i^k + e_i 2$$

4. Analysis and Discussion Results

According to data released by BPS, the number of poor people (population with per expenditure capita per month under the Poverty Line) in September 2017 in Bali reached 176.48 thousand people (4.14 percent), which is down by 3.65 thousand people compared to poor population in March 2017 which amounted to 180.13 thousand people (4.25 percent) period of March 2017 - September 2017, percentage of poor people in urban areas and rural areas have decreased. Percentage of poor people in urban areas in March 2017 3.58 percent, down to 3.46 percent in September 2017. Likewise the percentage poor people in rural areas fell from 5.45 percent in March 2017 to 5.42 percent in September 2017. During the period March 2017 - September 2017, Poverty Line rises amounting to 0.740 percent, from Rp. 361,387 per capita per month in March 2017 to Rp. 364,064 per capita per month in September 2017.

Table 1. Number of Poor People in Bali Province According to Regional Classification, 2011-2017 (in Thousand)

	2011		2012		2013		2014		2015		2016		2017	
	Mar	Sept	Mar	Sept	Mar	Sept	Mar	Sept	Mar	Sept	Mar	Sept	Mar	Sept
Kota	92,7	100,3	90,4	92,1	94,8	103,1	99,9	109	109,8	115,8	96,9	93,7	96,89	96,1
Desa	73,1	81,8	76,5	66,9	65,1	79,74	85,3	86,8	86,92	103	81,2	81,2	83,23	80,4
Kota + Desa	165,7	182,1	166,9	158,9	159,8	182,7	86,8	196	196,7	218,8	178,2	174,9	180,1	176,5

source: BPS Provinsi Bali, 2018

The Poverty Line is used as a limit to classify the population being poor or not poor. The poor are residents who have an average per capita expenditure per month below the Poverty Line. During the period of September 2015- March 2016, the Poverty Line increased by 2.40 percent, from Rp. 331,028 per capita per the month of September 2015 to Rp. 338,967 per capita per month in March 2016. With pay attention to the Poverty Line component (GK), which consists of the Food Poverty Line (GKM) and Non-Food Poverty Line (GKBM), it appears that the role of commodities food is still far greater than the role of non-food commodities. The amount GKM's contribution to GK in September 2015 was 68.88 percent experienced increase to 69.15 percent in March 2016.

Food commodities that make the largest contribution to the March Poverty Line 2016 both in urban and rural areas are generally the same, as for food commodities who play a role in the formation of urban poverty lines among others: rice, clove cigarettes filters, chicken meat, broiler eggs, shallots, ground coffee and instant coffee, wet cakes, noodles instant, bananas, and bread, while in the countryside between: rice, filter clove cigarettes, chicken eggs races, chicken meat, shallots, bananas, ground coffee and instant coffee, cakes, bread and chillies cayenne. In non-food commodities, commodities that play a role in line formation poverty in urban areas include: housing, gasoline, other religious or customary ceremonies, electricity, and education, while in the countryside between regions: housing, gasoline, religious or customary ceremonies other, firewood, and electricity.

Table 2. Average Monthly Expenditure per Capita by Non-Food Group Bali Province, 2010-2016

Makanan	2010	2011	2012	2013	2014	2015	2016
Sewa, kontrak, perkiraan sewa rumah	82.950	95.985	147.016	148.864	167.824	160.052	164.746
Pemeliharaan dan perbaikan ringan rumah	4.492	4.051	3.822	7.486	4.705	5.749	2.691
Listrik, air, gas, minyak tanah, kayu bakar	32.837	39.112	39.343	45.284	49.354	51.036	55.354
Rekening telepon rumah, pulsa HP, telepon umum, wartel, benda pos	19.129	29.004	28.114	29.627	30.800	34.465	37.211
Sabun mandi/cuci, kosmetik, perawatan rambut/muka, tisu	15.066	20.237	21.975	26.747	28.856	36.747	42.411
Perawatan rambut/muka, tisu	15.066	25.430	30.286	42.948	39.649	30.032	34.478
Biaya pendidikan	22.326	28.808	31.831	42.743	44.394	36.218	40.921
Transportasi, bensin, solar, minyak pelumas	31.841	52.158	51.546	62.522	75.246	82.763	82.983
Jasa lainnya	6.401	8.942	11.058	9.358	11.340	9.450	12.637
Pakaian, alas kaki, tutup kepala	10.491	17.462	17.060	22.839	23.832	18.642	19.321
Barang tahan lama	29.563	66.887	58.750	57.279	79.992	84.862	61.691
Pajak (PBB & Kendaraan)	7.669	8.680	8.587	11.555	12.900	11.788	13.185
Pungutan	3.872	3.498	4.498	5.039	4.567	2.781	3.589
Asuransi kesehatan	4.243	4.391	6.982	6.310	8.005	10.466	12.502
Asuransi lainnya	2.605	6.285	9.273	3.547	5.009	1.839	2.052
Keperluan pesta dan upacara	26.794	31.295	75.646	49.733	52.554	46.678	47.796
Jumlah	**319.569**	**442.226**	**545.788**	**571.880**	**639.026**	**623.568**	**633.569**

source: BPS Provinsi Bali, 2018

When viewed from the components that have a major influence on the deployment in Bali, especially in non-food components, housing is ranked first. This can understandable because the price of houses or land in Bali is very expensive, relative compared to in outside Bali. Its value even shows a significant increase trend. Some parties argues if the social burden of customary implementation and cultural preservation is one causes that affect poverty rates in Bali. Based on the results of surveys and censuses national (Susenas) for the March 2014 period that has been announced by the Central Statistics Agency shows that the percentage of poor people in Bali increased to 4.53 percent from the previous period in September 2013 was 4.49 percent. The thing that attracted attention was items of expenditure for the poor. From the survey conducted on expenditure components non-food, the need for religious ceremonies occupies the second position after housing. While spending on health and education gets a smaller portion (*https://www.beritabali.com*). This phenomenon which then raises the presumption if the ritual religion and customs have become a poverty trap in Bali. Customary social burden borne the community is quite influential on the expenditure of the poor. Even though the government has provided several types of poverty alleviation assistance, such as poor rice.

Social busyness in Bali does have a high intensity. Activity intensity custom that is high enough, of course, will have an increase in costs that must be incurred for implementation. If viewed from the opportunity cost, then the time taken for participating in these activities correlates with the loss of income that may be received by an individual if that time is used for work. During this time the social burden on adat and the culture that must be borne between the poor and the rich is the same, so the community poor become very high burden that must be borne. Besides there are also villages Pakraman or a traditional village that enforces policies that ultimately impact burdensome society.

If the poverty rate in Bali is seen per district/city area, it will be seen quite striking conditions. Table 4.3 shows the percentage of poor people per district/city in Bali. The highest number of poor households in Bali is in the Karangasem region and the second most followed was in the Klungkung area. In Karangasem, according to the Agency Bali Village Community and Government Empowerment, its citizens have almost every year IDR 4 million debt for traditional ceremonies, working this year to pay off last year. This is what then became the spotlight about the difficulty of alleviating poverty in Bali.

Customs and culture that exist in Balinese society are closely related to the religion and religious life of the Hindu community. Both have long historical roots and reflect expressive configurations with the dominance of Hindu religious values and philosophies. In this configuration, aspects of religious essence, patterns of life, social institutions, and art in Balinese society are included. The majority of Balinese people embrace Hinduism which has a basic framework covering three things; philosophy, ceremony, and Tata Susila. The essence of Hinduism is Panca Cradha which means five beliefs namely Widhi Cradha is the belief in the existence of God Almighty, Atma Cradha is the belief in the existence of atman or soul in every creature, the Karma Pala Cradha is belief in the law of action, Punarbhawa Cradha is belief in the case of reincarnation or rebirth after death, Moksa Cradha is a belief in moksa which is eternal happiness.

The pattern of life of Balinese people is very rigid and bound to good religious norms and social. In the context of religious norms, for example, every Balinese Hindu is obliged to performing prayers or worship at certain temples is required for one place of residence together in the community, the ownership of agricultural land is required in one subak certain, are required in social status based on color, on obligatory kinship ties according to patrilineal principles. Balinese settlement structures can be divided into two types namely the settlement of a cosmic pattern as happened to Balinese people who live in mountains

and settlements spread as happened to Balinese people who are in lowland. In the cosmic pattern, the traditional village is the central point. While in the pattern spread, the village is divided into a smaller area called Banjar. Balinese Hinduism does give a characteristic to Bali. Various rituals and ceremonies his religion has become a special attraction for foreign and domestic tourists. Although Hinduism originated in India, Bali still has its own Balinese style of Hinduism. in the form of self-control measures become an important feature of religious expression in the circles Balinese Hindu community. For this reason, the Balinese Hindu community is known for its behavior graceful and polite.

From the available data, the survey is intended to look at the current characteristics and conditions of poor household in question. However, the survey did not go as expected. Because of the 400 questionnaires distributed, only 361 questionnaires were accepted complete, due to time constraints. In addition, the alert status issued by the Government for Karangasem Regency in the middle of the survey period also caused the survey in this area to become not optimal. Descriptive statistical summary of respondents can be seen below.

Table 3. Data Descriptive Statistics

	art	pendapatan	frekuensi_ritual	pengeluaran_keagamaan	pengeluaran_makanan	pengeluaran_adat	skala_harapan hidup	skala_kepuasan	skala_kebahagiaan	status_adat	pdd
Mean	4,144	1.958.089	294,31	4.189.687	608.853	843.436	5,501	6,315	6,706	1,063	
Stand Error	0,087	73.775	7,665	269.222	78.296	53.419	0,074	0,070	0,078	0,014	
Median	4	1.750.000	374	2.900.000	350.000	550.000	5	7	7	1	
Mode	4	1.000.000	375	-	-	-	5	7	7	1	
Stand Dev.	1,670	1.401.728	145,65	5.115.212	1.487.629	1.014.962	1,420	1,343	1,484	0,266	
Kurtosis	0,270	2	-0,626	22	89	6	-0,173	0,300	0,000	15,07	
Skewness	0,259	1	-1,104	4	8	2	0,014	0,072	0,2167	3,552	6,
Range	9	8.900.000	427	45.400.000	20.000.000	7.240.000	8	8	7	3	
Min.	1	-	0	-	-	-	2	2	3	0	
Max.	10	8.900.000	427	45.400.000	20.000.000	7.240.000	10	10	10	3	
Count	361	361	361	361	361	361	361	361	361	361	

source: Data Processed

When viewed from the average value of income owned by respondents, refer to the category poverty that is used generally is US $ 2 / day, then all respondents are in the category poor household. Their average income is only Rp. 1,958,089 per month. With the average number of household members is 4 people, so per day the income per individual becomes Rp. 16,317. This figure is far below the minimum income that must be met, which is around Rp 28,000.

The average education that was successfully completed by respondents was primary school, even though there are respondents who successfully complete their education up to one diploma. Look expenditure structure of each household, the expenditure for food is still relatively more large compared to non-food expenditure, which in this case specifically looks at expenses for customs and religion. Most respondents stated themselves as a member of a traditional village, although there are some that are not traditional customs. The frequency of custom and religious activities that must be followed by every household can reach 66 times per year, although on average around 18 times per year. The activity in question here, can be in the form of carrying out or attending pawiwahan, death, ngayah piodalan, nguopin, and others.

Expenditures that must be spent in total for these activities can range between Rp. 4 Million - Rp. 5 Million per year. When compared to the level of income received an average

of Rp. 23 million per year, this expenditure on adat and religion is not exceed the income received. Therefore, it can be said if customary activities and rituals carried out by each household adjust to the abilities of each household, and not something that is imposed on its magnitude.

Table 4. Results of Analysis of the Effects of Expenditures and Indigenous on Home Income in Bali

Variable	Model 1		Model 2	
	Koefisien	**t-statistik**	**Koefisien**	**t-statistik**
pengeluaran makanan	0,0506 (0,0395)	1,2818	0,0578 (0,0394)	0,1441
pengeluaran ritual	0,2329*** (0,0439)	5,2975		
pengeluaran adat			0,1661*** (0,0394)	4,2077
pengeluaran agama			0,1528*** (0,0487)	3,1375
anggota rumah tangga	0,04153*** (0,02158)	3,2432	0,0326*** (0,0128)	2,5369
pendidikan	0,0107* (0,0057)	1,8682	0,0091 (0,0056)	1,6277
status adat	0,0710 (0,0733)	0,9682	0,1268* (0,0758)	1,6722
frekuensi yadnya	0,0058*** (0,0014)	3,3908	0,0026* (0,0015)	1,6592
R2	0,2667		0,2729	
F-statistik	20,4337***		16,8384***	

source: Data Processed

The results of the analysis show that if you become Hindu in Bali with a variety of customary obligations and ritual routines it has absolutely no effect on the level of poverty in Bali. Surprisingly, spending on rituals has a positive impact on household income significantly. This means that the greater the funds spent on rituals, the greater the household income. A 1% increase in food expenditure, encouraging an increase of 0, 05% of household income. Meanwhile, an increase of 1% for ritual spending can encourage an increase in income by 0.23%. The effect of ritual spending can be said to be greater than the expenditure on food. This result still raises further questions, what kind of pathway has a positive effect on ritual expenditure on household income. Often this ritual is associated with yadnya. When referring to the meaning of yad itself as various forms of offering ceremonies and worship of Ida Sang Hyang Widhi Wasa by Hindus on the basis of sincere conscience. This sincerity of conscience is assumed to be positive for individuals to provide the best. When spending on rituals is divided into religious expenditures (relatively more flexible) and traditional / other expenses (relatively more rigid), the results are not much different (as shown by model 2).

Sorting out the two types of ritual expenditure becomes adat (in the form of pesons, ayahan, patisan, contribution, and various forms) with religious expenditures are expected to be able to provide a clearer picture of the "objections" that are considered to make

Balinese people become poorer. The results consistently show if all obligations religious customs and rituals have no negative influence on income household. The frequency of various traditional, social and religious activities is also not give a negative influence on people's income

Other social dimensions, in the form of status of being a customary man give a positive influence. That is, if the household is not a member of traditional customs, the income they have will be higher, but this effect is not significant. This matter shows that there are still strong traditional influences on traditional social life in Bali, especially Hindus. Being a member (custom) like having rights exclusive to the assistance and acceptance of the social environment that is accepted by the family. If there is a hardship that befell the family, then other adat members are inside one Banjar will voluntarily and happily help to ease the burden. This makes any obligation to become an adat man, will not be an objection for the family concerned.

The number of household members and education is assumed in theory give a positive effect on household income. More and more home members ladder, the accumulated household income will also increase. Capital other humans are education. The higher the level of education of a person, the more also the income that can be received.

Different welfare indicators are submitted using the happiness index or happiness index. The happiness scale used here is the level of happiness perceived by respondents using a scale indicator. The larger the scale shown, the happier the respondent was in living a life that ranged from 1- 10 (lowest - highest).

Table 6. Results of Happiness Determinants in Bali

Variabel	Koefisien	t-statistik
pengeluaran makanan	0,0845 (0,1312)	0,6437
pengeluaran keagamaan	0,1415 (0,1582)	0,8941
pengeluaran adat	-0,1864 (0,1283)	-1,4525
anggota rumah tangga	0,0550 (0,0414)	1,3293
Pendidikan	-0,0482*** (0,0181)	-2,6659
status adat	0,0605 (0,2500)	0,2421
frekuensi ritual	0,015955*** (0,0051)	3,1235
kepuasan sosial	0,6523*** (0,0434)	15,0247

source: Data Processed

The results of the analysis on the aspects of happiness here show quite surprising things. Regarding individual happiness, all material things tend to have no effect towards one's level of happiness. But when faced with education, frequency the implementation of various forms of ritual, and social satisfaction only affects their happiness. This indicates that one's happiness cannot be measured from material ownership only, but also imateriil. Expenditures for other religious and customary rituals have different effects. Religious ritual

spending is positively correlated, while expenses for adat are correlated negative. This indicates that if the ritual is given more flexible flexibility, such as As for religious rituals that are adapted to one's condition, the effect will be different compared if forced. However, like more traditional and religious rituals in Bali surrender to sincerity, they do not have a significant impact.

The frequency of participation in traditional activities and religious rituals has an impact positive and significant on one's happiness. The more often he is involved in activities in his environment, the greater the feeling of happiness he felt. This result is contradictory the view of most people who stated that the time taken for various activities religious customs and rituals in Bali will cause feelings of disruption and reduce their happiness. These results also confirm, if welfare is not only obtained measured by asset ownership, but also the feeling of being recognized in the social environment. Seen from satisfaction to social relationships to be the most dominant factor influencing towards one's level of happiness. The greater the level of satisfaction of an individual with acceptance of the social environment towards them, the higher the level of happiness can be felt by that person.

The results of a survey conducted by BPS regarding the happiness index indicate if Bali's happiness index in 2017 is 72.48, which is higher compared to the Indonesian national happiness index (70.69). When compared to conditions in 2014, the happiness index of the Balinese can be said to increase. Dimensions the biggest role in the formation of happiness of Balinese is the dimension of life satisfaction (34.80), followed by feeling dimensions (31.18) and dimensions of meaning of life (34.02) (Provincial BPS Bali, 2018). These results confirm the results of the study here, if social satisfaction is influential great for one's welfare. Although it can be said, the scale of happiness and satisfaction the social used here is relatively subjective and not exactly the same as dimensions composite used by BPS in its measurement.

No significant effect of religious ritual expenditure on happiness one does not necessarily indicate the absence of a relationship between religious attitudes and the happiness of Hindus in Bali. The greater the level of expenditure for religious rituals is not can be correlated with a more religious person. Some studies show if the level one's religiosity correlates with the level of happiness. Aghili and Kumar (2008) examine the relationship between religious behavior and subjective happiness of Iranians and Indians shows a positive correlation between religious behavior and happiness. Increasingly religious someone, the happier they are. Only, the religious behavior meant here is more on the spirit of life and trust in the future that drives happiness to be higher. While the correlation of happiness with relative religious behavior is formal (religious norms) are of less value. But another study by Sillick et al. (2016) get different results, if there is no significant difference between people's happiness religious ones with not.

Religiosity in this case can be said as all things related to trust in certain beliefs or doctrines regarding supernatural powers (Reich, et al. 1999 in Ansari, 2015). However, in a broader sense religiosity is interpreted as a comprehensive sociological term used to show various religious activities, dedication and dedication, as well as trust or doctrine (Ansari, 2015). Study by Clemente and Sauer (1976) in his study of the level of life satisfaction of Americans concluded if the more often a person goes to the Church, the higher the level of satisfaction of his life. This result is almost similar to the results obtained by Colón-Bacó (2010) which uses frequency to place worship as an indicator. However, some say that the Church can be identified as source of social support so that attendance to the Church can be associated with increasing height health outcome of the person. The same association can be used in this study. The frequency of rituals, both traditional and religious rituals, will place the person in social environment. Frequent gathering frequency will increase taste their happiness because of the feeling of being accepted and supported by the social

environment where they live. Likewise with a significant social satisfaction scale correlation with individual happiness scale.

5. Conclusion

There is a lot of controversy stating that being Hindu in Bali will be very troublesome. Some official government agencies even released poverty figures making the amount of expenditure on religious rituals as the cause of the size of the house poor stairs in Bali.

This research is intended to answer the controversies and hypotheses stated at on. However, the results of the analysis show that there is no strong and significant evidence to state if poverty is influenced by the existence of adat, the ritual of religion is the social dimension shade the Hindu community in Bali.

Prosperity seen from the amount of income confirms if income influenced by spending on religious customs and rituals, but the effect is positive and significant. Not negative, as many parties hypothesize. Frequency of customary activities and the religious rituals that are followed also have a positive effect. This contrasts with a view that states that the number of traditional and religious rituals that must be followed will be disrupt working time and cause them to be unproductive and poorer.

Prosperity seen from different perspectives is also tested here. Results that was quite surprising. Variables which are material in nature tend not affect the level of happiness of a person. But the feeling of being accepted and satisfied will be environment and social relations make them happier. So, when the frequency the yadnya has a positive effect on the level of happiness, it can be justified. Because the more often they are involved in traditional activities and religious rituals, the better the relationship they have with their social environment.

However, there are some weaknesses in this study. Some previous studies show there is an inconclusive result between income relations and religion (culture) with individual welfare. This is more due to the different indicators used. The happiness scale in this study is still subjective and has not been used raw components as used by BPS. Therefore, the results are debatable. For future studies, research can be developed using several indicators official as a comparison.

The results of this study also show more on the results of quantitative testing, so that they are still not can be explained in detail how this ritual expenditure can have a positive effect on individual income.

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The Analysis Effect of Economic Growth And Investment on Income Inequality in Indonesia

Yunus Kurniawan[1], Sebastiana Viphindrartin[2], Zainuri[3]

[1,2,3]Development Study Science Department Faculty of Economy and Business, University of Jember, 68121

Email: yunuskurniawan20@gmail.com

Abstract

Economic growth is the economic progress of a country, especially the increase of goods and This study is a quantitative research that aims to determine the effect of economic growth and investment of foreign direct investment to income inequality in Indonesia in 2013-2016. This study used panel data from 33 provinces in Indonesia during the period 2013-2016. The type of data used in this study was secondary data, which includes Gini index data, per capita GRDP growth and foreign direct investment (FDI) investment. Data analysis in this research used panel data regression analysis. The results showed that provincial economic growth had a positive and significant impact on income inequality. While foreign direct investment investment positively influences not significantly to income inequality.

Keywords: income inequality, economic growth, FDI

1. Introduction

Indonesia continues to experience an increase in output per capita from year to year. This is indicated by national gross income per capita which continues to increase. According to World Bank data Indonesia's national per capita gross income increased from US $ 560 in 2000 to US $ 3,630 in 2016. Indonesia's economic growth was also followed by a decrease in poverty rates from year to year. Based on data from the Central Statistics Agency (BPS), since 1999 Indonesia has succeeded in reducing poverty from 47.97 million (23.43 percent) of the poor population to 28.28 million (11.25 percent) in 2016. The pace of economic growth Indonesia has experienced a slowdown since 2012 due to weakening demand for several commodities driving the Indonesian economic boom in the previous decade, one of which is coal. The decline in demand from major coal importing countries such as the PRC and the abundance of world coal production also affected the falling selling prices of coal in the world market. This has resulted in slowing the growth rate of exports, investment and the rate of reduction in poverty rates in Indonesia. However, economic growth in Indonesia is not followed by an even distribution of income.

Income inequality in Indonesia as measured by the Gini Index tends to increase. Indonesia uses the consumption expenditure approach to calculate the Gini Index. Data on income groups in Indonesia are measured using the data approach of population expenditure groups in Indonesia. There is a slight weakness in measuring income inequality using the expenditure approach. The general fact that is known is that data on inequality based on expenditure tends to be lower than income-based (Lustig, 2015). According to Yusuf in Prastowo et.al. (2014) this is because high income groups usually save a greater proportion of their income, the distribution of expenditure on consumption is generally more equitable than income distribution. Ahlualia (1974) in Asri (2005), classifies income income in three groups, namely: 40% of the population receiving the lowest income, 40% of middle income population and 20% of high income population.

Based on data on the inequality in the share of expenditure in urban and urban and rural areas, there is a similar pattern of expenditure share. The share of 20% of

high-spending groups always exceeds the share of 40% of the medium-spending group and tends to increase. While the share of 40% of the medium-spending group and 40% of the low-income group tends to decrease. In the period 2010-2016, the share of 40% of low-expenditure groups in the combined urban and rural areas decreased by 9.98% or an average decline of 1.66% per year. While the share of 40% of the expenditure group is experiencing a decline of 6.63% or an average decline of 1.10% per year. Meanwhile, the share of 20% of high-expenditure groups has increased by 9.59%, or an average of 1.60% increase per year. As a result 20% of high- expenditure groups in 2016 controlled a share of 49.04% of total expenditure (up from 44.75% in 2016). According to data on expenditure share in 2010-2016, it is seen that there is a tendency of 20% of high-expenditure groups or rich groups to be the group that enjoys the greatest economic growth. While 40% of low-income groups or the poor are the most depressed groups in line with economic growth. This fact shows the widening gap in inequality in Indonesia along with economic growth.

There are many causes of income inequality, one of which is according to Procovicth in Suyatno (2009) that this gap is caused by economic growth, population growth, and the development of cities and villages. The relationship between inequality and economic growth began to emerge when economist Simon Kuznets put forward the inverted U hypothesis (Galbraith and Kum, 2012). Kuznets said that initially when development began the distribution of income was uneven, but after reaching a certain level of development the income distribution was more evenly distributed (Kuncoro, 2004). Karl Marx in his theory argued that economic growth in the early stages of development would increase labor demand. The increase in the wage level of the workforce further affects the increased risk of capital to the workforce. As a result there are problems with unemployment and income inequality. In short, economic growth tends to reduce the problem of poverty and income distribution in the early stages of development, then in the next stage there will be the opposite (Irawan, 2002). Empirical evidence from this view is based on observations in several countries such as Taiwan, Hong Kong, Singapore and the PRC. NeoClassic groups are very optimistic that economic growth in practice tends to reduce income inequality and poverty (Irawan, 2002).

In addition to economic growth there is one important factor that can affect the income gap in the midst of the globalization era, namely investment. Investment plays an important role in development, so it is often called the "engine of growth". According to Harrod- Domar in Arsyad (1997), each economy can set aside a certain proportion of its national income if only to replace damaged capital goods. However, to grow the economy, new investments are needed as additional capital stock. Investment can be defined as a change in capital stock and has a direct relationship with total output. Direct investment investments will have an impact on employment, which can ultimately increase national output. Based on Harrod-Domar's theory, the lack of investment in a region makes economic growth and income levels per capita in the region low because there are no productive economic activities. Thus the inequality of investment distribution is considered as one of the main factors causing income inequality. Dabla-Norris, et.al. (2015) found that greater financial openness (foreign investment) will have a positive effect on increasing inequality in developed countries, which reflects the fact that the benefits of skilled labor sectors are disproportionate. Whereas in developing countries FDI has no effect on inequality. Meanwhile Lin and Wu (2013) found that investment has a positive effect on income inequality. Whereas on the contrary, Danawati et al (2016) found that investment did not have a significant effect on income inequality.

The purpose of this study is 1) to analyze the effect of economic growth on income inequality; 2) analyze the effect of investment on income inequality.

2. Literature Review

Economic Growth and Income Inequality

The relationship between inequality and economic growth began to emerge when economist Simon Kuznets put forward the inverted U hypothesis (Galbraith and Kum, 2012). According to Kuznets, in the initial stages, the economic growth of income distribution tends to deteriorate, but in the next stages it will improve. This hypothesis is better known as Kuznets' inverted "U hypothesis, in accordance with the form of a series of changes in income distribution trends with the size of the Gini coefficient and GNP per capita growth which will look like a U- reversed curve. According to Kuznets, income distribution will increase in line with economic growth (Todaro, 2000). It is as if in the short term there is a positive correlation between economic growth and inequality of income distribution, meaning that economic growth will be followed by increasing inequality of income distribution. But in the long run, the relationship between them becomes a negative correlation, meaning that an increase in income will be followed by a decrease in the inequality of income distribution (Todaro, 2004).

NeoClassic economists argue that economic growth tends to reduce poverty and income inequality even though it is still in the early stages of growth. Empirical evidence from this view is based on observations in several countries such as Taiwan, Hong Kong, Singapore and the PRC. NeoClassic groups are very optimistic that economic growth in practice tends to reduce income inequality and poverty (Tarmidzi, 2012). Economic growth tends to reduce the problem of poverty and income distribution only in the early stages of development, then in the next stage there will be the opposite (Irawan, 2002). Neo Marxist states that economic growth will always cause a widening inequality between the rich and the poor. This happens because of the accumulation of capital and technological advances that tend to increase the concentration of resource and capital control by the rulers of the capital "elite" group of society. On the contrary, non-capital owners will remain in a state of poverty.

Park and Shin (2015) also stated that economic growth can increase or decrease the income gap of a society in a region. Kang (2015) found that economic growth correlates negatively with the income gap. While Cingano (2014) found that economic growth does not affect income inequality.

Influence of Investment on Income Inequality

Investment or investment is an expenditure that aims to increase capital and gain profits in the future. Because of its important role in development, investment is often called the "engine of growth". According to Harrod-Domar's theory in Arsyad (1997), each economy can set aside a certain proportion of its national income if only to replace damaged capital goods. However, to grow the economy, new investments are needed as additional capital stock. Investment is defined as a change in capital stock, and has a direct relationship to total output. Direct investment investments will have an impact on employment, which can ultimately increase national output

Based on Harrod-Domar's theory which explains the positive correlation between the level of investment and the rate of economic growth, it can be said that the lack of investment in a region makes economic growth and income levels of people per capita in the region low because there are no productive economic activities. With the centralization of investment in a region, the imbalance in the distribution of investment is considered as one of the main factors that lead to inequality of development or economic growth.

In the theory of endogenous growth, technological development is an important factor that influences investment. According to Todaro (2004), the endogenous growth model can

be used to determine the high potential investment returns in developing countries whose labor capital ratio is still low. The endogenous growth model sees technological change as an endogenous result of investment in human resources and technology-intensive industries, both by the private sector and the government. This theory refers to innovation or technological development as a component that influences investment, where previously technological change or development is the result of physical capital investment and human capital that can create an external economy and increase productivity.

The influence of investment is reinforced by the results of Lin and Wu (2013) and Bhandari (2007) who found that investment has a positive effect on income inequality. Whereas Mihaylova (2015) and Danawati et al (2016) found that investment had no significant effect on income inequality. Dabla-Norris, et.al. (2015) found that investment will have a positive effect on increasing inequality in developed countries. Figini (2006) found that FDI has a different effect on income inequality.

3. Research Methods

This research was conducted with a quantitative approach. The type of data used in this study is secondary data in the form of panel data with the period of 2010-2016. In general, the data in this study were obtained from the Central Statistics Agency in the form of GRDP, Gini coefficient and investment in 2010-2016.

The analysis in this study uses panel data which is a combination of time series data and cross-section data. There are two kinds of data panels, namely data balance panel and unbalance panel data, data panel balance is a condition where the cross-sectional unit has the same number of time series observations. While the unbalance panel data is a condition where the cross-sectional unit has the same number of time series observations. Data analysis method uses estimation with panel data, namely Pooling Least Square (Common Effect). The classic assumption test of the regression model must be free from multicollinearity, autocorrelation, and heteroscedasticity and the data produced must be normally distributed.

Research variables include income inequality measured by the Gini Index or Gini Ratio in each province in Indonesia. The Gini Index is calculated based on the approach to public consumption expenditure. Economic growth is measured by the growth of per capita Gross Regional Domestic Product (GRDP) on the basis of constant 2000 prices in each province, Investment using foreign direct investment (FDI) investment ratio data.

4. Research Result

Data analysis techniques use the Pooled Least Square method to examine the relationships between individuals cross section. Complete output results from panel data regression analysis using Pooled Least Square (Common Effect) method. The following is the output of panel data regression with Common Effect/Pooled Least Square Model with Eviews program.

Based on the results of data analysis can be formed the following equation model:

$$KTP_{it} = 0,330236 + 0,002444 GROW_{it} + 0,001421 FDI_{it} + e_{it}$$

Based on these equations it can be interpreted the results of the estimation of panel data regression with the pooled least square method with the following explanation.

1. Constant value
   The constant value (C) is 0.330236, which means that if the variables of economic growth and investment do not change (constant), then the income inequality is 0.330236.

Table 1. Data Panel Regression Results with Pooled Least Square Method

Variable	Coefficient	t-Statistic	Prob.
Konstanta	0.330236	42.60518	0.0000*
PDRB Per Kapita (Grow)	0.002444	3.263739	0.0013*
Investasi PMA (FDI)	0.001421	0.916024	0.0900
R-Square	0,986056		
Adjusted R-squared	0.133353		
F-statistic	9.847653		
Prob (F-statistic)	0.000000		
Durbin-Watson stat	0.507870		

Source: Data processed

*) significant on α=5%, ˣ) insignificant on α=5%,

2. Economic Growth

Based on the regression results with the pooled least square model, the economic growth obtained by 0.002444 means that the investment variable does not change (ceteris paribus), the economic growth variable will have a positive and significant effect on income inequality. This means that every increase in economic growth by 1 unit will increase the value of income inequality by 0.002444 units.

3. Investment (FDI)

Based on the regression results with pooled least square model, the Investment (FDI) of 0.001421   means that if the economic growth variable does not change (ceteris paribus), the investment variable does not have a positive and significant effect on income inequality. This means that every increase in investment is 1 unit so it does not increase the value of income inequality

4. Discussion

Influence of Economic Growth on Income Inequality

Based on the regression results with the pooled least square model, economic growth has a positive and significant effect on income inequality. This means that the increasing RGDP per capita growth will also increase income inequality.

Economic growth is the process of increasing output per capita in the long run. This definition contains three main things, namely process, output per capita and long term. The process shows that economic development from time to time will continue to change, output per capita associates total output aspects and aspects of population, and the long term is described as a tendency to change the economy in a certain period driven by internal economic changes (Arsyad, 2010:11) Economic growth both directly and indirectly will affect the problem of regional inequality. Inequality in revenue sharing is an imbalance in economic development between various regions in a region which will also cause inequality in income levels between regions. Inequality in developing countries is relatively higher because at the time the new development process begins, the opportunities and opportunities for development are generally used by regions with better development conditions while the underdeveloped regions are not able to take advantage of this opportunity due to limited infrastructure and facilities. low quality of human resources. Therefore, economic growth tends to be faster in regions with better conditions, while underdeveloped regions do not progress much.

This result also supports the hypothesis put forward by Simon Kuznets. According to Kuznets in Wilder (2003), states that economic growth influences income distribution with

greater wages in skilled and economical labor obtained in the beginning of industrialization but followed by an increase in inequality in line with institutional changes. At first economic growth tends to cause rising levels of poverty and income inequality in developing countries, or there is a positive influence of economic growth on income inequality. But after developing countries experience an economic transition into developed countries, the Kuznets U-inverse curve will decline, which indicates a decrease in income inequality. The results of this study are in line with the research of Cevik and Caro (2015), Park and Shin (2015), and Wahiba and Weriemi (2014) which state that economic growth has a positive and significant effect on income inequality.

