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FREE TRADE AREA AGREEMENT OF ASEAN ECONOMICS AND RICE TRADING POLICY IN INDONESIA

Wisnujati Nugrahini Susantinah*, Student
University of Brawijaya, Malang, Indonesia

Nuhfil Hanani, Lecturer
Wijaya Kusuma University, Indonesia

Setiawan Budi, Syafrial, Lecturers
University of Brawijaya, Malang, Indonesia

*E-mail: wisnujatinugrahini@gmail.com

ABSTRACT

Indonesia as a country with the highest consumption of rice in the world (Ministry of Agriculture, 2012) but has not been able to meet domestic production, ironically reduced agricultural land is converted to non-agricultural land, poor inputs, unsustainable credit granting, low technology leads to low production, so the policy alternatives are importing, on the other hand, Indonesia is a member of the ASEAN economic community (MEA) in the hope of being able to meet the rice production because the ASEAN MEA commitment becomes a production base and can compete with other countries in the world by launching single market. To anticipate the existence of MEA, and the anticipation of the import of rice of world rice exporter countries, it is necessary to analyze the impact of MEA existence, and anticipation of rice imports of world rice exporter countries by using policy simulation. The results showed that rice crops tendency in Indonesia from year to year decreased, so that rice production decreased, but if Indonesia reduces rice imports it can increase productivity so that the price decreases and demand for price increases. As a result of the agreement of MEA Indonesia imported to Thailand and Vietnam, but Indonesia prefers import from Vietnam country as import country because Vietnamese rice price is cheaper. The removal of import restrictions from Vietnam and Thailand has lowered rice imports from Thailand and increased imports from Vietnam. The policy of decreasing imports from India and China resulted in the decline of rice from both countries and Thailand but increased rice imports from Vietnam.

KEY WORDS

ASEAN Economic Community, import, simulation, exporter, rice.

The world's rice market is the thin market and residual market, meaning that the rice traded on the world market is very small and the rest of the exporter's country's inventory) so that the world rice market is uncertain,

Paddy production in Indonesia is cultivated on a small scale because rice farms in Indonesia are only available at 13.76 million hectares, with a total of 26.13 million farm households to feed the entire population of Indonesia. In addition, rice production in Indonesia of 5.01 tons per hectare is actually still low, although higher than Thailand (4.5 tons) and Vietnam (3.7 tons), Indonesia faces supply-side problems, meaning that rice production in Indonesia is relatively small compared to the consumption of its population, consumption of Indonesia's rice is highest compared with the population of other countries in the world. therefore the country has an alternative policy of import from other countries both from ASEAN and exporting countries of the world

AEC is the economic integration as planned in ASEAN Vision 2020 (Wangke, 2014: 6) ASEAN Vision 2020, is an effort to create a stable, prosperous and highly competitive ASEAN economy. goods, services, investments, economic development of skilled labor and

poverty reduction and socio-economic disparities by 2020 "(Wangke, 2014: 6). MEA is a free trade area (FTA) which is expected to become a production base and become a single market, of course, this agreement will have consequences for Indonesia because Indonesia's capability is not the same as other ASEAN countries such as cultivated land, inputs, the technology used and the price set at harvest time.

With the MEA as a production base, is expected to meet the demand of the ASEAN community at a relatively cheap price.

Research purposes:

- To analyze the impact of the ASEAN Economic Community (MEA) Agreement;
- To analyze the impact of decreasing rice import from the world rice exporter countries.

METHODS OF RESEARCH

Kinds and Data Sources. The data used in this study is secondary data based on time series (time series), from 1980 to 2013 period. While the data collected from various sources are: Food and Agriculture Organization (FAO); Central Bureau of Statistics (BPS); Bank Indonesia; Ministry of Agriculture; Public company BULOG; International Food Policy Research Institute (IFPRI); Commodity and Trade (Comtrade).

The data used in this study are secondary time series data from 1980-2013. Secondary data were obtained from several sources such as Food and Agriculture Organization (FAO), UN Data, Central Bureau of Statistics (BPS), Bank Indonesia, Commodity and Trade (Comtrade), Ministry of Agriculture, and Directorate General of Food Crops.

The next step is to perform tabulation of data, analysis of several stages including model specification, model identification, model estimation, model validation from an econometric model, as for data forecasting using data from 2013 until 2033, and simulation with forwarding simulation type (ex- ante simulation). In this simulation, two simulations have simulated the performance of Indonesian rice, simulation of AEC impact and simulation of world rice trade policy.

The econometric model of rice commodity in this study is organized into 8 equations, consisting of 7 structural equations and 1 identity equation. The structural equation is a representation of the endogenous variables of exogenous variables that operationally rely on the sign and the magnitude of parameter estimation values according to the theory. A Flow of variable linkage can be seen in Figure 1.

In this study, the econometric model is divided into several blocks, among others: 1. Domestic rice market block, 2. ASEAN market block or AEC, and 3. World market block.

Block Domestic Rice Market. It consists of the identity equation of QIN, and the structural equation of APB, RB, DKPITA.

Rice production is a certain amount of rice obtained from the multiplication of Indonesian rice harvest area with maternal rice productivity mathematically the identity equation of Indonesian rice production as follows:

Production of Rice (QIN)

$$QIN = APB * RB \quad (1)$$

QIN = Indonesian Rice Production (000 Ton)

APB = Area of Rice Harvest Indonesia (ha)

RB = Rice Productivity Indonesia (Ton / ha)

Area of Rice Harvest Indonesia (APB)

$$APB = a_0 + a_1PB_t + a_2PPUK_t + a_3KUT_t + a_4PJAG_t + a_5APBL_{t-1} + u_1 \quad (2)$$

APB = Area of harvest (Thousand Ha)

PB_t = Year t rice price (US Dollar / Ton)

PPUK_t = Fertilizer Price (Rp / Kg)

KUT_t = Farming Credit (Million Rupiah)

PJAG_t = Corn Price (Rp / Kg)

APBL = Area of harvest previous year (Ha)

The Productivity of rice in Indonesia influenced by rice price (PB), harvested area (APB), the price of fertilizer (PPUK) and rice productivity of Indonesia the previous year (RBL), is formulated as follows:

The Productivity of Rice Indonesia (RB)

$$RB = b_0 + b_1PB + b_2APB + b_3PPUK + b_4RBL_{t-1} + u_2 \quad (3)$$

RB = Productivity In Year t (Ton / Ha)
 PB = Indonesian rice price (USD / Ton)
 PPUK = Price Fertilizer (Kg / Rp)
 RB_{t-1} = Productivity Previous Year

Rice Demand Per Capita (DKPITA)

$$DKPITA = c_0 + c_1PB_t + c_2Int + c_3DKPITAL_{t-1} + u_3 \quad (4)$$

DKPITA = Demand for rice per Capita (Ton / person)
 PB = Price of Rice (USD / Ton)
 DKPITAL = Rice demand of previous year (Ton / person)

ASEAN Market Block:

Import of Indonesian rice from Thailand (MTH)

$$MTH = d_0 + d_1QINTH + d_2PTH + d_3RTHH + d_4ERTH + d_5MTHL_{t-1} + u_4 \quad (5)$$

MTH = Import Rice from Thailand country (000 ton)
 QINTH = Indonesian Rice Production (000 ton)
 PTH = Rice Price from Thailand (USD / Ton)
 ERTH = Thailand Exchange Rate (Bath / USD)
 PW = World price of rice (USD / Ton)
 MTHL = Imported rice from Thailand last year (000 Ton)

Import of Indonesian Rice From Vietnam (MV)

$$MV = e_0 + e_1QINV + e_2PVT + e_3PW + e_4RVT + e_5ERV_T + e_6MVL_{t-1} + u_5 \quad (6)$$

QINV = Indonesian Rice Production (000 Ton)
 PVT = Rice Price from Vietnam (USD / Ton)
 ERVT = Vietnamese Exchange Rate (Dong / USD)
 PW = World price of rice (USD / Ton)
 RVT = Rice Trade Rice Vietnam
 MVL = Import of rice from Vietnam Country of previous year (000 Ton)

World Market Block. Based on Who country.co's information on the world's top ten rice exporting countries, it states that India, Pakistan is an exporter with exports of Pakistan of 3800,000 metric tons, China of 600 metric tons and India of 2200 metric tons.

Import of Indonesian Rice Originating from Country of India (MIND)

$$MIND = f_0 + f_1DKIND + f_2PIND + f_3RIND + f_4ERINDA + f_5MINDL_{t-1} + u_6 \quad (7)$$

MIND = Import rice from India (000 Ton)
 PIND = Price of rice from India (USD / ton)
 RIND = Rangansi Imports of rice from india
 ERINDA = Indian exchange rate (Rupee / USD)
 MINDL = Import of rice from India the previous year (000 Ton)

Import of Indonesian rice from China (MCH)

$$MCH = g_0 + g_1QIN + g_2DK + g_3PCH + g_4PW + g_5ERCH + g_6MCHL_{t-1} + u_7 \quad (8)$$

MCH = Imported rice from China (000 tons)
 QIN = Indonesian rice production (000 tons)
 DK = Indonesian rice demand (000 Ton)
 PCH = Rice price from China (USD / Ton)
 PW = World Rice Price (USD / Ton)
 ERCH = Chinese Exchange Rate (Yuan / USD)
 MCHL = Import of rice from China the previous year (000 Ton)

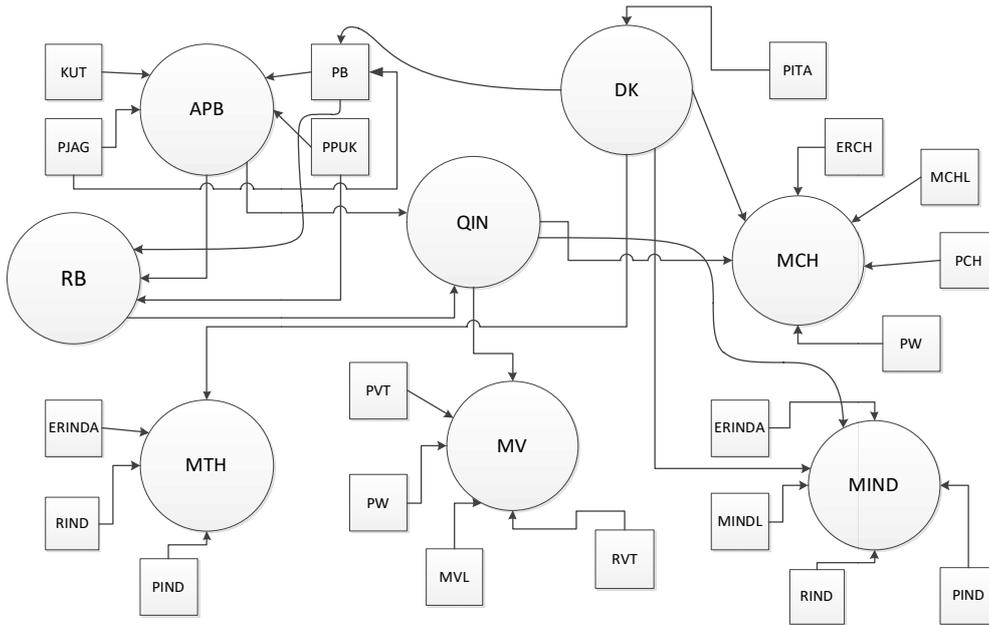


Figure 1 – Indonesian Rice Performance Study Model

RESULTS AND DISCUSSION

From the FAO data of 2016, it shows that Indonesia's rice price is ranked highest, or the most expensive compared to the price of rice from India and China.

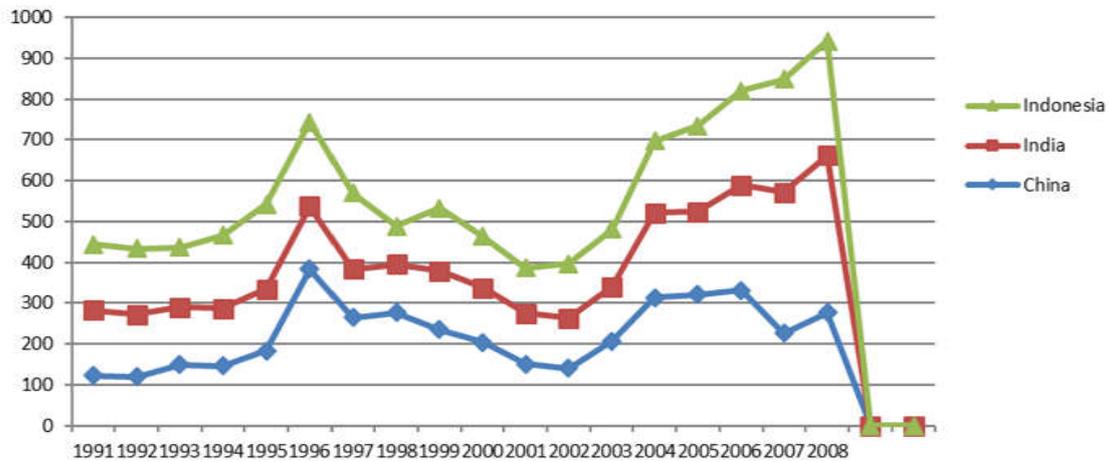


Figure 2 – Rice Price in to ASIA Countries (Source: Secondary Data, FAO 2016)

Figure 2 shows that Indonesia is still not able to compete with other ASIA countries, this is because Indonesia has not been able to determine the cheap price. This is because the cost of rice production is highest among exporting countries such as India and China. Production costs include agricultural land, agricultural technology means of production. So there needs to be more technology use in every line like start planting, weeding, and harvesting. Fertilizer subsidies, the provision of credit aid to farmers should be more appropriately calculated because so far the aid is unsustainable and sometimes subsidized fertilizers cannot be found in certain areas.

The determination of price policy will minimize the risk of rice farming because there is a guarantee of the falling of the selling price of grain under the cost of production. Falling selling prices usually occur during harvest time, in 2004 the determination of rice price in Indonesia based on production cost does not refer to international rice price (Sawit, 2011).

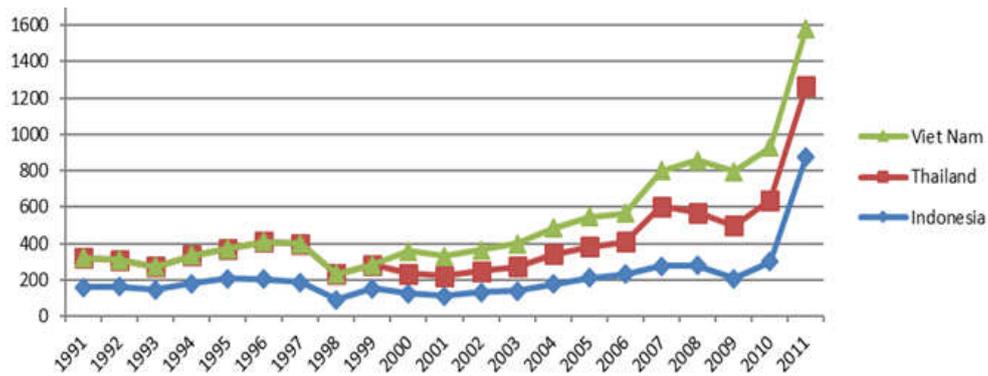


Figure 3 – Rice Production Costs (Source: Secondary Data, FAO 2016)

But in the ASEAN region, Indonesia has the cheapest price of rice, but the price at the producer level, the price of Indonesian rice is cheaper than the price of Vietnam and Thailand from 1991 to 2011, meaning that Indonesia is able to compete with the countries in the ASEAN region.

Policy Simulation on Elimination Restriction of import from Vietnam. Blueprint MEA is the base of rice and single market, import restriction is abolished, Indonesian rice imports come from ASEAN countries such as Thailand and Vietnam, the two countries are more developed countries in applying agricultural technology and able to streamline production costs, the data show that the price at the level of Indonesian rice producers is cheaper than Vietnam and Thailand but in the world rice trade both countries are able to compete with other countries in the world, it is necessary to examine the impact of decreasing rice imports from the two ASEAN countries, for clarity can be seen in the following table.

Table 1 – Policy Simulation on Elimination Restriction of import from Vietnam 1%

No	Variabel	Value		Change		Variable Discription
		Basic	SIM I	Unit	(%)	
1	APB	11692,3	11278	-414,3	3,67352	Area of Harvest Land (Ha)
2	RB	4,3528	4,397	0,0442	1,00523	Productivity (Ton / Hectare)
3	QIN	51430,5	50048,4	-1382,1	2,76153	Production (Ton)
4	PB	16,3201	16,1694	-0,1507	0,93201	Rice Price (US Dollar / Ton)
5	DK	33951,1	33963,4	12,3	0,03621	Indonesian Rice Demand (Ton)
6	DKPITA	0,00017	0,00017	0	0	Rice Demand Per Capita (Ton)
7	MTH	6219,1	6209,9	-9,2	0,14815	Import From Thailand (Ton)
8	MV	3288,8	3336,2	47,4	1,42	Import From Vietnam (Ton)
9	MCH	1699,2	1964,8	265,6	56,76	Import From China (Ton)
10	MIND	2860,6	2921,5	60,9	2,09	Import From India (Ton)

The policy simulation results show that if rice imports from Vietnam and Thailand are reduced by 1 percent, then rice productivity will increase by 0.44 or 1 percent, indicating that if Indonesia reduces imports from Thailand and Vietnam then Indonesia will be able to increase productivity rice in Indonesia, rice productivity is supported by fertilizer price (PPUK), rice price (PB) and rice harvest area (APB). Indonesia's rice producers are still dominated by Java Island, around 56 percent of which are produced by Sumatra Island (22%), Sulawesi (10%), Kalimantan (5%) and other islands (7%), from simulation results this policy requires the effort to print new rice fields both on Java island and outside Java Island. The existence of paddy fields is not only able to support food security, but also to maintain the production system, to maintain the environment and the inheritance of cultural values. (Efendi Pasandaran, 2006)

In Indonesia, there is a decrease in rice harvest utilization, but also land conversion in watersheds, whereas the conversion of land around the watershed will disrupt the hydrological balance that will affect water availability throughout the year. Conversion of paddy fields occurs due to the scarcity of land and water resources, the dynamics of development and the increase of population.

In fact, the problem of resource scarcity has long existed, marked by the limit to grow by the Club of Rome (Meadow 1972), and the signal of a green revolution for food fulfillment in 1960, meaning that the government has seen the phenomenon of rice scarcity in Indonesia and power in general world.

Watershed (DAS) is very important because it will create a system of irrigated rice fields, multifunctional systems, namely the function of the park is to support food production, land, water, cultivation, and the existence of community institutions, the second function is the function of biophysical conservation and maintenance irrigation and paddy field maintenance, if irrigation and rice fields are maintained then the function of conservation will run well, the third function is the function of cultural inheritance, the function of cultural inheritance is to inherit the culture of mutual assistance to the grandchildren so as to emerging social capital and local wisdom, the above description then Indonesia needs to reduce rice imports from Vietnam and Thailand, and increase rice productivity in Indonesia. Indonesia's rice imports increased from Vietnam to 1.42 percent.

With the removal of rice import restrictions from Vietnam, Indonesia reduced imports from Thailand but instead increased imports from the world, imports to India increased to 2.09 percent but imports from China increased to 56.76 percent.

To strengthen the analysis, it is necessary to predict the import of Indonesian rice from Vietnam and Thailand. Data from FAO Import Indonesia rice is mostly from two countries in ASEAN, namely Vietnam and Thailand. From 1980 to 1988 imports from both countries were relatively similar in quantity, but in 1989 Indonesia imported more from Vietnam, this can be seen in the following graph.

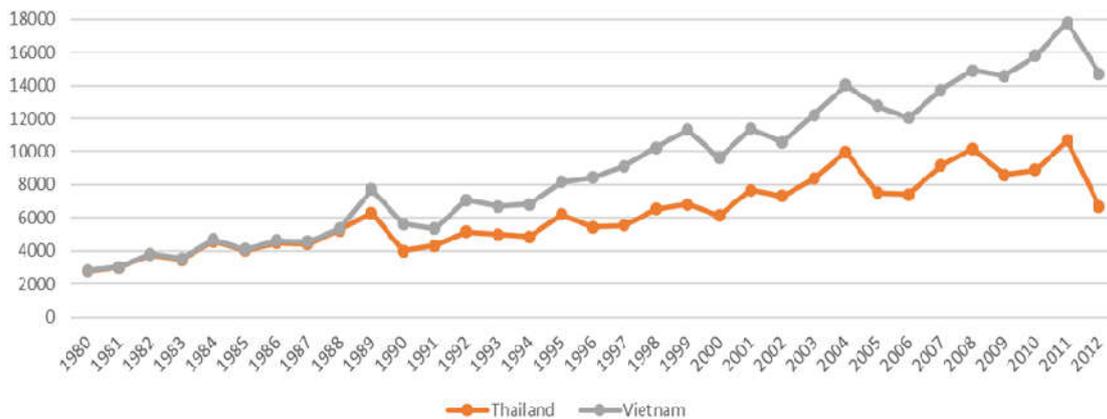


Figure 4 – Rice Import in Indonesia (Source: FAO)

In the simulation of policy resulted from the impact of rice import decline from Thailand and Vietnam, Data from FAO Import of Indonesian rice came mostly from two countries in ASEAN, namely Vietnam and Thailand. From 1980 to 1988 imports from both countries were relatively the same in quantity, but in 1989 Indonesia imported more from Vietnam.

Indonesia imports more rice from Vietnam because Vietnam's rice price is cheaper than Thailand, but the world's rice market is a thin market, as stated by (Sawit, 2008, Tabor et al 2002) residual market so that there must be serious efforts from the Indonesian state to strengthen national food security.

Simulation of Policy Restriction of import from Thailand. The import of Indonesian rice comes from ASEAN countries, namely from Thailand and Vietnam, the two countries are more advanced countries in applying agricultural technology and are able to streamline production costs, the data shows that the price at the level of Indonesian rice producers is cheaper compared to Vietnam and Thailand but in the world rice trade the two countries are able to compete with other countries in the world, it is necessary to examine the impact of the decrease of rice imports from the two ASEAN countries, for clarity can be seen in table 2 below.

Table 2 – Policy Simulation on Elimination Restriction of import from Thailand 1%

No	Variable	Value		Change		Variable Discretion
		Basic	SIM I	Unit	(%)	
1	APB	11692,3	11278	-414,3	-3,67352	Area of Harvest Land (Ha)
2	RB	4,3528	4,397	0,0442	1,00523	Productivity (Ton / Hectare)
3	QIN	51430,5	50048,4	-1382,1	-2,76153	Production (Ton)
4	PB	16,3201	16,1694	-0,1507	-0,93201	Rice Price (US Dollar / Ton)
5	DK	33951,1	33963,4	12,3	0,03621	Indonesian Rice Demand (Ton)
6	DKPITA	0,00017	0,00017	0	0	Rice Demand Per Capita (Ton)
7	MTH	6219,1	6209,9	-9,2	-0,14815	Import From Thailand (Ton)
8	MV	3314.2	3336.2	22	0,66	Import From Vietnam (Ton)
9	MCH	1699.2	1964.8	265.6	56.76	Import From China (Ton)
10	MIND	2860.6	2921.5	61	2.09	Import From India (Ton)

The simulation of the policy of abolishing import restriction from Thailand indicates that the area of rice harvest still decreased by 414.3 ha or -3.67352, but productivity increased, because the decreasing of harvested area will decrease production, but the price of rice also decreased, and demand rice increased, the impact of removing import restrictions from Thailand turned imports from Thailand down 0.15 percent, and imports from China rose to 56.76 percent. while imports rose from Vietnam and India.

Simulation of Price Policy of Indonesia is equal to Vietnam Price. Indonesia's rice imports more than Vietnam, because the price of cheap rice compared with other neighboring countries namely Thailand, another thing is the distance of the country of Vietnam is not too far with the state of Indonesia.

With the agreement of the ASEAN Economic Community where there is a single price then of course. the price of Indonesian rice should be equal to the price of Vietnamese rice. In this study simulated the policy if the price of Indonesian rice (PB) equal to the price of Vietnamese rice, the result of policy simulation as in table 3 below.

Table 3 – Price Policy Simulation of Indonesia equal to Vietnam Price

No	Variable	Value		Change		Variable Discription
		Basic	SIM 2	Unit	(%)	
1	APB	11692,3	11278	-414,3	-3,67352	Area of Harvest Land (Ha)
2	RB	4,3528	4,397	0,0442	1,00523	Productivity (Ton / Hectare)
3	QIN	51430,5	50048,4	-1382,1	-2,76153	Production (Ton)
4	PB	16,3201	295.5	-162,9	-55,13	Rice Price (US Dollar / Ton)
5	DK	33951,1	33963,4	12,3	0,03621	Indonesian Rice Demand (Ton)
6	DKPITA	0,00017	0,00017	0	0	Rice Demand Per Capita (Ton)
7	MTH	6219,1	6209,9	-9,2	-0,14815	Import From Thailand (Ton)
8	MV	3314.2	3336.2	22	0,66	Import From Vietnam (Ton)
9	MCH	1699.2	1964.8	265,6	13.51	Import From China (Ton)
10	MIND	2860.6	2921.5	61	2.09	Import From India (Ton)

The facts of this policy simulation are that rice production has declined due to decreased agricultural land, which is 1,328 or 2.76 percent, it is strongly affirmed that agricultural land is very influential on production, but with increasing productivity and decreasing import price of rice has decreased and demand rice increased.

In ASEAN trade, imported rice from Vietnam has increased, imports from Thailand have decreased, import decline from Thailand has made Indonesia increase imports from other countries, namely India and China, from China has increased up to 13.51 percent and increased import from India.

Simulation of Decreasing Policy of Import of Rice from China and India 1%. With the existence of the ASEAN Economic Community (MEA) is expected to be able to meet the needs of Indonesian production and imports within the ASEAN countries, it is necessary to simulate the policy of Decrease Import Rice Indonesia From China, and India 1 percent, while the results can be seen in table 4 below.

Table 4 – Policy Simulation of Decreasing Rice Import from China and India

No	Variable	Value		Change		Variable Discription
		Basic	SIM 3	Unit	(%)	
1	APB	11692,3	11278	-414,3	-3,67352	Area of Harvest Land (Ha)
2	RB	4,3528	4,397	0,0442	1,00523	Productivity (Ton / Hectare)
3	QIN	51430,5	50048,4	-1382,1	-2,76153	Production (Ton)
4	PB	16,3201	16,1694	-0,1507	-0,93201	Rice Price (US Dollar / Ton)
5	DK	33951,1	33963,4	12,3	0,03621	Indonesian Rice Demand (Ton)
6	DKPITA	0,00017	0,00017	0	0	Rice Demand Per Capita (Ton)
7	MTH	6219,1	6209,9	-9,2	-0,14815	Import From Thailand (Ton)
8	MV	3314.2	3336.2	22	0,66	Import From Vietnam (Ton)
9	MCH	1699.2	-3929.6	-2.230,4	-56.76	Import From China (Ton)
10	MIND	2860.6	-5843.0	-2.983	-51.05	Import From India (Ton)

The decline in imports of India (MIND) and China (MCH) by 1 percent caused a decline in the area of rice harvest (APB), ie the area of rice harvest (APB) decreased by 414.3 hectares per year or 3.67 percent, is a threat to the sustainability of food security, especially in Indonesia, because of reduced harvested land for various reasons permanently, or permanently, the converted land will not return to wetland again. The decline in rice harvesting area of 414.3 hectares indicates that the rice harvest area in Indonesia (APB) will decrease although the import of rice in the world rice exporting country decreases, but productivity increases to 0.04, although small still indicates that if there is decrease of import from country China (MCH) and India (MIND) will be able to increase productivity, but in general the production of rice (QIN) in Indonesia has decreased by 1,382 tons per year due to the decreasing land area of 414.3 hectares, the decreasing of rice production (QIN) (PB) also declined 0.2 US dollars, although the decline is relatively small but the decline in imports from China (MCH) and India (MIND) by 1 percent will encourage farmers to try to increase productivity (RB) and price of rice (PB) down. Although production decreased, then rice price (PB) also fell, triggering demand for rice (DK) rose to 12.3 tons, but demand per capita (DKPITA) did not change.

On the decline of Indonesian imports from China (MCH) and India (MIND) also triggered import decline from China by -56.76, India 51.05, from Thailand at 9.2 tons or 0.1 percent, but even increased imports from the country Vietnam by 22 tons or 0.65 percent

CONCLUSION

The impact of the ASEAN Economic Community (MEA) agreement is the abolition of rice import restrictions from Thailand and Vietnam.

Elimination of import restrictions of Thailand and Vietnam have resulted in decreasing of the harvested area (APB), increasing productivity (RB), decreasing rice price (PB) and increasing demand of rice (DK).

Single price affects the same price in ASEAN, the price of Indonesian rice is equal to the price of rice in Thailand and Vietnam. Policy simulation shows imports of rice from Thailand decline but imports from China and India.

To analyze the impact of decreasing rice imports from the world rice exporting countries, the results show that imports from China succeeded in decreasing to 56, 75 percent and import decline from India by 51.05 percent.

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ASIA'S BOARD DIVERSITY: DOES DIRECTOR DIVERSITY ON BOARD AFFECT FIRM PERFORMANCE?

Novitasari Devi

Economic and Business Faculty, University of Airlangga, Surabaya, Indonesia

E-mail: devi.novitasari-2016@feb.unair.ac.id

ABSTRACT

Some countries in Europe have passed laws that require every company to have a woman on the company's board of directors. Asia still does not have legislation as in some countries in Europe, so women's board office companies in Asia are small or nonexistent. In this study, board diversity was measured by 4 variables; these are gender diversity, age of director, director's educational background, and outside director, with board size and firm size as control variables, while firm performance is measured by using return on asset. The population in this study was companies included in Forbes Asia's 50 Best Big Public Companies of 2014-2016. The results show that board diversity does not affect the performance of the company.

KEY WORDS

Board diversity, director of diversity, corporate governance, firm performance.

The role of a woman becomes more common in the work environment, they play an important role in leadership positions throughout the company. More companies began training in introducing programs and workshops to promote gender diversity and equity. In 2005, Norway became the first country to introduce the rules of women's quota on the board of directors by passing a law requiring companies to have at least 40% of women on its board of directors in 2008. In 2007, Spain passed a guideline encouraging the company to increase its share women in the company's board of 40% by 2015. In January 2011, French law was modified and quotas were introduced to increase women's representation on the board of directors by 20% by 2014 and 40% by 2017, for both listed and unlisted companies. Similarly, other countries such as Belgium, Italy and the Netherlands are awaiting the enactment of the same law. Meanwhile some countries such as Australia, Germany and UK encourage companies to voluntarily set the quota. (Deloitte, 2011)

In Asia, only a few of women are on the board of directors of companies and almost half of companies in Asia do not have a female board of directors. Recorded only 8.6% female board of directors at companies in Hong Kong, 8.1% in China and Malaysia reached 7.8%. Smaller figures were obtained for companies in Singapore that is only 6.4% and 4.7% in India. More than 70% of the board of directors in six Asian countries - China, Hong Kong, India, Malaysia, New Zealand and Singapore - does not have an independent female board of directors. Similarly, very rarely found 3 (three) or more women on board of directors of one company and hardly found 3 (three) or more women who become independent board of directors in one company. (Yi, 2011). Carter et al. (2003) found that firms with two or more women in board members had firm value (which was proportional to Tobin's Q ratio) higher than firms with fewer women in board members of less than two people.

Campbell & Minguez-Vera (2008) who argue that greater gender diversity among council members results in more diverse opinions and diverse critical thinking making decision making more time consuming and less effective. The composition of board members is an issue related to corporate governance. The existence of distribution or diversity on board members is believed to affect the value of the company, both in the short term and long term. Council diversity is often called to increase board effectiveness and monitoring, and will improve company performance (Blake, 1991) in Carter et al (2003). This diversity encompasses the diversity of gender, age, ethnicity, educational background and professional experience of board members. Board diversity is expected to have a positive

impact. The greater the dispersion within council members can lead to more conflict, but the dispersion can provide an alternative solution to an increasingly diverse problem than homogeneous board members.

Our study is unique in that we consider the outside director, age, educational background and gender diversity in this analysis that are not common in the literature. This research also use control variable that is board size and company size. We believe that gender diversity, the age of the board of directors, the educational background of the board of directors and the outside director is not the same phenomenon and will not affect the company in the same way. This study aims to examine the effects of gender diversity, the age of the board of directors, the educational background of the board of directors and the outside director on the performance of a company as measured by ROA.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Corporate Governance. According to Turnbull (Syakhroza 2003) corporate governance is a series of systems organized by considering factors affecting institutional processes (including factors related to corporate governance regulators). The company is called in good condition if the company meets the principles such as fairness, transparency, accountability, and responsibility. In research conducted by Surya and Yustiavandana (2006), revealed that good application of basic principles of good corporate governance (GCG) can increase company value.

In this study, it is seen not only the gender diversity, but also from the age of the board of directors, educational background, and also outside director in the company. This study further examines the diversity that exists on the board of directors in the company. The existence of distribution or diversity on board members is believed to affect the performance of the company, both in the short and long term. Based on this, this study will examine the characteristic factors of gender, age of the Board of Directors, educational background and outside directors in Asia.

The Role of Woman on Board. Board diversity becomes an interesting thing to look at in relation to corporate governance because there is still the assumption that men are more fit to occupy important positions in the company. Recorded only 8.6% female board of directors at companies in Hong Kong, 8.1% in China and Malaysia reached 7.8%. Smaller figures were obtained for companies in Singapore that is only 6.4% and 4.7% in India. More than 70% of the board of directors in six Asian countries - China, Hong Kong, India, Malaysia, New Zealand and Singapore - does not have an independent female board of directors. (Yi, 2011).

Khrisnan and Parsons (2008) found that gender diversity in top management can improve the company's financial performance. McKinsey (2007) found that firms where strong women's presence within the Board of Directors have better governance and financial performance. While research results Carter et al. (2003) found that firms with two or more women in board members had firm value (which was proportional to Tobin's Q ratio) higher than firms with fewer women in board members of less than two people. From the description above research hypothesis as follows:

H1: The role of women on board members has an effect on the firm performance.

The Proportion of Outside Director. Inside the board diversity contained the board composition which draws the outside director's nresentase inside the board (Ohlson in Faizal 2004). A board with a strongly independent composition of outside directors will have more stringent managerial control behavior than a management-controlled board. The ability of independent directors to influence management decisions will increase with the proportion of their board standing. Hermalin and Weisbach (2000 in Carter et al., 2003) have found strong and significant external directors influence on performance. Limpaphayon and Sukcharoensin (n.d) through their research in Thailand found that the board of directors dominated by outside directors with low managerialownership has a strong and significant influence on the company's performance. Based on the description, can be formulated hypothesis as follows:

H2: The proportion of outside director on board has an effect on the firm performance.

The Age of Director on Board. According to Hurlock (1999), one's adulthood can be divided into three stages, namely early adulthood (early adulthood) starting from the age of 18-40 years, middle age (middle adult) beginning at age 40-60 years, and adult (late adult) that begins at age 60 to death. At the age of 40 years, someone will reach his career. Adulthood is a period of decline in physical skills and the greater the responsibility, other than that this period is a time when people achieve and maintain satisfaction in his career (Santrock 1995). Levinson and Peskin (1981) as quoted by Santrock (1995) who stated that the age of 34-50 years is the healthiest, quietest, most self-controlled, and most responsible group. At the age of 40-45 years, a person has climbed the career path as far as they can and has reached a stable place in his career at the age of 40 years. The statement is like the proverb "life begins at 40".

In late adulthood, a person's speed to process information decreases, and is less able to retrieve information that has been stored in his memory. This is what causes when a person enters adulthood advanced, they prepare for retirement. According to Brandstadter and Renner (in Santrock 1995) one thing to consider in terms of advanced adulthood is increased wisdom as one gets older.

Supported by Dagsson & Larsson (2011) research in modern times as it is today a growing and emerging generation of young people with computers and the internet, the younger generation of board members allows more information and better experience in the company's business. And many assumptions at a young age a person is more open to something new.

This shows that age can affect a person's performance in a company that can then affect the company's performance. In addition, older workers typically show more loyalty to the company than younger workers (Dessler 1997). But in this study we use the age above 50 years because according to us at that age a director is wiser and trusted in making decisions. From the above description can be formulated hypothesis as follows:

H3: The age of director on board has an effect to firm performance.

The Director Educational Background. Kusumastuti (2007) states that the educational backgrounds of the members of the council have an effect on the knowledge they have. By having existing business and economic knowledge, at least board members have better ability to manage a business and make business decisions than not having business and economic knowledge. Ultimately this will affect the value of the company. The title or background of education in the financial field of board members will also automatically provide many benefits for the financial management of the company (Jeanjean and Stolowy, 2009).

Bray and Howard and Golan as quoted by Santrock (1995) state that university education helps someone in his career progress, where a highly educated person will have a higher and faster career path. Nurudin (2004) mentions that research from Harvard University in the United States revealed that success is not solely determined by the knowledge and technical skills (hard skills), but by self-managing skills and other people (soft skill). This study revealed, success is only determined about 20% with hard skills and the remaining 80% with soft skills. Understanding of the term hardskill is a skill that can produce something of its nature visible and immediate. Unlike hardskill, soft skills are invisible and not immediate. Soft skills include interaction with the lives of others. From the description above it can be made as follows hypothesis:

H4: The director educational background on board has an effect to firm performance.

METHODS OF RESEARCH

The sample of this study is a publicly listed company in Forbes Asia's 50 Best Big Public Companies. Samples are taken based on purposive sampling method with criteria: (1) Companies included in Forbes Asia's 50 Best Big Public Companies 2014-2016; (2) Other non-financial services and non-service companies; and (3) the company must have a financial statement containing a statement of financial position and annual report;

(4) Companies that have data required for this research. Based on the criteria, 86 companies were sampled as described in the table below.

Table 1 – Research Sample

Criteria are used		Total Companies
1.	Company which listed in Forbes	150
2.	Asia's 50 Best Big Public Companies 2014-2016 Bank and other service company	(50)
3.	Companies that don't have any data which needed for the research	(14)
Total samples are used		86

The data used a secondary data derived from annual reports of each company obtained from each company's website listed in Forbes Asia's 50 best big public companies 2014-2015. Dependent variable used in this research is firm performance (firm performance). Company performance is calculated based on information based on price to book value. In addition to measuring company performance based on financial accounting information, then this measurement also uses Return On Assets (ROA).

The independent variable in this research is the board diversity. In this study, the board diversity includes the age distribution, gender diversity of the board of directors, the educational background, and the proportion of outsiders in the board. For the measurement of each independent variable: a) Gender (GEN), measured by a dummy variable, where 0 states no female directors in the board and 1 stating there are female directors in the board, b) Proportion of outside directors (OUTSIDER) measured using the percentage of outsider directors in board members, c) Age (AGE), measured using board council proposals over 50 years and d) Educational background (EDU), measured using the proportion of board members with educational background in economics, business and finance.

The control variables used in this study as used in the study of Carter et al. (2003), namely: a) Board size (BSIZE), measured by the number of board members and b) Firm size (FSIZE), measured by the natural logarithm of the total assets of the firm.

Data Analysis Technique. In this research, the analytical technique used is multiple linear regression analysis. Multiple linear regression analysis was used to determine the effect of gender diversity, age of the Board of Directors, educational background, and outside director (independent variable) on Company Performance (dependent variable). The statistical calculation in this study uses SPSS (Statistics Packages for Social Science) version 22 program. The regression model used is bellow:

$$\text{PERFORMANCE} = \beta_0 + \beta_1 \text{ GEN} + \beta_2 \text{ AGE} + \beta_3 \text{ EDU} + \beta_4 \text{ OUT} + \beta_5 \text{ SIZE} + e$$

Where:

- PERFORMANCE = Firm Performance;
- β_0 = Constanta;
- β_1 GEN = Gender Diversity;
- β_2 AGE = The Age of Director;
- β_3 EDU = Educational Background;
- β_4 OUT = *Outside Director*;
- β_5 SIZE = Control Variable for firm performance;
- e = Error.

RESULTS AND DISCUSSION

The average ROA is worth 15.9136% which means the average sample company has Return on Asset with the value. Of the total sample companies, there are 27 companies that have below average ROA and 59 companies have ROA values above average. This means that 31.39% of the sample companies have an ROA value that is smaller than the average.

For the aged (AGE) variable, an average of 59.23% indicates that most of the sample companies are board members over the age of 50 years. All of the companies in this study sample had board members over the age of 50 years. This suggests that decision making in the sample company is dominated by the elderly, in which the elderly remain in a respected position (Kuntjoro 2002).

The result from the educational background of economics, business, and finance (EDU), there are 60.76% board members in sample companies with educational background in economics, business and finance. But there is one sample company whose membership of the board has absolutely no educational background in economics, business and finance. The average value indicates that board members with economic and business education and financial backgrounds are important in the company.

The following is a general description of the research data used in this study:

Table 2 – Summary of Statistic Description

Variable	Mean	Std. Deviation
ROA	15.9136	12.06566
AGE	0.5923	0.23340
EDU	0.6076	0.21632
OUTSIDER	0.3947	0.19594
BSIZE	8.71	3.115
FSIZE	11.8436	0.65556

For the proportion of outsider director (OUTSIDER), there are 7 sample companies that do not have board members who are outsider directors. When viewed from the average value, it can be said that the proportion of outsider directors in the sample company is enough that only amounted to 39.47%. This is more than enough because based on research conducted by Surya and Yustiavandana (2006), based on recommendation Code for Good Corporate Governance recommends that at least 20% of the members of the board of commissioners and board of directors are independent members.

For board size (BSIZE), the average sample company has a board of 8-9 people. But there are also some companies have the largest number of board members among the sample companies, ie as many as 20 people. In firm size variables (FSIZE), the average sample company has firm size that is not much different, it is seen from the standard deviation of 0.66.

The high number of women in Asia working in leadership positions is also seen from the table above which describes descriptive statistics for women's presence on the board of directors. Of the 86 sample companies, 23 companies or 26.7% did not have female council members, while 73.3% of the sample companies had female councilor.

The table below summarizes the tests conducted on the six previously mentioned hypotheses:

Table 3 – Summary of Regression Results

Variable	Coefficient	t-value
(Constant)	21,908	3,359
GENDER	0.763	0.363
AGE	-7.529	-2.305
EDU	-1.875	-0.304
OUTSIDER	2.555	1.371
BSIZE	-0.512	-0.491
FSIZE	-0.339	-1.840

$R^2 = 0.30$; Adjusted $R^2 = 0.18$; $F = 0,626$; Sig. (F) = 0.645

In order to obtain a good regression model, the data must pass the classical assumption test that includes normality, multicollinearity, heterocentricity, and autocorrelation (Ghozali 2005). Multi-collinearity test results showed free data from multicollinearity symptom, where all independent variables used in this study had tolerance value > 0.10 or VIF < 10.

Normality test results with One Sample Kolmogorov Smirnov Test that the assumption of normality is met, in which the significance obtained for distribution of annoying or residual variables is more than 0.05. Similarly, heteroscedasticity test results with scatterplot graphs, it is seen that the points spread either above or below the value 0 on the horizontal axis, so there is no problem of heteroscedasticity. The output of this classic assumption test can be seen in the appendix. Therefore it can be concluded that the regression model used in this study passed the classical assumption test.

Based on table 3, it can be seen that simultaneously, the independent variables used in this research are women in board, age of board of director, economic and business education background, proportion of outside directors, This is seen from the significance level of F test of more than 10%. The results of this study differ from those of Cox and Blake (1991) and Robinson and Dechant (1997) in Carter et al. (2003) that the distribution in the board of diversity is believed to have an effect on the value of the company.

Variations of the variables used in the research model can provide an explanation of the dependent variable variation of 18% (adjusted R²), while the remaining 82% is explained by other variables outside the model. The findings are in line with the opinions of Hermalin and Weisbach (2000) as quoted by Carter et al. (2003) which provides an important point, in which agency theory simply can not provide a clear predictor of the relationship between board diversity and firm value.

Based on the table, partially found those variables also have no effect on firm performance. This may be because women are less of a risk than men, so women have a lower percentage in some positions than men (Charness and Gneezy 2004). So women have no influence on firm performance.

The proportion of outside directors (OUTSIDER) variables found statistically did not affect firm values. According to Surya and Yustia Vandana (2006), based on recommendation Code for Good Corporate Governance recommends that at least 20% of the members of the board of commissioners and board of directors are independent members. Although from the descriptive statistics it can be seen that the average outside directors in the sample company is more than 20% but this outsider variable has no effect on the performance of the company which may be caused because the companies already have members of the board of directors who are very competent in their field.

The age variable of board members (AGE) was also found not to affect firm value. Relating to the lack of an age-related influence on the value of a company is supposedly an older person, more and more health problems are faced, which in turn will lead to a decrease in intellectual ability (Siegler & Costa in Prasetyaningrum 2005).

The proportion of board members with business and economic background (BSTUDY) was found to have no effect on company performance as measured by ROA ratio. The absence of such influence is due to the fact that in this study only defines the educational background specifically for economy and business and finance. There is a possibility that the board members' educational background in accordance with the type of business enterprise that can support the continuity of the company's business is more necessary. So in this case board members who have an educational background termed "discipline" is necessary in running the company's business

Board size variables (BSIZE) and firm size as control variables were found to have no effect on firm value. The results of the study discussing the size of the board of directors and the size of the company is still not consistent. According to Pfeffer (1973) and Pearce and Zahra (1992), increasing the size and diversity of the board of directors will benefit the company, but Yermack (1996) and Eisenberg et al. (1998), as quoted by Faizal (2004) in his research found that the number of small directors will improve the performance of the company.

The results of this study are match with Darmawati et al. (2004) which states that the effect of firm size on corporate governance is still unclear. Large companies can have greater agency problems that require better corporate governance (Durnev and Kim as quoted by Darmawati et al., 2006). On the other hand, Klapper and Love (Darmawati et al., 2006)

suggest that small firms can have growth opportunities requiring external funds that then impact on the need for better corporate governance mechanisms.

CONCLUSION

The findings of the research and analysis described above, it can be concluded that the distribution of board members (board diversity) does not affect the performance of companies as measured by ROA. The existence of women in the board (Gender diversity), the proportion of outside directors, the age of board members, and the proportion of board members with economic, business and financial education backgrounds have been found to have an effect on the company's performance.

Future research is expected to be done more specifically and more deeply to better explain the dependent variable (firm performance measured by ROA), can also include other additional variables such as ownership structure, annual meeting, and debt ratio so that the results obtained can be better.

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**PROFITABILITY, GROWTH OPPORTUNITY AND FREE CASH FLOW:
DIVIDEND POLICY WITH DEBT POLICY AS THE INTERVENING VARIABLE
ON THE MANUFACTURING COMPANIES LISTED IN INDONESIA STOCK EXCHANGE**

Fitri Utami Alex*

Graduate Program in Management, Sriwijaya University, Indonesia

Isnurhadi, Widiyanti Marlina, Hanafi Agustina, Lecturers
Department of Management Science, Sriwijaya University, Indonesia

*E-mail: fuautamialex@yahoo.com
ORCID: 0000-0003-1092-770X

ABSTRACT

This research analyzed the effect of profitability, growth opportunity and free cash flow on dividend policy with debt policy as the intervening variable. The variables used included dividend policy proxied by debt payout ratio as the dependent variable, profitability proxied by net profit margin, growth opportunity and free cash flow as independent variables and debt policy proxied by debt-to-equity ratio as the intervening variable on the manufacturing companies listed in the Indonesian Stock Exchange in the period of 2013-2016. The aims of this research were: to know the effect of profitability, growth opportunity and free cash flow on dividend policy on the manufacturing companies in 2013-2016; to know the effect of profitability, growth opportunity and free cash flow on dividend policy with debt policy as the intervening variable on the manufacturing companies in 2013-2016. The research determined the appropriate samples as the representatives of the population by using various sampling technique.

KEY WORDS

Profitability, growth opportunity, free cash flow, dividend.

Efficiency and effectiveness become the main strength of a company so that it can survive in the increasingly fierce competition. Decisions taken by a company must be made with careful consideration so as not to harm the sustainability of the company. One of the important decisions that must be faced is the determination of the dividend policy that best suits the company's condition (Alzomaia and Khadhiri, 2013). According to Brigham and Houston (2011), the optimal company's dividend policy is a policy that results in a balance between current dividend and future growth which maximizes the stock prices.

Profitability is a net profit generated by a company from various operating activities run by the management of the company. The greater the profit a company gets, the greater its ability to pay dividends to investors or shareholders (Denis and Osobov, 2008). Net profit margin (NPM) shows how much percentage of net profit earned from each sale (Heikal et al., 2014). Net profit margin is a ratio used to demonstrate a company's ability to generate net profits after taxes (Stahl et al., 2012). Net profit margin is the comparison between the net sales. The greater the net profit margin then the company's performance will be more productive. Thus, it increases investor confidence to invest in the company.

Measuring company profitability can be performed by using net profit margin (NPM). Profitability affects growth through assets owned. The higher the profitability level of a company, it will also increase the growth of the asset (Heikal et al, 2014). Van Horne and Wachowicz (2005) argued that profitability ratios consist of two types, namely ratio indicating profitability related to sales and ratio indicating profitability related to investment. Profitability related to sales consists of gross profit margin and net profit margin. Profitability related to investment consists of return on total assets and return on equity (Kothari et al., 2009). The growth of manufacturing industry companies holds a dominant position in the development of

the economy in Indonesia because it deals directly with the purchasing power of the people in everyday life (Adnyana and Badjra, 2014). Companies in manufacturing sector listed in ISE also hold the highest number compared to other sectors with a population of 150 companies in 2016 which is listed in ISE by taking the sample of the companies issuing complete financial statements from 2012 to 2016 as many as 45 companies.

The decision to share profits in the form of dividends will reduce the company's internal resources. On the other hand, if the company retains the earnings, it will increase the formation of internal funding sources that can be used to finance the company's activities because the retained earnings is one of the internal funds used by the company for investment and expansion (La Porta, 2000). It will reduce the company's dependence on external funds so as to minimize the risk borne by the company.

The dividend policy is also one way to increase shareholder wealth. However, in fact, dividend payments are sometimes limited by the management due to some obstacles, such as a decrease in corporate profits, interest payments, or future lucrative investment opportunities. This condition leads the management to retain the earnings to be used as a source of internal funds.

In the selection of free cash flow (FCF), debt can be used to control the excessive use of free cash flow (FCF) for managers. In addition, shareholders will enjoy the work of their management team. For example, if a company issues new debts and uses the proceeds to repurchase shares, usually those that are owed, then management is obliged to pay cash to cover this debt in other words it can reduce the amount of cash flow on management. Jensen et al., (1986), related with free cash flow (FCF), stated that market pressure will encourage the managers to distribute FCF to shareholders or risk losing control of the company. FCF is the excess cash needed to fund all projects that have a positive net present value after dividend.

According to Baker et al., (2012) there are several factors affecting dividend policy such as profitability, liquidity, funding decision, firm size, free cash flow, collateralizable assets, growth, earning after tax, financial performance, net income, operating cash flow, investment opportunity set (IOS), and cash position. However, among all, there are some that have the appeal such as profitability, growth and free cash flow, especially for the shareholders or potential investors in a company.

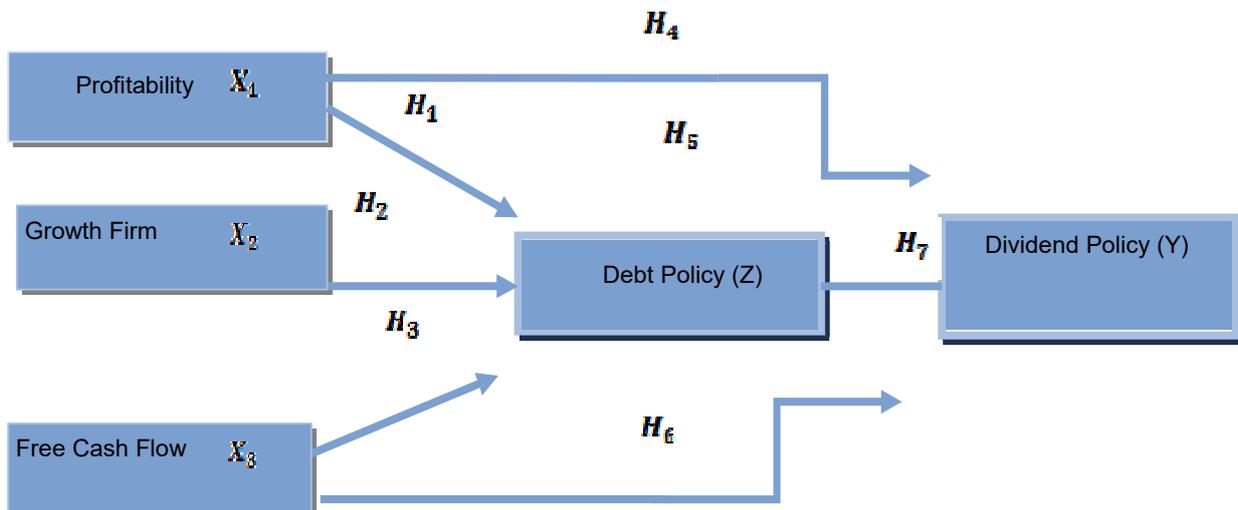


Figure 1 – Theoretical Framework

The research problems to be discussed in this research are: 1) how is the effect of profitability, growth and free cash flow to dividend policy on manufacturing companies listed in ISE in 2012-2016?, 2) how is the effect of profitability, growth and free cash flow on dividend policy with debt policy as the intervening variable on manufacturing companies listed in ISE in 2013-2016?

The aims of this research were to know the effect of profitability, growth and free cash flow on dividend policy on manufacturing companies in 2013-2016 and to know the effect of profitability, growth and free cash flow on dividend policy with debt policy as the intervening variable on manufacturing companies in 2013-2016.

This research analyzed the effect of profitability, growth opportunity and free cash flow on dividend policy with debt policy as the intervening variable. The variables used included dividend policy proxied by debt payout ratio as the dependent variable, profitability proxied by net profit margin (NPM), growth opportunity and free cash flow (FCF) as independent variables and debt policy proxied by debt-to-equity ratio (DER) as the intervening variable on the manufacturing companies listed in the Indonesian Stock Exchange (ISE) in the period of 2013-2016.

This research was aimed to see how the effect of profitability, growth and free cash flow on dividend policy with debt policy as the intervening variable. Based on literature review, hypothesis and previous research, the theoretical framework developed in this research could be presented as follows:

METHODS OF RESEARCH

This research analyzed the effect of profitability, free cash flow, growth and debt policy to dividend policy on manufacturing companies listed in Indonesia Stock Exchange. The variables used in this research were:

- Profitability, free cash flow and growth as independent variables;
- Debt policy as intervening variable;
- Policy as dependent variable measured by using Tobin's Q.

The research determined the appropriate samples as the representatives of the population by using various sampling technique. The sampling technique of this research applied purposive sampling. There were 45 companies that met the criteria to be the samples of this research. The number of the samples of this research was 45 companies with the total number of 180 (45×4 years).

The data analysis of this research applied path analysis method with the assistance of structural equation modeling (SEM) which was operated through analysis of moment structure (AMOS) program. Path analysis method is the development of the regression model used to test the fit of correlation matrices of two or more models which were compared by the researchers. The regression was performed for each variable in the model. The regression value predicted by the model was compared with the correlation matrix namely the results of variable observation. Then, the goodness of fit value was calculated. After that, the best model was chosen based on the goodness of fit (Ghozali, 2011). In addition, path analysis can also measure the direct or indirect correlations between variables in a model (Ghozali, 2011).

Currently, the AMOS program is one of the most sophisticated new generation programs to work on multidimensional and tiered research models, which was developed by Dr. J. Arbuckle. The AMOS program has its advantages because it is a user-friendly graphical interface program (Ghozali, 2011).

The steps in performing path analysis test in this research were as follows: classical assumption test, normality test, multicollinearity test, linearity test, heteroscedasticity test, and calculating path coefficient based on regression coefficient.

Hypothesis testing on the research variables were tested by multivariate regression method with the level of profitability of 0.05 ($\alpha = 0.05$). This testing was conducted to determine whether or not the changes of independent variable have an effect on the dependent variable. The research hypothesis would be accepted if one of the independent variables had an effect on the dependent variable. Hypothesis testing was performed by: simultaneous significant test (F statistic test), individual-parameter significant test (t statistic test), and total determination coefficient (Q^2).

A direct correlation occurs when one variable affects the other and no third variable mediates/intervenes the correlation between the two variables (Ghozali, 2011). Direct testing

examined the correlation of independent variables and intervening (mediation) variables directly to the dependent variable.

The indirect correlation occurs when the third variable mediates the correlation between the two variables (Ghozali, 2011). The indirect effect testing examined the correlation effect of the independent variable to the dependent variable through the intervening variable (mediation).

The sobel test was used to find out whether the correlation through a mediation variable was significantly capable of being a mediator within the correlation. Sobel test was performed by testing the indirect effect of independent variable (X) to the dependent variable (Z) through the intervening variable (Y).

The indirect effect of X to Z through Y was calculated by multiplying the path $X \rightarrow Y$ (a) by the path $Y \rightarrow Z$ (b) or ab , so the coefficient $ab = (c - c')$. The coefficient c was the effect of X on Z without controlling Y while c' is the coefficient of X effect against Y after controlling Y. From the standard error of coefficient a (SE_a) and coefficient b (SE_b), the indirect standard error (indirect effect) of SE_{ab} was calculated by using the following formula (Ghozali, 2011):

$$SE_{ab} = \sqrt{b^2 SE_a^2 + a^2 SE_b^2 + SE_a^2 + SE_b^2}$$

To test the significance of indirect effect on the sobel test, we need to calculate the t-value of the ab coefficient with the following formula:

$$t = \frac{ab}{SE_{ab}}$$

If the value of $t_{\text{calculate}} > t_{\text{table}}$, it could be concluded that the effect of mediation occurred.

RESULTS AND DISCUSSION

The result of regression analysis in this research was used to determine how big the effect of each independent variable (profitability, free cash flow and growth) to intervening variable (debt policy).

Table 1 – Summary Model of Regression Analysis Result on Independent Variables to Intervening Variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.257 ^a	.066	.050	0.55857

a. Predictors: (Constant), Growth, NPM, FCF

b. Dependent Variable : DER

Based on the results of the regression analysis in Table 1, it was known simultaneously the profitability (ROA), Free Cash Flow (FCF) and Growth against debt policy (DER). The simultaneous effect was 0.066 or 6.6% which was the contribution of the independent variable to profitability as the intervening variable. The remaining 93.4% was affected by other factors outside the research model.

Table 2 – ANOVA on Regression Analysis Results from Independent Variables to Intervening Variable

ANOVA ^b					
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	3.876	3	1,292	4.141	.007 ^a
1 Residual	54.911	176	.312		
Total	58.787	179			

a. Predictors: (Constant), growth, NPM, FCF

b. Dependent Variable : DER

This simultaneous model occurred significantly. It could be seen from the probability value (sig.) of $0.000 < 0.05$. Independent variables were linearly correlated.

Table 3 – Coefficient on Regression Result from Independent Variables to Intervening Variable (Coefficients^a)

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. error	Beta	T	sig	tolerance	VIF
1.(Constant)	1.466	.229		6.414	0.000		
NPM	-.018	.019	-.075	-.928	.355	.808	1.237
FCF	-.002	0.20	-.007	-0.91	.927	.927	1.079
GROWTH	-.061	.024	-.213	-2.548	0.12	0.760	1.315

Based on the results of data processing, it could be seen that profitability (NPM) affected debt policy (DER) -0.075 with p-value of 0.355 in which it was not significant because p-value < 0.05 . It could be interpreted that the increased profitability of 1% would lead to a decrease in debt policy variable of 35.5% and vice versa. The analysis result on free cash flow (FCF) on debt policy (DER) was equal to -0.007 with p-value $0.927 > 0.05$. Based on the results of the data processing, it meant that free cash flow did not partially affect debt policy in which the increased free cash flow of 1% would not affect the debt policy. The analysis result on growth to debt policy (DER) was equal to -0.213 with p-value $0.12 > 0.05$. Based on the results of data processing, it meant that the growth did not partially affect debt policy in which the increased growth of 1% would not affect debt policy.

The regression analysis result of this research was used to determine how big the effect each independent variable (profitability, free cash flow and growth) to dependent variable (dividend policy). The result of direct testing on the hypothesis through regression analysis was as the following:

Table 4 – Summary Model on Regression Result of Independent Variables and Intervening Variable to Dependent Variable

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.322 ^a	.104	.083	.16501

a. Predictors: (Constant), DER, Growth, FCF, NPM

b. Dependent Variable: DPR

The above table showed the regression result that profitability (NPM), free cash flow (FCF), growth and debt policy (DER) simultaneously had a positive and significant effect on dividend policy (DPR). The simultaneous effect was 0.83 or 8.3% which was the contribution of independent and intervening variables to the dividend policy whereas the rest of 91.7% was affected by other factors outside the research model.

Table 6 – ANOVA on Regression Result of Independent Variables and Intervening Variable to Dependent Variable

ANOVA ^b						
Model	Sum of Squares	Df	Mean Square	F	Sig.	
Regression	.552	3	.138	5.069	.001 ^a	
1 Residual	4.765	176	.027			
Total	5.317	179				

a. Predictors: (Constant), DER, Growth, FCF, NPM

b. Dependent Variable: DPR

This simultaneous model occurred significantly. It could be seen from the probability (sig.) of $0.001 < 0.05$. The test was then continued by individual testing through coefficient parameters.

Table 7 – Coefficient on Regression Result of Independent Variables and Intervening Variable to Dependent Variable

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig
1. (constant)	.074	.075		.988	.324
NPM	.009	.006	.132	1.660	.099
FCF	.015	.006	.195	2.626	.009
GROWTH	.001	.007	.012	.143	.887
DER	-.049	.022	-.162	-2.186	.030

Dependent Variable: DPR.

The result of regression data processing on profitability (NPM) to debt policy (DER) obtained insignificant result which was equal to 0.099 > 0.05 and did not have effect which was equal to 0.132. The conclusion of this research was that profitability (NPM) partially did not significantly affect dividend policy (DPR).

The free cash flow (FCF) variable to dividend policy (DPR) obtained insignificant results with the significance value of 0.009 > 0.05 and its effect was 0.195. It meant that free cash flow partially had no significant effect on dividend policy (DPR). Regression test conducted on growth variable to dividend policy obtained the effect equal to -0.012 with significant value 0.887 > 0.05 which meant that growth did not have significant effect to dividend policy.

Debt policy (DER) on dividend policy (DPR) variables had an effect of 0.162 with significant value 0.030 > 0.05 which meant that debt policy (DER) had no significant effect on dividend policy.

Direct test on independent variables and intervening variable to the dependent variable in this research was illustrated in the following path diagram:

Table 8 – Testing Results on NPM, FCF, GROWTH and DER to DPR

Independent Variables	Dependent Variable	Path Coefficient	p-value	Description
NPM	DPR	0.132	0.099	Not significant
FCF	DPR	0.195	0.009	Not significant
GROWTH	DPR	0.012	0.887	Not significant
DER	DPR	-0.162	0.030	Not significant

Source: Processed Data by the Researcher.

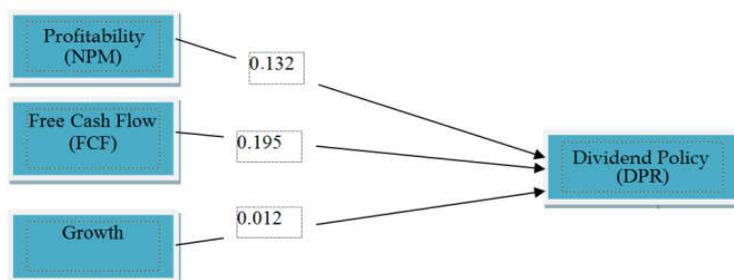


Figure 2 – Path Diagram on the Testing of NPM, FCF, GROWTH and DER to DPR

Analysis on profitability (NPM) variable to dividend policy variable (DPR) got coefficient value of 0.132 with significant value of 0.099 to positive direction. It meant that profitability (NPM) had no significant effect on dividend policy (DPR). The high or low level of profitability (NPM) affected dividend policy (DPR) and vice versa. Hypothesis 1 (H₁) stated that profitability had a positive and insignificant effect on the dividend policy was rejected.

The significance value of the effect on free cash flow to dividend policy variables was 0.009 with coefficient value of 0.195. It meant that free cash flow (FCF) had no significant effect on dividend policy (DPR). The high or low level of free cash flow (FCF) did not affect

dividend policy (DPR) and vice versa. Hypothesis 2 (H₂) stated that free cash flow had a negative and insignificant effect on dividend policy was rejected.

The effect of growth variable on dividend policy variable (DPR) got the coefficient value of -0.012 with significant value of 0.887 to the negative direction. It meant that growth had no significant effect on dividend policy. Hypothesis 3 (H₃) stated that growth had a negative and insignificant effect on the dividend policy was rejected.

The direct test of the intervening variable on the dependent variable in this research was illustrated in the following path diagram:

Table 9 – Testing Result on DPR to DER

Independent Variable	Dependent Variable	Path Coefficient	p-value	Description
DER	DPR	-0.162	0.030	Not Significant

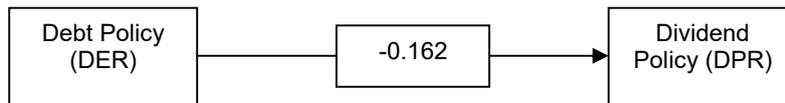


Figure 3 – Path Diagram of Testing on DER to DPR

The effect of debt policy variable (DER) on dividend policy variable (DPR) got coefficient value of -0.162 with significant value of 0.030 to the negative direction. It meant that debt policy (DER) had no significant effect on dividend policy. Hypothesis 4 (H₄) stated that the debt policy (DER) had a negative and insignificant effect on the dividend policy was rejected.

The test of indirect effect aimed to detect the position of the mediation variable in a model. Examination of the characteristics of the mediation variable could be performed by multiplying path coefficient value of the effect of independent variables with mediation variable and the coefficient value of the effect of mediation variable and dependent variable. The total of the effect was calculated by summing the coefficient of direct effect with the result of the coefficient of indirect effect (Ghozali, 2011).

The test of indirect effect in this research was conducted to test the effect of debt policy mediation (DER) on the effect of profitability (NPM), free cash flow (FCF) and growth variables to dividend policy (DPR) variable. The test results of indirect effect were obtained as the following:

Table 11 – Test Results of NPM, FCF and Growth to DER

Independent Variables	Dependent Variable	Path Coefficient	p-value	Description
NPM	DER	-0.075	0.355	Not significant
FCF	DER	-0.007	0.927	Not significant
GROWTH	DER	-0.213	0.012	Not significant

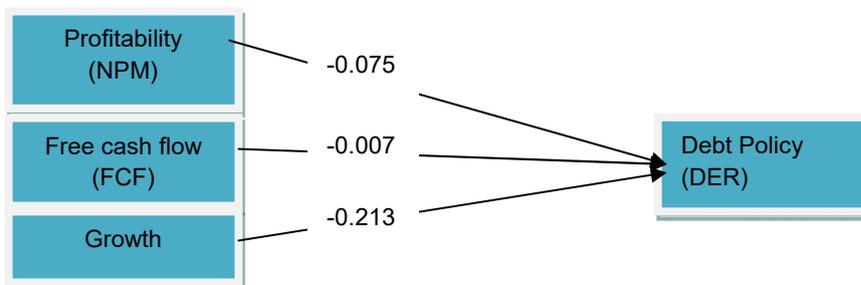


Figure 4 – Path Diagram on the Test Results of NPM, FCF and Growth to DER

The analysis of profitability variable (NPM) to debt policy (DER) variable obtained a coefficient value of -0.075 with a significant value of 0.355 to the negative direction. It meant that profitability (NPM) went against debt policy (DER). If profitability increased by 1% then

debt policy decreased by -0.075 or 7.5% and the remaining 92.5% was affected by other variables outside the research model. Hypothesis 5 (H₅) stated that profitability had a negative and insignificant effect on debt policy was accepted.

The effect of free cash flow (FCF) variable to debt policy (DER) variable obtained a coefficient value of -0.007 with a significant value of 0.927 to the negative direction. It meant that free cash flow (FCF) had no significant effect on debt policy (DER). Hypothesis 6 (H₆) stated that free cash flow (FCF) had a negative and insignificant effect on debt policy was rejected.

The effect of growth variable to debt policy (DER) variable obtained a coefficient value of -0.213 with a significant value of 0.012 to the negative direction. It meant that growth had no significant effect on debt policy (DER). Hypothesis 7 (H₇) stated that growth had a negative and insignificant effect on debt policy was rejected.

Test Result of Mediation Effect of Debt Policy on Profitability to Dividend Policy

The regression analysis result showed that the value of path coefficient correlating profitability to debt policy (DER) was -0.075 with the t-test of -0.928. The value of path coefficient of debt policy (DER) to the dividend policy (DPR) was 0.162 with t-test of -2.186. Moreover, the value of path coefficient of profitability (NPM) to the dividend policy (DPR) was 0.132 with the t-test of 1.660. The correlation of the three variables could be illustrated in the path diagram in the following Figure 5:

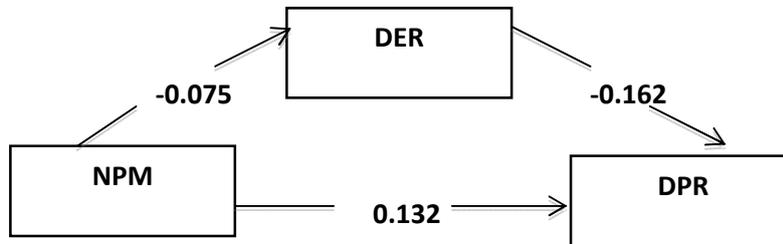


Figure 5 – Path Diagram on Profitability Testing to Dividend Policy through Debt Policy

The calculation of indirect effect was derived from the results of NPM against DER and DER against DPR. The calculation of the total effect was the addition of indirect effect and direct effects as follows:

$$\text{Indirect Effect} = -0.075 \times -0.162 = 0.237$$

$$\text{Total Effect} = -0.075 + 0.132 = 0.057$$

The calculation results obtained that the coefficient of the total effect (0.057) was smaller than indirect effect (0.237) and direct effect (0.132). It was assumed that partial mediation occurred by looking at sobel statistical value and its significance value. The sobel statistics result was shown in Figure 6 below:

Input:		Test statistic:	p-value:	
t _a	-0.928	Sobel test:	0.87915393	0.37931782
t _b	-2.746	Aroian test:	0.83108475	0.40592575
		Goodman test:	0.93666172	0.34893259
		Reset all	Calculate	

Figure 6 – Test Result of Sobel Test of Profitability to Dividend Policy through Debt Policy

The sobel statistic obtained a value of 0.879 with p-value 0.379 > 0.05. Thus, it could be said that the sobel statistic was insignificant. The value of indirect effect of 0.237 was greater than the direct effect of 0.132 but the sobel test did not show significant results. Sobel test required large sample quantities and the value of normally distributed mediation

coefficient but this assumption had been heavily criticized. According to Bollen and Stine (1990), in general, small samples had abnormal distribution. It could be concluded that debt policy was able to act the intervening variable. Thus, it can be concluded that debt policy acted as the intervening variable in the form of partial mediation. Hypothesis 8 (H₈) stated that debt policy was able to mediate profitability to dividend policy was accepted.

The regression analysis result showed that the value of path coefficient correlating free cash flow to debt policy (DER) was -0.007 with the t-test of -0.091. The value of path coefficient of debt policy (DER) to the dividend policy (DPR) was -0.162 with the t-test of -2.186. Then, the value of path coefficient correlating free cash flow (FCF) to dividend policy (DPR) was 0.195 with the t-test of 2,626. These three variables could be illustrated in the path diagram in Figure 7 below:

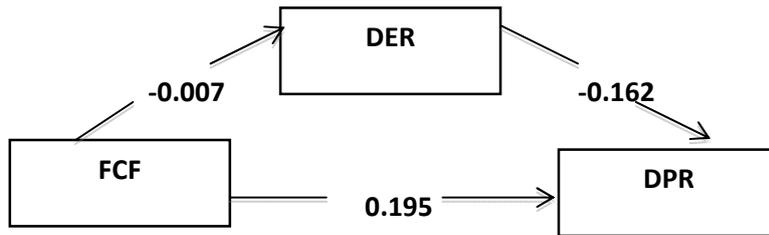


Figure 7 – Path Diagram on Free Cash Flow (FCF) Testing to Dividend Policy through Debt Policy

The calculation of indirect effect was derived from the results of FCF against DER and DER against DPR. The calculation of the total effect was the addition of indirect effect and direct effects as follows:

$$\text{Indirect Effect} = -0.007 \times -0.162 = 0.169$$

$$\text{Total Effect} = 0.169 + 0.195 = 0.364$$

The calculation results obtained that the coefficient of the total effect 0.364 was bigger than indirect effect 0.169 and direct effect 0.195. It was assumed that partial mediation occurred by looking at sobel statistical value and its significance value. The sobel statistics result was shown in Figure 8 below:

Input:		Test statistic:	p-value:
t _a	-0.091	Sobel test:	0.09095007
t _b	-2.746	Aroian test:	0.08546522
		Goodman test:	0.09764751
			0.92753226
			0.93189154
			0.9222122
		Reset all	Calculate

Figure 8 – Test Result of Sobel Test of Free Cash Flow (FCF) to Dividend Policy through Debt Policy

The sobel statistic obtained a value of 0.090 with p-value 0.927 > 0.05. Thus, it could be said that the sobel statistic was insignificant. It was the same to the result calculated by indirect effect in which the indirect effect test was smaller than the direct effect test of 0.169 < 0.195. It could be concluded that debt policy was unable to act as the intervening variable. Hypothesis 9 (H₉) stated that debt policy was not able to mediate free cash flow on dividend policy was rejected.

The regression analysis result showed that the value of path coefficient correlating growth to debt policy (DER) was -0.213 with the t-test of -2.548. The value of path coefficient of debt policy (DER) to the dividend policy (DPR) was -0.162 with the t-test of -2.186. Then, the value of path coefficient correlating growth to dividend policy (DPR) was 0.012 with the t-test of 0.143. The correlation of these three variables could be illustrated in the path diagram in Figure 7 below:

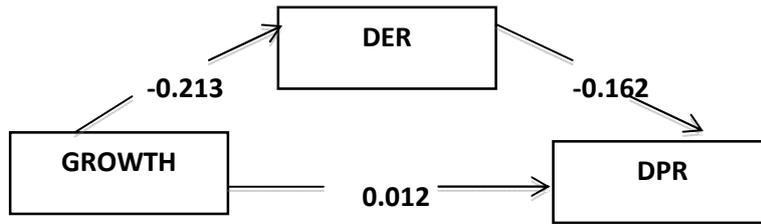


Figure 9 – Path Diagram on Growth Testing to Dividend Policy through Debt Policy

The calculation of indirect effect was derived from the results of GROWTH against DER and DER against DPR. The calculation of the total effect was the addition of indirect effect and direct effects as follows:

$$\begin{aligned} \text{Indirect Effect} &= -0.213 \times -0.162 = 0.375 \\ \text{Total Effect} &= 0.375 + 0.012 = 0.387 \end{aligned}$$

The calculation results obtained that the coefficient of the total effect 0.387 was smaller than indirect effect 0.375 and direct effect 0.387. It was assumed that partial mediation occurred by looking at sobel statistical value and its significance value. The sobel statistics result was shown in Figure 10 below:

Input:		Test statistic:	p-value:
t_a	-2.548	Sobel test:	1.86778756
t_b	-2.746	Aroian test:	1.80459491
		Goodman test:	1.93812042
			0.06179169
			0.0711381
			0.05260853
		Reset all	Calculate

Figure 10 – Test Result of Sobel Test of Growth to Dividend Policy through Debt Policy

The sobel statistic obtained a value of 1.867 with p-value 0.061 > 0.05. Thus, it could be said that the sobel statistic was insignificant. The value of indirect effect of 0.375 was greater than the direct effect of 0.012 but the sobel test did not show significant results. Sobel test required large sample quantities and the value of normally distributed mediation coefficient but this assumption had been heavily criticized. According to Bollen and Stine (1990), in general, small samples had abnormal distribution. It could be concluded that debt policy was able to act the intervening variable. Hypothesis 10 (H_{10}) stated that debt policy was able to mediate growth to dividend policy was accepted.

RESULTS OF STUDY

- Profitability (NPM) had a positive and significant effect on dividend policy (DPR);
- Free cash flow (FCF) had a negative and insignificant effect on dividend policy (DPR);
- Growth opportunity had a negative and insignificant effect on dividend policy (DPR);
- Debt policy (DER) had a negative and insignificant effect on dividend policy (DPR);
- Profitability (NPM) had a negative and insignificant effect on debt policy (DER);
- Free cash flow (FCF) had no significant effect on debt policy (DER);
- Growth opportunity had a positive and insignificant effect on debt policy (DER);
- Debt policy (DER) was able to mediate the profitability (NPM) variable to the dividend policy (DPR) variable;
- Debt policy (DER) was able to mediate free cash flow (FCF) variable to dividend policy (DPR) variable;
- Debt policy (DER) was able to mediate growth variable to dividend policy (DPR) variable.

DISCUSSION OF RESULTS

Profitability Had No Significant Effect on Dividend Policy. Based on the results of regression analysis, it was obtained that Hypothesis 1 (H_1) was rejected with positive signified regression coefficient. Thus, it could be concluded that profitability had no significant effect on dividend policy because net profit margin (NPM) did not always affect dividend policy especially in the established companies that had been operating for a long time. The findings of this research indicated that the company would not pay high dividend to maintain its reputation when profitability decreased or was low. The company would use the reserved earnings to be reinvested or divided in the form of dividends without having to change the proportion for the managerial shareholder and without depending on the amount of NPM to be earned by the company and would pay the dividend with a fixed amount. Therefore, no matter how big the profitability of the company, it did not affect the amount of dividend which would be paid to the shareholders. So, no matter how big the profitability of the company, the company would still divide the dividend annually through the company's profit.

Free Cash Flow Had a Positive and Insignificant Effect on Dividend Policy. Based on the findings of this research, it was obtained that Hypothesis 2 (H_2) was rejected with positive signified regression coefficient. Thus, it could be concluded that free cash flow had a positive and insignificant effect on dividend policy. According to Windiarti (2016), free cash flow was the excess cash needed to fund all projects that had a positive not present value after the dividend. That was because the size of free cash flow did not affect the high dividend distribution. If the company was willing to maximize the shareholder wealth by distributing dividends, free cash flow conditions were impossible because retained earnings were one of the most important sources of funds to finance corporate growth. Therefore, companies could use external financing in accordance with the pecking order theory concept in which the company preferred internal financing. Internal financing were derived from profits generated from company activities.

Growth Opportunity Had a Negative and Insignificant Effect to Dividend Policy. Based on the findings of this research, it was found that Hypothesis 3 (H_3) was rejected with positive signified regression coefficient. Thus, it could be concluded that the growth opportunity had a negative and insignificant effect on the dividend policy. According to Kaplan et al., (2001) the growth ratio was a ratio that illustrated the company's ability to maintain its economic position in the middle of economic growth and its business sector.

That was because the greater the need for corporate funds in the future, the greater the possibility of companies retaining their profits by not paying dividends to the shareholders or investors. That was because the company preferred to reinvest its earnings or revenues in the expansion field that was in the form of expansion of the company. However, if a company had achieved the expected growth rate, then the company had advanced and developed by obtaining capital funds from outside parties or the capital market. This might be different so the company would set a high dividend. In accordance with the pecking order theory concept, companies adjusted their dividend payout ratio targets to their investment opportunities while avoiding dividends drastically.

Profitability Had a Negative and Insignificant Effect to Debt Policy. Based on regression analysis, it was obtained that Hypothesis 4 (H_4) is received with negative regression coefficient. Thus, it could be concluded that profitability had a negative and insignificant effect on debt policy. Profitability was a net profit generated by the company from various operating activities run by the management company. The greater the profits was, the greater the company's ability to pay the dividends to investors or shareholders (La Porta et al., 2000). The higher the profitability, the lower the debt used.

Free Cash Flow Had a Negative and Insignificant Effect to Debt Policy. Based on the results of regression analysis, it was found that Hypothesis 5 (H_5) had a negative and insignificant effect on debt policy. Free cash flow was the extra cash company that can be distributed to creditors or shareholders that were not used for operations or investments. This was because it showed that the company was in a stable state. In addition, to reduce the risk of bankruptcy caused by debt, the company would try to reduce it by allocating free cash flow

to pay the debt. It could be concluded that the greater the free cash flow, then it would result in the decline in corporate debt policy. The companies, in the year of research, were in stable condition. Thus, in order to reduce the risk of bankruptcy caused by debt, a company would try to reduce it by allocating free cash flow to pay the debt. In accordance with pecking order theory, a company would choose internal funding first then debt and stock were the last option.

Growth Opportunity Had a Positive and Insignificant Effect to Debt Policy. Based on the findings of this research, it was found that Hypothesis 6 (H_6) was rejected with positive signified regression coefficient. Thus, it could be concluded that growth opportunity had positive and insignificant effect on dividend policy. Barclay et al., (1995) suggested that growth was one of the ratios that would affect dividend policy. The faster the growth rates of a company, the greater the level of need for the funds used to finance the expansion of the company. Companies with high growth rates should use equity as a source of financing to avoid agency costs between shareholders and company management. On the other hand, companies with low growth rates should use debt as a source of financing because the use of debt would require the company to pay interest on a regular basis. This was in line with the pecking order theory that established a sequence of funding decisions in which managers would first choose to use the retained earnings.

Debt Policy Had a Negative and Insignificant Effect to Dividend Policy. Based on the results of regression analysis, it was obtained that Hypothesis 7 (H_7) was rejected with negative signified regression coefficient. Thus, it could be concluded that the debt policy had a negative and insignificant effect on the dividend policy so that the increasing debt policy would be followed by a decrease in dividends. Debt was one of the external funding sources used by the company to finance the funding needs (Surya & Rahayuningsih, 2010).

Investors would not reinvest their shares in the company. As a result, the stock price on the company would decrease significantly. With this decline, the company tried to attract investors to maintain its reputation by using dividend policy constantly or not to change the share proportion. The company's debt would not affect the dividend payout ratio for the shareholders.

Debt Policy was Able to Mediate Profitability to Dividend Policy. Based on the calculation, it was obtained that Hypothesis 8 (H_8) was accepted with the calculation of indirect effect and the total effect greater than the direct effect. In addition, the sobel test indicated that p-value had significant value. Debt policy, in this case, mediated partially on the profitability of dividend policy because there was a direct influence between profitability and dividend policy as well as indirect influence between profitability and dividend policy.

These findings indicated that with the debt policy, the effect of profitability on dividend policy became stronger so that companies tended to use more external funding for their operations. Companies with high return on investment would use relatively small debt. High retained earnings were sufficient to finance most of the funding needs.

Debt Policy was Able to Mediate Free Cash Flow to Dividend Policy. Based on the results of regression analysis that had been conducted, it was obtained that Hypothesis 9 (H_9) was rejected with positive signified regression coefficient. It showed that the size of free cash flow had no significant effect on debt policy. According to Brigham & Houston (2007), free cash flow was the actual cash flow which was available for distribution to the shareholders and creditors. The cash distribution was made after the company invested in fixed assets and working capital needed to maintain the company's operations. It indicated that the company was in a stable state. To reduce the risk of bankruptcy caused by debt, the company would try to reduce it by allocating free cash flow to pay the debt. It could be concluded that the greater free cash flow would result in the decline of company's debt policy.

Debt Policy was Able to Mediate Growth to Dividend Policy. Based on the results of regression analysis that had been conducted, it was obtained that Hypothesis 10 (H_{10}) was accepted with positive signified regression coefficient. Growth was a ratio that illustrated that this year's percentage increase in sales was proportional to last year's in which the higher the growth meant the better the company (Utomo et al., 2016). If the growth rate of a

company is fast, then it requires a greater need for funds to finance the growth of the company.

In line with pecking order theory, this theory was based on the existence of asymmetric information; a situation where the management had more information about the company than the owners of capital. This asymmetric information would affect the choice between the use of internal funds or external funds and between the options of adding new debt or issuing new equities.

CONCLUSION

Based on the results of regression analysis, it was obtained that Hypothesis 1 (H_1) was rejected with positive signified regression coefficient. Thus, it could be concluded that profitability had no significant effect on dividend policy. Hypothesis 2 (H_2) was rejected with positive signified regression coefficient. Thus, it could be concluded that free cash flow had a positive and insignificant effect on dividend policy. Hypothesis 3 (H_3) was rejected with positive signified regression coefficient. Thus, it could be concluded that growth opportunity had a negative and insignificant effect on dividend policy. Hypothesis 4 (H_4) was accepted with negative signified regression coefficient. Thus, it could be concluded that profitability had a negative and insignificant effect on debt policy. Hypothesis 5 (H_5) had a negative and insignificant effect on debt policy. Free cash flow was an extra cash company that could be distributed to the creditors or shareholders that were not used for operations or investments. Hypothesis 6 (H_6) was rejected with positive signified regression coefficient. Thus, it could be concluded that growth opportunity had a positive and insignificant effect on dividend policy. Hypothesis 7 (H_7) was rejected with negative signified regression coefficient. Thus, it could be concluded that debt policy had a negative and insignificant effect on dividend policy. Thus, an increase in debt policy would be followed by a decrease in dividends. Hypothesis 8 (H_8) was accepted with the calculation of indirect effect and the total effect was greater than the direct effect. In addition, the sobel test indicated that the p-value had significant value. Hypothesis 9 (H_9) was rejected with positive signified regression coefficient. It showed that the size of free cash flow had no significant effect on debt policy. Based on the results of regression analysis that had been done, it was obtained that Hypothesis 10 (H_{10}) was accepted with positive signified regression coefficient.

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KNOWLEDGE AS A TOOL TOWARDS WELFARE: THEORY AND REALITY

Guswandi

Faculty of Economics, Krisnadwipayana University, Jakarta, Indonesia

E-mail: guswandi@unkris.ac.id

ABSTRACT

This paper aims to describe the theory and reality of welfare balance associated with population growth as well as its impact on the sustainability of development based on green growth. This paper also conveys the role of science to answer the “what, why and how” related to sustainability and green growth economy.

KEY WORDS

Welfare, economy, green growth, business.

Our population has grown significantly over the last decade affecting the balance of nature and ecosystems; it is not surprising then that disasters occur everywhere – landslides, oxygen depletion, world oil reserve depletion, and other forms of disasters that hinder human existence. Indonesia has long been known as a beautiful country, a paradise in the world. Indonesia is fertile and rich in natural resources; yet, it cannot escape disasters, and many forms, from drought, floods, to landslide, take place in the country. Our natural balance has been disturbed by the large number of population. Social and humanity problems have also increased, as human beings compete to maintain their existence.

On the other hand, countries around the world are vying to increase their economic growth. Investment has been significant for all sectors because it contributes to growth. Investment in the field of oil palm plantations, as one of Indonesia’s main commodities, has eroded millions of hectares of forests in Kalimantan, Sulawesi, Sumatra, and other islands the world has claimed as the world’s lungs. For the sake of economic growth, Indonesia’s forest resources have been sacrificed.

The above brief description has shown us that the growing population has led to ecosystem extinctions and increasing social and humanitarian problems; this is worse if all countries are oriented only to economic growth. In other words, GNP, which refers to the performance of a country, basically contains only the economic waste that excludes the welfare of society, the carrying capacity of the environment, and the balance of the ecosystem. This should not happen continuously; the state must have thoughts about growth that considers ecosystems and humanity, such is known as green growth (Anderson, 2016).

As scientists, Anderson, Kusters, Mc Carty and Obidzinski (2016) have tried to contribute to the maturation of the concept of green growth by articulating the theory and the reality of the countries in the world. Furthermore, we, graduate students, as the future scientists and scholars, are trying to understand the root of the error and reviewing and providing recommendations related to green growth in order to create sustainable economic development by reducing the damage to the ecosystem or set it to a minimum.

This study focuses on the role of science as well as its subjects, i.e. scientists as part of the academic community, to uphold the foundation of their life in the form of integrity, autonomy, and welfare in explaining the problems faced, why it happens and how to find solutions to the problems for a sustainable life without sacrificing the ecosystems.

Indonesia’s economic growth to date has brought welfare to most Indonesian. However, the economic growth that currently focuses on the natural resource-based industry sector also raises ecosystem and social issues. To address these issues, this paper will point out what happened in connection with the green growth.

The problems associated with the ecosystem include increased levels of CO₂, floods, landslides, drought, forest and land fires, degradation of air quality, groundwater abrasion and subsidence, and decreased quality and quantity of water. Based on data released by the

Global Green Growth Institute (2015), Indonesia's CO₂ emissions from fossil fuel consumption are around 500 million tons per year, while CO₂ emissions from changes in land use and forestry could reach more than 1 billion tons per year. This emission provides an economic impact for future generations in Indonesia and around the world. The toxic gas and particles, including the smoke of forest fires and peatlands, have degraded the water quality in many cities in Indonesia. The latest estimate states the impact of death from air pollution in Indonesia is about 3% of GDP (Gross Domestic Product) in 2010.

Based on the data from the National Disaster Management Agency¹, during 2017, the recorded disasters were floods (737 incidents), landslides (577 incidents), forest and land fires (96 incidents), floods and landslides (67 events), drought (19 events), in addition to natural events.

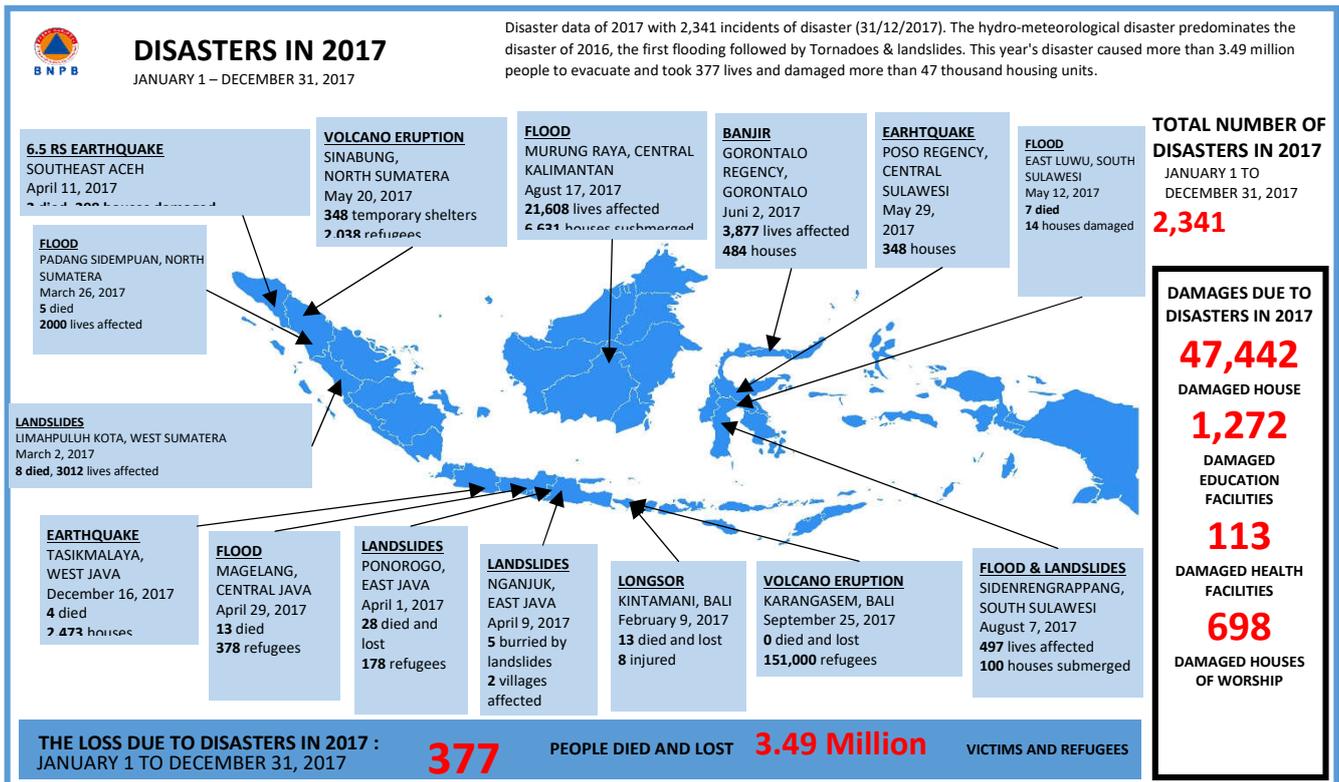


Figure 1 – Data of Disasters in Indonesia during the period of 2017 (Source: The National Disaster Management Agency, 2017)

Other important issues are social problems such as high crime rates, poverty, high unemployment, and increased hunger. From the data of the Central Bureau of Statistics, the number of poor people in Indonesia in 2017 was 26,582,900 people. This number is still quite high even though it has decreased from the previous year which was 27,771,220. Table 1 presents the data of poor people in Indonesia from 1970 until 2017.

Similar to the number of poor people in Indonesia, the number of unemployed in Indonesia is still quite high from 2012 to 2017; it was around seven million. The unemployment rate in Indonesia is presented in Table 2.

The high level of poverty and unemployment in Indonesia affects the level of crime either in the form of crime against life or physical. From the statistical data, Jakarta occupies the highest position for the crime rate although Jakarta is not included in the big 5 seen from the risk level of crime.

¹ Badan Nasional Penanggulangan Bencana (BNPB).

Table 1 – The Number of Poor People in Indonesia

Year	The Number of Poor People (in Millions)			The Percentage of Poor People			Poverty Line (IDR/Capita/Month)	
	Urban Areas	Villages	Urban Areas + Villages	Urban Areas	Villages	Urban Areas + Villages	Urban Areas	Villages
1970	n.a	n.a	70	n.a	n.a	60	n.a	n.a
1976	10	44.2	54.2	38.8	40.4	40.1	4,522	2,849
1978	8.3	38.9	47.2	30.8	33.4	33.3	4,969	2,981
1980	9.5	32.8	42.3	29	28.4	28.6	6,831	4,449
1981	9.3	31.3	40.6	28.1	26.5	26.9	9,777	5,877
1984	9.3	25.7	35	23.1	21.2	21.6	13,731	7,746
1987	9.7	20.3	30	20.1	16.1	17.4	17,381	10,294
1990	9.4	17.8	27.2	16.8	14.3	15.1	20,614	13,295
1993	8.7	17.2	25.9	13.4	13.8	13.7	27,905	18,244
1996	7.2	15.3	22.5	9.7	12.3	11.3	38,246	27,413
1996	9.42	24.59	34.01	13.39	19.78	17.47	42,032	31,366
1998	17.6	31.9	49.5	21.92	25.72	24.2	96,959	72,780
1999	15.64	32.33	47.97	19.41	26.03	23.43	92,409	74,272
2000	12.31	26.43	38.74	14.6	22.38	19.14	91,632	73,648
2001	8.6	29.27	37.87	9.79	24.84	18.41	100,011	80,382
2002	13.32	25.08	38.39	14.46	21.1	18.2	130,499	96,512
2003	12.26	25.08	37.34	13.57	20.23	17.42	138,803	105,888
2004	11.37	24.78	36.15	12.13	20.11	16.66	143,455	108,725
2005	12.4	22.7	35.1	11.68	19.98	15.97	165,565	117,365
2006	14.49	24.81	39.3	13.47	21.81	17.75	174,290	130,584
2007	13.56	23.61	37.17	12.52	20.37	16.58	187,942	146,837
2008	12.77	22.19	34.96	11.65	18.93	15.42	204,896	161,831
2009	11.91	20.62	32.53	10.72	17.35	14.15	222,123	179,835
2010	11.1	19.93	31.02	9.87	16.56	13.33	232,989	192,354
2011	10.95	18.94	29.89	9.09	15.59	12.36	263,594	223,181
2012	10.51	18.09	28.59	8.6	14.7	11.66	277,382	240,441
2013	10.63	17.92	28.55	8.52	14.42	11.47	308,826	275,779
2014	10.36	17.37	27.73	8.16	13.76	10.96	326,853	296,681
2015	10.62	17.89	28.51	8.22	14.09	11.13	356,378	333,034
2016	10.49	17.28	27.76	7.73	13.96	10.7	372,114	350,420
Sep-17	10.27	16.31	26.58	7.26	13.47	10.12	400,995	370,910

Source: The Central Bureau of Statistics, 2017.

Table 2 – The Unemployment Rate in Indonesia

Year	Not educated/ Has never attended school	Not/ Has Never Graduated Elementary School	Elementary School	Junior High School	Senior High School	Senior Vocational School	Academy	University	Total
2005	264,458	673,527	2,729,915	3,151,231	3,069,305	1,306,770	308,522	395,538	11,899,266
2006	170,666	611,254	2,589,699	2,730,045	2,851,518	1,305,190	278,074	395,554	10,932,000
2007	94,301	438,519	2,179,792	2,264,198	2,532,204	1,538,349	397,191	566,588	10,011,142
2008	103,206	443,832	2,099,968	1,973,986	2,403,394	1,409,128	362,683	598,318	9,394,515
2009	90,471	547,430	1,531,671	1,770,823	2,472,245	1,407,226	441,100	701,651	8,962,617
2010	157,586	600,221	1,402,858	1,661,449	2,149,123	1,195,192	443,222	710,128	8,319,779
2011	205,388	737,610	1,241,882	2,138,864	2,376,254	1,161,362	276,816	543,216	8,681,392
2012	85,374	512,041	1,452,047	1,714,776	1,867,755	1,067,009	200,028	445,836	7,344,866
2013	81,432	489,152	1,347,555	1,689,643	1,925,660	1,258,201	185,103	434,185	7,410,931
2014	74,898	389,550	1,229,652	1,566,838	1,962,786	1,332,521	193,517	495,143	7,244,905
2015	55,554	371,542	1,004,961	1,373,919	2,280,029	1,569,690	251,541	653,586	7,560,822
2016	59,346	384,069	1,035,731	1,294,483	1,950,626	1,520,549	219,736	567,235	7,031,775
2017	62,984	404,435	904,561	1,274,417	1,910,829	1,621,402	242,937	618,758	7,005,262

Source: The Central Bureau of Statistics, 2017.

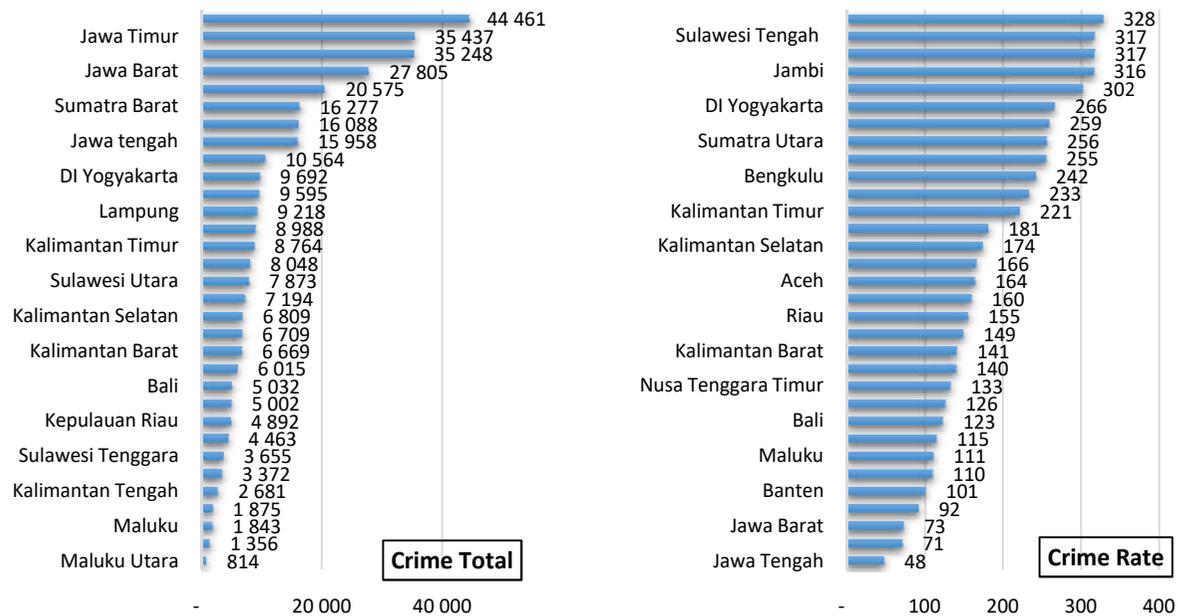


Figure 2 – Total Crime Total Reported and the Risk to Crime Rate According to the Regional Police Office 2015 (Source: The Crime Statistics, 2016)

The ecosystem and social problems occurring as described are caused by several factors, such as population increase, land conversion, development activities including rapid population growth and bad resource management. Nature has a limit of ability to accommodate all human activities. The increase in population and the increase in population activity all requires land as a basic means; it often leads to land conversion, such as agricultural land into settlements or industries or forests into plantations.

The conversion of forests into plantation land can lead to the increase of CO₂ levels, as proven by Anderson (2016) in East Kalimantan Province. There has been a significant conversion of forests into palm oil plantation. In 2000, the number of plantations has increased significantly, from the 116,888 ha allocated, 49,085 ha of plantation was planted. In 2013, the number started from 456,145 ha to turn into 1,115,415 ha of land allocated for palm oil plantations. From the data, in the period of approximately 10 years, the increase in palm oil plantations has reached almost 10 times. From the existing data, during 2000 to 2010, there was 19.9% land conversion occurred from forests to palm oil plantations or an increase of carbon emission to 20.6% (Anderson, 2016). The same issue is happening in all areas in Kalimantan as well as in other parts of Indonesia.

The increase in CO₂ levels, in addition to the conversion of forests, in which forests function as an absorber of CO₂ (1 hectare of forest can absorb 250-300 tons of CO₂ (Kyoto Protocol, 1997)), is also due to CO₂ resulting from forest fires. This is because to ease the process of opening oil palm plantation, the company burns the forests; not infrequently, it even causes a national disaster disrupting both local residents and neighboring countries.

In addition to land conversion, ecosystem problems are also caused by population explosions and increased human activities. The increase in population is estimated to reach 11 billion in this century where the largest population growth occurs in developing countries. This increase in population will increase the per capita consumption of the population, thus increasing the need for food and fuel or biofuel (Laurance, 2014). Population growth places additional burdens on natural resource capabilities and waste disposal, lowering environmental quality. The issues that cause ecosystem and social problems come from the same source, i.e. urban development, urban transport, lifestyle, and economy that only emphasize the structure of production and the dependence on the consumption of natural resources and energy in mass (Inoguchi, 2015).

Table 3 – World Energy Consumption

No	Negara	Oil	Natural Gas	Coal	Nuclear Energy	Hydro Electric	Total	%
1	USA	937.6	582.0	564.3	187.9	59.8	2331.6	22.80%
2	China	308.6	35.1	956.9	11.3	74.2	1386.6	13.60%
3	Federal Rusia	128.5	361.8	105.9	32.4	40.0	668.6	6.50%
4	Japan	241.5	64.9	120.8	64.8	22.6	514.6	5.00%
5	India	119.3	28.9	204.8	3.8	19.0	375.8	3.70%
6	Germany	123.6	77.3	85.7	37.8	6.1	330.4	3.20%
7	Canada	99.6	80.5	30.5	20.5	76.4	307.5	3%
8	France	94.0	40.2	12.5	101.4	14.8	262.9	2.60%
9	United Kingdom	80.8	88.2	38.1	18.1	1.7	226.9	2.20%
10	South Korea	104.8	28.4	53.1	29.6	1.3	217.2	2.10%
20	Indonesia	54.7	30.3	22.2	-	2.5	109.6	1.10%

Source: *World Energy Outlook, 2008*.

The high consumption of the world community on the existing resources is also one of the causes of these problems. The existing data confirms that the world energy consumption is controlled by industrialized countries; US energy consumption reaches 22.80% of the world's energy consumption followed by China, Russia and Japan, while Indonesia ranks 20. The need for energy in Indonesia continues to increase; the need for fossil fuel is still the highest requirement in Indonesia followed by electricity and coal. Indonesia's energy needs by type and scenario can be seen in Figure 2.

Increased human activities (development) have also been a cause of increased emissions and global warming. As an example, the CO₂ emission in Jakarta reaches 206

million tons per year. The largest contribution comes from the transportation sector which reached 182.5 tons per year, while the household and industry sectors contribute 23.9 million and 350.3 thousand tons of carbon emissions per year (databoks.katadata.co.id).

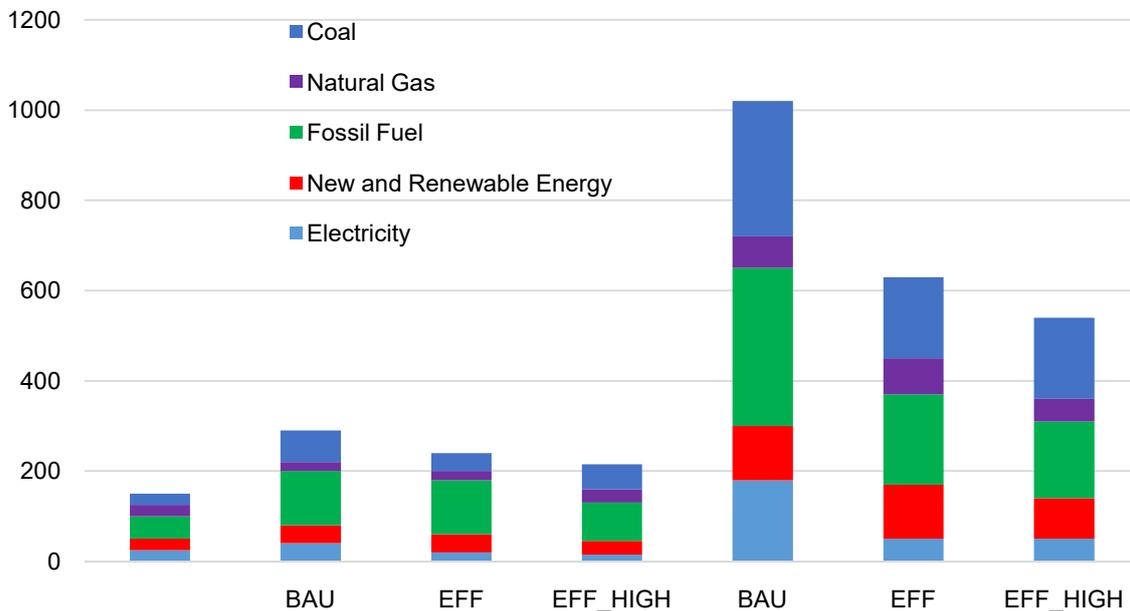


Figure 3 – Energy Requirements by Types and Scenarios (Source: Outlook Energi Indonesia, 2015)

In addition to ecosystem problems, the social problems that arise are also caused by population explosions. Population explosions not accompanied by the increase in employment would lead to an increase in poverty, especially in urban areas, as well as rising unemployment rates as described above.

The ecosystem and social problems because of land conversion, population growth, increased human activities and the development process are related to the carrying capacity of the earth. According to the Law Number 32 of 2009 on Environmental Protection and Management, the carrying capacity is the ability of the environment to support human life, other living things, and the balance between the two; capacity is the ability of the environment to absorb substances, energy, and/or other components in it.

When we review ecosystem and social issues around the world in general are caused by the use of excessive resources leaving the sustainability concept behind. Speaking of green growth, we are talking about economic growth that must be able to reduce or avoid environmental damage. Sustainability and green growth needs cooperation of government (central and local) as well as community and private (NGOs). In this case, the scientists play a role in finding new concepts or models in the application of sustainability and seeking renewable resources.

The study by Motesharrei (2014) has resulted in a Human and Nature Dynamics (HANDY) model based on the utilization and use of limited natural resources and human sustainability, as population growth and the utilization of existing resources do not concern sustainability. The rationale of the HANDY model is the predator-prey model in which population growth is as a 'predator' and resources are as 'prey' to be finished by humans. The human tendency is to enrich themselves by accumulating capital and savings over the carrying capacity of the nature. This causes the existing resources to no longer meet human consumption. This study also examines the different things that allow the occurrence of more complex dynamics that can fundamentally change the behavior and output of the model, namely the accumulation of surplus, which in this study is called the accumulation of surplus wealth.

The results of this study indicate one of the causes of damage in the community (both ecosystem and social), i.e. excessive exploitation of natural resources and excessive economic stratification where the economy is only oriented to the achievement of high economic growth that exceeds the production capacity (overload) to exclude environmental quality. To overcome these problems, a policy is required related to reducing the level of inequality and controlling population growth. The results also mention that although there is no stratification of the economy, the damage can still occur if there is a sharp decline in the value of capital goods. Both of these can be avoided by directing economic growth to sustainable economic growth by utilizing natural resources as wisely as possible.

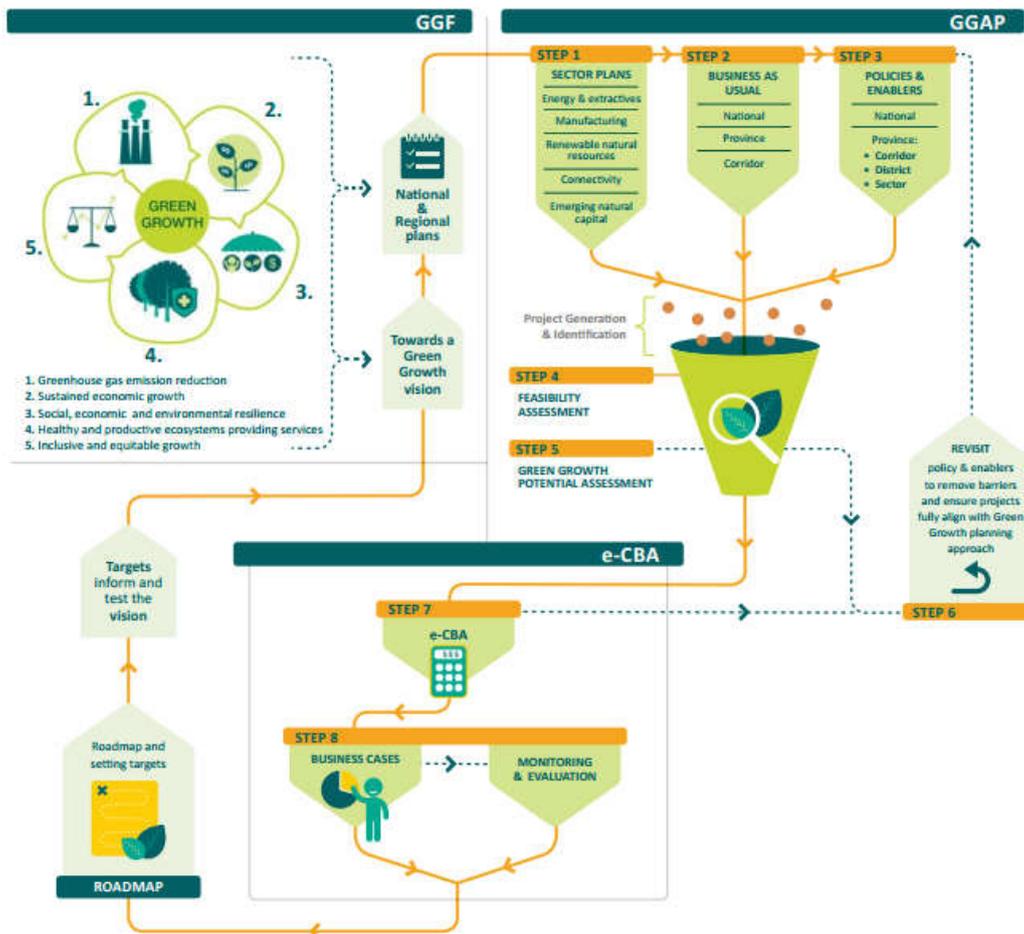


Figure 4 – Assessing and Designing Activities and Investments to Achieve Green Economy and Green Growth (Source: The National Planning Agency, 2017)

Other solutions related to environmental issues caused by the environmental carrying capacity that has been exceeded are planning according to the carrying capacity and environmental capacity. One effort to balance the utilization of resources and the environment is through the process of spatial arrangement based on the achievement of environmental preservation (Wirosoedarmo, 2014). In the preparation of Regional Spatial Plans, both national, provincial, and city levels, and spatial evaluation should have considered the environment as well as the carrying capacity of the environment.

In addition, the study conducted by the National Planning Agency related to green growth states that green economic growth depends on the complex relationship between various investments and field interventions. The process of assessing and designing activities and investments to achieve Green Growth Assessment Process (GGAP) uses indicators at various projects and sectors as well as city, provincial and national levels—to prioritize and assess green growth and green economy projects and policies. By assessing

the performance of green economic growth from projects and policies in the field, GGAP can improve the design of the planning process and improve the quality of investment (Bappenas, 2017).

Conclusion. Based on the above description, the following conclusions are given:

- Knowledge and science is a tool and at the same time is a common sense that can be directed to improve the welfare of mankind through the creation of models of economic development that pay attention to the ecosystem and the carrying capacity of the environment.
- As scientists, human can think and analyze of what happened, why it happened and how to solve it; a model or prototype can be made or compiled related to the solution of problems faced by humanity.
- Development planning must not only pay attention to achievements related to economic growth but also pay attention to the ecosystem and the carrying capacity of the environment so the desired economic growth can take place continuously (sustainable). As outlined in the HANDY model, sustainable economic development can occur when we utilize natural resources as wisely as possible.
- Indonesia as a developing country must be oriented to high economic growth.
- Indonesia as a developing country oriented to high economic growth should already implement sustainable economic growth and use natural resources wisely.
- Findings/concepts/models found and produced by scientists associated with sustainability to realize the green growth should be further poured in the form of policies so government and society can implement it.

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THE EFFECT OF STOCK OPTION COMPENSATION ON EARNINGS MANAGEMENT WITH CORPORATE GOVERNANCE AND AUDIT QUALITY AS MODERATING VARIABLES

Arlita I G.A. Desy*, Wirama Dewa Gede

Faculty of Economy and Business, University of Udayana, Indonesia

*E-mail: arlitadesy0403@gmail.com

ABSTRACT

Agency theory stated that stockholders must establish contractual relationships to provide reasonable compensation for managers to make decisions that maximize shareholder value even in uncertain situations and imperfect monitoring. One of them is stock option compensation. According to positive accounting theory, stock options compensation increase earnings management. The inconsistency of previous study encourages research by adding corporate governance and audit quality as moderating variables. The results prove the tendency of theory that occurs in business practices and provide input for policy makers to suppress earnings management. The sample consists of 16 manufacturing companies in Indonesian Stock Exchange with 81 observation data taken by purposive sampling. Earnings management is measured by real earnings management. Stock option compensation and audit quality with dummy while corporate governance is measured by corporate governance disclosure index. Hypothesis testing was performed using moderated regression analysis. The result of the study proves that stock option compensation has a positive effect on earnings management. Corporate governance reinforces the effect of stock option compensation on earnings management. Audit quality does not moderate the effect of stock option compensation on earnings management. Based on this result, companies should use other incentive plan to reduce earnings management. Practitioners and governments also need to reevaluate corporate governance requirements in order to protect stockholders not only from accrual earnings management but also real earnings management. The auditor profession is advised to continue to develop methods that can detect real earnings management.

KEY WORDS

Agency theory, positive accounting theory, earnings management, stock option compensation, corporate governance, audit quality.

The separation between owner and management in a public company resulted in an agency relationship within the company. This agency relationship resulted in issues related to the separation of control and ownership in the company (Jensen and Meckling, 1976). This agency problem can ultimately lead to opportunistic management behavior in the form of earnings management practices. One example of harmful earnings management practices happening in Toshiba.

In May 2015 Toshiba first announced that the company was investigating an accounting scandal that could lead to a revision of the company's profit over the past three years (Ando et al., 2015). Toshiba has inflated earnings of USD 1.2 billion over the previous seven-year period (CNN, 2015). As a result of this accounting scandal Toshiba shares fell to a two-and-a-half-year low and a net loss for the quarterly period of 12.3 billion yen (BBC News, 2015).

The earnings management can be detrimental so stockholders must find a way to develop the right contractual relationship. Jensen and Murphy (1990) recommend that compensation policies be designed to encourage managers to choose and implement actions that increase shareholder value even in uncertain situations and imperfect monitoring. One of them is with stock option compensation. The most important reason

managers today have a relatively large stock-based compensation package is to align manager goals with the goals of interested parties (Vos, 2010).

On the other side, according to the bonus plan hypothesis in positive accounting theory, compensation actually increases opportunistic behavior. On this theory it is assumed the manager will maximize their personal benefits (Watts and Zimmerman, 1978). Sun (2012) states that executive compensation contracts are incentives where opportunistic behavior in the form of earnings management tends to be detected because CEO allegedly have the drive to manage earnings if executive compensation is strongly attributed to performance. This is supported by the results of Alves (2012) and Lakhali et al. (2014) found that stock option compensation had a positive effect on earnings management. In addition, Kadan and Yang (2016) also found that the money value of new stock options is given and cumulative share returns are strongly correlated with earnings management.

Contrary, Essid (2012) found that the Executive Stock Option (ESO) lowers earnings management and is an additional control mechanism. Hassen (2014) found that total stock compensation is negatively related to the absolute value of accruals. Farichah (2017) also stated that there is a negative relationship of management compensation on earnings management.

The inconsistency of previous research results is presumed to be due to moderating variables that weaken or reinforce the effect of stock option compensation on earnings management. This study was conducted to re-examine the effect of stock option compensation on earnings management by adding moderation variables namely corporate governance and audit quality. Research Lakhali et al. (2014) found that stock option compensation has a positive effect on earnings management suggests research on the role of corporate governance in moderating the effect of stock option compensation on earnings management. Research Ahmad et al. (2016) that was conducted on manufacturing companies in Indonesia shows that companies that are audited by big-four will be less involved in earnings management than unaudited companies by big-four. So it is assumed that a good audit quality will moderate the effect of stock option compensation on earnings management.

This study was conducted to determine the effect of stock options compensation on earnings management and to know the ability of corporate governance and audit quality in moderating the effect of stock option compensation on earnings management. This study also aims to find a mechanism that can reduce the negative impact of the effect of stock option compensation on improving earnings management so that agency costs can be reduced.

LITERATURE REVIEW

The agency relationship is a contract between two or more persons, between a principal against a person called an agent, in order for the agent to act in a principal name that includes the delegation of some decision-making authority (Jensen and Meckling, 1976). Management as an agent has the responsibility to optimize shareholder profits and in return the management will be compensated according to the contract (Jensen and Meckling, 1976). In this relationship can be found a conflict.

Agency conflict is an act of individualism between the two parties to be more selfish than the interests of the company. The owner of a company as principal focuses on stock price hikes while management will focus on self-interest so that it tends to make unilateral policies that can harm the company (Hidayanti and Laksito, 2013).

Managers of the company have more information than stockholders as owners of the company resulting in an imbalance of ownership of information. The presence of asymmetric information and conflict of interest poses agency problems so that the company must bear agency costs.

Positive accounting theory is a branch of accounting research that seeking explanations and predicting actual accounting practices. Positive accounting can be attributed to the company's contractual views (Coase, 1937 and Jensen and Meckling, 1976).

In the company's view as the nexus of contract, accounting practices evolve to reduce contract costs by establishing agreements among various parties.

There are three hypotheses that show the manager's motive for choosing an accounting method over other methods: Bonus Plan Hypothesis, Debt Hypothesis, and Political Cost Hypothesis (Watts and Zimmerman, 1978). Managers with incentives that are associated with a firm's accounting performance tend to manage accounting methods and figures to show better accounting performance (Deegan, 2009).

Schipper (1989) in Wolk et al (2001) defines earnings management as a deliberate intervention in external financial reporting in order to gain personal benefit. Earnings management occurs when managers use judgments in financial reporting and transaction preparation to alter financial statements so as to mislead some stakeholders about the firm's economic performance or to influence contract yields that depend on the amount of accounting reported (Healy and Wahlen, 1999).

The company's board of commissioners tries to establish an optimal incentive compensation scheme to reduce agency costs (Essid, 2012). The incentive compensation scheme will establish a self-monitoring system and align the interests of shareholders and managers (Dorff, 2005). This stock option compensation is commonly used as a means to increase executive loyalty and motivation by making them as company owners and to add executive income as additional compensation (Asyik, 2010).

Sun (2012) concludes that executive compensation contracts are an incentive where opportunistic behavior in the form of earnings management tends to be detected because of the CEO. This means that giving stock option compensation encourages managers to be opportunistic by doing earnings management. Alves (2012) and Lakhali et al. (2014) found that stock option compensation has a positive effect on earnings management. The same is also evidenced by Kadan and Yang (2016) who found that the money value of the new stock option is given and the cumulative share return is strongly correlated with earnings management and insider trading in vesting years.

Corporate governance is a process and structure used by corporate organs, directors, managers, shareholders, and parties related to the development of the company in certain environments, to improve business success and corporate accountability in order to increase shareholder value in the long term by taking into account other stakeholders based on legislation and ethical values (Sutedi, 2011).

Corporate governance initially emerged to suppress conflicts of interest between management and stockholders resulting from the separation of ownership and control (Baydoun et al., 2012). Abbadi et al. (2016) states the agency theory framework suggests that internal oversight mechanisms help ensure that directors implement policies that maximize shareholder value. Corporate governance can mitigate the opportunistic behavior of managers in manipulating reported earnings (Nazira and Afza, 2018).

Auditing is a form of monitoring that companies use to reduce agency costs with creditors and shareholders (Jensen and Meckling, 1976). Independent auditor participation is an important part in reducing opportunistic managerial behavior (Saleem and Alzoubi, 2016). Ahmad et al. (2016) suggests that Indonesia's audited manufacturing firms Big four will be less involved in earnings management than unaudited by big four.

METHODS OF RESEARCH

This study analyzes the effect of stock option compensation on earnings management with corporate governance and audit quality as a moderating variable with the research framework that shown in Figure 1.

Based on literature review and research framework, hypotheses are stated as follow:

H₁ Stock option compensation has a positive effect on earnings management;

H₂ Corporate governance moderates the effect of stock option compensation on earnings management;

H₃ Audit quality moderates the effect of stock option compensation on earnings management.

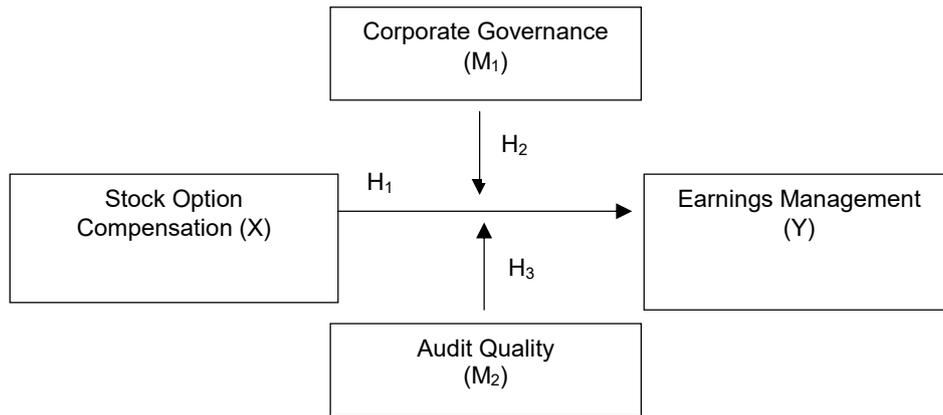


Figure 1 – Research Framework

The research was conducted at a manufacturing company in Indonesia Stock Exchange with data from 2018 to 2016. Manufacturing companies were selected because Subekti (2012) proves that the management of companies in Indonesia tends to make real earnings management in manufacturing companies. Observation period starts from 2008 because this year there is a global crisis that makes the bad economic conditions that trigger the occurrence of earnings management. One example is Toshiba, who performed a seven-year earnings management, where the scandal was revealed in 2015. Wang (2014) also proves that real earnings management tends to be higher in poorer economies.

Sampling method using purposive sampling technique with criteria as follows:

- The Company has a stock option compensation program or has an average value of the number of assets close to the company that has stock options in the same subsector;
- The Company has issued annual reports for the period of the year under review and has been audited by an independent auditor;
- The Company has all the necessary data on research such as cash flow from operating activities, total assets, sales, cost of goods sold, and operating expenses.

Based on these criteria, there were 16 companies with 81 observation data. Data obtained from www.idx.co.id, IDX representative office in Denpasar, each company's website, and archives available at www.morningstar.com.

Earnings management is the dependent variable in this study which is proxied with real earnings management calculated according to estimation model by Roychowdhury (2006) as follows:

- The cash flow abnormality rate of the operating activity (CFO) is calculated by subtracting actual CFO to normal CFO calculated by using the estimated coefficient of the following models:

$$CFO_t / A_{t-1} = \alpha_0 + \alpha_1(1/A_{t-1}) + \beta_1(S_t/A_{t-1}) + \beta_2(\Delta S_t/A_{t-1}) + \varepsilon_t \quad (1)$$

Where: CFO_t - cash flow from operating activities in period t ; A_t - Total assets at the end of period t ; S_t - sales during period t ; ΔS_t - sales period t minus sales period $t-1$.

- The abnormality of production costs (PROD) is calculated by subtracting the actual production cost from the normal production cost calculated using the estimated coefficient of the following models:

$$PROD_t / A_{t-1} = \alpha_0 + \alpha_1(1/A_{t-1}) + \beta_1(S_t/A_{t-1}) + \beta_2(\Delta S_t/A_{t-1}) + \beta_3(\Delta S_{t-1}/A_{t-1}) + \varepsilon_t \quad (2)$$

Where: $PROD_t$ - production cost in period t ; A_t - Total assets at the end of period t ; S_t - sales during period t ; ΔS_t - sales period t minus sales period $t-1$; ΔS_{t-1} - sales period $t-1$ minus sales period $t-2$.

- The discretionary cost abnormality rate (DISEXP) is calculated by subtracting the actual discretionary cost at normal discretionary cost calculated using the estimated coefficient of the following models:

$$DISEXP_t / A_{t-1} = \alpha_0 + \alpha_1 (1 / A_{t-1}) + \beta (\Delta S_{t-1} / A_{t-1}) + \varepsilon_t \quad (3)$$

Where: $DISEXP_t$: production cost in period t; A_t : Total assets at the end of period t; ΔS_{t-1} : sales period t-1 minus sales period t-2.

After the three proxies were counted later as in Valikifard and Mortazavi (2016) study reversed scores were used for abnormal CFO and DISEXP so that for all three proxies, the higher residuals would be related to the management of high real activity. So real earnings management is:

$$REM = \text{abnormalCFO} * (-1) + \text{abnormalDISEXP} * (-1) + \text{abnormalPROD} \quad (4)$$

The independent variables of stock option compensation are measured using dummy, 1 for firms that compensate stock options and 0 for non-compensating stock options. Corporate governance is measured using the Corporate Governance Disclosure Index (IPCG) which assesses the implementation of corporate governance of a company based on the disclosure of corporate governance principles in its annual report. IPCG is built on Surifah research (2011).

Audit quality is measured using dummy variables. Companies whose financial statements are audited by the Public Accounting Firm affiliated with the Big Four are rated 1 while 0 for the reverse. Big-four in this study were Deloitte, PricewaterhouseCoopers, Ernst & Young, and KPMG.

Hypothesis testing was performed using moderated regression analysis (MRA) with the following equation:

$$Y = \alpha + \beta X + \varepsilon \quad (5)$$

$$Y = \alpha + \beta_2 M_1 + \beta_3 M_2 + \varepsilon \quad (6)$$

$$Y = \alpha + \beta_4 X + \beta_5 X * M_1 + \beta_6 X * M_2 + \varepsilon \quad (7)$$

Where: Y - earnings management; α – constants; β - regression coefficient; X - stock option compensation; M_1 - corporate governance; M_2 - audit quality; $X * M_1$ - the interaction between stock option compensation and corporate governance; $X * M_2$ - the interaction between stock option compensation and audit quality; ε - error term.

RESULTS AND DISCUSSION

The number of observation data of companies that have a share option compensation program of 21 data from 6 companies. The amount of observation data that the company's year report is audited by the Big Four as a better proxy for audit quality of 53 data. Descriptive statistics of the variables in this study are presented in Table 1 below.

Table 1 – Descriptive statistics

Variables	n	Minimum	Maximum	Mean	Deviation Std
Stock Option Compensation (X)	81	0,00	1,00	0,26	0,44
Corporate Governance (M_1)	81	0,32	0,82	0,66	0,12
Audit Quality (M_2)	81	0,00	1,00	0,65	0,48
Earnings Management (Y)	81	-2,00	0,12	-0,50	0,46

From table 1 it is known that the average value of earnings management is -0.50 with the smallest value -2.00 and the highest value of 0.12. The average value of earnings management is -0.50 and shows earnings management activity through real activity specially to increase profit in the manufacturing industry is relatively low. While the average value of corporate governance index is 0.66 with the highest value of 0.82 and the smallest 0.32. The

quality of audit has an average of 0.65, which means that 65% of observational data are financial reports audited by the Big Four.

First regression equation results to see the effect of stock option compensation on earnings management. The results of the first equation regression can be seen in Table 2 below.

Table 2 – Equation (5) Regression Result

Model	Regression Coef	Sig.t
X	0,218	0,025
Constanta		1,770
R ²		0,047

Based on Table 2 it can be concluded that the value of β is 0.218 which means that stock option compensation has a positive relationship on earnings management. In other words, giving stock options compensation will improve earnings management. The option compensation variable has a significance value of 0.025, a value less than 0.05 so H_1 accepted. Thus it is concluded that stock option compensation has a positive effect on earnings management.

Furthermore, multiple regression is done by incorporating corporate governance (M1) and audit quality (M2) with regression result presented in Table 3 below.

Table 3 – Equation (6) Regression Result

Model	Regression Coef	Sig.t
X	0,228	0,004
M ₁	0,549	0,002
M ₂	-0,038	0,684
Constanta		-5,595
R ²		0,344

Based on Table 3 it can be seen that stock option compensation has a regression coefficient of 0.228 which means the compensation of stock options will increase the occurrence of earnings management. In addition, the coefficient of corporate governance regression and audit quality of 0.549 and -0.036, respectively, also means that the better the implementation of corporate governance the higher the actual earnings management practices that occur otherwise, on audit quality, the higher the audit quality owned by the company will result in real earnings management become lower. From Table 5.5 it is also known that corporate governance has a significance value of 0.002 while the audit quality is 0.684.

Last done regression to build equation (3) by entering interaction effect of stock compensation and corporate governance compensation variable and interaction of stock option compensation with audit quality with regression result presented in Table 4 below.

Table 4 – Equation (7) Regression Result

Model	Regression Coef	Sig.t
X	-1,853	0,002
XM ₁	2,181	0,001
XM ₂	-0,078	0,477
Constanta		1,771
R ²		0,323

Table 4 shows that the interaction between compensation of stock options and corporate governance has a regression coefficient of 2,181 which means that the higher interaction between stock option and corporate governance compensation can improve the behavior of real earnings management otherwise the higher interaction of stock option compensation and audit quality will decrease real earnings management. The significance

value of stock options and corporate governance compensation is 0.001, while the interaction of stock option compensation with audit quality is 0.477.

The second hypothesis states that corporate governance moderates the effect of stock option compensation on earnings management. When viewed from the regression coefficient of share and corporate governance compensation interaction in Table 3, it is seen that corporate governance actually strengthens the effect of compensation of the stock option on earnings management as reflected in positive regression coefficient value. Further testing is done by looking at the values of β in equations (2) and (3). In equation (2) β_2 is significant and in regression model in equation (3) $\beta_5 \times M_1$ it is known that β_5 is also significant so it can be concluded that variable M_1 , corporate governance is quasi moderator. These results indicate that corporate governance moderates the effect of stock option compensation on earnings management so that H_2 is accepted.

The third hypothesis states that audit quality moderates the effect of stock option compensation on earnings management. Looking at the values of β_3 in equations (2) and (3). In equation (3) β_3 is not significant and in the regression model in equation (3) $\beta_6 \times M_2$ it is known that β_6 is also not significant it can be concluded that variable M_2 , audit quality is homologue moderator variable. Hence it is concluded that H_3 is rejected, which means that audit quality does not moderate the effect of stock option compensation on earnings management.

Judging from the regression results in Tables 1, 2, and 3, there is a change in the coefficient of determination. When the model only takes into account the effect of stock option compensation on earnings management, the value of R^2 is 0.047, which means stock options compensation can affect earnings management only by 4.7% while the rest of 95.3% is influenced by other factors not found in the model. After added the corporate governance and audit quality variables, the value of R^2 becomes 0.344 which means that jointly compensation stock options, corporate governance, and audit quality can affect earnings management by 34.4% while the rest of 65.6% is influenced by other variables which did not become the focus of the study. In the third model the value of R^2 becomes 0.323, which means compensation of stock options and its interaction with corporate governance and audit quality can only affect earnings management of 32.3%.

DISCUSSION OF RESULTS

The results of the first hypothesis test show that stock option compensation has a positive effect on earnings management. These results support the research of Alves (2012) and Lakhal et al. (2014) and Kadan and Yang (2016) found that stock option compensation has a positive effect on earnings management.

Psychologically, management as a shareholder wants its stock options to have potential profitable value, which can be gained by improving performance or performing earnings management (Mukhtar and Taqwa, 2016). This research proved that management decided to make earnings management to reach the potential value that cater from stock options owned. It is in the opinion of Alves (2012) that the option of executive stock increases the opportunistic scope of the manager.

This study supports the positive accounting theory disclosed Watts and Zimmerman (1978), a bonus scheme hypothesis states that the bonus given to management will precisely encourage management to behave opportunistically by doing earnings management. Compensation will encourage managers to manage accounting methods and figures to show better accounting performance (Deegan, 2009). This study is also consistent with result of Sun (2012) which is executive compensation contracts are an incentive where opportunistic behavior in the form of earnings management tends to be detected. This means that giving stock option compensation encourages managers to be opportunistic by doing earnings management.

Results of this study prove that stock option compensation is not an effective mechanism to reduce earnings management, but the provision of stock option compensation

will actually encourage opportunistic behavior management so that earnings management is increasing.

The second hypothesis in this study is accepted which means that corporate governance moderates the effect of stock option compensation on earnings management. Nevertheless, the results of research show the opposite direction, corporate governance actually strengthens the effect of stock options compensation on earnings management. This implies the implementation of corporate governance disclosed in the annual report rather than undermining earnings management behavior but rather encouraging earnings management.

The results of this study contradict Abbadi (2016) that shows that good corporate governance quality will decrease earnings management. Corporate governance in this study actually improve earnings management so it can be concluded that the implementation of corporate governance is not effective in suppressing the opportunistic behavior of management in the form of earnings management. On the contrary, corporate governance actually strengthens the occurrence of earnings management resulting from the compensation of stock options and even corporate governance is directly proven to have a positive effect on earnings management. In this research, it is proved that corporate governance is a quasi moderator variable affecting earnings management as independent variable as well as moderation variable.

Corporate governance improves earnings management especially real earnings management. This is in line with the results of research Eny et al. (2015), which proves the greater percentage of institutional ownership, managerial ownership, the proportion of independent commissioners, and the existence of audit committees leads to higher levels of earnings management through real activity in the enterprise. This result is also supported by Istianingsih (2016) who found that the implementation of corporate governance has a positive effect on earnings management as measured by real activity.

Corporate governance can improve earnings management because in measurements there is a compensation that is the concentration of institutional ownership, the existence of remuneration committees, board meetings and commissioner sizes, as evidenced in some studies actually improve earnings management, particularly real earnings management.

Ming and Shioh (2015) found that the higher the concentration of institutional ownership, the manager tends to increase production costs which means improving real earnings management. This finding is also supported by Fauziyah (2017) found that institutional ownership actually improves the management of real activities undertaken by the company.

The institution as a shareholder also has an interest in the company's profits. Indonesian statement of accounting standard, PSAK 15 provides that if the company owns a share of more than 20% then the investment reporting must use the equity method. This method requires the investor's share of the income of the investee to be recognized in the profit and loss of the investor so that the earnings of the investee will increase the profit for the investor. This is suspected to be the cause of institutional owners also tend to support earnings management.

The existence of the remuneration committee is proved to have a positive effect by Obigbemi et al. (2016) this raises the question of the indentation and composition of the remuneration committee. Obigbemi et al. (2016) also found that firms with higher frequency of board meetings exhibit higher earnings management trends. Limanto and Herusetya (2017) research proves that the size of the board of commissioners improves earnings management when the company has transactions with related parties. This is supposedly because the board of commissioners can engage with related party transactions at a strategic level to improve the company's performance by making earnings management on the company's real activities.

This study measures corporate governance with scorecard assessments that use indicators that turn out to be higher the score obtained actually improve the practice of earnings management. Corporate governance is a mechanism designed to provide protection for investors, Enomoto et al. (2015) finds that managers in countries with stronger

investor protection tend to exercise real earnings management rather than accrual-based earnings management. This result is also supported by Istianingsih (2016) which proves that corporate governance index is not proven able to dampen earnings management practices in Indonesia because it only leads to trade off of earnings management through income discretion to earnings management through real activity.

This study was conducted with the proxy of real earnings management so that it is in accordance with the findings of Enomoto et al. (2015) and Istianingsih (2016), the implementation of good corporate governance improves earnings management while strengthening the effect of stock options compensation on earnings management. In other words, the behavior of the positive effect of stock options compensation on earnings management tends to occur in companies that have high quality corporate governance.

The third hypothesis in this study is rejected, which means that audit quality does not moderate the effect of stock option compensation on earnings management. This result conflicts with the assumption that audits performed by higher quality auditors can detect earnings management by management and report them so that earnings management behavior can be suppressed. Thus the results of this study are inconsistent with Saleem and Albazouni (2016) and Ahmad et al. (2016) which states that the quality of auditor's proxies by the Big Four audit will be less involved in earnings management practices.

The Professional Standards of Certified Public Accountants (SPAP) have regulated fraud in an audit of financial statements on Audit Standards 240: "The Responsibility of an Auditor Associated with Fraud in an Audit of a Financial Statement". The auditor should obtain reasonable assurance whether the overall financial statements are free from material misstatement, caused by fraud or error. Because of the inherent limitations of an audit, there is always an inevitable risk that some material misstatement in the financial statements may not be detected, even though the audit has been well planned and executed (Hidayah, 2016).

Real earnings management through real corporate activity will be more difficult to detect by the auditor. This is in accordance with the results of research Cheong et al. (2015) stating that when accrual-based earnings management is controlled, audit quality no longer affects the quality of financial statements because auditors will find it more difficult to detect earnings management practices through the real activities of the company so there is no difference in audit quality between Big Four and non-Big Four. Consequently, the quality of the auditor cannot decrease the real earnings management ploy. So auditor quality cannot be an effective tool to help reduce the occurrence of earnings management practices that occur when the company has a stock option compensation program.

CONCLUSION

Based on the results and discussions that have been done then concluded the following:

- Stock option compensation has a positive effect on earnings management. The results of this study support the bonus plan hypothesis on positive accounting theory with the finding that stock option compensation increases earnings management practices.
- Corporate governance is a quasi moderator variable that reinforces the effect of stock options compensation on earnings management. This means that an implementation disclosure of corporate governance increase earnings management while strengthening the effect of stock options compensation on earnings management.
- Audit quality does not moderate the effect of stock option compensation on earnings management.

This study has limitations in the number of samples because the number of manufacturing companies in the BEI which has a stock option compensation program is still very small. If similar research is to be done, research can be focused on looking at whether or not there is a difference in earning management practices before and after stock option compensation. In addition, research can be done on other industries whose members more

compensate stock options such as companies in the financial sector. Due to the different characteristics of the company's operations, other studies can also be made to build adequate measures to measure earnings management practices in other industries.

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THE EFFECT OF FUNDING AND INVESTMENT DECISIONS TOWARD COMPANY VALUE WITH DIVIDEND POLICY AS THE INTERVENING VARIABLE ON MANUFACTURING SECTOR LISTED IN INDONESIA STOCK EXCHANGE

Putri Nyayu Khairani*, Student
Management Science Master Program, Sriwijaya University, Indonesia

Isnurhadi, Yuliani, Hanafi Agustina, Lecturers
Department of Management Science, Sriwijaya University, Indonesia

*E-mail: nyayukhairani@yahoo.com
ORCID: 0000-0002-4176-0423

ABSTRACT

Company value reflects the current value of the desired revenue in the future and the indicator for the market in assessing the company holistically. Implementing the financial management function is the way that can be done to achieve the company's objectives. The optimal combination of management decision can optimize company value that will affect shareholder wealth. The funding decision is a very significant decision for the company because it involves the acquisition of funding sources for operational activities and to finance the company's investment activities. In this case, funding decision and investment decision are interconnected. Funding sources within the company can be obtained from inside or outside the company.

KEY WORDS

Funding decision, investment decision, dividend policy, company.

An institution in establishing a company should have clear goals. The company goals are such as gaining maximum profit, willing to make company owner welfare, and optimizing company value that can be seen from its share price. Company value reflects the current value of the desired revenue in the future and the indicator for the market in assessing the company as a whole. Implementing the financial management function is the way that can be done to achieve the company's objectives. The optimal combination of management decision can optimize company value that will affect shareholder wealth.

The market value of a company equity added with the market value of the debt is the value of the company in which the addition of debt from the amount of equity can then reflect the value of the company. Based on Cretu and Brodie (2007) research, there are several factors that can affect the value of the company, including: investment decision, funding decision, dividend policy, company growth, company size, profitability, and institutional ownership. Some of these factors have a relationship and effect on inconsistent corporate values.

The funding decision is a very significant decision for the company because it involves the acquisition of funding sources for operational activities and to finance the company's investment activities. In this case, funding decision and investment decision are interconnected. Funding sources within a company can be obtained from inside or outside the company. Funds from inside the company are called retained earnings and funds from outside the company are called debt.

Based on the research of Sartini and Purbawangsa (2014), it shows that funding decision has a significant positive effect to company value. The research result conducted by Fenandar and Raharja (2012) on the contrary states that funding decision does not have significant effect to company value. Another decision related to company value is investment decision. Investment decision are the decision that reflects future investment opportunities, ie through the introduction of new products or the expansion of old products, replacement of

equipment or buildings, research and development, and exploration. The implication for company is the company must plan to make investment decision through the introduction of new products or the expansion of old products, replacement of equipment or buildings, research and development as well as exploration (Husnan, 2008).

The research regarding the impact of investment opportunity set on the company value has been done by Hasnawati (2005). Investment opportunity that will generate value in the future will be greatly influenced by the investment made by the company. The results of this study successfully finding high IOS value is proven to have high company value in the current period and in the upcoming period.

Another policy related to company value is dividend policy. The dividend policy is an intervening factor in this present study. The ability of company to pay dividends may reflect the company value. If the dividend payout is high, then the stock price is also high which affects the high company value as well. Thus, dividend policy is one of the most important decisions. In this present research, dividend policy is measured by dividend payout ratio. Diana and Fitria (2017) find that investment decision has positive effect to dividend policy.

Based on the above explanation, the objectives of this study are: 1) to explain the funding decision and investment decision directly on the company value in manufacturing company listed on the Stock Exchange period of 2013-2016. 2) to explain the effect of funding decision and investment decision to company value with dividend policy as the intervening variable at manufacture company listed on Indonesia Stock Exchange year of 2013-2016.

LITERATURE REVIEW

Signalling Theory. Modigliani and Miller assume that investors and managers have the same information about the prospect of a company called symmetric information. However, in fact, the manager has more information about the company than the investor. This is called asymmetric information where it can affect the optimal capital structure. Signaling theory is a settlement of information asymmetry (Alivia, 2013).

Trade-Off Theory. This theory discusses the relationship between capital structure and company value. Trade-off model assumes that the capital structure of the company is the result of the trade-off of tax profits by using debt with the cost of which is reflected as a result of the use of the debt. The trade-off theory essence in the capital structure is to balance the benefits and sacrifices arising from the use of debt. As long as benefits are greater, additional debt is still permissible. The sacrifice of the debt because of the greater use of debt, the additional debt is not permitted.

Bird in the Hand Theory. This theory is proposed by Myron Gordon (1959) and John Lintner (1956) who argue that equity or company value will decrease if the dividend payout ratio is lowered as the investors are less confident of capital gains generated from retained earnings than if investors receive dividends. Gordon and Lintner state that investors are much more appreciative of the expected earnings of dividends than the expected income from capital gains.

Company Value. Company value is the price that the prospective buyer is willing to pay when the company is sold (Husnan, 2008). The company value is often associated with the stock price. The higher the stock price, the higher the company value will be (Brigham and Houston, 2007).

Funding Decision. Funding decision is a decision on the source of funds that will be used by the company. The source of funds is divided will be able to affect into two, namely internal fund source and external fund source. External fund source used by company is debt and capital. To determine the optimal composition of funding that the company value. This ratio shows the comparison between financing and funding through debt with funding through equity.

Investment Decision. Investment decision is the decision regarding investment to gain profits or benefits that are acceptable. According to Gaver and Kenneth (Hasnawati, 2005) Investment Opportunity Set (IOS) is the value of a large company depending on the expenditures that are determined by the management in the future period in which the

investment option is expected to produce large returns. The selected IOS option is the ratio of market to book of asset (MBVA).

Dividend Policy. Dividend policy is the decision whether the profits earned by the company will be distributed to shareholders as dividends or will be held in the form of retained earnings in order to finance future investment. If the company chooses to distribute profits as dividends, it will reduce the retained earnings and subsequently reduce the total internal financing sources (Sartono, 2001).