Meanwhile, in the period 2010-2016 shows that economic growth at the provincial level as a whole has a positive and significant impact on income inequality. That is, economic growth that occurred at the provincial level as a whole in the period 2010-2016 increased income inequality in that period. The large increase in income inequality from economic growth can indicate that any increase in economic growth (per capita income) will increase income inequality (this coefficient. Increased income inequality that occurs indicates an increasingly uneven portion of economic growth enjoyed by all population groups. That is, The economic growth that occurs drives an increase in income in the population group (poor and non-poor) with an unequal proportion of increase, namely the proportion of the increase in the non- poor population group is higher than the poor group.

Increasing income inequality in line with the growth of GDP per capita in Indonesia is allegedly due to unequal income distribution between high, medium and low income groups. To see indications of uneven income distribution can use the expenditure group share approach in Indonesia. With this approach can be seen the share of 20% of high-expenditure groups or rich groups that are always higher than 40% of low-income groups or poor groups, and tend to increase.

Economic growth contributes to reducing income inequality because economic growth in the regions is inclusive (or still exclusive). High economic growth creates many opportunities, but on the other hand the opportunities that grow are more enjoyed by those who have social opportunities such as having a better position or education. Access to population that has education and low status is not as large as those who have higher social capital, both social strata, education, and social standing. This unequal initial condition determines the lack of future opportunities and perspectives. The same is true of those who have educational inequality that affects the labor market. Those with low education strata tend to have low productivity so they become trapped in low wages and income. Economic growth also provides more opportunities for capital owners to develop assets such as land, property, shares and other financial products.

Effect of Investment on Income Inequality

Based on the regression results with the pooled least square model, the investment has a positive and significant effect on income inequality. This means that increasing investment will also increase income inequality. The results of this study actually support the Harrod- Domar theory where investment increases growth and has a positive effect on income inequality, but in the case of this study the effect was not significant on income inequality. This result is in line with Mihaylova (2015), who examined the influence of foreign direct investment (FDI) investments in Central and Eastern European countries. The results of his research show that FDI has no significant effect on income inequality.

Investment influences and does not significantly affect the development inequality that occurs between Indonesia. This condition means that an increase in uneven investment between various regions will lead to areas that are relatively more advanced due to

investment activities and there are areas that are relatively undeveloped due to the lack of investment. This will encourage unbalanced development. If this continues to be allowed then the development inequality that occurs between regions in Indonesia will widen. This will encourage unbalanced development. If this continues to be allowed then income inequality that occurs between regions will widen.

The results of this study were allegedly due to investment projects in foreign direct investment in Indonesia, especially in manufacturing industries, as well as mining and quarrying and other capital-intensive sectors that only absorbed a small number of workers. The ratio of foreign capital to labor absorbed in 2010-2015 tends to increase, although in 2016 it decreased. This indicates that foreign investment investment projects tend to be more capital intensive.

5. Conclusions and Recommendations

The results show that: 1) economic growth has a positive effect on income inequality. The higher the GRDP per capita growth, the higher income inequality will increase; 2) Investment Variables (FDI) partially have no significant effect on income inequality. This is due to the many foreign direct investment investment projects in capital-intensive sectors such as manufacturing industries that only absorb a small amount of labor.

Suggestions that can be proposed include: 1) economic growth needs to be continously improved with economic activities that encourage economic growth so as to reduce income inequality; 2) Foreign investment should lead to labor- intensive, thereby reducing unemployment and increasing community income.

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Assessing of The Impact of Governance and Institutions on Poverty Alleviation: Study Case in Indonesia

Badara Shofi Dana[1], Sebastiana Viphindrartin[2], Zainuri[3]
[1]Student, Master Degree of Science in Economics, University of Jember, Jember
[2,3]Lecturer, Department of Economics and Development Studies, Faculty of Economics and Business,
University of Jember
Email: badara.dana@gmail.com

Abstract

The phenomenon of poverty becomes an object in every developing and developed country to be considered in taking a policy. The formulation of policies undertaken by every government around the world should incorporate elements of poverty reduction. However, the problems that occur with poor governance systems coupled with weaker institutions provide government policy programs as poverty reduction is not well implemented. The purpose of this study is to examine the impact of good governance and institutional quality that will affect poverty in Indonesia. The data used in this research is time series data from 2002Q4 until 2016Q4. Variables used in this research are poverty level, quality of government proxy through political stability and absence of violence, corruption and government effectiveness, and institutional quality with a proxy of rule of law and regulatory quality. The use of Factor-Augmented Vector Autoregression (FAVAR) analysis tools is expected to see the effect of good governance and institutions on reducing poverty in Indonesia. The results obtained from this research are good governance and institutional quality can give effect to poverty reduction with the implementation of a government program. Thus good governance and institutions are the main focus the government requires with its indirect influence on poverty

Keywords: FAVAR, Poverty , Government, Institutional

1. Introduction

Poverty is the main problem of developing countries or we can say that poverty is a general scarcity or condition of someone who does not have a number of material possessions or money (Khan 2009; Kwon and Kim 2014; Hakan Berument and N. Nergiz Dincer 2008). Poverty reduction is the main task of every government that must be carried out through programs originating from the State Revenue and Expenditure Anggran (APBN). However, in fact the command program used to reduce poverty has no effect. Research conducted by Siddique, Shehazadi, Shaheen, & Manzoor (2016) explains that poverty reduction does not work in various countries due to government performance and institutional quality. This is due to the performance of the government and weak institutional quality which will make the government's objectives not right on target.

Optimization of government work accompanied by the quality of its institutions will provide a role in achieving government programs in reducing poverty. As in the research conducted by Shepherd (2000); Muhammad et al. (2016) explained that government performance has an influence on the use of poverty. This is also consistent with the research conducted by Sittha (2012); Force (2002); Phillippo-Holmes (2014) looked at the relationship between government performance and institutional quality with poverty. However, research conducted by Lopes (2014); Sundaram and Chowdhury (2011); Journal et al. (2017) gives different results that it takes a good time lag in the influence of government to reduce poverty.

Indonesia, which is a developing country, also has problems related to poverty. On

the other hand, the condition of the government that still has political oversight and the occurrence of transaction costs in the quality of its institutions provides new problems. The latest new problems that are present in Indonesian countries are programs aimed at the community that are less than optimal and not on target. This is the cause of poverty is not reduced. Based on this background, this study has a purpose to see the relationship between government performance and institutional quality in influencing poverty.

2. Literature Review

The relationship between government performance and poverty is empirically few. This is because there are differences in literature in looking at these relationships. In research conducted by Sasaoka (2005) and Earle and Scott (2010) explained that government performance has an influence on poverty. The same results were also shown in the research conducted by Stojanović, Ateljević, and Stević (2016) and Widiyanto (2018) gave confirmation of the relationship between government performance and poverty. Sebudubudu (2010); Shepherd (2000) and Force (2002) Explain that not only the quality of government has an influence on poverty, but the quality of institutions is also an important factor in reducing poverty.

3. Methodology

The data used in this study is quarterly data from 2002Q4 to 2016Q4. The variable used in this study is the level of poverty, the performance of government that is seen through political stability and absence of violence, control of corruption and government effectiveness. Meanwhile, the quality of institutions (institutional) is proxied by rule of law and quality regulation. Data sources used in this study were obtained from the world bank. The research model specifications used in this study modify the research used by Siddique, Shehazadi, Shaheen, & Manzoor (2016) and Vora-Sittha (2012).

$$pov_t = \alpha_1 + \alpha_2 \, factor \, government + \alpha_3 \, factor \, institutions + e_t \qquad (1)$$

$$pov_t = \alpha_1 + \alpha_2 \begin{bmatrix} pol\_stab_t \\ ctrl\_corrup_t \\ gov\_effect_t \end{bmatrix} + \alpha_2 \begin{bmatrix} rule\_law_t \\ reg\_qual_t \end{bmatrix} + e_t \qquad (2)$$

Equation (1) and (2) provide an explanation for poverty in Indonesia influenced by the quality of governance and institutions. Furthermore, Equation (2) is transformed into Factor-Augmented Vector Autoregression (FAVAR) models in equations (3), (4) and (5) as follows:

$$pov_{1t} = a_{10} + a_{11}pov_{1t-2} + a_{12}\begin{bmatrix} pol\_stab_{2t-2} \\ ctrl\_corrup_{2t-2} \\ gov\_effect_{2t-2} \end{bmatrix} + a_{13}\begin{bmatrix} rule\_law_{3t-2} \\ reg\_qual_{3t-2} \end{bmatrix} + \varepsilon_{1t} \qquad (3)$$

$$\begin{bmatrix} pol\_stab_{2t} \\ ctrl\_corrup_{2t} \\ gov\_effect_{2t} \end{bmatrix} = a_{20} + a_{21}\begin{bmatrix} pol\_stab_{1t-2} \\ ctrl\_corrup_{1t-2} \\ gov\_effect_{1t-2} \end{bmatrix} + a_{22}pov_{2t-2} + a_{23}\begin{bmatrix} rule\_law_{3t-2} \\ reg\_qual_{3t-2} \end{bmatrix} + \varepsilon_{2t} \qquad (4)$$

$$\begin{bmatrix} rule\_law_{3t} \\ reg\_qual_{3t} \end{bmatrix} = a_{30} + a_{31}\begin{bmatrix} pol\_stab_{1t-2} \\ ctrl\_corrup_{1t-2} \\ gov\_effect_{1t-2} \end{bmatrix} + a_{32}pov_{2t-2} + a_{33}\begin{bmatrix} rule\_law_{3t-2} \\ reg\_qual_{3t-2} \end{bmatrix} + \varepsilon_{3t} \qquad (5)$$

The use of FA-VaR in this study is used to see the quality of governance that is proxied by political stability and absence of violence, control of corruption and government

effectiveness combined into one factor called the government factor, while the institutional quality seen through rule of law and regulation quality also merges into one factor, namely institutional factors. This condition makes this study use the FA-VAR analysis tool.

Table 1. Definisi Varibel

Varibel	Definisi	Sumber
Pov (Proverty)	• The poverty rate is calculated based on the ratio of poverty calculation at the national poverty line. • Unit (% of pupulation)	World Bank
Pol_stab (political stability and absence of violence)	• Perception about the possibility of political instability and / or politically motivated violence, including terrorism • Unit (%)	World Bank
Ctrl_corrup (Control of Corruption)	• Assessing corruption issues • Unit (%)	World Bank
Gov_effect (Government Effectiveness)	• Perceptions of the quality of public services, the quality of civil service and the level of independence from political pressure, the quality of policy formulations and implementation, and the credibility of the government's commitment to the policy. • Unit (%)	World Bank
Rule_law (Rule of law)	• Perception about the extent to which agents have trust and comply with community rules, and especially the quality of contract enforcement, property rights, police, and courts, and the possibility of crime and violence • Unit (%)	World Bank
Reg_equal (Regulatory Quality)	• Perception of the government's ability to formulate and implement good policies and regulations that enable and encourage the development of the private sector • Unit (%)	World Bank

4. Result and Discussion

Good quality of governance and institutions will have an effect on poverty caused by government policies with the aim of reducing poverty can be channeled according to plan and on target. However, the relationship between the quality of governance and institutions with poverty is still weak at the level of empirical studies. Thus, the use of Factor-Augmented Vector Autoregression (FAVAR) analysis tools as a support in seeing the relationship between the quality of governance and institutions with poverty.

Stationary test on the data is done first in this study to give an overview of the data used in this study as appropriate. On the other hand, stationary data is used so that there is no smooth regression in the study. Data can be said to be stationary if the variable probability value is smaller than the alpha value (α = 1%, α = 5%, α = 10%).

Table 2. Stationary Data

Varible	Prob. Poverty	Prob. Control of Corruption	Prob. Government Effective-ness	Prob. political stability and absence of violence	Prob. Regulatory Quality	Prob. Rule of law
Level	0,833	0,763	0,871	0,497	0,432	0,887
First Difference	0,017**	0,000*	0,000*	0,000*	0,000*	0,000*

Source: Data Processed
* significant α=1%, ** significant α=5%, *** significant α=10%.

In Table 2 describes the results of stationary data in this study. The results of the stationary test in this study indicate that the stationary data at the level of first difference with the probability value of each variable under the alpha value (α = 1% and 5%). Thus, the data used in this study is data that is intensity at the level of first difference.

Subsequent testing by looking at cointegration in the model used through the johansen test. The use of cointegration tests to see there are long-term relationships between variable relationships. The existence of long-term relationships in the model is seen through the trace statistic value greater than the value of the critical value.

Table 3. Johansen Cointegrastion Test

Maximum Rank	Trace Statistic	5% Critical Value
0	124,679	94,5
1	82,611	68,56
2	49,178	47,21
3	28,866	29,68
4	14,102	15,41
5	1,492	3,76

The cointegration test results using the Johansen approach can be seen in table 3. Table 3 shows that there is a long-term relationship between variables with a maximum rank in rank 2. On the other hand, the johansen cointegration test can also be used to view data at the level level can be used. The next step is using the FA-VAR analysis tool which can be seen in Figure 1.
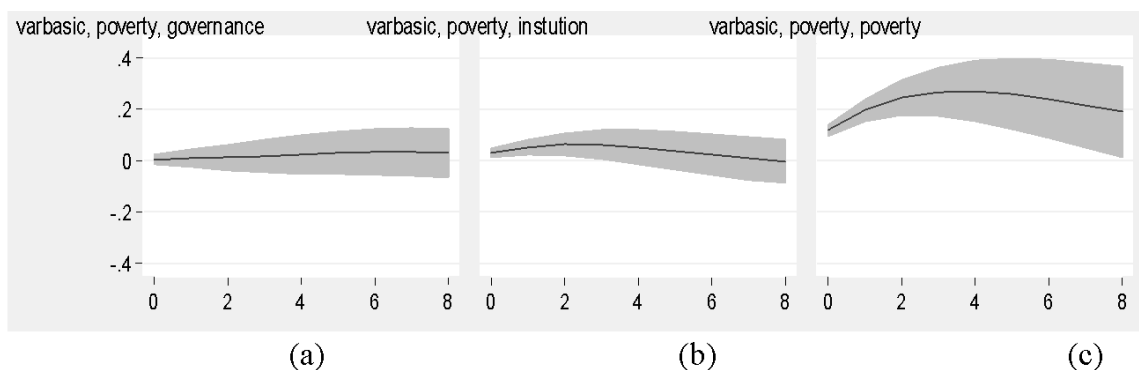

(a)   (b)   (c)

Figure 1. Hasil Impulse Respon Function di Indonesia

In Figure 1 is the estimation of FA-VAR by looking at the results of Impulse Response Function in Indonesia. The results show that in the shock of government relations and poverty in Figure 1a it can be seen when the initial shock from the government's performance is not good, it has little effect. However, when in a long period of time, as in lag 8, it gives an understanding that in the long run the government's poor performance will provide an increase in poverty. The relationship between government performance and poverty is in accordance with research conducted by Muhammad et al. (2016); Scholte (2010); Earle and Scott (2010) and Stojanović, Ateljević, and Stević (2016). The same results are also shown by the relationship between institutional performance and poverty. When a shock is seen through the occurrence of a poor institutional performance, poverty will be responded to at the beginning of the period with a small influence, but in lag 4 and above it has a large influence. Research conducted by Pathak and Pacific, (2014); Duncan (2013) and Khan (2009) provide confirmation that there is a link between institutional performance and poverty. Based on the estimation results using FA-VAR shows that the performance of the government with an institution that is not good or good will not have a big impact in giving influence in poverty. The relationship between poverty and government and institutional performance requires time lag in its connection.

Steps in reducing poverty through government and institutional performance that have a relationship to the results of the analysis of this study need to be followed up. In this case, the government needs to carry out revisions related to the regulations used to provide convenience accompanied by suitability and accuracy in carrying out the regulations set by the government. On the other hand, the government also needs to make efficiency in its performance so that transaction costs do not occur. This is because high transaction costs indicate inefficiency. The community also needs to play an active role in controlling the performance of the government. Agat remains in the corruption and does not carry out actions of a personal interest.

5. Conclusion

The results of the study show that government and institutional performance has an effect on poverty confinement, but in the relationship between government and institutional performance and poverty requires time lag. With the results there are several things that must be considered by the government such as revisions related to regulations that are used to provide convenience accompanied by suitability and accuracy in carrying out regulations set by the government, efficiency in performance so that transaction costs and community intervention do not occur in controlling government performance.

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Implementation of Blog Site As A Media Campaign and Internet Business For The Small and Micro Medium Enterprises (Case Study: Krukut's Village, Depok City)

Sugianto[1], Yul Tito Permadhy[2], Indri Arrafi Juliannisa[3]
[1,2,3]UPN "Veteran" Jakarta, JL. RS. Fatmawati No.1, Jakarta-12450, Indonesia
Email: sugiantosemm@yahoo.com

Abstract

The existence of Micro and Small Medium Enterprises in the Indonesian economy has a big role and potential in building national and sectoral economy, as well as : participate in the process of equitable economic development, to support economic growth, and expanding employment. Currently, the weakness of Micro and Small Medium Enterprises has not been able to develop its potential and role optimally and limitations in product marketing. Then to solve the problem, in this research using quantitative and qualitative methods, will create marketing managerial skills based on internet technology. The survey results prove that in the Krukut's village, Depok City, there are 420 populations of Micro and Small Medium Enterprises, but of that number there are still not many perpetrators of Micro and Small Medium Enterprises can utilize the meaning of information technology to support online marketing through the internet, such as Electronic Commer. Therefore, the result of this research have created The Blog Site for help the marketing, and the positive impact from The Blog Site is increasing the product sales of Micro and Small Medium Enterprises amount 12 %.

Keywords : Micro and Small Medium Enterprises; online marketing; Electronic Commer

1. Introduction

The existence of Small and Micro Enterprises (UMKM) in the Indonesian economy has a large role and potential in building national and sectoral economies. Some of the strategic roles of small and medium enterprises are participating in the process of equitable economic development, supporting increased economic growth, creating business opportunities as well as creating and expanding employment opportunities so as to absorb a large workforce (Bank Indonesia , 2015).

The Ministry of Cooperative's statistical data shows that in 2016 the large business group has 4,952 business units, medium 44,280 business units, small 602,195 business units, while micro small businesses create 54,559,000 business units. Workforce absorption from MSMEs is 107.65 million or 97.24% of the total workforce (Kementerian Koperasi, 2017)

In reality, small businesses have not been able to develop their potential and roles optimally. The condition of small businesses is still relatively weak, some are still limited to efforts to meet local consumption needs or the environment in which the business is located. Such conditions are due to the limitations of small and medium micro enterprises. Limitations on the ability of business management and marketing infrastructure of businesses owned (Purwanti, 2012).

With the above limitations is an important problem for UMKM in developing their business. These problems cannot be solved just by UMKM. It requires assistance from the government and strategies in problem solving and potential development with a coaching approach. Starting from strengthening motivation, entrepreneurial mentality and

independence, improving internet technology-based managerial skills and marketing skills (Setyanto, Samodra, & Pratama, 2015).

The development of internet technology today is very fast where almost all information will be very easy to obtain. The internet today is not only used as a source of information but also as a means of communication that is very much needed in various fields including in the fields of education and business. By doing business via the internet (online business), it will expand market share not only dependence on the sales area such as conventional business by opening stalls or shops in an area. The market share of online business will be much wider because people throughout Indonesia and even the world can access the internet so that the products offered via the internet will be much easier and more in demand (Y , 2010).

The data obtained from the preliminary survey results that in the Krukut Urban Village, Limo District, Depok City, there are 420 UMKM populations that have been registered as members of UMKM. Of this amount covers 275 in the field of food and beverages, 26 in the field of clothing, 3 in the field of landscaping and plantations, and 116 in the trade sector and others. There are not many UMKM entrepreneurs who can use information technology (IT) facilities to support their business, namely for marketing and selling online through the internet in the form of Electronic Commerce (e-commerce). Whereas one of the keys to the success of UMKM is the availability of a broad market for increasing the production of its businesses. Meanwhile, the fundamental weakness faced by UMKM in the field of marketing is low market orientation, weak in complex and sharp competition and inadequate marketing infrastructure. Currently, UMKM in marketing rely on promotion through only a banner installed in front of the business location and community and the oral environment. Facing an increasingly open and competitive market mechanism, market control is a prerequisite for increasing competitiveness (Kementerian Koperasi, 2017).

Representing a website or blog as an online marketing tool is a must, because by having a website / blog, making the business known 24 hours a day. One important marketing strategy from the web is that you can explain in detail the products and services you sell. In addition, it can persuade visitors to buy products or services offered (Kristiyanti, 2011).

Be aware of these problems, researchers care about the environment of the surrounding community and plan this research as a form of community service, which is expected to increase knowledge in terms of business marketing through e-commerce and and can motivate UMKM to run their business professionally.

2. Methods

This study uses a qualitative method, that's a method aimed at describing and analyzing phenomena, events, social activities, attitudes, beliefs, perceptions, thoughts of individuals individually or in groups. Some descriptions are used to find principles and explain what leads to conclusions (Afifuddin & Ahmad, 2009).

In this study using phenomenological qualitative methods, phenomenologists try to find meaning in life experiences. Researchers collect data related to concepts, opinions, the establishment of attitudes, judgments, and giving meaning to situations or experiences in life. The purpose of phenomenological research is to find or find the meaning of the essential or fundamental things from the life experience. The study was conducted through long in-depth interviews with participants. An understanding of the perceptions and attitudes of informants on the subject's daily life experiences is obtained by using interviews. The use of this approach begins with silence, shown to examine what is being learned. The method of phenomenology emphasizes various subjective aspects of human behavior, then the researcher tries to understand how the subject gives meaning to the events that occur around his life. (Afifuddin & Ahmad, 2009).

The approach taken by the researcher to achieve goals, there are; use the seminar method of giving motivation to entrepreneurship, especially using online media, especially personal blog sites, then the research team held a Forum Group Discussion (FGD) for all UMKM in the krukut village to discuss complaints about the shortcomings they faced, and mentoring marketing methods in the form of: brand, description and prices, promos and display of goods. The population for this study are all UMKM under the guidance of Krukut Village who do not have an online site for marketing their products.

3. Findings and Argument
General Description of Krukut Village

Krukut Village is a village located in Limo sub-district, Depok City, West Java, Indonesia. The development of the Krukut village from the geographical, demographic and income sources aspects is so rapid, especially in the field of development and economic administrators. There are several indicators that can be used as a reference for economic growth in Krukut Village. First, the index of public purchasing power is increasing from year to year. On the purchasing power side, there was an increase in the purchasing power index from 8.76 in 2016 to 15.49 in 2017 (Badan Pusat Statistik, 2017).

Second, the achievement of the rate of economic growth, especially from the sectors of the trade and services sub-sector. Third, there has been an increase from year to year in the role of the tertiary sector, from 50.42% in 2016 to 52.77% in 2017. These indications indicate that the people of the Krukut village have been able to meet the needs of the primary and secondary sectors (Badan Pusat Statistik, 2017).

The increasing economic rate has made Krukut as a village that has advantages in the field of services and trade. This is evident in the growing number of services and trade sector services that have sprung up in Krukut Village, such as retail restaurants, wholesalers, housing, furniture and business places and other services This is evident in the growing number of services and trade sector services that have sprung up in Krukut Village, such as retail restaurants, wholesalers, housing, furniture and business places and other services (Badan Pusat Statistik, 2017).

Along with the times have to make people in a place to adapt to these changes, for the people in Krukut Village, many have entrepreneurship. But, lately sales have been declining, so they need more knowledge to be able to market their products online.

Results of Forum Discussion Group Discussion

The main discussion in the FGD, the researchers opened it by giving seminars on knowledge about technology and several online marketing sites, and training to create blog sites, is the seminar also provided motivation so that the seminar participants were enthusiastic about staying entrepreneurial. This is done to open up insight into the importance of technology to meet daily needs and improve the household economy.

The outline of the material presented in this weblog training with blogspot is as follows, (Kristiyanti, 2011):
1. Creating a blog account as a first step in creating a weblog or several,
2. Changing the appearance of a web blog with a responsive and more attractive design template according to the theme of the webblog,
3. Change the url address of the blog using Top Level Domain, 2nd Level Domain, 3rd Level Domain, Keyword On Domain to Sub Domain,
4. Fill out articles, photos, videos and other content into the blog as a means of publication and business promotion.

The next training is the basis of e-commerce by using a prestashop application package. This training is carried out after a web blog training with blogspot. The purpose of e-commerce training with the prstashop application package is that trainees can create e-commerce applications with e-commerce template forms for free because they are opensource meaning they can be used, downloaded and developed by anyone for free. There are no costs incurred if we want to use an existing CMS unless you want to be online with a professional domain like .com, however, this training is done online for free, but this free web is temporary. After completion, new training is applied to professional domains that can be purchased from internet providers or providers.

The importance of product marketing in a blog site is;
1. Increase business credibility
2. Save marketing budget
3. Always Connect with Customers
4. Easy to access
5. Reaching a wider target market
6. Means of Cataloging Products and Services (Portfolios)
7. Save time
8. Improving Customer Service

Marketing is the most important thing in doing business, not just relying on media blogs, there are other media that were introduced in this study as sites to sell online, such as: *tokopedia, bukalapak, blibli.com, and Instagram.* Researchers refer to these sites because the site is easy to understand and much loved by the community, especially young generation.

With UMKM who own these online sites, then customers can easily know everything about the products and brands that are marketed. Other than that, customers can immediately make a decision to make a purchase if interested, or look for other products they need. Not only product information, but information about the company can also be displayed on an online site.

In this seminar there was a discussion between speakers and seminar participants, things discussed about the difficulties faced by UMKM to be able to market their products, as for the complaints, there are:
1. Lack of understanding by UMKM actors about the use of the internet and the way it operates.
2. Difficulty finding customers, because customers have faithfully chosen the old online shop.
3. A five-star rating on a sales site that affects the demand for goods sold.
4. The number of competitors in doing business online

Responding to these complaints the research team gave briefings to the perpetrators for :
1. Training to install online sites for marketing products such as tokopedia, bukalapak, blibli.com, instagram and creating a personal blog.
2. Trying to sell manually, or manual sales that have been done so far, are posted in the column of online sales sites in order to attract consumers' interest.
3. Training in the form of a unique brand name for the selling goods, teaches to describe the goods sold in a short, solid and clear way so as not to make consumers not confused, the researchers suggest that UMKM do not target high prices, UMKM can provide promos without having to make them lose, by increasing the price 2x but can give buy one get one free discount, and training to design the appearance of goods sold by shooting pictures of goods sold with the shooting side that different.

4. Maintain communication and loyalty to consumers.
5. Fast response in dealing with consumer complaints or Chat to consumers.
6. Having a unique product selling, so that the product becomes a product with its own characteristics, so consumers will be easily attracted to buy it.

Globalization is increasingly global, thus demanding businesses to be able to take advantage of technological developments. Retail entrepreneurs must be able to take advantage of the development of these technologies by marketing products online through the sites currently available. Selling products online can also increase sales by classifying product types and descriptions as online catalogs, we can inform our products online. Look neater and organized with a price tag that has been pinned on each product and this looks elegant and professional that can increase consumer confidence.

4. Conclusion

1. Today's internet technology is very attached to human life, with the internet can make it easier for humans to meet their needs and the internet can increase the economy.
2. The low knowledge of UMKM in the Krukut Village about how to market online and how much better it would be for them to open up insight into the benefits of online product marketing.
3. Online marketing can reduce product marketing costs.
4. The main characteristics of a product are very important, because it can increase consumer buying interest.

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The Strategy of Business Development of Terasi Puger With Value Chain Analysis

Imam Suroso[1], M. Silahul Mu'min[2], Dyah Wulandari[3], Kiky Indah Sari[4]

[1,2,3,4]Faculty of Economics and Business, University of Jember, Jember 68121, Indonesia

Email: lahul.respect@gmail.com

Abstract

Puger district is one area in Jember regency that has great potential for marine product. The great potential support the existence of small and medium scale marine products processing business, which is Terasi Puger. Based on data form the Central Bereau of Statistics (BPS) the number of terasi puger production during 2011 to 2013 are 14.5 tons to 15.75 tons. Terasi puger become one of the featured products in the marine sector and the potential for development. The purpose of this paper is to analyze how the business value chain terasi puger and formulate the form of business development strategy of terasi puger. This research is a qualitative descriptive. The data are primary and secondary data. The sample selection used purposive and snowball sampling. The analysis of research used Value Chain Analysis (VCA). The results showed there are four main parties in value chain activity that are the fisherman, owner of terasi, traders and consumers. There are eight activities in Business Value Added (BVA), three activities in Real Value Added (RVA), and one activity in Non Value Added (NVA). The development of competitive advantage is done by pressing the BVA activity cost, adding RVA activity value, and eliminating NVA activity.

Keywords : Terasi Puger; Value Chain Analysis; Competitive Advantage

1. Introduction

Jember is a regency in East Java which has the potential for marine products. This potential is supported by the geographical location of Jember district that has a marine area stretches along the south coast of Java less than 170 Km. by web page that was launched by Jember comprehensive information center wide the waters in Jember regency of approximately 34,400 Km with each approximately 100km long coastline contains the potential for sustainable produks about 40,000 tons / year. Based on data released by the Central Bureau of Statistics (BPS) the quantity of fishery production in Jember district during 2010-2016 namely.

The below table (Table 1) shows that there is a trend that is likely to increase from the capture fisheries production in Jember. Komodditas ocean caught fish include tuna, Skipjack, Cob, Layur, Tengiri, shrimp, squid, grouper, kakap, and Manyung. There are four central landing the fish in Jember district in Puger, Ambulu, Gumukmas, and Kencong.

Table 1. The Quantity of Fishery Production

Year	Total Production (tons)
2010	8718
2011	8,681
2012	9,620
2013	7566
2014	8802
2015	9232
2016	9366

Puger district become one of region has the potential for marine products. It is known that puger is one of the berthing boat or fishing boat that became a central landing of fish. The potential then allows growing businesses based seafood processing for small and medium micro scale. Terasi become one of the processing business are more involved in the community puger coastal region. Terasi the preservation of fishery products as rebon which is then processed and fermented untukk created as a food seasoning. Based on data from the Central Bureau of Statistics (BPS) terasi puger production in 2011-2013 amounting to 14.5 tons, 15.5 tons and 15.75 tons.

Micro-businesses are highly vulnerable to competition from businesses in addition era of globalization requires an effort to survive in the competition. Puger Terasi Enterprises must be able to create more value than competitors in order to enhance competitiveness. Value can be created sepanjan vertical business chain from the input to the final stage to the consumer. According to besanko et al (2013) explains that the ability of a company to create value depends on the resources that are owned and different capabilities. Value chain analysis is a strategic tool that can be used to identify the value chain in an effort to create value for both companies and consumers. Barney (2007) explained that value chain analysis can be used to analyze the activities of the business enterprise and to identify the resources and capabilities held in various business activities of the company to meproduksi goods or services, ranging from material procurement smell, production processes, sales up distribution process.

Value chain analysis a strategic analysis tool that is used to gain a better understanding of the competitive advantage (Porter, 1985). Value chain analysis see the company as one part of the product value chain. A value chain is a set of activities required to mengasilkan a product starting from the planning stage, production stage, through to delivery to the final consumer (Kaplinsky, 1999: Kaplinsky and Morris, 2001) value chain that includes activities that occur because of the relationship with the supplier or the supplier linkages and consumer or consumer circuitry relationship linkages (in wibowo Porter, 2014). The concept of value chain analysis could be a tool to understand the value chain to form a product (Shank and Govindrajan, 1992).

According Arsanti (2012) concept of value chain analysis is to coordinate all parties involved in the value chain and share information in a transparent manner in the value chain to aid in the flow of process efficiency and product fair returns for each actors. Achievement of value can be done not only to achieve production efficiency, but also to generate more profits by increasing the value added. According Arsanti et al (2017) in the Value chain analysis is necessary to an understanding of the preferences of actors, some of the resources that can be used for suppliers of raw materials, artisans or entrepreneurs, supporting industries, traders, central market, traditional markets, provision of inputs, and traders retailer.

Relative to the purpose of this study to identify the business value chain in the industry puger shrimp Terasi in District Puger. identification is made to see the actors involved in a series of value chain activities that can be specified the role of each actor. More from this study can be found clustering of each activity according to value chain value chain analysis. The results of each activity grouping value chain can be used as a basis of recommendation strategy of development terasi puger.

2. Value Chain Analysis

This research is classified as descriptive qualitative study conducted in rural areas and Puger Kulon Puger wetan the object of research is a cottage industry puger Terasi. according to Koentjaningrat (1993) descriptive qualitative research is qualitative research

which illustrate accurately the individual or specific kelompo on the circumstances and symptoms. techniques of sampling using purposive and snowball sampling. The data used primary data and secondary data. Secondary data were obtained from the Department of Industry and Trade Jember. Primary data were obtained from observations and interviews in depth at parties-related parties include fishermen, craftsmen Terasi, traders and consumers. early stages were carried out in this research is to study literature as the basic theory in conducting research and pengaplikasianya in empirical studies that have been done earlier. After a literature study followed by pengmpulan the data by first observation to field conditions to facilitate identification of primary data collection. Data collected by in-depth interviews are not structured to obtain primary data. In the interview process to use voice recorders to capture as much data or information as well as to minimize the data is not recorded when the interview data recording process. The data were obtained and analyzed in accordance with the method used to answer the research problems. method of analysis is the value chain analysis with do the stages in accordance with that proposed by Widarsono (2009), which:

1. Identifying the value chain activities
   Analysis of activity values can help management to gain a better understanding of the strategic competitive advantages held by the company and can determine more precisely the position of the company in the value chain as a whole.

2. Identify Cost Drivers in each event value
   Value chain analysis can help identify the activities where the company can add significant value to customers by analyzing cost driver for each activity value. Cost drivers are factors that alter the total amount that can be known at this stage the company's activities that have a cost advantage.

3. Develop a competitive advantage by reducing costs or add value
   Identification of the activity of the value and cost drivers can help the company's management in deciding which parts of the value chain that are not competitive and competitive for the company.