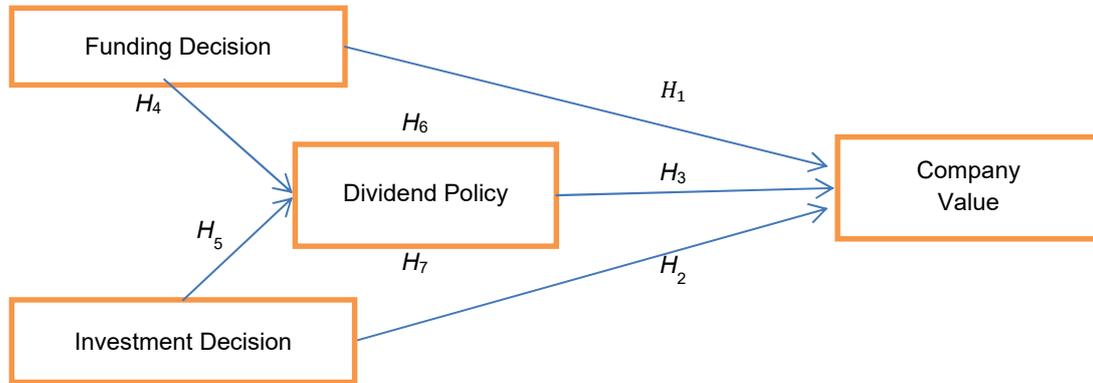


Figure 1 – Model of Research Hypothesis

Research Hypotheses:

- H_1 = Funding decision affects company value significantly;
- H_2 = Investment decision affects company value significantly;
- H_3 = Dividend policy affects company value significantly;
- H_4 = Funding decision affects dividend policy significantly;
- H_5 = Investment decision affects dividend policy significantly;
- H_6 = Dividend policy is able to mediate funding decision towards company value;
- H_7 = Dividend policy is able to mediate investment decision towards company value.

METHODS OF RESEARCH

The populations in this study are all manufacturing companies listed on the Indonesia Stock Exchange (IDX) according to the Indonesian Capital Market Directory (ICMD) publication in the period of 2013 to 2016 as many as 150 companies.

The sampling is based on the purposive sampling method. The sampling process utilizes criteria from the list of manufacturing companies listed in Indonesia Stock Exchange (IDX) in 2013-2016 amounted to 50 companies with the observation total of 200 (50 companies x 4 years).

The data used in this study is secondary data in the form of company financial statements in the period of 2013 to 2016.

The data collection technique used is documentation in which the data are collected from annual financial report of company and company annual report with period of five years starting from 2013 to 2016. The step undertaken is by recording all data needed in research to calculate DER, MBVA, PBV, DPR which will then be analyzed.

This study will present the average statistics that are supplemented with the highest and lowest values in each variable of funding decision, investment decision, company value, and dividend policy.

Inferential statistics in this study utilizes path analysis. Path analysis is an extension or development technique of multiple linear regression analysis. This study uses the application program of Statal Product and Service Solutions (SPSS) version 23 to help analyze data in this research.

Table 1 – Operational Definition

No.	Research Variables	Operational Definition	Measurement Scale	Indicator/Formula
1.	Funding Decision (X_1)	Funding Decision is a comparison between financing and funding through debt with funding through equity. It is greatly influenced by the company's investment opportunity which is the company's ability to exploit the opportunity to take advantage. This opportunity is unobservable except for certain proxies.	Ratio	$Debt\ to\ Equity\ Ratio = \frac{Debt\ Total}{Equity\ Total}$
2.	Investment Decision (X_2)	It is commonly indicated by the stock price which is the ratio of the market value of a stock to the book value of the company so that it can measure stock price level.	Ratio	$MBVA = \frac{Activa\ Total - Equity\ Total + (shares\ distributed \times closing\ price)}{Asset\ Total}$
3.	Company Value (Z)	It is the company's decision regarding the policy relating to the determination of the percentage of net profit of the company which is distributed as dividend to the shareholders.	Ratio	$Price\ Book\ Value = \frac{Share\ Market\ Price}{Book\ Value\ per\ shares}$
4.	Dividend Policy (Y)		Ratio	$DPR = \frac{Dividend\ Per\ Share}{Earning\ Per\ Share}$

Source: Processed from several journals.

RESULTS OF STUDY

Linearity Test. The linearity test is conducted to know whether the model is accurate in describing the relationship between the variables being studied and can be considered as a good model. One of the assumptions in the regression is that the relationship between the dependent variable and the independent variable is linearly related (Supriyadi, 2014).

Table 2 – Result of Variable Linearity Test

Independent Variable	Dependent Variable	Test Result ($\alpha = 0.05$)	Sig.	Decision
DER	DPR	All model is significant	0.000	Linear
MBVA	DPR	All model is significant	0.000	Linear
DER	PBV	All model is significant	0.001	Linear
MBVA	PBV	All model is significant	0.000	Linear
DPR	PBV	All model is significant	0.005	Linear

Source: The data is analyzed by the researcher.

The approach used is Curve Fit in which the decision rule refers to the concept of parsimony, that is, when all models used as the basis of testing are significant or not significant or linear function is significant, it means that the model is considered being linear. Table 3 reveals that all forms of relationships between variables in the structural model is linear. Hence, the assumption of linearity in this structural model has been fulfilled.

Goodness of Fit Model Test. The result of goodness of fit model test can be fulfilled if it is supported by the calculation of valid data. Goodness of fit structural model on the analysis is in the form of total determination coefficient value ($R^2 \rightarrow m$). This value is calculated based on R^2 value of each dependent variable. From the results of data processing, it is found that the values of R^2 dividend policy and R^2 value of the company value are 0.446 and 0.789. Based on R^2 , each dependent variable can be calculated, thus, the value of predictive-relevance can be calculated (Q^2):

$$Q^2 = 1 - (1 - R_1^2)(1 - R_2^2)(1 - R_3^2) = 1 - (1 - 0,446)(1 - 0,784)(1 - 0,326) = 0,92$$

The value of Q^2 obtained is of 0.92 which can be interpreted that the model used to predict the endogenous variable is appropriate to be used as the basis for hypothesis testing. The value of the total determination coefficient of 92% is a good value and accurate to predict the company value, the remaining 8% is not included in this research model.

Hypothesis Testing Result. The research hypothesis result is presented in the table 3 below.

Table 3 – Research Hypothesis Testing Result

Independent Variables	Mediating Variables	Dependent Variables	Coefficient Path	p-value	Detail
DER		PBV	0.200	0.000	Significant
MBVA		PBV	0.866	0.000	Significant
DPR		PBV	0.326	0.000	Significant
DER		DPR	-0.276	0.000	Significant
MBVA		DPR	0.237	0.002	Significant
DER	DPR	PBV	0.111	0.003	Partial Mediation
MBVA	DPR	PBV	0.943	0.007	Partial Mediation

Source: it is processed by the researcher; significant on = 5%; Detail: DER: funding decision; MBVA: investment decision; DPR: dividend policy; PBV: company value.

DISCUSSION OF RESULTS

Funding Decision Positively and Significantly Affects Company Value. The result of regression analysis is obtained that Hypothesis 1 (H₁) is accepted with positive regression coefficient; therefore, it can be concluded that funding decision has positive and significant effect to company value so that the increase of funding decision hence will be followed by the increase of company value. It is in line with the trade-off theory that predicts a positive relationship between capital structure and company value with the assumption of tax benefit is still greater than the cost of bankruptcy and the cost of the agent. In essence, the trade-off theory shows that the value of a company with debt will increase with increasing debt levels. The use of debt will increase the value of the company but only at a certain point. After that point, the use of debt actually lowers the company value.

High debt indicates a high level of risk. In the capital structure theory, the capital structure policy involves balancing the risk and the rate of return that is by using more debt which means it will increase the risk borne by shareholders but using more debt can also enlarge the rate of return that investors expect. In accordance with risk and return theory, the higher the risk level of a company, the greater the return expected by the investor. If higher risks are not matched by high returns, then there will never be investors who are willing to invest in the company. The return of a company can be either a dividend or a capital gain. However, based on the bird-in the hand theory, investors prefer dividends to capital gain.

The conclusions obtained from Antwi, et al (2012), Arifah and Roifah (2013), Sartini and Purbawangsa (2014) state that funding decision has a significant and positive effect on company value. The same results are also obtained in the study, namely funding decision has a significant and positive effect on company value.

Investment Decision Positively and Significantly Affects Company Value. The result of regression analysis obtained shows that Hypothesis 2 (H₂) is accepted with marked positiveregression coefficient. It can be concluded that investment decision has a positive and significant effect on the company value so that increasing investment decision will be followed by an increase in the company value. The expected investment provides a higher rate of return (internal rate of return) than the cost of capital, is considered being profitable. The higher the rate of profit generated from the investment activity of the company will increase the stock price of the company. The higher stock price has an effect on the increase of company value.

The research findings support signal theory (signaling theory) because investment decisions reflected by the MBVA are very important in an effort to increase the company value. It is because this type of investment will give a signal about the growth prospects of the company, in this case, the total growth of assets and the prospect of capitalization of the stock market value reflected in the growth of expected assets for the future.

According to the research conducted by Sartini and Purbawangsa (2014), Rakhimsyah, L. A., & Gunawan, B. (2011), Fajriana and Priantinah (2016), Deviana and Fitria (2017), it is found that investment decision has positive and significant effect on company value. The same results are also obtained in the research, namely investment decision has a significant and positive impact on the company value.

Dividend Policy Positively and Significantly Affects Company Value. The result of regression analysis obtained reveals that Hypothesis 3 (H₃) is accepted with marked positive regression coefficient. Thus, it can be concluded that dividend policy has positive and significant effect to company value so that increasing of dividend policy then will be followed by increase at company value.

The dividend policy is a financial decision made by the company whether the profit earned will be distributed to shareholders or held as retained earnings. Dividend policy often makes a conflict of interest between the management company and the investor. Bird in the hand theory states that investors are more interested in companies which pay dividends (Wiagustini, 2010). The dividend payout made by the company is considered being a positive signal by investors to invest, as investors prefer a definite return on their investment. The company that distributes dividends will attract investors to invest. With so many investors buying stocks, it will raise the stock price so that it increases the company value.

According to research by Anton (2016), Clementin and Priyadi (2016), Sartini and Purbawangsa (2014), Fenandar and Raharja (2012), it is explained that dividend policy has a positive and significant effect on company value. The same result is also found in research that dividend policy has significant and positive effect to company value.

Funding Decision Negatively and Significantly Affects Dividend Policy. The result of regression analysis obtained shows that Hypothesis 4 (H₄) is accepted with negative regression coefficient. Hence, it can be concluded that funding decision has negative and significant effect to dividend policy so that the decrease of fund decision will be followed by the increase dividend policy.

The negative effect of funding decision on dividend policy indicates that the trade-off theory (Modigliani & Miller, 1963) applies to manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2013-2016, in which debt exceeding the optimum limit represents an excessively high debt and causes the company to have a risk of default higher so it leads to higher probability of bankruptcy. The more DER increases, the greater the debt burden the company pays, so it will lower the company's profit while profit is used to pay off the debt rather than pay dividends.

If the company's debt-equity ratio is high, then the company will be burdened with huge debt and agency fees, so the allocation of funds for dividend payout will be small. From this explanation, it can be seen that when the company's debt-equity ratio is high, then the dividend payout ratio will decrease.

The results of this study are in line with the results of research found by Fitriana and Pangestuti (2014) stating that funding decision has a significant and negative impact on dividend policy.

Investment Decision Positively and Significantly Affects Dividend Policy. The result of regression analysis obtained reveals that Hypothesis 6 (H₆) is accepted with positive regression coefficient. It can be concluded that investment decision has a positive and significant effect to dividend policy so that the increase of investment decision will be followed by the increase of dividend policy.

The company that has high IOS value also has high growth opportunities. High investment opportunities or IOS in the future make the company have a high growth rate. The company's management is willing to inform the public that the company has good prospects so that people are more interested in investing in the company. If the company can attract people to invest in the company, then the company will be easier to obtain additional capital to finance investment opportunities. The faster the growth rate of a company, the greater the need will be and to finance the growth of the company. The greater the need for future funding to finance its growth, the company usually prefers to hold earnings when it is paid as a dividend to shareholders by considering the limits of its cost. Therefore, it can be stated that the faster the growth rate of the company, the greater the required funds, the greater the chance to make a profit.

According to Sugiarto (2009) using data at company level, and using a combined six proxies to measure investment opportunity sets, it is found the results that are consistent with

Smith and Watts (1992) research that company has DER and level lower dividend yield than non-growth company.

Gaver and Gaver also examine the IOS relationship with dividend policy by using DPR and dividend yield as dividend policy proxy. The results show that dividend yield has a significant negative relationship with IOS, but the IOS relationship with DPR is not significant. Jones and Sharma (2001) is consistent with Gaver and Gaver's research that growing company has DER and dividend yield which are lower than company which does not grow. Myers and Majluf (1984) argue that profitable company (high IOS) has a drive to pay relatively low dividends in order to obtain more internal funds to finance their investment projects.

The results of this study are in line with the results of research found by Deviana and Fitria (2017), Fitriana and Pangestuti (2014) stating that investment decisions have a significant and positive effect on dividend policy.

Dividend Policy is Able to Mediate Funding Decision towards Company Value. The previous explanation states that financial manager must choose a capital structure that maximizes the value of a company. Company should be able to find the appropriate financing mix to achieve optimal capital structure that directly affects the company's value (Ross et al. 2009). In terms of funding decision, the question that often arises is how the company gets business funds. Is the fund used should come from internal company or from external company? If used both, then what proportion is appropriate between internal funds (capital) and external funds (debt) to increase the value of the company?

In 1977, Ross claimed that a good company whose performance could signal to a high portion of its debt to its capital structure. The company's poor performance would not dare to use large amounts of debt because of its high bankruptcy probability (Sugiarto, 2009). According to Brigham and Houston (2007), the increase of debt can be interpreted by outsiders as the company's ability to pay its obligations in the future, so the increase in debt will be responded positively by the market.

In the previous hypothesis, it has also been explained that one financial decision will affect other financial decisions (Fama and French, 1998). Similarly, it is also same as funding decisions and dividend policies. Jensen and Meckling (1976) argue that if free cash flow is used to invest, the dividend payout ratio falls. A high debt-equity ratio can lower the dividend payout ratio. If the company's debt-equity ratio is high, then the company will be burdened with huge debt and agency fees, so the allocation of funds for dividend payout will be small.

Based on these explanations, it can be concluded that there is a significant effect of funding decision on dividend policy and company value. Thus, it is assumed that dividend policy can be an intervening variable between funding decision and company value.

Based on the results of this study, it is obtained that Hypothesis 5 (H₅) is accepted. Dividend policy is able to mediate between variable of funding decision and variable of company value with sobel test. The results of this research are in line with result of research found by Fitriana and Pangestuti (2014) stating that dividend policy is able to mediate between the variables of financing decision and the variables of company value.

Dividend Policy is Able to Mediate Investment Decision towards Company Value. Investment decision is the decision that reflects future investment opportunities, ie through the introduction of new products or the expansion of old products, replacement of equipment or buildings, research and development, and exploration. The implication for companies is that company must plan to make investment decision through the introduction of new products or the expansion of old products, replacement of equipment or buildings, research and development.

Investment decision will have an effect on the company's performance over the long term while management has an enormous freedom in the use of company cash. By recognizing this, some researchers are trying to develop a signaling model in which capital investment is a signal that managers can use to show that company has high performance prospects reflected through company value. The investment opportunity that will cause future value will be greatly influenced by the investment made by the company, so that high IOS

value is proven to have high company value in the current period and in the upcoming period.

The implication for company is that company must plan to make investment decision through the introduction of new products or the expansion of old products, replacement of equipment or building, research and development, and exploration. If the company is able to maximize its capability through these investments in generating profits in accordance with the amount of funds that are bound, it can increase the company value.

Based on the results of this research, it is obtained that Hypothesis 7 (H₇) is accepted. Dividend policy is able to mediate between investment decision variables and company value variables by using sobel test. The results of this research are in line with the research result found by Fitriana and Pangestuti (2014) stating that dividend policy is able to mediate between investment decision variables and company value variables.

CONCLUSION AND SUGGESTIONS

Some of the conclusions obtained from the results of this study are funding decision (DER), investment decision (MBVA), and dividend policy (DPR) have a positive and significant effect on company value (PBV). Funding Decision (DER) has a negative and significant effect on dividend policy (DPR). The investment decision (MBVA) has a significant positive effect on dividend policy (DPR). Dividend policy (DPR) is able to partially mediate funding decision variables (DER) and investment decision (MBVA) to corporate value variables (PBV).

The management party must be able to maintain the stability of profits, improve financial performance and company value for the sake of continuity and good prospects for the company in the future. Investors are more cautious in making investment decision in the manufacturing sector. Investors should be able to explore and learn more about the company's asset structure information so that investors know whether the company uses internal funds or external funds to finance the company's operations.

The future research agenda is expected to extend the year of research so that the results will be better. In addition, it is necessary to add a variable in future research so that the value of determination coefficient can be improved and the modeling becomes better.

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THE EFFECT OF HUMAN RESOURCE MANAGEMENT ON THE JOB SATISFACTION AND EMPLOYEE PERFORMANCE OF SHARIA BANK IN SOUTH SUMATRA, INDONESIA

Hadjri Muhammad Ichsan*, Perizade Badia, Marwa Taufiq, Hanafi Agustina

Faculty of Economics Sriwijaya University, Inderalaya, Indonesia

*E-mail: ichsanhadjri@fe.unsri.ac.id

ABSTRACT

This research aims to determine the effect of Islamic Human Resource Management (IHRM) on the job satisfaction and employee performance. The population in this research were 245 sharia bank employees in South Sumatera, Indonesia where the number of selected respondents were 136 by using Slovin's formula and proportional stratified random sampling. The instrument in the measurement of the variable in this research is questionnaire distributed to the respondents. The results showed that IHRM consisting of Islamic recruitment and selection, Islamic training, and Islamic compensation positively and significantly affect the job satisfaction and employee performance.

KEY WORDS

Islamic human resource, management, job satisfaction, employee, Sharia bank.

The banking system in Indonesia embraces Dual Banking System consisting of two systems namely conventional and sharia banking (Remi, 2014). As one of the countries with the biggest Muslim population, Indonesia is expected to be the basis for sharia banking in the world. However, the current number of sharia banking assets is considered to be very small comparing to the overall banking industry asset in Indonesia. Based on the data from Indonesia Financial Services Authority (OJK), the number of sharia banking asset in Indonesia reached only 5.3% in 2016 (OJK, 2017).

The achievement of Indonesia's sharia banking asset in 2016 is still far below the achievement of other countries. Based on the data from Saudi Arabian Monetary Authority (SAMA), the number of sharia banking asset in Saudi Arabia in 2016 had reached 51% (SAMA, 2017). Similarly, based on the data from Central Bank of Malaysia (BNM), the number of sharia banking asset in Malaysia had reached 27% in 2016 (BNM, 2017).

One of the provinces in Indonesia with the sharia banking asset under the national average is in South Sumatera. Based on the OJK Syariah Banking Statistics Report of 2016, the total of sharia banking asset in South Sumatera Province was only 4.47% or under the sharia banking asset of 5.3% (OJK, 2017).

The performance of sharia banking organization in South Sumatera is considered as not optimal. One of the causal factors is the performance of Human Resources (HR) that has not been optimal. The performance of HR affects the overall organizational performance, where HR plays a very important role in the success of a business (Mathis & Jackson, 2011). The research conducted by Ascarya & Yumanita (2008) with the title "comparing the efficiency of Islamic banks in Malaysia and Indonesia", shows that one of the significant factors in causing inefficiency in Sharia Banks of Indonesia is the low quality of human resources.

Sharia Bank provides sharia-based banking operation, it is logical to expect this organization to put Islamic principles in the practice of Human Resources Management (HRM) and their policy. Islamic Human Resource Management (IHRM) is based on Al-Quran and Hadith of Prophet Muhammad Saw (Rahman et al., 2011).

Sharia-based of HR Management practice is an important aspect, but it is rarely highlighted in the literature (Hashim, 2009). Branine & Pollard (2010) state that there is very limited research discussing IHRM. Hence, it is necessary to conduct further research on the topic. Rana & Malik (2017) also state that there are very few researches that have reached

the IHRM topic. This is also supported by research by Khan (2015), who clarifies the lack of research on HRM in sharia banking. According to Mellahi & Budhwar (2010), although there has been an increase in the research interest in Islamic management in the last two decade, most of the research only focuses on Islamic finance and accounting (Chong & Liu, 2009; Napier, 2009), Islamic marketing (Haque et Hashim & Mizerski, 2010), Islamic leadership (Ahmad, 2009; Weir, 2008), Islamic work ethic (Ali & Al-Owaihah, 2008; Kumar & Rose, 2010), as well as gender and management in Islam (Metcalfe, 2006, 2007). So far, the number of research on IHRM is still very limited (Tayeb, 1997).

This research is conducted based on the basis of the very limited number of an empirical study on IHRM conducted in sharia banking. Several previous studies on IHRM suggest conducting further research by using more variative variables. The research by Hashim (2008) is only limited to job satisfaction, organizational justice, and intense turnover. The research also suggests further research on the impact of IHRM on employee performance. Follow up research by Hashim (2010) also suggests further research on the impact of IHRM on employee performance and job satisfaction. This is also supported by Rahman et al. (2013) who suggest that further research on IHRM should be conducted on employee performance, job satisfaction, and other variables. Fesharaki & Sehat (2017) also examine the impact of IHRM on organizational justice and organizational commitment in Iran. They suggest that further research on Islamic HRM on other variables that have not been studied.

This research aims to determine the impact of IHRM on job satisfaction and employee performance. Thus, it can be understood whether it is useful to implement the IHRM in the sharia banking organization or not. The previous research is related to IHRM which mostly focusing on the objects of Arab, Pakistan, and Malaysia. The object of research in Indonesia is still very limited and it has never been done in South Sumatra. This research is conducted as the effort to fill the research gap and to be the value for the originality of the research. It is expected that the research can provide insight for practitioners in sharia organization in managing human resources based on IHRM and it can be the reference for further research.

LITERATURE REVIEW

Islamic Human Resource Management (IHRM). The practice of IHRM is based on the Qur'an and Hadith of the Prophet Muhammad (Rahman et al., 2011). It is also based on ethical value, belief, and motivation (Khan, 2016). IHRM practice can be applied to various sharia organizations including sharia banking. Based on Hashim (2010) and Azmi (2015), there are several commonly used IHRM practices namely Islamic recruitment and selection, Islamic training, and Islamic compensation.

Islamic Recruitment and Selection. Recruitment and selection is a very important part of HRM practice. Recruitment and selection are considered as a complicated and complex task in the organization (Ali, 2005). Hashim (2010) argues that according to Islam, the employer should honestly inform the candidate of the potential job requirements and compensation he or she will obtain. The candidate should also provide true information about themselves. The organization should select the required candidate among many potential candidates applying for the job. Nepotism and favoritism can influence the recruitment and selection process. According to Islam, the candidate should be honest and competent because without these qualities he or she will not be considered as efficient (Mahesar et al., 2016). Muslim manager is obligated to follow the orders specified in the Qur'an to avoid nepotism, favoritism, and discrimination in the selection process of the candidate (Ali, 2005). Competent and potential candidate must be selected to fill a position on a job in an effort to avoid dishonesty and injustice.

Qur'an provides guidance in the selection process of the candidate including skills, knowledge, specialization, experience, personal skill, potential, character, persistence, and adherence to organizational rules and religious law (Salleh, 2012). The Islamic guideline covers five conditions that must be fulfilled for the selection of: 1) competence, 2) experience, 3) carrying responsibility, 4) organizational fit, and 5) reputation (Ali, 2010).

Islam emphasizes that candidate is selected based on merit and competence and should not be influenced by friendship, blood relation, kinship, age, wealth, race or political power (Alorfi, 2012).

Hashim (2009, 2010) states that all applicants in the selection process with the Islamic principles should be treated equally. The selection based on Islamic principles should be in line with the following principles: 1) the first principle is justice, 2) the second principle is suggesting that selection should be based on the competence regardless of wealth, age, race, political power, friendship, and blood relation, 3) the third principle is honesty, 4) the fourth principle is assigning work based on the employee's capacity, 5) the fifth principle is honesty. The candidate should be honest with himself, know his own ability and act when he is sure that he can do the task. The employer should be honest in telling the truth about the work being offered to the candidate, including the nature of the work, salary, and reward (Alorfi, 2012).

Rahman et al. (2013) state that the appropriate employee selection will improve the company performance in a more positive direction. On the other hand, inappropriate employee selection will slow down the company performance. This has been hinted by the Prophet Muhammad in the hadith narrated by Imam Bukhari from Abu Hurayrah. The Messenger of Allah said:

"When wasting a mandate, then wait for a destruction. It is said, O Rasulallah, what makes something worthless? Rasulallah said: "when a matter is handed over to someone who is not an expert in it, then wait for the destruction" (HR Imam Bukhari from Abu Hurayrah).

According to Rivai, Basalamah, & Muhammad (2014) if the selection is carried out in accordance with Islamic principles fairly, then the selection process will result in employee choices expected to give a positive and good contribution. Hence, the employer can provide good service and reward to the employees and improve the employee satisfaction. Meanwhile, if the selection is not well carried out, the company will get the negative impact, the complaint from the unsatisfied customers, reduced production of products with low quality which gives disadvantages to the company.

Islamic Training. Knowledge and wisdom are attributes of God. The Qur'an explicitly directs humans to seek and use science for the development of human potential (Rana & Malik, 2017). Islam encourages people to acquire skills and develop technology (Hashim, 2009). In accordance with the principles of Islam, the manager should possess the knowledge. They shall seek opportunities and means to enhance the knowledge and skills of employees who are under their responsibility (Salleh, 2012).

Islam requires human to seek knowledge with perseverance and excellence in achieving performance. Human is urged to seek knowledge from the day he was born to the day he dies. The concept is to create a continuous knowledge improvement. Enhancing the knowledge is the obligation for every employee and employer. The employee should provide his best work performance to the organization through his own knowledge and skills. If the employee is considered to have the insufficient skill, then it is the obligation of the employer to provide an opportunity for the employee to improve his competence. One of the ways is through training (Siswanto, 2014). The decision to choose an eligible employee to attend the training should be reviewed through information regarding performance and potential employees. This is the basis for recommending the employee for the training (Hashim, 2008).

Training and development in Islam include intellectual, moral, spiritual, physical developments (Hashim, 2010), social, psychological (Khan, 2016), emotional (Husain & Ashraf, 1979) developments and human growth. It aims to increase the knowledge and skills of employees holistically regardless of their rank or level in their organization.

Some concepts of Islam are directly related to the training and development. The first concept is *Etqan*, the awareness of self-improvement, referring to the effort of improving themselves for a better performance achievement (Branine & Pollard, 2010). The second concept is *Al Falah*, the desire to achieve excellence and perfection. The desire to excel in personal and professional matters become an ideal thing for Muslim due to these values.

This implies that employees are required to always do better, improve the quality of contribution and their work performance by learning new skills and acquire more knowledge. The third concept is Ihsan concerning Islam tradition that shows the business and spiritual obligation should be balanced with each other (Ali, 2005).

Islam emphasizes the training and development can cover the moral and spiritual development of the employees at all levels of the organizational hierarchy (Hashim, 2010). According to Islamic teaching, the employer should facilitate the career development of the employees through training, special assignment, and mentoring without discrimination on the ground of race, skin color, gender, or religion (Azmi, 2010). Training and development concepts in Islam includes acquiring knowledge, skills, and personality development by purifying one's soul (Rahman et al., 2013).

In the sharia banking, training is not only about operational factor, product knowledge, or other soft skills. However, the most important thing in the training is the knowledge of Sharia. The sharia knowledge is a fundamental and imperative prerequisite before starting sharia banking activities that create differentiation in conventional banking (Dewa & Zakaria, 2012). Gait & Worthington (2008) emphasize the importance of Sharia knowledge by defining sharia banking as the financial or product service provider that are principally implemented in accordance with the main principles of Sharia.

Islamic Compensation. Azmi (2015) discloses that compensation practice is a very important thing in HRM. Islam encourages the employer to appreciate his employees in accordance with the qualification, experience, knowledge, ability, and the amount of work they do. Married employees should get more compensation comparing to single employees because those employees must feed, buy clothes for their wife and children as well as providing education for the children. This usually happens as the employees getting older, the increase in salary will increase along with their seniority.

According to Mansor & Ghani (2005), all employees should also be given benefits, bonus, overtime wages, rise, time off and medical treatment without discrimination. All terms of payment of compensation should be clearly explained in the offer letter to be considered by the employee before they accept the offer. If employees are not satisfied with the compensation requirements, they can negotiate with their superiors since the discussion is also a principle in compensation practices according to Islamic principles.

Compensation should be enough to provide a decent life. Beekun (1997) states that if compensation is too low, individual may not feel motivated enough to strive. Ahmad (1995) states that a worker is entitled to fair compensation for his work.

The employer must develop compensation packages for their employees in such a way as to enable them to meet basic needs with a good standard of living (Sadeq, 1990). Favoritism and discrimination in compensation and promotion systems are prohibited in Islam as they are contrary to Islamic principles of human rights and justice (Khan, Farooq & Hussain, 2010).

Islam emphasizes that the compensation offered to employees must be reasonable and sufficient. Islam emphasizes giving full and complete compensation to decent employees without any reduction in their work. Islam instructs that compensation should be established on the basis of mutual consent and deliberation (Ahmad, 1995, Ali, 2005).

Job Satisfaction. According to Robbins (2008), job satisfaction is a general attitude towards someone's work which shows the difference between the number of rewards earned by employees and the amount they believe they should receive. Greenberg & Baron (2003) describe job satisfaction as the positive and negative attitudes that individuals make toward their work. Meanwhile, Vecchio (1995) expresses job satisfaction as thought, feeling, and the tendency of someone's action which is someone's attitude toward work.

Smith, Kendall, & Hullin (1969) measure the job satisfaction by using Job Descriptive Index (JDI) which includes job satisfaction, reward, promotion opportunity, supervision, and coworkers. Satisfaction toward job is achieved when an employee's work in accordance with his own skills and ability. The satisfaction with the reward will arise when an employee feels the received compensation in accordance with the workload and in the balance with other employees who work in the organization. The employee's tendency is desiring income

system believed to be fair and in line with his expectation. The satisfaction toward the supervision of higher authority is achieved when the employee has a supervisor capable of providing technical assistance and motivation. The satisfaction toward the coworkers is achieved when the employee has coworkers who can provide technical assistance and social support. The satisfaction toward the promotion opportunity will arise when the employees have the same opportunity in filling the position in the organizational structure.

Several previous studies have been done to determine the effect of IHRM on job satisfaction. However, there are several different results. The results of Hashim (2008) and Mahesar et al. (2016) conclude that the IHRM has a direct effect on job satisfaction. On the other hand, the research by Siswanto (2014) concludes that IHRM has no direct effect on the job satisfaction.

Employee Performance. According to Milkovich & Bodreau (1997), performance is the level at which employees perform their work in accordance with the condition that has been determined. The employees' performance that is common to most jobs includes elements of the number of results, quality of results, timeliness of attendance results and ability to work together. It further provides the performance standard of a person who sees the quantity of output, output quality, output period, workplace attendance and cooperative attitude. Performance standards are defined on the basis of job criteria in the form of an explanation of what the organization has given its employees to do. Therefore, individual performance in the job criteria must be measured, compared to the existing standards and the results should be communicated to all employees by explaining the performance standards of output production or better known as numerical performance standards and non-numerical performance standards (Mathis & Jackson, 2011). Employee performance needs to be assessed periodically. This is because the employee performance appraisal can then be used as an analysis for the need of training (Ivancevich, 2008)

Ali (2005) describes two performance evaluation approaches including; evaluation based on judgment and behavior. In the assessment-based method, the characteristics of the employee are included. These characteristics include honesty, responsibility, fairness, dedication, competence, and maturity. Islam requires employees to perform their duties and work with honesty, competence and without delay (Ahmad, 1995). The next method is a behavior-based evaluation, in which employee behavior during work is assessed and evaluated.

The problems that often raise in the assessment of employee performance is the party that provides the assessment. Usually, the higher authority is the one who performs the assessment. In most cases, the supervisor cannot accurately assess his own employees. Ali (2005) asserts that sometimes, it is very difficult for manager and supervisor to assess employees due to personal relationship and religious thought. Ali (2005) states that firing employees can cause problems for both employer and employee. According to Islamic principles, employee performance assessment should be based on fairness, accountability, caring, and accountability in accordance with established criteria (Rahman et al., 2013).

Poor design in the form of employee assessment such as subjective judgment type leads to unfair evaluation resulting in unfair treatment of some employees, few cases of dismissal, and inappropriate promotion (Sadeq, 2006). Such biased judgment contradicts the ethical principles of justice and employee rights. This is not part of Islamic principles.

The dimensions for measuring individual employee performance include quality, quantity, timeliness, and effectiveness. (Robbins, 2008). Some previous studies have concluded that employee performance is directly affected by recruitment and selection (Bako & Kolawole, 2016; Makhmara, 2016), training (Athar & Shah, 2015; Elnaga & Imran, 2013), and compensation (Hameed et al., 2014; Njogore et al., 2015).

RESEARCH MODEL AND HYPOTHESIS

The research model is illustrated in Figure 1 below:

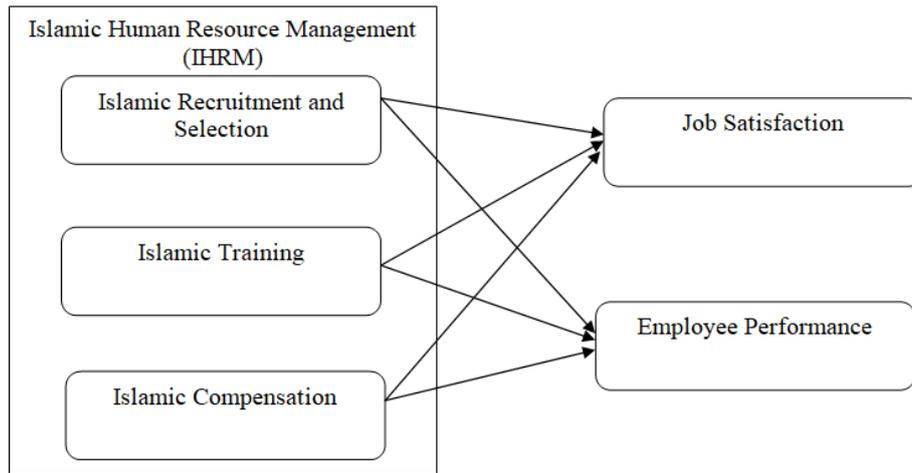


Figure 1 – Research Model

Based on the literature review, the hypotheses constructed from this research are:

1. Islamic Recruitment and Selection affect job satisfaction.
2. Islamic Training affect job satisfaction.
3. Islamic Compensation affects job satisfaction.
4. Islamic Recruitment and Selection affect the employee performance
5. Islamic Training affects the employee performance.
6. Islamic Compensation affects the employee performance.

METHODS OF RESEARCH

Population in this research is employees at sharia bank in South Sumatera Province, Indonesia amounted to 245 employees. Using the Slovin's formula, it is obtained a number of samples as many as 136 employees. The sampling technique uses proportional stratified random sampling method. A sample of 136 employees become the respondents in this study. Distribution time and questionnaire collection are 7 days.

The instruments used to measure the research variables are as follows:

- Islamic Human Resource Management (IHRM): The instrument used to measure IHRM is a questionnaire developed by Hashim (2010) as many as 20 items of questions about HRM based on Qur'an and Hadith. The question items contain variables that describe IHRM namely Islamic Recruitment and Selection, Islamic Training, and Islamic Compensation. The questionnaire is measured using five Likert scale points (1-5).
- Job Satisfaction: Instrument to measure job satisfaction is a questionnaire developed by Smith, Kendall & Hullin (1969) as many as 12 items of questions. Question items contain indicators of job satisfaction namely job satisfaction, reward, promotion opportunity, supervision, and coworkers. The questionnaire is measured using five Likert scale points (1-5).
- Employee Performance: The instrument used to measure employee performance is a questionnaire developed based on literature review from Robbins (2008) as many as 10 items of questions. Question items contain indicators of employee performance, namely quality, quantity, timeliness, and effectiveness.

RESULTS AND DISCUSSION

All of the 136 distributed questionnaires have been returned by the respondents and can be used for data processing. Table 1 describes the profile of the majority of respondents in this research.

Table 1 – Profile of Respondents

No	Demographic Type	Profile	Percentage (%)
1	Gender	Female	54.5
2	Age Range	26-30 years old	32.7
3	Level of Education	Undergraduate	57.4
4	Working Period	6-10 years	31.8

Source: Primary data processed, 2018.

Table 2 – The results of instrument validity test

Question Item	Pearson Correlation	Value of r table	Description
Islamic Recruitment and Selection 1	0.330	0.1684	Valid
Islamic Recruitment and Selection 2	0.346	0.1684	Valid
Islamic Recruitment and Selection 3	0.493	0.1684	Valid
Islamic Recruitment and Selection 4	0.433	0.1684	Valid
Islamic Recruitment and Selection 5	0.313	0.1684	Valid
Islamic Recruitment and Selection 6	0.420	0.1684	Valid
Islamic Recruitment and Selection 7	0.475	0.1684	Valid
Islamic Training 1	0.453	0.1684	Valid
Islamic Training 2	0.342	0.1684	Valid
Islamic Training 3	0.467	0.1684	Valid
Islamic Training 4	0.368	0.1684	Valid
Islamic Training 5	0.422	0.1684	Valid
Islamic Training 6	0.471	0.1684	Valid
Islamic Compensation 1	0.471	0.1684	Valid
Islamic Compensation 2	0.456	0.1684	Valid
Islamic Compensation 3	0.392	0.1684	Valid
Islamic Compensation 4	0.456	0.1684	Valid
Islamic Compensation 5	0.345	0.1684	Valid
Islamic Compensation 6	0.177	0.1684	Valid
Islamic Compensation 7	0.497	0.1684	Valid
Job Satisfaction 1	0.276	0.1684	Valid
Job Satisfaction 2	0.262	0.1684	Valid
Job Satisfaction 3	0.276	0.1684	Valid
Job Satisfaction 4	0.236	0.1684	Valid
Job Satisfaction 5	0.307	0.1684	Valid
Job Satisfaction 6	0.304	0.1684	Valid
Job Satisfaction 7	0.270	0.1684	Valid
Job Satisfaction 8	0.282	0.1684	Valid
Job Satisfaction 9	0.232	0.1684	Valid
Job Satisfaction 10	0.255	0.1684	Valid
Job Satisfaction 11	0.279	0.1684	Valid
Job Satisfaction 12	0.310	0.1684	Valid
Employee's Performance 1	0.309	0.1684	Valid
Employee's Performance 2	0.261	0.1684	Valid
Employee's Performance 3	0.339	0.1684	Valid
Employee's Performance 4	0.291	0.1684	Valid
Employee's Performance 5	0.313	0.1684	Valid
Employee's Performance 6	0.270	0.1684	Valid
Employee's Performance 7	0.267	0.1684	Valid
Employee's Performance 8	0.311	0.1684	Valid
Employee's Performance 9	0.291	0.1684	Valid
Employee's Performance 10	0.290	0.1684	Valid

Source: Primary data processed, 2018.

Table 1 shows that most of the gender of respondents are women (54.5%) with an age range of 26-30 years old (32.7%). The education level of the majority of respondents is undergraduate (Strata 1) (57.4%) with the working period of 6-10 years (31.8%).

The instrument is said to be valid and reliable when it meets the requirements on the validity and reliability test. The instrument validity test is carried out by comparing Pearson Correlation value with r value obtained from table r. With the number of respondents as many as 136 people, two-way test with a significance level of 5% obtains r table value of 0.1684. The instrument is said to be valid if the item of each question on the questionnaire has a

Pearson Correlation value > r table value. Table 2 illustrates the results of the instrument validity test used in this study.

Table 2 shows that all the question items in the instrument are valid. Then, reliability test is carried to test whether the instrument used is reliable. The instrument is said to be reliable when the Cronbach's Alpha value of each questionnaire item is greater than 0.6. Table 3 illustrates the results of the reliability test that has been performed.

Table 3 – Results of instrument reliability test

No	Variable	Cronbach's Alpha	Description
1	Islamic Recruitment and Selection	0.674	Reliable
2	Islamic Training	0.702	Reliable
3	Islamic Compensation	0.655	Reliable
4	Job Satisfaction	0.814	Reliable
5	Employee's Performance	0.771	Reliable

Source: Primary data processed, 2018.

Table 3 shows that all the instruments used to measure the variables in this study are reliable. The research is continued with the classical assumption test. The classic assumption test is used to determine whether the research model we have built meets the BLUE (Best Linear Unbiased Estimator) requirement. The classical assumption test consists of normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test.

The testing of data normality in analysis way is carried using Kolmogorov-Smirnov Test. The data is said to be normally distributed if the value of Asymp. Sig (2-tailed) greater than 0.05. Table 4 and 5 illustrate the results of the Kolmogorov-Smirnov test of the built-in research model.

Table 4 – Kolmogorov-Smirnov test results of research model of the effect of IHRM on job satisfaction
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		136
Normal Parameters ^{a,b}	Mean	.0E-7
	Std. Deviation	1.49506400
	Absolute	.076
Most Extreme Differences	Positive	.040
	Negative	-.076
Kolmogorov-Smirnov Z		.885
Asymp. Sig. (2-tailed)		.414

a. Test distribution is Normal.

b. Calculated from data.

Source: Primary data processed, 2018.

Table 5 – Kolmogorov-Smirnov test results of research model of the effect of IHRM on employee performance
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		136
Normal Parameters ^{a,b}	Mean	.0E-7
	Std. Deviation	1.18172650
	Absolute	.063
Most Extreme Differences	Positive	.036
	Negative	-.063
Kolmogorov-Smirnov Z		.739
Asymp. Sig. (2-tailed)		.646

a. Test distribution is Normal.

b. Calculated from data.

Source: Primary data processed, 2018.

Table 4 and 5 show the normality test results for the research mode on the effect of IHRM on job satisfaction and the effect of IHRM on employee performance. The results of Asymp value. Sig (2-tailed) in both tables are greater than 0.05. This means that all data in this research is normally distributed.

Then, multicollinearity test is performed. This test is carried out to see if there is a correlation between independent variables. A good regression model should not have multicollinearity. The multicollinearity test is carried out by looking at Tolerance and VIF values. If the Tolerance value is greater than 0.1 and the VIF value is below 10 meaning that there is no multicollinearity. Table 6 and 7 illustrate the results of multicollinearity test.

Table 6 – The Multicollinearity Test of IHRM Regression Model on Job Satisfaction

No	Variable	Collinearity Statistics	
		Tolerance	VIF
1	Islamic Recruitment and Selection	0.964	1.038
2	Islamic Training	0.975	1.026
3	Islamic Compensation	0.977	1.024

a. *Dependent Variable: Job Satisfaction.*

Source: Primary data processed, 2018.

Table 7 – The Multicollinearity Test of IHRM Regression Model on Employee Performance

No	Variable	Collinearity Statistics	
		Tolerance	VIF
1	Islamic Recruitment and Selection	0.964	1.038
2	Islamic Training	0.975	1.026
3	Islamic Compensation	0.977	1.024

a. *Dependent Variable: Employee's Performance.*

Source: Primary data processed, 2018.

Table 6 and table 7 show that the Tolerance values of all independent variables are above 0.10 and the VIF values of all independent variables are below 10. This indicates no multicollinearity problem in this study.

The next classical assumption test carried out in this research is the heteroscedasticity test using the Glejser test. A good regression model shows no heteroscedasticity. If the value of the significance of the regression free variables on the residual is greater than 0.05 then there is no heteroscedasticity problem. Table 8 and 9 illustrate the results of the heteroscedasticity test.

Table 8 – Test of IHRM Regression Model on Job Satisfaction

No	Variable	Significance
1	Islamic Recruitment and Selection	0.243
2	Islamic Training	0.232
3	Islamic Compensation	0.891

a. *Dependent Variable: Job Satisfaction.*

Source: Primary data processed, 2018.

Table 9 – Test of IHRM Regression Model on Employee Performance

No	Variable	Significance
1	Islamic Recruitment and Selection	0.267
2	Islamic Training	0.625
3	Islamic Compensation	0.682

a. *Dependent Variable: Employee's Performance*

Source: Primary data processed, 2018.

Table 8 and table 9 show that all the significance values of the independent variables are greater than 0.05. It shows that there is no heteroscedasticity problem in this study.

The last classical assumption test is autocorrelation test. This test is carried out by looking at the value of Durbin Watson (DW). If $dU < DW < 4-dU$ then there is no autocorrelation in the research regression model. The autocorrelation test of IHRM regression model on job satisfaction resulting in Durbin Watson value of 1,892.

$$dU < DW < 4-dU \\ 1.7652 < 1.892 < 2.2348 \text{ (no autocorrelation)}$$

Meanwhile the autocorrelation test of IHRM regression model on employee performance resulting in Durbin Watson of 1,968.

$$dU < DW < 4-dU \\ 1.7652 < 1.968 < 2.032 \text{ (no autocorrelation)}$$

Based on the above autocorrelation test, we obtain the results of no autocorrelation in this research model.

Table 10 and 11 illustrate the results of regression test of the effect of IHRM on the job satisfaction and employee performance.

Table 10 – Regression Results of the effect of IHRM on job satisfaction

Model	B	t	Sig.
(Constant)	27.588	6.495	.000
Islamic Recruitment and Selection	.267	2.894	.004
Islamic Training	.355	3.463	.001
Islamic Compensation	.246	2.668	.009

a. Dependent Variable: Job Satisfaction.

Source: Primary data processed, 2018.

Table 11 – Regression Results of the effect of IHRM on employee satisfaction

Model	B	t	Sig.
(Constant)	15.295	4.556	.000
Islamic Recruitment and Selection	.506	6.926	.000
Islamic Training	.290	3.581	.000
Islamic Compensation	.177	2.431	.016

a. Dependent Variable: Employee's Performance

Source: Primary data processed, 2018.

CONCLUSION

The research results support the hypotheses that have been formulated previously. The first hypothesis group mentions that IHRM affects job satisfaction. Based on the research, all IHRM variables namely Islamic recruitment and selection, Islamic training, and Islamic compensation positively and significantly affect the job satisfaction. Islamic training variable has the greatest influence on the job satisfaction with a Beta value of 0.355, followed by the Islamic recruitment and selection and Islamic compensation variables with a Beta value of 0.267 and 0.246 respectively. The level of significance of overall IHRM variables with the value under 0.05 shows a significant effect on the job satisfaction. The research results support the results of previous studies conducted by Hashim (2008) and Mahesar et al. (2016), in which their research results show a positive influence of IHRM on job satisfaction.

The second hypothesis group formulates that IHRM affects the employee performance. The research results show that all IHRM variables namely Islamic recruitment and selection, Islamic training, and Islamic compensation positively and significantly affect the employee performance. Islamic recruitment and selection variables have the greatest influence on the employee performance with a Beta value of 0.506. meanwhile, the Beta value of Islamic training and Islamic compensation variables are 0.290 and 0.177 respectively. Regression results also reveal that the significance level of all IHRM variables is below 0.05 which

indicates a significant influence on employee performance. Research on the impact of IHRM on employee performance has never been done before. Thus, it becomes the value of renewal for this research. Several previous studies have concluded that employee performance is directly influenced by HRM consisting of recruitment and selection (Bako & Kolawole, 2016; Makhmara, 2016), training (Athar & Shah, 2015; Elnaga & Imran, 2013), and compensation (Hameed et al., 2014; Njogore et al., 2015). However, the independent variables used in the research do not have Islamic perspective elements.

This research is expected to be the reference for other researchers who are interested in the IHRM variables. This research has its own limitation in terms of the number of sharia organization as part of the analysis unit and respondent. Further research is expected to involve more areas of other sharia organizations such as sharia insurance organization and sharia pawnshop as well as increase the number of other variables such as organizational commitment, trust, and so forth.

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THE ROLE OF DISTRIBUTIVE JUSTICE, PROCEDURAL JUSTICE, BUDGETARY GOAL COMMITMENT AND JOB RELEVANT INFORMATION IN MEDIATING EFFECT OF BUDGETARY PARTICIPATION ON MANAGERIAL PERFORMANCE

Novitasari Iga*, Suardhika I Made Sadha, Sari Maria M. Ratna, Wirajaya I Gde Ary

Post-graduate Program, Udayana University, Bali, Indonesia

*E-mail: iganovitasari88@gmail.com

ABSTRACT

Accountability and performance transparency is an important aspect for public sector organizations as an embodiment of the obligations of public or governmental organizations in accounting for the success / failure of program implementation. The Government is obliged to make accountability report in the form of Performance Report of Government Institution. The inconsistency of the study results prompted the authors to reexamine the effect of budgetary participation on managerial performance with distributive justice, procedural fairness, commitment to budget objectives and job-related information as a mediating variable. In implementing all of its obligations to manage funds from the community in a transparent and accountable manner, the government prepares an activity budget. The level of achievement of program activities in the Work and Budgeting Planning (RKA) is strongly influenced by budgetary participation.

KEY WORDS

Budgeting participation, managerial performance, distributive justice, procedural justice, budgetary goal commitment, job relevant information.

Not only are central government obligations, local governments are also required to not only be able to realize vertical accountability, i.e reporting to superiors, but also capable of realizing horizontal accountability, i.e reporting to Regional House of Representatives (DPRD) and communities (Mardiasmo, 2005). The Government is obliged to prepare an accountability report in the form of Government Instance Performance Report (LKjIP) in accordance with the mandate of Presidential Regulation number 29 of 2014 on Performance Accountability System of Government Institution and its compilation which refers to Ministry of Administrative and Bureaucratic Reform (Permenpan-RB) Regulation number 53 of 2014 on the Technical Guidelines of Performance Agreement, Performance Reporting and Procedure of Review of Performance Report of Government Agencies. The preparation of LKJIP is expected to be an implementation and government commitment in creating good governance and clean government and transparent and accountable in order to realize result oriented government.

In an effort to support the implementation of performance measurement, the government has made Government Accountability System Performance Accountability System (SAKIP). SAKIP is a government performance measurement system, which is used to determine the ability of government in achieving the vision, mission and goals of the organization. Performance measurement is needed to measure the level of achievement of the various programs that have been set, measure the achievement of the results and benefits that should be obtained in order to realize good governance. In implementing all of its obligations to manage funds from the community in a transparent and accountable manner, the government prepares an activity budget. The budget is the main instrument used by the government in implementing the established policies.

Performance benchmarks are a measure of the success achieved for each defined program. In a performance-based budget system the performance benchmark used is work performance. As an organization that implements performance-based budgets, local governments must have clear performance benchmarks. Each program as outlined in the

Work and Budget Planning (RKA), and how the level of achievement of the program will be a reference of the performance of the OPD.

Several previous studies that have examined the effect of budgetary participation on managerial performance have found mixed and inconsistent results. Researched by Ulupui (2004), Adrianto (2008), Arifin (2012), and Amertadewi (2013) found that there was a positive and significant influence between budgetary participation on managerial performance. While research conducted by (Lilik Subagyo, 2004) shows that there is no significant relationship between the participation of budgeting on managerial performance. Meanwhile, the results of Milani K. (1975), Chenhall and Brownell (1988) and Medhayanti and Suardana (2015) studies showed that there is a negative relationship between budget participation in managerial performance. Sumarno (2005) shows that budget participation has a negative and significant effect on managerial performance. While research conducted by Supomo, B., and Nur (1998), Ismiriati (2013), and Sinuraya (2009) indicate that there is no influence between the participation of budget preparation on managerial performance. The inconsistency of the research results is due to the contingency factor in the relationship of budgetary participation and managerial performance (Anthony and Govindarajan, 2005). Contingency variables can be either moderating or intervening variables (Nor, 2007).

This research is a development of research conducted by Giri (2014). In the study, researchers examined the effect of budgetary participation on managerial performance with procedural fairness, distributive justice and budgetary commitment commitments as mediating variables. The analytical technique used is Partial Least Square (PLS) with the location of research conducted at General Hospital Center (RSUP) Sanglah Denpasar. Meanwhile, this study examines the effect of budgetary participation on managerial performance with distributive justice, procedural fairness, commitment to budget objectives and job-related information as a mediating variable performed in the Regional Government Organization (OPD) of Badung Regency Government. The difference of this study with previous research is, this research adds one mediator variable that is job relevant information (JRI) with research location is at public sector organization that is OPD Badung Regency Government. OPD Badung Regency Government was chosen as the object of research because, Badung Regency is one of the regencies with the highest District Own Source Revenue (PAD) in Bali.

LITERATURE REVIEW

Equity Theory. This theory explains that, someone motivation is related to equity, and fairness and justice applied by the management. According to Adam (1965) and Greenberg (1986) equity is focused on the relative ratio of outcomes that employees derive from their input, compared to standards as a basis for judging justice for a relationship. This theory assumes that when we engage in interpersonal relationships, we will always evaluate those relationships by comparing our own input-output ratio with others, so that we can determine under reward, over reward (equally valued), equitably reward should be). The input in question is any contribution given by the individual in carrying out his work or relationship. Input can be time, energy, work loyalty, commitment, trust in leadership, tolerance, ability, flexibility, and others. While output (outcome) is a positive and negative consequences that individuals feel the effects of input given. Outcomes can include compensation, recognition, promotion, reputation, responsibility, and more. Justice can be used as a way to resolve conflicts, select employees, resolve conflicts among employees, and negotiate salaries (Greenberg, 1986).

Goal Setting Theory. The goal-setting theory is a theory of cognitive motivation based on the premise that a person has needs that can be thought of as specific outcomes or as a target (Locke and Bryan, 1968). The goal setting theory describes the relationship between a defined goal and work performance. The goal-setting theory dictates that goals are specific (specific) and difficult, with feedback will lead to higher performance (Robbins and Judge, 2008: 237). A person's commitment to a particular goal will also affect the actions of its performance consequences. So it can be said that, the goal is a form of motivation that sets

the standard for someone self satisfaction on performance (Hudayati, 2002). The basic concept of goal setting theory is that employees who understand the goals (what the organization expects them to be) will have an effect on their work behavior (Locke, 1986). Difficult goals will result in higher achievement compared to easy goals, while clear and challenging goals will result in higher achievement compared with abstract goals (Arfan, 2010: 90). There are five main principles of goal setting theory consisting of clarity, challenge, commitment, feedback and task complexity (Locke and Latham, 1986).

Contingency Approach. Contingency variables are needed because in the research the relationship of budgetary participation to the performance of the researchers tends to focus on the general question of whether budget participation is effective or not to performance, without focusing on what conditions the budget participation can be effective. Indriantoro and Supomo (2001) explained that the mediating factor is the type of variables that influence the relationship between independent variables and dependent variable into indirect relationship. The mediating variable is a variable located between the independent variable and the dependent variable, so the independent variable does not directly affect the dependent variable. Ghozali (2012) explains that the mediating factor is a factor or variable that is influenced by a variable and influences other variables. Contingency factors used as the mediating variables in this study are distributive justice, procedural fairness, commitment to budget goals and Job Relevant Information. The variable acts as a mediating variable that is considered capable of being a mediator in the causal relationship of the effect of budgetary participation on managerial performance.

Budgetary Participation. Budgetary participation is defined as the process by which individuals whose performance is evaluated for award based on the achievement of budget targets, are engaged and have influence in budget targets (Brownell, 1982). Participation in the preparation of the budget is the participation of top managers to subordinates in the process of determining the resources to be used in an activity and their own operations (Eker, 2007). With participation in budgeting, managers will be involved in considering and evaluating budgetary alternative alternatives (Kren, 1992). The participation in the budgeting process will encourage increased communication between superiors and subordinates. With the participation in the preparation of the budget is expected to create alignment goals between the individuals involved in the process of budgeting with the goals of the organization as a whole.

Distributive Justice. Distributive justice is defined as a reasonably accepted evaluation is relative to the work done (Greenberg, 1986). Meanwhile, Folger and Konovsky (1989) define distributive justice as perceived fairness in terms of the amount of compensation employees receive. Distributive justice is an employee's assessment of the fairness of outcomes received by an employee of an organization (Greenberg, 1990, Niehoff and Moorman, 1993 in Alotaibi, 2001). Magner and Johnson (1995) state distributive justice in terms of outcomes because the emphasis is on the distribution received, regardless of how the distribution is determined. Distributive justice is essentially achievable if the outcome / acceptance and input between two persons / two employees is comparable. If the proportion of the proportion received is comparable or greater, then it is possible to say that it is fair, and this has an impact on their work. However, if the proportion of the proportion received is smaller than the other, then there is the possibility that it is said to be unfair and that this will affect their work (Supardi, 2008). Individual justice perceptions will increase as the individual's involvement increases in the budgeting process (Wentzel, 2002). Distributive justice in question is not limited to the association, but also includes distribution, distribution, placement and exchange (Fatturochman, 2002).

Procedural Justice. Procedural justice is organizational justice that deals with decision-making procedures by organizations addressed to its members (Alotaibi, 2001). Procedural justice is justice that takes into account mechanisms that support employee empowerment and provide support to employees. Procedural justice refers to the justice rules and procedures by which awards are distributed (Alexander and Ruderman, 1987 in Supardi, 2008). Magner et al., In Beugre (1998) argues that managers or managers should avoid using arbitrary and arbitrary procedures in allocating existing resources. In order for the

organization to do so, the manager / manager must develop rules or procedures related to his work clearly and in which there is a communication mechanism from the bottom up (propose). If this is done, then most likely this will impact on the work that has been done. Based on several definitions of procedural justice it can be concluded that procedural justice is related to the perceived justice in the process of making a decision. Maria and Nahartyo (2012) also stated that procedural justice will cause a person to accept a decision, even if it does not agree with the outcome of the decision, because the decision-making process is done fairly. Furthermore, Maria and Nahartyo (2012) assert that fair process becomes the accepted norm for behavior, both in social context and in the context of organizational decision making process.

Budgetary Goal Commitment. Maiga and Jacobs (2007a) altered the budgetary goal commitment as determination and persistence to try to achieve money goals from time to time. Someone will perform better when he is committed to achieving a certain goal. To achieve budgetary goal commitment can occur when subordinates have accepted the established goals, and can be done because there are funds (Indarto, 2011). Budgetary goal commitment becomes important because productivity (mostly) of whether the organization achieves its financial goals (Wentzel, 2002). Magner et al. (1996) in Maiga and Jacobs (2007a) also states that subordinates are highly their budgetary goal commitment seeking interaction with people who have knowledge, performance, task strategies, and other issues, who have been hiding in performance. The budgetary goal commitment is something that is essential to achieving budget goals and perseverance in taking action from those funds (Locke et al., 1981). Commitment demonstrates a strong belief and Usefulness of the value and purpose (goal) to be achieved (Mowdey et al, 1979). Thus, as many as have a high budgetary goal commitment will be positive and try their best to achieve the purpose of money.

Job Relevant Information. In an organization there are two main types of information: (1) manager behavior information in decision making for job evaluation, (2) information for decision making in order to achieve better results (Kren, 1992). Job relevant information (JRI) is defined as information that can facilitate decision-making relevant to the task (Kren, 1992: 511). JRI aims to facilitate decision-making related to the task. JRI is needed by top managers to take strategic steps in achieving the goals that have been set. According to Murray (1990) information can be transferred from subordinates to his superiors. It shows that there are two advantages gained from the transfer of information: (1) the superior can develop a better strategy, which can be submitted to the subordinate so that performance can increase, (2) from information obtained from subordinates; decision level taken by the boss will be better or more suitable for the organization. When a subordinate or budget executive is given an opportunity to provide input in the form of information it has to the boss or user budget then the boss will gain a better understanding of the relevant information to the task (Krisler et al., 2006). Based on these definitions can be concluded that job relevant information is information related to tasks that can assist managers in the decision-making process. The exchange of information that occurs is expected to provide better knowledge to both parties regarding alternative decisions and appropriate actions to achieve the goal.

Managerial Performance. Managerial performance is one factor that can be used to improve the effectiveness of an organization (Sumadiyah and Susanta, 2004). Performance in an organization is a form of response to the success or failure of the goal of an organization. Government performance within the scope of macro organizational review includes the goals, ideals and expectations of an organization that is endeavored by its achievements by all elements of the organization. Government performance is determined by the vision and mission of the organization, where to achieve the vision and mission is needed motive. Without the drive or motive to achieve the vision and mission, then the performance will not work. Performance can be run with the support of facilities, infrastructure, competence, opportunities, standards, and feedback.

Hypothesis:

H₁: Budgetary participation to managerial performance;

H₂: Role of distributive justice on budgetary participation arrangement to managerial performance;

H₃: Role of procedural justice on budgetary participation arrangement to managerial performance;

H₄: Role of budgetary goal commitment on budgetary participation arrangement to managerial performance;

H₅: Role of job relevant information on budgetary participation arrangement to managerial performance.

Based on literature review of theory and hypothesis, the conceptual framework in this study is:

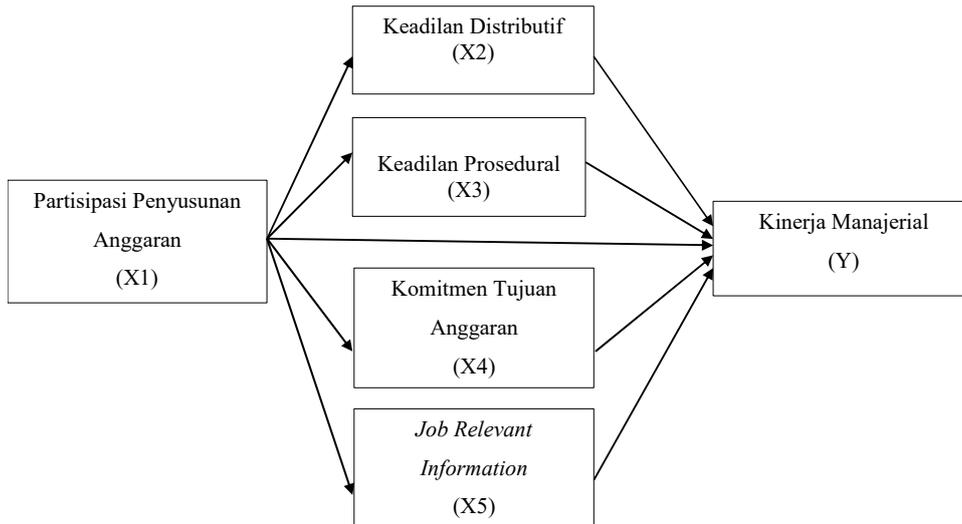


Figure 1 – Conceptual Framework

METHODS OF RESEARCH

This study uses a research instrument in the form of a questionnaire to collect primary data. The questionnaire is a collection of data that is done by giving a set of written statement to the respondent to be answered. Questionnaires were given to the Commitment Making Official (CMO) and the Technical Executing Officer (TEO) at the Badung District Government OPD in the 2017 Budget Year, which is used as the research sample or the respondent of this research. Data analysis in this research using Partial Least Square (PLS) approach using SmartPLS software. PLS is a powerful method of analysis and is often referred to as soft modeling because it eliminates the Ordinary Least Square (OLS) assumptions such as, the data must be normally distributed and the samples not necessarily large.

RESULTS AND DISCUSSION

The respondents in this study were represented in all productive age categories, but the level of respondents' dissemination was uneven. In this study the majority of respondents aged 46-50 ie as many as 137 people or 31.0% and age above 50 years is also as many as 137 people or 30.7%. In that age range, respondents are considered to have good emotional stability (stable), so have a good acceptance of a procedure applied. In addition to that age range, respondents are assumed to have better communication and decision-making skills in relation to the budgeting process. Respondents in this study majority have more than 9 years working period of 350 people or 79.2%. While respondents with a working period of 3-6 years is the least that is as much as 2 people or by 0.5%. Viewed from the respondent profile based on the working period it can be assumed that most of the respondents in this study have had good experience and understanding in the scope of work and responsibility on the process of budgeting participation, so it is expected to provide more objective answers.

respondents with the last education at bachelor degree is as many as 286 people or 64.7%, while respondents with the last education at master degree is as many as 156 people or 35.3%. Based on the above data respondents in this study have the level of undergraduate Education i.e bachelor degree and master degree, based on it is expected respondents can provide better answers, thorough and objective to the actual situation of the question in the distributed questionnaire. Respondents with a period of involvement in the process of budgeting with time less than 3 years (<3 years) is 34 people or 7.7%, respondents with involvement of budget preparation with a period of 3-5 years is as many as 48 people or 10.9%, while the respondents with the involvement of the preparation of the budget 6-8 years is as many as 148 people or 33.5%. Last respondents with a period of involvement in the preparation of the budget more than years (> 9 years) is as many as 212 people or by 48.0%. Based on the above data the majority of respondents in this study have involvement in the preparation of the budget is more than 9 years, then with the period of involvement in the budget process respondent assumed to have sufficient experience in the process of budget preparation so that respondents are expected to provide better answers, clear, thorough and objective to the actual state of the question in the distributed questionnaire.

R square value serves to see the significance of latent variables. The model is considered to have an effect when R2 is more than 0 (zero). R square value of each variable in this study can be seen in Table 1 as follows:

Table 1 – Determination Coefficient

	R Square	R Square Adjusted
Distributive Justice (X2)	0,290	0.288
Procedural Justice (X3)	0,227	0.225
Budgetary Goal Commitment (X4)	0,063	0.061
Job Relevant Information (X5)	0,316	0.315
Managerial Performance (Y1)	0,482	0.476

Source: Primary Data, 2018.

Based on Table 1 the coefficient of determination R2 is 0.482. It indicates that managerial performance variability (Y1) which can be explained by the participation of budgeting (X), distributive justice (X2), procedural justice (X3), commitment of budget goals (X4) and job relevant information (X5) is 48.2%, while the remaining 51.8% is explained by another variable not examined in the model. Distributive justice is explained by budget participation of 29.00%, the rest explained by other factors outside the model of 71.00%. Procedural fairness is explained by the participation of the drafting of the remaining 22.7% is explained by other factors outside the model of 77.3%. The commitment of budget objectives is explained by the participation of the 6.3% drafting of the remaining 93.7% explained by other factors outside the model. Job relevant information is explained by the participation of 31.6% drafting the rest is explained by other factors outside the model of 68.4%.

Q-square predictive relevance for the structural model is used to measure how well the observation values are generated by the model and also the parameter estimates. A model is said to have a relevant predictive value if the Q square value is more than 0 (> 0). Predictive relevance values are derived from:

$$\begin{aligned}
 Q^2 &= 1 - (1 - R_1^2) (1 - R_n^2) \\
 Q^2 &= 1 - (1 - R_1^2) (1 - R_2^2) (1 - R_3^2) (1 - R_4^2) (1 - R_5^2) \\
 Q^2 &= 1 - (1 - 0,290^2) (1 - 0,227^2) (1 - 0,063^2) (1 - 0,316^2) (1 - 0,42^2) \\
 Q^2 &= 1 - (1 - 0,084) (1 - 0,051) (1 - 0,004) (1 - 0,100) (1 - 0,232) \\
 Q^2 &= 1 - (0,916) (0,949) (0,996) (0,900) (0,768) \\
 Q^2 &= 0,402
 \end{aligned}$$

Based on the calculation of Q square, it is obtained that the model has good predictive relevance ($Q^2 > 0$). Q square predictive relevance value of 40.2% indicates that the data diversity can explain the model of 40.2% or in other words information in the data of 40.2%

can be explained by the model, while the remaining 59.8% is explained by other variables (variables that have not been contained in this model and error)

Exogenous variables are significant on endogenous variables if the t-statistic is greater than t-table 1,965 (2.5% significance level, DF = 436). The result of direct influence test of each variable can be seen in table 2 as follows:

Table 2 – Direct Effect

	T Statistics (O/STDEV)	t-Table	Description
X1 -> X2	14,389	1,965	Significant
X1 -> X3	12,523	1,965	Significant
X1-> X4	6,149	1,965	Significant
X1-> X5	17,809	1,965	Significant
X1 -> Y	3,783	1,965	Significant
X2 -> Y	4,072	1,965	Significant
X3 -> Y	11,206	1,965	Significant
X4 -> Y	0,416	1,965	Not significant
X5 -> Y	1,765	1,965	Not significant

Source: Primary Data, 2018.

Table 2 shows that the t-statistic value of budgetary participation on distributive justice is 14,441 more than the value of t-table 1,965. This means that budgetary participation has a significant effect on distributive justice. The t-statistic value of budgetary participation on procedural justice 13.096 is more than the value of t-table 1,965. This means that budgetary participation has a significant effect on procedural justice. The t-statistic value of budgetary participation to budgetary goal commitment is 6.161 more than the value of t-table 1,965. This means that budgetary participation has a significant effect on budgetary goal commitment. The t-statistic value of budgetary participation on job relevant information is 12,776 more than the value of t-table 1,965. This means that budgetary participation has a significant effect on job relevant information. The value of t-statistic budgetary participation (X1) on managerial performance (Y1) is 3.584 more than t-table 1,965. The result means that budgetary participation has a significant effect on the managerial performance. The t-statistic value of distributive equity in managerial performance is 3.977 more than the value of t-table 1,965. This result explains that distributive justice has a significant effect on managerial performance. The t-statistic value of procedural justice in managerial performance is 10.848 more than the value of t-table 1,965. This result explains that procedural justice has a significant effect on managerial performance. The value of t-statistic budgetary goal commitment on managerial performance of 0,516 is less than the value of t-table 1,965. These results explain that the budgetary goal commitment has no significant effect on managerial performance. The value of t-statistic job relevant information on managerial performance of 1,180 is less than the value of t-table 1,965. This result explains that job relevant information has no significant effect on managerial performance.

The results of indirect effect of latent variables analyzed through SmartPLS version 3.2.6 can be seen in Table 3.

Table 3 – Indirect Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
(X1) -> (Y1)	0,292	0,293	0,038	7,710	0,000

Source: Primary Data, 2018.

The value of indirect effect X1 is 0.292 obtained through the number of multiplication coefficient of budget participation path (X1) on managerial performance (Y1) through distributive equity moderation moderation (X2), procedural fairness (X3), budget goal commitment (X4) and job relevant information (X5) that is: $(0,538 \times 0,223 + 0,476 \times 0,468 + 0,252 \times -0,017 + 0,562 \times -0,084)$ so that obtained by result of indirect effect value equal to 0,292.

CONCLUSION

Budgetary participation arrangement has an effect on managerial performance. This means that the higher the involvement of the Commitment Making Official (CMO) and the Technical Executing Officer (TEO) in the budgeting process, will be able to improve managerial performance.

Budgetary participation effect on managerial performance with distributive justice as the mediating variable. This means that with increased budgetary participation involving the Commitment Making Official (CMO) and Technical Executing Officers (TEO), will lead to an increase in the perception of distributive justice, which in turn will result in improved managerial performance.

Budgetary participation effect on managerial performance with procedural justice as a mediating variable. This means that an increased budgetary participation involving the Commitment Making Official (CMO) and the Technical Executing Officer (TEO) will result in increased perceptions of procedural justice, which will ultimately lead to improved managerial performance.

Budgetary participation does not effect on managerial performance with budgetary goal commitment as a mediating variable. This means that an increase in budgetary participation Commitment Making Official (CMO) and Technical Executing Officer (TEO) will result in increased budgetary goal commitment but increased budgetary goal commitment does not improve managerial performance.

Budgetary participation does not effect on managerial performance with job relevant information as a mediating variable. This means that an increase in budgetary participation involving the Commitment Making Official (CMO) and Technical Executing Officer (TEO) will result in increased job relevant information, but the increase in job relevant information is not able to improve managerial performance.

Research Limitation. This study has some limitation. Firstly, the use of self-rating scale on the measurement of managerial performance can lead to linear bias, where respondents have a tendency to answer their performance is too high. Further research can measure performance without using self-rating scale, but the assessment is done by colleagues or leaders.

Secondly, this research was conducted at the Regional Device Organization (OPD) up to the Sub-District level, in line with the regulation change on the WTO which based on the Government Regulation Number 18 of 2016 which is meant by the Regional Device Organization (OPD) of all elements of regional apparatus namely the Regional Secretariat, Expert Staff, Secretariat of the House of Representatives (Sekretariat DPRD), Inspectorate, Regional Office, Agency, Technical Implementation Unit, District and Sub-District. Subsequent research can examine all the regional devices in question, including the Expert Staff Technical Implementation.

Thirdly, The development of subsequent research on the relationship between budgetary participation and managerial performance can use other mediating variables such as budgetary adequacy, clarity of budget objectives and internal controls. The adequacy of the budget gained from participation in the budgeting process will improve managerial performance because the availability of sufficient budget will be able to represent the needs of each area of accountability so that performance will increase (Indarto and Ayu, 2011).

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THE EFFECT OF TASK ENVIRONMENT TOWARD THE COMMITMENT TO CHANGE: TRANSFORMATIONAL LEADERSHIP AS A MEDIATOR

Fajri Detha Alfrian*

Faculty of Administrative Science, University of Brawijaya, Indonesia

Rachmawati Riani

Faculty of Economics and Business, University of Indonesia, Indonesia

*E-mail: dethafajri@gmail.com

ABSTRACT

This study aims to examine the relationship between task environment and Commitment to Change of employees and the role of transformational leadership as a mediator. This study was conducted at PT. KAI Commuter Jabodetabek (PT. KCJ), a subsidiary of PT. Kereta Api Indonesia which organize the operation of urban railway services by electric train in Jakarta, Bogor, Depok, Tangerang (Serpong) and Bekasi. Total 101 questionnaires were distributed to all permanent employees (implementer level, staff 2 - senior supervisor) of PT. KCJ who are based at the head office in Juanda Station, and 68 questionnaires were returned. Results show that transformational leadership fully mediates indirect relationship between task environment and all dimension of Commitment to Change (Affective, continuance and Normative).

KEY WORDS

Task environment, transformational leadership, change management.

The increasing interest of the citizen of Jabodetabek in using Jabodetabek electric train is clearly seen when the passenger volume record reach 830.964 passengers per day for the first time in May 4th 2015. It is not surprising considering the statistic data issued by BPS as in the following Table 1.

Table 1 – The Number Of Railway Passenger, 2010-1025 (Thousand Persons)

Month/Year	2015	2014	2013	2012	2011	2010
January	19 244	14 963	10 089	9 779	10 354	10 541
February	17 640	14 552	10 281	9 840	9 270	9 641
March	21 290	16 909	11 240	11 285	10 733	10 759
April	-	16 055	11 529	11 271	10 188	10 394
May	-	16 781	11 767	11 872	10 513	10 476
June	-	17 848	11 817	12 034	10 147	10 312
July	-	16 583	15 407	12 391	10 749	10 466
August	-	17 091	14 321	11 471	9 678	10 438
September	-	18 253	15 113	11 556	9 692	9 685
October	-	19 079	15 531	11 501	10 152	10 796
November	-	18 605	15 487	10 650	9 852	10 106
December	-	20 080	15 901	10 438	9 777	10 694

Source: <http://www.bps.go.id> Re-processed by the writer.

From Table 1, it is seen that the number of KRL passenger is increasing from time to time. This significant increasing is pleasing enough according to the online news released by www.krl.co.id because it shows that PT. KAI Commuter Jabodetabek is already on the right track to reach the target of 1.2 million passengers per day in 2019.

Figure 1 shows how the volume of KRL PT. KAI Commuter Jabodetabek (PT. KCJ) passenger is increasing year per year. The increasing from 2011 until 2015 is recorded 139% (Source: Corporate Communication of PT. KCJ). With the increasing of the number of

passenger faced by PT. KAI Commuter Jabodetabek, it requires the company's ability to respond the environmental change. The ability to respond is not only by providing the best service to the consumer which number keeps increasing from time to time, but also the quality (effectiveness and efficiency) of the business process conducted to produce the best service. This ability of company to respond requires the company to keep make continuous improvement which is supported by the entire element of the company. Therefore, it is important for the company to have a strong commitment of its all employees in running the change planning which has been determined by the company.

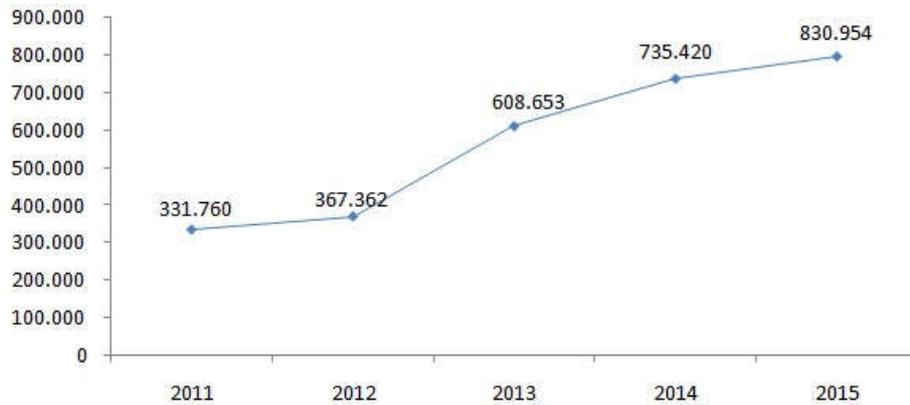


Figure 1 – The Graphic of KRL Passenger Average Volume Per Day Per Year
(Source: Corporate Communication of PT. KCJ)

Herscovitch and Meyer (2002) in Gelaidan and Ahmad (2013) stated that commitment to change is a mindset owned by a person which is needed for the success of a company. Smith (1996) in Kling (2004) explained that when employees have a commitment to change they will have higher energy level and dedicate themselves more than them who do not have commitment. The factors that affect employee's commitment to change are: transformational leadership and alteration leadership (Herold, et al., 2008), transformational and transactional leadership (Gelaidan and Ahmad, 2013), task environment (Lestari, 2014), employee's participation (Jaffe & Scott, 1998) in Cree (2000), working motivation (Parish, et al., 2008), appreciation and acknowledgement (Vroom, 1995) in Kling (2004), communication, participation, and empowerment (Armenakis and Harris, 2002; Goodman & Truss, 1982; Kotter, 1995) in Pitts (2006), trust toward organization (Peter & Waterman, 1982) in Kling (2004), personal factor, internal factor, external factor, and political factor (Nasir, et al., 2014). This research will discuss about the effect of task environment toward the employee's commitment to change and also aimed to know the mediation role of transformational leadership toward the relationship of the two variables.

Kreitner and Kinicki (2010) described that the power of organization external factor has a global effect and becomes one of the reasons why and organization or company evaluate the product or service they propose to the costumer. This condition pushes the company to immediately adapt the environment which will be successful if the employee has a commitment to change and to adapt with the environmental change.

According to Daft (2010), external environment of an organization has two layers. The first layer is general environment, and the second layer is task environment. General environment has several dimensions, such as: international, technology, socio cultural, law-politic, and natural dimension. Besides, in the next layer there is company's environment factor which is closer to the company that is task environment including the sectors that conduct daily transactions with the company and directly affect its basic operational and performance (Daft, 2010). Furthermore, Daft (2010) also explained that task environment including customer, competitor, supplier, and manpower market.

Fai (2005) in Lestari (2014) stated that the difference between two layers of organization external environment (general environment and task environment) is not clear

enough. In the context of PT. KAI Commuter Jabodetabek for example, political-law factor in the general environment of the organization (Daft, 2010) cannot be said as general environment of PT. KAI Commuter Jabodetabek because PT. KAI Commuter Jabodetabek is a state-owned enterprises (Badan Usaha Milik Negara/BUMN) which provides public facility and belongs to BUMN ministry. The connection between PT. KAI Commuter Jabodetabek with government policy is also stated in Perpres Number 83 Year 2011 about the assignment to PT. Kereta Api Indonesia as a parent company of PT. KAI Commuter Jabodetabek to provide the media and infrastructure for Soekarno-Hatta airport railway and the ring road of Jakarta-Bogor-Depok-Tangerang-Bekasi, so the government policy is clearly and directly affecting the company's operationalization. Appropriate with the consideration that has been mentioned before, the writer will add government policy factor as one of the four task environment factors (customer, competitor, supplier, and manpower market) as mentioned by Daft (2010).

Company's external environmental change which is very dynamic makes the organization need to be on the very high readiness level to face the change. The role of company or organization leader in this case has a quite significant influence in the changing process. Yukl (2010) stated that leading change is one of the most important and difficult leadership responsibilities. This is the main point of leadership that turns away other matters. It needs and effective leadership to revitalized an organization and to ease the adaptation toward the changing environment. Herold, et al. (2008) in his research found that transformational leadership has a stronger relationship than change leadership toward the employee's commitment to change. And so the study conducted by Gelaidan and Ahmad (2013) that transformational leadership affect the employee's commitment to change (normative).

Organization environment rapidly changes and becomes more uncertain that demands a new approach in planning and controlling strategy, more flexibility, learning, and improvisation (Bettis & Hitt, 1995; Brown & Eisenhardt, 1998; Vera & Crossan, 2004b, 2005 dalam Crossan, Vera, & Nanjad, 2008). Later, new types of organizations will be developed, the new network and cell will also be formed (Miles, Snow, Mathews, Miles, & Coleman, 1997 in Crossan, Vera, & Nanjad, 2008). Crossan, Vera, Nanjad (2008) mentioned that this kind of situation needs a leader role to prepare his organization to face the complex and changing situation of organization environment.

Through this research, the role of a leader in articulating external situation of an organization will be tested as a mediator variable. This research is hoped to find out whether transformational leadership plays role in the relationship between task environments with the employee's commitment to change. The situation and condition of the company's environment will be the reason for the company's leader to strengthen the change planning or initiative. Through the inspirational motivation dimension of transformational leadership, a leader will be able to form and to build team spirit by giving knowledge about the environment change which needs a commitment to change of the entire element of the company including its employees. With intellectual stimulation dimension, the leader will be able to stimulate innovative and creative ideas from the employee to take a part in facing the change happens in the company's business environment. Furthermore, in order to make the change planned by the management runs well, it is important for the leader to be a real example for the organization change (idealized influence dimension) for the employees in facing or running the change plan.

The planned change that has been run as a form of environment adaptation by the company probably cause resistance which possibly caused by many things such as the fear of power loss (Cummings and Worley, 2008) or the steadiness character that has been long accustomed because there is no change policy before. In this condition a transformational leader can do a personal approach to their employees (individual consideration dimension) by acting as a mentor (Bass and Avolio, 1994).

In their previous study, Beugre, et al. (2006) found that transformational leadership is not only personal character of a leader, but also stimulated by the environment faced by the organization. In a relative dynamic company environment, transformational leadership will be

more appropriate. A study by Waldman, et al. (2001) also found that the situation faced by the company has a strong effect on the company leadership and performance style. The study explained that charismatic behavior in idealized influence dimension of transformational leadership that belonged by the leader strongly influences the performance of the company on a high level of uncertainty. In other side, a study by Herold, et al. (2008) found that transformational leadership has direct influence toward the employee's commitment to change compared with change leadership. That is why from the two previous study can be concluded that transformational leadership becomes mediator variable between business environment and employee's commitment to change.

Concerned with direct relationship between of the company toward the employee's commitment to change, a study by Nasir, et al. (2014) found that there are 4 factors that influence the employee's commitment to change which are: external, politic, personal, and internal factor. External factor consists of: technology, government pressure, business competition, and global trade. So it can be said that external environment of the company can directly influence the employee's commitment to change. Looking at the relationship between two relevant variables, that is how the condition of company environment can influence the perception or mindset of the employee's commitment to change, and so the vital role of a leader in building the character of the down liner or the employee in adapting the change, this research aims to know more about the relationship of task environment toward the commitment to change of the employees of PT. KAI Commuter Jabodetabek and also to know what is the role of transformational leadership between those two variables.

THEORETICAL REVIEW

Definition and Dimension of Commitment to Change. Herscovitch & Meyer (2002) defined that commitment to change is a mindset that is needed by someone to reach the targeted change. Kling (2004) explained that commitment to change can be definitively described as a certain act of an employee based on their conscious choice.

A research by Herscovitch and Meyer (2002) results three components of commitment to change, that are: affective commitment to change, continuance commitment to change, dan normative commitment to change. Here are the explanations of each component:

- Affective commitment to change. That is a commitment to change based on the belief that there will be benefit of the change, so the employees *want to* change by their own willingness.
- Continuance commitment to change. That is a commitment to change that refers to a consciousness that there will be certain cost appears if they do not support the change of the organization, so the employees *needs to* do the change to avoid the cost.
- Normative commitment to change. That is the commitment to change based on the feeling of obligation for being a part of organization, so the employees *have to* support the change of the organization. Normative commitment to change is also implied on someone's performance behavior. They may do the same thing as the other employees with affective commitment to change, but they consider it as a part of organization task they carry out.

Definition and Dimension of Task Environment. External environment of an organization according to Daft (2010) can be divided into two, they are general environment and task environment. General environment consists of all dimensions that influence the company by the time, but not directly deal often with daily transaction. General environment includes international, technology, social and culture, economic, law-politic, and natural sectors. Meanwhile, task environment is the external environment which is closer to the company and includes the sectors that conducts daily transaction with the company and directly influences its basic operational and performance. Task environment generally includes competitor, supplier, customer, and manpower market (Daft, 2010). Task environment is the external environment which is closer to the company and includes the sectors that conducts daily transaction with the company and directly influences its basic

operational and performance (Daft, 2010). Dill (1958) and Thorelli (1967) in Osborn and Hunt (1974) explained that task environment is parts of organization environment which relevant or potential to influence the determination or achievement of organization's goal.

Dess & Beard (1984) mentioned that environment uncertainty can be formed from the three dimensions of task environment which are: munificence, complexity, and dynamism as explained below:

- Munificence (capacity). Munificence environment refers to the environment's ability to support the organization continuous growth (Starbuck's, 1976 in Dess & Beard, 1984). Dess & Beard (1984) explained that munificence is an environment that rich of resources and has enough ability to support organization's growth. That is why in the context of capacity, munificence is described as rare or abundant of important resource that is needed by one or more companies that operate in one environment (Castrogiovanni, 1991). The abundant of resource will make a company is possible to survive and grow in the environment, and also impacts toward the ability of a new company to come into the industry (Randolph & Dess, 1984 in Castrogiovanni, 1991).
- Complexity (homogeneity – heterogeneity, concentration – dispersion). Dess & Beard (1984) described complexity as heterogeneity and concentration of a series of company's activity. Child (1972) in Dess & Beard (1984) stated that environment complexity is about how heterogenic the coverage of organization activity is. A manager who faces a complex environment will experience a bigger uncertainty rather than the one who face a simple environment (Duncan, 1972; Pennings, 1975; Tung 1979; in Dess & Beard, 1984)
- Dynamism (stability – instability, turbulence). Dynamism can be described as uncertainty and instability of the environment which is unpredictable (Goll & Rashed, 2004). Dess and Beard (1984) stated that dynamism is related with instability of the environment and positively related with uncertainty. So it can be defined that the more unstable an environment's condition the organization will be more flexible to face it. This causes the organization will always be confronted to the need in the changing of strategy, structure, process, and culture.

Definition and Dimension of Transformational Leadership. Burns (1978) and Bass (1985;1996) in Boga & Ensari (2009) formulated the theory of leadership defined into two types in the matter of the way to influence the employee's behavior that is transformational and transactional leadership. Burns (1978) in Herold & Fedor, Caldwell, Liu (2008) transformational leadership attracts their employee's sympathy more with the values and makes them able to see the higher vision and also push them to make a bigger effort the reach the vision.

Nadler & Trushman (1990) in Boga & Ensari (2009) added that transformational leadership is more about the fulfillment psychological needs that strengthen the motivation and dedication of the people they lead. Transformational leadership aims to wider and increase attention of the people they lead, to stimulate consciousness and support of their follower to reach the mutual or organization goal, and also to motivate them to not only consider their self interest (Bass, 1985, 1997; Den Hartog, Van Muijen, & Koopman, 1997; House 1976 in Boga & Ensari, 2009). Meanwhile, transactional leadership is more involving an exchange process and leader request but not resulting enthusiasm and commitment to toward the task target (Bass, dalam Yukl, 2010).

As it is mentioned before that transformational leadership is more focused on leading a change. Transformational leadership is defined as a set of ability that makes a leader to be able to comprehend the need of change, to create the vision which convoys and brings the change, and to run the change effectively (Ebert & Griffin, 2013). Boal & Byrson (1988) in Boga & Ensari (2009) stated that, especially during the time of change, transformational leadership tends to be more effective in coping the crisis and to adapt the change that has to be run by the organization.

Furthermore, there are four characteristics of transformational leadership, which are: Charisma or idealized influence, intellectual stimulation, individualized consideration, and

inspiration/motivation (Bass, 1985; Bass & Avolio, 1990; Bass & Riggio, 2006; Fuller, Patterson, Hester, & Stringer, 1996 in Boga & Ensari, 2009).

METHODS OF RESEARCH

Descriptive statistic is statistic used to analyze the data by describing or depicting collected data as what it is without aiming to make general conclusion or generalization (Sugiyono, 2014). This analysis used by counting the mean value on every construct or latent variable interpreted in 3 categories according to Levine, et al. (2011).

The categorization could be explained through Table 2.

Table 2 – Mean Category Interpretation

Mean Value	Explanation
1,00 – 2,66	Low
2,67 – 4,33	Medium
4,34 – 6,00	High

Source: Levine et al (2011).

In this research, descriptive analysis would be used in interpreting the result of every research construct or latent variable that are: Task Environment, Transformational Leadership, Affective commitment to change, continuance commitment to change dan normative commitment to change.

Multivariate analysis in this research aimed to confirm, that was the analysis used to test the hypothesis developed based on the existed theory (Hair et al., 2013). SEM-PLS analysis was more effective to test the connection among the complex variables. SEM-PLS was appropriate to use if the researcher aimed to wider the existed theory (Solihin, et al., 2014). In this research, SEM-PLS was used with WarpPLS application because WarpPLS was able to directly give coefficient result and p value for moderation model (Solihin, et al. 2014). In this research, transformational leadership would be tested its role as a mediator.

The first hypothesis of this research was developed based on the study by Nasir, et al. (2014) that revealed that external factor could influence the commitment to change of the employees. That was why external environment which in this research was explained by task environment was considered directly affected toward every type of commitment to change.

Therefore, H1 was described as follows:

- H1a: Task environment (munificence, complexity and dynamism) variable directly affected toward affective commitment to change;
- H1b: Task environment (munificence, complexity and dynamism) variable directly affected toward continuance commitment to change;
- H1c: Task environment (munificence, complexity and dynamism) variable directly affected toward normative commitment to change.

The next hypothesis was developed from a study by Beugre, et al. (2006) that transformational leadership style was not only a leader's personal character but also stimulated by business environment. That was why the hypothesis about the connection among business environments which in this research was explained by task environment with transformational leadership was considered to have positive influence and connection. Therefore, H2 was described as follows:

H2: Task environment positively influence transformational leadership.

The next hypothesis was developed from a study by Herold, et al. (2008) who found that transformational leadership had a bigger influence toward the commitment to change of the employees. That was why this third hypothesis (H3) considered that transformational leadership affected every types of the employee's commitment to change. Therefore, H3 was described as follows:

H3a: Transformational leadership variable affected toward the employee's affective commitment to change.

H3b: Transformational leadership variable affected toward the employee's continuance commitment to change.

H3c: Transformational leadership variable affected toward the employee's normative commitment to change.

The population of this research was the settled employee of PT. KAI Commuter Jabodetabek (PT.KCJ) in the executor lever (staff 2 – senior supervisor) who were located in the Juanda Station head office per May 2015 as many as 101 persons.

The number of sample in this research was referred on the approach by Cohen (1992) who considered stastical power and effect size while deciding sample minimum size. Cohen (1992) in Sholihin (2013) gave the guidelines about deciding sample size for SEM-PLS model with table 1.5 (Sholihin, 2013 pp. 13) by determining how many arrows directed toward a construct, and then looking at the wanted significant level. In this research the most arrows directed toward the construct was 4 and the researcher wanted 0.05 for significance level (Hair, 2013). So it was got 42 for the number of minimum sample. The number of sample that was relatively small was not a problem in the research that used SEM-PLS because it was able to estimate the model with a quite high stastical power although the sample was small (Sholihin, 2013). In this research, the researcher distributed 101 questionnaires. However, because of the high mobility of the employee especially in the commercial and service division, the questionnaires returned by the respondents were only 68 (67.3%)

RESULTS AND DISCUSSION

Perception Descriptive Analysis of Task Environment of the Respondent. The following Table 3 explains the average or mean value of each dimension of the respondent's perception about task environment.

Table 3 – Respondent's Perception Regarding Task Environment

Dimension	Mean Value	Explanation
Munificence	5,57	High
Complexity	4,91	High
Dynamism	3,56	Medium

From Table 3 it can be known that the munificence and complexity dimension has a high mean value that is 5.57 and 4.91. The high mean value of munificence describes that the respondents consider the company environment of PT. KCJ is in the situation with the resource that supports the company to grow and develop. Then, a high mean value is also seen on the complexity dimension. It can be meant that the respondents consider that PT. KCJ is in a relatively complex task environment with the mean value of 4.91. In other side, the respondents also consider that dynamism dimension in the company environment is not too high but also not too low or in other word is medium. The mean value of dynamism dimension is 3.56. It means that the respondents consider the task environment of the company does not have significant dynamic.

Descriptive Analysis of Commitment to Change of the Respondents. The following descriptive analysis will describe the condition of commitment to change of the employee. The mean value of each commitment to change dimension can be seen in the following Table 4.

Table 4 – The Condition of the Respondent's Commitment to Change in PT. KCJ

Dimension	Mean Value	Explanation
Affective Commitment to Change	5,17	High
Continuance Commitment to Change	3,39	Medium
Normative Commitment to Change	4,88	High

From Table 4, it is known that the higher mean value of the respondent is on the Affective Commitment to Change and Normative Commitment to Change dimension with the value of each is 5.17 and 4.88. Meanwhile, the mean value of Continuance Commitment to Change is in medium category with the value of 3.46. The high mean value of Affective Commitment to Change as mentioned by Herscovitch and Meyer (2002) that Affective Commitment to Change is a commitment to change which based on the belief that there will be benefits they can get from the change. The second higher value is Normative Commitment to Change with the mean value of 4.88. Herscovitch and Meyer (2002) stated that the employee with normative commitment to change defines that they have a responsibility to support the change of the company because they feel that they are a part of the organization.

The next commitment to change dimension with mean value in medium category is Continuance Commitment to Change with the mean value of 3.39. The employee who has continuance commitment to change, according to Herscovitch and Meyer (2002), tends to support the change of the company because they consider that they will face certain loss if they do not support the change of the company.

Descriptive Analysis of Transformational Leadership of the Respondent. Here is the explanation about the result of mean value of transformational leadership variable. The mean value of transformational leadership can be seen in the following Table 5.

Table 5 – The Value of Respondent’s Perception About “Transformational Leadership” Leadership Style

Variable	Mean Value	Explanation
Transformational Leadership	5,01	High

The mean value of transformational leadership is considered high with the value of 5.01. It means that the respondent considers the leadership style of the higher leader in their working unit has transformational leadership style which is relatively high. In the process of company transformation it needs an effective leadership to run the company transformation program and to ease the adaptation process toward a changing environment. Ebert and Griffin (2013) stated that transformational leadership focuses on the importance of leading a change (the opposite of leadership in a stable period). The high assessment of the respondent toward the style of their leader which is reflected in mean value of transformational leadership which is considered high proves that according to the respondent, leadership style of PT. KCJ leader is able to guide the transformation of the company.

Relationship Analysis of Task Environment (Munificence, Complexity, Dynamic), Transformational Leadership and Affective Commitment to Change. The following analysis is aimed to find out how is the relationship between Munificence, Complexity and Dynamism simultaneously (Task Environment) toward Normative Commitment to Change mediated by oleh Transformational Leadership.

The result of the relationship analysis can be seen in the following Figure 2.

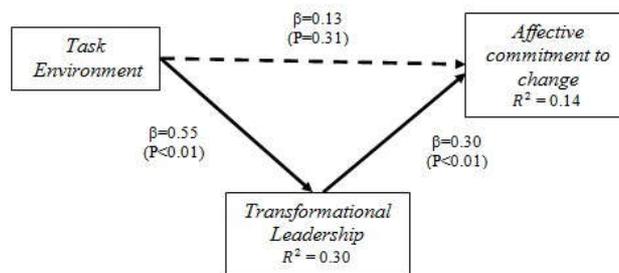


Figure 2 – The Role of Transformational Leadership Mediation Toward the Relationship Between Task Environment (Munificence-Complexity-Dynamism) and Affective Commitment to Change

Figure 2 explains the relationship between task environment and affective commitment to change mediated by transformational leadership. From Figure 1.2 it can be described that direct relationship between task environment and affective commitment to change is not significant because the value of $P=0.31$. A relationship between two variables can be said as significant if the value of $P<0.05$. Therefore, H1a cannot be supported. The non-significant direct relationship between task environment and affective commitment to change in this research is not appropriate with the result of a study by Nasir, et al. (2014) who stated that external factors influence the commitment to change of a company's employee so the relationship can be tested by representing a mediator variable that is transformational leadership. This is in accordance with the study by Beugre, et al. (2006) that transformational leadership styled can be stimulated by external environment and also a study by Herold, et al. (2006) which stated that transformational leadership has a stronger influence toward the employee's commitment to change compared to change leadership, so with the argumentations it can be said that transformational leadership can be a mediator variable and can be tested. The role of transformational leadership in the relationship between task environment and affective commitment to change can be seen from the significance of P value between task environment and transformational leadership and the significance of P value between transformational leadership and affective commitment to change. Figure 2 explains that P value is significant ($P<0.01$) on the relationship between task environment and transformational leadership. The R squared value of transformational leadership is 0.30. It explains that 30% of transformational leadership variable can be described by task environment variable. Therefore H2 can be supported. It is appropriate with the study by Beugre, et al. (2006) that company environment significantly influence transformational leadership style.

The same condition happens in the relationship between transformational leadership and affective commitment to change which is significant with the value of $P<0.01$. The squared R value of affective commitment to change is 0.14. It means that 14% of affective commitment to change variable is explained by transformational leadership so H3 can be supported. Therefore from Figure 4 it can be concluded that transformational leadership variable fully mediates the relationship between task environment and affective commitment to change. The following Table 6 shows that the value of indirect effect of task environment toward affective commitment to change mediated by transformational leadership is 0.165.

Table 6 – The Counting of Indirect Effect Value of Task Environment toward Affective Commitment to Change

Path	Counting	Indirect Effect Value
TaskEnv-TrnsLead-ACC	0.55×0.30	0.165

This indirect effect value is relatively lower than indirect effect value of indirect relationship between task environments with normative commitment to change (0.214). It means that although indirect effect value of this relationship is not higher than indirect effect value of normative commitment to change but leadership approach conducted by the leaders in the management of PT. KCJ is relatively successful to make their employee to have commitment to change which comes from themselves that is by making them feel as a part of the organization and they can see the benefit they will get if they support the company change.

Relationship Analysis of Task Environment (Munificence, Complexity, Dynamic), Transformational Leadership and Continuance Commitment to Change. The following analysis is aimed to find out how is the relationship between Munificence, Complexity and Dynamism simultaneously (Task Environment) toward Continuance Commitment to Change mediated by oleh Transformational Leadership.

The result of the relationship analysis can be seen in the following Figure 3.

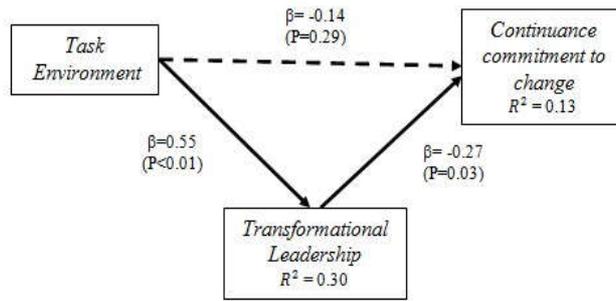


Figure 3 – The Role of Transformational Leadership Mediation toward the Relationship Between Task Environment (Munificence-Complexity-Dynamism) and Continuance Commitment to Change

Figure 3 explains the relationship between task environment and continuance commitment to change mediated transformational leadership. From Figure 1.3 it can be described that direct relationship between task environment and continuance commitment to change is not significant with the value of $P=0.29$. Therefore H1b cannot be supported. Continuance commitment to change can be more described trough mediator variable that is transformational leadership. Figure 3 explains that the significant P value ($P<0.01$) in the relationship between task environment and transformational leadership and then the relationship between transformational leadership and continuance commitment to change is significant with the value of $P=0.03$ but with negative relationship (beta value) that is -0.27 . Therefore, from Figure 3 it can concluded that transformational leadership variable fully mediates the relationship between task environment and continuance commitment to change. With this result hypothesis H3b can be supported. The following Table 7 shows that the value of indirect effect of task environment toward continuance commitment to change mediated by transformational leadership is -0.149 .

Table 7 – The Counting of Indirect Effect Value of Task Environment toward Continuance Commitment to Change

Path	Counting	Indirect Effect Value
TaskEnv-TrnsLead-ACC	0.55×-0.27	-0.149

The significant and negative indirect relationship between task environment and continuance commitment to change is actually bring benefits for PT. KCJ. It is appropriate with the study by Herscovitch and Meyer (2002) that the lower continuance commitment to change of the employee, the bigger support toward the change of the company. The value of negative indirect effect can also be described that transformational leadership is inversely related with continuance to change. Continuance type of commitment to change which is relatively transactional is not appropriate enough with transformational leadership which tends to motivate the follower from inside themselves and not a provocation which is transactional.

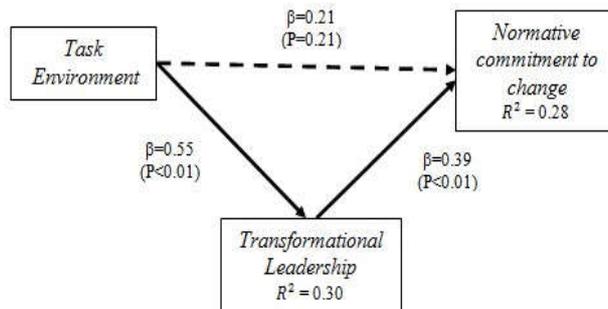


Figure 4 – The Role of Transformational Leadership Mediation toward the Relationship Between Task Environment (Munificence-Complexity-Dynamism) and Normative Commitment to Change

Relationship Analysis of Task Environment (Munificence, Complexity, Dynamic), Transformational Leadership and Normative Commitment to Change. The following analysis is aimed to find out how is the relationship between Munificence, Complexity and Dynamism simultaneously (Task Environment) toward Normative Commitment to Change mediated by oleh Transformational Leadership. The result of the relationship analysis can be seen in the following Figure 4.

Figure 4 explains the relationship between task environment and normative commitment to change mediated by transformational leadership. From Figure 1.4 it can be described that direct relationship between task environment and normative commitment to change is not significant with the value of $P=0.21$. Therefore H1c cannot be supported. This result can be defined that the employee's commitment to change does not immediately change because of the business environment but there is company's internal factor that stimulates the commitment to change of the employee. This research proves that condition through mediator variable that comes from the company's internal that is transformational leadership. Figure 4 explains that P value ($P<0.01$) is significant in the relationship between task environment and transformational leadership. The relationship between transformational leadership and normative commitment to change is also significant with the value of $P<0.01$. And then R squared value of normative commitment to change is 0.28. It means that normative commitment to change variable can be 28% explained by transformational leadership variable.

Therefore from Figure 4 it can be concluded that transformational leadership variable fully mediates the relationship between task environment and normative commitment to change. It means that hypothesis H3c can be supported. The following Table 8 shows that indirect effect value of task environment toward normative commitment to change mediated by transformational leadership is 0.214.

Table 8 – The Counting of Indirect Effect Value of Task Environment toward Normative Commitment to Change

Path	Counting	Indirect Effect Value
TaskEnv-TrnsLead-NCC	0.55×0.39	0.214

The value of indirect effect of indirect relationship of task environment toward normative commitment to change is 0.214. This value is bigger than the value of indirect effect between task environment and affective commitment to change.

Table 9 – Recapitulation of the Hypothesis Test Result

H	Variable Relationship	Hypothesis Description	Result
H1a	TaskEnv- ACC	Task Environment directly affects Affective commitment to change of the employee of PT. KAI Commuter Jabodetabek	REJECTED
H1b	TaskEnv-CCC	Task Environment directly affects Continuance commitment to change of the employee of PT. KAI Commuter Jabodetabek	REJECTED
H1c	TaskEnv- NCC	Task Environment directly affects Normative commitment to change of the employee of PT. KAI Commuter Jabodetabek	REJECTED
H2	TaskEnv-TrnsLead	Task environment (munificence, complexity and dynamism) variable affects Transformational leadership	ACCEPTED
H3a	TrnsLead – ACC	Transformational leadership variable affects Affective commitment to change of the employee of PT. KAI Commuter Jabodetabek	ACCEPTED
H3b	TrnsLead – CCC	Transformational leadership variable affects Continuance commitment to change of the employee of PT. KAI Commuter Jabodetabek	ACCEPTED
H3c	TrnsLead – NCC	Transformational leadership variable affects Normative commitment to change of the employee of PT. KAI Commuter Jabodetabek	ACCEPTED

It agrees with the study by Gelaidan and Ahmad (2013) that transformational leadership has a significant relationship with normative commitment to change. R squared value in normative commitment to change which is bigger that in affective commitment to change that is 0.28 can be defined that transformational leadership approach of the leaders

(VP) in the management of PT. KCJ is able to stimulate the sense of belonging of the employee toward the company as a basis in supporting the change of the company.

CONCLUSION AND SUGGESTIONS

Based on the analysis that has been previously discussed about the effect of task environment toward commitment to change mediated by transformational leadership, the writer enclose the conclusion into 2 following points as the answer of the problem of the study, they are:

- Task environment does not have significant relationship toward all dimensions of commitment to change (affective, continuance, normative).
- The dimensions of task environment simultaneously have indirect relationship with all dimension of commitment to change (affective, continuance, normative) through transformational leadership. There is one indirect relationship which is negative that is indirect relationship between task environment and continuance commitment to change.

Here are the suggestions from the writer for further researcher:

- For further researcher who wants to conduct a research about this topic they can do their research in a company with a high industry attractiveness so there will be a comparison of commitment to change between the employees in the industry with high level competition and those in the industry with relatively low level competition. So it will be known how much task environment and leadership in affect the employee's commitment to change in the different types of industry.
- This research is a beginning to find out how company environment affects the employee's commitment to change through the leadership style of the company. So the further researcher can enrich the discussion of this topic by adding other variables such as reward and recognition, empowerment, or other types of leadership style.

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THE ROLE OF LABOR UNION OF BPJS KETENAGAKERJAAN IN IMPROVING WELFARE AND CHANNELING THE ASPIRATION OF EMPLOYEES

Roadissa Habiba*, Hubeis Musa, Kuswanto Sadikin
School of Business, Bogor Agricultural University, Indonesia
*E-mail: habiba.roadissa@yahoo.com

ABSTRACT

The aims of this research are analyzing the role of Labor Union of BPJS Ketenagakerjaan in improving the welfare of the employees, analyzing the role of Labor Union of BPJS Ketenagakerjaan in distributing the aspirations of the employees, analyzing the influence of Labor Union of BPJS Ketenagakerjaan in providing direct benefits to the employees and providing suggestions for Labor Union of BPJS Ketenagakerjaan in order to perform its functions optimally as the representative of the employees. The research method used was descriptive research and it applied qualitative approach. The research findings showed that the role of Labor Union of BPJS Ketenagakerjaan, according to the three sources, was good enough, both in terms of its role in improving the welfare of the employees and also its role in channeling the aspirations of the employees.

KEY WORDS

Aspiration, welfare, labor union, business.

Human Resources (HR) within an industry or company is a social creature in which they interconnect each other, even tend to form small groups. Within the group, there is a variety of interactions to the emergence of a sense of interconnectedness. Groups can be interpreted as a collection of two or more individuals who interact and maintain stable relationships, share common goals, and feel themselves to be a group (Greenberg and Baron, 2003: 273). In addition, Gibson et al. (2012: 230) defined a group as two or more of the workers who interact with each other in which the behavior and/ or performance of the members are affected by the behavior and/ or performance of the other members.

Company, as a gathering place of Human Resources (HR), shall provide freedom for its HR to group, organize or union in accordance with article 28E paragraph (3) the Amendment of the 1945 Constitution stating that everyone has the right to freedom of association, assembly and expressing opinion. Therefore, the company, as the shelter of human resources, shall implement the provision by giving freedom for the employees to be able to form a group or organization as a forum to gather and convey their aspirations; which is commonly referred to as trade union or labor union.

Labor union is defined by Handoko (1985: 158) as a workers' organization established to promote or express opinions, protect and improve through the collective activities, the social, economic and political interests of its members in which the dominant interests the union strives for are related to the economy.

The establishment of labor union in Indonesia dates from the 19th century, in which Netherland Indische Onderwys Genootschap (NIOG) or The Dutch Indies Teacher Worker Union was established in 1879, whose establishment was influenced by the growth of labor movement around 1860-1870 in the Netherlands. After the establishment of the NIOG, it led to the establishment of other labor union organizations, including the establishment of the Postal Worker Union (Pos Bond) in 1905, the Plantation Worker Union (Cultuur Bond) and the Sugar Worker Union (Zuiker Bond) in 1906, the Government Employee Worker Union in 1907, the Railway Workers Union (Spoor Bond) in 1913, and so forth up to this day.

Recognizing the rapid establishment of labor union and the importance of labor union rules, the Indonesian government ratified the results of the International Labor Organization (ILO) convention number 87 of 1948 on the Right for Association and Protection of Organizational Rights, which led to the growth of domestic unions. It is inseparable from the

issuance of Presidential Decree No. 83 of 1998 which contains the ratification of Convention No. 87 on Freedom of Association and Protection of Organizational Rights and the issuance of Constitution number 21 of 2000 on Trade Union or Labor Union which regulate the definition, role, purpose, benefits and so forth.

Based on data compiled by the Ministry of Manpower in 2014, there were 6,808 unions with a total membership of 1,678,364 people in Indonesia. The existence of labor union within a company in Indonesia seems to have started to develop, in which various types of companies, both private companies, state-owned enterprises (BUMN), local-owned enterprises (BUMD) and state institutions have enough union organizations within their institutions. One of them is BPJS Ketenagakerjaan which is a government institution in the form of public legal entity, which participates in supporting the prevailing provisions by giving freedom to its employees to form a union. The labor union of BPJS Ketenagakerjaan is named by the Labor Union of BPJS Ketenagakerjaan (LU of BPJS Ketenagakerjaan) which is established on April 24, 1999. This LU of BPJS Ketenagakerjaan is a transformation of the Jamsostek Worker Union (SPJ) when the BPJS Ketenagakerjaan was still in the form of PT Jamsostek (Persero) as it is mentioned by Articles of Association (AD), chapter 2, article 2 on the timing of the Results of Extraordinary National General Assembly (MUNASLUB) of Jamsostek Worker Union in 2014.

At the initial observation, the employees felt that the active role of LU of BPJS Ketenagakerjaan is not optimal in carrying out its function. Various activities of LU of BPJS Ketenagakerjaan were rarely informed to the employees and the results of the activities and meetings conducted by LU of BPJS Ketenagakerjaan tended to be closed which only became the consumption of the board. The employees expected that LU of BPJS Ketenagakerjaan should be able to maximally run its role to fight for the welfare of employees and be able to publish all the activities they are conducting.

The aims of this research are (1) analyzing the role of Labor Union of BPJS Ketenagakerjaan (LU of BPJS Ketenagakerjaan) in improving the welfare of the employees, (2) analyzing the role of Labor Union of BPJS Ketenagakerjaan in distributing the aspirations of the employees, (3) analyzing the influence of Labor Union of BPJS Ketenagakerjaan in providing direct benefits to the employees and (4) providing suggestions for Labor Union of BPJS Ketenagakerjaan in order to perform its functions optimally as the representative of the employees.

METHODS OF RESEARCH

The research was conducted in the secretariat of LU of BPJS Ketenagakerjaan located in the headquarters building of BPJS Ketenagakerjaan on Jl. Jend Gatot Subroto no. 79, South Jakarta. It was conducted on April 2017 until January 2018.

Data Processing and Data Analysis. The research method used in this research is descriptive research and is a qualitative research of phenomenology, that is qualitative research that examine phenomenon or what is apparent (Soewadji 2012: 62). Broadly speaking, the stages of the research consist of (1) reducing data, (2) combining data and (3) explaining the data.

Data Source. The primary data source used in this research consisted of several types of data sources. The first was the answer from the questionnaire to several examples of employees that fit the criteria set by the researchers.

Table 1 – The Code of Each Example

No	Elements	People (n)	Source Codes
1	Industrial Relations Affairs of BPJS Ketenagakerjaan	1	Speaker 1
2	Member of Central Executive Board of LU of BPJS Ketenagakerjaan	1	Speaker 2
3	Member of Central Management Board of LU of BPJS Ketenagakerjaan	1	Speaker 3
Total		3	

The employee elements taken as resource persons in this research were categorized according to the characteristics of the sample set by the researcher, namely (1) the employee of the industrial relations affairs of BPJS Ketenagakerjaan, (2) the employee of the Central Executive Board of LU of BPJS Ketenagakerjaan, and (3) employee of the Central Management Board of LU of BPJS Ketenagakerjaan.

The examples of this research were presented by using snowball sampling technique.

RESULTS AND DISCUSSION

The Employment Agency for Social Security Employment (BPJS Ketenagakerjaan) is one of the public legal entities that provide social security for all workers in Indonesia. BPJS Ketenagakerjaan has four (4) social security programs, namely; employment injuries and work-related diseases, death benefit, old age benefit, and pension benefit. BPJS Ketenagakerjaan has a long history in its establishment, starting from Law No.33/ 1947 j.o. Law No.2/ 1951 concerning workplace accidents, Minister of Labor Regulation (PMP) No.48/ 1952 j.o. PMP No. 8/ 1956 on the arrangement of aid for the implementation of labor health, PMP No.15/ 1957 on the establishment of the Social Worker Foundation, PMP No.5/ 1964 on the establishment of the Social Security Fund (YDJS) Foundation and Law No.14/ 1969 on Manpower Principles. From these regulations, the government finally issued Government Regulation (PP) no. 33 of 1977 concerning the implementation of the social insurance program of labor (ASTEK), which requires every employer/ entrepreneur, both private and state-owned enterprises to protect their workers with ASTEK program, in which the PP is then refined by the issuance of PP. 34/1977 on the establishment of ASTEK organizers called Perum ASTEK.

A few years later, Perum ASTEK changed its name to PT Jamsostek (Persero) which its foundation is based on Law no. 3 of 1992 on Social Security of Labor (Jamsostek) and PP. 36 year 1995 which establish PT Jamsostek (Persero) as social security institution labor, which then run 4 protection programs consisting of; employment injury, death insurance, old age pension, and health care insurance.

Finally, the government issued Law no. 24 of 2011 on the Social Security Administrator which regulates the implementation of BPJS Kesehatan and BPJS Ketenagakerjaan. Based on the mandate, then PT Jamsostek (Persero) which previously in the form of state-owned enterprises (SOE) changed into a public legal entity with the name of BPJS Ketenagakerjaan.

The Profile of Labor Union of BPJS Ketenagakerjaan. Labor Union of BPJS Ketenagakerjaan is a place for workers who have a goal to convey their aspirations in defense of the rights and interests of the members and play an active role in improving the protection and welfare of BPJS Ketenagakerjaan workers. LU of BPJS Ketenagakerjaan is a transformation of Labor Union of Jamsostek which was established on 24 April 1999.

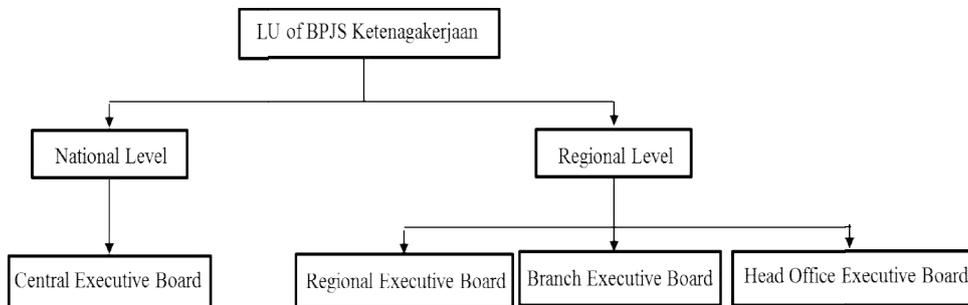


Figure 1 – LU of BPJS Ketenagakerjaan Organization Structure

LU of BPJS Ketenagakerjaan has the function to:

- Accommodate, channel, and fight for the aspirations of the members;
- Protect and defend the rights and interests of the members;

- Encourage and mobilize members to improve professionalism, work productivity, and an active role in advancing the company;
- Become the partner of BPJS Ketenagakerjaan in improving protection and welfare for BPJS Ketenagakerjaan participants.

Furthermore, LU of BPJS Ketenagakerjaan has the aims to:

- Take an active role in realizing the vision and mission of BPJS Ketenagakerjaan;
- Maintain and protect the existence and reputation of BPJS Ketenagakerjaan;
- Channel aspirations, defend the rights and interests of the members and play an active role in improving the protection and the welfare of the workers.

The administration period of the LU of BPJS Ketenagakerjaan is stipulated in the Articles of Association (AD) in article 17 concerning the period of management, namely: (1) Central Leadership Board shall be elected every three (3) years through the national congress (MUNAS), (2) Regional Leadership board shall be elected every three (3) years through regional/ central congress (MUSWIL/ MUSKAPU), (3) the head of Regional/ Branch/ Division Leadership Board is elected every two (2) years through regional/ branch/ division congress, (4) the head of Central Leadership Board, Regional Leadership Board, Branch Leadership Board, and Division Leadership Board have the stewardship period maximum for two (2) periods respectively.

The role of LU of BPJS Ketenagakerjaan in Improving the Welfare of the Employee.

After the research was conducted, the researchers obtained some points from the research findings: the three informants had enough understanding of the meaning of the union. The answer of each speaker entirely led to the same meaning; that is a group of employees formed to be a place for channeling the aspirations of the employees to the management of the company. The opinions of these three informants were in line with the definition of Labor Union under article 1 of Law no. 21 of 2000, "an organization formed from, by and for workers in and outside the company that is free, open, independent, democratic and responsible to defend, fight for and protect the rights and interests of the workers and laborers and improve the welfare of the workers/ laborers and their families".

Furthermore, from the interviews of the three informants, there were several different explanations related to the function of the union. For example, speaker 1 explained the function of the union as "the aspiration and coordination functions", then speaker 2 explained "the union as a strategic partner of management" and speaker 3 explained the function of union as "a bridge between workers and board members or directors".

Regarding to the characteristics of labor union, in accordance with Law no. 21 of 2000, it explains the characteristics of labor union listed in articles 3, 5, 8, and 9 LU of BPJS Ketenagakerjaan as a union representing all employees in BPJS Ketenagakerjaan that meets the characteristics of those regulations as the following:

- Having free, open, independent, democratic, and responsible characteristics; LU of BPJS Ketenagakerjaan had prepared the functions and objectives of the organization which were clearly stated in the AD/ ART of LU of BPJS Ketenagakerjaan in which one of the points in the AD/ ART explained that LU of BPJS Ketenagakerjaan played a role in channeling the aspirations, defending the rights and interests of members and playing an active role in improving protection and the welfare of the workers.
- Trade union/ labor union shall be formed by at least 10 (ten) workers; LU of BPJS Ketenagakerjaan had a membership of 5,578 employees.
- The organizational level of trade union/ labor union, federation and confederation of trade union/ labor union shall be stipulated in its articles of association and/ or its household budget; LU of BPJS Ketenagakerjaan had already had its own AD/ ART which has been prepared in the National Congress (MUNAS).
- It is established on the free will of the workers without pressure or interference of the employers, governments, political parties, and any parties; LU of BPJS Ketenagakerjaan is established without pressure or interference from employers, governments, political parties, and any parties. LU of BPJS Ketenagakerjaan is purely established on the initiative of a group of employees who want to make a union.

- It can be established based on business sector, occupation, and other forms that are in accordance with the will of the workers. LU of BPJS Ketenagakerjaan was established by a group of BPJS Ketenagakerjaan employees who work entirely for BPJS Ketenagakerjaan in social security.

Furthermore, in terms of the accountability report of the central management of LU of BPJS Ketenagakerjaan taken from 2013 to 2016, there were quite a lot of LU of BPJS Ketenagakerjaan activities that were carried out based on its function as a representative organization of all employees of BPJS Ketenagakerjaan, including:

- In 2013: Employee health treatment, retirement of PT Jamsostek employees and families after becoming BPJS Ketenagakerjaan (October 10, 2013), audiences and dialogue with BOD of BPJS Ketenagakerjaan related to the channeling of employee aspirations of PT Jamsostek (September 25, 2013), delivery of letters and aspirations to BOD of PT Jamsostek, application for reviewing the determination of grading and position level in redeployment process of employees and officials of PT Jamsostek (November 4, 2013).
- In 2014: Limited Discussion on Legal Study of Industrial Relations of BPJS Ketenagakerjaan: Collective Labor Agreement and Regulation of Directors (July 24, 2014), Industrial Relations and Labor Supervision (June 17, 2014), appeals for hearings to the Ministry of Manpower (June 17, 2014).
- In 2015: The Consideration of Employee and Family Health Insurance Service Program (July 3, 2015), Acknowledgment and Appreciation to the management of BPJS Ketenagakerjaan (December 8, 2015).
- In 2016: Commitment of the employees of BPJS Ketenagakerjaan and Aspiration Submission (January 27, 2016), Audience with Sri Sultan Hamengkubuwono X (March 1, 2016), Employee Support and Commitment of BPJS Ketenagakerjaan to the New Management (February 23, 2016), and Acknowledgments and Expectations of LU of BPJS Ketenagakerjaan (March 10, 2016).

All the activities were just some examples of activities that had been conducted in the period 2013-2016. By looking at those various activities that had been implemented by LU of BPJS Ketenagakerjaan, they had been able to perform its functions as a representative of all employees of BPJS Ketenagakerjaan one of which is to fight for the welfare of the employees to the management.

The Role of LU of BPJS Ketenagakerjaan in Channeling the Aspiration of the Employees. According to the informants, the LU of BPJS Ketenagakerjaan had not performed its function in channeling the aspirations of the employees maximally, as mentioned by the speaker 1 that the function of channeling the aspirations of the employees was not running maximally because there were some managers of LU of BPJS Ketenagakerjaan who tended to be passive to channelate employee aspirations in their own work units. However, it is different from what was mentioned by speaker 2 and speaker 3. Both argue that the function of channeling aspirations had been running well enough so that the welfare of the employees was realized because of the struggle of LU of BPJS Ketenagakerjaan. The difference of opinion can be seen from the answer of speaker 1 who argued that the function of LU of BPJS Ketenagakerjaan in channeling employee aspiration had not been running maximally due to individual factor from the management of LU of BPJS Ketenagakerjaan who were less communicative.

Next, in channeling the aspirations of the employees, LU of BPJS Ketenagakerjaan had been using other media for its ease; one of them was through the questionnaire media on employee health insurance. The use of the questionnaire was one of the selected media to facilitate the data collection from thousands of employees spread across Indonesia. The results of the questionnaire could then be used as a suggestion for the management in managing the follow-up and improvement when there was a shortage in employee health insurance services.

The meeting between the management of LU of BPJS Ketenagakerjaan with the management is quite often. It can be seen from the activity report of LU of BPJS Ketenagakerjaan during 2013-2016 which noted that there were many meetings between LU of BPJS Ketenagakerjaan with the management as the following:

- In 2013: Employee health treatment, retirement of PT Jamsostek employees and families after becoming BPJS Ketenagakerjaan (October 10, 2013), audiences and dialogue with BOD of BPJS Ketenagakerjaan related to the channeling of employee aspirations of PT Jamsostek (September 25, 2013), delivery of letters and aspirations to BOD of PT Jamsostek, application for reviewing the determination of grading and position level in redeployment process of employees and officials of PT Jamsostek (November 4, 2013).
- In 2014: Limited Discussion on Legal Study of Industrial Relations of BPJS Ketenagakerjaan: Collective Labor Agreement and Regulation of Directors (July 24, 2014), Industrial Relations and Labor Supervision (June 17, 2014), appeals for hearings to the Ministry of Manpower (June 17, 2014).
- In 2015: The Consideration of Employee and Family Health Insurance Service Program (July 3, 2015), Acknowledgment and Appreciation to the management of BPJS Ketenagakerjaan (December 8, 2015).
- In 2016: Commitment of the employees of BPJS Ketenagakerjaan and Aspiration Submission (January 27, 2016), Audience with Sri Sultan Hamengkubuwono X (March 1, 2016), Employee Support and Commitment of BPJS Ketenagakerjaan to the New Management (February 23, 2016), and Acknowledgments and Expectations of LU of BPJS Ketenagakerjaan (March 10, 2016).

Some of these activities were part of activity report of LU of BPJS Ketenagakerjaan during 2013-2016. The researchers selected the above list of activities because the title and theme of the activities were considered to be in accordance with the activities of channeling the aspirations of the employees to the company management through LU of BPJS Ketenagakerjaan.

Benefits of LU of BPJS Ketenagakerjaan for the Employees. Speaker 1 looked at the benefits of LU of BPJS Ketenagakerjaan from the ease of aspirations delivery to the management. Then, according to speaker 2, related to the career of someone who had been working as the administrator of LU of BPJS Ketenagakerjaan, it tended to be easier in developing their career because there were considered to have leadership aspect from their experiences. And lastly, according to speaker 3, the benefits of becoming a member of LU of BPJS Ketenagakerjaan is to learn to organize, to know business process, and also to develop a network because it can add friends from different work units.

Suggestions for LU of BPJS Ketenagakerjaan in Running its Function as the Representative of the Employees. Based on the results of interviews with the three informants, there are several points of conclusions from each speaker in which according to the researcher, they are good suggestions for the improvement of LU of BPJS Ketenagakerjaan, as the following:

- The election of LU of BPJS Ketenagakerjaan head should be conducted by using e-vote mechanism so that all employees and members of LU of BPJS Ketenagakerjaan can participate in choosing the head of LU of BPJS Ketenagakerjaan. Generally, the election system was always conducted through congress meetings in which according to speaker 1 is less in accordance with developments of the current era that are demanding to use the technology. Speaker 1 proposed to use e-vote because the system is perceived to make it easier for the head candidate to conduct electronic campaigns and facilitate the employee as the owner of voting right to vote to the head candidate of their choices.
- The use of LU of BPJS Ketenagakerjaan website as LU of BPJS Ketenagakerjaan tool in channeling the aspirations of the employees, reporting activities that have been implemented by LU of BPJS Ketenagakerjaan, and facilitating e-vote as what have been discussed in the above paragraph.

- Transparent use of LU of BPJS Ketenagakerjaan contributions that have been routinely paid monthly with pay cut mechanism. Speaker 1 suggested that the use of the contribution money might be transparently reported via LU of BPJS Ketenagakerjaan website so that all employees may know that the contributions are used appropriately and purposely.
- The competence improvement for all employees of BPJS Ketenagakerjaan. The competence improvement is intended for all employees of BPJS Ketenagakerjaan to be adaptive to the existing changes and threats.
- Speaker 2 expected that the management should be objective and ideal in listening to the demands of LU of BPJS Ketenagakerjaan. Thus, LU of BPJS Ketenagakerjaan can conduct audiences and establish a more intense communication. It indicates the communication between LU of BPJS Ketenagakerjaan and the management company has not run smoothly.
- LU of BPJS Ketenagakerjaan can be more independent. This suggestion is conveyed by speaker 3 that there was “like and dislike” in organizing in LU of BPJS Ketenagakerjaan. In addition, speaker 3 argued that there was a dislike attitude from the senior management to the new management. This likes and dislikes attitude might hamper organizational activities in LU of BPJS Ketenagakerjaan resulting in a less harmonious relationship and may cause obstacles in running the work program of LU of BPJS Ketenagakerjaan.

Managerial Implications. With this research, it is expected that the management of the company is able to establish a more harmonious industrial relations with the labor union, which is expected to:

- Able to accommodate the aspirations of employees submitted by the union;
- Able to bridging the needs of employees on the improvement of welfare that struggled by the labor union;
- Able to meet union demands when needs a meeting or mediation to the management;
- Management have to be more neutral and professional in giving employees flexibility in organizing in labor unions;
- Able to make the union as a partner in achieving the vision and mission of the company.

CONCLUSION

Based on the research findings that had been obtained by the researchers on the role of Labor Unions in improving the welfare and channeling of employee aspirations, the following conclusions can be drawn:

Based on the results of interviews to the data sources, all informant had enough understanding to the meaning and function of Labor Union of BPJS Ketenagakerjaan. All informants understood that the function of Labor Union of BPJS Ketenagakerjaan was sufficient and in accordance with the provisions of the applicable regulations, as is the function of Labor Union contained in Law no. 21 of 2000. In addition, still within the law, it regulates the characteristics of labor union. Based on Law no. 21 of 2000, the characteristics of Labor Union of BPJS Ketenagakerjaan have met the requirement of the applicable provisions.

Labor Union of BPJS Ketenagakerjaan has already had a systematic and clear AR/ART related to the membership, activities, stewardship, reporting the results of activities and so forth. Within the AD/ART, it is also clearly stated how the function, vision and mission of Labor Union of BPJS Ketenagakerjaan. The arrangement of AD/ART is in accordance with the application of Law no. 21 of 2000 which authorizes each trade union or labor union to prepare its AD/ART respectively without any intervention.

The role of Labor Union of BPJS Ketenagakerjaan, in channeling of the aspirations of the employees to the management, is different according to the three informants, but the

third opinion mentioned that the function of channeling aspirations is still not optimal. One of the causes why Labor Union of BPJS Ketenagakerjaan cannot perform its functions optimally is the boards or coordinators who are less active in playing their roles to collect the aspirations of the employees in their work units respectively.

In collecting the aspirations and asking the opinions of the employees relating with the welfare issue, Labor Union of BPJS Ketenagakerjaan had already released a questionnaire and distributed it to all employees. The questionnaire contained an evaluation of *Nayaka*; service provider of health insurance.

Meeting between Labor Union of BPJS Ketenagakerjaan and the management of the company is conducted regularly at least every 1 (one) month. The management gives an opportunity to Labor Union of BPJS Ketenagakerjaan to convey their aspirations and suggestions. In this meeting, both parties also communicate with each other in order to create a harmonious industrial relations climate.

Generally, two (2) people of three (3) informants quiet understand the benefits or advantages of being the official of labor union. Both informants underlined that the benefits of being the official of labor union is one form of employee participation in an organization in which the background of a person in the organization can be a consideration to improve his/her career. In addition to the consideration of the employee performance, the next point is to become the official of labor union in which it provide opportunities to learn, organize and broaden the network with the people. Furthermore, one speaker questioned the benefits of union contributions that have been routinely paid.

According to speaker 1, the activity report of LU of BPJS Ketenagakerjaan is not required to be reported to the management because the management of the company only provides the budget without giving any obligation to report the budget. However, in the point of view of LU of BPJS Ketenagakerjaan management, they have already seen either the activity report or financial report. Based on the explanation of the two informants, the financial and activity reports are well documented since the reporting process is conducted sequentially starting from the branch to regional leadership board until then the report is consolidated by the central leadership board.

There are several points that become suggestions from all informants for LU of BPJS Ketenagakerjaan including: the use of e-vote system mechanism in the election process of LU of BPJS Ketenagakerjaan Head, the improvement of competence of LU of BPJS Ketenagakerjaan employees in order to adapt to the existing changes and threats. In addition, the management should be more objective and ideal in listening to the demands from LU of BPJS Ketenagakerjaan and increase the intensity in implementing the audiences. Finally, LU of BPJS Ketenagakerjaan is expected to be more independent in carrying out the organization.

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IMPULSIVE AND COMPULSIVE BUYING IN RETAIL BUSINESS: AN OVERVIEW OF CONSUMER BEHAVIOR IN INDONESIA

Zakiatuzzahrah*, Doctoral Candidate
Business Administration, University of Padjadjaran, Indonesia

Arifianti Ria, Muftiadi Anang, Alexandri Mohammad Benny
Business Administration Department, University of Padjadjaran, Indonesia

*E-mail: zakiayenny@yahoo.com

ABSTRACT

The presence of pick-up service has caused a shifting in the pattern of consumer behavior. This happens particularly in the retail sector so that the growth of this business is increased. This paper aims to explain the relationship between impulsive and compulsive buying behavior in the retail sector. Previous studies showed that product characteristics and purchasing behavior of the retail sector are strongly related to the impulsive and compulsive buying behavior. The shifting model of conventional to online retail business demands retail management to design various strategies. One of which is to develop a creative retail mix. As a response to the trend of online retail, the management must redefine the understanding of such retail mix so as to develop a retail mix based on information technology.

KEY WORDS

Retail mix, impulsive buying, compulsive buying, business.

In order to understand consumer behavior comprehensively, there are several terms that must be discussed beforehand such as (i) the external and internal factors that influence buying decisions. The external factors are cultural (culture, sub-culture, and social class), social (household type, reference group role, and status), and environmental (environment, economic, and technology). On the other and, the internal factors include psychological (motivation, perception, learning, belief, attitude, self-concept, and personality), personal (age, lifestyle, occupation, education, and economic situation); Marketing program (marketing mix, retail mix); (ii). The buying process and decision (in which there is a discussion of impulsive and compulsive buying); (iii). Post-purchase behavior which is a subject that must be understood deeply and thoroughly (Parasuraman, et.al, 2002; Solomon, 2010; Priest, et al., 2013; Ramya & Ali, 2016).

Other than that, the 4.0 industry that is based on digital technology has been influential on consumer behavior including Indonesia. The presence of information technology makes consumers prefer buying through the online platform. The increase in online buying behavior which is due to the availability of pick-up service, particularly in the retail sector, makes the retailers change their business model. One of which is by closing the conventional outlets and investing it in the online models. This strategy is chosen by Seven Eleven (SeVel), Lotus and Debenhams, and some national retailers such as Matahari and Ramayana. All of those retailers migrate to the online business model by partially reducing or closing their conventional outlets. This is a form of response to the shifting of consumer behavior.

The fall of conventional retail is due to the changes in lifestyles which most of the Indonesian people consider traveling and leisure more important. The shifting in lifestyles is also due to the increasing number of middle-class population and the rise in incomes in recent years. According to the data released by the Central Bureau of Statistics (2017), Indonesia's middle class has increased to 8-9 million people per year. Thus, it can be said that Indonesia's middle-class population has touched the number of about 130 million people. The condition is reinforced by the GDP per capita of Indonesian society that is the US \$ 3000.

Broadly speaking, various macro environmental conditions in Indonesia have good conditions. This condition, which is due to the improving consolidation of democracy (politics) in Indonesia, has such indirect positive impact on the other dimensions of life, especially in the social, demographic, and economic aspects. Seen from the social and demographic state, some macro indicators show a pleasing condition. It is known that the Gini Ratio becomes smaller, the middle class is getting bigger, and the productive age is greater because of this demographic condition. In addition, the improved information technology infrastructure and improved inter-regional connectivity along with the development of various physical infrastructures such as airports, roads, ports, and other physical infrastructures make a distinct influence for some communities in their roles as a consumer.

Indonesia's macroeconomic indicator also represents a good condition. Even though the realization of 2018 economic growth is estimated to miss the target or only grew by 5.05% of the target set at 5.2%, the macroeconomic condition shows a better state than the global condition. In addition to that, people's consumption also growing better along with the low inflation. Consumer price inflation (CPI) in 2017 was the lowest in history reaching up to 3.18%. Those two indicators above give an idea that the consumption rate of Indonesian people today has a promising figure (BPS, 2018).

After the external environment condition that potentially influences consumer behavior (especially retail sector) is discussed in macro, hereinafter will discuss the potential impulsive and compulsive buying amidst the increasingly shifting behavior of buying (online). The topic of impulsive and compulsive buying behavior becomes increasingly important and interesting to be brought into the study since these two purchasing behaviors dominate the retail sector. This will be discussed without having to dispel the debate about ethics that is related to strategy advice, especially compulsive buying. (Muruganantham & Bhakat, 2013; Obaga, et.al, 2013; Vishnu & Raheem, 2013; Zaman & Zaman, 2014; Moon, et al, 2015).

Impulsive and Compulsive Buying in Retail Sector. Despite the variety of definitions of retail business, researchers agree that retail is essentially a business activity that sells products or services focusing on its use for personal and household consumption and not for business purposes. The differences in the size or volume of business are generally used as the basis for the classification of retail types. One of which is Kotler & Armstrong (2015) who classifies retail business based on the size, starting from department stores, supermarkets, and hypermarket.

Furthermore, Kotler & Armstrong (2015) asserted that although there are some differences in retail type, the products or services are generally the same. As for examples, the daily necessities category including toothpaste, milk, snacks, magazines, newspapers, detergents, clothes, and other types of products. There is also a category of shopping which generally in the form of large furniture, television, and other products. In general, the products sold in retail have a relatively low price. The distribution of products is widespread and easily accessible with a mass promotion system. In most cases, the consumers have a low engagement in the transaction and such impulsive buying is generally more dominant in the retail sector.

The study of impulsive buying has been the concern of researchers for a long time. (Clover, 1950; Stern, 1962; Rook, 1987; Peck and Childers; 2006; Chang et al., 2011; Banerjee & Saha, 2012; Setyningrum, et.al, 2016). Among the various studies above, impulsive buying usually occurs when a consumer strolling around to a place where all needs and desires are available such as in a shopping center. Impulsive buying is a shopping behavior which occurs unplanned when making spontaneous decisions. It does not matter whether a consumer is in a pure impulse buying condition (deviating from normal purchases) or in a suggestion impulse buying (where a new consumer first sees the product by looking at the quality, function, and usefulness of product as expected).

This is similar to compulsive buying. However, this behavior exhibits something that tends to be negative (to make purchases beyond the ability to buy simply because of self-esteem (materialistic consideration), as a form of anxiety and others expressions that nuanced "negative" state. In general, the retail sector is the ultimate choice for an individual to do a compulsive buying. Besides that, the dominant factors that significantly affect the

compulsive buying behavior are the openness to experience, thoroughness, extraversion, friendliness, and neuroticism (Bozionelos, 2004; Lin, 2010; Tommasel et.al., 2015; Ergin, 2010; Khare, 2013; Gupta, 2013; Bighiu, et al, 2015).

As a response to the dynamic factors that affect consumer behavior especially the buying behavior in the retail sector that is generally dominated by compulsive and impulsive buying behavior, a creativity of retailers in designing strategies is needed. To adapt to the existing dynamics, one of the creativities that need to be developed is to design a retail marketing mix that can answer the dynamics of the environment above.

Developing Retail Mix. The retail industry is a fairly homogeneous industry at which products sold between retailers are almost the same. However, behind this homogeneity, there is an interesting thing to be observed. In facing the increasingly competitive retail business, various different and interesting alternatives should be done by the retailers so that consumers will make the store as an option to shop. One strategy that is considered able to win the competition is to develop the strategy of retail mix marketing. (Lazer, 1961; Gauri, et.al, 2008; Balasescu, 2014; Azeem & Sharma, 2015; Terblanche, 2017).

The retail mix is a strategy that combines the four elements of marketing, namely place, price, product, and promotion. Physical facility and service are then combined to produce the expected feedback. Each element of this strategy is optimized to make the store superior in competing with other retailers. One of the researchers, who focus on retail mix marketing is Berman & Evans (2011). They developed a retail mix marketing which consists of product, price, promotion, as well as service and facility/location.

Along with the shifting of conventional stores to online shops, the explanations of each retail mix definition needs to be adjusted. Other than that, the addition of retail mix marketing elements is very possible when starting a new e-business (Kalyanam & Shelby, 2002). For example, the location of the store (in the physical sense) should be interpreted as a form of website where consumers "visit" the web. Therefore, it should be designed as a user-friendly website with common characteristics such as the clear identity of the website, good devices, fast loading time, intuitive navigation, compelling content, easy-to-read text, fun element of experience, clear rules, and guaranteed visitor privacy.

Products are a very important element in retail business. The availability of products is very important for the retail industry because customers are always looking forward to meet what is needed and desired in every store. The needs and desires of customers are very diverse in which the store is expected to fulfill it. The function of product managers (procurement and availability) is important. If the availability of the products is problematic, the competitive advantage of the retail sector will almost certainly be difficult to get (Balasescu, 2014). Meanwhile, the online retail model requires the management to display the products on the web either through photos or videos, so that visitors will be satisfied with the information about the products. (Senecal & Jacques, 2004; John & Anand, 2012; Riquelme, et.al, 2016)

Price is also a very important aspect for retailers. The success of the business is also largely determined by the pricing strategy. The management must be able to set the right price for the goods so that the sale will be more secure. Even though it is difficult to realize, all retailers try to set a high price with a high volume of sale in general. The pricing is in regard to many aspects related to profit maximization, customers' perceptual and psychological condition, market response, goods availability, image and product quality, brand perception, as well as laws and regulations. (Basuroy, et.al, 2001; Khare, 2014).

Communication also plays an important role in the success of the retail business. Communication, which is in the form of promotion, is basically one aspect that aims to drive the target market to be willing to become buyers and customers. The essence of this promotion is the way we deliver what we offer to the consumer to be well received. Marketing communication not only able to make customers interested in buying, but also to create a specific image adapted to the target market. The mix of promotion generally consists of advertising, sales promotion, personal selling, public relations, and direct marketing. (Grewal, et.al, 2011; Shamout, 2016)

The presence of information technology especially social media makes this retail mix has its own challenges because it requires creativity. The increasing channels (Facebook, Instagram, Twitter, etc.) and the diverse forms of promotion (story-telling, video blogger, etc.) require the practitioners in the field of promotion to understand the characteristics of online buyers better. Integrating marketing communication by using conventional and online media makes mix promotion as one of the keys to success in the retail field. (Favero & Alvares, 2013; Mapheto, et.al, 2014; Ots & Nyilasy, 2017).

Service has an increasingly noticeable role. A service is essentially intangible and does not cause a possession of anything. However, a service can basically be included in a physical product. Such service, in general, is serving the customers right before shopping, while shopping, and even after shopping. Service is an aspect which has an important role in the competition. It becomes real for the company to compete with the competitors because the element of service is very difficult to be imitated by others. (Bitner, et al, 1994). Kotler (2015) divided service into two parts. *First*, primary service which consists of credit payments, delivery, complaint handling, park handling, restroom, and toilet. *Secondly*, secondary service which includes packaging, products location information, consultation and purchase information, as well as deposit box.

When the purchasing behavior has not shifted into online buying, physical facility is a decisive factor in shaping the dominant market share desired by the company. Therefore, adjustments are needed along with this shifting. Physical facilities must be interpreted also with a web display that is easy to understand and is supported by various other facilities. Specifically, physical facilities (conventional retail) must meet several important elements that can be highlighted such as the image of the store in the form of good architecture, attractive exterior and interior design, adequate human resources, and a good supply of goods.

Moreover, a strategic location should be taken into account. The flow of consumer traffic in the area should be considered whether it can be a business center or not. The flow of consumer traffic will affect the placement of the retail stores because location can attract consumers and affect the impulsive and compulsive buying. (Bloemer & Ruyter, 1998; Jaravaza & Chitando, 2013; Sun & Rashad, 2015).

Conclusion. The product characteristics and buying behavior in the retail sector are highly relevant to the characteristics of impulsive and compulsive buying behavior. It is known that the shifting of buying behavior is due to a large number of pick-up services. This has made the retailers to adjust their business strategies and models. One thing that needs to be done is to change the understanding of retail mix marketing. This is considered substantial in the middle of the trend in which retailers choose to be market-driven organization.

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THE EFFECT OF ACCOUNTABILITY, TRANSPARENCY, OPENNESS, FAIRNESS AND COMPETITION ON EFFECTIVENESS AND EFFICIENCY OF E-PROCUREMENT IN MALUKU PROVINCIAL PROCUREMENT SERVICES UNIT

Surijadi Herman

Ambon State Polytechnic, Indonesia

Tamaela Eduard Yohannis*

Administrative Sciences College Said Perintah Masohi, Indonesia

*E-mail: tamaelaeduard@gmail.com

ABSTRACT

The purpose of this study is to examine and analyze the influence of accountability and transparency principles, open, fairness and competition against e-procurement effectiveness and efficiency in procurement service unit Maluku Province. The population of this study was all participants or providers of government Goods/Services registered in procurement service unit Maluku Province with purposive sampling as a sample method with 79 participants or providers of government Goods/Services as respondents. Data collection was done by direct survey. Hypothesis testing was empirically tested using Multiple Linear Regression Analysis. The results showed that the principle of accountability and transparency, openness, fairness / non-discrimination and competition proved to have a positive and significant impact on the effectiveness and efficiency of e-procurement in procurement service unit Maluku Province. This can be proven through regression coefficient indicating that if the principle of accountability and transparency, openness, fairness / non-discrimination and competition increase, then it will be followed by improvement of effectiveness and efficiency of e-procurement at procurement service unit Maluku Province. Thus, it can be said that increasing the principles of accountability and transparency, openness, fairness / non-discrimination and competition will improve the effectiveness and efficiency of e-procurement in procurement service unit Maluku Province.

KEY WORDS

Accountability, transparency, openness, competition, effectiveness, efficiency.

The demand for good governance in Indonesia arose due to the rampant practices of government officials. The number of cases of law violations and power abuse committed by the elements in the Indonesian government become a dilemma and of course is a barrier in realizing good governance. One of the most frequent cases of lawlessness is corruption.