3. Findings and Argument

Actors in the business value chain terasi puger

The results of the identification of value chain activities in the Terasibusiness puger knowable each actors who have contributed to the value chain in accordance with their respective functions. On the supplier carried out by fishermen puger which contribute in supplying and providing raw materials shrimp to the needy one of which is artisan Terasi. In one sailing with a day and night costs around IDR 500,000 and when the sail is sekoncen (go to sea for 5-7 days) cost around IDR 5,000,000. the price of the catch of fishermen depend on the season. Therefore, the price of shrimp has fluctuated widely, especially when the transitional season fish. shrimp prices during the season about IDR 20,000 – 25,000 and when not in season around IDR 30,000 – IDR 60,000.

The next actor is a craftsman Terasi the main actors in the value chain puger Terasibusiness. craftsmen Terasi production process by purchasing raw materials shrimp fisherman and sometimes through pengambek. The term pengambek directed at someone who became an intermediary in the sale of annual catch and fishing. In the value chain is known that the craftsmen Terasi has a relatively low bargaining power given the price of shrimp products is determined by the market mechanism. The business relationship between craftsmen Terasibetter illustrate their complementary relationship because usually small-scale artisans Terasi will sell the stock Terasi to a large-scale artisans. Total production of shrimp Terasi is generally about 1-3 tons per month. Terasi product range marketed

by craftsmen not only in Jember region but also outside the region such as Banyuwangi, Situbondo, Bondowoso and Lumajang.

The resulting Terasi product craftsmen in addition sold to final consumers but also to traders. There are two traders identified in the value chain activities of large traders and small traders. Great traders are entities who purchased the product Terasi with a relatively large scale. Terasi products purchased will then be resold to small traders (retail) and the final consumer. Thus, wholesalers may be said to be jam acts as a pure trader but also a distributor. The next Traders are small traders who memberli Terasi product not only of craftsmen but also from wholesalers. Small traders in the area of production of shrimp Terasi puger will perform during a shrimp season. Then the next actor is the consumer as the last purchase and consume the product Terasi. Consumers can buy shrimp products from previous parties such as artisans and wholesalers.

The identification of value chain activities

1. *Inbound Logistics*
   Inbound logistics activities related to aktiviitas receive, store, manage, and process of transporting raw materials from suppliers that will be used for the production process. Craftsmen Terasi rebon buy raw materials from fishermen puger at the fish auction place (TPI), which are located relatively close to the shrimp industry. Transportation of raw materials is done by private vehicles or use the services of bentor. Raw materials are transported directly sent to the warehouse or the place that will be used for drying shrimp. The first thing to do after getting the raw material is drying in order to maintain the quality of the shrimp to be able to produce a good Terasi. Results shrimp from the fishermen depend on the season. This dependence makes easy shrimp prices fluctuate. Craftsmen perform inspections or inspections of shrimp raw materials when performing transactions directly with fishermen. When it was found that the raw material does not match the compensation made Terasi product price declines. Indispensable relationship strong partnerships to establish business cooperation between the artisan fishing shrimp with shrimp as raw material suppliers.

2. *Operations*
   Activities related to the change in operation of the raw material into a finished product Terasi. All stages of production are identified on aspects puger Terasi operations. In the manufacture of Terasi needed a tool or machine according to the preference of craftsmen. Traditional tools required in the operations aspect is the mortar of wood while the more modern process using a milling machine. Puger Terasi-making process has several stages of the first drying, pulverization first, second drying, pulverization second, printing Terasi, third and subsequent drying packaging.

   The first drying process is performed directly after the acquisition of raw materials from fishermen to dive one day duration. In this process only half the shrimp dry dried. The technique is carried out with the aim that later on when the first comminution shrimp are not easily destroyed. Furthermore, the first pulverization process done after the first drying process. In this pulverization process should be done carefully, especially for the provision of salt because salt can be a determining factor for quality Terasi puger. The second drying process carried out when the raw material has been pounded smooth half. At this stage the raw materials that have been dried and can be stored as a semi-finished product.

   The second pulverization process is performed on the raw material in the form of karak then finely ground. Craftsmen need to exercise control over the raw material in the form of karak to ascertain if the karak completely dry. The level of quality is also

determined by karak Terasi should dry. Once it is done in accordance with the size of the Terasi formation as ½ kg and 1 kg. Formation is done manually by workers. Terasi has been made and then dried again to make sure if Terasi is not mushy and crumbly.

3. Outbound Logistics

Outbound Logistics the activities associated with the collection, storage, distribution of finished products to consumers. the selection means of transport used and the distance adjusted for the purpose of distribution. Terasi products that have been packaged to be stored in a cupboard that has ronga air to avoid moisture. Storage period very depending on how long the product is sold. Raw material management system using the first-in First Out system means that artisans will sell products first entered the Terasi deposit. There is no expiration date in the Terasi so that the storage can be done up to one year.

Distribution process carried out in accordance with consumer demand, meaning that craftsmen will distribute directly when consumers make a request to be sent to the location consumer Terasi and often also customers come to artisans to make purchases directly. Distribution costs depend on the agreement between artisans and buyers. Generally craftsmen willing to distribute the product Terasi outside of the city if the purchase amount is relatively large. In the process of outbound logistics indispensable good communication to provide confidence in the buyer. That trust is important to support the buyer loyalty to craftsmen.

Buyers outside the city in general is a businessman who has eateries and retail merchants who resell the product Terasi. The communication process is more often done via a phone call to make sure of whether the product to be purchased Terasiavailable. The payment system is done in cash and credit. for repayment of the credit system depends on the agreement between artisans and buyers of goods pelunasan.pengiriman time period is usually performed using vehicle truck, tosa or private vehicle and sometimes also use the services expedition like JNE.

4. Marketing and Sales

Marketing and sales activities include activities to introduce, encourage, and help consumers to purchase products through advertising or promotion. Marketing and sales activities are also aimed at getting new pelangga and manage the relationship between employers and customers to increase product sales.

In the marketing process there is still no utilization of social media or electronic media as well by the craftsmen. The marketing strategy was limited mouth to mouth and labeling on the product packaging. The strategy is less effective, especially for introducing new products to prospective customers. Required use of the media either by the artisans so that products can be better known by the shrimp Terasi outside community. During this time the customer obtained by the craftsmen generally get a recommendation from existing customers. Therefore, do not mesikpun prmosi and advertising artisans can still get consumers continuously.

The sales process is done directly to consumers both for final consumption or resale. Penetapa sales prices depend on the market price based on the price scale shrimp. There is a relation between craftsmen in the sales process primarily for the fulfillment of such requests artisans selling A Terasi without dye to the Craftsman B notabenya not produce Terasi without dye. puger terasi marketing outreach generally, Jember, and sometimes also outside Jember. Reach out jember not only in Java but also outside the island of Java, Kalimantan

5. Service
   Service activities related to the provision of services to increase or maintain the value of a product. So that their complaints and feedback from customers in maintaining the condition and quality of product service activities. Craftsmen Terasi puger always berusahan to maintain product quality according to the standards of consumer demand. the success of the service activity can be demonstrated by the absence of complaints from consumers.

6. Procurement
   Procurement activities related to procurement activities or the purchase of raw materials and ancillary equipment as well as how pembayaranya. In general, the purchase of raw materials made in fish auction place (TPI) puger. but when there is no shrimp season sometimes there are craftsmen who buy raw materials from outside puger. however there are differences in the quality of the raw material in view of shrimp that of puger better than shrimp purchased from outside puger. when the normal kondisis shrimp per basket price ranges from IDR 15,000 - 20,000. distribution of raw materials from artisans sometimes using becak montor for the transport to the production location. The use of private vehicles is more efficient than using other transportation services.

7. Technology Development
   Activities Technology in Development is done through the provision of technology, prosedr, and the latest techniques in production stages. The craftsmen Terasi've never done Research and Development for improvement and development of production capacity. Only a handful of craftsmen applying milling machines to assist in the production and the rest using traditional tools. There is an understanding if the Terasi is milled using a machine will deteriorate because the eyes of shrimp that of the Terasi is gone. Eyes shrimp Terasi indicated by black spots on shrimp by the craftsmen and consumers become indicators of the quality of Terasi puger.

8. Human Resources Management
   Activities associated circuitry Human Resources Management recruitment, selection, promotion, placement assessment and employee development as well as maintaining relationships between employees. The process of selection and recruitment based on the known reference by craftsmen who load indicator suitability of expertise and experience in the manufacturing process terasi.para craftsmen usually seek employment in the region Lojejer and Kirkcaldy. The number of workers who used ± 3 depending on the production capacity. Wage system relies on craftsmen whether to use the system daily, collective or per activity.

9. Firm Infrastructure
   Infrastrcture Firm activity associated with the management regarding financial planning, general Risk Management, accounting, and government relations. Firm activity to Infrastrcture necessary operational activities a business can run smoothly. business management of Terasi Puger is still not well integrated. The majority of craftsmen perform simple business management evidenced by the accounting system which only includes the recording of transactions in general. the weakness of the system artisans can not identify the benefits better, and it is difficult to determine the amount of costs incurred.
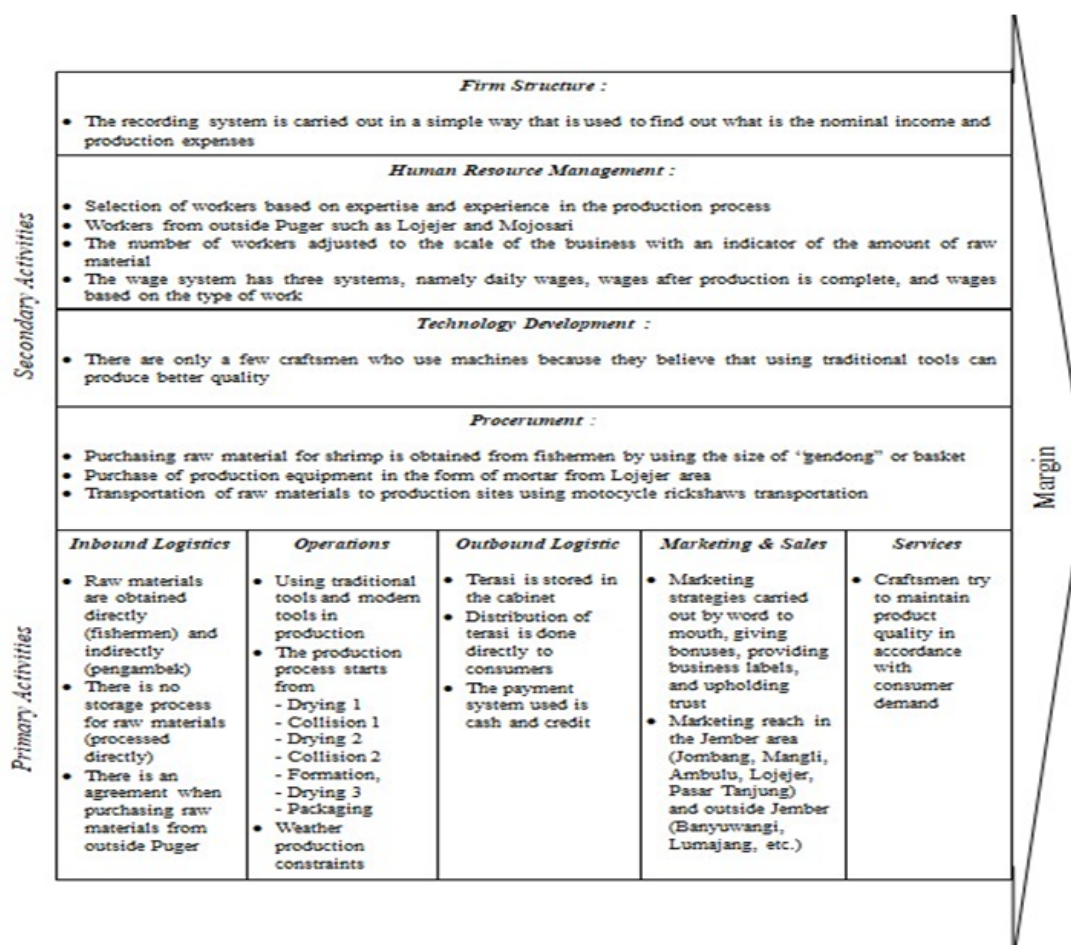
Figure 1 Identification of Value Chain Activity

Identification Cost Drivers in value chain activities

The identification cost drivers in value chain activities can be seen at table 2 below:

Table 2. Value Chain Activities

No	Activity	Cost Drivers	Type
1	Acceptance of Raw Materials	Total receipts of raw materials	BVA
2	Transportation raw materials	Total receipts of raw materials	BVA
3	Raw material storage	Total Raw Materials	NVA
4	Clothes line	The amount of raw material	BVA
5	Pulverization	The amount of raw materials, the number of means of production	BVA
6	Packaging	Total Production	BVA
7	Sale	Total Requests Items	RVA
8	Distribution of Goods	The distance, the amount of goods shipped	RVA
9	Promotion	The number of consumers	RVA
10	Use of Technology	Frequency of use of the machine	BVA
11	Human resource management	The number of workers	BVA

Source: Primary Data Processed, 2018

Business development strategy is based on the identification of cost drivers

In running a business, every company must be able to reduce costs (cost reduction) by reducing and eliminating activities, and add value for customers. The reducing activities focused by business value added, while focused on the elimination of non-value added by removing it from its activities.

Terasi business activities that need to be done to the presence puger in achieving cost reduction, among others:

1. *Activities Business Value Added*

    Activities Bussines Value Added in the shrimp industry puger consists of reception and transportation of raw materials, the production stages of drying, pulverization, and packaging, the use of technology, human resource management and business management. In achieving cost reduction for cost efficiency activities included in the Business category Value Added need to be reduced or minimized. Activities reception and transport of raw materials can be done by eliminating the efficiency of transport services for the transport. This can be done when a craftsman uses a private vehicle with the help of labor. The efficiency of the drying process is done by choosing the right time for drying by brightness indicator weather. This is to reduce the cost of storage of raw materials and minimize their loss of quality raw materials. Pulverization process and packaging is done with some alternatives that use milling machines to be effective and efficient, and packaging is done in accordance with the size of the shrimp such as the size of the oil and 1kg paper 1kg size down using plastic.

    Efficient use of technology achieved when technology is used when there is a large supply of raw materials. This is done to reduce engine maintenance costs and other costs associated with the use of the machine. The efficiency of resource management is done by the selection of a competent workforce and reduce unproductive labor. The use of machines and systems of remuneration penggilngan diijatah per day also be alternative efficiency of resource management. Efficiency management is committed to doing everything structured and complete recording every transaction that has been done. Separation of the use of the money business and personal money must be done in order to facilitate the recording of an income stream.

2. Activity Non Value Added

    Activity Non Value added in the shrimp industry puger lies in the activity of the raw material storage. This activity should be eliminated because they affect product quality shrimp Terasi and would only add to the cost. Craftsmen can avoid the storage of raw materials by conducting periodic management of raw materials means that purchases of raw materials adapted to the weather conditions as well as production capacity.

4. Conclusion

The results of the identification of value chain analysis was able to explain in detail the business activities that can provide value to the business and customers ranging activities of the supplier to the end consumer. In the business chain is the horizontal load each - each parties concerned, each of which has its own function. The determination is based on the results of the identification cost driver of value chain activities to see the cost of triggering factors in each activities. Analysis of cost drivers can help artisans Terasi in cost efficiency through business management. Strategies that can be done by craftsmen Terasi using the concept of cost reduction based on an analysis of cost drivers by performing pad activity elimination of costs that are non-value added activities and reduce costs on business value added and real value added.

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Design System Information Accounting Sales and Supplies in Roti Baba Jember

Faiq Qotur Rohman[1], Aisa Tri Agustini[2], Bunga Maharani[3]
[1,2,3]Universitas Jember, Jl Kalimantan No 37, Jember and 68121,Indonesian

Abstract

In this day and age technological developments require companies to develop and use computerized information systems to make companieseasy in providing services to consumers. The use of computerized information systems will improve accuracy, efficiency and effectiveness in the company. This problem is experienced by Roti Baba which still uses the manual system. Data collection methods consist of interviews and documentation. The data analysis method used is an interactive model of Miles and Huberman with three stages namely Data Reduction, Data Presentation, and Conclusion Withdrawal. Analysis Method The system used is the Romney and Steinbart System Analysis Method divided into five stages. The five stages consist of initial investigation, system survey, feasibility study, information needs and system prerequisites and system analysis reports. The results of this study indicate that: Sales and inventory accounting information systems in Roti Baba still use manual systems and a new system that can facilitate managers to monitor the company easily is needed. Based on the feasibility study, accounting and inventory accounting information systems are feasible to be applied to companies.

Keywords: Design, Information System, Sales, Inventory

1. Introduction

Rapid technological development influences every aspect of human activities. The rapid flow of technology makes companies use computerized information systems for giving services to customers and decision making. The use of computerized information systems can provide benefits including providing convenience for business actors in processing data and providing information quickly, precisely and relevant compared to manual systems.

A system used by the company can be said to be good if the system is in accordance with the needs and business activities within the company itself. A system that is good and in accordance with the company will reduce errors that arise, both because of operating inefficiencies and errors that arise due to human error and negligence can be minimized. a good system will help the company in making decisions that must be done to support operations and develop the company.

Roti Baba is a business that still uses manual recording, it has an impact on the company's operations. Impacts caused include inefficient time in operating activities, for example in recording sales are still done manually and in view of available supplies, employees must contact the kitchen. It has an impact on customer service which is left unchecked will result in the survival of this business itself.

Looking at the needs of sales and inventory information that is fast and precise on Roti Baba, an accounting information system is needed that helps companies to provide fast, precise and accurate information. Sales and inventory accounting information systems needed are web-based sales and inventory accounting information systems.

This is consistent with the desire of the Roti Baba management to create a web-based accounting and inventory accounting information system because it is more practical. Making web-based sales and inventory accounting information systems also makes it easy

for management to monitor the company's operational activities when management is not in the office.

This system is created using the PHP programming language (hypertext preprocessor) because of its dynamic nature. According to Prasetio (2012: 125) PHP programming language is open source which means it can be used free of charge and does not depend on certain operating systems such as windows. The use of a web-based system is needed in the long term to improve the quality of information generated by the system related to speed, accuracy and timeliness.

This study aims to design and design the accounting information system of sales and inventory in Roti Baba.

2. Methods

Research design

This study uses a qualitative method . Qualitative method is a research method used to examine the condition of natural objects, where researchers are a key instrument, data collection techniques are carried out in triangulation (combined), data analysis is inductive, and the results of qualitative research emphasize the meaning rather than generalization.

Place and Object of Research

The research site is Roti Baba which is located in Jember Regency, with the address Jl. Kertanegara No.28 Jember.

Types and Data Sources

According to Sugiyono (2017: 137), Primary Data is a data source directly provide data to data collectors. Whereas Secondary Data is a source that does not directly provide data to data collectors.

Method of collecting data

Data Collection Methods used by researchers are interviews and documentation. Interview is the collection of data by asking direct questions between researchers and respondents (Bambang Juanda 2007:91). The interviews were conducted with the owners and employees of the baba bakery sales and pastry department, using a structured type of interview. Documentation Method is a type of research data which includes sales data, inventory data and customer data. In retrieving data through documentation methods, the researchers took data directly from the Baba Bakery.

Data analysis method

Data Analysis used in the study uses an interactive model of Miles and Huberman to analyze research data. The steps of analysis by Miles and Huberman are three stages, namely:

1. Data Reduction
   Data obtained from the results of interviews and documentation are reduced by summarizing, selecting and focusing data on matters that are in line with the research objectives.

2. Presentation of Data (Data Display)
   The presentation of data is done after it is reduced or summarized. Data obtained from the results of interviews and documentation are then analyzed in narrative text to explain the results of the data that require more detailed explanation, as well as the presentation of relational tables to explain the use of database management systems.

3. Withdrawal of Conclusions / Verifications (Consulin Drawing / Verification)
` The final step in qualitative data analysis is drawing conclusions from verification. Based on data that has been reduced and presented, the researchers draw conclusions that are supported by strong evidence at the data collection stage.

System Analysis Method
System analysis is the most important step in creating a new system. In this case the system analysis is required to obtain actual information. System Analysis according to Marshal B. Romney and Paul John Steinbart (2014: 733) is divided into 5 stages:

1. First Investigation
   Fisrt investigations were conducted to filter requests for system development. when the initial investigation is carried out, the researcher must determine whether the proposed system is needed and feasible

2. System Survey
   System Survey is an extensive study of the Accounting Information System.

3. Feasibility Study
   Develop a more comprehensive feasibility analysis, especially related to costs and economics. The method used for feasibility analysis is the Payback Period Method, the Net Present Value Method, the Internal rate of Return.

4. Information Needs and System Prerequisites
   Identify the information needs of users of the accounting information system by documenting system requirements.

5. System Analysis Report
   The system analysis report is a report that contains summaries and documentation of activities when conducting an analysis.

3. Findings and Argument

A general description of the company

1. *Company profile*
   Roti Baba was founded by Mrs. Berlianti Ningrum since 2017. Roti Baba is located at Jl. kertanegara No. 28 Jember. Currently Roti Baba 8 employees. The slogan that is owned by Roti Baba is the "*Asli Sepenuh Hati*".

2. *Company History and Development*
   Roti Baba is a business that is engaged in the culinary field which is devoted to selling Mexican bun bread. Roti Baba was established and began to be marketed to the general public on November 1, 2017, with a central location on Jl. Kertanegara No. 28 Kaliwates, Jember. Centra is open Monday to Saturday 08.00 to 17.00. The marketing concept carried out at Roti Baba is online and offline marketing.

3. *Organizational structure of the company*
   The organizational structure owned by Roti Baba is as follows:
   • Founder is the founder of a company that has the task of being a long-term decision maker.
   • The CEO (Chief Executive Officer) has the task of making decisions relating to daily operations carried out or short-term decisions.
   • The Head Office has the duty to monitor employees in the office, make good relationships with subordinates, and conduct performance evaluation meetings at the office. Three members of the head office are admin, marketing and sales.
   • Head Pastry has the task of guiding and monitoring bakers in carrying out the bread

production process. A head pastry is also required to check the quality of products produced before being marketed (Quality Control). Head Pastry is assisted by two members, Baker and CS Baker.
• Delivery is responsible for sending products that have been ordered to consumers and communicating before the product is sent.
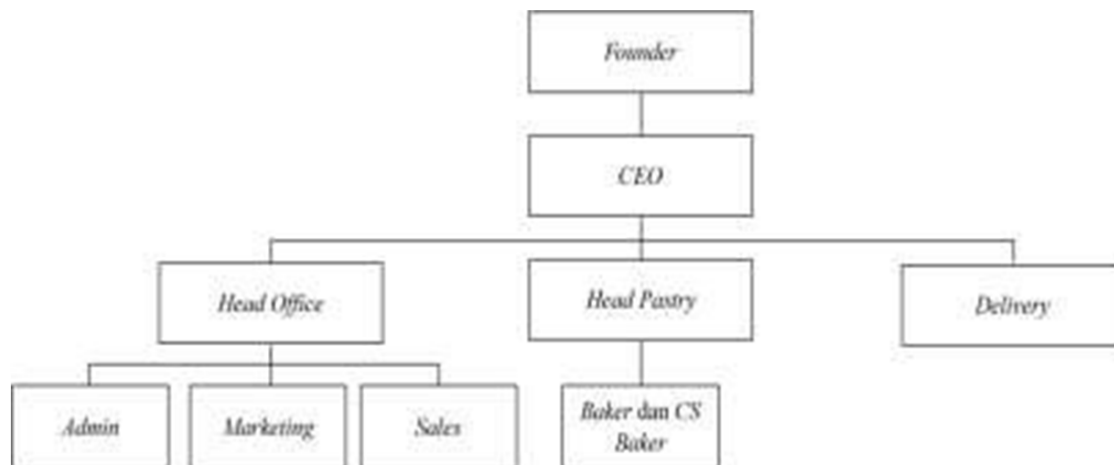

Figure 1. Structure of the Roti Baba Organization

Sales Accounting Information Systems and Roti Baba Supplies

1. *Accounting Information System Sales of Roti Baba*
   Sales accounting information system on roti baba explains all functions, documents, and procedures related to sales transactions. The sales transaction made at Roti Baba is a cash sale transaction. Roti Baba has several functions related to the sales accounting information system. These functions are as follows:
   • Baker and Cs Baker function here to make and prepare bread that will be sold.
   • Marketing function is to communicate with customers, serve customers, and prepare orders.
   • The Accounting function is carried out by the Admin. This function records manually sales transactions in Microsoft Excel for sales reports.

   The document used in the sales accounting information system is an order note made by the head office at the request of the marketing department. The sales procedure in the detailed accounting information system for Roti Baba sales is as follows:
   • The sales procedure on roti baba starts when you are Customers come to buy or order online through social media, roti baba. For customers who directly come to the outlet, marketing preparing bread is ordered and confirmation to the admin to make a note to be submitted to the customer. Customers who order online will be confirmed again by marketing. Once confirmed by the marketing customer, they will prepare the order and confirm to the admin to make a note.
   • The note that has been made by the admin will be submitted to the customer who ordered by submitting the order. Then the customer makes a payment. Whereas for notes intended for customers who order online will be given to delivery along with the order to be sent to the address of the intended customer.
   • The delivery section accepts orders and notes to be delivered to customers. After the order reaches the customer, the customer will pay the order to the delivery according to the note that is followed by giving an order note.

- The delivery section will provide a copy of the note and payment that will be submitted to the admin.
- Admin then records based on the note given delivery.

2. *Accounting Information System for Roti Baba*
   The functions associated with the inventory accounting information system at Roti Baba are as follows:
   - The Warehouse function has the responsibility to manage the inventory of products in the process and the finished product.
   - The accounting function in this roti baba is that the CEO is recording sales and making adjustments to inventory.

   The document used in the inventory accounting information system in Roti baba is a purchase note. Purchase notes are used as proof of purchase transactions. While the notes used in the inventory accounting information system on roti baba are stock cards. This stock card is made by CS baker that provides information on available supplies and any items that are almost depleted and must be purchased in the near future. The procedures related to the inventory accounting information system at Roti Baba are as follows:
   - Sales Procedure is in Roti Baba is cash sales. This sales procedure starts with customers who come to buy by coming directly or ordering online. Orders will be prepared and made by the admin. Orders that are ready will be given to customers and customers will pay. While for customers who buy online will be given to delivery to be delivered to consumers. Customers will pay for delivery and delivery to provide a copy of the note along with the payment to the admin.
   - The purchase procedure on roti baba is carried out when the raw material supply is almost gone. which is done in accordance with the CS baker request to the admin.

3. *Sales Accounting System Information Control Systems and Inventory in Roti Baba*
   The application of the accounting system for the sale of accounting information systems and inventory on roti baba is as follows:
   - Organizational Elements
     The organizational structure that has been created and applied in the roti baba is good, but in practice the separation of duties has not been carried out properly.
   - Authorization system and recording procedure
     The authorization system and the recording procedure carried out on the roti baba in the part of the order note given one to the customer and one given to the admin. Order notes made by the admin also do not have serial numbers so that it is easy for employees to commit fraud by eliminating notes. The recording of bread that is ready for sale is also not done properly and carefully by the pastry department, which has an impact on the difference in value reported by the office to the CEO.
   - Elements of healthy practice
     The main activity in the roti baba is that the sale is entirely carried out by employees of the marketing department. The head office only supervises without checking at all the sales process. The reporting process carried out after the operational activities of the company only receives sales reports and fees without checking the receipt. This provides an opportunity for employees to commit fraud. Whereas the sale of bread which is managed by CS baker is not reported to the CEO.

Analysis of Sales Accounting Information Systems and Inventories in Roti Baba

1. *First investigation*
   Roti Baba is a business that is engaged in the culinary field that produces mexican

bun type bread products. Based on the results of the interview there is an increase in production along with the increasing public interest in this product. The problems that often occur in Roti Baba in managing stocks are as follows:

- Recording of inventories of raw materials and in the process is not carried out properly so as to cause delays in the sales process to the partners because they must be recalculated.
- The difference in the amount of bread supply between the data sold and those provided by the pastry.
- Late report which should be carried out by CS Baker due to lack of neatness of the recording process carried out by CS Baker.
- Loss of proof of purchase receipt from the supplier that is used as proof of expenditure to the CEO.

The impact on the sales process includes:

- The occurrence of the difference between the stock of bread inventory that is ready for sale between Pastrie and Office.
- The difference between the amount of money reported and the amount of bread sold.
- Error in recording sales transactions that make errors in reporting.
- Reports often experience delays due to recording transactions that have experienced errors.

2. *Survey of System and System Information Needs*
   The information system needs needed by roti baba are as follows:
   - Providing customer data.
   - Providing data on sales transactions that occur and costs incurred.
   - Providing information on the supply of products that have been used up or not yet finished.
   - Provide sales, inventory and profit and loss reports.

3. *Feasibility study*
   Feasibility studies conducted in the design of the system by comparing costs incurred with the benefits to be obtained. Feasibility study The total costs needed in several alternative system selections are as follows:
   - Manual-based Sales Accounting and Inventory Information Systems
     Based on interviews conducted, the costs incurred for operational sales accounting information systems and manual-based inventory consists of two types of costs. These two types of costs are:

Table 1. Manual-based SIA Costs

Memorization Fee	Rp4.440.000,00
Stationery Purchase Fee	Rp792.000,00
Total Operating Cost of Sales Accounting Information Systems and Manual-Based Inventories	Rp5.232.000,00

- Manual-based Sales Accounting and Inventory Information Systems
  Costs incurred for the use of a sales and web-based accounting information system consists of system development costs, system operating costs and system maintenance costs. The details of the costs incurred for the implementation of the new system are as follows:

Table 2. Web-based SIA Cost

System Development Costs	(Rp)
Purchase 1 New PC Unit	3.285.000,00
Purchase 1 Note Printer	600.000,00
Cable Roll	25.000,00
Cable Control Pin	15.000,00
Total System Development Costs	3.925.000,00
Web-based Operating System Costs in One Year	
Purchasing NCR Memorandum Paper	324.000,00
Purchase Ribbon Catridge Ribbon	100.000,00
Total Operating Costs of Web-Based Systems in One Year	424.000,00
Web-Based System Maintenance Costs in One Year	
Electricity cost	900.000,00
Mi-Fi fee	1.800.000,00
Web Hosting Fees	144.000,00
Total Web-Based System Maintenance Costs in One Year	2.844.000,00

Comparative Analysis of Total Costs Between Accounting Information Systems Sales and Inventories Based on Manuals and the Web

Comparison of total costs between sales and inventory accounting information systems, aims to determine the cost savings that will be obtained in implementing manual and web-based sales and inventory accounting information systems.

Table 3. Web-based SIA Cost

Keterangan	SIA Berbasis Web (Rp)	SIA Berbasis Manual (Rp)	Selisih (Rp)
Biaya Operasional	424.000,00	5.232.000,00	4.808.000,00

Economic feasibility analysis of the application of sales and inventory accounting information systems is as follows:

1. *Payback Period Method*

$$Payback\ period = 0 + \frac{Unrecovered\ cost\ at\ start\ of\ the\ year}{Cash\ flow\ during\ the\ year}$$

$$= 1,99$$

2. *Net Present Value method (NPV)*
   The formula for calculating the Net Present Value with discounted interest is assumed to be 5.25% (https://www.bi.go.id/, accessed on June 29 2018) with the following formula:

$$NPV = -CFO + \frac{C_1}{1+r} + \frac{C_2}{(1+r)^2} + ... + \frac{C_r}{(1+r)^T}$$

$$= 1.399.443$$

3. *Internal Rate of Return method (IRR)*
   Internal Rate of Return can be calculated using the following formula:

$$IRR = i_1 + \frac{NPV}{NPV_1 - NPV_2} (r_2 - r_1)$$

$$= 6,88\%$$

Invetories Based

Conceptual Design

1. *The inventory procedure in Roti Baba*
   - Pastry parties input data regarding product data which includes the name of the item, cost of goods sold, selling price;
   - The pastry party is also required to input data regarding product stock, both raw and finished goods. c.Admin inputs the amount of expenditure made every day that is used for the operational purposes of the company;
   - The pastry party, specifically CS Baker, is obliged to report on supplies to the CEO every day with existing data.