In an article on the Ministry of Finance's Education and Training of Finance website, for example, it is said that the most corruption handled by the Corruption Eradication Commission related to corruption is in the procurement of government Goods/Services and is the second highest corruption case after bribery case. In 2004-2010 period, 44% of corruption cases handled by KPK were corruption cases in the government procurement (www.bppk.kemenkeu.go.id).

One of the implementation to realize good governance in Indonesia especially concerning regulate procurement policy of goods/services, then issued Presidential Regulation No. 54 of 2010 on Procurement of Government Goods/Services in order to provide guidance on regulation on the procedure of procurement of Goods/Services is simple, clear and comprehensive, in accordance with good governance through joint financing schemes (*cofinancing*) between the central government and local government. Presidential Regulation No.54 of 2010 was then revised to Presidential Regulation No. 70 of 2012 and then revised again to Presidential Regulation No. 4 of 2015.

The existence of this e-procurement system as the front guard in guarding the credible procurement process, not without weaknesses. As stated by the Head of Government Procurement Policy Agency, Agus Rahardjo who argued that in 2014 e-tendering funds reached Rp. 304 trillion while e-purchasing (direct appointment) reached Rp. 15 trillion. Of the total Rp. 820 trillion procurement of government goods and services', it means that about 38% are realized (<http://www.medanbisnisdaily.com>). This fact proves that there are still irregularities that occur in the e-procurement system.

The above facts indicate that the implementation of e-procurement should still receive attention to perform its function as a guardian of the procurement process of credible government goods/services. This is necessary because in essence this system aims to reduce the losses of the country born due to the use of conventional system (manual purchase). This statement is reinforced by research results Panayitou et al. (2004) proves that e-procurement can reduce supply cost (average 1%), reduce cost per tender (20% cost per tender), lead time savings (4.1 month - 6.8 months for open tender and 7.7 months - 11.8 months for limited tender).

This statement is in line with the findings of Wahyu Hary Wijaya, et al. (2011) which states that the variables affecting procurement efficiency include reducing cost per tender and reducing procurement process time and will be highly profitable in the future. Other researchers namely V.K. Narendira Kumar and B. Srinivasan, (2013) also stated that several factors affecting the implementation of e-procurement include; cost, supply chain visibility, turnaround time, tender process controls, inventory management and minimize errors in the process of purchasing goods. Badzlina Daroyani Novitaningrum, (2014) also supports the above statement that accountability and transparency in the procurement of goods and services of Surabaya City Government through e-procurement has been successfully realized.

Similar opinion was also delivered by Misbakhul Munir, (2015) which stated that overall implementation of e-Procurement in Lamongan District has been running very well, with details of accountability score (85.33%), target (87.73%), data security (84 , 83%), fairness / non-discrimination (85%) and transparency (87.33%) are in very effective category. The benefits of the state losses reducing are also submitted by Luh Putu Resti Mega Artantri, et al., (2016) that e-procurement has a role to suppress fraud on the procurement of Goods/Services of local governments on the island of Lombok.

Based on the description of phenomena and empirical studies above it can be said that the determinant of the realization of good e-procurement implementation is the principles of procurement of Goods/Services of the government, among others; effective, efficient, accountable, transparent, open, fair or non-discriminatory, and competitive. The novelty of this research lies in the development or existence of a conceptual model of research, particularly in the incorporation of accountability principles and the principle of transparency. This merger is an existence or model development based on the opinion of Stirton, (2001) who argues that although not identical but transparency is closely linked to accountability which means transparency can be combined with accountability.

This research will then be conducted at the Procurement Services Unit of Maluku Province with the aim to examine and inspect in depth the influence of the principle; accountability and transparency, openness, fairness or non-discrimination, and competition against the effectiveness and efficiency of e-procurement in Maluku Province. Selection of procurement service unit Maluku itself is based on the refutations submitted by the provider to the procurement service unit of Maluku Province and some even to the level of complaint. Disclaimer even complaint of course indicates that the implementation of e-procurement in the procurement process of government goods and services has not been effective and efficient.

REVIEW OF LITERATURE

Principal-Agent Theory. Jensen, (1976) argues that principal-agent relationships are contracts between one or several persons as principals with one or more persons as agents

to carry out services for their interests that involve delegating authority to agents. If both parties are interested in maximizing the utility, then the agent will not always apply in the best interests of the principal and potentially irregularities. According to Jensen, (1976) such deviations potentially cause economic losses. Costs incurred in this principal-agent relationship include:

- Costs to ensure that agents make optimal decisions for principal interests include bonding costs by agents and supervisory fees by the principal;
- Residual cost is the cost borne principal due to the divergence between decisions taken by the agent with a decision that can maximize the welfare of the principal.

Contingency Theory. The emergence of contingency theory is the result of criticism of classical theories that advocate "one best way" to organize and manage organizations. Contingency Theory proposes that there is no best way to organize different organizations working in different industries under different conditions. One of the most influential studies in the emergence of contingency theory was the research of Burns and Stalker (1961). They found two different management practices used, which they classified as "mechanistic" and "organic" systems. Mechanical systems are most appropriate for organizations operating under stable conditions. On the other hand, organic systems are more suitable for organizations working under unstable and volatile environments. This system allows the organization concerned to adapt to environmental changes. Burns and Stalker emphasize that any suitable system should also look at certain conditions meaning no system is superior to the other in all situations.

Concept about Public Procurement. Public procurement is politically sensitive because it involves a very significant amount of budget. Based on Presidential Regulation No. 54/2010 on Procurement of Government Goods/services, Procurement of Government Goods/Services is an activity to obtain Goods/Services by Ministry / Institution / Work Unit of Regional Devices / other Institutions whose process starts from planning of needs until completion of all activities to obtain Goods/services. Coverage of procurement activities includes planning, procurement process, receipt and storage, use of goods and asset management, and three transactions ie Goods/Services purchases (contracts), goods receipt transactions and goods disbursement transactions.

The concept of procurement of goods/public services is also submitted by the Organization for Economic Cooperation and Development, (2007) that has conducted a research from the perspective of good governance. The research produces solutions for increased integrity and prevention of corruption in the procurement of public Goods/Services ranging from the stages of determining the needs to contract management. They also revealed that transparency and accountability play an important role in the procurement of public goods/services. This statement is supported by the opinions of Rubinstein, (2007) and Schapper, (2009).

Principles of Procurement of Goods and Services in Indonesia. The principle of procurement of goods and services is based on government regulation through Presidential Regulation Number; 54 of 2010, number 70 of 2012 and number 4 of 2015 which in it describes a number of principles that should be the basis in implementing the procurement process of goods/services.

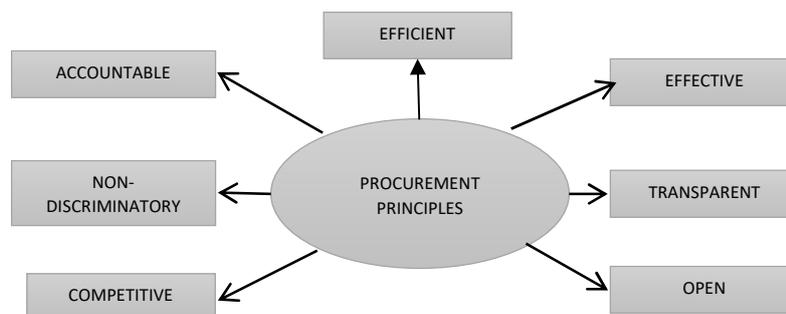


Figure 1 – Principles of Procurement of Goods and Services in Indonesia (Source: Presidential Regulation No. 70 of 2012)

This whole principle will be implemented in every process of procurement of goods and services, as described below.

- Efficient; procurement efficiency is measured against how much effort is made to obtain Goods/services;
- Effective; the effectiveness of procurement is measured against how far the Goods/Services obtained from the procurement process can reach the specified specifications;
- Transparent; how the whole process of procurement of Goods/Services is done so that it can be known widely covering the provisions, procedures, mechanisms, rules of the game, the specification of Goods/Services and all matters related to how the procurement process of Goods/Services is done;
- Open; procurement of Goods/Services can be followed by all providers of Goods/Services that meet the requirements / criteria established in accordance with applicable regulations;
- Competitive; the procurement process of Goods/Services can create a healthy climate or atmosphere of competition among providers of goods/services, no interventions that can disrupt market mechanisms;
- Fair/Non-Discriminatory; the procurement process may provide equal treatment to all prospective Providers of the Goods/Services and does not lead to profit to a particular party, unless provided for in this rule;
- Accountable; the whole process must be in accordance with the rules and provisions related to the procurement of Goods/Services so it can be accountable.

Previous Research and Research Hypothesis. OECD, (2007) and Schapper, (2009) argue that transparency and accountability are believed to be key factors for improving integrity and preventing corruption in the procurement of goods/services. This opinion reinforces previous statements by Grant, (2005) and Rubinstein, (2007). Wahyu Hary Wijaya, Retno Indryani, and Yusronia Eka Putri, (2011) stated that the variables that positively influence the procurement performance in Surabaya City Government are clean and transparent exports. Similar results were also delivered by Misbakhul Munir, (2015) stated that the overall implementation of e-Procurement in Lamongan District has been running very well, with details of accountable scores (85.33%) and transparent (87.33%) which are in very effective category . This means that the procurement principles have contributed positively to the implementation of e-procurement.

Badzlina Daroyani Novitaningrum, (2014) stated that accountability and transparency in procurement of goods and services of Surabaya City Government through e-procurement has been successfully realized. Furthermore, previous research by Florensia Br. KJaro-Karo, (2012) proves that the use of e-procurement at the Yogyakarta City government is capable of producing higher levels of efficiency and is able to maintain the confidentiality of offer documents of vendors / providers of goods and services. This statement is also reinforced by Luh Putu Resti Mega Artantri, Lilik Handajani and Endar Pituringsih, (2016) also proves that e-procurement has a role to suppress fraud on procurement of Goods/Services of local government in Lombok Island. Based on the explanation, the hypothesis that is built is as follows:

H₁: The principle of accountability and transparency has a positive effect on the effectiveness and efficiency of e-procurement in procurement service unit Maluku Province.

Another empirical study by A. Ika Iskandar, (2013) reveals that in general the application of procurement principles (including open principles) in the implementation of procurement of government Goods/Services in Government Procurement Policy Institutions, Sukabumi and Government Bogor city has been running but there are still some things that are not in accordance with the provisions. Similar results were also delivered by Misbakhul Munir, (2015) stated that the overall implementation of e-Procurement in Lamongan District has been running very well, with transparent scores or openness (87.33%) in the category very effective. Based on the explanation, the hypothesis that is built is as follows:

H₂: The open principle positively affects the effectiveness and efficiency of e-procurement in procurement service unit Maluku Province.

The results of A.Ika Iskandar's (2013) review reveal that in general the application of procurement principles (including Fair/Non-Discriminatory) principles in the implementation of government procurement in Government Goods / Service Procurement Policy Institution (LKPP), Sukabumi and City Government of Bogor. Similar results were also delivered by Misbakhul Munir, (2015) stated that overall implementation of e-Procurement in Lamongan District has been running very well, with details; Fair/Non-Discriminatory (85%) who are in very effective category. This reality also means that the procurement principle has a positive effect on the implementation of e-procurement. Based on the explanation, the hypothesis that is built is as follows:

H₃: The principle of Fair/Non-Discriminatory has a positive effect on the effectiveness and efficiency of e-procurement in procurement service unit Maluku Province.

The guidance of this final research hypothesis is based on the results of empirical study by A.Ika Iskandar, (2013) and Misbakhul Munir (2015) stated that the competitive principle is able to realize or positively affect the effectiveness and efficiency of procurement of Goods/Services in Sukabumi City, Bogor City and Lamongan Regency. Based on the explanation, the hypothesis that is built is as follows:

H₄: The competitive principle positively affects the effectiveness and efficiency of e-procurement in procurement service unit Maluku Province.

METHODS OF RESEARCH

This research includes an explanatory study that explains the influence of principles; accountability and transparency, openness, fairness / non-discrimination and competition against the effectiveness and efficiency of e-procurement. The population in this study is the 300 providers of government Goods/Services registered in the procurement service unit Maluku Province data. Sample determination used in this research is to use purposive sampling technique by using criterion that is; provider of government Goods/Services registered in procurement service unit Maluku Province) with active status, always follow the process of procurement of Goods/Services in procurement service unit Maluku Province at least in the last 6 months and not blacklisted in procurement service unit Maluku Province. Based on this criterion, then the final sample that can be obtained is as much as 79 providers. The analytical tool used to answer the problem and the purpose of research is multiple linear regression analysis.

RESULTS AND DISCUSSION

Quality Test Instrument Research. Testing instrument in this research is intended to test the validity or validity of the questionnaires used by researchers. Furthermore, this test will be discussed in two parts namely test validity and reliability test as described below. Validity test in this study using Product Moment Person correlation, that the validity of the instrument can be known by comparing the correlation index of Product Moment Person with significant 5%. The results of validity test show that the overall variable of this study can be said to be valid because the correlation value is greater than 0.3 and the significance level is smaller than 0.05.

Testing reliability of this study using alpha cronbachs where an instrument can be said reliable if it has a value of reliability coefficient greater than or equal to 0.6 means if $\alpha = 0.6$ then the instrument can be said reliable. All the variables studied in this study turned out to have a correlation coefficient above 0.60 so that all this research data can be said reliable.

The value of Kolmogorov Smirnov of accountability and transparency is 0.875, the open principle is 1,590, the principle of Fair/Non-Discriminatory is 1,661, the competitive principle is 1,581 and the effectiveness and efficiency e-procurement of 1,297 which is greater than the value of D table that is 0.150 (D count > D table) means that data is normally distributed.

Table 1 – Validity Test Results

Variables	Indicators	Item	r	Sig	Interpretation
Principles of Accountability & Transparency (X ₁)	Reference document preparation	X _{1.1}	0.624	0.000	Valid
	Performance bond	X _{1.2}	0.697	0.000	Valid
	Procurement procedure	X _{1.3}	0.679	0.000	Valid
		X _{1.4}	0.796	0.000	Valid
	Evaluation stage	X _{1.5}	0.733	0.000	Valid
		X _{1.6}	0.798	0.000	Valid
	Implementation report	X _{1.7}	0.753	0.000	Valid
	Preparation of Own Price Estimates	X _{1.8}	0.644	0.000	Valid
	Terms in Document	X _{1.9}	0.733	0.000	Valid
	Announcement Addendum document	X _{1.10}	0.739	0.000	Valid
	Schedule	X _{1.11}	0.644	0.000	Valid
	Data integrity	X _{1.12}	0.766	0.000	Valid
	Disclaimer	X _{1.13}	0.617	0.000	Valid
Open Principles (X ₂)	Entry requirements	X _{2.1}	0.862	0.000	Valid
	Announcement of the General Procurement Plan	X _{2.2}	0.800	0.000	Valid
	Procurement announcement	X _{2.3}	0.798	0.000	Valid
Fair/Non-Discriminatory Principle (X ₃)	Entry requirements	X _{3.1}	0.787	0.000	Valid
	<i>Aanwijzing</i> (job description)	X _{3.2}	0.781	0.000	Valid
		X _{3.3}	0.774	0.000	Valid
	Technical specifications	X _{3.4}	0.808	0.000	Valid
The Competitive Principle (X ₄)	Compete healthy	X _{4.1}	0.662	0.000	Valid
		X _{4.2}	0.641	0.000	Valid
	Affiliation	X _{4.3}	0.741	0.000	Valid
	In accordance with open principles	X _{4.4}	0.764	0.000	Valid
Effectiveness & Efficiency E-Procurement (Y)	Principles of accountability and transparency	Y _{1.1}	0.747	0.000	Valid
	Fair principle	Y _{1.2}	0.728	0.000	Valid
	The competitive principle	Y _{1.3}	0.803	0.000	Valid
	Open principle	Y _{1.4}	0.762	0.000	Valid
	Time effectiveness	Y _{1.5}	0.670	0.000	Valid
	Cost efficiency	Y _{1.6}	0.826	0.000	Valid
	IT Ability	Y _{1.7}	0.643	0.000	Valid

Table 2 – Reliability Test Results

Variables	Coefficient Alpha	interpretation
Accountability & Transparency Principle	0.918	Reliable
Open Principle	0.756	Reliable
Fair/Non-Discriminatory Principle	0.794	Reliable
The competitive principle	0.659	Reliable
Effectiveness & efficiency of E-Procurement	0.856	Reliable

Table 3 – Kolmogorov Smirnov Test Results

		PAT	PT	PATD	PB	PEE
N		79	79	79	79	79
Normal Parameters ^{a,b}	Mean	54.03	12.39	16.22	16.28	28.78
	Std. Deviation	6.100	1.605	2.073	1.921	3.429
Most Extreme Differences	Absolute	.098	.179	.187	.178	.146
	Positive	.098	.179	.187	.178	.146
	Negative	-.070	-.112	-.117	-.113	-.092
Kolmogorov-Smirnov Z		.875	1.590	1.661	1.581	1.297
Asymp. Sig. (2-tailed)		.428	.013	.008	.013	.069

a. Test distribution is Normal.

b. Calculated from data.

Heteroscedasticity test in this research was done by using Glejser Test which will regress residual absolute value to independent variable (Gozali, 2005). The following is the result of heteroscedasticity testing shown in the table below.

Table 4 – Glejser Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.670	1.305		.514	.611
1 PAT	-.086	.060	-.610	-1.426	.163
PT	.200	.138	.377	1.441	.159
PATD	.080	.120	.219	.665	.511
PB	-.016	.135	-.038	-.116	.908

This test states that if the independent variable proved not to affect the dependent variable then there is no indication of heteroscedasticity. This is evidenced by the magnitude of the probability significance (sig) above the level of trust 0.05.

The multicollinearity test of this study uses a view of tolerance and VIF values. The following is the result of multicollinearity testing as seen below;

Table 5 – Multicollinearity Test Results

Model	Collinearity Statistics	
	Tolerance	VIF
Accountability & Transparency Principle	0.196	5.102
Open Principle	0.332	3.016
Fair/Non-Discriminatory Principle	0.268	3.727
Competitive principle	0.234	4.276

The above data shows that the tolerance value is close to 1 and the VIF value is below 10 which means there is no multicollinearity among the independent variables in this study.

Table 6 – Results of Multiple Linear Regression Test

Variable	Coefficients	t count	Sig	Interpretation
Constant	0.695			
PAT	0.169	3.945	0.000	Significant
PT	0.350	2.798	0.007	Significant
PATD	0.435	4.032	0.000	Significant
PB	0.550	4.416	0.000	Significant
<i>Adjusted R Square</i>		0.911		
t tabel		1.664		

Hypothesis Testing Research:

Hypothesis Testing 1. The results of the first hypothesis testing revealed that the principle of accountability and transparency has a value of t count of 3.945 which is greater than the value of t_{table} is 1.664 (3.945 > 1.664) which means that accept H_a and reject H₀ or the first hypothesis accepted. This result shows that the principle of accountability and transparency has a positive and significant effect on the effectiveness and efficiency of e-procurement in procurement service unit Maluku Province.

Hypothesis Testing 2. The result of the second hypothesis test revealed that open principle has a t_{count} value of 2,798 which is bigger than t_{table} value that is 1.664 (2.798 > 1.664) which means that reject H₀ and accept H_a or second hypothesis is accepted. These results show that open principle has a positive and significant effect on e-procurement effectiveness and efficiency in procurement service unit Maluku Province.

Hypothesis Testing 3. The result of the third hypothesis test reveals that the principle of Fair/Non-Discriminatory has a value of t count of 4,032 which is greater than the t_{table} value of 1.664 (4,032 > 1.664) which means that accept H_a and reject H₀ or the third hypothesis is

accepted. These results show that the principle of fair / non-discrimination has a positive and significant effect on the effectiveness and efficiency of e-procurement in procurement service unit Maluku Province.

Hypothesis Testing 4. The result of the fourth hypothesis test shows that the competing principle has a t_{count} of 4,416 which is bigger than t_{table} value that is 1.664 ($4.416 > 1.664$) which means that accept H_a and reject H_0 or this last hypothesis is accepted. These results show that the competitive principle has a positive and significant impact on the effectiveness and efficiency of e-procurement in procurement service unit Maluku Province.

DISCUSSION OF RESULTS

The Influence of Principles of Accountability and Transparency on the Effectiveness and Efficiency of e-Procurement in Procurement Service Unit Maluku Province. The result of the analysis through multiple linear regression showed that the principle of accountability and transparency proved to be positive and significant fall towards the effectiveness and efficiency of e-procurement in procurement service unit Maluku Province. Based on the result of respondent's answer analysis, the role of principle of accountability and transparency in shaping the effectiveness and efficiency of e-procurement in procurement service unit of Maluku Province is caused the work team of procurement service unit Maluku Province announce addendum of procurement document if there is new provision. Any change of the document must be known by all participants so it must be notified by announcement on Electronic Procurement Service Maluku.

Another factor based on the respondents' answers that make this principle affect the effectiveness and efficiency of e-procurement is that all procurement process of goods / service at procurement service unit Maluku Province can be accessed. This reality shows that all providers have the same opportunity to win the tender in Maluku province and with this; the community and other stakeholders can participate in overseeing all stages of the auction process (Iskandar, 2013). In addition, Maluku Provincial procurement service unit is also proven to provide services in a more structured and professional and even open space for refutation to the provider. These results also support the opinion of previous researchers namely; Iskandar, (2013) that e-procurement can also reduce procurement inefficiency by providing greater benefits than the costs incurred.

The Effect of Open Principles on Effectiveness and Efficiency of e-Procurement in Procurement Service Unit Maluku Province. The results of analysis by using multiple linear regressions prove that the open principle proved to have a positive and significant effect on the effectiveness and efficiency of e-procurement in procurement service unit Maluku Province. Furthermore, through the results of the analysis of respondents' answers can be said that the indicators that provide the largest contribution so that this principle affects the effectiveness and efficiency of e-procurement in procurement service unit Maluku Province is an indicator of procurement announcement. These results indicate that the procurement service unit Working Group of Maluku Province has performed its duties in accordance with the prevailing provisions that have displayed the announcement of the procurement process of Goods/Services through the official government website, in the national procurement portal and through local notice boards.

The Influence of Fair/Non-Discriminatory Principle against the Effectiveness and Efficiency of e-Procurement In Procurement Service Unit Maluku Province. The results of the analysis through multiple linear regressions prove that the principle of Fair/Non-Discriminatory proved to have a positive and significant effect on the effectiveness and efficiency of e-procurement in procurement service unit Maluku province. This means that the procurement service unit Working Group of Maluku Province through policymakers in preparing technical specifications has been Fair/Non-Discriminatory or there is no tendency towards certain participants. Basically the requirements of participant participation, aanwidjing (job description) as well

The results of this study are in line with the results of empirical studies by Misbakhul Munir, (2015) and also by Iskandar, (2013) stating that overall fair / non-discriminative

implementation of e-procurement in Lamongan District, Sukabumi City and Bogor City has been running with both so that indirectly able to optimize the implementation of e-procurement.

The Effect of Competitive Principles on Effectiveness and Efficiency of e-Procurement at Procurement Service Unit Maluku Province. The result of multiple linear regressions analysis proves that the competitive principle has a positive and significant effect on the effectiveness and efficiency of e-procurement in procurement service unit of Maluku Province. These findings prove that the Maluku Provincial Maluku Working Group in determining the winning bidders will still be based on the participants' bidding documents or not because of the "deposit" or intervention from outside parties. This indirectly proves that the competition that occurs among all participants in the procurement of Goods/Services government at procurement service unit Maluku Province is a healthy competition.

CONCLUSION

Based on the discussion of research results, the conclusions can be submitted are as follows; principles of accountability and transparency, openness, fairness / non-discrimination and competition proved to have a positive and significant impact on the effectiveness and efficiency of e-procurement at procurement service unit Maluku Province. This can be proven through regression coefficient indicating that if the principle of accountability and transparency, openness, fairness / non-discrimination and competition increase, then the increase will be followed by improvement of effectiveness and efficiency of e-procurement at procurement service unit Maluku Province. Thus, it can be said that increasing the principles of accountability and transparency, openness, fairness / non-discrimination and competition will improve the effectiveness and efficiency of e-procurement in procurement service unit Maluku Province.

Limitations encountered throughout the conduct of this study include;

- The sample under study is limited to the procurement unit of Maluku Province only, while the existing procurement service unit in City and Regency in the province of Maluku is not included in this research;
- There are still many variables of effectiveness and efficiency of e-procurement that are not analyzed in this research model.

Implications of future research that can be recommended through this research include;

- Further research can use other variables such as those adopted from the opinion of Luh Putu Resti Mega Artantri, et al., (2016) which states that several factors related to the procurement process of government Goods/Services such as individual factors in the form of greed and need such as the commitment of members of the organization to not to cheat, and the provision of appropriate compensation to the procurement of goods/services;
- We recommend that further research should add samples that can be obtained from City and District Procurement Units in the Province of Maluku.

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PASURUAN POLICE RESORT TRAFFIC STRATEGY TOWARDS OVERCOMING HIGHWAY ACCIDENTS BY UNDERAGE STUDENTS

Amalia Mellysa

Postgraduate School, Airlangga University, Indonesia

E-mail: mellysa61@gmail.com

ABSTRACT

The purpose of this research is to analyze the function and strategy of Pasuruan Police to handle accident rate by motor vehicle underage user. The results showed that the level of motor vehicle usage by children in Pasuruan Police area increased significantly, especially high schools, where factors affecting the increase of accidents are family, school, environmental, and self-emotional factors.

KEY WORDS

Strategy, traffic, accident, child.

The increasing complexity in transportation need makes people consider every option to fulfil their expectation. Unfortunately, not all cars' driver and motorcycle riders are legally able to operate their vehicle in the perspective of law. There are many underage students who, is not legal yet, wish to use the vehicles. But, in fact, they are riding and driving their vehicles freely on highway road. These underage drivers often cause accident among others. The accidents are mostly caused by their unstable psychology, the mental and physical condition, and their improper and careless characters. Moreover, in some cases, it is also as result of their lack of knowledge on traffic rules and signs. That is why, in this case government and police traffic must build children protection as victims and violation actors.

Factually, senior and junior high students are still in process of "who am I" seeking phase. They are easy to provoke within simple things, they are fragile to violate and broke the law, even though the norms among society. Nowadays, we often see these student ride their motorcycle in rush and dangerous way. They do not bring identity card of their vehicle and also driving license as their age is still not yet fulfil the requirements of it. Even, they often ride within three people in one motorcycle. In fact, most of these students receive the permission from their parents to use the vehicles. Even though, the parent realised that it is illegal and dangerous to let their children to drive or ride. The parents know that their children are not yet 17 years old and have no driving license. In this case, family becomes the smallest and closest unit to educate their youth members. That is why; parents must not permit their children to use the conveyance. The number of highway road accidents in Pasuruan regency in 2014-2016 is relatively in high rate as stated on the table below.

Table 1 – The number of highway accident in Pasuruan Jurisdiction

Victims' Status	Years					Total
	2012	2013	2014	2015	2016	
Death	119	53	47	34	39	292
Serious Injuries	45	27	17	16	47	152
Light Injuries	993	620	552	631	517	3313
Jumlah	1157	700	616	681	603	3757

Source: Pasuruan Police Resort 2016.

From the data above, we can conclude that the total number of accidents on Pasuruan jurisdiction of 2012-2016 is 3.757 cases. The light injuries victims reach 3313 people, the serious injuries are 152 people, while the death victims are on 292 people.

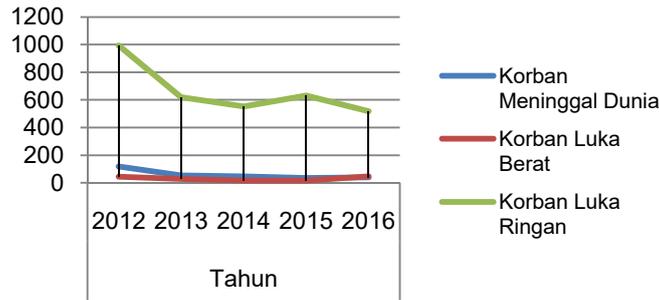


Figure 1 – The number of highway accident in Pasuruan Jurisdiction

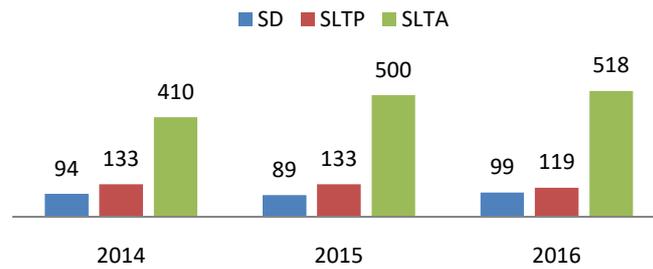


Figure 2 – The underage subject of traffic violation shortened by education level

From the data above, we can conclude that the accidents by underage students within 3 years 2014-2016 are 2.095 in total, whereas the elementary school students covers 282 students, the junior high is 385 cases, and the senior high students gather 1.428 cases. This supports the statement that any accidents cause or caused by underage students are in high numbers. It is very important for Pasuruan police to take actions.

Accordance with the violation of Indonesian Law number 22 of 2009 about traffics and transportation by students, there must be a prevention action to minimise the issues. The strategy could implement preventive or repressive way. Preventive strategy prevents the students to avoid disobedience and obey the law to minimise the civil action. Meanwhile, the repressive action must be implemented directly as the violation has been occurred. The institution who has duty and right to maintain in such cases is the traffic police which is known as Polantas in Indonesia.

Polantas has right and authorities to take care of the cases which violate the Indonesian law number 22 of 2009 about Traffics and Transportation. According to Indonesian Police Leader Regulation number 23 of 2010 about the organisation structure and administration work on Police Resort and Sector level article 59, Polantas has duties to control, guard, escort, patrol of traffics, and educate the society, registration and verification service for vehicles and users, and the identification of highway accidents, and the law enforcement of traffic regulation which has been implemented.

From the facts above, the police must be able to show its strategy in overcoming and preventing the number of underage student driving accidents.

METHODS OF RESEARCH

The research method used in this study is qualitative method. The setting of study takes place on the jurisdiction of Pasuruan police resort. Because, there are high numbers of underage children accidents occurred in this area. The informant of this study is vice head of Pasuruan Police Resort, Head Division of Traffic Pasuruan resort police, the personnel of traffic police of Pasuruan regency, and the student underage drivers.

RESULTS AND DISCUSSION

The Number of Motor Vehicle Usage and the Influence Factors of Underage Student Accidents in Pasuruan Police Resort Jurisdiction. It has been found that there are many drivers who are not yet old enough to use the vehicle in reality especially towards senior high school students. According to the subject case of Resort Police data, it could be displayed as follow:

Table 1 – The underage subject of traffic violation shortened by education level

No	Education	2014	2015	2016	Total
1.	Elementary	94	89	99	282
2.	Junior High	133	133	119	385
3.	Senior High	410	500	518	1,428

Source: Pasuruan Police Resort 2016.

From the data above, we can conclude that the accidents by underage students within 3 years 2014-2016 are 2.095 in total, whereas the elementary school students covers 282 students, the junior high is 385 cases, and the senior high students gather 1.428 cases. This supports the statement that any accidents cause or caused by underage students are in high numbers. It is very important for Pasuruan police to take actions.

The development of parenting pattern in Indonesia has been increased. This increasing is developed and changed. For example, the technology development has helped many children, it served any kind of information even when the information is not yet needed by them. The knowledge of parents on the age limit to drive vehicle is very important. Because, in driving process, the decision making is very tight, the driver must not only think of their safety but also other safety. Moreover, on that age, the children is already assumed to have stable emotion.

In highway condition, the driver is expected not to be easily provoked. There are many parents who do not yet understand that risk. They finally give permission for their underage children to drive the motor vehicle. The movement of this parenting pattern must be quickly resolved and slowly changed as family is the very first council for children. Parents, as model role, must able to provide good example for their children, they must take a good care of them. The parent must possess enough information about the traffic law and signs within safety riding. Thus, children would receive enough knowledge of their duty and rights as drivers in highway riding.

As one of education and knowledge media for the children, school is very important to teach them about discipline. Unfortunately, there are some schools that permit their students to bring their motor vehicle to school. It inspires them to ride motor vehicle while going to their school, it is also caused by there is no socialisation towards legal and safety riding from the related institution.

High speed driving in rush and dangerous way become a characterisation among society. There are many drivers who drive in high speed including the underage children. That decision often causes many traffic accidents. The demand of this driving behaviour by adults inspires and copied by children as they saw adult as role model within social life.

Children or adolescents also play a role in driving offenses. Factors of association and lifestyle can affect underage children who are not yet emotionally stable. Adolescents are recognized as a stage of development that is still in search of identity. The occurrence of changes in aspects of emotionality in adolescents one of them occurred as a result of physical and hormonal changes. This all demands new control and regulatory capabilities for their behaviour. At this time teenagers tend to be a lot of moody and unpredictable, behaving harshly to cover the lack of confidence. Anger usually happens and tends to be intolerant of others and wants to always win by them, start observing their parents and teachers objectively. In adolescents aged 15-18 years, adolescent rebellion is a universal expression and change from childhood to adulthood. Many adolescents experience conflict with their parents. A number of studies on teen emotions show that their emotional development

depends on factors of maturity and learning factors. Maturity and learning are closely intertwined with each other in influencing emotional development.

The Function and Strategy of Pasuruan Police Resort to Control the Number of Highway Accidents by Underage Teenager Students. The report conducted by people to resort police was meant to measure of how the ability of the police to handle in such cases. Moreover, the report could determine the working performance of the police instead to handle highway accidents, the police is meant to identify and fulfil the people's demand who experience the case as the user of service itself.

Determining the first action when the police arrive at crime scene is very crucial to judge the suspect's responsibility. The civil sanction is given to suspect who commit of what they did to determine their mistake.

In accident, there will be victims who really need help from the police. In this case, the pasuruan resort police is very helpful to help the victims by carrying them to the nearest hospital for first aid. The victims need both direct help and indirect help from the police. In some cases, the victims may receive direct help from the local people if the condition is sustaining enough.

Crime scene identification is one of repressive action. The police has authority to check the truth of the chronological accidents within its technical requirements and the condition of vehicle itself.

Socialisation of the rule of riding and the safety riding when riding at highway road is used as one of preventive action by the police. Police or other related institution can use the brochure media to spread the awareness where youth gather. Not only to obey the mandatory of regulation but also the consequence of the youth if they choose to violate and break the law such as not having the driving license. Brochure is the most effective media to spread the idea because of its small size and easy to store.

Civil law and fine are one of attempt to commence repressive action. But, as the subject is still underage, the law of women and children must considered include in this option, for instance if the accident caused by the underage results in death victims, there will be a lawsuit subsidiser as stated in article 281 of LLAJ Law, or the judges are also able to use article 30 of LLAW law. In general, the civil sanction committed for the underage teenager, in maximum, must be a half for the adults' one as stated in article 81 point 2 of SSPA law.

But, the consideration of law for underage teenagers is till implemented which is determined by the age, background of the case, the mental condition and alibi mode of the case. Because of those factors, the teenagers will be accompanied n=by their parents or proxies during the court process.

The Obstacles Faced By Pasuruan Traffic Police Resort in Overcoming the Traffic Accidents on Its Jurisdiction Area. Eventually, every resort police of Indonesia must have *Police Goes to School* program, the program is done by visiting the school to socialise the students of ho to wear helmet in proper way when they are being picked up by their parents. Moreover, safety riding is one of feature of the program. Unfortunately, the program did not reach the maximum outcome. The lack of financial condition and lack of personnel prevent the program to achieve its vision. Therefore, the program explains the ethics and regulation of driving within traffic condition. This education plays important role in developing and increasing the knowledge of society. Because, informing people by providing training is easier than other methods received by society. The behaviour which possessed knowledge foundation will be must last longer. In the other hand, any behaviour customs without enough knowledge will result in short term action.

Nowadays, the motor cycle usage is very popular among underage students to go to school as private transportation. Even, there are students of elementary school and first grade of junior high who already grant permission from their parents to ride motorcycle. This action is not correct from any perspectives, especially from law point of view. Civil regulation informs people that the minimum age of adult age category is 16 (article 45, 47 of Criminal Code).

Children less than 16 years old are still the responsibility of their parents. At age of 16, this phase is a period where adolescents experience emotional instability and feelings. They tend to try new things that need to be watched and given attention by parents, teachers, and society to avoid negative behaviours.

CONCLUSION AND SUGGESTIONS

According to the previous discussion, the conclusions are as follow:

The amount of motor vehicle usage by underage students in jurisdiction of Pasuruan resort Police is significantly increasing especially for senior high school category. Meanwhile, the factor that influence increasing number of accidents by underage students on Pasuruan resort police jurisdiction are family factor which still permit their children to use motor vehicle, school factor, environment, and unstable emotion factor. Those factors and accidents lead Indonesian police, and pasuruan resort police as one of part of it, suggest that underage teenagers are not allowed to possess driving license and to use vehicle motor.

The resort police function to handle the accidents committed by underage teenagers are to receive the reports as one of public service, visiting the crime scene, helping the victims, identifying the chronology of the traffic accidents. The strategy of Pasuruan resort police to control the accident by preventive and repressive action. The police hold socialization into society by spreading the brochure, coordinating with schools by using I Love Student With Pak Sakera tagline.

The obstacles faced by Pasuruan Police in dealing with traffic accidents in Pasuruan District Police is not yet maximum result of Police Goes to School program by Dikmas Lantas Pasuruan Police, because there is no special budget for Dikmas and constraint of lack parents' awareness of children not to allow underage school children to drive motor vehicles.

Based on the conclusions, the following suggestion will be as follow:

Suggestion for School. The school can have initiation to put traffic knowledge as one of their academic learning program. It also could commence a corporation with other institution such as Dikmas and public relation of Pasuruan resort police.

Suggestion for Pasuruan Dikmas. Improving coordination and understanding between parents and police could be one of good attempt. Thus, the parents must aware of their responsibility to take their children to school by facilitating for their children to arrive at school. They can choose public transportation or bicycle. They must not permit their children to use motor vehicle as it is one of act to brake and violate the law.

Suggestion for Pasuruan Resort Police. There must be more financial administration value for police goes to school program which is already implemented by Pasuruan Dikmas resort police. Thus, the socialisation of I Love Student with Pak Sakera (I love cycling to School) program will be optimally implemented.

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**DISCLOSURE OF MEANING BEHIND THE EXISTENCE OF PROCUREMENT CLINIC
OF GOVERNMENT GOODS AND SERVICES IN THE UNIT OF PROCUREMENT
SERVICES OF BADUNG REGENCY**

Martini Ida Ayu Agung Sri

Graduate Program, University Udayana, Bali, Indonesia

E-mail: adityapalguna21@gmail.com

ABSTRACT

This study aims to reveal the meaning behind the existence of procurement clinic of government goods and services at the Procurement Unit of Badung Regency. The research was conducted in Badung Service Procurement Unit on two informants that directly related to the process of the establishment of goods and service procurement clinic, namely the secretary of the Service Unit of Procurement of Goods and Services and Procurement Champions on the goods and services procurement clinic. The findings indicate that the existence of the goods and services procurement clinic is underpinned by the need for the media to carry out consultations on the procurement process of government goods and services and the rewards given in the form of procurement modernization training by the Government Procurement Policy Agency.

KEY WORDS

Positive image, workload, phenomenology, government, goods, services, procurement clinic.

Characteristics or key elements of good governance are accountability, transparency, openness, and the rule of law (Nisjar 1997). Good Governance will be able to recognize what the needs, problems, desires and interests and aspirations of the people properly and correctly, therefore the policies made will be able to reflect what interests and aspirations of the people it serves (B. Smith, 1985).

Indonesia as a developing country and it is trying to realize the ideals of the nation for the achievement of social welfare, the development of facilities and infrastructure related to the public interest becomes very important to be realized. The provision of goods and services is an important part of governance (Simamora, 2013). Not all goods and services available can be provided by the private sector. Goods and services that can not be provided by this market system are called public goods, ie goods that can not be provided through transactions between the seller and the buyer (Due & Friedlaender, 1993). The market system can not provide certain goods or services because the benefits of the goods are not solely enjoyed personally but also by others.

In order to improve professional procurement operations work, to avoid any conflicts of interest, and to avoid fraud in the procurement of goods and services at the Ministries / Institutions / Agencies / Governmental Institutions (K / L / D / I) levels, the government also requires every K / L / D / I to establish the Procurement Services Unit (ULP). The Badung Regency, Based on Badung Regent's Decree Number 70 of 2011 dated 10 November 2011 established the Procurement Services Unit (ULP) of Badung Regency with 9 (Nine) working groups. ULP Badung Regency was nominated as ULP of National Pilot, from the achievements that have been received, it does not mean that the government of Badung Regency is free from the problems related to the procurement of government goods and services. The was a case of alleged misuse of water meter procurement funds in the Local Government-Owned Running Water Enterprise of PDAM Tirta Mangutama Badung in 2016. This case indicated manipulation of costs for procurement of water meters. Other cases, such as allegations of irregularities or corruption in the project of river bank's construction along Tukad Mati in Legian area of Kuta in 2016. The river bank's construction was found cracked up to 570 meters long. From the case above the State Civil Servants relating to the standard operating procedures above have been examined by the Denpasar District

Attorney. This has led to massive concerns or fears among the bureaucracy over the procurement of goods and services which often ends and deals with law enforcement officials, either directly or indirectly. This condition is proven by the fact that the problems are handled by law enforcement officers from the National to Regional level, of which 56% comes from the government procurement process (Corruption Eradication Commission, 2015). The psychological pressure of work experienced by the State Civil Servants in carrying out its main duty and function as the procurement executor of government goods / services, needed a place or institution to consult with the purpose of providing motivation and assistance to the procurement of government goods / services. Work psychology is a psychological study of how human resources (HR) work within an organizational environment (Ndraha, 1999).

The inconvenience in this bureaucratic environment has inspired the State Civil Servants (ASN) to strengthen and fortify themselves from tasks related to the procurement process of government goods / services both within the internal of ULP itself and within the Government of Badung Regency. Thus, in the Year 2017 came the idea to develop an idea about the establishment of government procurement of goods / services Clinic at ULP Badung Regency. ULP Clinic of Badung Regency is actively involved in 3 (three) functions namely: planning of procurement, selection of providers of goods / services and procurement implementation functions.

An interesting thing to learn next is about the procurement clinic which is an integral part of ULP Badung Regency. It was established in order to carry out the implementation of ULP Pilot. Definitely the term of "clinic" is always associated with the world of health, it does exist in the ULP of Badung Regency which actually is not related to the duties and functions of services in the field of health.

Based on the background of the problems that have been described, then the main problem in this research is what is the meaning behind the establishment of Clinic of Government Procurement of Goods / Services of ULP of Badung Regency? Based on the subject matter, the purpose of this study is to expose the meaning of the Procurement Clinic of Government Goods / Services at Badung Regency ULP. The results of this study can provide useful benefits and contributions to the academic world, especially in relation to the existence of Clinic of Government Procurement of Goods / Services of Badung Regency in order to realize good governance. In addition, this study provides the Theory of Need relevance to the meaning behind the establishment of the Clinic.

THEORETICAL FRAMEWORK

The theory of needs (Maslow, 1943) is a hierarchy of needs theory contains a basic human need. Maslow describes it as a level or ladder of need. According to Maslow, the hierarchy of needs is driven by two forces, namely the motivation of shortcomings, and the motivation of development or growth. Motivation of shortcomings, aims to overcome human tension on the lack of existing needs. The motivation of development or need is based on the human capacity to grow and develop. As mentioned above, Maslow's hierarchy of needs has five levels, i.e.:

- Physiological needs, a body's biological needs include food, water, oxygen, and normal body temperature. Physiological needs are the first basic need that human beings seek to achieve life satisfaction. If one of these needs is not obtained, it will disrupt the fulfillment of the other basic needs.
- The need for security and safety, including the need for job security, freedom from fear or pressure, security from a threatening event or environment.
- The need for a sense of belonging, social and compassion, encompasses the need for friendship, family, grouping, interaction and affection.
- The need for respect (esteem), after the above three needs are met, human beings will pursue the need for appreciation, such as respect for others, status, fame, reputation, attention, and so on. According to Maslow, the need for appreciation is also divided into two levels: low and high levels. Low levels namely the need to

respect others, the need for status, fame, reputation, attention, appreciation, dignity, and domination. High demand is the need for self-esteem such as feelings, beliefs, competencies, achievements, mastery, independence, and freedom. Maslow argues, if the need for self-esteem has been resolved, then humans are ready to meet the needs at a higher level again.

- The need for self-actualization, including the need to attain self-existence through maximizing the use of capability and self-potential. Self-actualization needs are the highest level of need. This need involves a constant desire to reach the potential. According to Maslow, this need is the need that man has to involve himself to be what he/she wants according to his/her ability. Human being will fulfill his/her desire in accordance with the ability possessed in a person. Self-actualization described by Maslow is as follows: the Unit of Procurement Services (ULP) is a unit of government organization that works to implement the procurement of goods / services in permanent state of K / L / D / I, which can be stand-alone or attached to an existing unit (LKPP, 2011).

Procurement Unit of Badung Regency. The Procurement Service Unit (ULP) of Badung Regency was established with the composition that considering the work load which is the consequence of the annual Badung Regional Budget (APBD). The consideration resulted in the organization of the Procurement Unit of Badung Regency consisting of 9 (Nine) Working Groups (*Pokja*), each working group consists of 5 (five) people with the composition of 1 (one) chairman of the working group, 1 (one) secretary, and 3 (three) members, and supported by the secretariat to handle administrative matters. Procurement Unit of Badung Regency is an independent procurement service unit in the Goods / Service Procurement Division of Badung Regency, which is the principal agency and its function as the executor of the selection of government goods / service procurement providers in Badung Regency.

Procurement of Government Goods / Services. Procurement of Government Goods / Services is an activity to obtain goods / services by Ministries / Institutions / Agencies / Governmental Institutions (K / L / D / I) whereby the process begins with the planning of needs until the completion of all activities to obtain goods / services, financing partly or wholly derived from the State Revenue Budget (APBN) or Regional Revenue Budget (APBD), (Sutedi, 2012). Public Procurement is an acquisition process undertaken by government and public institutions to obtain goods, works, and services transparently, effectively and efficiently in accordance with the needs and desires of its users. In this case, the user can be an individual (official), an organizational unit (department, faculty, etc.), or a wider community group. (Edquist, C., Hommen, L., and Tsipouri, 2000).

Procurement Clinic of Government Goods / Services. Clinic is a health service facility that conducts individual health services that make basic or special medical services (Health Minister Regulation No. 9 of 2014). According to the Government Procurement Policy Agency (LKPP) in cooperation with Millennium Challenge Corporation (MC-AI) that procurement clinic in addition to performing its duties and functions as ULP procurement personnel, it also functions as a procurement clinic. Procurement Clinics can provide assistance and coaching and facilitation activities to procurement personnel inside and outside the ULP including procurement personnel in the Organization of Regional Devices (OPD).

Phenomenology. Phenomenology is the result of a reflection of philosophical thought (Husserl, 1989) as a radical new way of philosophizing. Later this theory was further developed by (Schuetz, 1944) and (Heidegger, 1962). Heidegger focuses on the awareness and essence of phenomena against elaborating existential and hermeneutic interpretative dimensions (Finlay, 2009).

The term phenomenology comes from the Greek "*Phainomenon*" which refers to the visible (Berrios, 1989, Harbiansyah, 2005) and "*logos*" which is defined as knowledge, discourse, reason or judgment (J. Smith, 2007). The essence of phenomenology is to describe and explain the uniqueness of life experience from the essence of a particular phenomenon (Diaz, 2015, Harbiansyah, 2005; Kuswarno, 2006; Sanders, 1982; Sudarsyah, 2013; Sukoharsono, 2006). In order to do so, Phenomenology seeks to explore the structure

of awareness and understanding of the experience of the people who experience it (Asih, 2005; Grace, 2009; Sandberg, 2005; Sukoharsono, 2006).

The phenomenological approach seeks to let reality reveal itself naturally (Harbiansyah, 2004). Through "inducement questions", the subject of research is left to tell all sorts of dimensions of its experience with regard to a phenomenon (Harbiansyah, 2005). The advantage of the method of phenomenology is that it will be able to bring the research to the most objective and neutral position in the subjective space that is able to highlight the importance of a phenomenon (Darmayasa & Aneswari, 2015). According to (Sanders, 1982) the steps that need to be done in the method of phenomenology include: intentional analysis, epoche and Eidetic reduction.

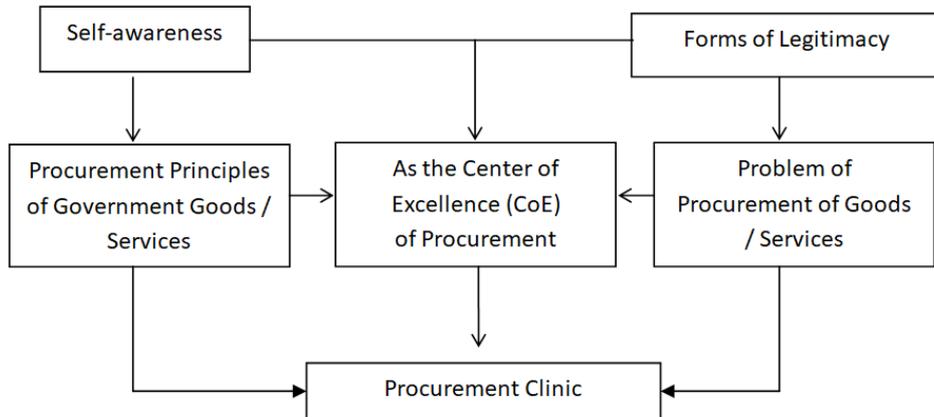


Figure 1 – Research Concept

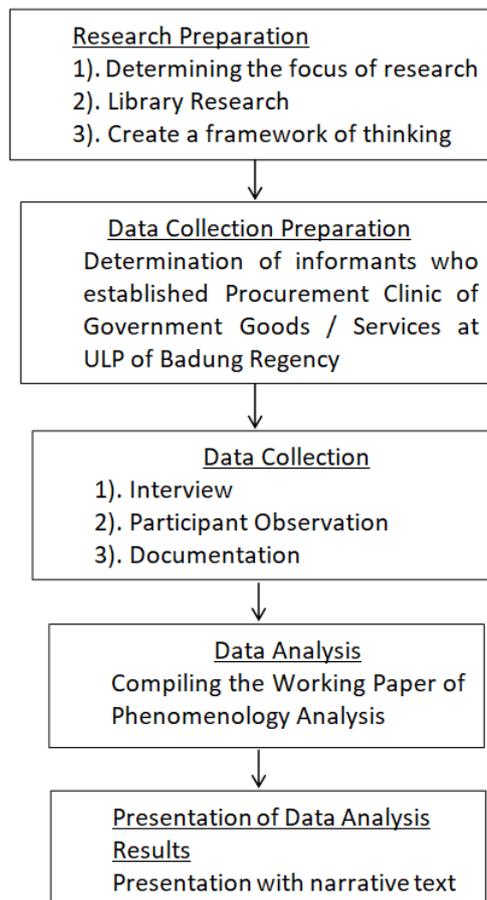


Figure 2 – Research model

Phenomenology uses two concepts of noesis and noema to reveal intentionality. Intentionality refers to the correlation between noema and noesis leading to interpretation of experience. Noema is an objective statement of behavior or experience as reality, whereas noesis is the subjective reflection of the objective statement (Sudarsyah, 2013). Intentional analysis is the process of exploring one's experience (noema) to derive the essence of its consciousness (noesis) by doing epoche application.

This study uses transcendental phenomenology as a research method, because this method is very appropriate to describe the direct desire of informants, to convey their desire to a phenomenon, which is about the establishment of Procurement Clinic of Government Goods / Services.

Procurement Clinic of Goods / Services in ULP Badung Regency was established as a manifestation of dedication Badung ULP as Center of Excellence and to carry out its guidance to the procurement of goods / services of the Government. Based on the explanation above, this concept is presented in the Figure 1.

METHODS OF RESEARCH

Research paradigm. Perception about humans through the interpretive paradigm mentioned that humans create reality through subjective meaning, which ultimately form a pattern of interaction through the systems of meaning. This study used the interpretive paradigm to understand and explain the phenomenon of the establishment of Procurement Clinic of Government Goods / Services at ULP of Badung Regency. The interpretive paradigm encompasses a wide range of philosophical and sociological thoughts that have the main characteristics for understanding and explaining the social world especially in the viewpoint of those directly involved in social processes (Burrell, G., & Morgan, 1979).

Research Approach. The approach of this research is qualitative approach. This research intends to reveal the essence behind the meaning of the establishment of Procurement Clinic of Government Goods / Services at ULP of Badung Regency. The research approach used is Phenomenology with the aim to reveal how informants interpret a phenomenon, so that the essence of the phenomenon will look natural without the researcher's intervention. There are several notions of phenomenology according to (Husserl, 1989) such as: (a) subjective or phenomenological experience, (b) a study of consciousness from the fundamental perspective of a person. It is understandable that phenomenological research is a thinking view that emphasizes human experiences and how humans interpret their experiences.

Research Location. This research was conducted at Badung Service Procurement Unit located at Jalan Raya Sempidi Badung Regency Civic Center.

Types and Data Sources. The type of data used in this study is qualitative data, i.e. subject data that includes opinions, attitudes, experiences, or characteristics of the informants consisting of the practitioners concerned. Based on data sources, this study uses primary data, a direct source (not through intermediary media). Primary data in this study were obtained from direct search and through unstructured and in-depth interviews with key personnel from Badung Regency ULP.

Informants of Research. The selection of informants was conducted purposively, based on certain criteria, namely:

- The decision makers in Badung Regency ULP;
 - The initiator of the idea of a procurement clinic of government goods and services.
- Based on the criteria that were outlined, while the informants of the research were:
- Secretary of ULP of Badung Regency as initiator of idea of establishing government goods/services procurement clinic;
 - Chairman of the Working Group of ULP of Badung Regency as well as a mentor or a procurement champion.

Methods and Techniques of Data Collection. Data collection techniques is the most strategic step in the research, because the main purpose of research is to get data (Sugiyono, 2010). Data collection techniques used in this study was conducted through:

- Interviews, in the study of phenomenology, it would have been extremely ineffective for phenomenologists to prepare a set of questions, since precisely these structured questions would keep the phenomenologist from the process of "disclosure" the consciousness (Kamayanti, 2016).
- Participatory observation is a data collection method used to collect research data through observation and sensing where the observer or researcher is really involved in the respondent's daily life (Bungin, 2007).
- Documentation Techniques, the notion of the word document according to (Gottschalk, 1985) is a process of proof based on any kind of source, whether written, verbal, or archaeological ones.

Methods and Techniques of Data Analysis. There are several key words in the analysis of phenomenological studies, as follows (Kamayanti, 2016): Noema; Noesis; Epoche (Bracketing); Intentional Analysis; Eidetic Reduction.

Qualitative Data Validity Examination Techniques. Testing of the validity of data in qualitative research includes the following criteria (Moleong LJ, 2013).

- Credibility (Validity Internal), the steps undertaken in this study include (1) making notes on interviews with informants and then (2) to cross check the records of the material to ensure no conflicting information between the notes of the interview. After that (3) the confirmation results had to be tested again with the previous information because it could contradict with the information that has been collected previously from the informants or other sources.
- Transferability (External Validity), this transfer value is related to the question, to which extent the research can be applied or used in other situations?
- Dependability (Reliability), whether the research results refer to the consistency of the researcher in collecting data, forming, and using concepts when making interpretations to draw conclusions.
- Confirmability, whether the results of research can be verified, or the results of the study are in accordance with the data collected and included in the field report. This was done by discussing the results of the research with the informants.

Methods and Techniques of Presentation of Data Analysis Results. The presentation technique of data analysis result is intended to write systematically about the research results. The results are presented in descriptions according to the data set. Data in the form of statements or opinions from interviews are presented in narrative form or informally in scientific language.

Disclosure of meaning behind the existence of procurement clinic of government goods and services in the unit of procurement services of Badung Regency:

Interpretation of Informant S. Interpretation of informant S stated that the existence of the procurement clinic of government goods and services is an idea that came spontaneously from Mr. I Made Sudarsana, SE (noema) which has been appreciated by the Policy Institute for Procurement of Goods / Services (LKPP), as a medium for consultation about the procurement process of goods / services along with the problems as well as a form of real appreciation and contribution to LKPP for giving three years of training on Procurement Modernization (noesis).

The theory of needs (Maslow, 1943) on the hierarchy of esteem needs stating that, at this stage someone needs include the desire to gain self-esteem. This self-esteem or self-respect depends on the desire or strength, competence, freedom and independence. This need is closely related to the achievement, motivation, drive for achievement. Through motivation, it is hoped that one can work and fulfill the job with a passionate spirit because it is based on a strong desire to do so (Terry & Rue, 2003), so that the objectives of the apparatus and the organization can be achieved (Flippo & Masud, 1995). The existence of the procurement clinic of goods / services other than as a place to carry out consultations, it is also used to assist the State Civil Servants, which is still hesitant and worried about the procurement of government goods / services. Employee fears indicate that there is pressure on working psychology, where the psychological study examines how human resources work

within an organizational environment (Ndraha, 1999). The theory of needs (Maslow, 1943) on the hierarchy of the second place mentions the importance of safety and security needs or the need for security.

The dynamics of rapid regulation is another problem in the provision of government goods and services. The regulation is about procurement of government goods / services, and this is not followed by the State Civil Servants to keep on learning so that they become less aware of existing regulations and the procurement process of government goods / services. Rapid regulatory changes are not kept up by the State Civil Servants caused by the lack of learning organization so that the understanding of the procurement of government goods / services is not achieved. Learning organizations are a way for organizations to create, acquire, and transfer knowledge, and modify behaviors to reflect new knowledge and insights in organizations (Garvin, Edmondson, & Gino, 2008). This confirms that learning organization is very important for an organization and its human resources as a learning process that can increase competitive advantage in this increasingly competitive business environment.

The goods / service procurement clinic is established to solve the problems that exist at each stage of procurement such as planning, budgeting, selection and contract implementation. For Informant S, it is very important to provide good service in the goods / services procurement clinic in the hope of improving the quality of services provided to the parties related to the procurement of goods / services government. Quality of service is a comparison of what the consumers have expected with the services they received. An organization, the concept of service quality becomes a measure of organizational success, the success of an organization means both in the business organization and also on the organization that is in charge of providing public services (Samosir 2005).

Procurement clinic of government goods / services of Badung Regency, strongly supports the favorable conditions for any apparatus that have the main duty and function as the procurement of government goods / services. Professional public services means accountable and responsible public services of the service providers (government apparatus).

Interpretation of Informant U. The establishment of the government procurement clinic is an idea of Mr. I Made Sudarsana, SE (noema). As more and more complex problems in the implementation of procurement of goods / services government, communication media and consultation is needed to obtain a solution to the problem (noesis). Officially the parties consulted are accepted at the goods / services procurement clinic. The apparatus providing such consultancy is not limited to procurement champions only, but rather to all the chairmen and secretaries of working groups (pokja), who have attended the procurement modernization training held by LKPP. Clinic of procurement of goods / services was formed because of the more and more complex problems that occur in the procurement process of goods / services, so it needs a kind of communication media for consultation on the problems in the process and implementation of government procurement of goods / services.

Benefits obtained from the government goods and services procurement clinic can be viewed from two sides, firstly, as a way or means to solve problems related to the procurement of goods and services. Secondly, to provide education to the parties related to the procurement of goods and services, how to avoid similar problems in the following years. As an effort to develop human resources through education and training in an effort to improve employees' performances. The need for organizations to provide education and training for their employees, because through education and training, it is expected to help employees reach to a higher level in the composition of employees and the organization as a whole (Moenir, 1995).

Procurement problems arise due to lack of understanding of the apparatus on how the procurement process of goods / services, whether in terms of planning, budgeting, selection, implementation, evaluation and monitoring until the goods / services are recognized as assets. Education and training are needed by the apparatus who has the main duty and function on the implementation of government procurement of goods / services with the aim of avoiding the procurement problems. The optimization of the success of a project is

determined by the planned organization by using available resources and tools with appropriate time of planning, and by using information technology (Kerzner & Saladis, 2011; Larson & Gray, 2013).

In fact, procurement clinic of goods / services for apparatus in the Unit Procurement Services turns out to cause more work loads because of the overlapping of work. Counselors and consultants at the procurement clinic run out of time to serve parties who wish to carry out consultations on procurement of goods / services. A public organization needs to see the ability of the Apparatus in terms of providing workload in accordance with its ability, so that the Apparatus can perform its duties properly (Sutarto, 2006). Workload is a burden for doing too many tasks or providing insufficient time to get the job done (Gibson, Ivancevich, Donnelly, & Konopaske, 1991). Higher workloads make consultants at the procurement clinic manage the time in such a way that all works, whether as their main tasks and functions or as professional consultants can be completed on time.

The problem of procurement of goods / services that can be completed in the procurement clinic has a positive impact on the organization. Not only the issue of procurement, but also the non-domain of the clinic. It adds a positive image and more recognition of the existence of the procurement clinic of goods / services.

Clinic procurement of goods / services is expected to provide professional and effective services. Professional means accountable and responsible public service from the service providers while effective means prioritizing on achieving what are the goals and objectives. Problem centering at the level of need for self-actualization is empathy to help others solve the problem. Finding the most effective solution to any problem, whether it is outside or inside of themselves (Maslow, 1943).

The increased understanding of the government procurement process of goods / services is expected to provide synergy between stakeholders related to the procurement of goods / services. This synergy begins with the planning of the OPD and its implementation by the Regional Development Planning Agency (Bappeda). It synergizes with the ULP as a service provider, the Finance Agency, and the Asset Department as the regional asset recorder. The parties involved should be able to work together, appreciate the difference of ideas and be willing to share (Covey, 2013). Synergy is urgently needed between stakeholders or interlinked stakeholders to produce better and greater output, this can be built with communication and coordination (Najjati, 2011).

Interpretation of the Researcher. Noema obtained from the researcher is the idea that came spontaneously from the Informant S and it is also the form of appreciation towards the reward given through training of procurement modernization by the Government Procurement Goods / Services Institution. Noesis obtained is the desire to make a media as a place to consult on the problems that occur in the procurement of goods and services and provide a positive image for the procurement clinic of goods and services.

The idea came because there was no media to consult about the problems of procurement of goods / services. Not apart from the spirit of Central of Excellent, this clinic was established after getting three years training on procurement modernization organized by LKPP in cooperation with Mc-I. The problems that arise in the government procurement of goods / services mainly because of lack of understanding of the apparatus that has the main tasks and functions on the implementation of government goods / services, and the regulation changes very quickly so it is an obligation for the Apparatus to continue to learn and improve understanding of the procurement process of goods / services. Lack of understanding of the procurement process of goods / services experienced by the apparatus such as in planning, budgeting, selection, evaluation and monitoring, contract implementation and asset inventory of the local government. This statement is supported by (Kotler et al., 2005) noting that the process of activity includes everything that is interconnected and related to the procurement process of goods and services. In the implementation there are several factors that must be considered by the procurement unit namely, planning or strategy approach that must be in accordance with the grace period and then adjusted for the cost to be incurred. A well-planned project should begin by separating the types of activities, processes to be taken, cost budgeting, labor and contract predictions (Maylor et al., 2006).

The problems that often occur in the procurement of government goods / services is the rapid change of regulation, thus demanding the apparatus and related parties to continue to learn and improve the ability in the field of procurement of goods / services. Learning Organization has seven dimensions, namely: creating continuous learning opportunities, developing discussions, encouraging collaboration and team learning, providing opportunities for employees to achieve common goals and shaping leadership that has learning strategies (Marsick & Watkins, 2003). Learning Organization is an organization's way of skillfully creating, acquiring and transferring knowledge, and modifying behaviors to reflect new knowledge and insights into the organization. The problem usually will be consulted to the procurement clinic of goods / services, this is not apart from the function of the clinic, i.e. to provide services to the public maximally. Responsiveness is an element of public service that leads to responsiveness and quickly responds to issues, needs and aspirations of the people (Effendi, 1991).

The existence of procurement clinic of goods / services is expected to provide solutions of all problems that occur in the goods / services procurement. This is related to the problem centering of the characteristics of the need for self-actualization (Maslow, 1943). Problem centering, having a sense of helping others solve the problem, finding the most effective solution to the problem. This happens even when problems occur outside or inside of their personal surroundings. Motivation for a sense of responsibility and social ethics is the basis of its will. A person who actualizes all his/her thoughts, behaviors and ideas is not based on his own good, but based on the public interest (Kozier, Erb, Berman, & Snyder 1998).

Apparatus whose main duties and functions relate to the procurement of goods / services undertake coordination and consultation to the procurement clinic in order to convince themselves that what they are doing is correct and not contrary to the existing regulations. The theory of needs (Maslow, 1943) mentions the importance of the need for security because of the awareness of the limits of each individual so that the importance of the other party to provide security for them. Security and safety needs include the need for job security, independence from fear or pressure, security from an event or a threatening environment. This is in line with the opinions of (Luthans, 2002; Robbins, Judge, & Breward, 2003) that employees are usually very concerned about their workplace environment for personal comfort and to support their work. They tend to prefer security protection to work. The more number of parties who consult the procurement clinic, it is expected that human resources available in the procurement clinic to improve professionalism in the field of procurement of goods / services. A professionally run public service will be able to provide responsive service and accountability. The key factor in providing public services is to do good, honest and focused service on the work being done.

Clinic procurement of goods / services for the Apparatus in ULP itself, it resulted in more work loads caused by the overlap of work. Apparatus assigned as mentors or consultants have time-sharing issues, in which they are also required to complete selection of goods / service providers in a timely manner because of the large number of auction packages that must be worked on and it demands a high level of accuracy. A high level of accuracy is required in order to avoid errors in evaluation of provider selection so that the selected provider is believed to be capable of carrying out the execution of the work. The use of work time required to complete the work indicates that although all work is always well resolved but the work time of the employees at certain times becomes increased until outside of working hours or holidays, resulting in a workload for employees (Tarwaka, 2011). The workload experienced by the Apparatus at the goods / service procurement clinic is anticipated by the creation of a service schedule, which commissioned alternately assisting parties implementing the government procurement of goods / services. The schedule is expected to reduce the workload of the mentors so that all work can be completed properly and on time and avoid losses for any party.

Government procurement clinic of goods / services is a place for the parties whose duties and functions are related to the procurement of goods / services to carry out coordination and consultation related to the procurement process of goods / services. It is so important that the existence of a clinic for procurement of goods / services. Therefore, more

and more parties are doing consultation to the procurement clinic. It illustrates that the existence of the goods / services procurement clinic provides a positive image, in which the procurement clinic is necessary for the parties concerned so that they are confident and understand the process of procurement of goods / services well. Image is a community perception of the organization based on what they know or think about the organization (Kotler et al., 2005). More broadly mentioned that image is the beliefs, images, and impressions that one believes in an object. The image of an organization describes the values of a person and the groups of people who are related to the organization. A positive image needs to be built honestly so that the image perceived by the public is good and right, in the sense that there is consistency between image and reality. Positive public opinion is formed from a positive image of an institution or organization, generally there is a good and positive relationship between the public with the organization. The positive image in Maslow's needs theory includes the need for reward (esteem). The need for appreciation, recognition from the organization or society arises because of an achievement of work and prestige from the leadership of the organization (Hasibuan, 2002). Job performance is a measure of one's success in completing a given task or job (Ismail, 2010).

Procurement clinic of government goods and services aims to provide capabilities for parties involved in the procurement of goods / services to better understand the process of procurement of goods / services. The better understanding on how the process of the implementation of goods / services of government, it is expected to provide motivation to work so that every apparatus has the skills and professionals in the field of procurement of goods and services. Factors influencing one's skill include belief, skill, motivation, intellectual ability and organizational culture (Fahmi, 2016). Maslow's theory of needs in (Suwatno & Priansa, 2011) mentions that motivation is formed because of the hierarchy of needs, so that by the motivation of work, it is expected that individuals are willing to work hard and enthusiastic to improve the ability and productivity of work (Hasibuan, 2002). An increasing understanding of the government procurement of goods / services is expected to provide synergy between stakeholders related to the government procurement of goods / services. The synergy is starting from the planning process of the organization, the implementation of budgeting carried out by the Regional Development Planning Board, then synergizing with the selection process of existing providers in ULP, in synergy with the Financial Institution as the party who will pay the completion of the activity and the last one in synergy with the Section assets that will record how many assets owned by the government. Well-realized synergies will be able to minimize the problems that occur in the field of procurement of goods / services government. Synergy can be built through good coordination and communication between stakeholders to achieve common goals (Najati, 2011).

CONCLUSION

Based on the analysis and discussion, it can be concluded that the parties involved in the disclosure behind the existence of the government procurement clinic of goods and services at the Procurement Unit of Badung Regency has understood the phenomenon. Noema expressed by the two informants has similarities, but the expressed Noesis has a difference.

Noema of disclosure of the meaning behind the existence of a government procurement clinic at the Procurement Service Unit of Badung Regency is an idea born from the thought of Mr. I Made Sudarsana. While Noesis from the disclosure of the meaning behind the existence of the government procurement clinic of goods / services at the Service Unit Procurement of Badung Regency namely:

- As a place to carry out consultations on various problems that occur in the process of procurement of government goods / services for the Apparatus and the parties related to the procurement of goods / services.
- As a concrete manifestation of the reward given, in the form of procurement modernization training for three years.

- The existence of a government procurement / clothing clinic causes an increase in the workload for the Apparatus in the Procurement Unit of Badung Regency, because in addition to completing the main work, namely the selection of procurement of goods / services, the also function as mentors or consultants for the parties who ask for coordination and consultation at the procurement clinic.
- The number of parties to coordinate and consult, improve the positive image of the procurement clinic of government goods / services.

SUGGESTIONS

The Husserl's Transcendental Phenomenology Study has been able to uncover the meaning of the phenomenon of the existence of the government procurement clinic at the Procurement Service Unit of Badung Regency. There are several things that the study can recommend according to the results of this study, among others:

- It is advisable that the outcomes of consultation to be formally documented for references to solve the same problem at the next consultation;
- Based on the problems consulted, it can be formulated a solution to be a learning material for OPD through Technical Guidance of capacity building in goods / services procurement process;
- The government is expected to immediately make a formal legal or regulatory umbrella for the existence of procurement clinic of goods / services in carrying out its duties and functions.

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EFFECT OF ENTREPRENEURIAL ORIENTATION TOWARD COMPETITIVE ADVANTAGE AND BUSINESS PERFORMANCE

Anastuti Karina Utami

Postgraduate Program, Faculty of Administrative Science, University of Brawijaya, Indonesia

Suharyono Wilopo

Faculty of Administrative Science, University of Brawijaya, Indonesia

*E-mail: karinautamianastuti@gmail.com

ABSTRACT

This study has the objectives to describe the effect of entrepreneurial orientation toward competitive advantage and business performance particularly for SMEs within Paguyuban Amangtiwi in Malang. Also, it aimed to test the model in understanding the most important variable which has greater effect for business performance. This study use *Path Analysis* method as the statistical tool and will be implemented in SME Paguyuban Amangtiwi in Malang. Result of this study shows that entrepreneurial orientation has positive effect toward competitive advantage. It also has significant relationship toward business performance. Entrepreneurial orientation also affects business performance.

KEY WORDS

Entrepreneurial orientation, competitive advantage, business, performance, enterprises.

Entrepreneurial orientation was considered as the critical process of organization that gives contribution for firm's survival and performance. Entrepreneurial orientation is the main aspect in running a business, because in its process, innovation renewal could affect firm's life, without any change the firm would be eroded by external changes. Wood et al. (2004) describe that entrepreneurial orientation is the ability to distribute creative innovation in business with added value. Firm should obtain more talent to conduct autonomy, innovation, risk taking, *proactiveness* and competitive aggressivity to gain competitive advantage and higher performance. One of the many studies which examine the direct effect from each dimension of entrepreneurial orientation is study regarding SME performance. Prior study discover that contribution of each and every entrepreneurial orientation dimension for business performance is varying, and in reality, autonomy and competitive aggressivity of the dimension has no correlation with business performance. Zhou et al. (2009), Li et al. (2010), Kamukama et al. (2011) suggest that competitive advantage has significant effect toward business performance.

Competitiveness can be reached if the firm has high *entrepreneurship* due to the importance of ability in managing the firm. As explained by Peteraf and Barnety (2003) the firm that has competitive advantage would be able to create *economic value* than its competitor. Entrepreneurial attitude and consequence of behavior toward innovation would highly influenced by its superior's background in his working experience. Superior's ability would highly affect firm's behavior in paying attention toward firm's position in the market, superior became responsive toward firm, market's needs and mostly needed new product design to adjust with the change and exploitation of consumer's taste, and thus creating firm's competitive advantage (Hadjimanolis, 2000). This ability lies in entrepreneurial orientation.