2. *The procedure for sale in Roti Baba*
   - Pastry parties input data regarding product data which includes the name of the item, cost of goods sold, selling price;
   - The pastry party is also required to input data regarding product stock, both raw and finished goods. c.Admin inputs the amount of expenditure made every day that is used for the operational purposes of the company;
   - The pastry party, specifically CS Baker, is obliged to report on supplies to the CEO every day with existing data.
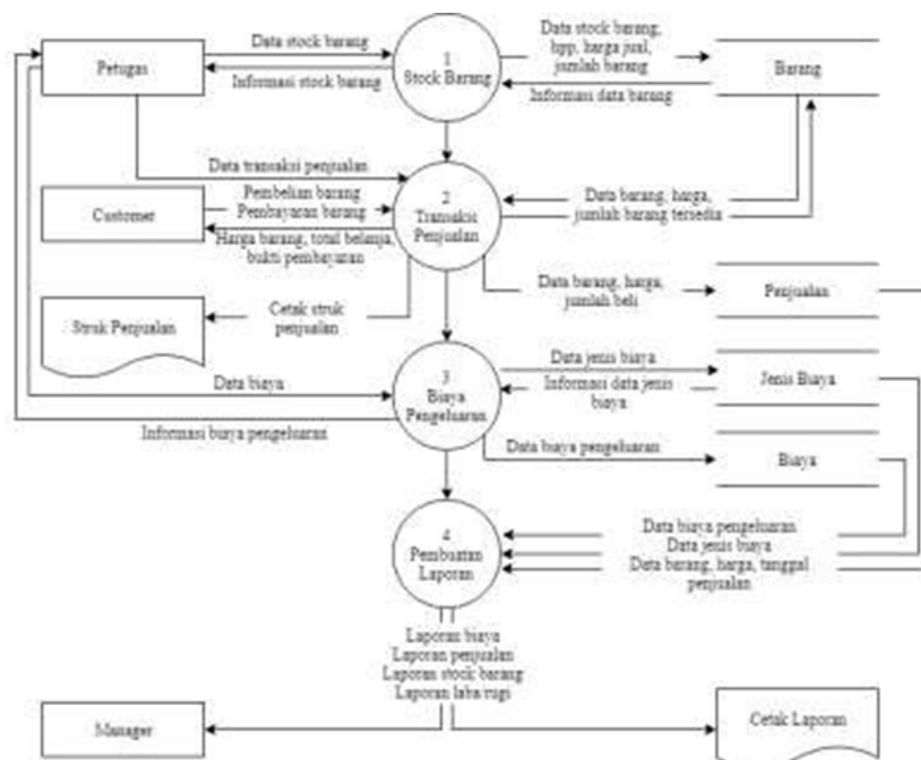
3. *Data Flow Diagram*

Figure 2. Data Flow Diagram

In the picture above the data flow diagram describes the process that occurs in the sales and inventory accounting information system. There are 4 main processes, namely:

- Item Stock Process
  The officer checks the goods against whether the goods are available or not. If it is not available, the officer will input the item data in accordance with the available information. After the data is entered it will be saved automatically in the item table.
- Sales Transaction Process
  This stage begins with the customer buying goods, the system will provide information about the data of goods, prices and quantities available. The customer will make payment according to the total purchase and the officer will provide the goods along with the sales receipt. Data regarding sales will be stored automatically in the sales table.
- Expense Fee Process
  Officers input data regarding costs incurred based on the type of costs, then the system will provide information. The system will then save the data in the cost table. The system will provide information about costs.
- Report Making Process
  This stage is the stage in making the required report. Reports made are cost reports, sales reports, goods stock reports and income statements. In the cost report, the system will retrieve data in the cost table that will be processed into a cost report. Whereas in the sales report, the system will retrieve data in the sales table that will be processed into a sales report. goods stock report will be produced by the system by processing the data in the goods table, and for the income statement generated by the system by automatically processing based on the data inputted by the officer.

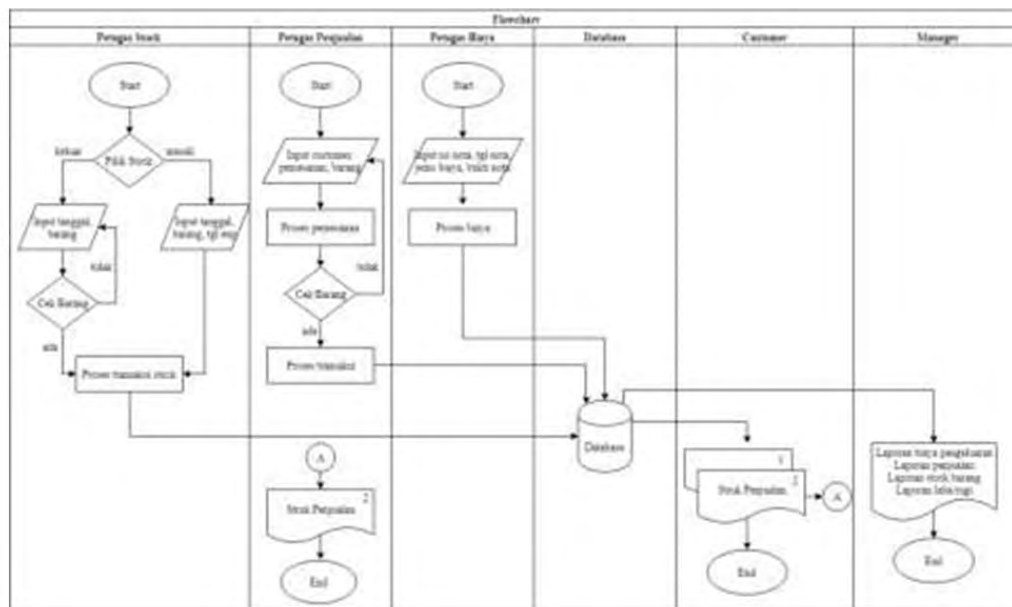4. *Flowchart*

Figure 3. Flowchart

Description:
- Stock Officer (CS Baker)
  The inventory data input process will be carried out by the stock clerk or CS Baker, starting with the presence of two main menu choices, namely stock in or out menu

- Sales Officer (Head Office)
  The sales data input process is carried out by inputting data about the customer's self data and the items ordered. the transaction will be processed, stored in a database with output in the form of duplicate sales receipts. The sales receipt will be given to the customer, while the copy will be given to the head office.
- Cost Officer
  The cost data input process is carried out by inputting data regarding the costs incurred. Then the system will do the storage process in the database.
- Manager (CEO)
  Output results regarding inventory reports. Sales reports, cost reports and income statements will be given to the Manager (CEO).

Physical Design

1. *Database Design*
   Database Design consists of various tables, including Table of Goods, Table of Types of Goods, Table of Taste, Customer Tables, Table of Customer Types, Table of Costs, Table of Types of Costs, Stock Tables, Stock Details Tables, Sales Tables, Selling Details Tables, User Tables and Position Table. Table of Goods is a table used to store information about goods data. Item Type Table is a table used to store the types of goods sold. Taste Tables are tables that are used to store the types of flavors in each item sold. Customer table is a table used to store customer data. The Customer Type table is a table used to store customer types. Cost Table is a table used to store data relating to costs incurred. Cost Type Table is a table that stores data about the type of costs. Stock table is a table that is used to store data items that are in inventory. Tables of Stock Details are tables that are used to store a list of available items. Sales Tables are tables that are used to store sales transactions that occur to customers. keep a list of sales that occur to customers. User Table is a table used to store data related to user data (employees). Position tables are tables that are used to store data relating to existing positions.

2. *Sales Accounting Information System and Supply Based on Jember Roti Baba Web*
   - Form Login
     The Login Form functions to initiate the process of accounting and inventory accounting information system applications. The application will not run if the user has entered the wrong email and password.

Figure 4. Log In Form

- Dashboard Form
  This form is the initial appearance of the sales and inventory accounting information system application. This form will provide information about the total sales obtained today, the total costs incurred, the total customers and the total users who can use.

Figure 5. Form Dashboard

• Menu Form
This form is the main menu of sales and inventory accounting information system applications. This menu display will be adjusted to the user who logged in.

Figure 6. Form Menu

• Customer Type Data Input Form
The customer type data input form is a form for inputting for the type of customer who will make the transaction.

Figure 7. Form Input Data of Customer Type

- Customer Data Input Form
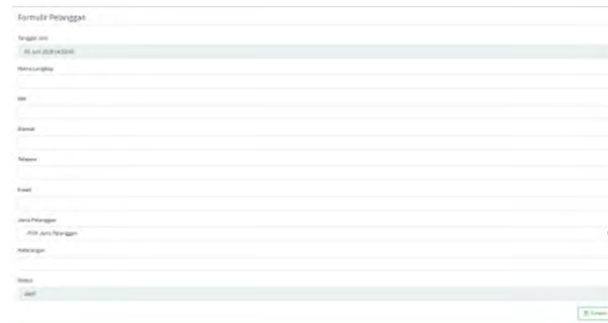 Customer data input form is a form used to enter customer data.

Figure 8. Customer Data Input Form

- Incoming Item Stock Input Form
  Incoming goods stock input form is the initial form that is used to input data regarding incoming stock.

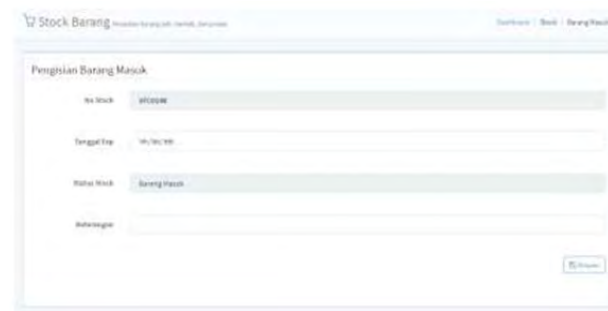**Figure 9. Input Item Input Form**

- Out of Stock Item Input Form
  The outgoing stock input form is the initial form that is used to input data regarding the stock of goods that come out.

Figure 10. Input Item Input Form

- Cost Input Form
  The officer data input form is a form that is useful for inputting data users or operators who are allowed to open this application.

Figure 11. Cost Input Form

- Sales Report Form
  Sales report form is a form used to view reports on sales transactions that have been made. how to enter start date and end date.

Figure 12. Form of Sales Report

- Cost Profit Report Form
  The cost report form is a form used to view reports on transaction costs that have been incurred.

Figure 13. Cost Report Form

- Profit and Loss Report Form
  The cost report form is a form used to view reports on transaction costs that have been incurred.

Figure 14. Form of Income Statement

Analysis of Internal Control Systems Sales and Inventory on Web-Based Roti Baba

1. *Organizational Structure*

   The organizational structure applied in the operational activities of Roti Baba is good, but in practice there are still a number of tasks performed.

2. *Authorization System*

   The authorization and recording system in the web-based sales and inventory accounting information system is as follows:

   • The recording of each sales transaction will be automatically recorded in the system to avoid manipulation or errors of officers in recording.

   • The sales note will be printed along with the name of the officer on duty and the name of the customer who ordered.

   • Making reports on sales, inventories, expenses, profit and loss will be automatically carried out by the system in accordance with what is inputted by the officer.

   • The output of the printed report will show the officer in charge and management

3. *Healthy Practices*

   The methods taken to carry out healthy practices in Roti Baba are as follows The accounts used in the system are divided into sales officers, cost officers, stock officers and management. The account of each officer will determine the menu that can be opened and the management will be able to monitor and supervise from anywhere.

4. Conclusion

The results of the system analysis can be said that the old system still has a lot of weaknesses that cause problems of effectiveness, efficiency and timeliness in presenting the information needed. This supports the design of a new system. Then based on a feasibility study which is seen from the economic aspect, this system is feasible to be developed.

The web-based sales and inventory accounting information system design in Roti Baba consists of conceptual design and physical design. Conceptual design is a general description of system use aimed at meeting the needs of the company's system. The physical design itself is in the form of database design, flowchart, input design and output design.

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Perceptions and Preferences of Traditional Merchants toward Business Financing Sources

Rizka Khoirunnisak[1], Sebastiana Viphindrartin[2], Zainuri[3]
[1]Student, Master Degree of Science in Economics, University of Jember, Jember
[2,3]Lecturer, Department of Economics and Development Studies, Faculty of Economics and Business,
University of Jember
Email: kaka.rizkakhoirnnisa@gmail.com

Abstract

Traditional mercant is categorized as small and intermediate entrepreneur due to the fact that trunover which has been gained is not really excessive. In most case, all of merchants encounter the difficulty to obtain capital in enhancing their enterprise. This Study intended to describe about perceptions and preferences of traditional merchant to business financing source in one of traditional market, Lumajang. This research conducted descriptive qualitative as research design. Well-grounded from The result of data analysis, it can be gained two conclusions of research result as follows: First, this study indicate that traditional merchants perceptions are influenced by social capital built by informal financial institutions so that mercants are more familiar with informal financial institutions than formal financial institutions. Second, most of merchants are prefer to choose informal financial institutions such as moneylenders to increase their sources of bussiness financing.

Keywords : Perception, Prefrence, Business Financing Sources

1. Introduction

Dalam kehidupan sehari-hari, pasar diartikan sebagai tempat sekaligus proses berlangsungnya jual beli barang-barang kebutuhan primer, seperti: sembako, sayur mayur, dan juga kebutuhan rumah tangga yang lain. Semakin berkembangnya zaman, saat ini pasar tersebut disebut pasar tradisional. Pasar tradisional adalah sebuah pasar dengan transaksi jual beli sangat sederhana, sehingga dapat memudahkan antara penjual dan pembelinya. Menurut Sutami (2012: 128) "Pasar tradisional merupakan pasar yang memiliki aktivitas jual beli yang sederhana, terjadi tawar menawar dengan alat pembayaran berupa uang tunai".

Pasar tradisional memiliki beberapa karakteristik yang membedakan pasar tersebut dengan pasar-pasar yang lain, diantaranya adalah sistem jual beli dan tawar menawar yang sangat mudah, pembayaran yang menggunakan uang tunai, bangunannya terdiri atas kios-kios atau gerai, barang-barang yang dijual adalah barang-barang pokok yang dibutuhkan setiap hari, misalnya: ikan, sayur mayur dan juga kebutuhan rumah tangga lainnya, dan juga interaksi sosial yang terjadi antara pedagang dan konsumennya yang tidak terjadi pada jenis-jenis pasar yang lain.

Selain karakter pasar tradisional yang berbeda dengan jenis pasar yang lain, pelaku ekonomi di dalamnya juga mempunyai karakteristik yang unik. Salah satu pelaku yang sangat identik dengan pasar tradisional adalah pedagang tradisional. Pedagang tradisional adalah orang-orang yang berjualan di dalam pasar tradisional. Pedagang-pedagang tersebut biasanya berada pada kios-kios atau gerai-gerai yang tersedia di pasar. Barang-barang yang dijual oleh pedagang tradisional adalah barang-barang primer yang biasanya dibutuhkan setiap hari oleh masyarakat. Umumnya pedagang tradisional dikategorikan sebagai pengusaha kecil dan menengah karena omset yang dihasilkan setiap tahunnya tidak begitu banyak. Menurut Undang-Undang UMKM No 20 tahun 2008, yang dimaksud

dengan usaha kecil menengah adalah usaha ekonomi produktif yang berdiri sendiri, yang dilakukan oleh perseorangan atau badan usaha yang tidak mempunyai ikatan dengan perusahaan atau anak perusahaan manapun dan juga memenuhi kriteria sebagai usaha kecil dan menengah. (www.depkop.go.id, 31 Agustus 2015).

Dalam meningkatkan usaha umumnya pedagang banyak mengalami kesulitan untuk mendapatkan permodalan. Modal yang dimiliki para pedagang tidak cukup untuk digunakan sebagai biaya operasional dalam mengembangkan usahanya. Akibatnya para pedagang tidak dapat mengembangkan usahanya dengan maksimal. Jika hal tersebut tidak di tanggulangi maka para pedagang tradisional akan tergerus dengan perkembangan zaman.

Untuk mengurangi permasalahan tersebut pemerintah sebagai lembaga yang membuat kebijakan telah meningkatkan kinerja-kinerja lembaga keuangan baik lembaga keuangan bank maupun lembaga keuangan bukan bank. Menurut Mukhlis (2015: 84) bank merupakan suatu lembaga keuangan yang berperan penting dalam penyediaan likuiditas keuangan dalam perekonomian. Bank dengan segenap kelembagaan yang melekat memiliki peranan penting dalam menopang kegiatan ekonomi masyarakat. Meningkatnya kinerja lembaga keuangan dapat dilihat dari meningkatnya akses lembaga perbankan di daerah pedesaan. Selain lembaga kuangan bank, lembaga keuangan bukan bank juga turut andil dalam mengurangi permasalahan permodalan khususnya bagi pengusaha-pengusaha kecil. Menurut data Otoritas Jasa Keuangan hingga akhir tahun 2012 terdapat 608 perusahaan industri keuangan nonbank yang terdiri atas 200 perusahaan pembiayaan, 100 perusahaan asuransi dan reasuransi, dan 308 dana pensiun. (Febrianto Eko Wicaksono, www.liputan6.com, 28 Agustus 2015). Akan tetapi, sejalan dengan meningkatnya lembaga keuangan baik perbankan maupun bukan bank, masih belum dapat menyelesaikan permasalahan yang terjadi di kalangan pengusaha kecil dan menengah. Beberapa permasalahan yang menjadi hambatan pengusaha kecil untuk mengakses lembaga keuangan diantaranya, persyaratan yang rumit, biaya administrasi yang tinggi, dan juga lamanya pemrosesan dana.

Para pengusaha, khususnya pengusaha kecil dan menengah merasa jaminan yang diajukan oleh lembaga keuangan baik bank maupun bukan bank tidak sesuai dengan jumlah pinjaman, hal ini karena mereka memerlukan dana atau pinjaman yang tidak banyak, sedangkan jaminannya tidak sesuai dengan jumlah pinjaman yang diinginkan. Hal tersebut membuat para pengusaha kecil dan menengah enggan untuk meminjam uang kepada lembaga keuangan bank maupun bukan bank. Selain itu, pengetahuan akan lembaga keuangan bank dan bukan bank juga sangat minim.

Permasalan-permasalahan tersebut seringkali dijadikan kesempatan oleh lembaga keuangan informal seperti rentenir dan bank keliling untuk meminjamkan dana kepada para pengusaha kecil dan menengah. Dengan keadaan yang mendesak para pengusaha memilih untuk meminjam modal dari lembaga informal seperti rentenir dan bank keliling. Padahal lembaga-lembaga tersebut seringkali memberikan bunga yang lebih besar dibandingkan dengan bunga yang ditawarkan lembaga keuangan formal. Akan tetapi, hal tersebut tidak membuat peminjam jera karena mereka mendapatkan akses kredit dengan mudah tanpa persyaratan yang berbelit-belit.

Pada kenyataannya peneyediaan dana pinjamam yang diberikan oleh lembaga keuangan informal, seperti rentenir dan bank keliling hanya menjadi solusi untuk sementara waktu karena setelah meminjam dana dari lembaga tersebut pengusaha akan mendapatkan masalah baru yaitu pengembalian dana dengan bunga yang sangat tinggi. Selain itu konsekuensi yang diberikan rentenir sangat berat jika tidak dapat membayar pinjaman. Kedua masalah tersebut membuat para pengusaha sulit mengembangkan usahanya dan juga sulit untuk mengembalikan hutang kepada lembaga tersebut.

Modal yang dipinjam dari lembaga keuangan nonformal, seperti rentenir dan bank

keliling memberikan dampak negatif bagi para peminjamnya. Hal tersebut karena bunga yang diberikan terlalu tinggi. Tujuan awal untuk mengembangkan usaha dengan meminjam modal tidak dapat tercapai karena adanya pengeluaran lain yang harus dibayarkan yaitu pinjaman dan bunga sehingga pada akhirnya akan meningkatkan biaya produksi. Hal tersebut memaksa para pengusaha untuk menjual produknya dengan harga yang lebih mahal sehingga dapat meningkatkan harga barang yang dijual. Jika hal tersebut diteruskan maka akan mengundang inflasi, akibatnya akan melemahkan daya beli konsumen.

Fenomena lembaga keuangan informal seperti rentenir dan bank keliling juga ditemukan pada aktivitas pasar tradisional. Dalam pasar tradisional lembaga keuangan informal mempunyai nasabah yang terdiri dari pedagang kecil yang usahanya merupakan usaha kecil mikro. Umumya usaha tersebut dikelolah oleh kalangan menengah ke bawah.

Hal tersebut juga terjadi di Pasar Tradisional Sukodono Lumajang. Pasar Tradisional Sukodono Lumajang dikelilingi oleh beberapa lembaga keuangan seperti teras BRI dan juga koperasi. Selain itu pasar tradisional Sukodono Lumajang dapat dikatakan sebagai salah satu tempat sumber mata pencaharian masyarakat sekitar karena sebagian besar pedagang di pasar tradisional Sukodonono adalah penduduk sekitar pasar. Selain sebagai sumber mata pencaharian penduduk, lokasi pasar Sukodono juga sangat strategis. Pasar yang berada di persimpangan jalan ini dapat dilalui oleh empat arah sekaligus hal tersebut dapat memudahkan masyarakat yang akan berbelanja disana. Lokasi yang strategis membuat pasar ini banyak di datangi oleh konsumen dari berbagai arah.

Namun dari beberapa keuinkan yang terdapat di pasar tradisional Sukodono Lumajang, belum dapat mensejahterakan pedagang-pedagang yang terdapat di dalam pasar, masih banyak pedagang- pedagang yang mengalami kekurangan modal usaha. Munculnya lembaga-lembaga keuangan di pasar Tradisional Sukodono Lumajang juga belum dapat memaksimalkan sumber permodalan bagi pedagang di pasar tersebut. Lembaga tersebut terdiri dari lembaga keuangan formal dan lembaga keuangan non formal seperti bank keliling atau rentenir banyak mewarnai aktifitas para pedagang di Pasar Tradisional Sukodono Lumajang.

Hadirnya dua bentuk lembaga keuangan yaitu formal dan informal yang sama-sama beroprasi di pasar Tradisional Sukodono Lumajang, seharusnya dapat meningkatkan permodalan bagi para pedagang. Pada penelitian ini peneliti ingin mengetahui persepsi dan prefrensi pedagang dalam mengambil keputusan untuk memlilih sumber pembiayaan usahanya.

Dari latar belakang tersebut terdapat beberapa literatur yang menjadi acuan dalam penelitian ini.diantaranya adalah (1) persepsi konsumen (2) preferensi konsumen, (3) pendekatan kurva indiferen, (4) faktor-faktor yang mempengaruhi prilaku konsumen, (5) sumber pembiayaan

Persepsi Konsumen

Persepsi adalah proses yang digunakan oleh individu untuk memilih, mengkoordinasi dan menginterpretasi masukan informasi guna menciptakan gambaran dunia yang memiliki arti Kotler Philip & Kevinlane Keller 2007 dalam Kamaruddin (2012: 29). Persepsi dapat digunakan para konsumen dalam menilai suatu kualitas layanan. Menurut Fitzsimmons dan Fitzsimmons 1994 terdapat lima elemen kualitas layanan, diantaranya adalah: Realibility (keandalan), assurance (jaminan/kepastian), emphaty, tangible dan responsiveness.

Preferensi Konsumen

Preferensi atau kecendrungan merupakan suatu hal yang harus didahulukan dan diutamakan daripada yang lain. Preferensi konsumen merupakan suatu tindakan konsumen

dalam memilih suatu barang dan jasa sesuai dengan tingkat kebutuhannya.

Pindyck & Rubinfeld (2009:74) menyebutkan bahwa terdapat beberapa asumsi tentang preferensi. Asumsi-asumsi tersebut berlaku untuk setiap orang dalam berbagai kondisi. Asumsi-asumsi tersebut adalah: kelengkapan, transitivitas, dan lebih baik berlebih daripada kurang.

1. Kelengkapan memberikan asumsi bahwa preferensi adalah lengkap. Dengan kata lain konsumen dapat membandingkan dan menilai semua produk dan jasa. Sebagai contoh: di dalam sebuah pasar terdapat dua keranjang yaitu keranjang A dan B. Konsumen dapat memilih atau lebih menyukai keranjang A daripada keranjang B atau sebaliknya atau tidak peduli dengan kedua-duanya. Yang dimaksud dengan tidak peduli adalah bahwa seseorang akan sama puasanya dengan pilihan keranjang manapun. Hal tersebut dikarenakan prefrensi mengabaikan harga

2. Transitivitas mengartikan bahwa preferensi atau kecendrungan adalah transitif. Memberikan asumsi bahwa seseorang yang membandingkan beberapa kondisi yang saling berhubungan akan menunjukkan sikap yang konsisten. Sebagai contoh, jika seseorang mengatakan bahwa ia lebih menyukai A daripada B dan lebih menyukai B daripada C, maka ia harus lebih menyukai A daripada C.

3. Lebih baik berlebih daripada kurang, semua barang yang baik adalah barang yang diinginkan. Sehingga konsumen selalu menginginkan lebih banyak barang daripada kurang.

Setiap konsumen memiliki perefrensi atau kecendrungan dalam menentukan berbagai pilihan untuk memenuhi kebutuhannya. Dalam memenuhi kebutuhan, setiap konsumen pasti memiliki kendala-kendala yang dihadapi seperti pendapatan yang terbatas, waktu, selera, dan kendala-kendala ekstern lainnya. Dalam ilmu ekonomi terdapat beberapa pendekatan untuk memahami kendala kendala tersebut yaitu kurva indiferen.

Kurva Indiferen

Kurva indiferen adalah kurva yang menggambarkan kombinasi beberapa barang yang sama-sama disukai oleh konsumen, yaitu tidak ada pilihan untuk satu kombinasi dengan barang lain kerena semuanya memiliki tingkat utilitas yang sama (atau utilitas yang sama) untuk konsumen. Menurut Hubbard & O'Brien, (2007: 230), "*An indifference curve shows combinations of consumption bundles that give the consumer the same utility*".

Kurva indiferen menunjukkan tingkat kepuasan dari semua kombinasi dua barang yang sama-sama dikonsumsi oleh individu. Tingkat kepuasan konsumen akan berbeda bila mengkombinasikan dua barang yang berbeda. Berikut adalah gambar kurva indiferen:
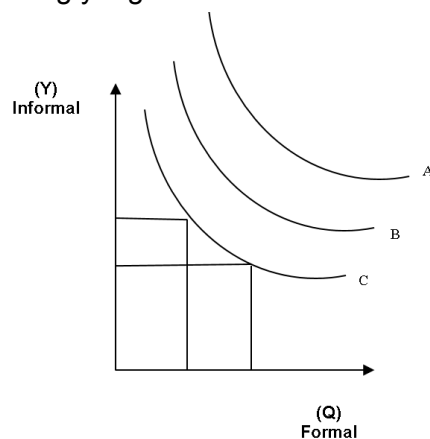
Gambar 1. Kurva Indiferen

Gambar tersebut menjelaskan bahwa di dalam kurva indiferen konsumen dapat memperoleh kepuasan yang sama sepanjang kurva. Perpaduan antara keinginan dan kemampuan pada dasarnya karena adanya tingkat kepuasan konsumen yang berbeda. Artinya dengan dana yang lebih besar (untuk dibelanjakan pada dua barang atau lebih, maka konsumen akan memperoleh tingkat kepuasan yang lebih besar. Begitu pula sebaliknya, jika dana yang dipunyai terbatas, maka terbatas pula keinginan untuk membeli suatu barang. (Kharina, 2015: 5).

Faktor-faktor yang Memengaruhi Perilaku Konsumen

Prilaku konsumen tidak hanya dipengaruhi oleh motif ekonomi semata melainkan juga sangat dipengarui oleh keadaan dan situasi lapisan masyarakat dimana ia dilahirkan dan berkembang. Dalam hal ini berarti konsumen berasal dari lapisan masyarakat atau lingkungan yang berbeda akan mempunyai kebutuhan, pendapat, sikap dan selera yang berbeda-beda, sehingga pengambilan keputusan dalam tahap pembelian atau mengkonsumsi barang dan jasa akan dipengaruhi oleh faktor-faktor yang berbeda pula. Menurut Kotler & Amstrong (1980: 119), "Consumer purchases are strongly influenced by cultural, social, personal, and psychological characteristics". Dari definisi tersebut dapat disimpulkan bahwasannya terdapat beberapa faktor yang mempengaruhi prilaku konsumen diantaranya adalah, faktor kebudayaan, sosial, kepribadian dan juga psikologi. Faktor-faktor tersebut akan dijelaskan sebagai berikut:

1. Faktor kebudayaan: Faktor kebudayaan berpengaruh luas dan mendalam terhadap prilaku konsumen. Faktor kebudayaan terdiri dari budaya, sub budaya, dan kelas sosial
2. Faktor sosial: selain faktor budaya, prilaku seorang konsumen dipengaruhi oleh faktor-faktor sosial seperti kelompok acuan dan keluarga.
3. Faktor pribadi: faktor pribadi yang memberikan kontribusi terhadap prilaku konsumen terdiri dari usia, tahap siklus hidup, pekerjaan, lingkungan ekonomi, gaya hidup, kepribadian dan konsep diri.
4. Faktor psikologis: selain faktor kepribadian, factor psikolgis juga berpengaruh terhadap prilaku konsumen. Beberapa faktor psikologis yang berpegaruh adalah: motivasi presepsi, pembelajaran, serta keyakinan pendirian.

Ada banyak faktor yang mempengaruhi diantaranya faktor ekonomi dan non ekonomi. Dalam faktor ekonomi hal tersebut dijelaskan oleh kurva indiferen dan garis anggaran. Sedangkan di luar ekonomi ada beberapa faktor yang sangat mempengaruhi persepsi dan preferensi pedagang dalam memilih sumber pembiayaan, diantaranya adalah: faktor kebudayaan, kepribadian, psikologis, lingkungan dan juga strategi marketing yang diberikan lembaga-lembaga keuangan tersebut. Dari beberapa faktor tersebut maka nantinya para pedagang tradisional akan menentukan mana yang menjadi pilihan untuk memenuhi kebutuhannya.

Faktor-faktor yang Memengaruhi Perilaku Konsumen

Sumber pembiayaaan adalah sumber dana yang didapat oleh seseorang atau lembaga untuk digunakan sebagai biaya operasional dalam mengembangkan usaha . Sumber pembiayaan tersebut dibagi menjadi dua bagian yaitu dari dalam maupun dari luar. Pembiayaan yang bersumber dari dalam berasal dari pengusaha atau lembaga tersebut. Sementara itu, sumber pembiayaan dari luar dapat diakses melalui pinjaman dari lembaga keuangan baik bank maupun non bank. Berikut adalah beberapa lembaga yang menjadi salah satu sumber dalam pembiayaan usaha.

Lembaga Keuangan

Lembaga keuangan adalah suatu badan yang bergerak di bidang keuangan dan

berfungsi menyediakan jasa bagi nasabahnya baik berupa pinjaman, menghimpun dana atau jasa-jasa yang lain.

Lembaga-lembaga keuangan berfungsi sebagai lembaga yang mempercepat penyaluran dana-dana dari Surplus Spending Unit (SSU) ke Deficit Spending Unit (DSU). Fungsi ini dikenal sebagai fungsi perantara financial (financial Intermediation). Selain fungsi tersebut, terdapat beberapa fungsi atau peran lain yang hampir sama, yaitu sebagai agent of Development. Dengan fungsi tersebut lembaga keuangan dapat mendorong pengembangan dan pembangunan ekonomi suatu daerah atau Negara. (Pandia, 2005:1).

Lembaga Keuangan Bank

Lembaga keuangan bank adalah suatu lembaga yang menghimpun dana dari masyarakat secara langsung dan menyalurkan kembali kepada masyarakat melalu pinjaman. Menurut Undang-Undang Pokok Perbankan Nomor 10 Tahun 1998 tanggal 10 November 1998, bank adalah badan usaha yang menghimpun dana dari masyarakat dalam bentuk simpanan dan menyalurkannya kepada masyarakat dalam bentuk kredit atau bentuk lainnya dalam rangka meningkatkan taraf hidup rakyat banyak. Dana atau uang yang dihimpun dalam bentuk simpanan di salurkan dalam bentuk kredit dan dalam usahanya bank juga memberikan usaha lainnya. (Pandia, 2005: 10)

Menurut Mukhlis, (2015: 84) Bank merupakan salah satu lembaga keuangan yang berperan penting dalam penyediaan likuiditas keuangan dalam perekonomian. Bank dengan segenap kelembagaan yang melekat memiliki peranan penting dalam menopang kegiatan ekonomi masyarakat. Selain itu bank juga dapat berperan menjembatani (intermediary function) antara pihak yang kelebihan dana dan kekurangan dana. Lembaga keuangan bank dapat mendorong masyarakat untuk meningkatkan kegiatan di sektor keuangan melalui penyimpanan maupun dalam meminjam dana. Berikut adalah gambaran secara grafis dari fungsi intermediasi keuangan.

Gambar 2. Fungsi Intermediasi

Dalam perekonomian terdapat beberapa kondisi dimana pelaku ekonomi dapat mengalami kekurangan dana (deficit unit) dan mengalami kelebihan dana (surplus unit). Kondisi kekurangan dan kelebihan dana yang dialami oleh pelaku ekonomi ini merupakan cerminan dari kegiatan ekonomi yang berkembang. Semakin banyak pihak yang memiliki kelebihan dana dapat mencerminkan berkembangnya kegiatan ekonomi. Namun banyaknya pihak yang memerlukan dana untuk meningkatkan usaha juga dapat diartikan sebagai berkembangnya unit usaha yang membutuhkan dana untuk keperluan perluasan investasinya (Mukhlis, 2015: 85)

Berdasarkan fungsinya, bank terdiri atas bank sentral, bank umum, bank tabungan, bank pembangunan, serta bank desa. Berdasarkan kepemilikannya, terdiri atas bank pemerintah, bank swasta nasional, bank swasta asing, bank campuran dan bank koperasi. Berdasarkan Undang-Undang Pokok Perbankan No. 23 tahun 1998 jenis bank di Indonesia adalah Bank Umum dan Bank Perkreditan Rakyat. (Pandia, 2005: 6)

Bank umum adalah bank yang dapat memberikan jasa dalam lalulintas pembayaran, sedangkan bank perkreditan rakyat adalah bank yang menerima simpanan hanya dalam

bentuk deposito berjangka dan/ atau bentuk lainnya yang dipersamakan dengan itu. Menurut Pandia (2005: 6) Fungsi bank perkreditan rakyat selain yang di atas adalah sebagai berikut:

1. Memberikan kredit.
2. Menyediakan pembiayaan bagi nasabah berdasarkan prinsip bagi hasil sesuai dengan ketentuan yang ditetapkan dalam peraturan pemerintah.
3. Menempatkan dananya dalam bentuk sertifikat bank Indonesia, deposito berjangka, sertifikat deposito, dan/atau tabungan pada bank lain.

Bank perkreditan rakyat dilarang melakukan usaha berikut:

1. Menerima simpanan berupa giro dan ikut serta dalam lalulintas pembayaran.
2. Melakukan kegiatan usaha dalam valuta asing.
3. Melakukan penyertaan modal
4. Melakukan uasaha perasuransian
5. Melakukan uasaha lain diluar kegiatan uasaha yang diperoleh.

Lembaga Keuangan Bukan Bank Formal dan Informal

Semakin berkembangnya lembaga keuangan di Indonesia maka muncul lembaga-lembaga keuangan bukan bank baik formal maupun informal. Lembaga keuangan formal berada di dalam pengawasan pemerintah sedangkan lembaga keuangan informal statusnya masih belum jelas karena tidak berbadan hukum dan tidak dalam pengawasan pemerintah. Berikut adalah penjelasan dari lembaga keuangan formal dan informal.