To be able to compete, SMEs basically should possess high creativity so that they could compete with large firm and other SMEs. This reflects that SMEs would also need competitive advantage. Competitive advantage is a high competitive ability compared to its competitor or other SMEs. In order to win the competition, firm should implement competitive strategy, which was done by the creative division. To build a competitive strategy, the

common formula should be directed into how business would be developed, what is the purpose of this development, and what policies needed to achieve the expected goals. Bharadwaj et al. (1993) describe that competitive advantage is the result of strategy implementation by utilizing all resources possessed by the firm.

Firm's ability and its unique asset were seen as the source of competitive advantage. Unique ability is the firm's ability to put its employees as one of the important parts to achieve competitive advantage. Porter (2008) explained that competitive advantage is superiority value own by a firm in facing a competition. Competitive advantage is the heart of marketing performance to face the competition.

We can see that creative economy sector has a large potential toward national economy. There were several sectors currently under the spotlight such as food and beverages, fashion and handicraft sectors. In general, creative industry grew about 5,6% with handicraft, *fashion*, and culinary sectors has the highest growth compared to other sectors. As commonly known, contribution of creative economy toward national PDB was about 7,05% or about Rp 641,81 trillion. Creative economy sits on the seventh position out of ten contributor sectors toward national PDB. Five creative industry group as the largest PDB contributors were culinary 32,51%, fashion 28,29%, handicraft 14,44%, publishing 8,11% and design 3,9%. In 2013, there were about 5,4 million creative business that absorb 11,8 million labor. Creative economy also able to contribute to national income through export about US\$ 3,2 billion or about 5,8% (Detik, 2016). This potential shows the opportunity for SMEs industry which should be utilizes by local industry to introduce several advantages in competing with other sectors.

This study was conducted to the largest SMEs association in Malang called Paguyuban Amangtiwi. Reason to select this Paguyuban was due to its large number of SMEs as its member (Dinas Koperasi dan UKM Kota Malang, 2017). Paguyuban Amangtiwi also has the cooperative called Koperasi Amangtiwi. To become a strong entity in penetrating local and international markets, SMEs in Malang city should be organized and has one mission.

Studies nowadays was directed more toward SMEs sectors particularly in Indonesia that known as the 4th largest nation in the world. Also, SMEs sector also became one economy field that known as the typical economy character of Indonesia. Therefore, studies regarding similar topics related with future SMEs development in Indonesia should be done continuously using various variables such as social capital, culture, government policies and religion which become influential issues lately toward the economy and tourism condition of Indonesia.

LITERATURE REVIEW

Entrepreneurial is the creative and innovative ability act as the basic and resource to seek opportunity for success. Several management literatures give three dimensional basic from organizational tendency for entrepreneurial management process, which were innovation ability, risk taking ability and proactive trait (Weerawerdeena, 2003). According to Sigauw, Simpson and Baker (1998), entrepreneurial competence was needed in marketing strategy implementation so that competitive advantage can be attained through responsivity value over customer's needs.

Specific dimension of *Entrepreneurial Orientation* was introduced for the first time by Miller (1983). This study mention that entrepreneurial is one that "involved in product market innovation, conduct risky business and for the first time conduct 'proactive' innovation, defeating competitor to survive" (Miller, 1983). Therefore, Miller (1983) identified the important dimension of EO as being innovative, risk taking, and proactive. More than a decade after study conducted by Miller (1983), Lumpkin and Dess (1996) propose five dimension of *Entrepreneurial Orientation: autonomy, inovativeness, risk taking, proactiveness and competitive aggressiveness*. In other word, they add two more dimension, autonomy and competitive aggressiveness, to the three dimension proposed by Miller (1983). In general, all firms would always put an effort into how to make their business to have a good performance and thus able to develop and survive longer. This desire would be

realized if the firm has high competitiveness compared to its competitor. Explicitly speaking, to win a competition, firm should implement competitive strategy, which usually done by the existing functional department or division.

Bharadwaj et al. (1993) explains that competitive advantage is the result of strategy implementation which utilizes various resources of the firm. Unique ability and asset viewed as the source of competitive advantage. Unique ability is firm's ability to make its employees as the important part in order to achieve competitive advantage. Firm's ability in developing its employees would make it advantageous in implementing human resource-based strategy and would be difficult to copy by its competitor. While unique asset or resources is the real resources needed by the firm to run its competitive strategy. Both resources should be directed to support low cost business performance and unique compared to its competitor. Entrepreneurial orientation through continuously developed attitude could improve SMEs potential in making the ability and resources as the competitive advantages.

Porter (1990) suggests that the firm could create competitive advantage through innovation by presenting new ways to fix the *value chain* so that it would create superior customer value. A proactive firm would have competitive advantage regarding response speed toward environmental change and customer's needs. Miller and Friesen (1983) suggest that proactiveness can be describes as the firm with speed in innovation and to be the first in introducing new product and services. Courage in risk taking would also necessary so that the firm was able to act in proactive and innovative manner to obtain competitive advantage. With this condition, it suggests that the firm implementing entrepreneurial orientation would obtain competitive advantage (Aloulou and Fayolle, 2005). Based on this relationship, this study develops the hypothesis:

H₁: Entrepreneurial orientation has significant effect toward competitive advantage.

Many researchers have tried to explain about business performance by examining entrepreneurial orientation of a firm (Wiklund & Shepherd, 2003). Therefore, relationship between *Entrepreneurial Orientation* and business performance has become an interesting focus in studying *Entrepreneurial Orientation* (Covin, Green & Slevin, 2006). Currently, there was mixed results. Some studies showed that *Entrepreneurial Orientation*, directly or indirectly, has positive relationship with business performance (such as, Wiklund & Shepherd, 2003; Hughes & Morgan, 2007; Li, Huang & Tsai, 2009). This means firm that adopt *Entrepreneurial Orientation* will be better than those without it. This association might be related with the fact that current dynamic business environment has shorter product's lifecycle and higher uncertainty (Rauch et al., 2009). Also, competitor's and customer's actions cannot be predicted.

According to Barney (1991), the firm would be able to fix their performance only if their strategies were able to exploit the opportunities and neutralizes threats. In other words, best business performance would not only related with exploiting combination of rare and valuable resources capability, but also related to its most effective combination. Therefore, entrepreneurial orientation as the strategy choice would able to combine resources in effective manner according to *schumpeter*, *dynamic capability* and *dominant logic*. However, value and rarity of capability combination of resources was not the direct result of entrepreneurial orientation, or in another word, entrepreneurial orientation, indirectly, has the role in determining business performance.

The fact, according to the view of "value-creation" (Peteraf and Barney, 2003), and "position superiority" (Bamberger, 1989), they should deliver product or service with unique features or lower cost than their competitor. Firm should exploit the valuable resources capability combination in which their competitor cannot do the same. Therefore, entrepreneurial orientation as the method, practice and decision making style of the manager was using entrepreneurial action as the effort from strategic level to direct the resources to create competitive advantage (Jantunen et al., 2005). Implementation of entrepreneurial orientation would give best business performance when they have competitive advantage. This best business performance emerge as the impact of competitive advantage obtained due to advantages within the firm while the competitor did not have the same advantages or cannot obtain it (Newbert, 2008). Based on this relationship, hypothesis was developed:

H₂: Entrepreneurial orientation has significant effect toward business performance.

Nelson (1991) suggest that if the firm only produce one set products with an array of process, it did not ensure long term competitive advantages. Competitive advantage would be reflected in firm's ability to innovate and through its competitive advantages they would be able to boost their business performance. Lidan Atuagene (2001) suggest that competitive advantage has significant effect toward SMEs performance measured from sales volume, profit level, market share, and *return on investment*. Competitive advantage can be attained from firm's ability in manage and utilize its resources and capital. Chapman et al. (2003) said that in its turn, competitive advantage is the important factor to create good business performance. Story et al. (2011) suggest that skill development, incubation and acceleration were important indicators to create competitive advantage in order to improve business performance. Based on this relationship, hypothesis was stated:

H₃: Competitive advantage has significant effect toward business performance.

METHODS OF RESEARCH

Based on objectives of this study, type of this study was *explanatory research* that conducts verification over relationship of several variables within study's problems (Indrawan and Yaniawati, 2014). Questionnaire was using Likert scale from 1 to 5. To measure entrepreneurial orientation, we use measurement basic from Mason et al. (2015) through 6 indicators such as Innovativeness, Risk-Attitude, Proactiveness, Autonomy, Aggressiveness and Competitive. To measure competitive advantage, this study developed measurement from Bharadwaj et al. (1993) with its 5 indicators such as uniqueness, inexpensive price, rarity (steps), difficult to copy, and irreplaceable. As dependent variable, business performance, this study use measurement basis from Anik (2015) with its 3 indicators, sales growth, profit growth and profit growth.

Total SMEs used as study population which also active member of Paguyuban Amangtiwi was 242 SME, using Slovin formula to obtain 147 samples of SME from three industrial sectors such as handicraft, food and beverages and fashion in Malang, East Java, Indonesia. This study use path analysis according to Pedhazur in Winarsunu (2004), path analysis is a method used to discover direct and indirect effect of a variable as the cause toward a variable as the impact/results. Variables in this path analysis were divided into two parts, exogenous or causal variables and endogenous or impacted/resulted variables (Sarwono, 2006).

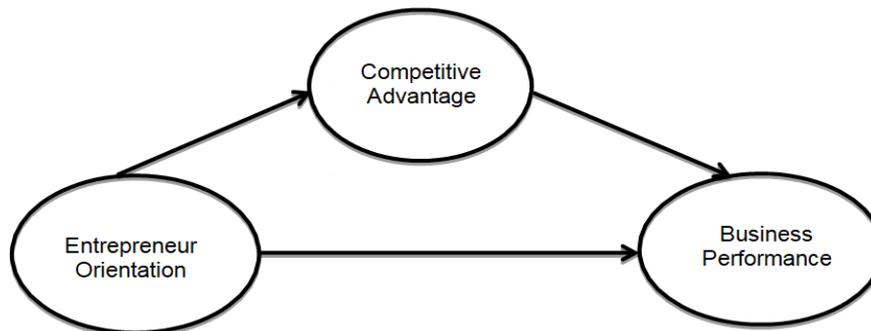


Figure 1 – Research Framework

Path analysis was done to discover explanation about direct and indirect relationship pattern based on theoretical consideration and author's knowledge displayed in figures (path diagram) to help in conceptualizing complex problems and to identify empirical implication of the tested theory. Reason of using path analysis was to discover direct and indirect effect of each tested variables. Innovation ability in entrepreneurship was highly important to compete with other competitor. This innovation can take form in new products or new marketing scheme. Innovated products would be able to attract consumer's interest to compete with other products.

RESULTS AND DISCUSSION

Below is the summary of study result using Path Analysis by testing direct and indirect relationship as explained in Table 1.

Table 1 – Summary of Path Analysis Result

Exogenous variable	Endogenous variable	Direct Effect	Indirect Effect	Total Effect	t calculated	Sig.	Category
X	Z	0,468	-	0,468	6,392	0,000	Significant
X	Y	0,356	0,468* 0,307	0,499	4,610	0,000	Significant
Z	Y	0,307	-	0,307	8,472	0,000	Significant

Source: Processed primary data, 2018.

Based on the result in Table 1, it can be seen that effect of Entrepreneurial Orientation variable (X) has $t_{\text{calculated}}$ 6,392 with probability of 0,000. Because $t_{\text{calculated}} > t_{\text{table}}$ ($6,392 > 1,983$) or $\text{sig } t < 5\%$ ($0,000 < 0,05$), it means that Entrepreneurial Orientation variable (X) has significant effect toward Competitive Advantage (Z). Also, Entrepreneurial Orientation variable (X) has $t_{\text{calculated}}$ value of 4,610 with probability of 0,000. Because $t_{\text{calculated}} > t_{\text{table}}$ ($4,610 > 1,983$) or $\text{sig } t < 5\%$ ($0,000 < 0,05$), thus Entrepreneurial Orientation variable (X) has significant effect toward Business Performance (Y). Competitive Advantage variable (Z) has $t_{\text{calculated}}$ of 8,472 with probability of 0,000. Because $t_{\text{calculated}} > t_{\text{table}}$ ($8,472 > 1,983$) or $\text{sig } t < 5\%$ ($0,000 < 0,05$), thus Competitive Advantage variable (Z) has significant effect toward Business Performance (Y).

Based on statistical test result, it was directly showed that Entrepreneurial Orientation (X) has significant effect toward Competitive Advantage (Z). Significant effect means that Entrepreneurial Orientation which consists of SMEs innovation, ability in risk taking, SMEs that took long term opportunity, competitive business concept, and aggressiveness in improving market position, also good competitiveness would affect Competitive Advantage variable (Z). This shows that SMEs in Paguyuban Amangtiwi of Malang has revealed that they can be superior in competition for food and beverages, fashion and handicraft sectors.

This result was in line with study conducted by Jia and Chia (2010) that innovation, initiative, and risk taking can affects the *sustained competitive advantage* (SCA). Similar results also obtained in Sukkabot and Sateeraroj (2014) which studied 331 entrepreneurs in Lao PDR or Laos. Their results show that entrepreneurial orientation has positive effect toward competitive advantage. Aziz and Samad (2015) suggest that SMEs should invest in innovation so that they could create competitive advantage. Keep innovating would be done by entrepreneur firms to stay superior from its competitor. According to Aloulou and Fayolle (2005) that the courage to take risk was highly needed so that firm would act proactively and innovatively in order to obtain competitive advantage. This condition explains that the firm which implements entrepreneurship would able to create *economic value* than its competitor.

Economic value would normally created by the process of product/service which produce more benefit with similar cost compared to the competitor (for example, differentiation based competitive advantage), or similar benefit with lower cost compared to the competitor (for example, efficiency based competitive advantage). SMEs in Paguyuban Amangtiwi particularly from food and beverages sectors would reap high profit because current market opportunity trend such as cakes and souvenir business has high demand. However, there was constraint in packing which still use manual packing and less demanded by consumers. SMEs constraints as discovered by author has cause consumers to be less interested in buying SMEs product, and thus SMEs Amangtiwi still hard to compete with large firms.

Based on statistical test result, it directly shows that Entrepreneurial Orientation (X) has significant effect toward Business Performance (Y). Significant effect between Entrepreneurial Orientation (X) with Business Performance (Y) means that SMEs Paguyuban Amangtiwi should gain more talent for product innovation, risk taking, competitive

aggressiveness and reviewing market to obtain competitive advantage and attain higher performance. When SMEs has more of those characteristic, they will show higher performance.

This study's result was supported by study of Zainol *and* Ayadurai (2011), Boso et al. (2013), Sukkabot and Sateeraroj (2014). It means that performance of SMEs Amangtiwi would increase if SMEs Amangtiwi has entrepreneurial orientation. This result was in line with result from Hafeez et al. (2011) who studied 398 SMEs in Malaysia in which one of his result suggest that entrepreneurial orientation has significant effect toward business performance. Similar results also obtain by Maso et al. (2015) who studied 300 SMEs in Udine Province (north Italy) and Kartner region (north Austria) and explains that entrepreneurial orientation has significant effect toward business performance with age and firm size as its control variables. In Udine province, *innovativeness*, *risk* and *competitive* indicators has positive relationship with business performance, but it also has negative and significant relationship in aggressiveness indicator. For Kartner region, positive indicator that has significant effect was *autonomy* and *competitive*.

SMEs in Paguyuban Amangtiwi should increase its performance by exploiting market opportunity and neutralize threats. According to Peteraf and Barney (2003), SMEs should create new value and positional superiority so that they could deliver product or service with unique feature or lower cost than its competitor. SMEs could exploit valuable resource combination in which its competitor cannot do the same thing. Therefore, entrepreneurial orientation as method, practice and decision making style of the manager by using entrepreneurial action is a strategic level effort to direct the resources in order to create competitive advantage (Jantunen et al., 2005).

Last part of this study is that competitive advantage as reflected from firm's ability to keep innovating and through competitive superiority would able to create high business performance. As said by Olivares *and* Lado (2013) who believe that competitive advantage was resulted from using the resources and ability/skill to create profitable satisfaction in the market. *Sustainable competitive advantage* (SCA) could be achieved because performance of market oriented behavior would need complex organizational knowledge and difficult to copy by competitor. From path analysis result, we obtain *R square value* 0,307 or 30,7%. It means that business performance was affected about 30,7% by competitive advantage. This significant effect shows that if competitive advantage was improved, it would be followed by increasing business performance. Therefore, it could maximize business performance.

This study was in line with the opinion of Lidan Atuagene (2001) who suggest that competitive advantage has significant effect toward SMEs performance measured from sales volume, profit level and return on investment. Competitive advantage can be obtained from firm's ability in managing and utilizing their resources and capitals. These resources would cover the product and service produced by SMEs. Chapman et al. (2003) also explains that competitive advantage is an important factor to obtain good performance. Paguyuban Amangtiwi agrees that SMEs should always superior than other firm, this is an important factor by looking at its unique product and service which differentiate SMEs from large firm with competitive price, rare product and difficult to copy or replace by its competitor. These advantages include different uniqueness from other firm, with competitive price, rare product and hard to copy product or service. These factors would make SMEs to be able to increase its performance. Along the way, SMEs should also develop its skill in creating products and acceleration as an important indicator to create competitive advantage in order to increase business performance.

CONCLUSION

Results of this study show that SMEs in Indonesia should improve its entrepreneurial orientation in developing its business. It was already known that entrepreneurial orientation has significant effect toward competitive advantage and business performance. Result of this study should also used as the basic for future research which discuss other variables such as social capital, entrepreneurial education, culture and customer behavior in Indonesia as

the developing country with large number of people. Also, this study has limitation such as its limitation in studying only handicraft, food and beverages and fashion related SMEs. It was expected that future studies would study other sectors such as in large manufacturing firms or service and technology firms.

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THE EFFECT OF BUDGET PARTICIPATION ON BUDGETARY SLACK

Sudirman¹, Saraswati Erwin², Usman Ernawaty^{1*}

¹University of Tadulako, Indonesia

²University of Brawijaya, Indonesia

*E-mail: ernawatyusman02@yahoo.co.id

ABSTRACT

This research aims to analyze the effect of budget participation on budgetary slack; the influence of organizational commitment on budgetary slack; the influence of organizational culture on budgetary slack; organizational commitment as the pure moderation variable or quasi moderation variable in the influence of budgetary participation on budgetary slack; organization culture as pure moderation variables or quasi moderation variables in the influence of budgetary participation on budgetary slack. This is a descriptive research in which the data are collected through observation, documentation and literature review. The data were analyzed using multiple linear regression analysis. The result of this research exhibited that budgetary participation has a negative influence on budgetary slack. Organizational culture and organizational commitments have negative effects on budgetary slack.

KEY WORDS

Budgetary participation, organizational commitment, organizational culture, budgetary slack.

Budget is one of the vital tools of a company in achieving its goals. Participative budgeting, according to Brownell (1982), is a process that describes how the individuals involved in the budget preparation. It has an influence on the budget targets and rewards upon achieving budgeting target. Budgetary participation is thought to have consequences on attitudes and behaviors of organization members (Murray, 1990). Should the budgetary participation does not run well, it may encourage the individuals to create budgetary slack.

The phenomenon underlying this research is the ambiguous theoretical contradiction in budgetary participation. On one side, budgetary participation does not create budgetary slack (Research conducted by Camman (1976), Dunk (1993), Merchant (1985) and Onsi (1973)). On the other hand, participatory budgeting has a positive relationship with budgetary slack (research conducted by Lowe and Shaw (1968), Young (1985)). The most researchers conducted research on the effect of participatory budgeting on budgetary slack in private sectors, specifically manufacturing company. There are only a few researches conducted on public sectors such as hospitals whereas public sector organizations including central government, public hospitals, state-owned enterprises have different characteristics on budget arrangement and report (Mardiasmo, 2009:7).

Hospitals, especially public hospitals (Bastian, 2010: 11) is one of the types of public sector organizations in Indonesia. It has very different characteristics and environment compared to private hospitals. These differences also exhibit different objectives and goals between the government and private organizations. The main purpose of government organizations is providing services to the public, while private sectors are purposed to optimize organizational profit devoted for the welfare of shareholders. Differences on budget planning and arrangement in public sector and subsidy coming from the central government to regional government create financial dependency which creates budgetary slack. The existence of substantial differences between public and private hospitals will influence the budgeting process. Therefore, a certain mechanism is necessary to manage public's aspiration and increase social service. Under these conditions, the researcher is interested to conduct a research on the public sector, particularly on public hospitals.

This research used organizational commitment and culture as moderating variables in assessing the relations between budgetary participation and budgetary slack. Organizational

commitment is one of the most important variables in this research as it is the influential factor of the organization in achieving its targets and goals. Individuals with high commitment tend to have positive thoughts and will strive to perform its best for the organization.

Organizational culture is influential on the employees' tendency to cause budgetary slack. Organizational culture is social forces that encourage organization members to perform work activities. Culture in an organization used a dimensional approach that practices the values and beliefs owned by the members of the organization manifested in individuals or groups behavior in an organization.

Based on the research background, the specific issue in this research is on whether budgetary participation, organization commitments, and culture affect budgetary slack and whether organization commitments and culture moderate the influence of budgetary participation on budgetary slack.

LITERATURE REVIEW

Budgetary slack is the dissidence on the total budget proposed by the employees and the total preferred estimated budget of the company (Anthony and Govindraj, 2004). According to Young (1985), *budgetary slack* is an act of decreasing productive capability by the employees when expected to determine their working standards. Hansen and Mowen (2007) argued that in participative budgeting, possible issues may occur such as: the heads of organization or the staffs may either set the budget standard too high or too low; the staffs/employees may possibly carry out budgetary slack/budgetary slack by allocating subordinate resources; pseudo participation.

Participation is a process in which the individuals influence on budget preparation. Their works will be evaluated and may be rewarded for achieving the target (Brownell, 1982). Managerial performances are expected to increase through budgeting participation. This is based on the idea that when objectives or standards are set collectively and agreed upon, the workers will strive to achieve the goals and objectives and will be responsible as they had parts in constructing goals.

Organizational commitment is an individual's commitment toward its company/organization. A person's commitment to the organization is one that guarantees the sustainability of the organization. Mowday *et al.*, in Curtis, Susan, and Wright (2001), stated commitment as the strength of individuals in an organization.

According to Zurnali (2010), organizational commitment is similar to Durkin's opinion (1999:127) stating that organizational commitment is a strong feeling of someone, strong attachment toward the objectives and values of an organization as well as its relation and role toward achieving those objectives.

Hofstede (1994) stated that culture consists of a mental joint program that requires responses from the individuals to its environment. Culture not only out-surfaced behavior but are instilled in each person. Organization culture can be described as values, beliefs, assumption, norms that are valid and agreed upon within the organization as guidance in solving issues. It is in line with Luthans's (1998) opinion stating that organizational cultures are the norms and values that guide the behavior of members of the organization. Strong organizational cultures will support the organization's goals. Weak organizational cultures may inhibit or in contrast with organization's goals. Positive influence means people-oriented organizational cultures will tend to not cause budgetary slack. On the other hand, work-oriented organizational cultures will cause high budgetary slack.

This research is a continuation of the research conducted by Usman (2012) about the influence of organizational cultures and asymmetric information toward the relation between budgetary participation on the discrepancy. The results exhibited a positive effect of budget participation on budgetary slack. Lewis and Ernawaty Usman (2011) conducted research on the influence of budget participation on the performance of local government officials. The results of the research exhibited that budgetary participation is positively related to the performance of local government officials.

Table 1 – Characteristics of employee-oriented and work-oriented organizational cultures

Employee-oriented culture	Work-oriented culture
Important decisions are determined collectively	Important decisions are determined individually
The worker is more preferred than the work results	The work result is more preferred than the worker
Giving clear work instructions to new employees	Less clear work instructions to new employees
Concerned about the personal matters of employees	unconcerned about the personal matters of employees

Source: Sulaksono (2005).

Young (1985) empirically examined the influence of personal information on the production capabilities, risk preference, and budgetary slack. The result exhibited that the desire to avoid the risk conducted by staffs participating in the budgeting process, there tends to be possible budgetary slack. These findings suggest that budgetary participation will increase the budgetary slack (positive effect). Merchant (1985) assessed the proposition on how participation will decrease the force causing budgetary slack. Govindarajan (1986) researched on the relation between budgetary participation and budgetary slack which the result exhibited positive relation in uncertain condition and negative relation in a certain condition. Onsi (1973) and Supanto (2010) researched budgetary participation and budgetary slack and found a significant relation which is a negative correlation between budgetary participation and budgetary slack. The results are similar to the research conducted by Camman (1976), Dunk (1993), and Merchant (1985). However, different results from Asringati (2006) exhibited that the budget participation positively related to budgetary slack. Based on the above explanation, the first hypothesis that the researchers propose would be:

H₁: Budgetary participation has a negative relation to budgetary slack.

Nouri and Parker (1996) assessed the influence of organizational commitment on the relation between budgetary participation and budgetary slack. The high organizational commitment would reduce the individual's tendency to cause budgetary slack. On the other hand, if the commitment is low, personal needs will be prioritized and the individual would tend to cause budgetary slack. It would cause the target budget will be easier to achieve and has better work assessment. Based on the above explanation, the second and third hypotheses proposed are as follows:

H₂: Organizational commitment has a negative influence on budgetary slack.

H₃: Organizational commitment moderates the influence of budgetary participation on budgetary slack.

Tjahjaning (2001) stated that organizational cultures have a positive influence on the relation of budgetary participation on managerial performance. However, Sardjito (2007), Usman (2012) found that organizational cultures have a negative influence over budgetary participation. This research result is similar to Ritongan (2008). The research conducted by Supanto (2010) exhibited that organizational cultures do not affect budgetary participation either. Supomo and Indrianto (1998) found that there is a positive influence of people-oriented organizational cultures and negative influence of work-oriented organizational cultures over the effectiveness of budgetary participation in increasing managerial performance.

Based on the above explanation, the fourth and fifth hypotheses proposed are as follows:

H₄: Organizational cultures have a negative relation to budgetary slack.

H₅: Organizational cultures moderate the influence of budgetary participation to budgetary slack.

METHODS OF RESEARCH

This field research used survey method to collect the field data in order to describe the influence of organizational commitment and organizational cultures on the relation between budgetary participation and budgetary slack. The research design used in this study is an

explanation (explanatory research) because this research described causal relationships between variables through hypothesis testing.

The populations in this study were all the directors, deputy directors, section heads, heads of the installations and the employees involved in the budgeting process in the Palu's public hospitals. Based on the surveys conducted in five public hospitals in Palu, there were 180 respondents. The researchers used Slovin approach (in Umar, 1999:67), resulting in 124 respondents involved in the research.

The independent variable in this research was budgetary participation, the moderating variables were organizational commitment and culture, and the dependent variable was the budgetary slack. Budgeting participation was measured using 4 instruments adopted from Kenis (1979). Organizational commitment was measured using 9 instruments adopted from Mowday (1979). Organization culture was measured using 8 instruments adopted from Hofstede et al, (1990). Budgetary slack was measured using 6 instruments adopted from Dunk 1993. All the instruments (questions) were measured using 5 points *Likert-scale*

The quality of research data is determined by the quality of the instruments used to collect data. The reliability test was conducted to measure a questionnaire which is an indicator of a variable (Jogiyanto, 2007: 52)

The analysis calculations used was multiple regression analysis by using a software called *Statistical Product and Service Solutions* (Ghozali, 161:2009). The formula is as follows:

$$Y = b_0 + b_1X_1 \quad (1)$$

Where: Y = Budgetary Slack, X_1 = Budgetary Participation, b_0 = constant, b_1 = regression coefficient.

MRA is a special application for multiple linear regression in which regression contains elements of interactions (multiplication of two or more independent variables) with the formula:

$$Y = a + b_1 + b_2 X_1 X_2 X_3 + b_3 + b_4 + b_5 X_1 X_3 X_1 X_2 \quad (2)$$

Where: Y = the dependent variable, a = constant, b_1 - b_5 = regression coefficient, X_1 - X_3 = free variable.

Classical assumption test was conducted by the following methods; (1) multicollinearity test was conducted using the Pearson test, as a criterion when the correlation between two variables exceeds 0.8, then multicollinearity will occur. (2) heteroscedasticity test was conducted to assess whether in the regression model occurred variance inequality from one residual observation to another observation, and (3) normality test which aims to test whether in the regression model, the intruding variable or residual has normal distribution, through observing normal probability plot which compares cumulative distribution and normal distribution (Gujarati, 2006:63).

F test is a test to exhibit whether all the independent variables in the model have collective influence over independent variables. If the F value calculation result is greater than the value F according to the table, then H_0 is rejected and H_a is accepted. The basic assumptions required is the real standard (α) which is 5%. The t-test is a test conducted to test the level of significance of the influence of independent variables individually over dependent variables using real standard (α) which is 5%.

RESULTS OF STUDY

The results of reliability test using SPSS software exhibited adequate Cronbach's Alpha value. Cronbach's Alpha diatan score of 0.60 was considered quite reliable (Ghozali, 2006: 48). Each variable obtained Cronbach's Alpha value for budget participation $\alpha = 0.688$, budgetary slack $\alpha = 0.644$, organizational culture at $\alpha = 0.641$ and organizational commitment 0,656 . A construct or variable is said to be reliable if the value of Cronbach Alpha > 0.60 (Nunally, 1960). The validity of the test results by means of statistical tests can

be concluded that all valid variables, evidenced by the all items have Questions Correlated Item-Total Correlation bigger than r table. (Ghozali, 2001: 49).

Multicollinearity is the situation there is a correlation between the independent variables with each other. One way to detect multicollinearity is the Pearson test. As a criterion, the correlation between the two variables exceeds 0.8 exhibits multicollinearity (Gujarati, 2006; 63). Multicollinearity test results exhibited that the correlation between two variables does not exceed 0.8.

Heteroscedasticity test aims to test whether the regression model occurred inequality residual variance from one observation to another observation. Based on the test result, heteroscedasticity does not occur in the scatterplot (Figure 1), which is identified in the following analysis: Data points spread above, under, or around zero; Data points do not accumulate above or below it; The spread of the data points do not form a wavy pattern, widened then narrowed and widened again; The spread of the data points does not have a pattern.

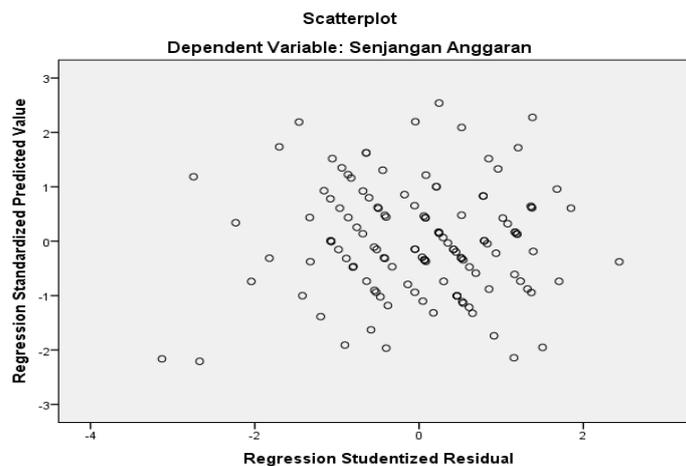


Figure 1 – Heteroscedasticity Test (Output SPSS)

Normality Test aims to test whether the regression model or residual confounding variables have a normal distribution. One way to see the residual normality is to observe normal probability plots comparing the cumulative distribution by a normal distribution. Normal distribution forms a straight diagonal line, and residual plotting the data will be compared with the diagonal line. If the data were normally distributed, then the line that describes the actual data will be normal. Based on the assessment result, the probability plot meets the criteria of normality, therefore it can be concluded that the regression model meets the assumption of normality.

Multiple regression test results presented in Table 1 indicates that the value of R square is at 0.263 which means that equation describes the budgetary slack influenced by organizational culture and organizational commitment amounted to 26.3%, while 73.7% is explained by other factors not included in this study.

Table 2 – Variable Regression Analysis Research

Model Summary ^b									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.513 ^a	.263	.245	2.14541	.263	-14.634	3	123	.000

Predictors (Constant) Organization Commitment, Budget Participation, and Organization Culture.
 Dependent Variable: Budgetary slack.

Source: Primary data processed in 2016 (SPSS output).

F test aims to show whether all the independent variables included in the model have an influence on the independent variable. Multiple regression results indicate significance level of 0.000 (significant), which means that all variables included in the model together affect the budgetary slack. F Test results are exhibited in the following Table 3.

Table 3 – Variable Regression Analysis Research

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	202.076	3	67.359	-14.634	.000 ^b
	Residual	566.144	123	4.603		
	Total	768.220	126			

*Predictors (Constant) Organization Commitment, Budget Participation and Organization Culture.
Dependent Variable: Budgetary slack.*

Source: Primary data processed in 2016 (SPSS output).

The first hypothesis states that budget participation negatively affects budgetary slack. The test results using multiple regression exhibited significance of 0.000 with the direction of the relationship is negative. It means that more employees are involved or participate in the budget process would decrease budgetary slack.

The second hypothesis states that organizational commitment negatively affects Budget. Assessment result with multiple regression test exhibits a negative direction with a significance level of 0.018, which indicates significant effect. The employees are committed to the organization. The employee exhibits budgetary slack tendency to decline poor organizational culture that exists in or around the work environment which in turn increases budgetary slack.

The third hypothesis states that the organizational culture negatively affects budgetary slack. Assessment result with multiple regression exhibited a negative relationship with a significance level of 0.001, which means significant. These results indicate that a good organizational culture will reduce budgetary slack.

The fourth hypothesis states that organizational culture moderates the relationship between budgetary participation and budgetary slack. Multiple regression results exhibited a significance level of 0.019 with a negative relationship, this means that organizational culture is a moderating variable but weakens the relationship between budgetary participation and budgetary slack.

The fifth hypothesis states that organizational commitment moderate the relationship between budgetary participation and budgetary slack. Multiple regression results show a negative correlation of 0.01 which means that organizational commitment is a moderating variable but does not strengthen the relationship between budgetary participation and budgetary slack.

CONCLUSION

Participation Budget has a negative effect on budgetary slack, which indicates employees participating in budget preparation would decline the budgetary slack. Organizational Commitment negatively affects the budgetary slack. Better organization commitment would decrease budgetary slack. Organizational culture negatively affects budgetary slack. Better organizational culture decreases budgetary slack. Organizational culture and organizational commitment is a moderating variable but have a significant negative relationship on both variables. It weakens the relationship between budgetary participation and budgetary slack.

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DOI <https://doi.org/10.18551/rjoas.2018-07.17>**STUDY OF FACTORS AFFECTING BANK SOUNDNESS****Satrio Vigo*, Achsani Noer Azam, Andati Trias**

Business Management, Bogor Agricultural University, Indonesia

*E-mail: vigo.satrio@yahoo.com

ORCID: 0000-0002-3369-7217

ABSTRACT

This research aimed to analyze the development and soundness level of banks using RGEC method to banking companies registered in ISE during the period 2010-2016. This research was aimed to 20 banks registered in ISE and conducted in August-December 2017. The secondary data, which is used to complement the writing of this research, came from the financial statements of period 2010-2016.

KEY WORDS

Bank, soundness, public services, policy.

The level of bank soundness will determine the quality and balance of the national financial system. According to Thomson (1991), bank soundness is an early warning system for the bank's current performance and for its future prospects. The purpose of the assessment of the soundness of a bank is to illustrate whether or not the bank can perform its function properly. The banks are categorized and considered as sound if it can perform its functions well, which is to maintain and preserve public trust, help smooth payment traffic and assist the government in carrying out the policy, especially monetary policy. In addition, to be able to perform its functions properly, the bank must have enough capital (Derviz Podpiera, 2008).

Bank Indonesia as the central bank of Indonesia has established a policy on the soundness of commercial banks using Capital, Asset Quality, Management, Earning, Liquidity (CAMEL) method. This regulation is set forth in Bank Indonesia Regulation no.6/10/PBI/2004 on April 12, 2004. Bank Indonesia subsequently improved the Bank's soundness assessment method from CAMEL method to Risk Profile, Good Corporate Governance, Earning, and Capital (RGEC) method. The implementation of this method is contained in the Circular Letter of Bank Indonesia No.13/24/DPNP on October 25, 2011 about the assessment of the soundness of commercial banks.

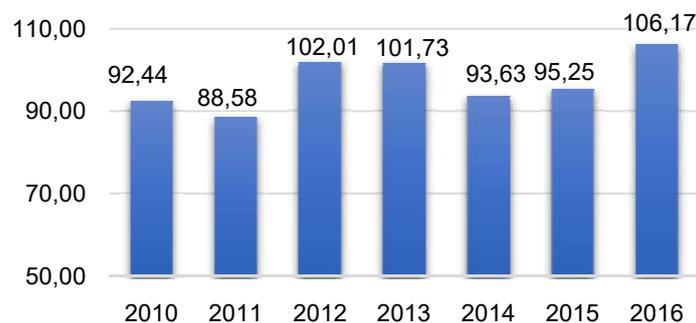


Figure 1 – LDR of 23 Banks in the Period 2010-2016, %

Based on Figure 1, the LDR of 23 banks tested in the research from 2010 to 2016 were 92.44%, 88.58%, 102.01%, 101.73%, 93.63%, 95.25% and 106.17%. During this period, LDR values were fluctuating but tend to be in fairly sound and unsound conditions. In 2011, the LDR was declining but starting from 2012 and then it was continuing to increase by 106.17%. The increasing LDR value indicated that the bank highly disbursed its credit while

the source of funds owned by the bank was limited. If the condition was left unchecked, it would let the bank to experience liquidity that affects the public's trust in the bank.

The form of loan disbursement by a bank can be in the form of property loans that is regulated in the Regulation of the Minister of Housing of the Republic of Indonesia, No. 13 of 2012 on the procurement of housing through loans or financing the ownership of a prosperous house with the support of housing financing liquidity facility with the highest interest rate of 7.25%. On September 24, 2013, Bank Indonesia issued circular letters related to the completion of Loan to Value (LTV) or Financing to Value (FTV) for property ownership credit and credit consumption of collateral property. The reason of Bank Indonesia issuing the Loan to Value regulation was that property values in Indonesia in recent years have soared too high so that it was feared to continue to increase the price of property assets in Indonesia that does not reflect the actual price (property bubble). If the property industry collapsed, then the bubble property price was corrected in the market, then the property prices decline below its intrinsic value, and will certainly have an impact on the banking industry (Lacovone and Zavacka, 2009). Figure 2 shows how the financing distribution on property loans which was published on 23 September 2013.

Table 1 – LTV Regulation on September 23, 2013

Financing & Collateral Type	Maximum LTV/FTV		
	FK/FP 1	FK/FP 2	FK/FP 3
HOL Type>70	70%	60%	50%
SHOL Type >70	70%	60%	50%
HOL Type 22-70	-	70%	60%
SHOL Type 22-70	80%	70%	60%
SHOL Type to 21	-	70%	60%
Store/Office OL	-	70%	60%

Source: Circular Letter of Bank Indonesia No. 15/40/DKMP.

A year since the issuance of the regulation, Bank Indonesia noted that the LTV policy had an impact on slowing House Ownership Loan (HOL) growth to 11.9% in December 2014 from 26.5% in December 2013. It prompted Bank Indonesia to revise one of its macro-prudential policies through the enactment of Regulation No. 17/PBI/2015 on Loan to Value or Financing to Value for loans or property financing and loan advances or motor vehicle financing. It was performed as an effort to encourage banking intermediation, as well as to provide a signal of support to the national economy through macro-prudential policy adjustment. In addition, LTV policy is aimed at helping lower middle income societies in meeting the real needs (first homes) for shelter.

Table 2 – LTV Regulation on June 18, 2015

Financing & Property Type	Ownership Loan & Sharia Ownership Loan		
	1	2	3
Landed Houses	70%	60%	50%
Type>70	70%	60%	50%
Type 22-70	-	70%	60%
Type to 21	80%	70%	60%
Flats	-	70%	60%
Type>70	-	70%	60%
Type 22-70			
Type to 21			
Stores/Offices			

Source: The Regulation of Bank Indonesia No 17/10/PBI/2015.

The objectives of conducting the research are:

- Analyzing the development and soundness level of banks using RGEC method to banking companies registered in ISE (Indonesia Stock Exchange) during the period 2010-2016.
- Testing and analyzing the effect of the LTV regulation on RGEC to banks registered in the ISE during the period 2010-2016.

LITERATURE REVIEW

Bank is a financial institution whose main activity is collecting funds from the society and channeling the funds back to the society and providing other bank services (Kasmir, 2012). According to Law No.18 of 1998, the definition of a bank is a business entity that collects funds from the public in the form of savings and distributes it to the community in the form of credit and or other forms in order to improve the standard of living of the people.

From the above understanding, it can be concluded that the bank is a place for people who make business in the field of finance, where people can save money and get credit facilities or other services.

According Susilo (2000), bank soundness can be defined as the ability of a bank to perform operational banking activities normally and fulfill all its obligations well under the applicable regulations. The definition of bank soundness is a very wide limitation because the soundness of the bank does include the soundness of a bank in carrying out its entire banking activities (Anderson and Fraser, 2000). The activities are: the ability to raise funds from the society, from other institutions and equity, the ability to manage funds, and the ability to channel funds to the society (Abbasi, 1999). In addition, it includes the ability to fulfill obligations to the public, employees, owners of capital and other parties and compliance with the applicable banking regulations.

This research measures the risk profile factor by using two indicators namely credit risk factor using Non-Performing Loan (NPL) formula and liquidity risk using Loan to Deposit Ratio (LDR) formula. From these two risks, the researchers can obtain quantitative data that cannot be obtained on operational risk factors, legal risk, strategic risk, compliance risk and reputation risk (Furqan, 2012).

The assessment of GCG factors in the RGEC approach is based on three main aspects: governance structure, governance process, and governance output (Peni and Vähämaa, 2012). According to the stipulations of Bank Indonesia stated in Bank Supervision Report (2012), "governance structure covers the implementation of duties and responsibilities of the Board of Commissioners and Board of Directors as well as the completeness and execution of the committee's duties; governance process includes bank compliance function, handling of conflict of interest, implementation of internal and external audit function, implementation of risk management including internal control system, provision of fund to related parties and big fund, and bank strategic plan (Santiso, 2001); the final aspect, governance output include transparency of financial and non-financial conditions, GCG implementation reports that meet the principles of Transparency, Accountability, Responsibility, Independency, and Fairness (TARIF)".

The assessment of earnings factor is based on three ratios:

- Return on Asset (ROA) is the ratio of earnings before tax to the average of the total assets.
- Net Interest Margin (NIM) is the ratio of the net interest income to the average of the total assets.

According to Bank Indonesia regulation no. 13/1/PBI/2011 article 7, paragraph 2 as referred to in article 6 letter d shall include an assessment of capital adequacy and capital management. CAR is the ratio of bank performance to measure capital adequacy owned by banks in supporting the assets that contain or generate risk (Cashmere 2012).

METHODS OF RESEARCH

This research was aimed to 20 banks registered in ISE and conducted in August-December 2017. The type of data and information used in this research consisted of secondary data (Ryan et al., 2002). The secondary data, which is used to complement the writing of this research, came from the financial statements of period 2010-2016. In this research, the data collection technique used was documentation. According Suharsimi Arikunto (2014) documentation method is to observe (stare) the object to obtain information in the form of three kinds of sources, namely writing (paper), setting (place), and paper or

human being (people). The documents required in this research were the financial statements of commercial banks for the period 2010-2016 accessed through www.idx.co.id and the websites of each commercial bank.

Binary Logistic Regression. Binary regression model is a model used to determine the relationship between explanatory variable (X) with the response variable (Y) that is binary. Logistic regression requires a logit connective function, logit transformation as a function of $\pi(x)$ as follows:

$$g(x) = \ln [\pi(x) / 1 - \pi(x)] = \beta_0 + \beta_1 X_1 + \dots + \beta_p X_p$$

Therefore, in general, the equation is:

$$g(x) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_6 X_6$$

Where: $g(x)$ = Bank Soundness; X_1 = NPL; X_2 = LDR; X_3 = GCG; X_4 = ROA; X_5 = NIM; X_6 = CAR; β_0 = Intercept; $\beta_1, \beta_2, \dots, \beta_6$ = the coefficients of each variable.

For independent variables that were categorical, dummy variables were required. Generally, if a nominal or ordinal scale variable has a value probability of k, then the dummy variable of k-1 is required. For example, the independent variable j has kj level. D_{ju} represents dummy variable of kj-1 and β_{ju} is the dummy coefficient with $u = 1, 2, \dots, kj - 1$. Thus, the logit model with the independent variable of p and the j variable was discrete.

RESULTS AND DISCUSSION

Non-Performing Loan (NPL). Prior to the policy of LTV 1, banks with an average sound level of 1 had a good NPL value. After the issuance of LTV 1, the NPL of the banks was getting better because it decreased to 0.60%. The impact of LTV 1 easing is the issuance of LTV 2 along with the increase of NPL value to the banks with sound level of 1. The impact of LTV 1 and LTV 2 on banks with sound level 2 tends to make the NPL continue to increase. One of them was BBTN in which BBTN is the pioneer of credit in housing. Banks with the sound level of 3 and 4 tend to be opposite and relatively volatile.

Loan to Deposit Ratio (LDR). At that time, the aim of LTV was to reduce the possibility of bubble property. The risk of this bubble property occurs when the money in circulation exceeds the growth of gross domestic product in which in the future the excess money will be misused. If the money liquidity within the community cannot be managed by the bank, then it will cause an economic crisis. Based on the following table, it can be seen that the LDR in all four level of bank soundness tend to increase. If this increase is ignored, then it tends to degrade the bank soundness because the sound LDR limit is 75% -85%. The increase of LDR is due to the large amount of funds used by banks in the property sector due to the increased property demand.

Good Corporate Governance (GCG). The average of GCG owned by these 23 banks during 2010 to 2016 was 1.87 in which the value is below 2.5 which means that the banks had good GCG. The highest GCG value was owned by BCA in 2012 of 3.25 and the lowest or best GCG number was 1 which was owned by NISP twice consecutively namely in 2015 and 2016. The GCG level in all four ratings of the bank was fluctuating but still at a sound level, so the existence of policies and changes from LTV did not have a big effect on GCG.

Return on Assets (ROA). If it is associated with LTV 1 and LTV 2 policies, all banks, becoming the samples, by 2014 had decreased the ROA value which was caused by after the issuance of LTV 1, the interest from the public in purchasing the property tended to decline due to the amount of down payment to be paid. The decline in public interest to purchase property loans will certainly lead to a decline in profit or benefit to be obtained by the bank. After the easing of LTV policy in 2015, the ROA value of all banks increased again, which means that the public interest in purchasing property improved again.

Net Interest Margin (NIM). The average NIM value of 23 banks under the research was 3.43, which means the average NIM was in good category. The highest NIM was owned by

BBNP in 2016, which was 17.59 and the lowest NIM was owned by SDRA in 2014 which was 0.25 that decreased after SDRA merger between Bank Saudara and Bank Woori. The issuance of LTV 1 and LTV 2 policies did not affect the soundness of banks in sound level of 1 and 2. Although there was a decrease in 2016, but the NIM ratio was still within the limits of the category of sound banks; occurred also to the banks with sound levels of 3 and 4 namely SDRA, BEKS and BSWD that had a decreasing NIM ratio.

Capital Adequacy Ratio (CAR). The average CAR of 23 banks under the research was 17.39, which means that the average NIM was in good category. The highest CAR was 48.49 owned by BKSJ in 2011 and the lowest CAR was 8.02 owned by BEKS in 2015. The impact of LTV 1 was attributed to CAR. Although all banks becoming the sample had sound CAR ratios, but after the issuance of LTV 1, the CAR ratio tends to decline as the existing capital in the bank was channeled to finance customers who will apply for property loans. After the LTV 2 in 2015, the CAR ratio had increased again, which means that the banks could reduce their capital because LTV 2 contains loosening rules on down payments in property purchases.

The Results of Binary Logistic Regression:

- Test of the Effect of NPL on Y. The results of Wald Test showed that the probability value was 0.000. The probability value (0,000) was smaller than alpha 10% which meant that the NPL had significant effect on Y. The coefficient value was -0.721 (negative) which meant that the increase of NPL value would tend to become unsound. The value of odds ratio was 0.486 which meant the increase of NPL by 1%. The chance to be sound was 0.486 times of unsound opportunities.
- Test of the Effect of LDR on Y. The results of Wald Test showed that the probability value was 0.023. The probability value (0.023) was smaller than alpha 10% which meant that the LDR had significant effect on Y. The coefficient value was -0.017 (negative) which meant that the increase of LDR value would tend to become unsound. The value of odds ratio was 0.983 which meant the increase of LDR by 1%. The chance to be sound was 0.983 times of unsound opportunities.
- Test of the Effect of GCG on Y. The results of Wald Test showed that the probability value was 0.000. The probability value (0.000) was smaller than alpha 10% which meant that the GCG had significant effect on Y. The coefficient value was -2.351 (negative) which meant that the increase of GCG value would tend to become unsound. The value of odds ratio was 0.095 which meant the increase of GCG by 1%. The chance to be sound was 0.095 times of unsound opportunities.
- Test of the Effect of ROA on Y. The results of Wald Test showed that the probability value was 0.050. The probability value (0.050) was smaller than alpha 10% which meant that the ROA had significant effect on Y. The coefficient value was 0.422 (positive) which meant that the increase of ROA value would tend to become sound. The value of odds ratio was 1.525 which meant the increase of ROA by 1%. The chance to be sound was 1.525 times of unsound opportunities.
- Test of the Effect of NIM on Y. The results of Wald Test showed that the probability value was 0.017. The probability value (0.017) was smaller than alpha 10% which meant that the NIM had significant effect on Y. The coefficient value was 0.414 (positive) which meant that the increase of NIM value would tend to become sound. The value of odds ratio was 1.513 which meant the increase of NIM by 1%. The chance to be sound was 1.513 times of unsound opportunities.
- Test of the Effect of CAR on Y. The results of Wald Test showed that the probability value was 0.081. The probability value (0.081) was smaller than alpha 10% which meant that the CAR had significant effect on Y. The coefficient value was -0.075 (negative) which meant that the increase of CAR value would tend to become unsound. The value of odds ratio was 0.928 which meant the increase of CAR by 1%. The chance to be sound was 0.928 times of unsound opportunities.

- Test of the Effect of LTV 1. The results of Wald Test showed that the probability value was 0.209. The probability value (0.209) was bigger than alpha 10% which meant that the LTV 1 had no significant effect on Y.
- Test of the Effect of LTV 2. The results of Wald Test showed that the probability value was (0.001). The probability value (0,001) was smaller than alpha 10% which meant that the LTV 2 had significant effect on Y. The coefficient value was -2.613 (negative) which meant that the banks in LTV 2 category would tend to become unsound. The value of odds ratio was 0.073 which meant that the banks in LTV 2 category has chance to be sound compared with unsound 0.073 times from Non-LTV-2 category to be sound compared with unsound.

MANAGERIAL IMPLICATIONS

For government regulators, especially those are related to the submission regulations of House Ownership Loan, this research found that NPL, LDR, GCG, ROA, NIM, CAR, and LTV 2 variables have effects on bank soundness. One of the tasks of banks is to keep the economy and when bank soundness is disrupted, it will affect the performance of the bank. In addition, the existence of LTV regulation that is intended to reduce the risk of bubble effect on the property sector can still be played by people outside the bank such as developers so that the LTV regulation runs less than optimal.

The findings of this research indicated that NPL, LDR, GCG, ROA, NIM, CAR, and LTV 2 had effects on bank soundness. It could be used as a reference for banks to continuously try to reduce the NPL because when there are many customers who have troubled loans, it will make the bank becoming more illiquid and must dilute its fixed assets to the third parties. The LDR describes the bank's ability to repay the withdrawals made by its customers by relying on the loans given as a source of its liquidity; the higher the LDR the lower the liquidity ability of a bank. Therefore, banks are required to keep the LDR value so that it does not exceed the maximum limit and the bank soundness is maintained. ROA is the ratio used to see the ability of banks in managing their assets to generate profits for the bank. Thus, it means that the higher the value of ROA, the better the bank's ability to manage its assets. As one of the variables affecting the soundness of banks, they are required to maintain ROA and continue to improve ROA to keep banks in sound condition.

CONCLUSION AND SUGGESTIONS

Based on the research findings that have been conducted, the following conclusions can be drawn:

- Based on the level of bank soundness, it could be seen that the RGEC in 23 banks in the period 2010-2016 were sound. From the total sample of 23 banks, they commonly have composite 2 which reflected that the bank was ready to deal with the significant negative effects of internal and external factors. The lowest composite rating was 4 which illustrated that the condition of the bank was not sufficiently ready to deal with internal and external negative and internal factors; namely PT Bank Swadesi or Bank of India Indonesia.
- Based on the results of regression test of the panel data, the ratios used consisting of NPL, NPL, GCG, ROA, NIM, CAR, LTV 1, and LTV 2 simultaneously have a significant effect of 62.4%. It means that the variability explained by factors in the model is 62.4% and the remaining 37.6% is explained by other factors outside the model. Based on the partial test results, the variables that significantly affect the soundness of the banks are NPL, LDR, GCG, ROA, NIM, CAR, and LTV 2.

Based on the research findings that have been concluded, the following suggestions are obtained:

- Based on partial testing, only LTV 2 affects the bank soundness. Therefore, further research may discuss more deeply about how the new government policy design in order to be able to achieve its goals without any disturbances to the bank soundness.

- It is expected to the next research to be able to add the number of banks and explain how much the percentage of its distribution to the credit of the consumer and add periods of time with quarterly or monthly data to get more detailed findings.

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**ATTITUDE ANALYSIS ON THE EFFECT OF CAREER DEVELOPMENT
ON ORGANIZATIONAL COMMITMENT OF FRONTLINE EMPLOYEES OF BANKING
SECTOR IN MATARAM CITY**

Allamu M. Rogib Rova*, Student
Asmony Thatok, Sulaimiah, Lecturers
Graduate Program in Management, Mataram University, Indonesia

*E-mail: rogibrova@gmail.com
ORCID: 0000-0002-2502-9032

ABSTRACT

This research aimed to determine and analyze partially and simultaneously the effect of career development based on education, training, mutation and promotion on organizational commitment of frontline employees of banking sector in Mataram City. This research was a causal-associative research that aimed to analyze the correlation between one variable with other variables or how a variable affects other variables. Population of the research was frontline employees of banks that were state-owned companies in Mataram City amounted to 188 people. The samples of 65 people were obtained by using the Slovin formula. By using proportional random sampling technique, the distributed respondents of BNI amounted to 30 people, BTN amounted to 6 people and Bank Mandiri amounted to 29 people. The data analysis was performed by using multiple linear regressions. The analysis results showed that the variables of education, training, mutation and promotion positively and significantly affected the organizational commitment of frontline employees of banking sector in Mataram City. In addition, partially, the analysis results showed that the variables of education, training, mutation and promotion had positive and significant effect on organizational commitment of frontline employees of banking sector in Mataram City respectively.

KEY WORDS

Career development, education, training, mutation, promotion, organizational commitment.

The high flow of money circulation in the globalization era and the free trade have made the banking sector as the most strategic sector in trade because the function of the bank as an intermediary has shown an important role in trade and development. Completeness of bank services can be seen from several aspects of the bank's capabilities in terms of capital, facilities, and human resources it owns. Regarding to services produced by human resource competence, it cannot be separated from the frontline role that directly intersects with the customers or consumers. To be a reliable front liner, training and intensive development are required. In addition to the interests of the organization, this training and development activities are supported by Bank Indonesia Regulation no 5/14/PBI/2003.

The existence of career development is also required by every employee to improve work commitment of human resources. Safiri (2015) stated that companies are still trying to build employee loyalty through effective human resources implementation including career planning and development. Jakson et al. (2009) mentioned that training and development can provide a shared experience that enhances understanding among employees of diverse backgrounds and helps to accelerate the development of company cohesion and employee commitment. Hans (2007) stated that career development has a direct effect on human resource commitments. Developed organizations are identical to career development. Career development plays an important role in improving employee commitment to achieve the goals of an organization or company.

Furthermore, the employee's belief in career development will bring consequences to his/her commitment for the company. Employees who believe in their career development positively tend to have a high level of commitment, thereby avoiding them from various

attitudes and work behaviors that hinder the achievement of organizational goals, such as strikes, absenteeism and turnover. It may indicate that the employee has a high commitment. Conversely, employees who believe their career development negatively tend to have a low level of commitment.

In fact, following career development program for a front liner is not easy. Various process stages must be passed by a front liner to be able to follow the process of career development. The selection process that must be passed depends on the working system of the bank. In addition to performance-oriented, to be able to follow a career development program, a bank's front liner will be examined from the age, employment, educational background, gender, marital status, number of dependents, and rewards from the concerned front liner, and other technical matters. The most basic thing is that a career development program in a banking system is based on the needs of the bank; on the extent to which front liner employees must be trained, educated, and prepared to support the movement of the bank in order to achieve the organizational goals.

Due to the commitment of frontline banking employees, on the average, frontline employees have high commitment. It is despite the career development program that is implemented by a bank. It can be seen from the process of front liner service to the customers that always be based on the applicable SOP, and can also be seen from the front liner behavior in avoiding strikes. However, in reality, not all front liners have an opportunity to develop their careers and not a few front liner employees who do not follow a career development program and retire in the same position.

Companies, which are engaged in services, especially the banking sector, are very imperative in fostering their employees because the company's success in achieving the goals is strongly affected by the success of the employees in providing services. If the frontline employees perceive their career development positively, they will have more commitment to the company.

Previous Relevant Research. Previous relevant research that had been conducted showed the relationship between career development and the improvement of organizational commitment. Hutagalung (2015) found a direct effect of career development consisting of education, training, mutation and promotion on organizational commitment. Moreover, Putra (2014) found that the dominant effect of career development variables consisting of education, training, mutation and promotion had direct effect to organizational commitment. A research conducted by Oktariandini (2015) showed a positive correlation between career development variable consisting of education, training, mutation and promotion and organizational commitment variable. This research showed the attachment of career development on commitment of 32.3%. Furthermore, Adryan (2012) found that career development based on education and training variables had more dominant effect on organizational commitment compared with mutation and promotion variables.

Previous research conducted by Pratistiani (2013) found that education and training variables had significant effect on organizational commitment. Hidayat (2015) found a positive correlation of career development consisting of education and training on the improvement of organizational commitment. Furthermore, Subhi (2014) found that education and training consisting of instructor skills, training materials, training methods, and training tools had an effect on organizational commitment simultaneously. Meanwhile, it partially indicated that the instructor skills, training materials and training tools had an effect on organizational commitment whereas training method had no effect on organizational commitment. Furthermore, Mudaim (2014) argued that career development based on rotation/mutation and training played a role in improving organizational commitment. Salindeho (2016) proved that career development based on mutation and promotion had direct and indirect effects on organizational commitment. It was supported by the research findings of Wibowo (2006) stating that career development, one of which consisted of promotion had positive and significant effect on organizational commitment. Then Safitri (2015) found a positive correlation between career development consisting of training and promotion and organizational commitment.

Previous relevant research indicated that there was no effect between career development and organizational commitment that had been proven by Hidayah (2015). Furthermore, Halimah (2013) in her findings showed that there was no direct effect on career development towards organizational commitment. Sari (2010) showed that career development program had negative but insignificant effect on organizational commitment.

Based on previous relevant research and theoretical framework, the following hypotheses can be formulated:

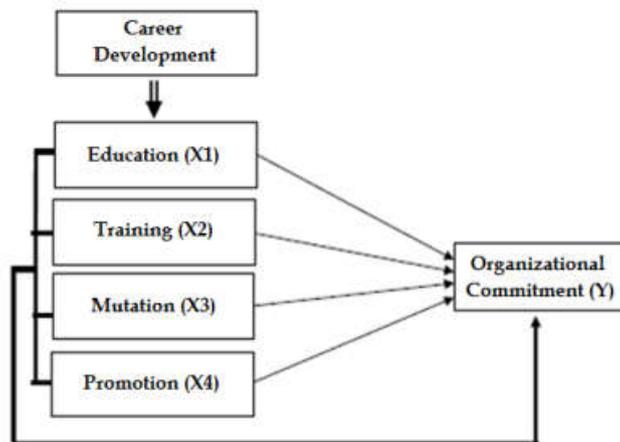
H1: Career development based on education, training, mutation and promotion has positive and significant effect simultaneously on organizational commitment of the employees.

H2: Career development based on education has positive and significant effect on organizational commitment of the employees.

H3: Career development based on training has positive and significant effect on organizational commitment of the employees.

H4: Career development based on mutation has positive and significant effect on organizational commitment of the employees.

H5: Career development based on promotion has positive and significant effect on organizational commitment of the employees.



Description :

- Partially
- Simultaneously

Figure 1 – Conceptual Framework of the Research

METHODS OF RESEARCH

This research applied quantitative approach. This was a type of causal associative research that aimed to determine the effect of independent variables on the dependent variable. This research was conducted in banking with state-owned company status consisting of BNI, BTN, and Bank Mandiri. BRI was not included because its frontline employees were contract employees. The involved respondents of frontline employees were as many as 65 people. The distributed questionnaires were as many as 65 questionnaires which then all the questionnaires were processed to obtain the results of the respondents' answers. The variables of this research were career development which included education quoted from Adryan (2012), training from Hutagalung (2015), mutation and promotion from Hidayat (2015), and organizational commitment from Hidayat (2015).

Scaling on each variable applied a five-level scale (Likert scale) consisting of highly appropriate, appropriate, sufficient, inappropriate, and highly inappropriate. The result of reliability test of the research instrument showed that all items in the research variables were

reliable because the Cronbach's Alpha was above 0.244. Meanwhile, the result of validity test of the research instrument by using correlation technique of Pearson Product Moment showed that the items on all variables were valid because the value of t-calculate was more than 0.244. The data analysis of this research was performed by using SPSS 16 program.

RESULTS AND DISCUSSION

According to the hypotheses that have been formulated previously, multiple linear regression analysis was used to predict how much effect of career development variable consisting of education, training, mutation and promotion on organizational commitment of frontline banking employee in Mataram City.

Based on the calculation result, the regression equation was obtained as can be seen in Eq. (1):

$$Y = 7.198 + 0.45X_1 + 0.569X_2 + 0.204X_3 + 0.249X_4 \quad (1)$$

Table 1 – Output Results of Multiple Linear Regressions

Variables	Coefficient Estimate	Beta	T	Sig.
Organizational Commitment (Y)	7.198			
Education (X1)	0.45	0.224	2.186	0.033
Training (X2)	0.569	0.320	2.973	0.004
Mutation (X3)	0.204	0.233	2.421	0.019
Promotion (X4)	0.249	0.244	2.562	0.013
F Calculate	18.654			
Adjust R ²	0.525			

Based on Table 1, the adjusted R square was 0.525. It meant that career development variable including education (X1), training (X2), mutation (X3) and promotion (X4) had effect on organizational commitment (Y) as many as 52.5%. Meanwhile, the rest 100% - 52.5% = 47.5% was influenced by other factors that were not examined in this research. From the regression equation, it could be interpreted as follows:

- The regression coefficient value of 7.198 showed that if education, training, mutation and promotion in a constant condition or $X = 0$, organizational commitment of banking frontline employees in Mataram City was equal to 7.198.
- X1 (education) had the regression coefficient value of 0.45 and had positive effect on Y (organizational commitment). It meant that if the education of frontline employees was better and increased by 1 unit with the assumption that other variables were constant then it could increase the organizational commitment of frontline employee of banking sector in Mataram City as many as 0.45.
- X2 (training) had the regression coefficient value of 0.569 and had positive effect on Y (organizational commitment). It meant that if the training of frontline employees was better and increased by 1 unit with the assumption that other variables were constant then it could increase the organizational commitment of frontline employee of banking sector in Mataram City as many as 0.569.
- X3 (mutation) had the regression coefficient value of 0.204 and had positive effect on Y (organizational commitment). It meant that if the mutation of frontline employees was better and increased by 1 unit with the assumption that other variables were constant then it could increase the organizational commitment of frontline employee of banking sector in Mataram City as many as 0.204.
- X4 (promotion) had the regression coefficient value of 0.249 and had positive effect on Y (organizational commitment). It meant that if the promotion of frontline employees was better and increased by 1 unit with the assumption that other variables were constant then it could increase the organizational commitment of frontline employee of banking sector in Mataram City as many as 0.249.

The processing results of F test for the hypotheses using SPSS 16.0 application with significance level of (α) 0.05 ($n = 65$) were presented in Table 2.

Table 2 – The Results of ANOVA Output in Regression Analysis

ANOVA ^b		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	704.929	4	176.232	18.654	.000 ^a
	Residual	566.855	60	9.448		
	Total	1271.785	64			

a. Predictors: (Constant), Promotion, Education, Training, Mutation

b. Dependent Variable: Organizational Commitment

Conventional testing criteria at $\alpha = 5\% = 0.05$ with $df = k; (n-k-1) = 4; (65 - 4 - 1) = 60$ then $F\text{-table} = 2.53$ and $F\text{-calculate} = 18.654$. Due to $F\text{-calculate} > F\text{-table}$, then H_0 was rejected and H_a was accepted so that the variables of education, training, mutation, and promotion had significant effect simultaneously on organizational commitment. The test criteria used the probability of significance value = 0.000 or 0.0% less than 5% then H_0 was rejected and H_a was accepted so that the variables of education, training, mutation and promotion had significant effect on organizational commitment.

The results of t test process are presented in Table 3.

Table 3 – The Results of t-test

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	7.198	4.984		1.444	.154
Education	.450	.206	.224	2.186	.033
1 Training	.569	.191	.320	2.973	.004
Mutation	.204	.084	.233	2.421	.019
Promotion	.249	.097	.244	2.562	.013

a. Dependent Variable: Organizational Commitment

This test was conducted to determine whether or not independent variables significantly had effect on dependent variable.

- Education Variable: Conventional test criterion found that at the error level $\alpha = 0.025$ (two-tailed test) with $df = 60 (65 - 4 - 1)$, it was known that $t\text{-table} = 2.00$ and $t\text{-calculate} = 2.186$. Due to $t\text{-calculate} > t\text{-table}$, then education variable (X1) had significant effect on organizational commitment of frontline employees of banking sector in Mataram City which means that H_0 was rejected and H_a was accepted. Based on the test criterion, by looking at the probability of the significance value = 0.033 or 3.3% which was smaller than 5% then H_0 was rejected and H_a was accepted. Thus, it could be concluded that the education variable (X1) had significant effect on organizational commitment of frontline employees of banking sector in Mataram City.

- Training Variable: Conventional test criterion found that at the error level $\alpha = 0.025$ (two-tailed test) with $df = 60 (65 - 4 - 1)$, it was known that $t\text{-table} = 2.00$ and $t\text{-calculate} = 2.973$. Due to $t\text{-calculate} > t\text{-table}$, then training variable (X2) had significant effect on organizational commitment of frontline employees of banking sector in Mataram City which means that H_0 was rejected and H_a was accepted. Based on the test criterion, by looking at the probability of the significance value = 0.004 or 0.4% which was smaller than 5% then H_0 was rejected and H_a was accepted. Thus, it could be concluded that the training variable (X2) had significant effect on organizational commitment of frontline employees of banking sector in Mataram City.

- Mutation Variable: Conventional test criterion found that at the error level $\alpha = 0.025$ (two-tailed test) with $df = 60 (65 - 4 - 1)$, it was known that $t\text{-table} = 2.00$ and $t\text{-calculate} = 2.421$. Due to $t\text{-calculate} > t\text{-table}$, then mutation variable (X3) had significant effect on organizational commitment of frontline employees of banking sector in Mataram City which means that H_0 was rejected and H_a was accepted. Based on the test criterion, by looking at

the probability of the significance value = 0.019 or 1.9% which was smaller than 5% then H₀ was rejected and H_a was accepted. Thus, it could be concluded that the mutation variable (X₃) had significant effect on organizational commitment of frontline employees of banking sector in Mataram City.

- Promotion Variable: Conventional test criterion found that at the error level $\alpha = 0.025$ (two-tailed test) with $df = 60$ ($65 - 4 - 1$), it was known that $t\text{-table} = 2.00$ and $t\text{-calculate} = 2.562$. Due to $t\text{-calculate} > t\text{-table}$, then promotion variable (X₄) had significant effect on organizational commitment of frontline employees of banking sector in Mataram City which means that H₀ was rejected and H_a was accepted. Based on the test criterion, by looking at the probability of the significance value = 0.013 or 1.3% which was smaller than 5% then H₀ was rejected and H_a was accepted. Thus, it could be concluded that the promotion variable (X₄) had significant effect on organizational commitment of frontline employees of banking sector in Mataram City.

Hypothesis 1: The result of hypotheses testing showed that career development based on education, training, mutation and promotion had positive and significant effect on organizational commitment of frontline employees of banking sector in Mataram City simultaneously. It meant that the higher the employee's perception of career development (education, training, mutation, and promotion) the higher the employee's organizational commitment, and the lower the employee's perception of career development, the lower the employee's organizational commitment.

Banking companies or other organizations in Mataram City describe career development as a management strategy of human resource used to attract the talented people to be interested and willing to work and devote their competence to work for the organization. Career development is carried out so that the employees can continue to work in the organization for long periods of time or even their entire working period is devoted to the organization. Career development in such a way may have effect on employees' commitment to their career positively.

These findings were consistent with Hutagalung's (2015) research who found a direct positive effect in career development consisting of education, training, mutation and promotion on organizational commitment. In addition, Putra (2014) also found the dominant effect of career development variable consisting of education, training, mutation and promotion that had an effect on organizational commitment directly. A research conducted by Oktariandini (2015) showed a positive correlation between career development variable consisting of education, training, mutation and promotion and organizational commitment variable. This research showed the attachment of career development on commitment of 32.3%. Furthermore, Adryan (2012) found that career development based on education and training variables had more dominant effect on organizational commitment compared with mutation and promotion variables.

The proposed hypotheses, that had been proven, indicated that the perception of career development might have effect on organizational commitment of an employee to his/her company. If an employee had a positive perception to the opportunities given by the company, their commitment to the company would increase. Due to this positive perception, the employees would feel that the company provided them with opportunities to develop themselves, clear career paths, career planning and deployment at employment levels in accordance with their skills, and better job opportunities according to their ability and potential.

One of the benefits of career development is to direct employee's actions to the goals set by the company, which can lead the employees to be involved in achieving those goals. Ultimately, such engagement is also an element of organizational commitment.

Hypothesis 2: The results of hypothesis testing showed that career development based on education partially had positive and significant effect on the organizational commitment of frontline employees of banking sector in Mataram City. It meant that the higher the employee's perception of career development based on education then it would increase employee's commitment to the company and this increase occurred significantly. On the

other hand, low perception of career development based on education would significantly lead to lower organizational commitment.

Phoobe and Steband in Adryan (2012) stated that there was a positive correlation between education and the increased organizational commitment of the employees. Previous research conducted by Pratistiani (2013) found that education variables had significant effect on organizational commitment. Armawati (2016), Hidayat (2015), Hutagalung (2015), Putra (2014), Oktariandini (2015), and Subhi (2014) found direct effect of career development based on education on organizational commitment. Furthermore, Adryan (2012) found that career development based on education had dominant effect on organizational commitment.

Based on the findings of this research, it could be interpreted that if banking companies in Mataram City provide opportunities to improve the educational background of frontline employees, pay attention to educational level, adjust employee's career with their disciplines, improve their competences, and prepare frontline employees for future tasks, then it will have positive and significant effect on the organizational commitment of the frontline employees.

Hypothesis 3: The results of hypothesis testing showed that career development based on training partially had positive and significant effect on the organizational commitment of frontline employees of banking sector in Mataram City. It meant that the higher the employee's perception of career development based on training then it would increase employee's commitment to the company and this increase occurred significantly. On the other hand, low perception of career development based on training would significantly lead to lower organizational commitment.

Previous research conducted by Pratistiani (2013) found that training had significant effect on organizational commitment. Armawati (2016), Hutagalung (2015), Subhi (2014), Putra (2014), Oktariandini (2015), and Safitri (2015) found that career development based on training had effect on organizational commitment. Furthermore, Mudaim (2014) and Hidayat (2015) revealed that career development based on training played a role in increasing organizational commitment. Adryan (2012) found that career development based on training had more dominant effect on organizational commitment than other variables.

Based on the findings of this research, it could be interpreted that if the banking companies in Mataram City provide skill training to frontline employees, the suitability between the training and the implementation of the task, the ease of training process, the instructor skills and the training program that can facilitate the completion of the work, then it will have positive and significant effect on the organizational commitment of frontline employees.

Hypothesis 4: The results of hypothesis testing showed that career development based on mutation partially had positive and significant effect on the organizational commitment of frontline employees of banking sector in Mataram City. It meant that the higher the employee's perception of career development based on mutation then it would increase employee's commitment to the company and this increase occurred significantly. On the other hand, low perception of career development based on mutation would significantly lead to lower organizational commitment.

Armawati (2016), Hutagalung (2015), Putra (2014), Oktariandini (2015), and Adryan (2012) found that career development based on mutations had direct effect on organizational commitment. Furthermore, Mudaim (2014) argued that career development based on mutation or rotation played a role in increasing organizational commitment. Salindeho (2016) proved that career development based on mutation had direct and indirect effect on organizational commitment.