1. Lembaga Keuangan Bukan Bank Formal

   Selain bank sebagai lembaga keuangan dan kredit, masih ada lembaga-lembaga lain yang berisifat besar, formal dan urban. Mereka beroprasi dalam lingkungan serta sarana yang berbeda-beda. Lembaga-lembaga tersebut adalah pegadaian, asuransi, sewa guna usaha (leasing), dan lembaga keuangan bukan bank serta pasar uang dan modal. (Wijaya & Hadiwigeno, 1991: 371)

   LKBB formal adalah lembaga keuangan yang berbadan hukum dan telah terdaftar pada notaris, namun lembaga ini tidak di atur secara langsung oleh pemerintah atau undang-undang tentang perbankan (Imelia, 1998:47). Fungsi LKBB formal yaitu melayani kebutuhan ekonomi masyarakat khususnya masyarakat menengah ke bawah yang tidak dapat dijangkau oleh lembaga perbankan, maka pemerintah berupaya untuk melakukan peningkatan ekonomi masyarakat dengan stimulus investasi dari masyarakat serta membantu mereka dalam mendapatkan kredit bunga ringan sesuai dengan kebutuhan mereka melalui LKBB tersebut Arthesa, 2006 dalam Saputra (2012:5).

   Akan tetapi, beberapa manfaat LKBB formal belum berjalan dengan lancar karena beberapa masalah diantaranya LKBB formal memiliki karakteristik berupa rumitnya prosedur administrasi, meningkatnya aspek legalitas dan biaya administrasi. Hal tersebut dilakukan untuk meminimalisir kredit macet yang terjadi. Masalah-masalah tersebut membuat kinerja LKBB formal masih kurang efektif dan efisien.

2. Lembaga Keuangan Informal

   Lembaga keuangan informal adalah suatu lembaga keuangan yang tidak mempunyai badan hukum dan tidak juga dicatatkan pada notaris sehingga dapat bergerak bebas tanpa terikat dengan peraturan apapun. Lembaga-lembaga tersebut dijuluki sebagai rentenir, bank plecit atau bank keliling. Lembaga-lembaga tersebut menggunakan admnistrasi yang sederhana sehingga membuat lembaga ini lebih di gemari oleh masyarakat (Saputra, 2012:7). Akan tetapi, biaya administrasi yang rendah tidak diselaraskan dengan bunga yang ditawarkan, karena bunga yang ditawarkan lembaga-lembaga tersebut cukup tinggi sehingga dapat menyusahkan konsumen yang menjadi

nasabahnya. Menurut Kamus Besar Bahasa Indonesia bank plecit atau bank keliling diartikan sebagai suatu lembaga bukan bank atau perseorangan yang meminjamkan uang, biasanya dengan bunga yang tinggi dan penagihannya dilakukan setiap hari.

Hingga saat ini LKBB informal masih tersebar luas, khususnya di Pulau Jawa. Masyarakat Jawa biasa menyebut lembaga tersebut sebagai rentenir, bank thitil, pengijon dan juga bank keliling. Nasabahnya juga terdiri dari berbagai kalangan. Nasabah LKBB informal biasanya meminjam dana tersebut untuk kebutuhan sehari hari atau untuk modal usaha kecil (Saputra, 2012: 8).

2. Methods

Penelitian ini menggunakan pendekatan deskriptif kualitatif dengan model studi kasus. Pendekatan kualitatif digunakan untuk memahami fenomena yang dialami oleh para pedagang tradisional sebagai subyek penelitian yang dapat dilihat dari persepsi, motivasi, dan tindakan secara holistik dan nantinya akan dideskripsikan dalam bentuk kata-kata. Sedangkan Kehadiran peneliti di lapangan dibutuhkan selama proses penelitian, mulai dari perencanaan, pengambilan data, hingga pelaporan. Dalam penelitian ini, peneliti bertindak sebagai instrument utama sehingga peneliti harus berhubungan langsung dengan informan. Informan yaitu orang yang dimanfaatkan untuk memberi informasi tentang situasi dan kondisi penelitian.

Data dalam penelitian ini berupa data primer, yaitu data yang diperoleh langsung dari narasumbernya, bukan dari dokumen maupun orang lain. Dalam penelitian ini data primer diperoleh setelah peneliti melakukan observasi dan wawancara mendalam terhadap pihak-pihak yang terkait dengan penelitian. Pihak-pihak tersebut diantaranya ketua paguyuban pedagang, lembaga keuangan formal dan informal yang berada di Pasar Tradisional Sukodono Lumajang, pedagang yang menjadi konsumen lembaga keuangan formal dan informal. Pihak-pihak yang terkait dengan penelitian ini disebut dengan informan.

Informan dalam penelitian ini dipilih menggunakan teknik purposive sampling, yaitu teknik pengambilan sampel dengan menggunakan kriteria tertentu. Kriteria-kriteria dalam penelitian ini diantaranya : pedagang yang menetap lebih dari lima tahun, dan pedagang yang menjadi konsumen lembaga keuangan formal dan informal. Dengan menggunakan purposive sampling diharapkan kriteria sampel yang diperoleh sesuai dengan penelitian yang dilakukan dan mampu menjelaskan keadaan yang sebenarnya.

Analisis data dalam penelitian ini dilakukan dengan cara reduksi data, penyejain data dan pengambilan kesimuplan dalam penelitian kualitatif.

3. Findings and Argument
Bentuk Praktik Lembaga Keuangan Formal & Informal

Pada pasar tradisional Sukodono Lumajang Terdapat dua bentuk lembaga keuangan yaitu : lembaga keuangan formal dan informal. Lembaga keuangan formal adalah lembaga-lembaga yang mempunyai badan hukum dan lembaga yang disahkan oleh pemerintah. Lembaga keuangan formal yang terdapat di pasar tradisional Sukdono Lumajang adalah Teras BRI yang sengaja di disain untuk masyarakat menengah ke bawah. Teras BRI di pasar Tradisional Sukodono Lumajang berdiri sejak tahun 2013. Dalam praktiknya pangsa pasar yang di tuju oleh Teras BRI adalah pedagang tradisional dan pegawai yang mempunyai penghasilan tetap.

Terdapat berbagai macaam produk yang ditawarkan oleh Bank BRI, Bunga yang ditawarkan oleh teras BRI terbilang sangat ringan jika dibandingkan dengan lembaga-lembaga yang lain. Sebagai contoh: jika konsumen meminjam uang sebesar 1 juta rupiah maka angsuran yang harus dibayarkan adalah Rp. 88.833,- per bulan selama satu tahun.

Jika di jumlahkan maka pinjaman pokok dan bunga sebesar Rp. 1.065.996,-. Dari ilustrasi tersebut dapat dilihat bahwa bunga yang ditawarkan BRI sangat rendah dibandingkan dengan lembaga-lembaga yang lain.

Selain hasil observasi dan wawancara terhadap lembaga keuangan formal peneliti juga melakukan observasi dan wawancara terhadap lembaga keuangan informal. Dari hasil observasi dan wawancara peneliti terdapat beberapa model bentuk praktik lembaga keuangan informal seperti, rentenir dan bank keliling yang terdapat di pasar tradisional Sukodono Lumajang. Model tersebut dapat dibagi menjadi dua bagian di antaranya, bank keliling yang berasal dari dalam pasar dan luar pasar.

Bank keliling yang berasal dari dalam pasar adalah bank keliling yang dikelolah oleh sesama pedagang. Pedagang tersebut meminjamkan uang kepada rekan-rekannya dengan bunga yang cukup besar. Cara kerja bank keliling yang berada di dalam pasar hampir sama dengan model bank keliling yang berasal dari luar pasar. Hanya saja bank keliling yang berada di dalam pasar lebih fleksibel dibandingkan bank keliling yang berada di luar pasar.

 Selain dari sisi penarikan angsuran terdapat keunikan lain pada bank keliling baik yang berada didalam maupun diluar pasar. Bank-bank tersebut tidak meminta jaminan kepada konsumen. Sehingga konsumen lebih tertarik. Proses pinjam meminjam dilakukan dengan rasa saling percaya antara peminjam dan lembaga yang memberikan pinjaman.

Dari hasil wawancara yang dilakukan terhadap 8 informan, terdapat beberapa persepsi yang dipaparkan informan tentang lembaga keuangan formal. Menurut beberapa informan melakukan pinjaman pada lembaga keuangan formal banyak mengalami kesulitan di antaranya jaminan, lamanya survey, tidak boleh meminjam di tempat lain dan lamanya cicilan yang diberikan.

Sehinggah para informan lebih menyukai meminjam kepada bank thitil tatau bank keliling daripada lembaga keunagan formal yang ada di sekitar pasar. Selain keunikan yang dipunyai lembaga keungan informal, modal sosial juga berpengaruh terhadap pengambilan keputusan bagi para pedagang ini. Karena dalam pasar ini seseorang akan cenderung mngikuti prilaku temannya untuk mengambil sebuah keputusan sehingga jika sebagian memilih bak thitil maka pedagang yang lain juga akan mengikuti.

4. Conclusion

Terdapat dua bentuk lembaga keuangan di dalam pasar tradisional Sukodono Lumajang, yaitu lembaga keuangan formal dan lembaga keuangan informal. Lembaga keuangan formal yaitu teras BRI merupakan cabang dari bank BRI yang dikhususkan untuk membantu para pedagang dalam permodalan. Sedangkan lembaga keuangan informal yang terdapat di pasar tradisional yaitu bank thitil atau bank keliling. Lembaga ini tidak memiliki badan hukum sehingga dapat dengan mudah untuk memasuki pasar. Bank thitil di pasar tradisional Sukodono Lumajang mempunyai berbagai model di antaranya bank thitil harian dan bank thitil mingguan.

Persepsi pedagang tradisional terhadap sumber pembiayaan usaha dibagi menjadi dua baigian yaitu persepsi terhadap lembaga keuangan formal dan persepsi terhadap lembaga keuangan informal. Persepsi terhadap lembaga keuangan formal kurang baik. Hal ini menunjukkan bahwa pedagang kurang familiar terhadap lembaga keuangan formal. Sementara itu, persepsi pedagang terhadap lembaga keuangan informal cukup baik, hal ini mengidentifikasi pedagang lebih familiar dengan lembaga keuangan informal. Hal tersebut dilatarbelakangi dari berbagai faktor diantaranya faktor kebudayaan, psikologis, kepribadian dan juga sosial.

Preferensi pedagang tradisional terhadap sumber pembiayaan usaha jatuh pada lembaga keuangan informal. Dari persepsi yang dipaparkan oleh informan-informan

maka dapat dilihat bahwa sebagian besar pedagang lebih memilih mengakses sumber pembiayaan usaha kepada bank keliling karena kemudahan-kemudahan yang diberikan. Namun terdapat beberapa orang yang memilih lembaga keuangan formal sebagai sumber pembiayaan usaha karena mereka tidak ingin menaggung resiko dan juga bunga yang lebih rendah. Selain itu faktor-faktor lain juga mempengaruhi prefrensi pedagang tradisional terhadap sumber pembiayaan usaha.

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Empirical Studies The Sustainability of The Subsector Fisheries on The Coastal Of Regency Banyuwangi (Perspective of Sustainable Development)

Herman Cahyo Diartho[1] dan Darwin Eka Indriyana[2]
[1,2]*Department of Economics Science-Faculty of Economics and Bussines University of Jember*

Abstract

Fishery resources in the coastal areas of Banyuwangi has enormous potential in supporting the life of fishermen. However, the current actual condition, the volume of fishery production in the coastal areas of Banyuwangi has decreased. Sustainable development in the fishery subsector is directed to improve the welfare of fishermen, optimizing the utilization of fishery resources without neglecting the economic, ecological (environmental) and social aspects.

The results showed that the development of fishery resources in the coastal areas of Banyuwangi has not reached the sustainable stage. The results of the measurement of the sustainability of fishery resources showed low average value. From each dimension (economic, social and environmental) there are several criterias that have medium (**M**) and high (**H**) value. This means that in each dimension requires an alternative recommendation to support the sustainable development of capture fisheries. Economic dimension, the decline of catching quantity is a priority to formulate recommendations. The beneficiaries of fishery resources should provide a compensation for conservation measures to maintain the capture fisheries ecosystem. In addition, the role of the government is also needed as a party that has an important role related to fishery resource policy.

The environmental dimension has only one priority of recommendation developments, that is making WWTP (wastewater treatment plant) and its use according to standard. Better waste management can minimize pollution so it will not affect the balance of the ecosystem of fishery resources. Social dimension, institutional system improvement is a recommendation option that can improve the fishery resource management system in coastal areas of Banyuwangi to improve the prosperity of fishermen. Finally, improvements in every aspect of supporting sustainable fisheries development can maintain the sustainability of fishery resources so that the utilization of capture fisheries resources can be done optimally without putting aside the economic, environmental and social sustainability.

Keywords: Capture Fishing Subsector and Sustainable Development

1. Introduction

Resources in the fisheries sector is one of the most important resources for the livelihood of the people and has a potency to be a prime mover of the national economy (Mariani, 2014). This is reflected in the contribution of the fishery sector to the national economy. Based on data from the Ministry of Marine Affairs and Fisheries, in 2016 the potential of capture fisheries in Indonesia reached 9.9 million tons where this number will continue to increase in the next year as the reduction of foreign fishing boats around Indonesia's sea. This condition occurs because the marine resources that become the source of livelihood of the fisherman is openly accessed. The further impact of open access resources is the first to cause fishermen whose livelihood resources depend primarily on marine and fishery resources often have to move around to obtain maximum catch. Second, the openly accessed livelihood patterns and activities affect the culture, institutions and

local wisdom of the fishermen and coastal communities of Indonesia. Along the coast of the Indonesian archipelago, there are a number of different traditions, institutions and local wisdom (Hidayat, 2013). The nature of open access ocean resources often leads to the use of irresponsible or neglect of sustainability preservation because the community assumes that they are free to take the existing resources with no control (Nurhayati, 2013).

In fisheries development, the challenge to sustain resources is a complex issue. Fishery resources are categorized as recoverable resources, but the most frequent question is how large the fish can be harvested without having a negative impact for the future. Continuity is a key word in fisheries development that is expected to improve the condition of the fishery community's resources and welfare (Fauzi and Anna, 2002). Fisheries resources are natural assets that are extracted to provide the greatest benefit to human beings. However, this aspect of benefits has various dimensions, both economic, ecological and social dimensions. The complexity of these fish resources leads to the increasingly complex fisheries development objectives (Mariani et al. 2014).

The catch of the fish in the coastal areas of Banyuwangi is directly proportional to the number of fishermen. Based on data from Central Bureau of Statistics of Banyuwangi in 2016, the number of working laborers in the fisheries subsector reached 45.77% of total workforce in the agricultural sector. The profession becomes fishermen in the coastal district of Banyuwangi become one of the main choice because it is considered that this profession is a way of life inherited from generation to generation. Being a fisherman is the main income source for most of the coastal population of Banyuwangi from the sea.

The phenomenon that occurs the overfishing of fish resources around Bali Strait, where the impact is the reduction of fish catching, causing scarcity of some species of fish. One type of fish that can not be found is lemuru (sardines), which used to be the leading commodity of fishermen in the coastal district of Banyuwangi. The weak institutional capacity of supervisors and the lack of optimal control of fishery resource utilization is one of the causes of the increasing scarcity of fish around Bali Strait so that the production of capture fisheries decreases every year and results in the declining economic welfare of fishermen and coastal communities who depend on their livelihoods.

The concept of sustainable development is directed to manage the fishery resources to achieve the welfare of the community, especially the fishermen who rely on marine resources to meet their living needs, while maintaining the sustainability of the sea given that the potential of marine resources is very large and can be used as the hope of future development. Sustainability is not only economic, but also social, especially environmental (ecological). Efforts to utilize fish resources optimally and sustainably become a very urgent demand for the community's welfare, especially fishermen who support their lives from the sea. Sustainable development is ultimately not only economically, but also ecologically and socially.

In this research, analyzing strategy of sustainable development of fishery resources that exist in coastal areas of Banyuwangi which become one direction of development goals in Indonesia at this time.

2. Research Method

In the study of using PSS analysis tool or **Product Service System**, the methodology can be explained as follows:

Activities in each stage of PSS are described in general as in Figure 1. The method of sustainability assessment and formulation of recommendations using the PSS method is carried out by a series of steps developed by UNEP and DELFT University of Technology consisting of 4 stages: (1) identifying sustainability dimensions system, (2) formulate and

choose alternative recommendations, (3) conduct an assessment of the details of recommendations, (4) evaluate recommendations for choosing the best.

In the first stage PSS is to identify the dimensions of system sustainability. At this stage an introduction to capture fisheries system is learned by taking attention into internal and external aspects by creating a system map, making a SWOT diagram of sustainability (identification of strengths and weaknesses for current conditions and identification of opportunities and threats for the future), and sustainability assessment using PSS worksheets. So, this first stage consists of the following three activities:

1. Drawing a system map is to identify the involved parties in the industry, as well as to identify the flow of material and information within it,

2. Creating a sustainability SWOT is to identify strengths, weaknesses, opportunities and threats. The SWOT analysis itself covers five aspects, such as environmental, socio-cultural, economic, technological and regulatory,

3. Assess the industry with checklist to analyze criteria in a system that have not fulfilled aspects of sustainability with 3 dimensions and each dimension consist of 6 criterias.

The second phase in the PSS chooses recommendations made with a help from PSS worksheet and portfolio diagrams for the feasibility assessment of recommendations. The PSS workbook contains options for directing recommendations. The next is to make a Feasibility Recommendation Diagram to see whether the offered recommendations are feasible and contain sustainability aspects for the system or not. Factors to consider include the possibility of making changes on the usage of fishing tools, reduction of resource usage, and waste management.
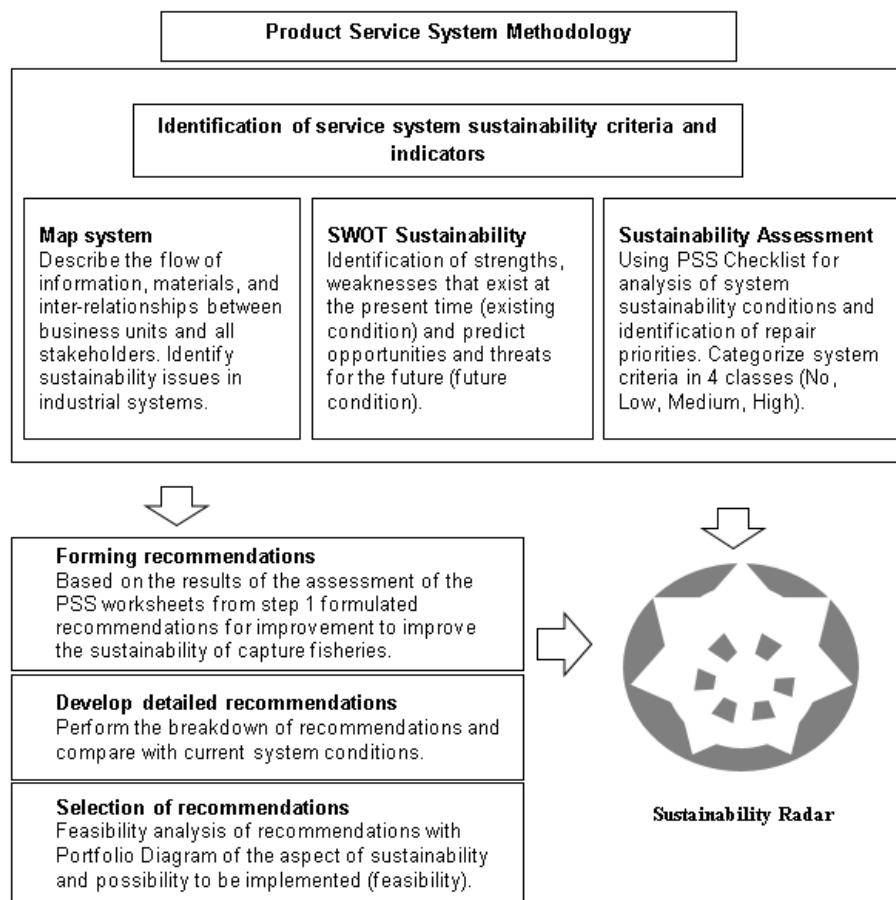

Figure 1: Stages in PSS (UNEP and DELFT University of Technology)

The third stage is to develop the detail of the chosen recommendations by identifying the priority of recommendation criterias with the value of **H** = High, **M** = Medium, **L** = Low and **N** = None. The identification is done with the help from PSS worksheet in which the respondents fill out the "Yes" and "No" answers, the answer "Yes" valued as 1 and the answer "No" valued as 0. The fourth stage is to evaluate and choose the chosen recommendations. This stage is done by creating portfolio diagrams and PSS radar to compare the conditions if the recommendations are applied to the current system. The results of this recommendation evaluation are mapped in a sustainability radar for each dimension.

3. Results and Discussion
Sustainability Dimensions System

The question points for the continuous SWOT refer to 6 criterias from 3 dimensions of PSS (economic, environmental and socio-cultural), as well as other important notes. SWOT is the result of interviews with chosen respondents who are understand the condition of fisheries in the coastal areas of Banyuwangi with open questions. (Purwaningsih, et.al. 2016).

SWOT analysis looks at the strengths and opportunities that exist in the capture fishery around Bali Strait. In addition, also to see the weaknesses and threats in the future related to capture fisheries in order to minimize long-term risks of conservation of fisheries resources catch. The development of fishery resources is not only based on the sustainability of the economic dimension, but also focused on environmental and social dimensions.

Table 1. SWOT of Capture Fisheries Sustainability in Coastal areas of Banyuwangi

Criteria	Current Fishing Conditions		Predicted Future Condition	
	Strength	Weakness	Opportunity	Threats
Economic Dimension • Revenue • Catching Quantity • Capital Origin • Catching Distribution • Grant from Goverment • Fish price	Potential fishery resources around Bali Strait are abundant if it is used properly	The fishermen have low skills in other fields The number of fish catches keeps declining	Government support in the form of more environmentally friendly fishing tools Enchancement number of the captures	The quantity of fish catches continues to decline, fishermen do not earn income
Enviromental Dimensions • Enviromental Sustainability • Fishing Tools • Fish Waste • Fishing Radius • Coservation • Biodiversity	Fishermen use fishing tools that is environmentally friendly Fishermen do not catch fish in conservation areas	Waste fish dumped around Muncar sea Limitness of using the fishing tools	Maintaining environmental sustainability will increase the potential of capture fisheries	Waste will pollute the environment and sea
Social and Cultural Dimensions • Partnership Relations • Conflicts • Educations • Institutions • Safety • Rules/Norms	A good understanding of coastal management by some people The lack of conflict	Fishermen's safety is threatened because they do not use safety equipments that does not meet the standards	With good education, fishermen will be able to understand sustainable management of marine resources	Exploitation of marine resources

The economic dimension, the potential of fishery resources in the Bali Strait becomes the strength for fishermen if the existing resources can be utilized optimally. Yet another problem arises that the number of fish catches continues to decline every year. Scarcity of fishery resources occurs due to various factors, both factors are caused by nature and human error. If the catch of the fish continues to decline, then the welfare of fishermen is also lower, because they rely their lives to the sea while most of the fishermen have no skills other than to go to sea, so there is no other source of incomes other than looking for fish in the sea.

The environment dimension, the fishermen participate in preserving the coastal environment. People began to realize that the occurrence of fish scarcity around Bali Strait is one of them due to their activities are not environmentally friendly. The social dimension shows that the partnership between the fishermen and the skippers is very good, there is never any conflict between both of them. Although many new fishermen are existing in the coastal areas of Banyuwangi, but the native fishermen never mind their presence as long as it does not disturb or damage the coastal ecosystem. Fishermen also begin to understand the importance of sustainable fisheries resource management in order to maintain the capture fishery ecosystem. But on the other hand, the fishing community has a weakness in terms of OSH (occupational health and safety), they never use or provide safety equipment for fishing. In addition, fishermen also have no health insurance because of various reasons.

Sustainability Assessment

The final step in the first step before proceeding to recommendation formulation stage is to categorize sustainability criteria in the "No" (N), "Low" (L), "Medium" (M) or "High" (H) categories to find out alternative criterias for recommendations that have to be developed. Assessment is done by giving questionnaires to the respondents, ie the fishermen in the coastal areas of Banyuwangi. Then process the data of each respondent with a scoring system. The answer "Yes" is scored 1 and the answer "No" is scored 0. For the counting system, the value is 1 for each total value of each criteria. For example, in one criteria there are 4 questions with 2 "Yes" answers, then the value is 2/4 or 0,5.

Table 2. Results of Sustainability Assessment in Coastal areass of Banyuwangi

No.	Criterias	Total Value	Average	
1	Economical Dimensions			
	• Revenue	36,25	0,37	M
	• Catching Quantity	76,5	0,78	H
	• Capital Origin	56,5	0,58	M
	• Catching Distribution	6,25	0,06	L
	• Grant from Goverment	65,5	0,66	M
	• Fish price	26,75	0,27	L
Average		44,62	0,45	L
2	Enviromental Dimensions			
	• Enviromental Sustainability	16,5	0,17	
	• Fishing Tools	45,75	0,47	
	• Fish Waste	68	0,69	
	• Fishing Radius	37,25	0,38	
	• Coservation	45,25	0,46	
	• Biodiversity	60,5	0,62	
Average		45,54	0,46	L

No.	Criterias	Total Value	Average	
1	Social and Cultural Dimensions			
	• Partnership Relations	24	0,23	N
	• Conflicts	37,5	0,38	L
	• Educations	63,25	0,64	M
	• Institutions	61,75	0,63	M
	• Safety	61	0,62	M
	• Rules/Norms	41,5	0,42	L
Average		48,16	0,42	L
Average value		46,10	0,44	L

Source: Primary data is processed

The table above shows that the value of sustainability of capture fisheries in the coastal areas of Banyuwangi is still low. The average sustainability value of each dimension is above 0.44. The economic dimension has one criteria that has a mean value of High (H) that is the catching quantity. Based on the results of field research and supporting data from the Department of Marine and Fisheries of Banyuwangi shows that the catch of the fish around Bali Strait continues to decline every year. The decrease of capture fishery production in the coastal areas of Banyuwangi can be seen in the table below:

Table 3. Banyuwangi Capture Fish Production Data

Years	Production Volume (kg)
2009	48.305.369
2010	27.746.419
2011	38.328.993
2012	28.313.788
2013	21.466.872
2014	21.141.772
2015	31.265.500
2016	15.772.440

Source: DKP (Dinas Kebersihan dan Pertamanan) of Banyuwangi, 2017

The table above shows the decrease of fish catches since the last 10 years, the number of fish successfully landed until 2016 had decreased only to 15,000 tons, whereas the number of fish catches around Bali Strait had reached 50,000 tons per year. This is much different from the current condition, it is almost a year of fishermen in the coastal areas of Banyuwangi never gained anything. The production volume is declining and no income is earned because becoming a fisherman is the main job. There is no support from the government that all this time has overcome the scarcity of fish in the coastal areas of Banyuwangi, the provided support by the government is only training about knowledge of preserving the marine environment.

In environmental dimension, environmental sustainability has low average value or Low (L), it indicates that fishermen in coastal areas of Banyuwangi realize the importance of maintaining coastal environment sanitation so as not to be polluted and disturb the balance of coastal ecosystem. In contrast to the conditions of the past few years in which people are reluctant to participate in maintaining coastal environment sanitation because their activities only exploit fishery resources. Fishermen in the coastal areas of Banyuwangi also began

to conserve in the territorial of Aking Wood sea which is now a protected in accordance to Regional Regulation of Banyuwangi No.35 of 2003 on Stipulation and Management of Protected Marine Aking Wood in Muncar, Banyuwangi.

Another criteria on the environmental dimension has a Medium (M) value of fish waste and biodiversity. The condition of environmental sustainability in the sea around coastal areas of Banyuwangi is quite apprehensive, the fish species are decreasing and the catch also continues to decline every year especially in the last year. One type of fish that can not be found around Bali Strait is lemuru fish or commonly called sardines. This condition is very worrying considering lemuru fish is a type of fish that became a commodity for the catch of the fishermen in the coastal areas of Banyuwangi.

Social dimension indicates that the potential conflict of fishermen in coastal areas of Banyuwangi is Low (L), it shows that there is no conflict either by fellow fishermen or between fishermen and skippers. Fishermen have a good partnership relationship with skippers as the lender of capital. Without the intervention of skipper, fishermen especially the labors can not catch fish in the sea because of limited capital.

1.   Formulation of Recommendations Alternative

Formulation of recommendations based on the results of the sustainability assessment, where only those with the dominant Medium (M) and High (H) values will be given the recommendation options. The formulation of recommendations between each dimension are interrelated, in essence to achieve sustainable management of capture fisheries resources based on sustainability aspect.

Economic dimension, chosen alternative recommendation option to increase the quantity of the fish because it is the most dominant attribute. The number of fish catches in the coastal areas of Banyuwangi is decreasing every year is not only caused by natural factors alone, but the human factor also contribute in it. The mismanagement of fishing resources in the past has had an impact on the current sustainability of capture fisheries resources. The catch continues to decline until the loss of species of the fish that became a pre-eminent commodity around Bali Strait. The decline of fish catch resulting lower fishermen's income. On conservation activities of marine waters become one of the ways that can be done to rehabilitate the condition of Bali Strait. Improved fishing systems as well as the usage of more environmentally friendly fishing tools are also needed to preserve the resources of capture fisheries.

The government should also take part in addressing issues related to fishery resources. Support from the government is expected by the fishermen, where fishermen in the coastal areas of Banyuwangi need the help of more environmentally friendly fishing tools.

The environmental dimension, alternative recommendation choice is directed to waste management. During this time, the sea around Bali Strait has been polluted by the waste of industrial activity and the activities of fishermen themselves. Waste from the industry is channeled to the flow of the river that leads to the sea. This waste then contaminates the quality of the sea and causing the fish and other sea organisms to not live well. Fishermen also engage in activities that generate hazardous waste on the coast. This waste is fish spray waste that has been very rotten. The fish waste is cleaned around the beach area and then sold to the flour industry. The establishment of wastewater treatment plant (WWTP) according to standard and operated properly can minimize waste pollution that occurred around Bali Strait.

Social and cultural dimension, directed to improve education level of fishermen in coastal areas of Banyuwangi. The profession of being a fisherman does become a hereditary livelihood. It is a tradition if their parents are a fisherman, then his son will also be a fisherman. But this paradigm has begun to shift little by little, the fishing community has

begun to realize the importance of education. Increasing the educational level of fishermen ultimately has implications for their knowledge of how to manage sustainable capture fisheries resources so that they can continue to be utilized until their future children. So that management is not only exploitation, but also pay attention to environmental sustainability. In the end, sustainable development of fishery resources capture directed to improve prosperity of fishermen and coastal society.

In addition, institutional improvements in the management of catches are also important to note. The existence of institutions that become a forum for fishermen is expected to help the fishermen to independence and improve welfare.

From the above explanation can be taken several main points. In the economic dimension, 2 recommendations are given, such as the conservation of the waters of the Bali Strait and the role of government to provide support in the form of fishing tools. In the environmental dimension is given an important recommendation that is making WWTP with the appropriate standard usage. In the social and cultural dimension, there are 2 recommendations, such as the improvement of the educational level of fishermen, especially for fishermen's children and institutional improvement for the fishermen.

Development of Recommendation Details

After making an alternative recommendation formulation, the next step is to compare the alternative with current condition. Whether formulated alternative recommendations can preserve the capture fisheries that exist in the coastal areass of Banyuwangi with the category can be very much better, better, good, the same or even bad from the conditions that exist today. Comparison of this recommendation is conducted by interviews with fishermen who have knowledge about the importance of sustainability in the development of capture fisheries. The results of alternative comparison recommendations can be seen in Table 4.

Table 4. The Results Oo Alternative Comparison Recommendations

Dimensions	Criterias	Value
Economy Environment Social and Culture	1. Conservation of Bali Strait 2. Goverment role 3. Making WWTP (wastewater treatment plant) 4. Education improvement 5. Institutional improvement	++ + ++ + ++

Description: "++" very much better, "+" better

In the picture below shows that the medium (M) categorized criteria is fishermen income level, support from the government, and the origin of capital. There is one criteria that has high category (H) that is catching quantity amount. This suggests that these criterias play an important role in the development of fisheries resources. This criteria also has the sharpest edge of the radar because it has "++" value which means that alternative recommendations given are much better if it is applied. For government support criteria have a "+" value which means that if the recommendation is made and applied, the existing system will be better than before.
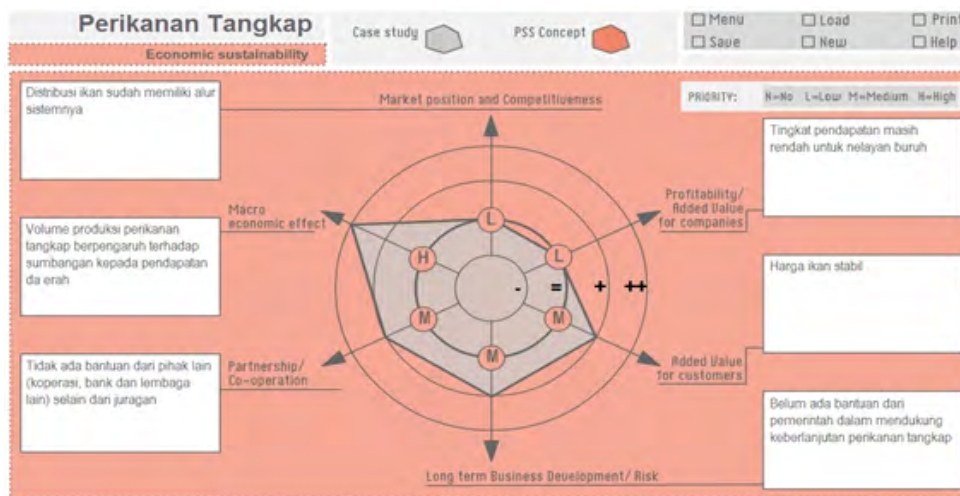
Figure 2. Sustainability Radar of Economic Dimension

In the picture below, the sustainability radar for the environmental dimension shows that the criteria of the fish waste has the sharpest radar edge shape because after being compared with the current system, the criteria has "++" value which means if the existing recommendation is applied, the existing system will be much better than before. This criteria has a medium (M) value. Other criterias that have medium (M) value are biodiversity and catching device. Biodiversity around Bali Strait experiences amazing scarcity, there are some types of fish that currently can not be found back around Bali Strait. In addition, fishing tools that are used by fishermen also requires renewal so that the sustainability of fishery resources can be maintained in relation to sustainable development.
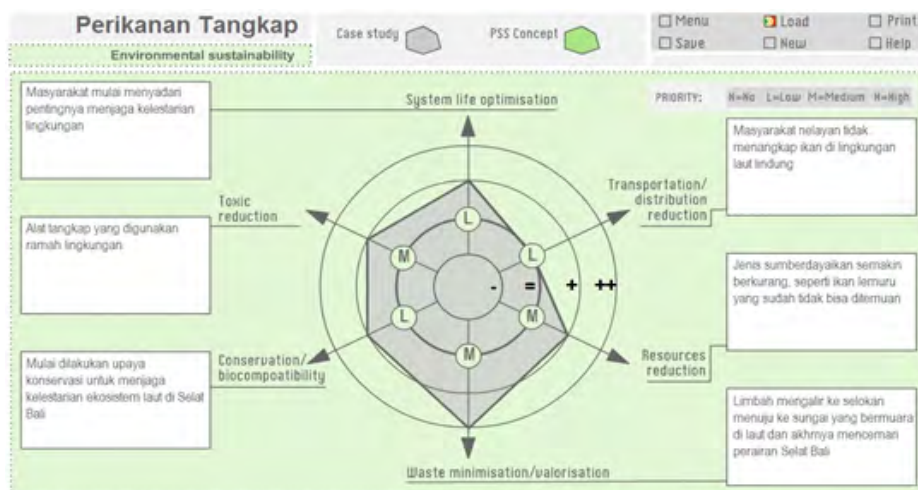
Figure 3. Sustainability Radar of Environmental Dimension

In Figure 4, a sustainability radar for social dimension, it can be seen the criteria that has the most sharp edge of the radar is the institutional. This is because compared to the current system, the implementation of institutional recommendations will make the system much better than the current one. This criteria has medium (M) value so it needs an alternative recommendation. Then another criteria that education has "+" value so that if the recommendation is applied will also make the system becomes better than before.
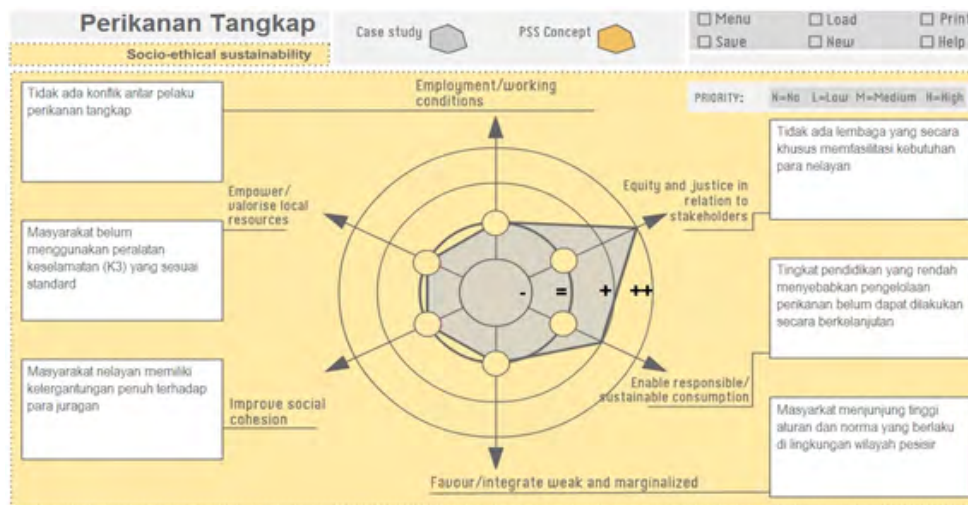
Figure 4. Sustainability Radar Social Cultural Dimension

4. Conclusion And Recommendation

The results of the research concluded that the development of fishery resources in the coastal areas of Banyuwangi has not reached the sustainable stage. This is shown from the results of the calculation of sustainability assessment using the PSS worksheet. The result of measuring the level of sustainability of capture fishery resources that exist in the coastal areas of Banyuwangi shows the average value which is still low. From each dimension (economic, social and environmental) there are several criterias that have medium (M) and high (H) value. This means that in each dimension requires an alternative recommendation to support the sustainable development of capture fisheries.

Economic dimension, decreasing catching quantity is a priority of recommendations formulation. The beneficiaries of capture fisheries resources should provide a compensation for conservation measures to maintain the ecosystem. In addition, the government is also an important party which has a role relates to fishery resource policy. The environmental dimension has only one priority of recommendation development, that is making WWTP and its usage according to standard. Better waste management can minimize pollution so will not affect the balance of the ecosystem of fishery resources. For the social dimension, the improvement of institutional system is a recommendation option that can improve the existing fishery resources management system in the coastal areas of Banyuwangi to support the improvement of the welfare of fishermen.

The results of this study provide recommendations of the importance of synergy of all levels of society in maintaining the balance of marine ecosystems in the Bali Strait. Increased awareness of coastal communities is needed to maintain the balance of the ecosystem of capture fisheries resources. In addition, improving the quality of human resources of fishermen becomes an important thing that can be done by the government to support the sustainable development of capture fishery resources. Finally, improvements in every aspect of supporting sustainable fisheries development can maintain the sustainability of fishery resources so that the utilization of capture fisheries resources can be done optimally without putting aside economic, environmental and social sustainability.

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Evaluation of Readiness of Rural Tourism: Case Study of Dangean, Gedangan Village, Cepogo Sub-District, Boyolali

Bayu Grendo Sigarete[1], Halim Ahmad[2], Ferita Nelindya Afriana[3]
[1,2]Lecture, Hospitality Program, Ambarrukmo Tourism Institute, Yogyakarta, 55198, Indonesia
[3]Graduate Student, Hospitality Program, Ambarrukmo Tourism Institute, Yogyakarta, 55198, Indonesia
Email: bayugrendo@stipram.ac.id

Abstract

Boyolali district is identical with dairy. Dangean village is located in the District of Cepogo which is a milk producing center in Boyolali. The majority of Dangean people as dairy farmers. The efforts to diversify the community business are by packing the daily activities of residents as a breeder to serve as a tourist attraction in rural tourism. This research is a descriptive qualitative research. The method that is used in this research is experiment. The sample determination is done by purposive method that is foreign student representing foreign tourists. The sample is 5 foreign students. The number of samples is determined by considering the readiness of the facilities currently available in Dangean. The results of research conducted by a team of researchers from Ambarrukmo Tourism institute (STIPRAM) Yogyakarta showed that the attractions and packaging tour packages are the factors that become the main preference tourists when traveling in Dangean. The main strengths of Dangean are the activity of attractiveness, the visual landscape of the area, and the package of tourism activities. While the weakness that is currently owned by Dangean is the low level of popularity, competitiveness, and service.

Keywords: Dangean Village, Kampung Wisata, attractions, tour packages.

1. Pendahuluan

Kabupaten Boyolali dikenal sebagai salah satu daerah penghasil susu terbesar di Indonesia. Data Badan Pusat Statistik (BPS) tahun 2013, menunjukkan bahwa Kabupaten Boyolali menjadi rumah terbesar kedua peternak sapi perah di Indonesia dibawah Kabupaten Pasuruan dengan jumlah 27.655 rumah tangga. Sentra peternakan sapi perah di Kabupaten Boyolali adalah Kecamatan Cepogo. Salah satu daerah di wilayah Kecamatan Cepogo yang yang menjadi penyumbang susu terbesar adalah Dusun Dangean.

Dangean merupakan sebuah Dusun yang secara administratif menjadi bagian dari Desa Gedangan, Kecamatan Cepogo, Kabupaten Boyolali. Boyolali dikenal sebagai sentra pengahsil susu sapi terbesar di Provinsi Jawa Tengah. Secara Geografis dusun Dangean terletak di lereng Gunung merapi dengan ketinggian kurang lebih 1.100 mpdl (meter di atas permukaan laut) sehingga memiliki suhu lingkungan yang ideal untuk produktivitas sapi perah. Dusun Dangean ditinggali oleh ±70 Kepala Keluarga dimana pekerjaan utama masyarakat Dusun Dangean adalah peternak. Mayoritas warga dangean (90%) adalah peterrnak sapi perah dengan rata-rata kepemilikan sapi berjumlah 3-5 ekor tiap Kepala Keluarga. Selain beternak, masyarakat Dusun Dangean juga berprofesi sebagai bertani kebun sebagai usaha sampingannya. Komoditas pertanian yang paling banyak masyarakat tanam adalah jenis sayur-sayuran yang hidup di dataran tinggi seperti kol (Ahmad, et al., 2017).

Model peternakan rakyat seperti yang dilakukan oleh masyarakat Dangean adalah model pengelolaan yang rentan tergerus oleh persaingan industri. Penyebab utama gagalnya usaha peternakan sapi perah rakyat di Indonesia adalah faktor dari keterbatasan sistem

pengelolaan, yaitu tehnik bertenak masyakarat yang masih tradisional dan mengunakan peralatan seadanya. Kegagalan usaha ternak sapi perah rakyat turut berkontribusi terhadap tingginya angka kemiskinan dan rendahnya tingkat pendidikan di Indonesia (Ahmad, et al., 2017). Salah satu upaya untuk meminimalisir kegagalan usaha peternakan sapi perah model peternakan rakyat adalah dengan menerapkan kosep diversifikasi ekonomi.

Diversifikasi ekonomi merupakan suatu upaya untuk meningkatkan pendapatan dari suatu usaha melalui jalur lain dengan memanfaatkan komoditas yang diusahakan tersebut. diversifikasi akan meningkatkan peluang pendapatan dari usaha peternakan rakyat melalui pintu pendapatan lain. Salah satu upaya diversifikasi yang berpotensi untuk dikembangkan adalah dengan mengemas kegiatan peternakan rakyat menjadi atraktivitas melalui konsep Desa (Kampung) Wisata. Desa wisata merupakan suatu bentuk integrasi antara atraksi, akomodasi, dan fasilitas pendukung yang disajikan dalam suatu struktur kehidupan masyarakat yang menyatu dengan tata cara dan tradisi yang berlaku (Nuryanti, 1992; Dewi dkk, 2013). Desa wisata adalah sebuah kawasan ppedesaan yang memiliki karakteristik khusus untuk menjadi daerah tujuan wisata dimana penduduknya masih memiliki tradisi dan budaya yang relatif masih asli (Zakaria dan Suprihardjo, 2014).

Keberhasilan diversifikasi usaha peternakan rakyat melalui konsep Kampung Wisata tidak serta merta dipengaruhi oleh unsur-unsur yang menjadi atraksi saja, melainkan keseluruhan faktor pendukung lain seperti budaya, lingkungan visual, serta keterampilan manajerial dari warga yang menjadi aktor utama dalam pengelolaan Kampung Wisata. Oleh karena itu diperlukan kajian yang mendalam mengenai faktor-faktor tersebut agar keberhasilan program diversifikasi ekonomi melalui konsep Kampung Wisata bisa lebih terjamin.

2. Metodologi

Penelitian ini dilaksanakan oleh tim peneliti dari Sekolah Tinggi Pariwisata Ambarrukmo (STIPRAM) Yogyakarta. Penelitian ini merupakan jenis penelitian deskriptif kualitatif, yaitu dengan menghasilkan data-data berbentuk angka untuk kemudian di deskripsikan dalam bentuk narasi. Metode dalam penelitian ini adalah eksperimen (uji coba).

1. Sumber dan jenis data
   Sumber data dalam penelitian digolongkan menjadi data primer dan sekunder. Data primer adalah informasi asli yang diperoleh dari tangan pertama sumber data utama (Wardianta, 2006). Data primer dalam penelitian ini diperoleh dari wawancara terhadap masyarakat. Sedangkan data sekunder diperoleh dari dokumen-dokumen pendukung yang relevan. Penentuan sampel dilakukan dengan metode purposive (ditentukan). Sampel yang dipilih dalam kegiatan ini adalah mahasiswa asing yang merepresentasikan wisatawan asing. Mahasiswa asing dipilih berdasarkan pertimbangan bahwa target pasar utama Kampung Wisata Susu Dangean adalah wisatawan asing. Jumlah sampel adalah 5 mahasiswa asing. Jumlah sampel ditentukan dengan pertimbangan kesiapan fasilitas yang saat ini tersedia di Kampung Wisata Susu Dangean.

2. Pengumpulan data
   Pengumpulan data primer dilakukan dengan wawancara terstruktur, yaitu wawancara dimana pewawancara menentukan sendiri masalah dan pertanyaan-pertanyaan yang akan diajukan kepada responden (Moleong, 2005).

3. Uji validitas data
   Valiasi data diuji dengan menggunakan metode triangulasi, yaitu mengumpulkan data sejenis dari sumber yang berbeda sehingga kebenaran data yang diperoleh bisa diuji antara yang satu dengan yang lainnya.

4. Analisis data

   Analisis data menggunakan teknik analisis interaktif, dengan tiga komponen utama yang meliputi reduksi data, sajian data, dan verifikasi data.

5. Penyajian data

   Data yang telah dianalisis kemudian disajikan secara deskriptif, yaitu disajikan dalam bentuk cerita yang mengalir.

3. Hasil Penelitian

Faktor-faktor Pembentuk Kampung Wisata

Tabel 1. Faktor Pembentuk Kampung Wisata

Parameter	Score					Average
	I	II	III	IV	V	
Attraction	3	3	4	4	3	3,4
Management (Tourism Package)	3	3	4	2	3	3
Society's Attitude (Hospitality)	4	4	4	4	4	4
Supporting Facilities	4	4	4	3	3	3,6
Service	3	4	4	4	4	3,8
Popularity	1	3	3	2	1	2
Homestay	4	4		3	3	3,5
Environmental	3	4	4	4	4	3,8
Landscape of Village	3	4	4	4	3	3,6
Accessibility	3	3	4	4	3	3,4
Competitiveness	2	3	3	2	2	2,4
Average						**3,3**

Hasil penelitian menunjukkan bahwa nilai rata-rata dari kesiapan Dangen untuk dikembangkan menjadi Kampung Wisata adalah 3,3 dari skala maksimal 4. Hal ini menunjukkan bahwa responden menilai Dangean sudah siap untuk dikembangkan menjadi Kampung Wisata. Konsep Kampung Wisata menawarkan keseluruhan suasana yang mencerminkan keaslian pedesaan baik dari kehidupan sosial ekonomi, sosial budaya, adat istiadat, serta keseharian dalam bentuk arsitektur bangunan dan struktur tata ruang desa yang khas atau kegiatan perekonomian yang unik dan menarik yang berpotensi untuk dikembangkan sebagai komponen kepariwisataan (Andini, 2013)

Parameter yang dinilai menjadi kekuatan utama Dangen untuk pengembangan Kampung Wisata menurut responden adalah Society's Attitude (Hospitality) dengan nilai 4. Fakta bahwa Dangean berlokasi di wilayah yang secara geografis berada di kaki gunung Merapi dan Merbabu yang jauh dari wilayah perkotaan menyebabkan karakter masyarakat Dangean adalah masyarakat yang ramah. Sumber daya manusia diakui sebagai salah satu komponen vital dalam pembangunan pariwisata, dimana keramahtamahan menjadi salah satu perwujudan sikap sadar wisata dalam prinsip Sapta Pesona (Pitana, 2009; Muhza et all, 2013). Berada di daerah pedesaan membuat sifat masyarakat Dusun Dangean menjadi sangat terbuka, baik, sopan, saling menghargai dan mudah menerima pendatang baru (Ahmad, et al., 2017).

Attraction

Atraksi merupakan objek daya tarik wisata yang memberikan kenikmatan kepada wisatawan, dimana atraksi bisa dibedakan menjadi 3 berdasarkan jenisnya, yaitu alam, budaya, dan buatan (Damanik dan Weber, 2006). Hasil penelitian menunjukkan bahwa atraksi utama yang dianggap paling menarik di Dangean adalah custom and culture. Atraksi budaya adalah atraksi yang dikembangkan dengan lebih banyak berbasis pada hasil karya dan hasil cipta manusia, baik yang berupa peninggalan peninggalan budaya (situs/heritage) maupun yang budayanya masih hidup dalam kehidupan masyarakat yang dapat berupa ritual, seni pertunjukan, karya seni, sastra, maupun seni rupa (Sunaryo, 2013). Beberapa tradisi yang masih di pertahankan keberlangsungannya di Dangean antara lain ulang tahun "memetri" desa, sedekah bumi "nyadran", dan tradisi adat pernikahan (Sigarete, et al., 2017). Pasar wisatawan budaya lebih tertarik pada suatu daerah tujuan wisata yang memiliki keterikatan yang kuat dengan adat dan budaya asli lokal, dimana hal itu bertujuan agar mereka bisa belajar sesuatu yang baru dalam perjalanan wisata yang mereka lakukan (Agrusa et al, 2010).

Tabel 2. Nilai Faktor Atraksi

Attraction	Value					Average	Rank
	I	II	III	IV	V		
Milking	3	3	4	4	3	3,4	5
Horticultural Activity	3	3	4	2	3	3	4
Natural Landscape	4	4	4	4	4	4	2
Custom and Culture	4	4	4	3	3	3,6	1
Culinary	3	4	4	4	4	3,8	3

Service

Pelayanan merupakan salah satu unsur vital dalam pengembangan suatu usaha pariwisata. Pelayanan akan berpengaruh terhadap kepuasan berwisata dari wisatawan. Hasil penelitian menunjukkan bahwa unsur yang menjadi faktor utama dalam pelayanan wisata di Dangean adalah keramahtamahan. Masyarakat Dangean adalah masyarakat yang masih sangat memelihara kepedulian sosial diantara mereka yang pada akhirnya membentuk karakter masyarakat menjadi masyarakat yang ramah. Kepedulian sosial tersebut tercermin dari masih terpeliharanya kegiatan kebersamaan seperti gotong royong dan kerja bakti (Sigarete, et al., 2017). Pola kehidupan masyarakat sangat ditentukan oleh aturan-aturan dan norma-norma yang berperan penting dalam kehidupan sosial mereka, dimana aturan-aturan dan norma-norma tersebut membentuk homogenitas perilaku dan sosial ekonomi masyarakat, dengan tujuan untuk memperkokoh benteng benteng kehidupan anak keturunan sehingga terjalin tatanan hidup yang terus berkesinambungan dan dominan (Senoaji, 2010). Meskipun demikian, language skill serta regional understanding masyarakat juga perlu untuk terus ditingkatkan untuk menunjang kepuasan berwisata dari wisatawan. Pada dasarnya daya tarik dari sebuah objek sejarah atau budaya tidak hanya terletak pada keindahan visualnya saja, namun juga sering kali terkait dengan legenda atau mitos yang melekat pada objek tersebut. Sehingga dibutuhkan pengelola yang memahami dan bisa menjelaskan cerita atau makna yang terkait di dalamnya agar cerita atau makna tersebut bisa sampai kepada wisatawan (Sigarete and Ahmad, 2017)

Tabel 3. Nilai Faktor Service

Service	Value					Average	Rank
	I	II	III	IV	V		
Hospitality	3	3	3	3	1	2,6	1
Language Skill	2	2	2	1	3	2	2
Regional Understanding	1	1	1	2	1	1,2	3

Home Stay

Dalam teori pariwisata, home stay merupakan bagian dari amenitas. Amenitas meliputi berbagai fasilitas serta kelengkapan-kelengkapan yang dapat digunakan oleh wisatawan untuk bersantai dan beristirahat dengan nyaman selama melakukan kunjungan wisata ke suatu destinasi (Sunaryo, 2013). Keberadaan amenitas akan memberikan kenyamanan tambahan terhadap wisatawan saat berwisata ke suatu lokasi (Sigarete and Ahmad, 2017). Hasil penelitian menunjukkan bahwa pelayanan tuan rumah menjadi hal yang paling kuat menurut responden. Karakter masyarakat Dangean yang ramah membawa masyarakat pada pada sikap yang juga ramah dalam melayani wisatawan yang menginap di home stay. Sumber daya manusia diakui sebagai salah satu komponen vital dalam pembangunan pariwisata, dimana keramahtamahan menjadi salah satu perwujudan sikap sadar wisata dalam prinsip Sapta Pesona (Pitana, 2009; Muhza et all, 2013). Masyarakat Dangean masih memegang erat aturan-aturan religius, dimana ketaatan warga dalam hal-hal agama pada akhirnya membentuk karakter masyarakat Dangean baik masyarakat generasi muda maupun tua menjadi baik dan ramah (Ahmad, et al., 2017).

Tabel 4. Nilai Faktor Home Stay

Home Stay	Value					Average	Rank
	I	II	III	IV	V		
Architecture	2	1		1	1	1,25	4
Facilities	3	3		3	4	3,25	2
Host Service	4	4		2	3	3,25	1
Food Menu	1	2		4	2	2,25	3

Environment

Kondisi environmental juga dianggap merupakan kekuatan Dangean untuk dikembangkan menjadi Kampung Wisata. Data penelitian menunjukkan bahwa kondisi environmental Dangean mendapatkan skor yang tinggi yaitu 3,8. Posisi geografis Dusun Dangean yang berada di kaki gunung membuat kondisi lingkungan Dusun Dangean sangat ideal (Ahmad, et al., 2017). Hasil penelitian menunjukkan bahwa lingkungan sosial menjadi kekuatan utama Dangean dalam membengun Kampung Wisata. Banyaknya tradisi dan adat yang masih terpelihara serta didukung dengan sikap ramah yang dimiliki oleh masyarakat membuat lingkungan sosial Dangean menjadi sangat menarik bagi wisatawan. Pariwisata perdesaan diaplikasikan dengan menunjukkan suatu lingkungan geografis tempat terjadi/ berlangsungnya aktivitas pariwisata dan karakteristik asli berupa budaya tradisional, budaya pertanian, lanskap pedalaman, dan gaya hidup sederhana (Raharjana, 2012). Wisatawan yang berwisata di daerah pedesaan biasanya berharap bisa merasakan pengalaman langsung untuk hidup sebagai masyarakat pedesaan, juga terlibat pada kegiatan-kegiatan atau acara (event) Desa (Gaman and Nistoreanu, 2015). Peluang pasar untuk kegiatan wisata dengan atraksi budaya saat ini sedang sangat tinggi dengan porsi pasar sebesar

1/5 dari pasar wisatawan, dimana umumnya para wisatawan mencari daerah yang memiliki atraktivitas budaya seperti kesenian, warisan-warisan budaya leluhur, dan juga kegiatan-kegiatan berbasis budaya lainnya (Carmen, 2013).

Tabel 5. Nilai Faktor Enviromental

Home Stay	Value					Average	Rank
	I	II	III	IV	V		
Social	2	2		1	2	1,75	1
Natural	1	1		2	1	1,25	2

4. Kesimpulan

Dusun Dangean memiliki potensi untuk berkembang melalui konsep Kampung Wisata. Kekuatan utama yang dimiliki oleh Kampung wisata Dangean adalah atraktivitas kegiatan, lansekap visual daerah, dan paket kegiatan wisata. Sedangkan kelemahan yang saat ini dimiliki oleh Kampung Wisata Dangean adalah rendahnya tingkat popularitas, daya saing, serta pelayanan.

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The Challenges of the Existence of Lurik Weaving in Klaten Regency, Central Java

Bayu Grendo Sigarete[1], Halim Ahmad[2], Riskika Aulia Suci[3], Novi Rahayu[4]

[1,2]Lecture, Hospitality Program, Ambarrukmo Tourism Institute, Yogyakarta, 55198, Indonesia

[3,4]Graduate Student, Hospitality Program, Ambarrukmo Tourism Institute, Yogyakarta, 55198, Indonesia

Email: bayugrendo@stipram.ac.id

Abstract

Traditional Indonesian textiles are famous for their rich artistic features that have wide variations with various decorative motifs that represent environment areas with harmonious cultivation. One of the traditional textiles is weaving. In various regions of Indonesia, weaving is not only functioned as a cover of body or clothing, but also, it is often associated with various beliefs and used in traditional ceremonies or rituals. One of the very simple weaving results, both in appearance and in the process is a striated fabric whose motives are dominated by striated (lorek-lorek) or lines. An area that has a historical relation closely that is related to weaving lurik is Klaten, where the statue of a woman who was weaving a decorator in one corner of this city. However, the image of Klaten as a producer of lurik weaving is endangered. The research result of researchers team from Ambarrukmo Tourism Institute (STIPRAM) of Yogyakarta by using descriptive research method, through interview with respondent shows that the main factor that cause fading image of Klaten as producer of lurik weaving is lifestyle change of society. Some efforts have been made by the government through various policies. But in fact, its still not give maximum results.

Keywords: Lurik weaving, Klaten, lifestyle, government policy

1. Introduction

Clothing is one of the basic needs for every human being. Clothing history begins with a long history of human civilization. In the past ancient humans used leaves to cover their bodies, then developed using animal hair and bark as a cover for the body, so clothing needs to be an important element in human life. Indonesian traditional textiles are famous for their rich artistic picture that has a wide variety with a variety of decorative motifs that represent the environment with harmonized cultivation, one of the traditional textiles is weaving. Virtuous woven fabric in Indonesia not only functions as a cover for nakedness or clothing, weaving in Indonesia is associated with various beliefs and is used in various traditional ceremonies or rituals. Various types of woven fabric in Indonesia include Lurik, ikat weaving and songket weaving. One of the very simple weaving results, both in appearance and in the process, is Lurik. Although very simple, this lurik fabric has various meanings.

Lurik is the name of the weaving cloth, the word lurik itself comes from the Javanese language, lorek which means lines, which are symbols of simplicity. The name of the motif is derived from the name of the flora, fauna, or from something considered sacred. Traditional lurik motives have meanings that contain advice, ideals, and hopes for the wearer. However, currently the number of lurik users is less than a few decades ago. The craftsmen from time to time begin to disappear. One of the centers of Lurik in Central Java that still survives to date is the center of Lurik. Non-Machine Weaving Tools (ATBM) in Tlingsing Village, Cawas District, Klaten Regency. In this Tlingsing, every house has this Non-Machine Weaving Machine (ATBM) and still weaving, although weaving is not the main job but only a side job for them. Besides that, this ATBM lurik woven fabric has a rival with the Lurik ATM (Machine Weaving Tools) located in Pedan District.

2. Methods

This research was conducted by a research team from the Yogyakarta Ambarrukmo College of Tourism (STIPRAM). The method used in this research is descriptive qualitative, that is by interpreting qualitative data from the observed actors, then presenting them in the form of stories (Ahmad and Sigarete, 2018).

1. Source and type of data

   Data sources in the study are classified into primary and secondary data. Primary data is original information obtained from firsthand the main data source (Wardianta, 2006). Primary data in this study were obtained from interviews with Lurik craftsmen and collectors. Whereas secondary data is obtained from observation and communication with related informants as well as from relevant supporting documents.

2. Data collection

   Primary data collection is done by structured interviews, namely interviews where the interviewer determines his own problems and questions to be asked to the respondent (Moleong, 2005). Determination of the sample was carried out by the method determined (purposive sample) based on consideration. Whereas secondary data is obtained by unstructured interviews, namely interviews whose questions are not compiled but adjusted to the particular circumstances and characteristics of the respondent, with a question-and-answer method that flows like in everyday conversation (Moleong, 2005).

3. Test data validity

   Data validation was tested using the triangulation method, which is collecting similar data from different sources so that the correctness of the data obtained can be tested between one another.

4. Data analysis

   Data analysis uses interactive analysis techniques, with three main components which include data reduction, data presentation, and data verification.

5. Presentation of data

   The data that has been analyzed is then presented descriptively, which is presented in the form of a flowing story.

3. Findings and Argument

History of Klaten Lurik

Lurik is a weaving whose motif is dominated by lorek-lorek or lines. The lines of long lines of a piece of fabric are called lajuran, and the width of the fabric is called poor feed, while the small boxes are called cacahan, the three patterns in Java, especially Central Java and East Java are called Lurik. Klaten has many cultural characteristics inherent in this city, one of which is Lurik made with traditional tools or which is often referred to as ATBM (Non-Machine Weaving Machine). The weaving in Java is strengthened by the use of weaving on statues and reliefs of temples scattered in Java. This lurik is spread in the regions of Yogyakarta, Solo and Tuban. In the city of Klaten itself, Lurik fabrics have become a hallmark of this city, and nowadays Klaten lurik craftsmen have been scattered in various areas such as Cawas, Pedan, Delanggu, Bayat, and other areas.

In the past this ATBM lurik woven fabric originated in Pedan Subdistrict, a pedicure cloth made from cotton thread woven with traditional looms. The coloring process starts from the yarn, so that the color of the front and rear fabric is the same. The pattern of weaving forms a vertical line that supports a very varied color combination. In the era of the 60s, Pedan was once a center for lurik production in Central Java. With the support of cooperatives in each district, the Klaten lurik entrepreneur reaches 500 people with 70,000

workers. This Lurik has been around since the 1940s. The equipment for weaving used at that time was still very simple (weaving), made of bamboo and wood (Sadilah, 2009).

In Pedan, Lurik Non-Machine tools (ATBM) developed rapidly, most of the people in Pedan District worked as weavers, and there were also people from other sub-districts who worked as weavers in Pedan, such as Cawas and Delanggu. ATBM was introduced by someone of Pedan, who learned through an education path like a course in Bandung (Sadilah, 2009). The Lurik industry was further eroded in the New Order when textile and conglomerate factories emerged. Weavers in Pedan are many who change jobs, they prefer to work in Garments, because according to them the weaving process takes a long time to produce one piece or one roll of cloth is given a small wage, the wages are not in accordance with the level of complexity in the process weaving. That way, people from Cawas and Delanggu who previously worked as weavers in Pedan, all returned to their respective districts, because they were more interested in developing the business in their respective region, especially in Tlingsing, Cawas , Klaten.

Traditional looms used throughout Indonesia in general are gendhong looms. Gendhong weaving is a very simple loom made of wood, so called because lungsen yarn on the loom (gledek and apit) is tied to "por" (the back of the weaver), weavers usually sit on the ground or sit in bamboo halls, with straight leg position forward. Gendhong looms later developed into Non-Machine Looms (ATBM) which were introduced in 1930. Non-machine looms (ATBM) were allegedly first introduced by the Dutch government in 1911. At that time the Dutch East Indies government brought Non-Machine Looms (ATBM) . This tool is made of wood, where the piston is connected with a rope, so that if one of the looms is moved, automatically the other tool will move (Isbandono, 2016). The demand for these fabrics is increasing, especially in the Japanese era, many people use bagor clothing, which is the reason why weavers use ATBM (Sadilah, 2009).

Weaving motifs also continue to experience development. Originally weaving cloths had a simple ornament in the form of plain lurik. In its development until now there are 4 types of Lurik, namely: plain lurik (vertical and plain horizontal), vertical plain horizontal lines, horizontal plain vertical lines, and a combination of vertical lines with horizontal lines (plain weaving).

The Challenge of the Existence of the Klaten Lurik

Lurik is full of meaning and cannot be separated from trust, so its existence always accompanies traditional ceremonies. Lurik's philosophy and meaning is reflected in its motives and meaning. For example the Honey Gedog motif, which is used in mitoni or siraman ceremonies, there are also lurik with Lasem motifs used as bridal equipment in the Probolinggo area, the people use the Lurik "Tuluh Watu" selengdang for the seven-monthly ceremony (Jawa Tingkeban) and to make (Ruat). The use of striated is still ongoing, but using lurik with names that have philosophical meaning has rarely been found (Asti, 2015).

Nowadays, it is difficult to find striated craftsmen who make woven with a certain meaning. This is because it makes woven with a high level of complexity and expensive prices that are less competitive in the market. There are also many weavers who used to make lurik with certain meanings that do not pass on their skills to their next generation. There is also the opinion that the next generation is not interested in lurik but working on batik that is more varied and easily marketed. There is also the next generation of weaving to switch professions not as weavers, for example as employees or traders. On the other hand, most people do not understand lurik which has such philosophical meanings and increasingly rare traditional ceremonies, especially those who use lurik as part of the ritual.

The Central Java and Klaten government require the ranks of Civil Servants to wear lurik

uniforms. Circular of the Regent of Klaten No.025 / 575/08 dated June 25, 2008, concerning the trial of the use of Lurik / Batik, as specific chlotes has Positive Impact Areas (Kedaulatan Rakyat, 10 July 2008). More and more people are glancing at classic weaving products. Klaten, resulting in the revision of the Regent's SE with new SE No. 65/77/06/2010, which requires Civil Servants (PNS) to wear lurik uniforms two days a week. Not only executives who respond to this phenomenon, even in the legislature. The regulation on the obligation to use lurik uniforms for Klaten Regency DPRD members in 2009-2014 is stated in article 98 paragraph 3 Chapter VI regarding the trial and decision making of the related draft tatib. The article reads: In the event that there are no specific meetings and activities the leaders and members of the DPRD wear civilian clothes using the Klaten DPRD's planned lurik clothes. This is certainly an opportunity for the craftsmen to market their products.

Unfortunately, all of regulations above does not specifically mention that the uniforms used are local products from Klaten. this is involved in traditional markets and supermarkets that are starting to flood the manufacturer's lurik products, both from domestic and overseas (especially China and India) which can be obtained at relatively cheaper prices than the classic Klaten products. Besides being cheap, the manufacturer's quality is also better than classic lurik. This is a challenge for lurik craftsmen to maintain their products (quality and quantity). One characteristic of classical lurik is that the fabric tends to shrink after being washed, thick and faded. In its development, lurik fabrics are increasingly diverse and are also used by the private sector and the general public. For example, for party clothes, men's and women's clothing, pillow cases and chairs, and others. Klaten Regency has several centers of lurik craftsmen and can be used as educational tours and cultural tourism.