Based on the findings of this research, it could be interpreted that if the banking companies in Mataram City mutate the frontline employee by paying attention to the mutation period, be objective in doing the mutation, pay attention to mutation limit, pay attention to the ability or competence of the mutated employee, make the discipline level as mutation assessment, pay attention to the mutation implementation and requirements, socialize the mutation, pay attention to the assessment and justice in the mutation process, and if the employees can anticipate the mutation, then it will have positive and significant effect on the organizational commitment of the frontline employees.

Hypothesis 5: The results of hypothesis testing showed that career development based on promotion partially had positive and significant effect on the organizational commitment of frontline employees of banking sector in Mataram City. It meant that the higher the employee's perception of career development based on promotion then it would increase employee's commitment to the company and this increase occurred significantly. On the other hand, low perception of career development based on promotion would significantly lead to lower organizational commitment of the employees to the company.

Promotion conducted within the scope of the organization also plays a role in increasing organizational commitment of the employees. Armawati (2016), Hutagalung (2015), Putra (2014), Oktariandini (2015), and Adryan (2012) found direct effect of career development based on promotion on organizational commitment. Salindeho (2016) proved that career development based on promotion had direct and indirect effect on organizational commitment. That was also supported by the research findings conducted by Wibowo (2006) who stated that career development, one of which consisted of promotion, had positive and significant effect on organizational commitment. In addition, Safitri (2015) found a positive correlation between career development based on promotion and organizational commitment. Based on the findings of this research, it could be interpreted that if the banking companies in Mataram City promotes the position of the frontline employees by paying attention to the working period, competence, insurance and clear career atmosphere for frontline employees, skill, thoroughness and fairness in promotion process, it will have a positive effect and will significantly increase the organizational commitment of frontline employee.

CONCLUSION

Based on the findings of the research conducted simultaneously (thoroughly), it was found that there was a significant effect of career development based on education, training, mutation and promotion on organizational commitment of frontline employees. Partially, career development based on education had significant effect on organizational commitment, career development based on training had significant effect on organizational commitment, career development based on mutation had significant effect on organizational commitment, and career development based on promotion had significant effect on organizational commitment.

There were several limitations in this research including: this research was limited to career development variable based on education, training, mutation and promotion as well as organizational commitment variable. In addition, this research only examined the frontline employees of the banking sector without including the bank employees as a whole and this research only included 65 respondents. The next limitation of the research was the researchers only examined employees who work in the banking sector with the status of state-owned company in Mataram City. Thus, the limitations of the circumstances experienced by employees working only in those banks certainly cannot represent the condition of banking employees in Mataram City as a whole which has different policies for its employees.

Having the limitations in conducting this research, the researchers expect that future research, related to career development and organizational commitment variables, further extends the scope of the research, such as setting, population, sample, work sector and so on. It will certainly strengthen the theories and findings of previous researchers related to these variables. Furthermore, regarding to frontline employees, future researchers are expected to raise other topics or variables according to the characteristics of the employees themselves which tend to have a productive age and the majority of the employees are fresh graduates. The researcher may further extend the scope of the research object which is not limited to frontline employees but includes the entire employee position in the banking sector. In addition, future researchers can conduct comparative research that examine more in depth about career development in the banking sector by comparing career development in Private Banks with State-Owned Banks.

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**IMPROVEMENT STRATEGY OF EMPLOYEE PERFORMANCE
PT. PLN PERSERO AREA GORONTALO**

Samudra Anggi Marchilina*, Maarif Ir Syamsul, Affandi Joko

School of business, Bogor Agricultural University

*E-mail: anggiemarchelina03@gmail.com

ABSTRACT

Every year, the demand for electricity in Gorontalo keeps on increasing, thus requiring PT. PLN (Persero) to always improve the performance of their employees for the company to continue to grow. However, in the year 2016-2017, a decrease in performance was shown at PT. PLN (Persero) Area Gorontalo. Based on these facts, this study wanted to observe the influence of leadership and job satisfaction on employee performance and what strategies are done to improve employee performance in PT. PLN (Persero) Area Gorontalo. The method used in this study is Structural Equation Model (SEM) method with Partial Least Squares (PLS) approach using SmartPLS software and Analytic Hierarchy Process (AHP) method using Expert Choice 11 software. The result of this research shows that leadership style have a significant effect on employee satisfaction but has no significant effect on employee performance, and job satisfaction have a significant effect on employee performance. Then, the proper strategy formulation in order to improve performance is to improve employee prosperity, increase employee competence through employee education and training, improve performance monitoring and evaluation, improve leadership style, and adjustment of employee recruitment.

KEY WORDS

Leadership style, job satisfaction, employee performance, improvement performance

The company needs qualified Human Resources (HR) to run the company's operations properly. Terry (2006) says that humans are the most important and decisive element, the maker of goals and the process actors to achieve the goal, in the absence of human no work process, and an activity always associated with human labor. Therefore it is very important for a company to ensure an improvement in the company's HR performance. Companies that have a very important role and impact for the people of Indonesia is one of the companies incorporated in SOEs. One of the companies incorporated in SOEs is a company engaged in electrical services, namely PT. PLN (Persero), has many branches area in all regions in Indonesia and one of them is PT.

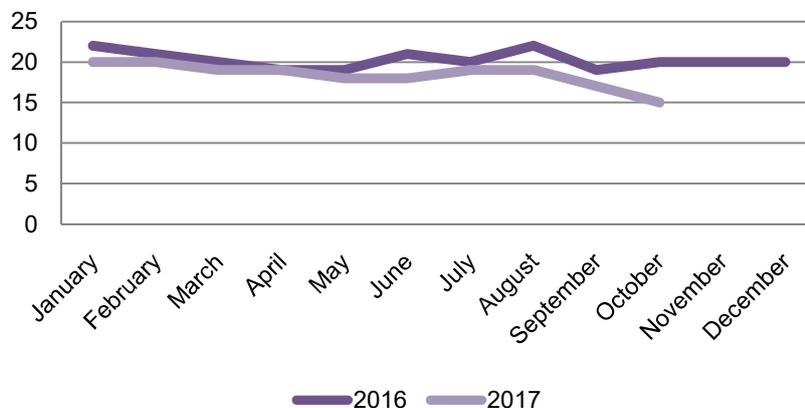


Figure 1 – Graph of performance realization report 2016-2017

PLN Area Gorontalo. PT. PLN Area Gorontalo is a PLN Service and Network Area that serves the Special Province of Gorontalo, is under the Main Unit of PLN of Region Suluttenggo. Overall PLN Area Gorontalo served by four Rayon namely, Rayon Telaga, Rayon Limboto, Rayon Kwandang, and Rayon Marisa. Every year, the electricity demand in Gorontalo keeps increasing, causing the company to be increasingly demanded to always improve the performance of employees so that the company can keep growing and getting better. But if we look at the performance of PT. PLN (Persero) Area Gorontalo, in the year 2016-2017, showed a decrease in performance realization achieved as illustrated in the following figure 1.

Figure 1 shows that there is a decrease in performance indicators achieved. From a total of 23 indicators, the achievement of network performance achieved has decreased. The fact above shows that there is a decrease in performance at PT. PLN (Persero) Area Gorontalo. Based on these facts, researchers do pre-research to be able to determine exactly what factors affect the decline in performance within the company's environment. From the results of pre-research, shows the factors that dominate as a cause of employee performance decline that is leadership style and job satisfaction. Based on the above facts, this research would like to see the influence of leadership style and job satisfaction on employee performance, and recommendation of what strategy is right to improve employee performance in PT. PLN (Persero) Area Gorontalo.

LITERATURE REVIEW

Employee Performance. Performance is the result or success rate of a person as a whole over a period of time in carrying out the tasks compared to possible possibilities, such as predetermined standards of work, targets or goals or predetermined criteria (Rivai 2005). According Mangkunegaran (2005) performance (work performance) is the work of quality achieved by an employee in performing their duties in accordance with the responsibilities given. Based on several notions of performance, can be said that the performance is the success of a job obtained or achieved someone in fulfilling their duties and responsibilities to achieve corporate goals.

Employee performance indicators according to Barnard, are as follows:

- Effectiveness and Efficiency. The effectiveness of an organization if the goals of an organization can be achieved in accordance with the planned needs, the efficiency associated with the amount of sacrifices incurred in achieving the goal.
- Authority and Responsibility. In this case the authority is the authority that someone has to govern others (subordinates) to perform tasks assigned to each subordinate within an organization. Responsibility is an inseparable part or as a result of the ownership of such authority. If there is a meaningful authority it automatically arises responsibility.
- Discipline. Discipline when obeying applicable laws and regulations. Employee discipline as the employee's obedience in respecting the employment agreement in which the employee works.
- Initiative. One's initiative is related to thinking power, creativity in the form of ideas for something related to organizational goals. Each reverse initiative gets the attention or positive response from the boss.

Leadership Style. Nawawi (2006) explains that leadership is the ability to convince others to achieve goals enthusiastically through effective cooperation.

Nawawi also explains the leadership function is directly related to the social situation in the life of each group which implies that every leader is inside, not outside the situation. Leaders must strive to be part of the social situation of the group or organization.

According to Nawawi, operational leadership can be divided into five main functions, namely:

- Intruktif function, the leader functions as a communicator determining what (the content of the command), how (how to do the command), when (start time, carry out, report the results), and where (where do the command) so that decisions can be

realized effectively, so the function of the person being led is simply executing the command.

- Consultative functions, leaders can use the consultative function as a two-way communication. It is used when the leader in an effort to determine decisions that require consideration and consult with the people he leads.
- Function Participation, in running the function of participation, leaders try to activate the people he leads, both in making decisions and in implementing them. Each member of the group has the same opportunity to participate in carrying out the activities outlined in the main tasks, according to their respective positions.
- Delegate function, in performing delegation functions, the leader delegates authority to make or make decisions. The function of the delegate is actually the trust of a leader to a person who is entrusted to delegation of authority by carrying it out responsibly. The function of this delegation must be realized because the progress and development of the group can not be realized by a single leader.
- Control Functions, control functions assume that effective leadership must be able to manage the activities of its members in a direction and in effective coordination, so as to enable the achievement of the goal together maximally. In carrying out the control function, the leader can realize through guidance, direction, coordination, and supervision activities.

Job Satisfaction. Job satisfaction is a pleasant or unpleasant emotional state in which employees perceive their work. Job satisfaction reflects one's feelings toward one's work. This appears in the employee's positive attitude towards work and everything faced in his workplace (Sunyoto, 2012). According to Robbins (2006), job satisfaction refers to the general attitude of an individual to his work. A person with a high level of job satisfaction shows a positive attitude towards the job, someone who is not satisfied with his job shows a negative attitude towards the job.

There are five determinants of job satisfaction called job descriptive index, namely:

- The work itself. The rate at which a job provides fun tasks, learning opportunities, and opportunities to gain responsibility.
- Salary. Job satisfaction is a function of the absolute amount of salary received, the degree to which the salary meets the expectations of the workforce, and how the salary is given.
- Opportunity or promotion. Employees have the opportunity to develop themselves and expand work experience, with the opening of opportunities for promotion.
- Supervisor. The ability of supervisors to provide technical assistance and support behavior. Functional relationships and positive overall relationships provide the greatest level of job satisfaction with superiors.
- Coworkers. Basic human needs for social relationships and fulfilled by co-workers who support employees. If there is a conflict with colleagues, it will affect the level of employee satisfaction with the job.
- System administration and company policy (Mangkunegara, 2005)

METHODS OF RESEARCH

This research was conducted by taking research setting at PT. PLN Area Gorontalo. The data collection was conducted since February until March 2018. The respondents of this research were all employees of the PT. PLN Area Gorontalo. The method used in the selection of respondents was census method. The number of respondents in research was 158 employees.

Research begins by analyzing the leadership style, job satisfaction, and employee performance in PT. PLN (Persero) Area Gorontalo based on respondent's opinion. Further testing is done to measure the influence of leadership style on employee performance and job satisfaction. Tests are also conducted to measure the effect of job satisfaction on employee performance. Measurement of influence on both variables was done by using

structural equation modeling (SEM). After that, formulation of strategy will be formulated in order to improve employee performance by using AHP method. By using AHP, employee performance improvement strategy issues will be clearly identified. The results of the analysis are then used as the basis for recommendations for PT. PLN (Persero) Area Gorontalo related to employee performance. The framework of this study can be seen in Figure 2 below:

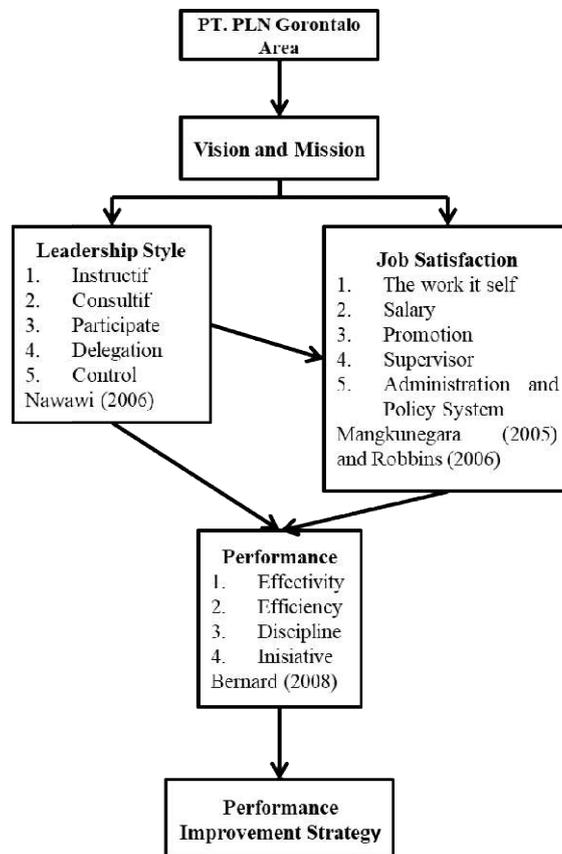


Figure 2 – Conceptual Framework

RESULTS AND DISCUSSION

General description of respondents describes the characteristics of respondents in this study. This research uses questionnaire distribution method at PT. PLN (Persero) Area Gorontalo to find out how much influence the leadership style and job satisfaction on employee performance. A total of 158 questionnaires were distributed with respondent characteristics including gender, age, duration of work, and last education. Here is an explanation of each respondent's characteristics.

Observations made through the questionnaire obtained the result that the majority of employees are men with percentage 76.1% and women by 23.9%. According to Anwar (2005) states that the gender effect on employee productivity. PT. PLN is a company that for most of its work requires more male labor than women. Therefore, adjustment in recruitment is very important to be done to adjust the company's need for labor.

The identity of respondents is explained by age, the dominance of respondents is at the age of 20-30 years or 82 percent. This shows that PT. PLN Area Gorontalo has employees in the productive age category so as to facilitate the individual to improve its performance, because it is needed by companies that are looking to grow and maximize the potential of its employees.

Characteristics of respondents then seen from how long employees work in organizations or institutions, the results show that most respondents with a working period of

<5 years of 59 percent. This is understandable because the majority of PT. PLN Area Gorontalo is a young person or fresh graduate. Seeing from the old work that is still fairly new to prove that the lack of experience work most employees. However, because the age of the majority of employees is productive age, it can be overcome by increasing the procurement of employee education and training for employee performance PT. PLN (Persero) Area Gorontalo can increase.

Characteristics of respondents viewed from the level of education, where the level of education in general to become the basis of organization or management to be an important factor to recruit prospective employees in this case is the employee of PT. PLN (Persero) Area Gorontalo. the results showed that most of the respondents had the last education level of Strata 1 (S1) ie 42 percent, then SMA 33 percent and last D3 by 25 percent. This shows the diversity of educational levels that can be an evaluation for the company.

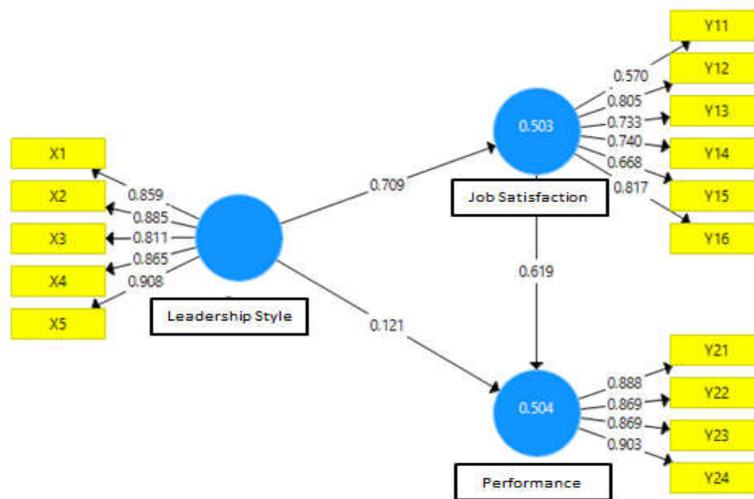


Figure 3 – Processing Results Model

The value that connects the latent variable to the indicator is the value of the loading factor, which is used to test the validity. If the value is > 0.7 or the value > 0.4 and the value of AVE > 0.5, it can be said that the i-th indicator is valid. So, according to Figure 3, there are some indicators of job satisfaction variable <0.7, therefore checking the AVE value as shown in Table 1 below.

Table 1 – AVE Value

n/n	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Leadership Style	0.916	0.919	0.937	0.750
Job Satisfaction	0.818	0.830	0.869	0.528
Employee Performance	0.905	0.907	0.934	0.779

Based on table 1, even though its loading factor value is <0.7, it produces AVE value >0.5 so it can be considered all indicators are valid. In addition, Test Reliability can be performed with Outer model. Reliability is how far a question can minimize the diversity of answers. Reliability in SEM PLS can be determined by looking at the value of Cronbach's Alpha or Composite Reliability. Both values are greater than 0.7 indicating that the model is reliable.

From the result of measurement of leadership variable in figure 3 shows that indicator X5 (control) has the highest value equal to 0.908, it can be said that the leader's controlling style to subordinate in job problem and also coordination and monitoring the implementation of work is important and well-valued and have big influence in the assessment employees.

For job satisfaction variable can be seen in Figure 3, indicator Y16 (system administration and company policy) has the highest value equal to 0.817. It can be said that

the administrative system and company policy is the indicator that most explain the variable of job satisfaction, and judged good by employees.

The latter results show that good performance will create an increase in employee initiatives, responsibilities, and discipline. As in Figure 3, that variable Y24 (initiative) has a high value, that is equal to 0.903. That is, the most influential indicator in improving performance is to increase employee initiative in their work.

Table 2 – Correlation of variables

n/n	Leadership Style	Job Satisfaction	Employee Performance
Leadership Style	1.000	0.709	0.560
Job Satisfaction	0.709	1.000	0.705
Employee Performance	0.560	0.705	1.000

The size of a strong relationship has a correlation of > 0.5. Thus, the model created has a fairly strong relationship between variables.

Table 3 – Diversity explained by model viewed from r-square value

n/n	R Square	R Square Adjusted
Job Satisfaction	0.503	0.500
Employee Performance	0.504	0.498

From the value of R-square above, it means leadership style able to explain the diversity of job satisfaction of 50.3%, while the remaining 49.7% can be explained by other variables outside of the studied. Then job satisfaction and leadership style can explain the diversity of employee performance of 50.4%, while the remaining 49.6% can be explained by other variables outside of the studied. For ordinal data, this R-square is sufficient.

By looking at the value of path coefficient, can be seen direct influence between variables. The coefficient shows how much change in the response variable if there is a change in the independent variable. The positive coefficient value indicates a direct relationship between the two variables. While the negative coefficient value shows the opposite relationship between the two variables involved.

Table 4 – Correlation of variables

n/n	Leadership Style	Job Satisfaction	Employee Performance
Leadership Style		0.709	0.121
Job Satisfaction	-	-	0.619
Employee Performance	-	-	-

That is, the three variables have a positive relationship. Seen if the direct influence of leadership style on employee performance is very small, it will be seen indirect influence of leadership style variable on employee performance.

Table 4 – Correlation of variables

n/n	Leadership Style	Job Satisfaction	Employee Performance
Leadership Style	-	-	0.439
Job Satisfaction	-	-	-
Employee Performance	-	-	-

This value is quite large, so it can be said leadership style indirectly influence (through job satisfaction).

Hypothesis testing. Hypothesis testing is conducted to answer the research objectives:

- H0: The i variable has no significant effect on the response;
- H1: The i-variable has a significant effect on the response;
- H0 rejected when p-value <0,05 or thit> 1,96.

Leadership style has a significant effect on job satisfaction because the value of t arithmetic > 1.96 or p-value <0.05. The results showed that leadership had a significant

positive effect on job satisfaction, which means that the better the leadership, the employee satisfaction will increase

Leadership style has no significant effect on employee performance. This suggests that leadership styles do not have a direct effect on performance, but the style of leadership gives an indirect effect on employee performance through job satisfaction.

Job satisfaction has a significant effect on employee performance. This indicates that the higher the employee job satisfaction, the employee performance will increase.

Test Results AHP Analysis. Preparation of AHP hierarchy compiled and distributed to some respondents who are considered as experts. The respondents numbered eight experts who included among others; two lecturers of tbsp from IPB university, three heads of tbd from state-owned company, three tbsp experts and policy makers in PT. PLN Area Gorontalo. Based on the results of data processing using Software Expert Choice 11, it can be seen the structure of research hierarchy and its scores as shown in Figure 3.

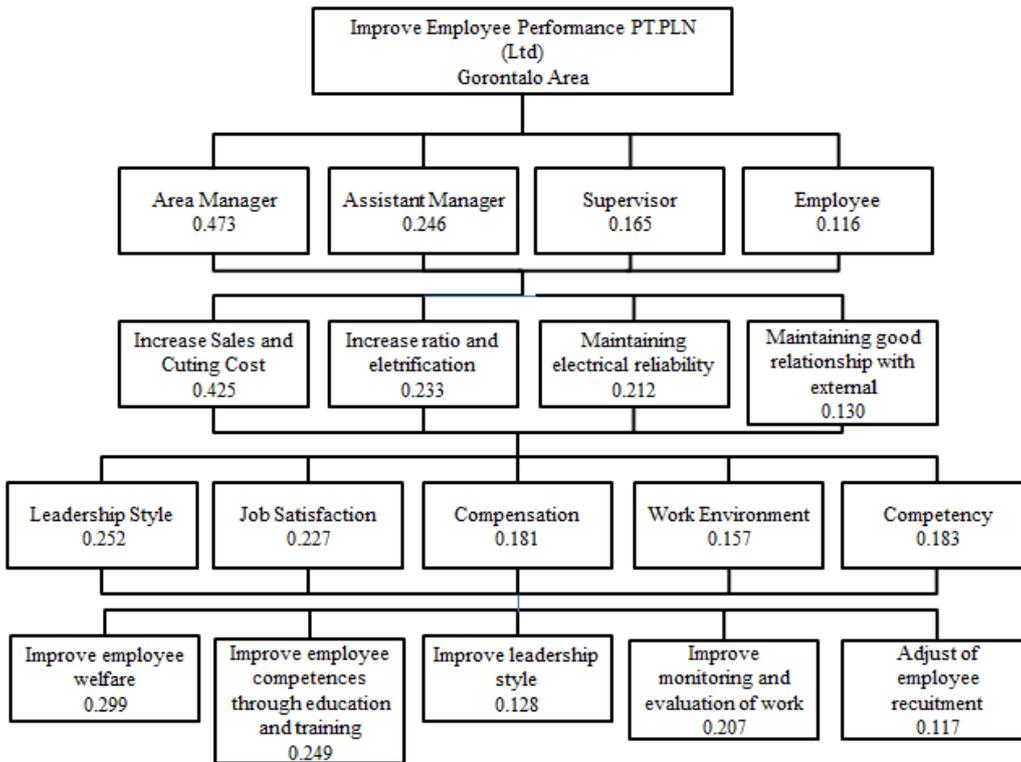


Figure 3 – AHP Analysis Results

Based on the result of synthesis of weight assessment conducted, indicating that the most important strategy and become the main priority in order to improve the performance of employees of PT. PLN Area Gorontalo, is increasing employee well-being (0.299), improving employee competence through employee education and training (0.249), improving monitoring and performance evaluation (0.207), improving leadership style (0.128), and adjusting employee recruitment (0.117) as shown in Figure 3.

Managerial Implications. Based on the results of research then some things that need to be considered by PT. PLN (Persero) Area Gorontalo is:

- Leaders should be more focused and effective in regulating the activities of members in accordance with jobdesk;
- Leaders conduct regular guidance, direction, and supervisory activities to employees;
- Increase employee competence through training and education;
- Company management conducts regular FGD activities involving leaders and employees;
- Improve work monitoring and evaluation.

CONCLUSION

The results of this study indicate that leadership style has a significant effect on job satisfaction, but no significant effect on performance, because it has indirect influence through job satisfaction, then job satisfaction has a significant effect on performance. Meanwhile, to improve employee performance PT. PLN. The Gorontalo area, an alternative strategy that can be done is improving employee welfare, improving employee competency through employee education and training, improving performance monitoring and evaluation, improving leadership style, and adjusting employee recruitment.

RECOMMENDATIONS

Subsequent research, it is advisable to use ANP analysis tools (analytical network process), and review from different factors such as motivation, discipline and others, and not limited by existing structures and also expand the object of research.

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THE EFFECT OF INFORMATION TECHNOLOGY USAGE ON THE RELATIONSHIP BETWEEN BUDGET PLANNING, HUMAN RESOURCES COMPETENCY AND BUDGETARY IMPLEMENTATION AT STATE UNIVERSITY IN BALI, INDONESIA

**Verawati Ni Made Adhika*, Wirakusuma Made Gede,
Putri Igam Asri Dwija, Suputra Idg Dharma**

Master's Program of Accounting, Faculty of Economics and Business,
University of Udayana, Indonesia

*E-mail: adhika.verawati@gmail.com

ABSTRACT

Absorption of the budget is often used as a benchmark in performance appraisal, so budget absorption is very important to be noticed by the government. This study aims to test empirically about the influence of budget planning, human resource competence, on the ability of budget absorption at Udayana University with the use of information technology included as a moderation variable. This study us primary data, data collected by using the instrument in the form of questionnaire. The sampling method in this study used saturated sampling (census) where all members of the population were sampled. The number of samples in this study was 116 respondents. Data analysis technique using Regression Moderation Analysis. The results of data analysis showed that the use of information technology can strengthen the influence of budget planning on the ability of budget absorption at Udayana University and the use of information technology can strengthen the influence of human resource competence on the ability of budget absorption at Udayana University.

KEY WORDS

Budget absorption ability, budget planning, human resource competenncy, information technology usage.

Budgeting is a financial plan of all activities of a systematically organized organization expressed in monetary units for a certain period. Budgeting can be used as control tool, because budget has function as planning of an organization. The budget can also serve as a benchmark for the government's performance appraisal in moving the economy, so that budget absorption is very important to be noticed by the government. The existence of problems in the realization of the budget will adversely affect the economy in the region. The problem of poor economy can be seen from the budget absorption rate (Mahendra et al, 2017).

Timely and scheduled budget absorption can help development and have an impact on the rate of economic growth. The phenomenon of low budget absorption becomes an interesting issue in government circles. The issue is often found in some government agencies that show that the low budget absorption rate at the beginning of the year and will accumulate at the end of the year. Low absorption of the budget is considered to contribute to the quality of public services and difficulties in achieving economic growth targets (Burhan, et al., 2015). The slow absorption of the budget which causes high budget absorption rate in the second semester will cause the risk of state financial accountability, such as imposing unnecessary activities, weakness of activity planning, and decreasing quality of activity implementation (BPKP, 2012). The amount of budget absorption in the second half, indicating the number of completion of activities that accumulate at the end of the fiscal year, which will cause the impact of not optimal output will be generated.

The President of the Republic of Indonesia in his speech revealed that based on the latest data obtained in June 2016, there is a value of Rp. 214 trillion funding of all APBD which is still settled and not yet used. President Joko Widodo instructed all regional leaders to immediately absorb the budget. Based on the report of the Ministry of Finance, the absorption of K / L budget up to the first semester of 2016 budgetary disbursement reached

only Rp 262,815.5 billion or 34.2% of the state budget in 2016. On different occasions President Joko Widodo confirmed the absorption of the budget is not good, will result in funds not quickly channeled to the community and not channeled to the regional economic system, so that beneficiaries can not enjoy the development or other economic benefits of the fund in a timely manner.

Ministry of Finance (MoF) reported, budget absorption in the first half of 2016 in 30 ministries / state institutions are low. Based on the report, the budget absorption is divided into three groups, namely: a. high; b. medium; and c. groups with low budget absorption. Mentioned, as many as 41 K / L into the high budget absorption group that is 34.2% and above; 16 K / L has moderate absorption (27.5% - 34.2%); and 30 K / L has a low absorption (less than 27.5%). The Ministry of Research, Technology and Higher Education is included in the medium budget absorption group, with a budget absorption rate of 33.5%.

Udayana University is one of the State Universities (PTN) which is one of the working units from the Ministry of Research Technology and Higher Education (Kemendiknas). Udayana University is also one of the Public Service Bodies that have applied the Financial System of Public Service Agency (BLU) which has officially obtained full BLU status on December 27, 2011 based on Decree of Minister of Finance no. 441 / KMK.05 / 2011. Based on Government Regulation of the Republic of Indonesia No. 23 of 2005 which explains that BLU has flexibility in financial management based on economic principles and productivity, and the implementation of sound business practices, making Udayana University has flexibility in financial management. Of the total budget owned by Udayana University in 2017 of Rp. 693,200,470,000, the total budget realization is only 92.07% or Rp. 638.232.078.421. Budget absorption is in the first semester of only 28.19% or Rp. 188.139.213.231. The number shows that the budget absorption rate at Udayana University accumulates at the end of the fiscal year, which indicates the number of completion activities in the second semester. In addition, the percentage of Udayana University's budget absorption at the end of the year shows the percentage that has not reached 100% level. The low absorption of the budget can be interpreted as not yet optimal budget expenditure when compared with the target budget (Fahlevi and Ananta, 2015).

The budget absorption at Udayana University should receive serious attention so that Udayana University can improve the quality of lecturers and the quality of education. One form of quality improvement is by following international accreditation to strengthen and expand cooperation in the field of higher education between countries and to ensure the input, process and outcome of the program study is in accordance with the standards that should exist at a college. The absorption of a good budget signifies the implementation of the program of activities in accordance with the planning that has been set.

Planning is very important in the success of an activity or program undertaken. If the implementation of the activity is already in accordance with what is planned, then it is expected to produce more targeted output. Weak budget planning makes budgets already approved in the Budget Implementation List (DIPA) to be revised, which takes extra time in the process of budgeting so that it will result in a delay in the budget absorption process.

In addition to budget planning, the competence of human resources is also a factor that can cause delays in budget absorption. Competence of human resources can be a determinant in the success of an activity. The competence of human resources that can be seen from the level of professionalism in work will help the effectiveness in generating high budget absorption. Different results of research on budget planning and human resource competence affect the budget absorption expressed by Yumiati (2016), which states that planning has a negative effect on budget uptake. The inconsistency of the research results is also revealed by Priatno (2013) which states that the human resource factor has an insignificant influence on budget absorption.

To resolve differences from various research results, it can be done using a contingency approach (Govindarajan, 1986). Brownell (1982) examines some studies and finds a conditional influence as a moderating variable on the relationship between independent variables and dependent variables. Conditional factors can be grouped into four variables, namely: culture, organizational, interpersonal, and individual. Another factor that allegedly interacted influenced variable of budget planning and human resource competence

to budget absorption ability is the use of information technology. Technology is a tool that can be used to accomplish tasks more quickly. The obligation to utilize information technology by the Government is regulated in Government Regulation Number 56 Year 2005 regarding Regional Financial Information System which is a substitute of Government Regulation Number 11 Year 2001 regarding Regional Financial Information. Wilkinson et al. (2000), stated that information technology includes computers (mainframe, mini, micro), software, database, network (internet, intranet), electronic commerce, and other types related to technology. The use of information technology to make the work more efficient, because it can accelerate the completion of work and output will be generated will be more accurate and consistent.

Based on the above description, the authors are interested in conducting research on the absorption of the budget at Udayana University, entitled "The Effect Of Information Technology Usage On The Relationship Between Budget Planning, Human Resources Competency And Budgetary Implementation At State University In Bali, Indonesia".

LITERATURE REVIEW

Goal-Setting Theory. The Goal-Setting Theory implies that an individual is committed to a goal (Robbins, 2015: 137). Goal setting theory explains that there is an attachment between the purpose and performance of a person to the task it has. The goals set by a person, will determine how much commitment a person has in performing to achieve that goal. The organization that has set its goals, in this case a good budget planning, then the organization can more easily manget achieve target in accordance with what has been predetermined.

Based on the goal-setting theory approach the success of budget absorption is a goal to be achieved, while the commitment that will affect its performance to achieve these goals can be influenced by variable budget planning, human resource competence and the use of information technology. The existence of budget planning, good human resource competence, and supported by the use of information technology, will create sufficient information that can improve understanding of budget goals so as to create the possibility to achieve goals better.

Contingency Approach. To resolve the differences due to inconsistency of the results of the study, a contingent approach (Govindarajan, 1986) is required. There are several studies that have found conflicting results regarding the relationship between budget planning and human resource competence with the ability to absorb an organization's budget. So to resolve the difference of findings can be done by taking a contingency approach. The interaction between the ability of budget absorption and budget planning, human resource competence and information technology, can be explained by the contingency approach. The contingency approach in this study explains that budget planning and human resource competence in budget absorption will depend on a particular condition, in example the use of information technology.

Budgeting. Halim and Damayanti (2007) states that the budget is information or statement about the plan or policy of finance of an organization or business entity for a certain period of time estimates of revenues and expenditures of the State which is expected to occur in a certain period. The public sector budget contains a document describing the financial condition of an organization that includes information on revenue, expense and activity budgets. The budget contains an estimate of what the organization will do in the future. Budget for the public sector is very important because it is a tool to achieve the goal in order to provide services to the public or people whose purpose is to improve public services and welfare community.

Budget Absorption Rate. According to Kuncoro (2013) the budget absorption rate statesmeasures how far the target plan has been achieved by the agency. Measurement of budget absorption is done by calculating the proportion / percentage of budget amount realized in one budget year to the budget amount (Noviwijaya & Rohman, 2013). Simply budget absorption can be interpreted as a comparison between budget and realization. Budget absorption, particularly goods and services spending, has a significant effect in

driving economic growth. The earlier the implementation of its activities, will provide benefits and great stimulus effects for the benefit of society (Lestari, 2016). For that every government agency should manage its expenses to run smoothly and can support the successful achievement of national development targets. Public performance will be assessed based on the budget absorption rate. Performance appraisal is done by analyzing the difference or difference between actual and budgeted performance (Mardiasmo, 2009: 123). Measurement of budget absorption is done by calculating the proportion / percentage of total budget that has been realized in one budget year to the amount of budget ceiling (Noviwijaya and Rohman, 2013). Timely budget absorption will result in proportionate absorption, meaning that the relative absorption of the budget meets an almost equal percentage in each period with a proportionate budget absorption target of 25% per quarter.

Budget Planning. Ridhotullah and Jauhar (2015) stated that planning is to think about what to do with the resources they have. According to Notoatmodjo (2003: 14) planning is the core of management because all relevant organizational activities are based on the plan. Budget is a tool of planning as well as government control. Inadequate budget planning will have an impact on the ineffectiveness of the work program, because it is not aligned between budget planning and work program to be implemented so that it becomes one of the factors low level of budget absorption.

Competence of Human Resources. Within the organization human resources are the key to achieving organizational goals. Therefore, human resource management should be done as well as possible in order to contribute maximally to the organization. Without good and qualified human resources, an organization with good goals and sophisticated facilities and infrastructure will find it difficult to achieve its goals (Harsono, 2011).

According to Grote (in Pramudyo, 2010: 35), competence can be used to predict the performance, ie who performs well and less well depending on the competence it has, measured by the criteria or standards used. So it can be concluded that competence is the knowledge (knowledge), skill (skill) and attitude (attitude) owned by a staff or leadership that can affect their performance or other tasks effectively and efficiently or in accordance with predetermined standards. In good local financial management, the organizational unit must have quality human resources, supported by educational background, often attended education and training and have experience in finance (Wansyah et al., 2012). This supports the results of Kamukama et al. (2010) stating that human capital (education, experience, skills, attitudes, creativity) has a significant positive effect on the financial performance of microfinance institutions in Uganda.

Use of Information Technology. Information technology includes computers (mainframe, mini, micro), software (software), databases, networks (internet, intranet), electronic commerce, and other types related to technology (Wilkinson et al., 2000). The use of information technology will play a role in decision making in an organization, so that decisions can be taken more quickly. The use of a computer that is one part of information technology will help in the completion of work, when compared to using the manual way, the computer will produce a much faster performance and can reduce the errors that occur, so the data produced more accurate. Today, the development of information technology is not only used in business organizations but also in public sector organizations, including governments. By utilizing information technology in budget absorption can help the government to make the budget absorption premises faster, so as to further enhance economic growth. The existence of information systems will also produce a more practical report, because by using the resulting report system can integrate with each other. It also helps top management to monitor the extent to which budget uptake has been done. It can be viewed at any time using a system.

Information Technology Moderates the Effect of Budget Planning on the Ability of Budget Absorption. Based on Goal-Setting Theory which states that an individual who is committed to achieving his goal, the commitment will affect his actions and the consequences of his work. Based on this theory an individual will determine the purpose for his behavior in the future, and that goal will have an effect on the behavior of the individual (Arthana, et al., 2016). Individuals who want to achieve the goal in this case is the absorption of high budget, then the individual must be able to formulate the right strategy that is by doing

a good budget planning supported by information technology, so that planning documents and budget execution can be executed in a timely manner. This means that budget planning and budget management by utilizing information technology will have a positive impact on the accuracy / accuracy of the results / performance of an organization. Research Winidyanigrum (2010), Yudianta (2012), Nuryanto & Nunuy (2012), Yuliarta (2013), Walker & Andrews (2013), Indriasih & Poppy (2014), Bhuiyan et al. (2015), and Suwanda (2015) who found that information technology / information systems have a positive influence on financial performance / budget absorption.

H₁: Information Technology strengthens the influence of Budget Planning on Budget Absorption at Udayana University

Information Technology Moderates the Effect of Human Resource Competence (HR) On Ability Absorption Budget. Based on Goal-Setting Theory, the individual must have good ability in his efforts to achieve the goals set. Goal-Setting Theory aims to improve efficiency and effectiveness by specifying the expected outcomes in which individuals, groups and organizations work (Siagian, 2004: 1919). In implementing the maximum budget absorption objectives, an organization requires human resources that have the ability in budget management, so that the economic benefits of the budget can be received well. Human resources have a very important role to manage an organization, so that an organization requires resources that have competence in the field (Iskandar, 2015). The involvement of qualified individuals in the absorption of the budget makes it more understandable about what targets will be achieved, and how the effort achievement using resources owned, then the targets prepared can be in accordance with the targets to be achieved. This can be strengthened if the human resources can apply information technology to absorb its budget. By using information technology, these resources can work faster, because information technology can integrate and store all information in a databank. The use of information technology can help human resources in organizational strategic planning (Panca, 2005).

Research Hullah (2012), Arthur (1995), Delaney & Huselid (1996), Herryanto (2012), Nuryanto & Nunuy (2012), Gomes et al. (2013), Walker & Andrews (2013), Mamogale (2014), Indriasih & Poppy (2014) and Zarinah et al. (2016), empirically proves that the quality of human resources has a positive influence on the reliability of financial reporting / financial performance / organizational performance / budget absorption.

H₂: Information Technology strengthens the influence of Human Resource Competencies on Budget Absorption at Udayana University.

METHODS OF RESEARCH

This research use primary data, data collected by using instrument of questionnaire, related to budget absorption at Udayana University. Respondents in this study were Budget Management Officials of Fiscal Year 2018 that existed within Udayana University, which consisted of the Signing Officers of Paying Letters (PPSPM), Committing Officers (KDP), Bureau of Disbursements (BPP) and members of BPP. The determination of these officials as a population is based on the consideration that these officials are officials at all levels directly involved in financial management, both from planning activities to budget absorption.

The questionnaire of this research using the likert scale 1 through 5. Likert scale is used in order to facilitate the respondents to choose alternative answers. Population in this study amounted to 116 officials budget managers. The sample of this study used a saturated sampling technique, in which all members of the population were sampled. For the sample in this study amounted to 116 officials budget managers. However, based on the number of questionnaires sent to the respondents, only 112 returned and complete questionnaires.

Before performing the analysis, first classic assumption tests such as normality and heteroscedasticity tests are performed. In addition, tested the validity and reliability. Hypothesis testing performed by doing moderation regression test (MRA) with equation formula as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 (X_1 \cdot X_3) + \beta_5 (X_2 \cdot X_3) + e$$

Where: Y = Budget Absorption; A = Constant; $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = Regression coefficient; X_1 = Budget Planning; X_2 = Human resources competency; X_3 = Usage of information technology; E = Error Term.

Operationalization of Variables:

Dependent variable. Dependent variable of this research is Budget Absorption ability. The dependent variable was measured by the questionnaire adopted from Monik Zarinah's research (2015). This dependent variable uses four indicators using four indicators, namely: (1) Comparison of budget realization with budget absorption targets, (2) Realization for each semester, (3) Consistency in program / activity implementation, (4) Timeliness / monthly absorption schedule.

Independent variables. Independent variable in this research is Budget Planning and Human Resource Competence. Budget planning was measured using a modified questionnaire from Monik Zarinah's research (2015). Budget planning variables use indicators: participation, data accuracy, accuracy of RKA-KL approval, approaches and instruments in budget preparation, planning and needs, resolutions or changes. The competence of human resources was measured using a modified questionnaire from Farida Mony research (2012). The competency variable of human resource use 5 indicators are: knowledge, integrity, skill, self concept, and attitude.

Moderating variables. The moderation variable in this research is the use of Information Technology. This moderation variable was measured by a questionnaire adopted from Arfianti research (2011). This moderasi variable uses four indicators, namely: (1) Computerized accounting process, (2) Software as per law, (3) Integrated accounting and managerial report, (4) Software application integrated.

RESULTS AND DISCUSSION

Instrument Data. This study uses a unit of analysis in the form of perceptions of respondents on the variables studied. The analysis conducted using answers from respondents as many as 116 questionnaires. Questionnaires are distributed to existing budget managers within the Udayana University. The rate of return of the questionnaire is shown in Table 1.

Table 1 – Data of Instrument Retrieval

No.	Keterangan	Total
1	Distributed questionnaires	116
2	Questionnaires did not return	4
3	Questionnaires returned and used	112

Usability response rate 96.55%

Source: Data processed (2018)

Table 1 shows that the questionnaires were sent as many as 116 questionnaires. The questionnaire returned as many as 112 questionnaires or equal (96.55%). Respondents used in this research are among others budget officials in Udayana University.

Characteristics of Respondent. Characteristics of respondents of this study were gender, age of respondent, last education level, educational background, years of service and training participation. In the characteristics of sex, shows that women dominate the proportion of sample of budget management officials in Udayana University. Characteristics of the respondent's age indicate the level of maturity and emotional level of an individual. Based on existing data, officials of budget managers in Udayana University are dominated by employees who have enough maturity level in decision making from the age side. Based on the characteristics of the last level of education, indicates that the officials of budget managers in the University of Udayanan is dominated by graduate degree. Judging from the characteristics of educational background, it shows that the respondents are dominated by budget management officials with non-economic and non-accounting background. Characteristics based on the respondent's working period, indicating that the respondent is dominated by budget management officials who have relatively long work experience.

Table 2 – Respondent Characteristics

Explanation	Measurement	Total Respondent	Percentage
Gender	Man	49	43,8%
	Woman	63	56,2%
	Total	112	100%
Age	20 – 29 years	17	15,2%
	30 – 39 years	34	30,4%
	40 – 49 years	24	21,4%
	≥ 50 years	37	33,0%
	Total	112	100%
Level Of Education	SLTA/SMA	14	12,5%
	Diploma	5	4,5%
	S1	57	50,9%
	S2	12	10,7%
	S3	24	21,4%
	Total	112	100%
Education Background	Accounting	34	30,4%
	Management	12	10,7%
	Economic Development	2	1,8%
	Others	64	57,1%
	Total	112	100%
Years Of Service	< 5 years	30	26,8%
	5 – 10 years	21	18,7%
	> 10 years	61	54,5%
	Total	112	100%
Participation In Training	Never Followed	24	21,4%
	Has never been	88	78,6%
	Total	112	100%

Source: data processed (2018).

Table 3 – Validity Test

No	Variable	Indicator	Correlation Coefficient	Explanation
1	Budget Planning (X1)	X1.1	0,899	Valid
		X1.2	0,934	Valid
		X1.3	0,88	Valid
		X1.4	0,875	Valid
		X1.5	0,876	Valid
		X1.6	0,898	Valid
		X1.7	0,879	Valid
		X1.8	0,933	Valid
		X1.9	0,853	Valid
		X1.10	0,947	Valid
		X1.11	0,927	Valid
		X1.12	0,888	Valid
2	Human Resource Competency (X2)	X1.1	0,845	Valid
		X2.2	0,937	Valid
		X2.3	0,94	Valid
		X2.4	0,931	Valid
		X2.5	0,895	Valid
		X2.6	0,891	Valid
		X2.7	0,940	Valid
		X2.8	0,902	Valid
		X2.9	0,937	Valid
		X2.10	0,888	Valid
		X2.11	0,937	Valid
		X2.12	0,924	Valid
		X2.13	0,911	Valid
		X2.14	0,934	Valid
X2.15	0,887	Valid		
X2.16	0,858	Valid		
X2.17	0,949	Valid		
X2.18	0,939	Valid		
3	Information Technology Usage (X3)	X3.1	0,914	Valid
		X3.2	0,912	Valid
		X3.3	0,953	Valid
		X3.4	0,916	Valid
		X3.5	0,928	Valid
		X3.6	0,922	Valid
		X3.7	0,906	Valid
		X3.8	0,926	Valid
4	Budget Absorption Ability (Y)	Y.1	0,895	Valid
		Y.2	0,896	Valid
		Y.3	0,902	Valid
		Y.4	0,933	Valid
		Y.5	0,879	Valid
		Y.6	0,875	Valid
		Y.7	0,902	Valid
		Y.8	0,925	Valid

Source: data processed (2018).

Based on the characteristics of participation in the training, shows that the respondents are dominated by budget management officials who have never followed the budget management training. The characteristics of respondents who participated in this study are shown in Table 2.

Validity Test. Validity test is done to measure the validity of a questionnaire. Validity test in this research use correlation coefficient between score where correlation must be positive and value $> 0,3$. Recapitulation of validity test results from each item of statement is presented in table 3.

Based on the instrument validity test results in Table 3 shows the overall correlation coefficient has a value higher than 0.3. For it can be concluded that the research instrument is valid.

Reliability Test. Reliability Reliability test is done to test the consistency of respondents' answers to the whole item statement used. A questionnaire is said to be reliable or reliable if a person's response to the statement is consistent or stable from time to time. Test reliability in this study using Cronbach Alpha, if the coefiesien Cronbach Alpha > 0.70 then the instrument can be said reliable or reliable (Ghozali, 2013).

Table 4 – Reliability Test

Variable	Cronbach Alpha	Explanation
Budget Planning (X_1)	0,978	Reliabel
Human Resources Competency (X_2)	0,988	Reliabel
Information Technology Usage (X_3)	0,974	Reliabel
Budget Absorption Ability (Y)	0,963	Reliabel

Source: data processed (2018).

Based on the results of the reliability test in Table 5.4 shows that all variables have Cronbach Alpha value greater than 0.70. So it can be concluded that the instrument used in this study has qualified reliability.

Normality Test. Normality test aims to test whether in the regression model, disruptive or residual variables have a normal distribution. In this study the normality test is done by using the Kolmogorov-Smirnov test. A data is said to have a normal distribution if the value of Asymp. Sig. (2-tailed) greater than 0,05.

Table 5 – Normality Test

	Unstandardized Residual
N	112
Kolmogorov-Smirnov Z	0,065
Asymp. Sig. (2-tailed)	0,200

Source: data processed (2018).

Based on Table 5, the value of Asimp. Sig (2-tailed) of the normality test is 0.200 greater than $\alpha = 0.05$. This means that the variables used in the study have been normally distributed.

Heteroscedasticity Test. The heteroscedasticity test aims to test whether in the regression model there is a variance inequality of the residual one observation to another observation (Ghozali, 2013). Heteroskedastisitas can be known through Glesjer test, that is by regressing the residual absolute value of the model estimated against the independent variable. If the probability significance of each independent variable > 0.05 , it can be concluded there is no heteroscedasticity in the regression model (Ghozali, 2013: 142).

Table 6 – Heteroscedasticity Test

Variabel	T	Sig
Budget Planning(X_1)	0,527	0,599
Human Resource Competency (X_2)	-0,416	0,678
Information Technology Usage (X_3)	1,328	0,187

Source: data processed (2018).

Based on the heteroscedasticity test in Table 6, it shows that there are no independent variables that significantly influence the Absolute Residual bound variable (Absres). This is indicated by the significant value of 0,599 for the variable of budget planning, 0,678 for the competence variable of human resource and 0,187 for the variable of the use of information technology. All values are greater than alpha ($\alpha = 0,05$), so it can be concluded that the regression model found no symptoms of heteroscedasticity.

Descriptive statistics. Descriptive statistics in this study are presented to provide information about the characteristics of research variables. Descriptive statistics in this study are presented to provide information about the characteristics of research variables, including the minimum value, maximum value, mean value and standard deviation. Descriptive statistical test results are presented in Table 7.

Table 7 – Descriptive statistics

Variable	N	Minimum	Maksimum	Mean	Std. Dev
Budget Planning (X_1)	112	24,00	60,00	45,7054	9,29074
Human Resource Competency (X_2)	112	38,00	90,00	57,7054	14,01649
Information Technology Usage (X_3)	112	16,00	40,00	29,8393	6,67057
Budget Absorption Ability (Y)	112	16,00	38,00	30,6339	6,12188
Valid N (listwise)	112				

Source: data processed (2018).

Based on the test results in Table 7, it can be seen that the average value of respondents' assessment of budget planning is 45.7054 which shows the classification of high budget planning. The average assessment of the respondents to the competence of human resources is 57.7054 which show the classification of human resource competence is quite high. Meanwhile, the average assessment of respondents to the use of information technology is 29.8393 which show the classification of the use of high information technology. The average assessment of the respondents to the ability of budget absorption is 30.6339 which show the classification of the ability of high budget absorption.

Regression Result. Hypothesis test using moderation regression test model (MRA) by looking at t test result. Interaction test is done to test the interaction of independent and dependent variables and moderation variables. The model of the moderation regression equation to be tested is as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 (X_1.X_3) + \beta_5 (X_2.X_3) + e$$

$$Y = 31,846 + 0,016X_1 - 0,358X_2 - 0,387X_3 + 0,008X_1*X_3 + 0,009X_2*X_3 + \varepsilon$$

Where: Y = Budget Absorption; A = Constant; $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ = Regression coefficient; X_1 = Budgeting; X_2 = Human resources competency; X_3 = Usage of information technology; E = Error Term.

Table 8 – Moderating Regression Analysis

Variable	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	31,846	3,786		8,411	0,000
Budget Planning(X_1)	0,016	0,062	0,024	0,258	0,797
Human Resource Competency (X_2)	-0,358	0,043	-0,821	-8,251	0,000
Information Technology Usage (X_3)	-0,387	0,206	-0,414	-1,882	0,063
X_1*X_3	0,008	0,004	0,497	2,367	0,020
X_2*X_3	0,009	0,002	0,290	4,333	0,000
F	190,446				
Sig F	0,000				
R Square	0,900				
Adjusted R Square	0,895				

Source: data processed (2018).

The model feasibility test shown in the F value is 190,446 with the level with significant 0.000 less than 0.05 ($\alpha = 5$ percent), which means the research model used is feasible to use. Adjusted R Square value of 0.895 means that the ability of budget absorption in

Udayana University can be explained by the variable of budget planning and human resource competence 89,5% while the rest 10,5% is explained by other variable not included in research model.

Based on hypothesis test result shown at t-test value for interaction variable of budget planning and use of information technology equal to 2,367 and level of significance 0,020 bigger than $\alpha = 0,05$ and has positive regression coefficient equal to 0,008. This means that the variable use of information technology strengthens the influence of budget planning on the ability of budget absorption at Udayana University. Hence the hypothesis H1 is accepted. The results of this study support the results of research conducted by Winidyanigrum (2010), Yudianta (2012), Nuryanto & Nunuy (2012), Yuliarta (2013), Andriani (2013), Walker & Andrews (2013), Indriasih & Poppy (2014) Bhuiyan et al. (2015), Suwanda (2015) and Pratikyo (2016) who found that information technology / information systems have a positive influence on financial performance / budget absorption.

Meanwhile, hypothesis test results are shown on the t-test for the interaction of human resource competence variables and the use of information technology of 4.333 and the significance level of 0.000 is greater than $\alpha = 0.05$ and has a positive regression coefficient of 0.009. It means that the variable use information technology strengthens the influence of human resource competencies on the ability of budget absorption at Udayana University. Hence the hypothesis H2 is accepted. The results of this study support the results of research conducted by Arthur (1995), Delaney & Huselid (1996), Herriyanto (2012), Hullah (2012), Nuryanto & Nunuy (2012), Gomes et al. (2013), Walker & Andrews (2013), Mamogale (2014), Indriasih & Poppy (2014) and Zarinah et al. (2016) who found that the quality of human resources and the utilization of information technology has a positive influence on financial performance / organizational performance / budget absorption / financial reporting reliability.

CONCLUSION

The use of information technology strengthens the influence of budget planning on the ability of budget absorption at Udayana University. This means that the better the budget planning is supported by the high ability of the use of information technology, the higher the ability of budget absorption in Udayana University.

The use of information technology strengthens the influence of human resource competence on the ability of budget absorption at Udayana University. This means that the higher the competence of human resources is supported by the high ability of the use of information technology, the higher the ability of budget absorption in Udayana University.

Based on research results and research conclusions, it can be submitted suggestions as follows:

- Preparation of the budget to be done more carefully again for budget planning that is prepared in accordance with the needs and appropriate time.
- Udayana University to be more selective again in the placement of human resources in the financial management. Based on the characteristics of respondents as much as 57, 14% of respondents who have non-economic and non-accounting education background. The part of the financial manager should have sufficient knowledge so that it can work more quickly and on time. The competence of human resources can also be enhanced by frequent training in the field of state finance.
- Increased budget absorption is also supported by the use of reliable information technology. Udayana University should strengthen human resources through education and training as system operator and budget implementer so that can be improved again.
- The absorption of the budget in Udayana University tends to be large in the second half, indicating the number of completion activities that accumulate at the end of the fiscal year, which will have an unoptimal impact on the output to be generated.

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**THE EFFECT OF INTELLECTUAL INTELLIGENCE, EMOTIONAL INTELLIGENCE,
SPIRITUAL INTELLIGENCE AND TYPES OF ACCOUNTANT PROFESSIONS
AT ETHICAL ATTITUDES OF MASTER ACCOUNTING STUDENTS**

Jatmika Luh Asri*, Sukartha I Made

Master Program of Accounting, Faculty of Economics and Business,
University of Udayana, Indonesia

*E-mail: asriloeh@gmail.com

ABSTRACT

The purpose of this study to provide empirical evidence about the influence of intellectual intelligence, emotional intelligence, spiritual intelligence, and the type of accounting profession on the ethical attitude of master accounting student. Sampling using sample saturated with total sample counted 130 responders. Hypothesis testing tool used is multiple linear regression analysis. The result of research proves that intellectual intelligence and emotional intelligence have an effect on the ethical attitude of accounting master student, which means that the higher intellectual intelligence and emotional intelligence of the students, the better the ethical attitude of the students. The results of this study also shows the spiritual intelligence and accountant profession type does not affect the ethical attitude of master accounting student, this is due to the many factors outside the spiritual intelligence and the type of accounting profession that influence ethical attitudes and able to exclude the influence of spiritual intelligence and accounting profession types of ethical attitude of accounting master student.

KEY WORDS

Intellectual intelligence, emotional intelligence, spiritual intelligence, accountant profession type, ethical attitude.

Ethical attitude is the basic thing that already exists in human, because of the basic environment of every human family interact and form a basic attitude in accordance with the environment. The human developmental gap from child to adult goes through a long phase and one of is the formation of attitudes.

Master accounting students get education norms and ethics contained in the environment lectures. These ethical values will influence him in making a decision to do something good or bad, and create a good standard of self in society. Student of master accounting degree as an accountant has ethical attitudes gained during college and work experience.

Development of ethical attitudes on master accounting students through education that sharpens intellectual intelligence, emotional intelligence, and spiritual intelligence so that learners are not only smart in the science of accounting but also in behaving. Intellectual intelligence, emotional intelligence, spiritual intelligence relate to the theory of planned behavior which says that humans tend to act with the intention and perception of control through certain behaviors. The intention is influenced by attitude, subjective norm, and behavior control. Application of a balanced curriculum between intellectual intelligence, emotional intelligence, spiritual intelligence is expected to occur a positive change for the enforcement of professional ethics of accountants in Indonesia. (Nasirwan, 2011).

Intellectual intelligence is the ability to adapt to new needs, using the tools of thought that are appropriate to the purpose (Purwanto, 2003). Based on research by (Jamaluddin & Indriasari, 2011), (Lucyanda, 2013) and (Wardana & Mimba, 2016) the more intelligence someone, it will encourages them to behave ethically

Emotional intelligence as the ability to sense, understand and effectively apply emotional power and sensitivity as a source of human energy, information, connections and influence (Ayman, Sawaf, and Cooper Robert, 1998). Based on a study by (Shahhosseini,

Daud Silong, & Nak Uli, 2012), (Ika, 2011), (Dewanto & Nurhayati, 2009)) high levels of emotional intelligence have a positive impact to manage their own emotions.

(Pasiak, 2002) states that spiritual intelligence transcends the present and human experience, and is the innermost and most important part of human. Based on research by (Wardana & Mimba, 2016), (Trihandini, 2005), (Chakraborty & Chakraborty, 2004) spiritual intelligence encourages a person to be ethical because of the calm and confidence in dealing with the problem certain attitude and behavior will be controlled.

The employment background of the master accounting student contributes to the process of developing ethical attitudes that are pointed out in their daily lives. The work experience in accounting masters as an accountant is based on accountant ethics in the form of accountant code of ethics. Accountant profession except the public accountant has not yet formulated its code of ethics but based on IFAC's fundamental ethical principles an accountant must have integrity, objectivity, professional competence, and caution, confidentiality, professional behavior (Fitri & Utami, 2006).

The International Federation of Accountants defines the accounting profession as all occupational fields employing accounting skills, including the work of public accountants, management accountants working in industrial, financial or trade firms, accountants working in government, and accountants as educators.

Master accounting student make ethics an important part of their curriculum. They must adhere to the ethics and codes of conduct applicable to the world of accounting. This research is done to master accounting student because they are accountants who have worked in various profession accountant. Master accounting students who already have knowledge in accounting and also ethics at bachelor degree are expected to apply it well in the business world. The same fundamental principles of ethics and educational background are one of the factors influencing the ethical attitude of the accounting master student.

LITERATURE REVIEW

Theory of planned behavior. Ajzen developed a theory which is a refinement of the reason action theory proposed by Ajzen and Fishbein, in 1975. Discussion of the theory of planned behavior is the same as the theory of reason action which is the intention of individuals to perform certain behaviors. Intense can see the motivation factors that affect behavior. Reason action theory says there are two determinants of intention: personal attitudes and subjective norms.

The attitude was originally defined as a condition for the emergence of an action. The concept then develops more broadly and illustrates a tendency to consistently respond favorably or unpleasantly to an object, this tendency being the result of learning, not innate or offspring. Factors that influence the formation of attitudes include internal factors including gender, age, education, emotional, and external factors that include mass media, educational institutions, religious institutions, jobs and society (Azwar, 2005)

The attitude structure is divided into three mutually supporting components according to (Secord & Backman, 1964) that is cognitive component is a component of knowledge which will form certain belief and opinion about attitude object, affective component is component that related with feeling of pleasure or displeasure, it can be said related to individual emotional states so that it is evaluative. This component is closely related to the value system adopted by the attitude, and the conative component is a component of attitude in the form of a person's readiness to behave related to the attitude object.

Ethics. Ethics derived from the Greek is "Ethos", which means the character of morality or custom. Ethics is usually closely related to the moral word which is a Latin term, "Mos" and in its plural form "Mores", which also means a custom or a person's way of life by doing good deeds (morality) and avoiding action the bad. (Ward, Ward, & Deck, 1993) state that ethics includes a complex determination process of what a person needs to do in a particular situation characterized by the combination of the experience and learning of each individual.

Ethics as a moral teaching is generally not written. But for a professional organization (eg accountants, doctors, lawyers), ethical attitudes are set forth in written rules called codes

of ethics. The code of ethics is designed to serve as a rule of ethical conduct for members of the profession aimed at maintaining the reputation and trust of the community so that the profession can still exist and survive.

The accounting profession has the responsibility to act in the public interest. This Code of Professional Accountants is an adoption of the Handbook of the Code of Ethics for Professional Accountants 2016 Edition issued by the International Ethics Standards Board for Accountants of the International Federation of Accountants (IESBA-IFAC). In the process of drafting, IAI (Indonesian Institute of Accountants) coordinates with the Indonesian Institute of Certified Public Accountants (IAPI) and the Indonesian Institute of Management Accountants (IAMI) in accordance with the Memorandum of Understanding between IAI, IAPI and IAMI on the cooperation of professional development of accountants in Indonesia. Ethical Principles in the IAI Code of Ethics consist of five, namely Integrity, Objectivity, Competence and Prudence Professional Confidentiality, Professional Behavior.

Intellectual intelligence. (Zakiah, 2013) mentions intellectual intelligence is a person's ability to acquire knowledge, master and apply it in the face of problems experienced by students. The intellectual intelligence possessed by each individual can be the basis of control in behaving. Intellectual intelligence still affects the mindset of a student, because intellectual intelligence is the first intelligence developed that can make a student think rationally to learn to account and understand it. Aspects of Intellectual Intelligence include problem-solving skills, verbal intelligence, practical intelligence.

Emotional intelligence. (Goleman, 2000) defines emotional intelligence as the ability to recognize the feelings of oneself and the feelings of others, motivate oneself, and manage emotions well on oneself and in relationships with others. Emotional intelligence requires a person to learn to recognize, appreciate the feelings of self and others and respond appropriately and effectively apply emotional energy in everyday life. Emotional intelligence to benchmark the ability of individual emotional control in influencing attitudes and behavior (Jogiyanto, 2007). Aspects of emotional intelligence include self-awareness, self-regulation, motivation, empathy, social skills.

Spiritual intelligence. Spiritual intelligence is more related to the enlightenment of the soul. People who have high spiritual intelligence is able to make sense of life by giving a positive meaning to every event, problem, even the suffering that happened. By giving a positive meaning will be able to raise the soul and do positive actions and actions. Sufficient spiritual intelligence is a contributing factor in the control of individual behaviors in accordance with objective attitudes and norms prevailing in the environment. Individuals with good spiritual intelligence have more controlled attitudes and behaviors than those with poor spiritual intelligence. Aspects of spiritual intelligence include the ability to be flexible, high self-awareness, ability to deal with and utilize suffering, ability to deal with and overcome pain, reluctance to cause unnecessary loss, quality of life, holistic views, tendency to ask questions. ability to position oneself.

Types of accountant professions. The international federation of accountants defines the accounting profession as all occupational fields employing accounting expertise, including the field of public accountant work, management accountants working in industrial, financial or trade firms, accountants working in government, and accountants as an educator.

METHODS OF RESEARCH

The population of this research is the students of Master Accounting Program which amounts to 140 students. In this study used the total sampling method. Sources of data using the primary data in this study obtained from qualitative data from the distribution of questionnaires to the master accounting students as respondent. Independent variables in this study are intellectual intelligence, emotional intelligence, spiritual intelligence and different types of the accounting profession. The dependent variable in this study is the ethical attitude of master accounting students. The determination of the value of the different types of accounting profession (JP) is $N = 5$, the category that can be used is $5-1 = 4$ (Sugianto, 2000).

Description of the determination of JP value as follows:

- JP1 = 1 if the profession is a public accountant, if not 0;
- JP2 = 1 if the profession is a management accountant, if not 0;
- JP3 = 1 if profession as educator accountant, if not 0;
- JP4 = 1 if the profession is a government accountant, if not 0.

The data collection in this study used questionnaires adopted from the Ethical Ethics Principles of IAI, (Robins & Judge, 2008), (Goleman, 2009) and (Zohar, D. dan Marshall, 2005) using 5 rating scale.

Data analysis on data that has been collected includes descriptive statistics, classical assumption test, and multiple regression analysis. Regression model in this research is expressed as follows:

$$SE = \alpha + \beta_1KI + \beta_2KE + \beta_3KS + \beta_4JP_1 + \beta_4JP_2 + \beta_4JP_3 + \beta_4JP_4 + e \quad (1)$$

Where:

- SE: Ethical Attitude;
- α : Constants;
- β : Regression Coefficient;
- KI: Intellectual Intelligence;
- KE: Emotional Intelligence;
- KS: Spiritual Intelligence;
- JP₁: Public Accounting Profession;
- JP₂: Professional Management Accountant;
- JP₃: Professional Accountant Educator;
- JP₄: Government Accounting Profession;
- e: error term.

The hypothesis in this research formulated as follows:

- H1: Intellectual intelligence positively affects the ethical attitude of master accounting students;
- H2: Emotional intelligence positively affects the ethical attitude of master accounting students;
- H3: Spiritual intelligence positively affects the ethical attitude of master accounting students;
- H4: Different types of accounting professions have a positive effect on the ethical attitude of master accounting students.

RESULTS OF STUDY

Based on the result of instrument test, consisting of validity and reliability test, it is obtained that all statements have coefficient more than 0.3 so that all instruments are valid. For the reliability test, all research instruments are declared reliable because each statement item has a reliability coefficient greater than the value of Cronbach alpha 0.6. This suggests that such measurements can provide consistent results when re-measurement of the same subject matter.

The questionnaires were distributed as many as 140 questionnaires, which were returned as many as 140 questionnaires and were worthy of use as many as 130 questionnaires, due to complete and qualified fill. The results of the calculation of the data obtained shows the return rate of respondents (response rate) of 100 percent and the return rate that can be analyzed (useable response rate) of 93 percent.

Statistic descriptive. Variables of intellectual intelligence (KI) are represented by 10 statements and each statement is measured on a scale of 1-5. Descriptive statistical results in Table 1 shows the value of the assessment of respondent responses to intellectual intelligence (X1) is high, this can be seen from the total average score indicators on

intellectual intelligence variable of 4.01. The highest average score for intellectual intelligence variables was 4, 01 on the indicator of practical intelligence ability.

The emotional intelligence variable (X2) is represented by 23 statements and each statement is measured on a scale of 1-5. Rating of respondent emotional intelligence (X2) is high, this can be seen from the total average score indicator on the emotional intelligence variable of 3.90. The highest average score of the emotional intelligence variable was 3.97 on the self-motivating ability indicator.

The spiritual intelligence variable (X3) is represented by 18 statements and each statement is measured on a scale of 1-5. Assessment of respondent answers to spiritual intelligence (X3) is high this can be seen from the total average score indicator on Spiritual Intelligence variable of 3.98. The highest average score of the spiritual intelligence variables is 4.14 on the quality of life indicator.

The student ethical attitude variable (Y) is represented by 29 statements and each statement is measured on a scale of 1-5. Assessment of respondent answers to student ethical attitude (Y) is high this can be seen from the total average score indicator on student ethical attitudes of 4.10.

Table 1 – Statistic Descriptive

Variable	Indicator	Score
Intellectual Intelligence (X1)	a. Problem-solving skills	3,99
	b. The ability of verbal intelligence	4,00
	c. The ability of practical intelligence	4,01
	Mean KI (X1)	4,01
Emotional intelligence (X2)	a. The ability to recognize oneself	3,96
	b. Self-control	3,87
	c. Self-motivating ability	3,97
	d. Ability to empathize	3,82
	e. Social skills	3,89
	Mean KE (X2)	3,90
Spiritual Intelligence (X3)	a. Be flexible	3,88
	b. Self-awareness	4,08
	c. Facing and exploiting the suffering	4,06
	d. Faced and overcome the pain	3,78
	e. Reluctance to cause harm	3,86
	f. Quality of life	4,14
	g. A holistic view	3,95
	h. The tendency to ask questions	4,01
	i. Ability to position oneself	3,76
	Mean KS (X3)	3,98
Student Ethical Attitudes (Y)	a. Integrity	4,09
	b. Objectivity	4,12
	c. Competence and caution	4,03
	d. Confidentiality	4,14
	e. Behavior of professionalism	4,18
	Mean SE (Y)	4,10

Classic assumption test. Normality test results can be seen in Table 2 which shows the coefficient of Asymp. Sig (2-tailed) of 0.20 is greater than 0.05. This means that the data in this study is normally distributed.

Table 2 – Normality Test

n/n	<i>Unstandardized Residual</i>
N	130
Kolmogorov-Smirnov Z	0,059
Asymp. Sig. (2-tailed)	0,20

Multicollinearity Test based on Table 3, it is known that the tolerance value of each variable is greater than 10% or 0.1 and the VIF value of each variable is also smaller than 10. This indicates that the regression does not occur in multicollinearity symptoms.

Table 3 – Multicollinearity Test

Variable	Tolerance	Variance Inflation Factor (VIF)
KI	0,730	1,371
KE	0,676	1,480
KS	0,812	1,231
JP ¹	0,487	2,053
JP ²	0,562	1,779
JP ³	0,579	1,727
JP ⁴	0,553	1,807

The result of heteroscedasticity test in Table 4 shows that the value of Sig. each independent variable is above 0.05 so it can be concluded that the regression model used does not contain symptoms of heteroscedasticity.

Table 4 – Heteroscedasticity Test

Variable	Sig.	Status
KI	0,775	Non heteroscedasticity
KE	0,797	Non heteroscedasticity
KS	0,110	Non heteroscedasticity
JP ¹	0,655	Non heteroscedasticity
JP ²	0,059	Non heteroscedasticity
JP ³	0,534	Non heteroscedasticity
JP ⁴	0,803	Non heteroscedasticity

Multiple Linear Regression Analysis. Based on Table 5, the result of adjusted R Square of 0.322 means 32.2% variation in acceptance of ethical attitude of master accounting student can be explained by variation from intellectual intelligence variable, emotional intelligence, spiritual intelligence, and accountant profession type. While the rest of 67.8 percent influenced by other factors not described in the model.

Table 5 – Results of Coefficient of Determination (Adjusted R²)

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	0,599	0,359	0,322	1.190.609

Table 6 – F Test Testing

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	9.686.134	7	1.383.733	9.761	0,000
	Residual	17.294.096	122	141.755		
	Total	26.980.229	129			

Table 6 – Results of Multiple Linear Regressions

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	45,844	8,802		5,208	0,000		
KI	1,048	0,189	0,471	5,551	0,000	0,730	1,371
KE	0,266	0,100	0,235	2,663	0,009	0,676	1,480
KS	-0,148	0,115	-0,104	-1,288	0,200	0,812	1,231
JP ₁	-2,584	3,289	-0,082	-0,786	0,434	0,487	2,053
JP ₂	-3,196	3,534	-0,087	-0,904	0,368	0,562	1,779
JP ₃	-1,449	3,729	-0,037	-0,389	0,698	0,579	1,727
JP ₄	1,418	3,562	0,039	0,398	0,691	0,553	1,807

Table 6 shows the F test testing the independent variables (KI, KE, KS, JP) that simultaneously have an influence on the dependent variable (SE). The value of significance $F = 0,000 < \alpha = 0.05$. This means that the model used in this study is feasible (fit).

Multiple linear regression model is used to analyze the influence of each variable of intellectual intelligence, emotional intelligence, spiritual intelligence, and type of accounting profession on the ethical attitude of master accounting students with the help of SPSS program.

The results of multiple linear regression analysis are presented as follows:

$$SE = 45,844 + 1,0481KI + 0,266KE - 0,148KS - 2,5848JP_1 - 3,196JP_2 - 1,449JP_3 + 1,418JP_4$$

The regression coefficient of KI variable is 1.048. Coefficient marked positive and significant means if the variable of intellectual intelligence increase one unit and other variable is considered constant then variable of ethical attitude of master accounting student increase.

KE variable regression coefficient is 0,266. Coefficients marked positive and significant means if the emotional intelligence variable increases one unit and other variables are considered constant then the ethical attitude variable of master accounting students increases.

The regression coefficient of KS variable is -0.148. Coefficient marked negative and insignificant meaning if the variable of spiritual intelligence increase one unit and other variable is considered constant hence variable of student's ethical attitude is not change.