4. Conclusions

Klaten Lurik is one of the intellectual works of Indonesian ancestors which is often associated with various beliefs and used in various traditional ceremonies or rituals. But the existence of Lurik as a regional cultural heritage is threatened by changes in people's lifestyles which increasingly leave pride in Lurik. Because of this, more preferential efforts are needed, especially from the Government through the policies of regional regulations so that Lurik as the cultural heritage of the Klaten region is not lost due to the times.

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The Influence of Interpretative Media in order to Change the Tourist Behavior of throwing garbage in Breksi Cliffs, Sleman, Yogyakarta

Halim Ahmad[1], Bayu Grendo Sigarete[2]

[1,2]Hospitality Program, Ambarrukmo Tourism Institute, Yogyakarta, 55198, Indonesia

Email: halimahmad@stipram.ac.id

Abstract

Breksi cliffs were built and managed for tourist destinations in 2015. One of the challenges in the management of tourism in Breksi Cliff is garbage. The main factor ignoring garbage problems by tourists is due to their poor understanding of the environment and the dangers of environmental damage. So that, we need an initiative from the manager of Breksi Cliff in managing the environment around the tourist site through the installation of an interpretive media that is educative to the tourists about the environment, as well as an effort to provoke tourists to participate actively in order to control garbage in Breksi Cliffs. This research is a qualitative research and it is using experimental method. The study design was randomized complete design with 2 treatments and 3 repetitions. The data were collected by sampling method, by counting the trash in 2x2 m area around the sampling points. The data collection is 6 times with 3 times data retrieval before treatment and 3 times data after interpretative media installation treatment. The result of research by researcher team from Ambarrukmo Tourism Institute (STIPRAM) Yogyakarta based on statistical analysis shows that there is real difference of amount of gaebage before and after installation of interpretative media, where the garbage quantity decrease from 13,4 to 4,1.

Keywords: Breksi cliff, interpretative media, garbage, experimental

1. Introduction

The tourism industry is projected as one of the driving forces of development in 2018. Selection of the tourism industry as an economic engine in 2018 due to several reasons. First, the magnitude of the potential appeal of which is owned by Indonesia which includes the natural beauty and cultural diversity. Indonesian nature and culture are always ranked in the world's top 10 every year. Even the island of Bali has been named the world's best travel destinations in 2016 by one of the world's leading travel media. Second, promising market potential. From the perspective of the global travel market has a relatively high resistance since continued to show a positive trend amid rampant international terrorism. Whereas from a national perspective, the trend of constant economic growth above the 5% figure will create many new rich communities that are potential as a target for tourism.

As an industry, tourism actually contributes to the economy. However, like other industrial sectors, tourism also holds potential damaging effects from the environmental side. The nature of tourism, especially conventional economic tourism causes tourism development to be oriented only to economic goals. As a result, tourism development is not just an explorative activity, but is more identical to exploitative activities. This overly exploitative development is the main threat to the existence of tourism activities in a location. Excessive exploitation of tourism resources will make the attraction of a tourist site fade. The waning of attraction due to a decrease in the quality of the tourist environment will be responded by tourists by leaving the tourist location. Therefore, environmental factors must also get special attention in managing a tourist location so that tourism activities can run sustainably.

Breksi Cliff is a fairly new tourist location in Yogyakarta. Breksi Cliff began to be built and managed for tourist purposes in 2015. As a new tourist location, many things become challenges in the management of Breksi Cliffs. One of the challenges is in terms of garbage. Garbage becomes a serious problem for tourist sites based on natural beauty such as Breksi Cliff where the aesthetic elements are inherent and become one of the offerings in tourism activities. Tourists not only enjoy a comfortable natural atmosphere, but also enjoy visual offerings from the location. So that the presence of too much garbage will make visiting satisfaction from tourists low. Visit satisfaction is positively correlated with interest in returning to visit. The low tourist satisfaction will have an impact on the low interest of tourists to visit the Breksi Cliff. For this reason, an initiative from the manager of the Breksi Cliffs is needed in managing the environment around the tourist sites.

2. Methods

The research was carried out by a research team from the Yogyakarta Ambarrukmo College of Tourism (STIPRAM). This research is a type of qualitative research using experimental methods, namely by testing the hypothesis and then tested statistically to determine the effect of the trials that have been conducted. The research location was chosen based on consideration (purposive), where the researcher determined the Breksi Cliff as the location of the experiment. Determination of the Breksi Cliff is based on the fact that the environmental conditions in the location are still much disturbed due to the presence of quite a lot of garbage.

Data collection technique

Data about the large amount of garbage in Breksi Cliff is taken by sampling method, namely by calculating the amount of waste in certain points that are considered to represent the real conditions on the location. Trash in 2x2 m area around the calculated sampling points are then accumulated. Data retrieval will do as much as 3x to 6x with details of the data retrieval of data before treatment and after treatment installation 3x interpretive media.

Data analysis

The study design used a completely randomized design (CRD) with two treatments and three replications. The treatment given is:

T0 = Without interpretive media
T1 = With interpretative media

Mathematical models of experimental design in this study are:

$$Yij = μ + τi + εij$$

Information:
Yij = The results of observing the effect of the i-th treatment and the j-test
i   = 1,2
j   = 1,2,3
μ   = middle value of all observations
τi   = effect of the i-treatment
εij = the effect of the experimental error from the i-treatment and the j-test

The research hypothesis are:

H0: τi = 0: There is no effect of the installation of interpretive media on the changing attitudes of tourists in disposing of garbage.

H1: τi ≠ 0: There is an effect of the installation of interpretive media on the changing attitudes of tourists in disposing of garbage.

Data were tested according to the procedure F variance and if there is a real treatment effect (P <0.05) followed Duncan test at 5% level.

3. Findings and Argument

Breksi Cliff Tourism Object

Breksi cliff is located in Sambirejo Village, Prambanan District, Yogyakarta (Farhan, 2016). Breksi is the name of a rock type included in clastic sedimentary rocks where rock fragments are the result of previous rock breakdown, which is a product of volcanic activity that experiences water transportation (Candra, 2014). Breksi Cliff Park is a chunk of former mining quarry (Nursastri, 2016). Breksi Cliff was previously a limestone mine site (Rizal, 2016). The number of breccia rocks in Yogyakarta province is quite large and spread in Bantul, Sleman and Gunungkidul regencies (Candra, 2014). The limestone from the mining at Breksi Cliff is used as the main material for sculpture, and is used as a base or wall of the building as a substitute for ceramics (Hakim, 2015).

Traditional mining that has been going on for years has transformed lush hills into white box cliffs that contrast with the surrounding green vegetation (Hakim, 2015). Mining activities at Breksi Cliff were stopped by the government because the location of Breksi Cliff is a geological site that is part of Purba Nglanggeran Volcano (Rizal, 2016). The Breksi cliff is proclaimed as a cultural heritage because it is a historical evidence of geological phenomena where the Breksi Cliffs are deposits of the ancient volcanic ash of the Nglanggeran volcano (Nursastri, 2016). Breksi cliff is included as one of the geological sites and has been designated as the Geoheritage of Ijo Temple which must be protected (Hakim, 2015).

Breksi cliffs were opened for tourist sites in March 2015 (Rizal, 2016) by Karang Taruna Sambirejo (Farhan, 2016). Development of Breksi Cliffs is done by carving cliffs with cultural images such as wayang (Narsisti, 2016). Cliff carving is done by local artists with a working time of about 6 weeks for one puppet relief (Bona, 2016).

Tourists on the Cliff Breksi are dominated by teenagers. This is influenced by the main attractivity factors offered at Breksi Cliff in the form of visual attractivity supported by the addition of photo spots. Ahmad and Sigarete (2018) in their research found that the main preference of teenage tourists is the attraction of spot photography. From the Breksi Cliff, tourists can see the panoramic view of the beauty of the Ijo Temple and Ratu Boko Temple with a backdrop of Merapi and merbabu mountains (Narsisti, 2016), and can see Prambanan and Borobudur Temples (Farhan, 2016). Breksi Cliff is also commonly used as a camping location that offers a sunrise atmosphere (Rizal, 2016). In addition, at the foot of the cliff there is an amphiteatre called Tlatar Seneng which is used as a venue (Narsisti, 2016). The number of tourists visiting Breksi Cliff reaches 3,000 vehicles at weekends (Bona, 2016). Breksi Cliff Tourism Object does not yet have a local regulation so that there is no tariff to enter and its management is still carried out by Karang Taruna (Bona, 2016). Tourists are allowed to pay the entrance fee accordingly, and only at a fee of Rp 2,000 for motorbike parking (Hakim, 2015), and Rp. 5,000 for cars, and Rp. 10,000 for bus parking (Bona, 2016). The entrance fee for the Breksi Cliffs which is fairly cheap is the main attraction for teenagers. The most ideal admission price for teenagers is around IDR 5,000 - IDR 25,000 (Ahmad and Sigarete, 2018).

The Influences of Installation Interpretative Media

Table 1. The experiment data

Repetition	Plot	Treatment	
		Before	**After**
The first	Plot 1	15	5
	Plot 2	13	6
	Plot 3	15	3
	Plot 4	14	3
	Plot 5	13	3
	Plot 6	13	2
	Plot 7	13	5
	Plot 8	17	5
	Plot 9	13	6
	Plot 10	13	3
	Rata-rata	**13,9**	**4,1**
The second	Plot 1	11	4
	Plot 2	13	4
	Plot 3	16	4
	Plot 4	14	4
	Plot 5	13	4
	Plot 6	15	5
	Plot 7	13	4
	Plot 8	11	4
	Plot 9	13	4
	Plot 10	9	5
	Average	**12,8**	**4,2**
The third	Plot 1	15	6
	Plot 2	15	3
	Plot 3	14	2
	Plot 4	10	3
	Plot 5	17	6
	Plot 6	11	2
	Plot 7	13	4
	Plot 8	16	5
	Plot 9	13	6
	Plot 10	11	4
	Average	**13,5**	**4,1**
Average		**13,4**	**4,1**

Statistical test results show that there is a significant influence of the installation of interpretative media on the behavior of throwing garbage from tourists in the Breksi Cliff. The data shows the average amount of waste after the interpretive media is 4.1. Down from 13.4 before the installation of interpretive media. This shows that interpretative media about the environment can actually open up tourists' awareness of the importance of the environment and shape the behavior of tourists to be more concerned about the environment. Environmental interpretation is a bridge or form of communication between objects or natural resources with visitors coming in the area (Junianti, 2016). Media is one of the elements of communication, because in the communication process there is always a process of delivering information and information sources or from the sender of messages to the target or recipient of information through the media (Muntasib, 2003; Joni, et al., 2010). Techniques in environmental interpretation consist of two, namely direct techniques (attended service), and indirect techniques (unattended service) through the media (Sharpe, 1982; Junianti, 2016). Effective communication media must be based on community preferences, trial use of media and methods or time for media distribution (Weinreich, 1999; Joni et al., 2010).

Interpretation in relation to the environment is a form of service to visitors to parks, forests, and protected places and other recreational places (Sharpe, 1982; Junianti, 2016) Interpretation activities in a tourist environment are an ideal way to engage and improve community understanding of the environment (Henning and Pakpahan, 1991). The interpretation of the tourist location environment is considered to influence visitor behavior and reduce adverse effects on the environment (Junianti, 2016). The informative approach alone is not enough to make tourists aware of the importance of environmental sustainability, so that interpretations that contain more than just information can be used as a tool to foster tourists' attention and appreciation for a tourist location that ultimately tourists will be encouraged to protect and conserve something of interest to they (Henning and Pakpahan, 1991). The interpretation program not only supports conservation and management of the area but also increases the satisfaction and comfort of tourists (Moscardo, 1998; Oktawirani et al., 2012), where tour guides and tourism facilities play a role in supporting the transfer of knowledge and environmental preservation of tourist sites (Yusiana and Mayadewi , 2016) The main purpose of an interpretation is not instruction but provocation (Tilden 1977; Junianti, 2016).

4. Conclusion

Environmental problems, especially in tourist locations become one of the serious problems to be solved soon. Poor environmental quality will reduce the level of tourist satisfaction from tourists so that it will worsen the image of a tourist attraction which will have an impact on the decline in competitiveness of the tourist motorcycle taxi. Interpretative media can be used as an alternative solution in an effort to control environmental problems in order to maintain the existence of tourism activities in a tourist attraction.

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Innovation Strategy in Batik Business to Increase Value Creation and Sustainability: Study At Batik Company in Banyuwangi District of East Java Province, Indonesia

Agnes Yuanita Soemartono[1], Rahayu Eka Safitri[2], Djoko Poernomo[3]

[1,2]Master Candidate, Departemen of Administration Science, Faculty of Social and Political Science, University Of Jember

[3]Lecturer, Departemen of Administration Science, Faculty of Social and Political Science, University of Jember

Email: lionel.bionel@gmail.com

Abstract

Batik is a cultural heritage Indonesia nation that has been recognized by the world. This is due to batik has sociocultural and economic value. This potential when processed and developed properly will be one source of strength in the creative industry to expand the work and welfare of the community. The current competition in the batik industry is very tight. This fact requires that batik companies need to develop innovation strategies that can increase the added value in order to remain adaptive in the market.The purpose of this research or paper is to develop a framework for applying innovation strategies to improve value creation and sustainability in batik companies in Banyuwangi district. This research uses qualitative research. Informant of this research is owner of batik company. Data collection techniques using in-depth interviews. Data analysis uses domain and taxonomy analysis. The results of the study show that there are variations of innovation strategy implementation in batik company. These variations will be described in more detail in this paper.

Keywords: Innovation Strategy, Value Creation, Sustainability, Batik Company.

Village Funds and Development in Indonesia: The Role of Social Capital

Irin Cahyawati[1], Sebastiana Viphindrartin[2], Zainuri[3]
[1]Student, Master Degree of Science in Economics, University of Jember, Jember
[2,3]Lecturer, Department of Economics and Development Studies, Faculty of Economics and Business, University of Jember
Email: irin.cahyawati@yahoo.com

Abstract

In developing countries like Indonesia, the main problem is poverty. The greatest poverty occurs in rural areas. Government takes policy by focusing on rural development. One of the mandate of Law No. 6 Year 2014 about The Village is to allocate budgeting at Village Fund scheme to optimizing infrastructure and empowerment as effort to reduce poverty. This study aims to determine contribution of Village Funds to develop village communities. This research was conducted through descriptive analysis and literature study with observation in the year 2015 until 2017. The hypothesis in this research is the implementation of Village Fund Program has a significant influence on rural poverty reduction. The results show that during the implementation year 2015-2017, the Village Fund Program has an influence in reducing rural poverty indicated by the declining number of rural poor from 17.7 million in 2014 to 17.1 million in 2017 and a decrease in the percentage of the rural poor from 14,09% in 2015 to 13.93% in 2017. Social capital plays a role in the success of the planning process through consultation and supervision of village infrastructure development. In addition, empowerment activities with local wisdom as a form of strengthening social capital increases economic and social activities.

Keywords: rural poverty, village fund, social capital

1. Introduction

The government through regional autonomy empowers regional governments to administer their own government, with the full support of the government in its implementation. The emphasis of regional autonomy is placed at the district or city level, but if examined, the essence of regional autonomy is based on self-reliance initiated by the lowest level of government, is the village (By 2014). Nasrul (2013) argues that rural development is an important part of national development, since the still dominant rural areas of more than three quarters of Indonesia are rural and more than half of the population still live in rural areas.

Law No. 32 of year 2004 on Villages gives villagers the opportunity to organize and manage their own households, which is organized by taking into account the principles of democracy, community participation, equity, justice, and attention to the potential and diversity of the region. This is reinforced by the presence of Law no. 6 Year 2014 about Village. Firmanzah (2014) in Abidin (2015) added that the Act recognizes the authority of the village and empowers the village more strong, advanced, independent and democratic. The village government is expected to manage its territory independently including the management of the village's assets, finances, and income to improve the quality of life in the village and the welfare of the community.

Enactment of Law no. 6 About the Village is accompanied by Village Funds Program as one of the funding sources of village development. The Village Fund is a fund sourced from the State Budget (APBN) intended for villages used to fund government administration, development implementation, community development, and community empowerment in

village. The purpose of granting the village funds is as a stimulant or stimulant fund to push finance village government programs supported by the participation of self-help community in carrying out government activities and community empowerment (Harning and Amri, 2016).

Development policies made by the government can be used as drivers economic growth. Through the Village Fund Program is expected to reduce rural poverty through empowerment and rural infrastructure development. The Village Fund program seeks to maximize social capital through the local wisdom of each village. Kusuma et. al. found that rural social capital plays a role in ecotourism development in Banyuwangi (Kusuma et al., 2017). Furthermore, the Village Fund Program in Kota Banda Aceh enhances infrastructure, economic and social development (Harning and Amri, 2016). Research conducted by Sofianto (2017) found that the implementation of village funds contributed to increased accessibility of villagers and community participation in development. Yasa also found that community participation in the Bali Province plays a role in reducing poverty. The relationship between empowerment and village development becomes interesting for further research.

Indonesia is a developing country with more than half of its population living in rural areas. The government always strives to synergize the village development policy with national development. One of the government's efforts is through the Village Fund Program. Thus, a review of village development issues is needed to reduce poverty and affect economic growth.

2. Methodology

This research is a descriptive research. According to Whitney (in Nazir 1988: 34 in Sofiyanto, 2017), descriptive research is a fact-finding with the right interpretation in order to get a systematic, factual and accurate description, description, or painting facts, traits and relationships between the phenomena investigated. Meanwhile, literature studies conducted by searching for various written sources, whether in the form of books, archives, magazines, articles, and journals, or documents relevant to the issues studied. Year of observation is the Year 2015 to 2017, where Year 2015 marked the beginning of the enactment of Law no. 6 About the Village and the start of the Village Fund Program.

3. Results and Discussion

Village Autonomy

The village is an embryo for the formation of political and governmental society in Indonesia, long before the modern nation-state of Indonesia was formed (Santoso, 2006 in Sofianto, 2017). Law no. 6 of 2014 about the Village provides significant changes in village governance. In essence the Village Law has a vision and engineering that gives wide authority to the village in the field of administration of village administration, implementation of village development, village community development, and empowerment of village communities based on community initiative, rightful authority, and village customs. Widjaja (2003: 165) states that village autonomy is native, round, and whole autonomy and is not a gift from the government. Instead the government is obliged to respect the original autonomy possessed by the village. As a legal community that has its own original structure based on privilege, the village can perform legal acts both public law and civil law, possessing property, and can be prosecuted and prosecuted in court (Harning and Amri, 2016) .

Village Fund

Indonesia has about 73,000 (seventy three thousand) Villages (Mulyono, 2014). The Village Fund is a fund sourced from the State Budget (APBN) intended for villages used to

fund government administration, development implementation, community development, and community empowerment. In 2015, the Village Fund is budgeted at Rp 20.7 trillion, with an average of each village getting an allocation of Rp 280 million. In 2016, the Village Fund increased to Rp 46.98 trillion with an average of Rp 628 million per village and in 2017 again increased to Rp 60 trillion with an average of Rp 800 million per village. Based on the evaluation from Department Financial, in the three years of implementation, the Village Fund has proven to have produced facilities and infrastructure that are beneficial to the community, among others in the form of the construction of more than 95.2 thousand kilometers of village roads; 914 thousand meters of bridges; 22,616 units of water connections; 2,201 units of boat moorings; 14,957 PAUD units; 4,004 units of Polindes; 19,485 well units; 3.106 village markets; 103,405 drainage and irrigation units; 10,964 Posyandu units; and 1,338 units of embung in the period 2015-2016.

Poverty

Poverty is defined as a low standard of living, namely the existence of a material deficiency level compared to the standard of living prevailing in the society concerned. The evaluation results of the use of the Village Funds over the past two years also indicate that the Village Fund has managed to improve the quality of life of the villagers as shown by, among others, the decline in rural inequality ratio from 0.34 in 2014 to 0.32 in 2017. The decline in the number of poor rural areas from 17.7 million in 2014 to 17.1 million in 2017 and a decrease in the rural poor from 14.09% in 2015 to 13.93% by 2017.

Social Capital

The development of villages sourced from the Village Fund is directed at infrastructure development and community empowerment conducted by raising local village wisdom. This includes the strengthening of social capital in a growing context in society. Principles that are articulated in the context of village setting, include: the principle of recognition; subsidiarity; diversity; togetherness; mutual cooperation; kinship; discussion; democracy; independence; participation; equality; empowerment; and sustainability (Mulyono, 2014). Putnam (1995) defines social capital as a picture of social organization, such as networks of norms and social beliefs that facilitate mutual coordination and cooperation (Yustika, 2012). In the development of village infrastructure self-managed cooperation named "gotong royong" involving the participation of villagers. This is where social networking mechanisms and social norms of society play a role in the development process. Togetherness and common purpose are the drivers of the villagers in participating. The preparation of village planning and accountable reporting in the Village Revenue Expenditure Budget (APBDesa) is one way to foster citizens' trust. Human resources become capital that is very important in doing development. The linkage of this problem with community empowerment is enormous. The impact of community empowerment is the community's independence in overcoming their problems through initiative and creativity to improve the quality of life. Village empowerment programs succeed through the participation of rural social networks, through religious leaders, community leaders, and community groups. The existing social networks are successful in giving influence to the village community to participate in developing their village.

4. Results and Discussion

Consistency of village development should be supported by commitment, awareness and active participation of all stakeholders towards the progress of the village, as a forum for realizing the welfare of the community (Mulyono, 2014). Through the enactment of Law no. 6 Year 2014 on the Village is placed the foundation of village-based village autonomy

development. The emergence of the Village Law was accompanied by a Village Fund Program mechanism that focused on infrastructure development and village empowerment. Since its inception in 2015, the Village Fund Program has proven to reduce rural poverty and improve the quality of rural living.

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Competitive Sector and Transformation of Economic Structure in Tuban Regency (2010-2015 Period)

Hidayatul Hanifah[1], Riniati[2], Fivien Muslihatinningsih[3], Lusiana Ulfa H.[4]

[1,2,3,4]Department of Economics and Development Studies, Faculty of Economics and Business,
University of Jember
Email: fivien.feb@unej.ac.id

Abstract

On its duties, functions, and responsibilities to manage the potential of a region and also part of Autonomy implementation, Regional Government must be able to increase economic growth, equal distributions of income, and optimize regional development. Economic development performance can be seen through the economic growth accompanied by the change of output distributions and economic structure. Competitive sectors are ought to be owned by each region in the implementation of Regional Autonomy to finance developments, including the region of Tuban. Tuban had experienced transformations of economic structure due to the conversion of agricultural to industrialization. These economic transformations in Tuban are marked by the decrease of agricultural sector and the increase of industrial sector, along with the establishment of PDRB and employment. This study aims to identify the competitive sector and analyse the transformation of economic structure in the district of Tuban by using data variables of GRDP in year 2010 and employment data in year 2000. The method used is quantitative descriptive analysis according to Locationt Quotient (LQ) and Dinamic Location Quotient (DLQ) to identify competitive sector. Analysis tool Shift Share modified by Esteban Marquillas is used to analyse economic structure of Tuban. The result of LQ and DLQ analysis shows that mining sector is the basic sector and has potential to be developed as competitive sector in Tuban. The result of Shift Share analysis by Esteban Marquillas shows that there was transformation of economic structure from agriculture sector to trading sector in Tuban.

Keywords: Dinamic Location Quotient, Location Quotient, Shift Share, Shift Share Esteban Marquilla

1. Introduction

Economic development depends on the policy in determining competitive sectors. Samuelson (Tarigan, 2014:46) explained that every region must have competitive privilege that could be developed vastly and combined with other sectors so that the growth of one sector will encourage the growth of other sectors, which eventually might end up to a rapid economic development.

Each region must have competitive sector to develop regional economic growth and to increase employment. If the region of Tuban has owned competitive sector, other sectors cannot be abandoned because it might lead to imbalances in development, such as income distributions that become widen, high number of unemployment, and declining of public welfare. To avoid such loss, the development must be balanced and in line with the effort to collaborate competitive sectors with other sectors.

According to Tarigan (2014:46) regional economic growth is the increase of overall community income in the area. Regional revenue describes the prosperity of a region due to its ability to portray remuneration occurred in the region. According to Boediono (1985:1), economic growth is a process of output rise per capita in the long run. Output rise must be higher than population rise. This development has a tendency to go forward

and continue. According to basic export theory by Richardson (Tarigan, 2014:55), regional economic growth is determined by the demand for goods and service from outside the region. Richardson divides economic into two sectors, base sector and non-base sector, in which this base sector triggers the growth of other sectors.

According to Adam Smith, economic growth is influenced by capital accumulation in two ways. Firstly, there is direct capital enhancement that increases the number of outputs. Second, indirect capital enhancement that increases productivity per capita along with the existence of specialization and more various divisions of labours. Eventually, specialization will accelerate economic growth. The process of capital accumulation is influenced by broader market and profits that are above the minimum profit (Boediono, 1985: 9)..

In addition to economic growth, transformation of economic structure is also one of the determinant performances of economic development. Transformation of economic structure occurs as a result of economic growth. Kuncoro (Sun'an, 2015: 65) explains that structural change is a phenomenon faced by developing countries, where the economic structure was initially subsistence and merely focused on the agricultural sector, a modern economic structure dominated by industry and services. Chenery's development pattern theory explained that along with increased income per capita, the economy of a country will shift from agricultural sector to the industrial sector. In line with the process of structural transformation, there will be a decrease in consumption of food ingredients due to an increase in consumption of non-food ingredients (Kuncoro, 2000: 54; Sun'an 2015: 73). The results of Chenery and Syrquin (Tambunan, 2003) research showed there is a change in the output contribution in the economy in the long term, here means the contribution of agricultural output will decrease while the contribution of industry and services will increase in line with the increase in national income or income per capita.

In terms of labor, according to Lewis, there will be a process of transfer, output growth and employment from the agricultural sector to the industrial sector, although the shift is lagging behind the process of changing the structure itself. As a result of lag, the agricultural sector will play an important role in increasing the supply of labor in the structural transformation process. The low productivity of the agricultural sector labor has gradually increased, similar to the productivity of the industrial sector in the transition period (Sun'an, 2015: 75). Ranis-Fei in the theory of labor economic development explains that economic development takes place by allocating labor surpluses in agriculture that have zero output contributions to the industrial sector so that the workforce is more productive with the same wages as agriculture.

East Java Province is one of the regions located in Java Island which has an average rate of economic growth at 6.09% in year 2011-2015. Sectoral contribution within the establishment of GRDP in 2010-2015 according to constant rate shows that the manufacture industry sector has the largest contribution to GRDP in East Java Province at 29.25% followed by the wholesale and retail trade sector at 18.18% and the agriculture, forestry and fisheries sectors. The smallest contributions in GRDP are from the sectors of water supply, waste management, waste and recycling.

Tuban Regency is one of the districts in East Java Province. Tuban had given large contribution to the formation of East Java GRDP in 2010-2015. The GRDP of Tuban on the basic constant rate shows that it is dominated by the manufacturing industry sector at 30.65%, the agriculture, forestry and fisheries sector and the construction sector, each at 18.66% and 13.01%. While the employment of Tuban is dominated by the agricultural, plantation, forestry, hunting and fisheries sectors, the trade sector, restaurants and accommodation services as well as the community, social and individual service sectors.

Tuban has the potential that becomes obligatory to be developed, including the energy

sector (tides can be used as PLTU), tourism sector (as the earth guardian and the city of a thousand caves and many unexposed tourist attractions), industrial sector (the site of many large industries such as Indonesian cement , holcim cement, steel steel industry and others and local handicrafts (batik and woven gedogs)), agriculture and plantations sector (rice, corn, beans and siwalan, duku prungahan and star fruit are the typical groceries of Tuban) and fisheries has the potential to be developed as a fish processing industry (BPS Tuban Regency, 2015: 63) .This study aimed to identify the competitive sectors and analyze whether there is a transformation in the economic structure in Tuban 2010-2015.

2. Method

Research Design

The type of this research is quantitative descriptive, aims to make a systematic, factual and accurate description of the facts and nature of the population in a particular place, Tuban, to develop a detailed understanding. The location and time of the study were Tuban Regency in 2010-2015.

Data Sources and Type

Data used in this study are secondary data obtained from BPS of Tuban Regency and BPS Provincial of East Java regarding the GRDP and Labor of Tuban Regency and East Java Province. Data used from GRDP in this study were started from year 2010 along with 17 categories business sectors and for the labor, data used are from the population aged 15 years and over who worked in main business fields from year 2000 along with 9 business sectors.

Analysis Method

Data analysis was done using quantitative descriptive analysis according to Locationt Quotient (LQ) and Dinamic Location Quotient (DLQ) analysis tool to identify the competitive sectors as well as the Shift Share analysis tool and Shift Share analysis tool modified by Estebn Marquillas to analyze the economic structure of Tuban.

1. Analysis of Location Quotient

Analysis of Location Quotient (location questionnaire) or abbreviated as LQ is a comparison between the magnitude of the role of the sector / industry in an area and the magnitude of the role of the sector / industry nationally. Generally the variables used are added value (income level) and number of employment. Formula of LQ (Tarigan, 2014) as follows:

$$LQ = \frac{\dfrac{X_i}{PDRB}}{\dfrac{X_i}{PNB}} \qquad (1)$$

where:
x_i = GRDP sector i in Tuban Regency
PDRB = total GRDP of Tuban Regency
X_i = GRDP sector i East Java Province
PDRB = total GRDP of East Java Province

2. Analysis Dinamic Location Quotient

Analysis Dinamic Location Quotient is a comparison between the development or growth rate of the sector / industry in an area and the development rate of the sector / industry nationally. DLQ and LQ shared a lot of similarities, but only DLQ is more suppressed to development rate. Formula of DLQ (Wiwekanda, 2016) as follows:

$$DLQ_{ij} = \left(\frac{\dfrac{1 + g_{ij}}{1 + g_j}}{\dfrac{1 + G_i}{1 + G}} \right) \tag{2}$$

where:

g_{ij} = development rate sector i of Tuban Regency
G_i = development rate sector i of East Java Province
g_j = development rate of Tuban Regency
G = development rate of East Java Province

3. Analysis of Shift Share

Shift share analysis is one of the quantitative techniques commonly used to analyse sector growth and changes in regional economic structure towards higher administrative economic structures as a comparison or reference. Shift share analysis equation and its components (Hasani, 2010) as follows:

$$D_{ij} = N_{ij} + M_{ij} + C_{ij} \tag{3}$$

where:

i   = analysed economy sector
j   = analysed area Tuban
n   = comparison area East Java
D_{ij} = changes in sector i in area j (Tuban)
N_{ij} = national growth sector i in area (East Java)
M_{ij} = industrial mix of sector i in area j (Tuban)
C_{ij} = competitive sector i in area j (Tuban)

Variable used in this study are labor which is notated as (y), as follows:

$$D_{ij} = y^*_{ij} - y_{ij} \tag{4}$$
$$N_{ij} = y_{ij} \cdot r_n \tag{5}$$
$$M_{ij} = y_{ij} (r_{in} - r_n) \tag{6}$$
$$C_{ij} = y_{ij} (r_{ij} - r_{in}) \tag{7}$$

whereas:

y_{ij} = labor in sector i in area j (Tuban)
y_{*ij} = labor in sector i in area j at the end of analysis year (Tuban)
r_{ij} = growth rate sector i in area j (Tuban)
r_{in} = growth rate sector i in area n (East Java)
rn   = the average rate of growth of labor in area n (East Java)

$$r_{ij} = \frac{y^*_{ij} - y_{ij}}{y_{ij}} \qquad\qquad (8)$$

$$r_{in} = \frac{y^*_{in} - y_{in}}{y_{in}} \qquad\qquad (9)$$

$$r_{n} = \frac{y^*_{n} - y_{n}}{y_{n}} \qquad\qquad (10)$$

where:

y_{in} = labor sector i in area n (East Java)
y^*_{in} = labor sector i in area n at the end of analysis year (East Java)
y_{n} = total labor of all sectors in area n (East Java)
y^*_{n} = total labor of all sectors in area n at the end of analysis year (East Java)

4. Analysis Shift Share Modified by Esteban – Marquillas (SS-EM)

Analysis of Shift-Share modified by Esteban – Marquillas (SS-EM) is a modification of classic Shift-Share analysis. This analysis is used to solve the problem of the effect of allocation and specialization that has not existed in the classic Shift Share analysis. In the modification of Shift Share Esteban Marquillas new element is added namely y'ij defined as a region variable (yij), formulated to (Sufriadi, 2015).

To find out the allocation effect using the formula:

$$A_{ij} = (y_{ij} - y'_{ij})(r_{ij} - r_{in}) \qquad\qquad (10)$$

whereas:

$(y_{ij} - y'_{ij})$ = describes the level of specialization in sector i Tuban
$(r_{ij} - r_{in})$ = describes the level of competitive advantage of sector i in Tuban.

The modification result using Shift Share by Esteban Marquillas can be formulated as follows (Supomo dalam ma'mum, 2012):

$$D_{ij} = y_{ij}(r_n) + y_{ij}(r_{in} - r_n) + y'_{ij}(r_{ij} - r_{in}) + (y_{ij} - y'_{ij})(r_{ij} - r_{in}) \qquad\qquad (11)$$

3. Result and Discussion

Results

1. Analysis of Competitive Sector

   a. *Analysis of LQ (Locationt Quotient)*

   LQ (Locationt Quotient) analysis is used to determine the most competitive sector or economic source of a regional economy by using a comparison between the magnitude of the role of the business field in Tuban Regency to the magnitude of the role of the business field in East Java Province. The comparison used GRDP data of Tuban and GRDP data of East Java Province in 2010-2015. Seen from these comparisons, there are several possible LQ values as follows:

   - LQ > 1 means that the sector is source sector and has the potential to be developed as an economic driver for Tuban Regency.
   - LQ = 1 means that the magnitude of the role of the sector i in Tuban Regency has the same amount with the magnitude role of the sector i in East Java Province.
   - LQ < 1 means that the sector is non-source sector and has the least potential to be developed as an economic driver for Tuban Regency.

LQ results on GRDP from 17 (seventeen) business fields in 2010-2015 in Tuban Regency were only 5 (five) business sectors can be considered as source sectors, namely: mining and mining (1.76), agriculture, forestry and fisheries (1,46), construction sector (1.43), manufacturing industry sector (1.05) and government administration, defense and social security sectors (1.01), while others are non-source sectors..

LQ results from 2010 to 2015 describe the sectors that have the highest LQ average are: 1) the mining and mining sector with LQ by 1.76; 2) the agriculture, forestry and fisheries sector with LQ by 1.46 and 3) the construction sector with LQ by 1.43. Meanwhile the lowest LQ was experienced by the accommodation and food supply sector by 0.17, the transportation and warehousing sector by 0.19 and the company services sector by 0.25.

The mining sector consistently produced the highest LQ from 2010-2015. The second highest LQ result from 2010-2015 experienced a change from the construction sector to the agriculture, forestry and fisheries sectors. The lowest LQ consistently from 2010-2015 occurred in the sector of providing accommodation and food between 0.16 and 0.18. Likewise, the second lowest LQ also consistently occurred in the transportation and warehousing sector from 2010-2015 with LQ ranging from 0.18 to 0.20.

b. *Analysis of DLQ (Dinamic Location Quotient)*

Dynamic Location Quotient analysis is a comparison of growth rate of a sector / industry in a region towards the growth rate of a sector / industry nationally. In fact, DLQ is almost the same as LQ, but the emphasis of DLQ is on the growth rate based on GRDP. So the analysis used the data of the economic growth rate of Tuban Regency and the data of East Java Province's economic growth rate in 2011-2015 over constant rate according to business field in year 2010 as basic year. Seen from these comparisons, there are several possible DLQ values as follows:

- DLQ > 1 means that sector i could be expected to become the source sector in the future
- DLQ = 1 means that the growth rate of sector i in Tuban Regency has the same amount with the sector i in East Java Province
- DLQ < 1 means that sector i is the least expected to become the source sector in the future

The results of Tuban DLQ analysis in 2011-2015 in average show that out of 17 business fields there are only 4 source sectors in the future, namely: 1) the mining sector; 2) the sector of water supply, waste management, waste and recycling; 3) the service company sector; 4) the transportation and warehousing sector. Other service sectors have results of DLQ = 1.00 means that the development potential of other service sectors in Tuban Regency is comparable to the development of the same sector in East Java Province, while other sectors are non-source sectors in the future. The results of DLQ each year show a shift in the business base in the future. This shows that economic sectors growth in Tuban Regency fluctuates so that sometimes in certain years a sector has the potential to become a source sector but in the following year or before it has non-source potential.

DLQ results above in average show the sectors that have the highest DLQ, include: 1) mining sector by 1.68; 2) the water supply sector, waste and recycling waste management by 1.34; and 3) the transportation and warehousing sector and the company's service sector by 1.02. Other service sectors have DLQ 1.00 results. While the sectors that have the lowest DLQ results even negative, are: 1) electricity

and gas procurement sector (-2.36); 2) the sector of providing accommodation and food (0.32) and 3) the construction sector (0.41).

The mining sector from 2011-2013 by 1.02-2.72 had the highest DLQ value while in 2014 the sector of water supply, waste management, waste and recycling was by 2.06 and in 2015 there were two sectors namely the real estate sector and the service company sector had the highest DLQ value by 1.38. When viewed from the lowest DLQ value from year to year in 2011-2012 and 2015, the electricity and gas procurement sector classified in (-9.90) - (-0.76) while in 2013-2014 the sector of providing accommodation and food classified in (-1.35) - (0.36).

2. Transformation of Economic Structure Analysis

   a. *Shift Share Analysis*

   Shift Share Analysis is used to analyze changes in the regional economic structure towards the higher economic structure of the administrative region as a comparison. For this purpose, this analysis uses three basic components related to each other:
   - National share component (Nij) or national growth, the amount of regional employment increase
   - Proportional shift component (Mij) or structural components (industrial mix), to measure the magnitude of the net regional shift caused by the composition of the industry / sector in the region concerned.
   - Differential shift component (Cij) often termed a locational, regional or competitive advantage component to measure the competitiveness of the sector in Tuban Regency compared to the same sector in East Java Province.

   The results of the shift share analysis on the labor in 2010-2015 in Tuban Regency, show: 1) the contribution of national share component has a positive effect on the employment in Tuban Regency by 38,368.08 workers against employment in East Java; 2) Proportional shift component has a negative effect which means the growth of employment in Tuban Regency lags behind -40,208.04 workers from East Java Province; 3) The effect of differential shift components has a positive effect which means that Tuban Regency has a competitive advantage so that the employment growth is faster than the provincial level by 95,093.97 workers. Total employment growth shows a positive number of 93,254 workers, which means that the growth of employment in Tuban Regency from 2010-2015 is relatively faster than the total growth of employment in East Java.

   The sectors that have the highest employment are: 1) the trade, restaurant and accommodation services sector by 59,551.00 workers; 2) The construction sector by 55,628.00 workers; 3) Community, social and individual services sector by 55,453.00 workers. While the business fields that have the lowest employment growth are: 1) Agriculture, plantation, forestry, hunting and fisheries sectors; 2) Mining sector; 3) Transportation, warehousing and communication sectors. Each has a growth of -52,353.00 workers, -37,544.00 workers and -25,516.00 workers.

   b. *Shift Share Analysis Modified by Esteban Maquillas*

   Shift Share Analysis modified by Esteban Maquillas is used to solve the problem of the effect of allocation and specialization that do not yet exist in the classic Shift Share analysis. Shift Share Modified by Esteban Maquillas analysis on competitive advantage (Cij) is divided into two components, namely competitive advantage (C'ij) and allocation influence component (Aij). While for National share component (Nij), Proportional shift component (Mij) and total growth (Dij), the results are the same as the classic Shift Share. The influence of allocations can be seen from two parts, namely the level of specialization of the sector i in Tuban Regency multiplied by the

competitive advantage in Tuban Regency. The results of the Esteban Marquillas Shift Share analysis on the Tuban Regency employment in 2010-2015 showed the comparative advantage of labor (C'ij) of 952,987.70 workers while the specialization allocation (Aij) was negative -857,893.74 workers. The results of Esteban Marquillas' Shift Share analysis show some of the sector possibilities as follows:

- Sectors that have competitive advantages and specialization levels are two sectors, namely: trade, restaurants and accommodation services which have comparative advantages (C'ij) of 16,256.96 workers and specialization allocation (Aij) of 13,383.81 employment, social and service sectors and individuals have a comparative advantage (C'ij) of 4,999.91 workers and specialization allocation (Aij) of 31,796.11 workers.

- Sectors that have competitive advantages and do not have a specialization level are 4 sectors, namely: 1) the mining sector has a competitive advantage (C'ij) of 92,916.01 workers while the specialization (Aij) is -125,821.64 workers; 2) the electricity, gas and drinking water sector has a competitive advantage (C'ij) of 16,150.81 workers while the specialization (Aij) allocation is -16,992.67 workers; 3) the transportation, warehousing and communication sector has a competitive advantage (C'ij) of 23,289.63 workforce while the specialization (Aij) allocation is -39,093.45 workers; 4) the financial institutions, real estate, leasing and business services sector has a competitive advantage (C'ij) of 877,386.65 workers while the special allocation (Aij) is -859,334.60 workers.

- Sectors that have a specialization level and do not have competitiveness are 3 sectors, namely: 1) the agriculture, plantation, forestry, hunting and fisheries sectors have a special allocation (Aij) of 52,186.62 workers while competitive advantage (C'ij) in on 3,116.71 workers; 2) the manufacturing industry sector has a special allocation (Aij) of 16,862.32 workers while competitive advantage (Cij) is -362.80 workers; 3) the construction sector has a specialization allocation (Aij) of 69,119.76 workers while competitive advantage (C'ij) is on -74,532.76 workers.

Discussion

1. Competitive Sector

The results of the LQ (Location Quotient) analysis show that there are 5 source business sectors out of 17 existing sectors, namely: 1) the mining and mining sector; 2) agriculture, forestry and fisheries sector; 3) construction sector; 4) the manufacturing industry sector and 5) the government administration, defense and social security sectors. The source sector from 2010-2015 has a multiplayer base of 1.31, which means that source sector is able to influence the formation of GDP at 1.31 times the total output generated by this source sector. This is because the source sector has abundant output so that it can be exported outside Tuban. By doing that, the GRDP of Tuban Regency would be increased.

This is in accordance with the economic base theory of Tiebout (Tarigan, 2014) which states that in an economy in the long run only the export sector that is able to drive economic growth and according to Richardson's export base theory (Tarigan, 2014) which states that only an increase in exports can push increase in regions due to an increase in other sectors tied to regional income. In addition, free trade between regions encourages each region to move in sectors that have comparative advantages. Comparative advantage is an economic activity which favor comparisons for regional development (Sarwedi, 2014: 12; Tarigan, 2014: 80). Samuelson (Tarigan, 2014: 46) also explained that each region must have a sector that has a competitive advantage to

be developed quickly and synergized with other sectors so that the growth of one sector will encourage the growth of other sectors, eventually will be able to drive the economy to grow rapidly.

The results of DLQ (Dinamic Location Quotient) show that there will be 4 source sectors on the future, namely: 1) mining sector; 2) water supply, waste management, waste and recycling sectors; 3) the service company sector; and 4) transportation and warehousing sectors. This shows that the source sector can change.

The results of the LQ and DLQ analysis portray that in the sector that remains as the source sector in the future is the mining sector. This is because Tuban Regency has considerable mining and extraction potential from petroleum products. In addition to petroleum, mining materials produced in Tuban Regency in 2014 are: 1) 357,576 tons of Quartz sand spread in several places, namely Bancar Subdistrict, Tambakboyo District, Jatirogo District, and Singgahan District. Quartz sand is used as a material for making glass and other production materials; 2) 3,440.14 tons of Clay is scattered in several locations including Jenu Subdistrict, Tambakboyo District and Kerek District. This clay is used as raw material for cement; 3) 14,687.91 tons of Limestone spread in Kerek District, Merakurak District, Tambakboyo District, Palang District, Sematan Kematan and Montong District. Limestone is used as raw material for cement and paint-making materials; 4) 198 tons of Phosphate is found in Kerek Subdistrict, Merakurak Subdistrict and Bangilan Subdistrict marketed outside the region and exported for fertilizer production; 5) 130,576 tons of Ballday; and 6) in 2013 dolomite had a production of 4,130 tons.

The growth of the economy as a whole requires superior sectors that can be developed and have a positive impact on the growth and absorption of employment in the area. However, the development of the non-source sector must not be abandoned because it can lead to imbalanced of income. So development must be carried out in a balanced or sustainable manner so that it will not cause further widening income inequality. This is because there are many cases of higher economic growth in the region in line with high inequality in the area.

2. Transformation of Economic Structure

The results of the analysis of the classic Shift Share and Shift Share by Esteban Marquillas in the employment in 2010-2015 shows that the trade, restaurant and accommodation services sector has the highest growth and the results of the analysis of the Shift Shareby Esteban Marquillas this sector has a level of specialization and competitive advantage. In addition to the trade sector, restaurants and accommodation services, the social, individual and social services sector has the third highest growth after the construction sector.

Classic Shift Share and Shift Share by Esteban Marquillas' analysis results show the change of employment from the primary sector, namely agriculture, plantation, forestry, hunting and fisheries to the tertiary sector / services, namely the trade sector, restaurants and accommodation services and the social, individual and social services sector.

This is in accordance with the model of labor surplus by Arthur Lewis (Su'nan, 2015: 78) that in developing countries there will be a shift of labor from the traditional sector to the modern sector because the agricultural sector traditionally has a surplus of labor. The results of the change of labor led to output growth and employment growth in the modern sector. This is also matched with the labor situation in Tuban which shows that the employment growth of the agricultural sector is declining and followed by an increase in employment from the non-agricultural sector which causes economic growth to rise and mark an increase of GRDP of Tuban Regency.

Ranis-Fei's labor economic development theory (Jhingan, 1996) also explains that in economic development there is an allocation of labor from the agricultural sector because labor in the agricultural sector has zero contribution to the industrial sector so that the workforce is more productive. This also happened in Tuban Regency where the agriculture, plantation, forestry, hunting and fisheries sectors had a labor growth of -2.66%. The labor growth of the agriculture, plantation, forestry, hunting and fisheries sectors is lower than the growth of the labor force in Tuban Regency, which is 0.25%

Chenery and Syrquin stated that transformation in economic structure are divided into three categories, they are: transformation in economic structures that are seen as changes in the accumulation process, transformation in economic structures that are seen as changes in the process of allocation of resources, and transformation in economic structures that are seen as changes in demographic and distribution processes. The accumulation process includes activities for stock establishment, government savings, and activities to provide education to the community. The resource allocation process is the structure of domestic demand (public expenditure on domestic production), production structure and trade structure. Demographic and distribution processes include changes in the allocation of employment in various sectors, urbanization, birth and death rates and income distribution (Sunan, 2015: 76). These changes in the allocation of employment from various sectors in Tuban, resulted on the trade, restaurants and accommodation services, construction sector, social services, social and individual sectors, financial institutions, real estate, business rental and service sectors, and manufacturing industry sectors having positive workforce growth.

4. Conclusion

The results of the competitive sectors identification in Tuban Regency in 2010-2015 are:
1. The results of the LQ (Location Quotient) analysis show that the source sector in Tuban Regency in 2010-2015 is the mining sector, the agriculture, forestry and fisheries sector, the construction sector, the manufacturing industry sector and the government administration and social security sector.
2. The results of the DLQ (Dinamic Location Quotient) analysis show that there are 4 source sectors in the future, namely: mining sector, water supply sector, waste management, waste and recycling sector, the service and transportation and warehousing sectors.

This shows that the mining sector is the source sector both in the present and in the future.

The results of the analysis of transformation in the economic structure of Tuban Regency in 2010-2015 are:
1. The results of the classic Shift Share analysis show that the trading sector of restaurants and accommodation services has the highest employment growth in Tuban Regency followed by the construction sector and the social, individual and social service sectors.
2. Shift Share modified by Esteban Marquillas analysis results show there are 2 sectors that have competitive advantages and specialization levels, namely: 1) the trade, restaurants and accommodation service sector and 2) social services and individuals, while other sectors either have competitive advantage or specialization, and neither both.

This shows that there have been changes in the economic structure from the agriculture, plantation, forestry, hunting and fisheries sectors to the trade, restaurant and accommodation services sectors in accordance with the theories of Arthur Lewis's labor surplus model, Rannis-Fei's labor development economic theory and Chenery's development pattern theory.

5. Suggestions

The Tuban District Government needs a strategy to improve the performance of the source sector in order to increase the economic growth of Tuban Regency. But the non-source sector must also be brought up to discussions so that economic activities in the Regency can run optimally.

The Tuban District Government must focus on productive sectors in absorbing employment to reduce unemployment in Tuban Regency and increase GRDP.

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Evaluation of Program Innovation in Village Credit Institution (Case Study of "Wariga: Investment As Family Heritage" Program of Bedulu Village Credit Institution in Gianyar Regency, Bali)

Ida Ayu Nyoman Saskara[1], A. A. I. N. Marhaeni[2], Ni Nyoman Yuliarmi[3]
[1,2]*Faculty of Economics and Business, Udayana University, Denpasar, Bali*

Abstract

Village credit institution or Lembaga Perkreditan Desa (LPD) is a financial institution formed by Desa Pakraman (custom village) in Bali Province, aiming to improve the economy of rural communities. LPD generally provide savings and credit services, but some LPD have been innovating with programs that meet the needs of the community. One of them is Bedulu LPD which makes WARIGA (investment as family heritage) financial services program. As we know, the community in Bali is predominantly Hindu, and it is a must to carry out the Ngaben ceremony for his deceased family. Ngaben ceremony costs fairly high, therefore Bedulu LPD cooperate with insurance service providers, to provide compensation of Rp.7 million Rupiah for each person of family when there are members of his family who died. The obligation of each family is to make a deposit of Rp.2 million rupiah per family once time.

In practice, people's interest in the WARIGA program is very high, but there are still obstacles that occur. Such a failure to claim to the insurance company, so that the LPD must bear the payment of customer claims. So this research was conducted to evaluate WARIGA innovation program on LPD Bedulu, and to know the appropriate program development strategy. Analytical techniques used are SWOT analysis (Strength, Weakness, Opportunity, and Threat).

The results of the analysis show that WARIGA program is very helpful to the people of Bali, and needs to be maintained continuously with growth and build strategies that include: (1) expansion of WARIGA program promotion; (2) screening of potential victims in accordance with the requirements of an insurance company to prevent claims from failing; (3) extension of credit for additional capital from WARIGA program so as to increase LPD's profit.

Key words: rural economics, SWOT analysis, village credit institution (Bedulu LPD), WARIGA program

1. Introduction

Village Credit Institution (LPD) in Bali are the best in the Fund and Rural Credit Institution (LDKP) system in Indonesia, although there is strong competition at the local level from the many formal and informal institutions (Bedson, 2009). The Village Credit Institution (LPD) is a financial institution formed by the Custom Village in the Bali Province.

The LPD is seen as a profitable entity, which depends on savings and deposits as a source of funding. The LPD has several objectives (Mantra, 1998), namely as follows: First, it encourages economic development of rural communities through targeted savings and effective capital distribution. Second, eradicating debt bondage systems, dark pledges, etc. that can be compared to that in rural areas. Third, creating equity and employment opportunities for rural residents. Fourth, creating purchasing power and expediting payment

and exchange traffic in the village. The operational foundation of the LPD based on the awig- awig (custom norms) of traditional villages, which promotes family ties and the spirit of mutual cooperation between custom villagers.

The background to the need for Microfinance Institution (MFI) is; First, as an instrument to overcome poverty. The poor generally have micro-scale businesses. Second, MFIs are needed because they are one of the instruments for developing microfinance markets. Pragmatically, the microfinance market is a financial aspect of all economic processes in the micro segment which includes everything related to savings and business credit (Pantoro, 2008). Siu (2001) explained that the Micro Finance Institution, which in Indonesia is called a Microfinance Institution is an institution that provides financial services to the poor and low-income families (as well as their micro-scale business activities), enabling them to better manage their risks, achieve consistent consumption patterns, as well as developing its economic base). There are four factors that cause the growth of LPD in Bali to increase rapidly, namely:

1. The political will of the local government of Bali to provide credit to the community through the establishment of LPDs;
2. LPD is in accordance with and can meet the needs of Balinese people, especially in rural areas;
3. LPD operates only in traditional village areas with relatively small areas;
4. The LPD has been able to act as a financial institution as well as a bank because it is not only as a borrowing institution, but as a savings institution.

If we pay attention to the condition of the funds collected and the loans disbursed, it seems that in addition to maintaining the relationship with the awig-awig traditional villages, for the development of LPDs in the future, integrated management needs to be implemented that can maintain health and independence on an ongoing basis. With healthier, more stable and independent conditions, it is expected that public trust in LPDs can increase in the future so that LPDs can compete or synergize with other similar financial institutions.

In general, LPDs provide savings and credit services, but some LPDs have innovated with various programs that suit the needs of the community. One of them is Bedulu LPD which makes WARIGA financial services (Family Investment Heritage). As we know, the people in Bali are predominantly Hindus, and it is a must to carry out the Ngaben (cremation) ceremony for their deceased families. The Ngaben ceremony fee is high, therefore Bedulu LPD cooperates with insurance service providers, to provide compensation of Rp.7million for each family if a family member dies. The obligation of each family is to deposit funds amounting to Rp.2million per family card once.

In its implementation, the public interest in the WARIGA program in Bedulu LPD was very high, where during the first year 1,022 participants were registered. For almost two years, there were still obstacles to the implementation of the WARIGA program in Bedulu LPD. Such as a claim failure to an insurance service company, so that the LPD must bear the customer's claim payment. So this research was conducted to evaluate the WARIGA innovation program in Bedulu LPD, as well as to find out the appropriate program development strategies.

In determining the strategy, the company needs to pay attention to conditions both internal conditions and external conditions of the company. The step that must be done is to collect external and internal data (Antiningrum, 2003). The purpose of this study is to identify internal and external factors that influence the WARIGA program on Bedulu LPD. In addition, this study also aims to find out the appropriate strategies for the development of the WARIGA program.

2. Methods

This research is quantitative descriptive. The study population is the community (especially community leaders) in Bedulu Village including Bedulu LPD management and employees. The sample in this study was determined by purposive sampling as many as 50 respondents.

Data collection method was carried out by questionnaire, followed by data analysis techniques with SWOT analysis. SWOT Analysis An analysis of the environmental variables of a company or industry that can create strength, weakness, opportunity, and threat. SWOT analysis of the WARIGA program in Bedulu LPD consists of several stages. First, identify strategic factors. This first stage was carried out in the SWOT analysis by identifying the strategic factors of the WARIGA program in Bedulu LPD, both from the internal and external environment. Second, gives weighting to strategic factors. Weighting is given by the assessment team based on the level of importance of the influence of strategic factors on the success of the program. The total weighting value for all components of the strategic factors is 1.00 for the internal and external environment. Third, assessment of strategic factors. After weighting, then the assessment team provides an assessment of each strategic indicator using a Likert scale, where the assessment team is asked to give a value to each indicator of strategic factors by choosing one of 4 (four) tiered scales, namely: very good, with value 4; well, with a value of 3; less, with a value of 2; and very less, with a value of 1. Fourth, determining the range/interval. This range of values is needed to position the internal environment on strengths and weaknesses, as well as the external environment on opportunities and threats. To determine the interval used the following formula:

$$Interval = \frac{Range\ of\ weight}{Class}$$

$$= \frac{3}{4}$$

$$= 0{,}75$$

While the cut point calculation is as follows:

$$Cut\ Point = \frac{Sum\ of\ Value}{Class}$$

$$= \frac{4+3+2+1}{4}$$

$$= 2{,}5$$

So, if the value obtained is greater than 2.5 it is an opportunity and strength, whereas if the value obtained is less than 2.5 it is a threat and weakness. From the results of the calculation of the value interval, the results criteria are known as in Table 1 below.

Fifth, position the values obtained in internal and external matrix (IE) diagrams. The results of the score of each factor are entered into the internal and external matrix to determine the position of the WARIGA program on Bedulu LPD, after inputting can then be determined the appropriate development strategy according to the environmental conditions of Bedulu LPD.

Table 1. Criteria for Analysis Results

Score	Range of Score	Criteria	Intern	Extern
4	3.26 – 4.00	Very Good	Strength	Opportunity
3	2.51 – 3.25	Good	Strength	Opportunity
2	1.76 – 2.50	Bad	Weakness	Threat
1	1.00 – 1.75	Very Bad	Weakness	Threat

3. Results and Discussion

Identification of strategic factors as a determinant of the success of the WARIGA program in Bedulu LPD

The strategic factors identified to determine the success of the WARIGA program in Bedulu LPD consisting of internal and external strategic factors are presented in Table 2.

Table 2. Internal and External Factors Strategic Which Affect the Success of WARIGA Program on Bedulu LPD

No	Internal Factors Strategis	External Factors Strategis
1	LPD health conditions	Attitudes/interests of the community
2	Competency of LPD's management	Culture of local communities
3	Commitment of LPD's administrators	Economic conditions of the community
4	Service quality LPD's employee	Public education
5	Promotional support	Support from Custom Village
6	Competencies of LPD's employee	Collaboration with insurance companies
7	LPD's accounting control system	
8	LPD's facilities and infrastructure	

Table 2 shows that there are 8 (eight) internal strategic factors and 6 (six) external strategic factors identified that determine the success of the WARIGA program in Bedulu LPD. The internal strategic factor will be the strength or weakness of the company / industry concerned. If internal factors have a positive effect, it will become a strength, and if a negative effect will be a weakness. External strategic factors are opportunities or threats for companies/industries. If the negative effect will be a threat.

Evaluation and formulation of WARIGA program development strategies on Bedulu LPD

The formulation of the WARIGA program development strategy in Bedulu LPD begins with analyzing the internal and external conditions of the WARIGA program at Bedulu LPD based on a questionnaire distributed to respondents. The collected data was then analyzed by SWOT analysis.

The internal strategic factor analysis of the WARIGA program on Bedulu LPD was done by comparing respondents' assessments about the importance of internal strategic variables today compared to the future. The level of importance of current and future internal strategic variables is indicated by the score on the current and future weight and condition / state of internal strategic variables, as well as the score on the rating. Table 3 shows the WARIGA program's Internal Factor Analysis Summary (IFAS) at the current and future Bedulu LPDs. The weighted average value is categorized as strength if it is 2.50 <N ≤ 4.00 and is categorized as a weakness if it is worth 1.00 <N ≤ 2.50.

Table 3. Internal Factors Analysis Summary (IFAS) of the WARIGA Program on Bedulu LPD

		Present			Future		
		Weight	Rating	Weight-ed Score	Weight	Rating	Weight-ed Score
1	*2*	*3*	*4*	*5=3x4*	*6*	*7*	*8=6x7*
1	LPD health conditions	0.12	2.95	0.35	0.12	3.22	0.39
2	Competency of LPD's management	0.12	3.20	0.38	0.12	3.27	0.39
3	Commitment of LPD's administrators	0.13	3.08	0.40	0.13	3.42	0.44
4	Service quality LPD's employee	0.13	3.24	0.42	0.13	3.33	0.43
5	Promotional support	0.13	3.18	0.41	0.13	3.47	0.45
6	Competencies of LPD's employee	0.12	3.03	0.36	0.12	3.18	0.38
7	LPD's accounting control system	0.13	3.04	0.40	0.12	3.23	0.39
8	LPD's facilities and infrastructure	0.12	3.27	0.39	0.13	3.35	0.44
	Total	**1.00**	**24.99**	**3.12**	**1.00**	**26.47**	**3.31**

Based on the average weighted score of IFAS in Table 3, it can be seen that the WARIGA program's internal strategic factor in Bedulu LPD is currently valued at 3.12, which means that it is above 2.5 so that it is the strength of the WARIGA program in Bedulu LPD. All internal strategic indicators have a weighted score ranging from 0.35 to 0.42. LPD health condition indicators have the lowest value (0.35). This condition means that LPD health indicators are considered not good for the development of the WARIGA program in Bedulu LPD. This is in accordance with the reality that the health level of Bedulu LPD 2017 is quite healthy, not in a healthy position. Although at a glance in terms of facilities and infrastructure support, Bedulu LPD looks good, but it turns out that the overall health condition is considered to be quite healthy.

Future average weighted score of IFAS for all internal strategic factors is 3.31, which means greater than 2.5, which means strength. The IFAS value of the WARIGA program in Bedulu LPD is 3.31, which means it is greater than 2.5 so that it is a strength. Weighted score of IFAS WARIGA program on Bedulu LPD in the future is greater than the current weighted score of IFAS (3.31> 3.12). This shows that all internal WARIGA program internal indicators on Bedulu LPD have the potential to change to be stronger in the future.

Analysis of the external strategic factors of the WARIGA program at Bedulu LPD was done by comparing respondents' assessments about the importance of external strategic variables today compared to the future. The level of importance of current and future external strategic variables is indicated by the score on the current and future weight and condition / state of external strategic variables, as well as the score on the rating. Table 4 shows the WARIGA program's External Factor Analysis Summary (EFAS) at the current and future Bedulu LPDs. The weighted average value is categorized as an opportunity if it is 2.50 <N ≤ 4.00 and categorized as a threat if it is worth 1.00 <N ≤ 2.50.

Table 4. External Factors Analysis Summary (EFAS) of the WARIGA Program on Bedulu LPD

		Present			Future		
		Weight	Rating	Weighted Score	Weight	Rating	Weighted Score
1	*2*	*3*	*4*	*5=3x4*	*6*	*7*	*8=6x7*
1	Attitudes/interests of the community	0.17	3.21	0.55	0.17	3.27	0.56
2	Culture of local communities	0.17	3.02	0.51	0.17	3.15	0.54
3	Economic conditions of the community	0.16	2.75	0.44	0.16	2.98	0.48
4	Service quality LPD's employee	0.16	2.81	0.45	0.16	3.04	0.49
5	Public education	0.17	3.03	0.52	0.17	3.12	0.53
6	Collaboration with insurance companies	0.17	3.05	0.52	0.17	3.22	0.55
	Total	**1.00**	**17.87**	**2.98**	**1.00**	**18.78**	**3.13**

Based on the EFAS average weighted score in Table 4, it can be seen that the strategic external factor of the WARIGA program at Bedulu LPD is currently valued at 2.98, which means that over 2.5 is an opportunity for the WARIGA program in Bedulu LPD. All external strategic indicators have a weighted score ranging from 0.44 to 0.55. Indicators of the economic condition of the community have the lowest value (0.44). This condition means that the economy of the community in the village of Bedulu and its surroundings is perceived as not good by the respondents.

The future EFAS average weighted score for all external strategic factors is 3.13, which means greater than 2.5 which means strength. The EFAS value of the WARIGA program in Bedulu LPD is 3.13, which means it is greater than 2.5 so that it is a strength. The weighted score of EFAS for the WARIGA program on Bedulu LPD in the future is greater than the current weighted score of EFAS (3.13> 2.98). This shows that all of the WARIGA program's external strategic indicators in Bedulu LPD in the future have greater opportunities than at present.

Determining Strategic Position and Formulation

The results of internal and external analysis (IFAS and EFAS) are then incorporated into the internal-external matrix or often called the IE matrix. In the IE matrix there are nine cells (Figure 1), with the following strategy implementation: (1) the growth and build strategy is applied if the position of the company/institution is in cells I, II, and IV; (2) a hold and maintain strategy is applied if the position of the company/institution is in cells III, V, and VII; and (3) harvest and diverst strategies are applied if companies/institutions are in cells VI, VIII, and IX.

According to David (2006) in his book Strategic Management, strategic positions in cells I, II or IV are most appropriate for implementing intensive strategies (market penetration, market development and product development) or integration (backward integration, forward integration and horizontal integration). The right strategy applied by Bedulu LPD in relation to developing the WARIGA program is an intensive strategy, namely

a strategy that requires an intensive effort to improve the competitive position of Bedulu LPD, namely: (1) Market penetration strategy, namely a strategy to seek wider market share for WARIGA products through more active marketing and promotion efforts; (2) screening of prospective victims according to the requirements of the insurance service company to prevent claims failing; (3) expansion of credit for additional capital from the WARIGA program so as to increase profits.
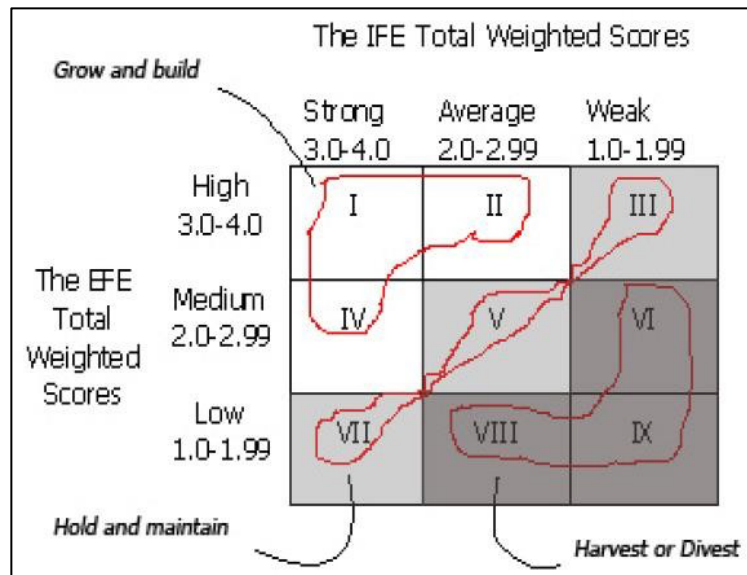

Figure 1. IFAS - EFAS Matrix (David, 2004)

Based on the Growth and Build Strategy that will be applied by Bedulu LPD as a microfinance institution based on local wisdom, whose existence is only in Bali, in the future it will be the main funding source for various activities of rural communities, especially for traditional activities. Considering that LPDs are established by traditional villages, the WARIGA program which also contributes to traditional villages when claims occur is a tangible form of LPD feedback to support traditional villages and preserve Bali's local wisdom.

4. Conclusion and Implication

Based on the previous discussion as a result of the evaluation of the WARIGA program on Bedulu LPD, it is known that there are internal and external strategic factors that influence the success of the WARIGA program. Internal strategic factors will be the strength or weakness of the WARIGA program in Bedulu LPD. If internal environmental factors have a positive effect it will be a strength, and if a negative effect will be a weakness. The internal strategic factors of the WARIGA program in the identified Bedulu LPD consist of: LPD health conditions; competency of LPD's management; commitment of LPD's administrators; service quality LPD's employee; promotional support; competencies of LPD's employee; LPD's accounting control system; LPD's facilities and infrastructure.

Furthermore, it is also known that there are external strategic factors which constitute opportunities or threats to the WARIGA program on Bedulu LPD. If a positive effect will be an opportunity, and if a negative effect will be a threat. The external strategy factor of the WARIGA program on the identified Bedulu LPD consists of: attitudes/interests of the community; culture of local communities; economic conditions of the community; public education; support from Custom Village; collaboration with insurance companies.

The strategic position of the WARIGA program in Bedulu LPD currently has strong competitiveness and medium category attractiveness. The best strategy to be implemented so that later the WARIGA program on Bedulu LPD has a strong appeal is the growth and build strategy.

The results of the analysis show that the WARIGA program is very helpful for the Balinese people, and its sustainability needs to be maintained with a growth and build strategy which includes: (1) expansion of program promotion; (2) screening of prospective victims according to the requirements of the insurance service company to prevent claims failing; (3) expansion of credit for additional capital from the WARIGA program so as to increase profits.

Based on previous pemasanasan, it can be suggested to Bedulu LPD in the future to make the WARIGA program have a strong appeal and strong competitiveness are as follows: (1) the strategy of market penetration can be done by Bedulu LPD with a ball picking system to prospective participants, not only by waiting for program participants who come to register; (2) an increase in the number of WARIGA program participants can be done through collaboration with traditional institutions in each banjar (sub-village) by giving a fee for its performance; (3) by giving bonuses in the form of goods/merchandise to program participants who can invite more people to join the WARIGA program.

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