The regression coefficient of variable JP_1 equal to -2,584. Coefficient marked negative and insignificant meaning if variables of profession type of public accountant increase one unit and another variable is considered constant hence variable of the ethical attitude of accounting student does not change.

The regression coefficient of variable JP_2 is -3.196. Coefficient marked negative and insignificant meaning if variables type of management accountant profession increased one unit and other variables are considered constant then the variable ethical attitude of accounting students did not change.

The regression coefficient of variable JP_3 equal to -1,449. Coefficient marked negative and insignificant meaning if a variant of profession type of educator accountant increases one unit and another variable is considered constant hence variable of the ethical attitude of accounting student does not change.

The regression coefficient of variables JP_4 is 1.418. Coefficient marked positive and insignificant meaning if variables of government accountant profession type increase one unit and other variable is considered constant hence variable of the ethical attitude of accounting student do not change.

The test results of the influence of each independent variable (X1, X2, X3, X4) on the dependent variable (Y) are as follows:

1. The influence of intellectual intelligence on the accounting student's ethical attitude shows that the significance value $t = 0,000 < \alpha = 0.05$ then the intellectual intelligence variable positively influences the ethical attitude of the accounting student, the first hypothesis (H1) is acceptable;
2. The Influence of Emotional Intelligence on Ethical Attitudes of Accounting Students The results showed that the significant value $t = 0.009 < \alpha = 0.05$ then the emotional intelligence variable positively influences the ethical attitude of accounting students, then the second hypothesis (H2) is acceptable;
3. Effect of Spiritual Intelligence on Student Ethical Attitudes Accounting research results show that significant value $t = 0.200 > \alpha = 0.05$, then the variable of spiritual intelligence does not positively affect the ethical attitude of accounting students, then the third hypothesis (H3) can be rejected;
4. The Influence of Accountant Profession Type on Ethical Attitudes of Accounting Student:

- the result of research indicate that significant value $t = 0,434 > \alpha = 0,05$, hence variable of the type of Profession of Public Accountant does not have a positive effect on accountant ethical attitude of the ethical attitude of accounting students;
- The results showed that significant value $t = 0.368 > \alpha = 0.05$, then variable Type Professional Accountant Management does not positively affect the ethical attitude of accounting students;
- The results showed that significant value $t = 0.698 > \alpha = 0.05$, then variables Type Professional Accountant Educators have no positive effect on the ethical attitude of accounting students;
- The results showed that the significant value $t = 0.691 > \alpha = 0.05$, then the variable Type of Professional Accountant Government has no positive effect on the ethical attitude of accounting students;
- The results showed that the significant value $t = 0.492 > \alpha = 0.05$, then the variables Other Accountants Professional type does not positively affect the ethical attitude of accounting students.

The fourth hypothesis (H4) can be rejected.

DISCUSSION OF RESULTS

Based on Theory planned behavior (TPB) that in conducting the behavior for every individual, it has a perception of beliefs that control it. The intellectual intelligence possessed by each individual can be the basis of control in behaving. The intellectual intelligence that also affects the cognitive component of the attitude forming process that is knowledge, will form certain beliefs and opinions about the object of attitude, including ethical attitudes.

The ability owned by the students that related to intellectual intelligence is able to give confidence to students in behaving in accordance with the attitude and subjective norm prevailing in the environment. In terms of student accounting environments, the intellectual intelligence of each student will provide the confidence drive to be ethical that is indeed needed in the world of accounting.

Based on the research that has been done, the intellectual intelligence of master accounting students is able to make students to understand problems, speak good, show curiosity in various problems, know how to achieve problem-solving which will shape the ethical attitude of master accounting students. So that master accounting students can develop intelligence capabilities that are based on the accountant's ethical code in living the profession as an accountant.

Theory of planning behavior (TPB) has a control of perceived behavior. Each individual has different behavior controls in accordance with his belief in what he considers to control. Emotional intelligence is also an affective component in the formation of attitudes that related to feelings of pleasure or displeasure and is closely related to the value system held by the attitude owner. It's relationship with the value system adopted by the attitude owner. Emotional intelligence is a benchmark for the individual's emotional control ability in influencing his attitude and behavior

Emotional intelligence is a benchmark for the individual's emotional control ability in influencing his attitude and behavior. This means that emotional intelligence affects the ethical attitude of master accounting students because it improves self-control ability, stimulates perseverance, and can self-motivate the students themselves.

Based on the research that has been done then the emotional intelligence of master accounting students can improve the ability to recognize feelings, reach and evoke feelings to help the mind, understand feelings and meaning, and control feelings deeply so that helps the development of emotions, and thus will form an ethical attitude on accounting student. So that master accounting students can develop emotional control on the ethical attitude which is based on accountant ethics code in a profession as an accountant.

Based on Theory planned behavior (TPB) that in doing a behavior every individual has a perception of beliefs that control it. Sufficient spiritual intelligence is a contributing factor in the control of individual behaviors in accordance with objective attitudes and norms

prevailing in the environment. Good spiritual intelligence control in the students will affect the student's ethical attitude, because with the calm and confidence in facing problems in learning will lead the students to remain ethical in solving them.

Based on the research that has been done spiritual intelligence has no effect on the ethical attitude can be seen from the respondent's lowest-valued response on spiritual intelligence variables, that is "when in a debate, I'd rather succumb though my opinion is better" which refers to the aspect of holistic view. This aspect indicates that master accounting student are less able to see the problem by only looking from one side, and less considering other sides. While the responses of respondents on ethical attitude variables, showed respondents have a fairly high response in using moral judgment and professional judgment. So, it can be concluded that the high or low self-holistic thinking in facing a problem, does not affect the holistic view in the world of work in other words this research shows the high or low spiritual intelligence does not affect the ethical attitude of master accounting students who work as accountants.

Professional ethics is a characteristic of a profession that distinguishes a profession from another profession, which serves to regulate the behavior of its members (Murtanto and Marini, 2003). In theory ethical profession (code of ethics) owned by the accounting profession, there are rules that become the foundation for the existence of the accounting profession. The code of ethics is designed to serve as a rule of ethical conduct for members of the profession aimed at maintaining the reputation and trust of the community so that the profession can still exist and survive. So that master accounting students who have a profession as an accountant has a good ethical attitude, because it is accustomed to carry out the work in accordance with the ethical standards of accountants is the code of ethics of accountants.

Based on the research that has been done, the types of accounting professions consisting of public accountants, management accountants, accountant educators, and government accountants have no effect on the ethical attitude of master accounting students. Experience in the world of work that refers to the ethical code of accounting profession and business ethics courses and professions that have been taken by master accounting student in the process of studying at the level of bachelor degree and master degree does not encourage the influence of ethical attitudes in the background of students who work as accountants. The number of factors outside the type of accounting profession that influences the individual student life like work environment, and work culture in each workplace, so that any type of accounting profession does not affect the ethical attitude of the students.

CONCLUSION

Based on the results of the analysis and discussion of research results, it can be concluded that intellectual intelligence and emotional intelligence affect the ethical attitude of master accounting students, while spiritual intelligence and different types of accounting professions have no effect on the ethical attitude of master accounting students.

Based on the conclusions, it can be given advice for master accounting students to be given courses ethics in the realm of accounting education that emphasizes the graduation of intellectual ability, emotional ability without ignoring the spiritual ability and emphasis code of accountant ethics can also be reasserted in the learning process of master accounting students, to be used simultaneously and conscious as a professional accountant.

Adding other variables such as social intelligence, organizational experience, and environmental circumstances may also affect an individual's ethical attitude. In addition, there are other variables that are expected to influence ethical attitudes, such as age, education level, gender, the locus of control, and equity sensitivity.

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DEVELOPING TEACHING MATERIALS IN SOCIAL SCIENCE FOR GRADE V OF PRIMARY SCHOOL ON THE SUBJECT OF ECONOMIC ROLE

Rokmanah Siti*, Solihatin Etin, Winarsih Murni
Primary Education Program, State University of Jakarta, Indonesia

*E-mail: annah.sitirokmanah@gmail.com
ORCID: 0000-0001-7662-5080

ABSTRACT

This research aimed to develop a product in the form of teaching materials of social science on the subject of economic role. This research was conducted on grade 5 of primary school with the number of respondent of 52 students. This research applied Research and Development (R&D) model by Dick, Carey and Carey. Prior to the development of the product, needs analysis and literature review were conducted. The findings of preliminary study suggested that teaching materials were highly indispensable for social science instruction which could be learned independently with complete material, colored illustrations, and supplemented with learning activities and questions for practice. The process of product development was conducted in a hierarchical order. The evaluation process was performed in three stages. The first stage was the expert judgment conducted by linguists, material experts and media experts. The second stage was one-to-one evaluation conducted with three students having high, medium and low abilities. The third stage was small group evaluation conducted with sixteen students. The test results mentioned that the teaching materials of social science were feasible for use. To see the effectiveness of the product, it was followed by conducting field group test with 33 students. The results of t-test analysis showed the difference of learning result between pre-test and post-test. Based on the average score, it indicated that the teaching materials were effective for use in social science instruction. The findings from the questionnaire indicated that the students liked the teaching materials of social science.

KEY WORDS

Research, development, teaching materials, social science, primary school.

Education implemented in every educational unit starting from primary to higher education even conducted in formal and informal institutions should be the foundation for the self-building of the learners and the wider community. Education plays a very important role to ensure the survival of the state and nation and is also a mean to improve and develop the quality of human resources (Mulyasa, 2013). The quality of future human resources is determined by the quality of today's learners in which it is the biggest investment for the nation's generation that needs to be educated early. Through the learning process, the children of the nation quality can be prepared thoroughly, which is able to master the required various competences.

Education, implemented in primary school, generally covers several subjects, one of which is social science. Social science is one of the compulsory subjects given in primary school that aims to build the basic skills of the students to have a sense of nationalism, nationality, and love of the homeland as well as educating students to develop their competences and social life.

It is in line with the objectives of the social science instruction in which according to Solihatin (2011), it aims to educate and provide the basic ability of the learners in developing their competences based on their talents, interests, abilities, and environment, and as the provision for the learners to continue to education higher. Yumarlin (2012) stated that in equipping the learners in social science instruction, it should refer to the pattern of student

potential development optimally through the provision of broad opportunities so that they are able to develop their knowledge, attitudes, moral values and social skills.

Based on the experiences, the researchers found some problems both from the teachers and students. In reality, what appears to be happening in the field was a pattern of knowledge transfer in which the teacher only attempts to transfer the knowledge in his/her head to the students' without providing sufficient opportunities for them to develop their own potential. This condition has created some opinions and assumptions that social science is a boring and less challenging subject for students to learn. In addition, the teachers have lack of the mastery in many teaching models and media for the learning process so that he/she has no teaching variation in which it leads to an ineffective learning. Moreover, the learning process of social science in primary school has been emphasized on the mastery of many learning materials so that the learning atmosphere is rigid, one-way learning/ student-centered, does not provide opportunities for learners to learn more actively in the learning process of social science, as well as the use of inadequate teaching materials.

The success of a learning process, especially the learning process of social science, cannot be separated from the efforts of an educator in conveying the information to the learners. The social science instruction approach used by teachers should be based on activities that enable students to actively seek, explore, and discover the concepts and principles of social science instruction thoroughly. Thus, learners will be trained to discover the various concepts in each learning process by themselves. The teachers can also apply a scientific approach so that the learners can gain direct understanding and experience during the learning process.

The scientific approach is intended to provide the learners an understanding in knowing and comprehending various materials. The application of a scientific approach in the learning process involves the concept understanding of observing, questioning, experimenting, analyzing and communicating (Paut, 2016).

According to Hamdani (2011), in addition to the proper use of learning approaches, the use of teaching materials must also be appropriate so that the learning objectives can be achieved. Teaching materials are a set of materials that are organized systematically, both written and unwritten in order to create an environment or atmosphere that allows learners to learn.

Teaching materials play an important role in ensuring the effectiveness of teaching and learning activities, good teaching materials are teaching materials that can accommodate the learners in understanding the subject and able to help the learners to solve and provide solutions to problems they found in everyday life.

According to Prastowo (2014), teaching material is a book arranged in a systematic language that is easily understood by the learners. Therefore, it is adjusted to the learner's level of knowledge and age to enable them to study independently with or without teacher guidance.

Learning, with the use of teaching materials, will create more effective learning, since the teaching materials are developed based on the needs analysis of the learners (Rufii, 2015). The development of teaching materials is based on the needs of learners and teachers, the characteristics of the learners, learning analysis, learning strategies, and literature review. By using teaching materials, teachers act as facilitators in the learning process. Furthermore, learning with the use of teaching materials should be in accordance with the principles of learning process and apply student-centered learning. From the point of view of the learners, teaching materials are a necessity in developing their independence and performance.

Teaching materials developed based on the needs analysis of the learners may help teachers in organizing teaching materials and conducting the assessments. In addition, it can help the learners to learn independently and involve them in class activities. Thus, the learners are able to build their knowledge and gain meaningful learning experiences because they regularly practice to connect one concept with another. The results of large-scale trials conducted by Leasa et al. (2016) showed that the teaching materials in the form of thematic modules can improve the cognitive achievement of the learners not only at low cognitive

level but also at the highest level. The cognitive skills that the learners gain after using the module are the skill to analyze, evaluate and create. The findings are very different from the previous learning condition in which the student only develops low cognitive skill (C1-C2) in which they only memorize a concept. So, it can be said that the use of teaching materials in the learning process can improve student learning outcomes.

Furthermore, the effectiveness of teaching materials has been tested and found from the results of research conducted by Alias & Siraj (2012). Based on the findings of her research, it is known that the teaching materials/ modules developed based on the needs analysis of the learners is very effective for those who have a visual, active and reflective learning styles. Based on the findings of this research, it can be concluded that the use of teaching materials in the learning process can facilitate learners with different learning styles.

Currently, the use of teaching materials in primary school teaching is rarely used. The use of teaching materials in the learning process can be found in some private schools. The available teaching materials only contain the learning materials without being equipped with Student Work Sheets (LKPD). In addition, the layout of the teaching materials is so monotonous so that the learners have less interest to use it. Furthermore, in public primary schools, the teaching materials are available in the form of a printed book borrowed from school or purchased by the students themselves and student work sheets came from publishers or student work sheets made by teachers themselves.

This condition appeared in SD Negeri Kragilan 1 of Serang Banten District. Based on the observation, it was known that the teaching materials used in this school were in the form of a printed book of 2013 curriculum that students bought from bookstores and the LKPD written by the teacher. The available teaching materials contained the learning materials that were still abstract, had not enough information about a material and had lack of visualization in supporting the learning materials. Supposedly, teaching materials contain interesting pictures as material support so that the learners can easily understand the concept and feel interested to learn it.

Based on the results of interviews conducted to 5th-grader teacher of SD Negeri Kragilan 1 of Serang Banten District, it was found that the teachers experience obstacles in teaching and learning process related to the teaching materials. The obstacle was that the government did not provide printed books for the learners so that learners should buy the books in the bookstore and usually the theme to be studied has not been available at bookstore. It made the teacher to search for material from the internet. The available books did not cover the material in depth, so teachers usually combine two to three books or even more in the learning process. Another obstacle was the time limitations of teachers in teaching and catching up learning materials in which the needs of some learners were not served appropriately. Therefore, some learners must learn independently to understand the concept and the material in depth. However, teaching materials used did not lead the learners to be active in the learning process and build knowledge independently.

The results from the questionnaire showed that 100% of students mentioned that they had never used teaching materials and 100% of students agreed to develop teaching materials for social science instruction. Based on the observation, interviews, and questionnaires, it could be seen that the available teaching materials could not meet the needs of the learners. Therefore, it required teaching materials or learning process that leads to the development of the learner's thinking. One of which is printed material that students can use independently to understand the concept and the materials in depth which is supported by visual image as supporting materials.

The researchers are interested in developing teaching materials for social science instruction that can help learners actively engage and develop their thinking patterns in solving various problems in the environment. Thus, the learners will become accustomed to solve real-world problems and are ready to face future challenges.

Based on the above background explanation, the researchers are interested in conducting a research and development, namely developing teaching materials for social science instruction with interesting, effective, and fun contents for the learners. Furthermore, the teaching materials that will be developed include the elements in the form of teaching

materials in scientific approaches including: description and components of scientific approach, guidance on the use of teaching materials, competence contents of 2013 curriculum (core competences and basic competences), learning indicators, learning objectives (competence to be achieved), introduction or greeting at the beginning of learning, material description, work practice or worksheet, evaluation, feedback and follow-up, formative tests, summative tests, answer keys, and references. Thus, the research will be conducted under the title "Developing Teaching Materials in Social Science for Grade 5 of Primary School on the Subject of Economic Role".

METHODS OF RESEARCH

This research aimed to produce a product of teaching materials in social science for grade of primary school. This research was conducted at the primary school of SD Negeri Kragilan 1 of Serang Banten District. In addition, the research was conducted in the academic year of 2017 - 2018. The research and development method used to design the teaching materials in social science was a research model developed by Dick and Carey (2009:6-8). Dick and Carey's model of instructional designs include the following 10 steps or stages:

- Conducting preliminary study (needs analysis to identify the learning objectives). The preliminary study was conducted before the research steps were carried out. At this stage, the researchers performed the needs analysis by conducting observation to see the situation of the class, the learning process and discussion, interview with the teacher of grade 5, and distributing the questionnaire to the students.
- Conducting the instructional analysis. The aim of this stage was to determine the steps of the appropriate learning activities to achieve the learning objectives. In conducting the instructional analysis, the researchers determined the skills, knowledge and attitudes that were necessary to start the learning process. This stage was performed to know the initial competence that must be mastered by learners before studying the material of economic role. To master this material, the learners were expected to develop creative thinking skills, so that they are able to understand, explain and apply the concepts and processes of social science that they had learned in school to their everyday lives.
- Analyzing the students (in the context of learning) or analyzing the characteristics of the learners. The aspects to be found out at this stage included the talent, learning motivation, thinking skills, interest or early skill in order to know who was becoming the user of product development, class, age and in what situations the product development would be used. At this stage, it was determined that the user was 5th grader students aged 10-12 years. According to Piaget's cognitive development, the age is at a concrete operational stage. The characteristics of students at this age have more complex level of thinking skill, have high curiosity to recognize the environment, and show a certain talent so that the needs of self-actualization is complex. Therefore, the concrete things around the environment of the learners could be used as an example in the learning process so that it would help learners to understand the concepts of social science in concrete.
- Formulating the performance objectives. At this stage, the researchers described what the learner would do or perform, mentioned the purpose, and provided the conditions to achieve the learning objectives. Based on the results of instructional analysis, specific competences or objectives (instructional objectives) were developed to achieve the general learning objectives (instructional goals) by formulating specific indicators in the form of criteria of achievement in accordance with the basic competences of the learners.
- Developing assessment instruments. At this stage, the researcher determined the assessment tool according to the model behavior and determined the design of the instrument. The instruments were used to find out the specific objectives to be achieved. The instrument used was test. The evaluation sheets on pretest and posttest served to measure the skill before and after applying the product that was developed in social science instruction on the subject of economic role. Therefore, the form of the question used was multiple choice containing as many as twenty questions.

- Developing learning strategies. After performing the analysis stages, the information that has been obtained were used to decide an effective strategy for the learning process. In this research, the researchers applied scientific approach for the learning process. The learning atmosphere was designed using scientific approach based on the characteristics of the learning process of social science instruction in primary school which was expected to achieve specific objectives. The use of scientific approach was also expected to create a fun learning process in social science instruction, learning in the context of real-world situations and more easily understanding a concept.
- Developing and selecting the learning materials. At this stage, the researchers chose and designed the teaching materials that would be used for the product. The teaching materials were compiled and developed by applying scientific learning approach to enable the students to study social science on the subject of economic role. The instruction with the teaching materials of social science was a learning model that was designed as independent learning materials. Thus, the learners could understand the concept of social science and apply the concepts and processes of social science they had learned in school to their everyday lives.
- Designing and developing formative evaluation. After the draft or design of the learning program had been developed, the next step was designing and conducting a formative evaluation. Formative evaluation was conducted to collect the data related to the strengths and weaknesses of the teaching materials in social science during the development of the product. The aim of formative evaluation was to improve or assess the progress of the product and the developed design. The stage of formative evaluation included validation stages from the experts and individual, small group and large group trials.
- Revising the instruction or conducting instructional revision. After the researchers conducted a formative evaluation, the next step was revising the draft of teaching materials in social science that was still in the form of the design of a product. After conducting the trial, the teaching materials were revised in accordance with the acquisition of inputs and results. The data obtained from formative evaluation procedures were summarized and interpreted to determine the weaknesses of the teaching materials in social science.
- Developing summative evaluation. Summative evaluation was conducted after the product was evaluated formatively and revised in accordance with the standards used by the designer. The summative evaluation did not involve the program designer but involved independent assessment. It was one reason to suggest that summative evaluation was not classified into the design process of the learning system.

RESULTS OF STUDY

The following are the findings from the development stage of the teaching materials in social science for grade 5 of primary school on the subject of economic role.

Pre-production. Before conducting a further production stage, the researchers firstly analyzed the needs by using interview, questionnaire and literature review. Based on these results, it could be concluded that learners needed teaching materials that were able to develop the competence of the learners. Therefore, all learners agreed with the development of books such as teaching materials in social science learning. The learners needed instructional books that could be studied independently which contained complete, concrete and colorful materials, illustrations, and supplemented with learning activities and questions for practice. Moreover, the researchers worked with various parties to complete the product that had been planned previously.

Production. These teaching materials in social science applied some steps that included:

- Instructional Analysis:

Instructional analysis step was performed so that the product of the teaching material produced was in accordance with the applicable curriculum and the characteristics of the students with their environment. The developed teaching materials in social science referred to the 2013 curriculum of theme 8 (eight) entitled the environment is our friend. The first step carried out by the researchers was looking at the basic competences of social science (IPS) for the learners in grade 5 of primary school. In the second step, the researcher analyzed the student textbooks given by the government for grade 5 of primary school relating to the material or subject on the economic role.

- The Aims of Developing Teaching Materials in Social Science:

The development of these teaching materials in social science aimed to help the students of grade 5 of primary school to learn independently and help them to improve their understanding and thinking skills on the subject of economic role. These teaching materials could facilitate the learners to learn more easily, concretely and attractively in achieving the learning objectives. In addition, the learners could learn independently and assess their own learning outcomes in order to understand the shortcomings within themselves better. The material presentation in this teaching material was presented in various ways to accommodate student learning styles. This teaching material helped the teachers to concretize the abstract concepts within textbooks through illustrated illustrations in which it would facilitate the realization of success in the learning process.

- Determining the Title of the Teaching Materials in Social Science:

The next step, after determining the learning objectives, was to determine the appropriate title for the teaching materials. The developed teaching materials in social science took the title "Let's Know More about the Economic Role for Grade 5 of Primary School".

- Selecting the Physical Design of the Teaching Materials in Social Science:

At this step, the physical design was selected for the teaching materials in social science for 5 graders of elementary school with an attractive design which included figures in accordance with the learning activities on the subject of economic role.

The next stage of the development process of the teaching materials in social science on the subject of economic role was to conduct a feasibility test. Feasibility test was conducted through expert judgment, one-to-one tryout, small-group tryout and field tryout. Expert judgment involved linguists, material experts and media experts, and teachers of grade 5 of primary school.

Table 1 – Expert Judgment

Aspects	Scores
Language	73.33
Materials	94.0
Teaching materials/ Media	92.0

The description of the score had the scales of: a) 0 - 20% = Very poor, b) 21% - 40% = Poor, c) 41% - 60% = Fair, d) 61% - 80% = Good, e) 81% - 100% = Very Good. From the results of the expert judgment, it showed that the language aspect within the teaching materials was good, the material aspect was very good, the teaching materials/ media aspect was very good and the assessment given by some teachers was also good. It could be concluded that the teaching materials in social science for grade 5 on the subject of economic were feasible for use.

One-to-one test on the evaluation of teaching materials in social science was performed by distributing questionnaires to three students who had different competences. Based on the results of the questionnaire analysis, the learners as a whole were good but there were some constructive findings and inputs. The use of the activity guide was clarified and the language was adjusted with the student's language.

Small-group test was performed by distributing questionnaires to 16 students. The results of the questionnaire analysis suggested that the learners as a whole were excellent. There were two kinds of field tryout, namely: a) product conformity test and b) pretest and

posttest. Product effectiveness test was conducted on 33 respondents who joined social science instruction in grade 5 in Kragilan Sub-District of Serang Banten District. The tryout was performed by conducting the test on the learning outcomes through pre-test and post-test which was calculated using the t-test.

Table 2 – The Description of the Data

Description	Pre-test X_1	Post-test X_2
Total	2240	2735
Average	67.87	82.87
Highest Score	80	100
Lowest Score	50	60
Standard Deviation	7.074	11.860
Number of Respondents	33	33
$\sum_{i=1}^n X_i^2$	153650	
$\sum_{i=1}^n Y_i^2$		231175
$\sum_{i=1}^n X_i Y_i$	35520038750	

Statistical hypothesis:

- $H_0 = T_{count} < T_{table}$ = There is no significant difference between pre-test and post-test in the instruction of social science on the subject of economic role.
- $H_1 = T_{count} > T_{table}$ = There is significant difference between pre-test and post-test in the instruction of social science on the subject of economic role.

Preparing the supporting data to perform t-test.

- The average score of pre-test (X_1), post-test (X_2). The average score of pre-test (X_1) = 67.87 and post-test (X_2) = 82.87
- The standard deviation of pre-test (S_1) = 7.074 , post-test (S_2) = 11.860
- The number of respondents (n) = 33
- Correlation coefficient (r) = 0.125

The t-test calculation. The t-test formula used can be seen in Eq. (1).

$$t = \frac{X_1 - X_2}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2} - 2r \left(\frac{S_1}{\sqrt{n_1}}\right) \left(\frac{S_2}{\sqrt{n_2}}\right)}} \quad (1)$$

The Decision of the Test. The results of the t-test showed that $t_{count} = -6.61$ and $t_{table} = -1.962$ in the level of significance $\alpha = 0.05/ 95\%$. Thus, $t_{count} = -6.61 < t_{table} = -1.962$, so the decision of test is $H_0 =$ rejected.

There is significant difference between pre-test and post-test in the teaching materials of social science used by the learners on the subject of economic role in grade 5 of primary school.

Based on the data analysis above, it can be seen that the $t_{count} = -6.61 < t_{table} = -1.962$ in the level of significance $\alpha = 0.05/ 95\%$. It can be concluded that there is difference between pre-test and post-test of the learner outcomes. Thus, the use of the teaching materials in social science on the subject of economic role used for grade 5 students is effective because there is an increase in learning outcomes from the average of student scores from 67.87 to 82.87 which has a difference of 15.00.

Student response to the teaching material in social science on the subject of economic role is very good. It can be seen from the overall average score of 93.27. These findings suggest that the produced teaching materials in social science as a whole are considered as excellent.

DISCUSSION OF RESULTS

The success of a learning process cannot be separated from the efforts of an educator in conveying the information to the learners. Teaching materials are a set of materials that are organized systematically, both written and unwritten in order to create an environment or

atmosphere that allows learners to learn. According to Prastowo (2014), teaching materials play an important role in ensuring the effectiveness of teaching and learning activities, good teaching materials are teaching materials that can accommodate the learners in understanding the subject and able to help the learners to solve and provide solutions to problems they found in everyday life.

The findings of this research have resulted in a printed book product in the form of teaching materials in social science on the subject of economic role for grade 5 of primary school by using scientific approach. The scientific approach was intended to provide understanding to learners in knowing and understanding various materials. The process of applying the instruction by using the scientific approach involves understanding concepts such as observing, questioning, experimenting, analyzing and communicating or known as 5M (in Indonesia). Rufii (2015: 9) suggested that the instruction implemented by using teaching materials will create more effective learning process.

CONCLUSION

Based on the findings of the research and development, with a series of evaluations and revisions of the results of the test through expert judgment, one-to-one tryout, and small-group tryout, this teaching material in social science could be considered feasible for use with the average criteria of excellent. Meanwhile, in terms of effectiveness, through field tryout, the teaching materials in social science could be considered as effective with the calculation of t-test on the pre-test and post-test. In addition, students' responses to learning activities of social science by using books in the form of printed materials for grade 5 of primary school were also very good.

The teachers may utilize and implement these teaching materials in social science as one of the learning resources in the learning activities of social science in primary school. The use of teaching materials can help learners in improving their competence and providing motivation in the process of teaching and learning activities. This teaching material is not only used as a learning resource in the classroom but it can also be used individually as an independent study material.

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THE “GADJAH MADA” PROGRAM IMPLEMENTATION TO ACCELERATE BHABINKAMTIBNAS’ ROLES AND FUNCTIONS

Purbantoro Adam

Postgraduate School, Airlangga University, Indonesia

E-mail: adam.akpol2006@gmail.com

ABSTRACT

The acceleration of roles and functions of Bhabinkamtibnas of Gresik Police resort is the result of working performance improvement in the form of quantity indicators. The indicator shows an improvement in the amount of visit that they made and the working effectiveness. Quality of work determines the quality of problem mapping in more details; the problems do not only limit on safeness and order issues, but also in social problems. Personal qualities are the support from transformational within Gadjah Mada program. Fortunately, those problems do not postpone the program target as each of them is well overcome.

KEY WORDS

Role acceleration, Bhabinkamtibnas, working Improvement, Gadjah Mada team.

Started from several problems occurred as the result of Bhabinkamtibnas function implementation errors, Gresik Police Resort declare the Polres Head Instruction number: Sprint/484/VI/2016, on June 4th 2016. It deploys an innovations program called “Gadjah Mada” as the abbreviations of Antisipasi Kejahatan serta Penyelesaian Masalah Masyarakat Desa (Crime Anticipation and Problem Settlement of Village Society). One of their sub program is Quick Win and Polri Grand Strategy to enhance the Police Image among societies as the protector and of people by always visiting the village and overcome if the possible threat is found in quick time. Gadjah Mada program is the implementation and system of Binmas and Bhabinkamtibnas function by doing visit to Tomas, Toda, and Society. The officer must be proactive while communicating with people. So, the officer would detect the threat or problems earlier known as IPOLEKSOSBUDKAM which is developing among society and being protected by Law article 26 Perkap number 3 of 2015 about Polmas. From the amount of visit officer could make, the program allows them to have more maximum visits in shorter time and better result. Within Gadjah Mada Program, the three pillars of government will be consolidated; they are government, Police and Military. It will be easier for them to map their role and function in overcoming social problems among society in the name of Gadjah Mada Team.

The Gadjah Mada team was meant to do direct service to people about the problems that they are having with or any future threats. The team was split into four divisions, each division hold up to 25 personnel; the personnel consist of traffic police, detective, Drugs Police, Babinkamtibnas and the staff such as medical personnel. The medical personnel are very important if the team found a civilian with bad health condition and could not afford medicine in time. In total, the gadjah mada team possessed 100 personnel which often called the 100 consultants. These 100 personnel is very important as the resort police of Gresik realised that importance of Police officers service which function as analysis towards the root problems found among villagers as it is the most fragile area to ignite a conflict. The 100 consultants is a new innovation for the concept of Bhabinkamtibnas function implementation. Door to door is the method used by the team to make a visit in villages? The visit will make a record to the head of family identity within the members of family itself. The information will be informed in the form of Visit Report. The consultant must able to detect early threat or problems, they must evaluate and analysis if the threat will be a serious problem. Thus, the solution must also be early invented to overcome the upcoming threat within villages. The consultant could commence a mediation or negotiation to the recent problems that they handle. The preventive activity also delivered by socialising and making

publication of any regulation that the villagers need to be aware of. The information report must be handed to the leader of the team every week or every month, the report will be forwarded to Head of Gresik Police.

The differences between old program, Polmas, and the new program, Gajah Mada, is the switching process of Community Policing into Democratic Policing. The difference lies in the method of problem overcoming method. The community policing includes society in overcoming with solutions that they offer through Police and Society Mediation Forum and Police and Society Council. Meanwhile, in democratic policing, not all people could participate in policy making process. Some people will attend the meeting as representation of the society, thus, the meeting will not consume much time. Moreover, the government representation will also come to the meeting. The meeting will mostly discuss each problem faced by each family which is reported from the head of family in Activity Report as result of 100 consultants' job. If there were 1000 head of family in a village, by estimating 7 family visits in a day for each personnel, the team could afford 700 visits in a day. The target will be fulfilled in two days. It is different from former method which gather able to information of 1000 family in 1,5 years. Moreover, the new concept has 75% of success rate in overcoming problems within 12 days.

METHODS OF RESEARCH

The study uses descriptive qualitative method to describe the recent problems which still intact. It consists of note taking, description, analysis, and interpretation the recent conditions. In other words, the descriptive qualitative is meant to collect information of recent conditions: the descriptive qualitative is designed to collect information of recent issues; in one hand, descriptive qualitative is a method to commence research on human status community, an object to be described, an image of systematic way, factual and accurate information or phenomenon that become problem of the study.

DISCUSSION OF RESULTS

The Implementation of Gajah Mada Program To Accelerate the Roles and Function of Bhabinkamtbnas. To assess whether the improvement of new concept, Gajah Mada, is successful or not, the study uses Working Performance Acceleration Assessment proposed by Gomez. It consist of Quantity of work, Quality of work, Job Knowledge, Creativeness, Cooperation, Dependability, Initiative, and Personal Qualities. Each stat will be discussed as follow:

- Quantity of Work:

Indicator Quantity of work as an indicator of the assessment of working performance is an indicator of the quantity or number of job achievements that have increased significantly. From Gresik Polres data, the quantity of Gajah Mada team's performance with its 100 Consultant program has been improved significantly. The performance improvement especially from the number of successful targets must be achieved by Bhabinkamtibmas in the form of increasing intensity of officer visit to the residents.

For example, the implementation of Gajah Mada team activity is conducted in Mulung Village Driyorejo Gresik Subdistrict, Petiken Village, Driyorejo Gresik Sub-District, Banjaran Village Driyorejo Gresik Sub-district, Sumpat Village Driyorejo Gresik Sub-district. Maximum performance target is at 478 HH. With the working pattern of Team Gajah Mada involving 100 consultants and other policy implementing elements, with targeted visits, hospitality and face-to-face in 478 HHs, 398 families can be terialized or about 92% realized. While that can not be visited because majority of the population of 4 villages are Workers / Factory Workers. If carried out with the old pattern of relying on a bhabinkamtibmas with a range of day-to-day visits, hospitality and face-to-face elements of targeted communities, then at least can only do 2 times per day and for visits in 398 families as realized by Tim Gajah Mada, then with the old Pattern will take about 199 days to realize the number of visits, hospitality and face-to-face at 398 HH.

- Quality of work:

Fasten working performance within quality of work indicator is goal of the stat based on the requirement of preparation and synchronization. Face to face communication method is used while Gadjah Mada team executing the order. They also commence two way reciprocal communications, within personnel (intern) communication; they must reveal the frame of reference of the society as their target. It could be their orientation by complementing the situation factor. To enhance the quality of their working performance, the team must focus on the current problem among society. Team must not use linear one way method while looking for the cause of the problem. In other word, they must apply circular communication method. The process is already in line with the original target of Gadjah mada team which is family as the smallest community among the society. The result of Gadjah mada programs are mostly satisfied, the quality of problem mapping of the team is improving, it detects not only the problem from inner Bhabinkamtibnas, but also the other problem that society has raised.

This satisfied result come from the personnel composition who come from different backgrounds. Not only police, the personnel also filled with manucipal police, general authorization department, and etc. the complexity of problem will be easier to tale down as the composition of personnel are vary. This is align with the definition of working performance quality stated in police head regulation number 3 of 2015 about Polmas within article C, D, and E stated that The successfulness of Bhabinkamtibnas and Polmas means the improvement of working motivation to serve and give service to the society as the duty of public servants. Another indicator is the improvement of the time they respond to any issue among society.

- Job knowledge:

This stat is very crucial to determine the successfulness of the team's operation. Because, the amount of knowledge possessed by the team members determine the amount of information and study result of the team.

Unique skill is needed for bhabinkamtibnas to enhance their role and function. The Chief regulation article 29 number 03 of 2015 state that the personnel must possess the skills as follow: Early detection; Social communication; Negotiation and meditation; Leadership; Problem solving.

Members with sufficient knowledge will improve the efficiency of task execution. But for members of the Team who do not have enough knowledge, it will hamper its performance. Financial waste, time and energy and other factors will be done by less knowledgeable Team members. This waste will inevitably hinder the achievement of organizational goals. According to Dale knowledge possessed by a person can be categorized in two types, namely: based knowledge and knowledge that is not based. If associated with the demands of the ability of members or consultants of the Gajah Mada Program, then to improve the ability of early detection; social communication; negotiation and mediation; leadership; and social problem solving, according to Spencer, the increase in knowledge if the competence of members in the realm of analytical thinking (AT), conceptual thinking (CT), technical / professional / managerial expertise (EXP) as explained below:

- Analytical thinking is a skill to detect problems and situation to process them into small details of it, or a skill to gather the implication of a situation in details. In general, this competency allows the personnel to think in systematic and analytic way toward complex situation. To improve analytical thinking of Gadjah Mada personnel, apply a significant workshop of intensive training. Before the team enter the field, they must participate in analytical thinking training program 3-2 times in 2,5 months. It takes place in Gresik Police Resort ballroom by inviting the experts to train them. The discussion focused on problem solving of social issues. The evaluation process is maintained to conclude whether the team improves their analytical thinking skill or not.
- Conceptual thinking is a process of understanding by gathering small details and put them together to revel bigger picture of the issue. In practice, the sample taken from

Sumput village revealed that the team detects drugs and liquor issue. Thus, the questionnaire raised when visiting the village lead to the description of criminals identity who store and deliver the stuff, the team must get the information of the place and time of the transaction, another important information to gather is the modus of the criminals. In other hand, sample taken in Mulung Village, the problem and issues found there are mainly about agrarian. Then, the questionnaire for the society must be about agrarian lawsuit case, land acquisition conflict between both parties. By using conceptual thinking, the team will acquire bigger image of the issue and let them to chose best option for the current problems within different villages.

- Expertise (EXP) is one of job-related knowledge (technical, professional, or managerial), it is also the motivation to extend, utilize, and distribute that knowledge. This is a form of implementation of the capacity obligations that must be owned in accordance with The Chief Regulation Article 29 of number 3 of 2015 which has the ability in social communication, negotiation, mediation and conduct leadership in dialogue sessions with citizens. To train communication skills, negotiation, mediation and lead dialogue sessions, each member is equipped with IPS (Inter Personal Skill) Training 2 times a Meeting and 1 time and Simulation for 2.5 months at Polres Gresik. The training provided for IPS is a direct communication technique (Direct Communication). Direct communication is communication between communicator with face-to-face communication.

Creativeness is a statement meant to overcome a current issue. To enhance this ability, the head of the team must provide equal chance for each members to contribute and deliver their idea in democratic way. Every member, during evaluation process, must able to perform their creativity to overcome the problem by using new method and finding that they invent. Within this stat, the Gadjah mada team is able to create an application called Go Sigap lead by the head of Police Resort to support Gadjah Mada program. It is a multifunction app which is available on Playstore, there are some features that people can use as follow:

- Panic button;
- Laporan informasi (Information Report);
- Notifikasi permintaan bantuan dari Polri (Notification of Polri Aid);
- Info dan Berita (Information and News);
- Alamat penting (important numbers).

In order to use maximum features of the app, the society must do registration by filling their identity card number, name, adress, phone number and picture of ID. The early information that people can get from the app are mainly about:

- Info Bencana (disaster information);
- Info unjuk rasa/ kerusuhan (Demonstration/Rally Information);
- Info kemacetan (Traffic Information);
- Info kegiatan masyarakat (Social Events);
- Info update cuaca (Whether Cast).

The unique feature, panic button, will allow the society to send their personal information including the current position to Gresik Police Resort. The current position of the sender will be automacially updated every one minute when this feature is activated.

Cooperation is the vailability to work with others. While overcoming the problems of social issues, gadjah mada always coordinate and cooperate with another institution to create effeciency of time. One of example is when the team try to overcome the problem in Driyorejo , the team helps shorten the negotiation time between policy makers and another party. The case details are: The village budget is promised to obtain 13 billion rupiahs as compensation for their used land by other sector. Unfortunately, the promise is broken and there are 11 documents waiting for next land compensation acquisition. To solve such problem, the team coordinates with Police Resort, head of Sub-district, konimayaron, BPN, Head of Mulung village. They socialise the law number 02 of 2012 about land acuisition for public purpose. It stated that the personal land will have compensation, the documents will

be delivered to government but not for village land as stated in law number 2 of 2012, the village land, as state asset, will not receive any compensation

Dependability is an awareness that could be trusted on its presence and working complement. The 100% attendance of gadjah mada team is mandatory, all 100 consultants must able to overrun the deadline of their target. They must aware of their scheduling process and their shift rolling. The 100 consultants are chosen from all police officers of Gresik Regency, they must be well prepared, the candidates attendance list must be on 100% from their previous office, the replacement must be very quick if one of their personnel is unable to attend the program.

Initiative is a new motivation while receiving such bigger responsibility. The initiative of the team is well applied on the field. The early program already blocked by financial factor, but this obstacle did not make the team lost the motivation to complete their mission, the personnels are willing to use their own budget if the successfullnes of mission was so depend on it. Beside, it is not easy to apply every single theories they have learnt on training, some community on villages are hard to be compromised with, good initiative is very needed on such situation. thenew motivation while receiving bigger responsibility must always be plotted on the soul of each personnel.

Personal qualities is about leadership, personality, hospitality, and personal integrity. In this study the authors emphasize the leadership model as personal qualities that have a big effect on the achievement of bhabinkamtibmas performance acceleration. The leadership model of Gresik Police Chief when going to make innovation of Gajah Mada Program is a model of Transformational leadership. One of Kapolres' personal qualities as a Leader with transformational character is acting organizational renewal agency that created the Gajah Mada Program as an innovative program with the speed of solving community and social problems. The leader of this type analyzes the old ways in which community policing is considered ineffective in maximizing the role of bhabinkamtibmas. The ineffectiveness of problem-solving and the settlement of community and other social problems with the community policing method also raises the reform discourse of the leadership to accelerate the settlement of the kamtibmas and social problems.

The obstacles during Gadjah mada program implementation and the mechanism solving. These are the problems found during the implementation of gadjah mada program:

The main problem of this issue is the result of there is no certain regulation from Chief Regulation of Indonesian Police. The implementation of this program is only protected from Police Resort Regulation of Gresik number: sprin/484/VI/2016 of 4th June 2016 about the 100 consultant formation of Gresik Regency. Because of this issue, the problems found are as follow:

- There is no standardized/legal definition of democratic policing applied towards Gadjah Mada program;
- The strategies to achieve mission and vission of the programs are not in details starting from the implementation of starting strategy of association phase, the problem solving mechanism details, Polri Service, and etc;
- Each mandatory duty for each pilars, (Government, Polri, and TNI) are not informed in details;
- There is no clear financial report of DIPA (The Administration Budget List) for Gadjah Mada Gresik Program.

Most problem occurs as the result of undesentralisation of the policy among all indonesian regency because there is no policy support from the central unit (Kapolri)

The implementation of Gadjah Mada Program innovation is a product of complexity policy with many obstacles. that is why, the implementation complexity scale is higher than other program. Thus, the administration policy become one of major issue of this program.

The financial administration issue plays important factor for the development of gadjah mada program.

Thye gadjah mada team must, at least, commence a visit to society once a month. But, they could make more visits based on the current situtaion of the village.

According to the administration data of financial distribution of 2017, which covers each financial departments expenditure, Unit and Polsek Ranks and technical guidance of budget absorption. For Gresik Police resort financial administration data of 2016, it has Rp. 82.766.408.000 for staff expenditure, Rp. 33.877.057.000 for commodities expenditure allocation, and Rp. 30.000.000 for capital allocation. Thus, Gresik Police Resort covers Rp. 116.673.465.000 in total for financial support of 2016. Then for the budget allocation Polres Gresik 2017 is divided into three types of expenditure ie employee expenditure amounting to 100.097.900.000 and goods expenditure of Rp. 38,929,144,000 and capital expenditure of Rp. 407.614.000 with total budget support received by Polres Gresik Rp. 139.434658.

Throughout development and planning administration, the Local Police of Eastern Java Police does not support the financial of Gajah mada program, it is stated on DIPA of 2017. thus, because of there is no early support for 100 constlants of gadjah mada personnels, the team only receive Rp.5000/day for meals, this is far from the word enough to cover the expenditure for each personnels. Even, there is no clear supporting financial for the next 2018 administration data, because the program is only applied only in Gresik Regency.

That is why, the Chief of Gresik Police Resort made an attempt of grant funds offer. The attempt was successfull, the chief obtain additional financial aid about Rp. 250.000.000,-. This support is literary mandatory for Gresik government as Police is one of their major partner in Forkopimda (Communication Forum of Local Leaders). By this additional funds, the team will be able to maintain one of their product Go Sigap. According to M. Narafin, the amount of financial aid is a short-term funds from time expenditure perspective. Short-term budgets are budgets made with the longest period of time up to a year in order to support performance. Whereas expected from the availability of budget for the implementation of the Gajah Mada Program is a type of fixed budget, continuous and in the long term. So,there will be evaluation and projection performance targets in more than a year.

Unfortunately, the grant fund for the next season of 2018 remains unclear. Thus, the only way to obtain additional financial aid is to turn the program into national scale from central government.

Society Charaters Issue. In gneral, the society accepts and appreciate the gadjah mada program in positive ways as stated by several consultants below.

According to Hamid Rusdi, Binmas Members of Gresik Polres:

The villagers are very excited to wait the arrival of gadjah mada team when visited their village. Because, the villagers has received information before that the problems or their aspiration will be well handled if they store it to gadjah mada team visit. That is why, the visit is very valuable in the eyes of the villagers. Beofre the team commence the questionnaires to the villagers, the team ionforms them that the identity of informants will remain in secret and safe. Thus, the people will have no fear to express any thought and problems that hold their fear in living their life. This is already proved by every names of the people visited by the team within diffrent villages.

According to Sukarto, Binmas Members of Gresik Polres:

On early visit, the villagers are very cooperative when they are being interviewed by the team. They help the personnels a lot to gather more datas about the problems or issues raised on the village. The villagers provide team with details of information in efficient ways.

The villagers answered all questions honestly, the did not make the interview difficult. In return, they feel happy as one of representation of the government make a special visit by going after their house.

This method known as *blusukan* in Indonesia, it is very efficient to be applied in vast area of indonesia. Thus, people support and feel respected as the government take care of them by doing visit directly to thier house.

The solidarity among people in village is still stronger than city. That is why, the bound and connection between team and villagers are easily formed as the villagers are full of respects and honor. Solidarity is a situation between individuals or communities which is based on the morals and believes of both parties consolidated by same past experience

which forms same emotional condition. Thus, people will help each other if one of the member need a hand. For example, if one of village commence a wedding, circumcision, and demise occasions, people will automatically help the home without asking them before. The amount of people who participate in occasion is not the same between village and city. For example, in Gresik Regency, the amount of people who participate in demision, it will not exceed hundred, they will help the home to take care of the body into the graveyard. But, if it is about wedding party, it will exceed hundreds number of people participating in the party. The participation could be more than 4-5 neighbiourhoods, the amount will increase if the party holder is public figures.

Another issue faced by the team is the homogeneity of villagers, it apperas that such issu becomes problem for gadjah mada program within one area. For example, there is a certain village whose people are dominated by labor company, the team could not make a visit earlier at 5 p.m. because, the majority of villagers are still not coming home from their workplace. This case was experienced by the team based on the interview with one of personnel below: "many of the villagers house are empty as they still working on the factore when we made visit".

The team could not hesitate their visit on schedule if the villagers are still working. The team must not broke the ethic rule if they insist to make a visit on that time. This issue affects the precentage of visit that must be re-schulde by the team.

From the issues above, Gresik Police Sub-precinct must coordinates in advance with the bhabinkamtibmas of the area to be visited whether there is a plan of celebration on its territory or not. But for the problem of the incident of death, it can not be predicted before so the existing solution, when a member finds its territory there is an incident that befell the residents, the Team will coordinate through WhatsApp group Team Member of Gajah Mada to check the number of the last visit is above 90 % or not. If it has reached 90%, the members can coordinate with the leaderto abort the visit. In case after coordinating with other teams, the number of visits is less than 90%, the team will coordinate with the leader whether the visit is postponed or the target percentage visits are decreaseed within the area.

CONCLUSION

Gadjah Mada Program accelerates the role and function of bhabinkamtibnas through several indocators as follow:

- Quantity of work, the amount of visits to accelerate the program to be finished is around 478 families or 92% in a day. In time efficiency, the program reach great improvements about 9.447% (nine thousand and four hundred fouty seven percent);
- Quality of work, it measures the more details of problem mapping by the team, the problems must not only focused on the orders and safety of society issue, but also other social issues;
- Job knowledge covers the ability of gadjah mada team to do analytical thinking (AT), *conceptual thinking* (CT), and *technical/professional/managerial expertise* (EXP);
- Creativeness is the varities options proposed by the members within leader verification and approval, the product is applied on Go Sigap Application which is available on Playstore. In meantime, the product is still on maintenance and development;
- Cooperation is the way of the p[ersonnel to link up with another important institutions, it improves the time efficiency as many social problems solved quickly;
- Depenadability is represented in 100% attendance responsibility for the personnels to solve the issues in maximum efforts;
- Initiative is the way of the team to solve problem by initiation of the team's members on the field;
- Personal qualities cover the transformational leadership in gadjah mada team to better than before.

There is no significant regulation for gadjah mada team that include in Police

Regulation, it causes the program is not include on one of national democratic policing which is applied in the program. The strategies to achieve mission and visions of the program are still blur on each pillars (Governments, Police, and Military). Moreover, there is no significant plotting of DIPA for gadjah mada program of Gresik. Eventhough, the tehncial regulation could be maintained by internal Gresik Governance through *skep Polres*, the impact is still to low to affect entire Gresik are. related to budget plotting for more maximal program implementation as well as various policy support from Police Unity at a higher level than Polres level. The second issue concerns the input of operational budget. Within the development and planning program of Gadjah Mada plotting financial administration through DIPA 2017 and 2018, it delayed some mission of the team. Eventhough there is a short term financial aid of grant fund commenced by Head of Gresik Police Resort, it does not enough to continue the program. Thus, transforming the program into nastional scale is the only option to support the program. The third issue is about the characters of villagers. In some occasions, the villagers are willing to help each other when another villager need a lending hand. As a result, the team canceled their visit to that place. Thus, coordination with local bhabinkamtibnas personnel is mandatory to decide whether the village is able to be visited or not. In case of unpredictable occasion such as demise, the visit will be directly canceled to respect them. Another problem is the homogeneity of the villagers who possessed same occupation as labour. The team will not able to make a visit before 5 p.m, as the villagers are still working on the factory. The coordination with leaders are very important to make certain schedule on that uniqe are. Another way is by periodically check other team visit precentage to solve this kind of problem.

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THE INFLUENCE OF DRIVING LICENSE REGISTRATION QUALITY SERVICE TOWARDS APPLICANT SATISFACTION IN SATPAS RESORT POLICE OF NGANJUK

Lebang Christopher Adikara

Postgraduate School, Airlangga University, Indonesia

E-mail: lebang_106@yahoo.com

ABSTRACT

In this democracy era, people are start be brave to deliver their opinion and aspiration, they also start to criticise the government. They demand for their right and ask for improvement for the need that the government failed to provide. The aspiration from society is very important for Indonesian police; the aspiration will improve and change any policy that does not meet the requirement from society. One of department which always become major interest is the driving license service. In order to improve the service to society, Quick Win is one of Polri program to gain trust and interest among people.

KEY WORDS

Quality, service, driving, license applicant, satisfaction.

In this democracy era, people are start be brave to deliver their opinion and aspiration, they also start to criticise the government. They demand for their right and ask for improvement for the need that the government failed to provide. The aspiration from society is very important for Indonesian police, the aspiration will improve and change any policy that does not meet the requirement from society. One of department which always become major interest is the driving license service. This department often badly reviewed by society as it is one of the most important department among people. Driving license is one of state license, published by Polri, its function is to inform that the owner is able to drive their motor vehicle.

Such condition will, of course, influence the quality service parameters by society. It will break the name of institution of Polri as failed to provide satisfaction for applicants of driving license. The public trust parameters of society towards Polri will be declined by this phenomenon, the accountability performance of Polri will be also influenced. Moreover, there will be many people who lack of driving ability but possessed a driving license which will result in increasing number of accidents in high way. There are many accidents caused by the driver who lack of ability to control their driving skill. This is very dangerous as it could threaten the life of the driver an other people in the road.

In order to regain the public trust, Polri has developed a program called Quick Wins. It is one of Polri program to gain trust and interest among people. "the trust issues from society for working performance of Polri is common problem for decades, Polri has been worked to improve and fix this uncomfortable environment.

Quick wins is the implementation and realisation of Ministry of State Appartus Empowerment regulation number Kep: 26/Menpan/2004 which has vision to improve the quality service of Polri. The improvement of driving license registration service, as stated in Quick Wins, it must follow the concept of quick, appropriate, simple, and inexpensive. The quick concept means that the quality must be well planned and well controlled, appropriate means effectiveness of the service, simple means that the bureaucracy must not contain unnecessary steps, and inexpensive means the cost for registration must not become big burden of society economy condition.

METHODS OF RESEARCH

Quantitative approach is used for this study. Yin (2011: 235) stated that quantitative approach is a strategy to collect data and provided them in numbers and statistic. The method used in this study is survey. Jackson (2009: 16) states that survey method is an act

of giving questions or topics to individuals and explain their responses. Survey could be determined by phone, letter, and internet. Or face to face interview. One of advantage by using survey than descriptive is that the researcher is allowed to make an experiment easier in larger scale.

RESULTS AND DISCUSSION

After meeting the requirement of classic assumption test, the regression model used in this study is already appropriate. It will be used to test the influence of quality service towards customer satisfaction. The table below uses the result of analysed regression data in SPSS 2.0 version. The result could be seen in the table below.

Table 1 – Simplified Linier Regression Test

Summary^b Model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,502 ^a	,252	,246	6,071

a. Predictors: (Constant), X

b. Dependent Variable: Y

According to the table result above, it could be concluded that coefficient correlation result between quality service and customer satisfaction is 0,502. Meanwhile, the value of coefficient determination (R square) is 0,252. We could synthesis the quality service influence towards customer satisfaction is about 25,2%. The next step is to measure the amount of significance level of the influence. In order to obtain that, the t-test is applied which is measured by SPSS 2.0 version. The result will be as follow:

Table 2 – Significance Test Result

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	62,481	7,319		8,537	,000
X1	,344	,055	,502	6,307	,000

a. Dependent Variable: Y

Based on the significance test results, it can be explained that the t test results, the $t_{count} = 6.307$ with Sig = 0,000. While t_{table} value (0,05, 118) = 1,9802. It can be synthesized that service quality variables positively affect customer satisfaction, with alpha significance value smaller than 0.05 (viewed from two directions). While the hypothesis used in testing one direction (positive or negative side) can be used column 5 (five) with the test sequence as follows:

- The formula of Hypothesis will be as follow:
H01: The quality service (X1) does not influence customer satisfaction (Y)
H11: There is influence of quality service (X1) towards customer satisfaction (Y)
- The significance level used in this study is using alpha level which is $(\alpha) = 5\%$.
- As known t_{count} (is obtained by dividing regression coefficient in 2nd column within error standard in 3rd column) table 5.20, according to the order of X variable, the variable of t_{count} value is 6,307.
- As known t_{table} is within alpha $(\alpha) = 5\%$. Because, the object of study is only one way whether it is positive only or negative only. That is why, the alpha value is divided by two, it becomes 0,025 within $n - k = 120 - 2 = 118$ degree of freedom/df (n represent the amount of samples while k is the amount of variable in X and Y). Thus, the t_{table} value is 1,9802 (Tabel t, Deny Kurniawan, 2008:7).

5. The criteria of this experiment test will be as follow:

H_{0i} is positive and H_1 is negative if $-t_{table} \leq t_{count} \leq t_{table}$ within the decision is that there is no influence of quality service toward customer satisfaction.

H_{0i} is negative and H_1 is positive if $t_{count} > t_{table}$ or $-t_{count} < -t_{table}$, within decision that quality service influence customer satisfaction.

6. As the value of tcount is 6,307 > ttable=1,9802 and the value of Sigcount = (0,000) < Sig table (0,05), it means that H0 is rejected while H1 is accepted. It could be synthesised that there is significant influence of quality service towards customer satisfaction.

7. In conclusion, because value of tcount > ttable, it sums up that there is influence of quality service (X) towards customer satisfaction (Y). Whereas, the variable of quality service gives positive impact to customer satisfaction.

After t test, the next step is to testify linier regression model for influence of customer service as follow:

Table 3 – Linier Regression Table

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	62,481	7,319		8,537	,000
X1	,344	,055	,502	6,307	,000

a. Dependent Variable: Y

The table above explains the linier regression table model of quality service toward customer satisfaction, as follow:

$$\hat{Y} = a + b_1X_1$$

$$\hat{Y} = 66,481 + 0,344X_1$$

Where:

- a: 66,481, if quality service value is zero, it means that the average customer satisfaction value (the value of quality service is constant, as the result of major perception of society to police) possessed 66,481 points.
- $b_1 = 0,344$, it means that the regression coefficient value of quality service (X) is 0,344. It states for every 1 point increasing quality service, it will increase the average point of customer satisfaction point for 0,344.
- In general, from the test above, it could be concluded that the quality of service influence the customer satisfaction positively. In order to measure the accuracy of the variables' linier, there will be a screenshot of SPSS 2.0 version output about the accuracy of each variable.

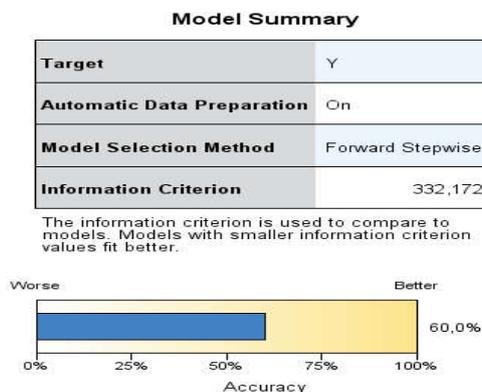


Figure 1 – Linearity Level Figure

From the figure above, it could be seen that the regression linearity level is 60% which includes in good category. In general, we could assume that the quality of driving license registration service, generally, has positive value towards society satisfaction as license applicant in Satpas Nganjuk Police.

DISCUSSION OF RESULTS

The hypothesis which states that there is an influence of quality service towards customer satisfaction. It is supported by coefficient correlation (R) between quality service and customer satisfaction is 0,502. Meanwhile, the value of determination coefficient (R square) is 0,502. It could be synthesised that the influence of quality service towards customer satisfaction is 25,2%.

After the value of quality service influence towards customer satisfaction, the next step is to measure the amount of significance level of the influence. In order to obtain that, the t-test is applied which is measured by SPSS 2.0 version. It can be explained that the t test results, the $t_{count} = 6.307$ with Sig = 0,000. While t_{table} value (0,05, 118) = 1,9802. The criteria of the test are as follow:

- H_{0i} is positive and H_1 is negative if $-t_{table} \leq t_{count} \leq t_{table}$ within the decision is that there is no influence of quality service toward customer satisfaction.
- H_{0i} is negative and H_1 is positive if $t_{count} > t_{table}$ or $-t_{count} < -t_{table}$, within decision that quality service influence customer satisfaction.

As the value of tcount is $6,307 > t_{table}=1,9802$ and the value of Sigcount = (0,000) < Sig table (0,05), it means that H_0 is rejected while H_1 is accepted. It could be synthesised that significant influence of quality service towards customer satisfaction is around $\alpha = 0,05$. The influence is also showed by the simplified regression linier model which stated below:

a. if quality service value is zero, it means that the average customer satisfaction value possessed 66,481 points.

b. It means that the regression coefficient value of quality service (X) is 0,344. It states for every 1 point increasing quality service, it will increase the average point of customer satisfaction point for 0,344.

Generally, from the linearity model above, it could be predicted that quality service give positive influence towards customer satisfaction. The finding of this study shows that the society as applicants of driving license registration assume that the quality service of the license is high within average score 86,55%. Thus, it could be concluded that the quality service provided by Police of Nganjuk is already in excellent service.

According to questionnaire score, the total quality service variable value is 18600. Meanwhile, the amount of total questionnaire (X) is 16069. The continuum category measure the high score as 13640,50, medium is 8680,50, and the low score is 3720,50. Thus, the variable standing position of quality service continuum is as follow:

- The low continuum range, 3720,50 – 8680;
- The medium continuum range, 8680,50 – 13640;
- The high continuum range, 13640,50 – 18600.

It means that the total continuum range which is 16069 is placed on high continuum category which range between 13640,50 – 18600. Meanwhile, the total customer satisfaction variable value 15000, from the questionnaire table, the value of (Y) is 13021. The continuum category divides the high score category ranges 11000,50, the medium is 7000,50, while the low point is 3000,50. Thus, the descending position for customer satisfaction towards driving license registration will be as follow:

- The low continuum range, 3000,50 – 7000;
- The medium continuum range, 7000,50 – 11000;
- The high continuum range, 11000,50 – 15000.

The value of customer satisfaction in this study, which is 13021, is included in high category within 11000,50 – 15000 scores. Based on the finding, it could be concluded that the better quality service the better customer satisfaction. This could be shown by the value

of each variable which possessed percentage of 86,55% from the responds of every sample while the percentage of customer satisfaction is around 86,70%.

Goesth and Davis cited Tjiptono (2004: 51), argued that quality is defined "as a dynamic condition in which it deals with products, services, people, processes and environments that meet or exceed expectations. While Christopher Lovelock and Lauren Wright (2008: 14) state that "quality: the degree to which a customer satisfies service by meeting their needs, wants and expectations.". In accordance with the statements above, theory of Heskett cited by Proctor (2000: 279) states that; the relationship between the quality of internal services and the quality of external services which furthermore relate to customer satisfaction, customer loyalty and organizational profitability. They propose that high quality internal services lead to increased employee satisfaction which in turn leads to increased service value and increased external customer satisfaction.

The existence of Nganjuk SATPAS, in serving the duty to society, must meet the expectation of society in diversity. The society which comes from elements of varieties, they must obtain service which is equal, predictable, expected, and tolerant zone between quality service and applicant satisfaction. If the conditions above are fulfilled, there will be feelings of secured, security, ordinance, peaceful, to support the productivity of society.

Yogi S & M. Ikhsan (2006: 279) states that public service is close to bureaucracy government representation, because it is a direct function of government to serve its people. That is why, the quality service of an institution is the reflection its bureaucracy. In conclusion, this must be the fundamental procedure for the state to serve the people, this must also be followed by Nganjuk Police Officers.

According to the regulation of Ministry of State Apparatus Empowerment (Meneg PAN) number 63/KEP/M.PAN/7/2003 educates people that public service is an act of effort to service the society done by the state apparatus as the realisation of people needs or the implementation of constitution law.

Moreover, in Law article 13 number 12 of 2002 about the Police of Indonesian Republic, it states that: the fundamental duty of police is to: maintain the security and the orderliness of society; law empowerment, and; give protection, aegis, and service to society.

According to the decision of Menag PAN and the Law formulation above, the general duty of police is to serve the society. Thus, for SATPAS Nganjuk Police department, to serve and give best quality service to people is mandatory. It is important to give the best service as it will increase the image of Police among society. Starting from this understanding, the police officers of Nganjuk try to give their best service to the smallest element of society universally whereas they are the judger of law and protector of its people.

There are many strategic, innovative, and creative ways provided by Nganjuk Police as the reformation movement in every department, driving license registration becomes one of focus. Unfortunately, there is no such an easy way to reform all of it in instant time, by planning a good, fixed, and consistent bureaucracy will produce more actual, aspirative, and accommodative policies. That is why, bureaucracy reformation will demand Police of Nganjuk to keep correcting their policies internally as the people satisfaction will always be maintained and improved.

CONCLUSION AND SUGGESTIONS

According to the finding and discussion of the study, it concludes that there is a direct positive influence of quality service toward customer satisfaction as the applicants of driving license registration. In other words, *Tangibles, Reliability, Responsiveness, Competence, Courtesy, Credibility, Security, Access, Communication, and Understanding the customer* contributes 25,2% simultaneously towards customer satisfaction variable which are the applicants of driving license.

There are several suggestions by the researchers as follow:

- There must be consolidation of communication indicator from the officers to improve the customer satisfaction as it possesses the lowest point.

- The responds to people needs must a little bit faster. A fast and accurate service of an institution become major focus in serving people to obtain driving license, the process must be in time to wipe out a bad or negative perceptions of the applicants to the procedure and the officers.
- There should total quality service to maintain prime performance.
- The leader of institution should be a good model to represent a positive cultures among the officers.
- Another study to examine another variable is a good option such as organization environment, working ethos, discipline work and other variables which has connection with customer satisfaction.

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THE LIABILITY OF HIGHWAY PUBLIC TRANSPORTATION LEGALIZATION IN JEMBER REGENCY

Inambala Arum

Postgraduate School, Airlangga University, Indonesia

E-mail: eliindra10@gmail.com

ABSTRACT

The obstacle of law legalization for public transportation in Jember is caused by the law policing itself, it is the governor regulation number 36 of 2016 which its contents has a clash with home affair ministry regulation number 28 of 2017 which caused in blurred law. The second factor comes from the officers who do not provide scheduled socialization and they do not judge with strict judgement. Thirdly, it is the law awareness from society, people are lazy to commence their administrative law to legalise their vehicle, and the small number of their vehicle which one person only possessed one or two vehicles makes them unwilling to register their vehicle to government. Thus, the law awareness scale among society is still low. The last factor is culture impact which is similar to awareness factor. The culture of people who does not care with the safety, punctuality, and comfort of customers is a character which has been intact among society, this makes them unwilling to register their vehicle.

KEY WORDS

Obligation, public transportation, law, council.

Juridically, the definition of public transportation is stated on article 1 law number 22 of 2009 about Mass Transportation Traffics (known as UULJA). It states that transportation is the displacement of humans or commodities from one place to another which uses vehicle in highway road traffics. Another definition explains that public transportation is the passengers' transportation within renting or paying system. The city public transportation (Bus, minibus, etc), train, water transportation, and planes are all included in mass/public transportation. The transportation used in this study is limited for highway road transportation to fulfil the increasing needs of people on mobility and displacement; it does not matter whether the displacement range is far or close. The public transportation plays important role on controlling traffic jams, fuel/gas saving, and city development and planning.

In order to commence a safety, order, and expeditious mass transportation, it must follow the regulation from the law. One of model to control mass transportation is by applying and registering all public transportation to the state as written on UULLAJ. The driver and the vehicle must be registered according to article 1 act 21 UULLAJ states "the public transportation company is a legal council that provide mass transportation for people and commodities by using motor vehicle". The statement, then, is preceded to government regulation number 74 of 2014 about Road Transportation. According to article 79 government regulation number 74 of 2014, it is clearly stated that the public transportation company must be a legal counsel of Indonesia which follows rules of the constitutions.

By using a legal council on mass transportation, the government will be easier to control the mass transportation procurement. Moreover, the company, within its legal status, must have own workshop. Thus, the safety of vehicles is more guaranteed. Also, the legal company must register their driver, this will reduce the amount of crimes happened among passengers and drivers.

METHODS OF RESEARCH

This study uses qualitative method as the problem of study is connected with social issues which fundamentally depend on observation. According to Moleong, qualitative

research is “a research which its purpose is to reveal the phenomenon experienced by the subject of study such as behaviours, perception, motivation, act, and etc, holistically described in the form of words and languages, within most natural special context and by using many natural methods”.

In one hand, according to Sugiyono: “Qualitative method is a method which is based on post-positivism philosophy, although for the natural experiment where the researcher is the key instrument of study, the data collection technique uses triangulation. The data analysis is inductive or qualitative, and the result of study focuses on the meaning than generalisation”.

Based on the conclusions above, it can be concluded that the qualitative approach is a complete approach to the subject of research where there is an event in which the researcher becomes a key instrument of the research. Then, the result of the approach is described in the form of words written empirical data that have been obtained and in this approach also emphasizes the meaning of generalization.

DISCUSSION OF RESULTS

There are some problems raised in the obligation to register the public transportation to the state, as follow:

Legal Factor. The constitution regulation is the fundamental law for every law enforcer to do legal action. That is why every law must follow the social movement among societies. As stated by Philip Nonet and Philip Selznick about responsive law, they state that the development of law must be synchronised with the movement of society. Therefore, any laws and regulations will, of course, follow the development, situation, and condition of society. Satjipto Rahardjo states that the law enforcement is started by the time it was approved by constitution. In other words, there is a background of a certain phenomenon that push government to publish regulation in the implementation of law in the form of legislation.

In general, the public policy must be legalised in the form of law, in other hand, law is the product public policy. Thus, the relation between public policy and law could not be separated. The two must get along together within filling each other principal. Theoretically, if a law does not have public policy as its foundation, the law will lose its substantial value vice versa. The public policy without protection of law and constitution will be very weak and easy to be object of violation.

Law publication is one of alternative way to solve a certain problem. Public policy has helped many practice of law to reach such ideal regulation to fulfil the product of law itself. The public policy in question is a legal body policy for public transportation.

The publication of Ministry of Home Affairs regulation number 28 of 2017 replaces the Ministry of Home Affairs regulation number 12 of 2016. The current problem of Ministry of Home Affairs' regulation number 28 of 2017 is that there is no technical regulation from the governor as stated on the previous regulation, Ministry of Home Affairs regulation number 12 of 2016, which is followed by the publication Governor Regulation number 36 of 2016. As the old law has been cancelled by new one, the Governor Regulation number 36 of 2016 about technical regulation is also cancelled.

It is clearly stated on Ministry of Home Affairs regulation number 28 of 2017: “At the time this Ministerial Regulation comes into force, the stipulation of the Governor Regulation to implement the basis for the imposition of CLA and BBN-KB shall be implemented no later than 30 (thirty) days since the enforcement of this Ministerial Regulation”.

Unfortunately, as there is no governor regulation stated in ministerial regulation of home affairs regulation number 28 of 2017, there is a possibility of discretion because there is no governor regulation that exists to be the same as governor rule number 36 of 2016. This makes uncertainty among law enforcer while practicing state administration especially in Samsat Jember Regency as setting of the study. If the current law is not being amend, there will be no BBN –I or new tariff for public transportation. In the other hand, the state could not use Governor Regulation number 36 of 2016 as it against own policy.

Law Enforcer Factor. Human resources are one of factor that would determine the successfulness or failure of policy implementation. Edward III stated that "*Probably the most essential resources in implementing policy is staff*".

According to Soedjono Soekato, several factors that must be applied to achieve proper law enforcement, they are:

- The role model provided by law enforcer;
- Firm manner from law enforcer;
- The synchronisation between current law and technology development;
- Provide proper time for people to understand the new policy;
- Socialisation of regulation obligated among society.

As stated above, from Soekanto explanation, we can conclude that the last factor, socialisation, is a model of which is preventive law enforcement action.

There are several dimension of socialisation policy; they are transmission, clarity, and consistency dimensions. The transmission dimension demands the policy to be delivered not only to the implementers but also to the target of policy itself. , that is why, this communication dimension covers transmission policy which include objectivity clarity within high concentration of visions.

Within consistency dimension, in its practice in Jember Regency, the latest socialisation to inform people about law council policy is commenced by department of transportation and Traffic Police Council in mid 2016 on may until late 2017, the policy of law council has been amend several times since. The latest socialisation is still informed people about the cancelled law, Ministerial of Home Affairs regulation number 26 of 2014. This law has been replaced by Ministerial of Home Affairs regulation number 12 of 2016 and being replaced again by Ministerial of Home Affairs regulation number 28 of 2017. Thus, we can conclude that the importance and awareness to socialise the current and latest law to society is still low.

That is why, the information received by Organda, as one of legal public transportation company, is not always up to dated. This has been proved by the interview with Umi Indrayanti, she says: "If there is a legal counsel we will be well protected, but we also need a fee for its administration process. And get 30% incentives if incorporated."

In addition, from the transformation dimension of how a policy should be transformed, according to the author, still does not reach maximum value. This is caused by the media socialization of legal obligations, it does not use banners or through videotron. Socialization used traditional media; so far, they only use the form of talk and involve only Organda. For its effectiveness, members of the Organda also do not necessarily convey the same information to the members below it correctly. So that, the socialization must be put on through banners, videotron, or local radio. So that, clarity of socialization material will be understood clearly and in details for the target group.

Law Awareness Factor. Law awareness, according to Indonesian dictionary, is an individual awareness towards knowledge that a certain action is controlled by law. Law awareness, at some point, is expected to force people to obey and obligate the rule by avoiding any obstacles that would result in law violation. That is why law awareness improvement becomes very important to improve law enforcement.

The result of society who does not possess law awareness is the society who loves to violates their regulation. The violation become worse if it's executed by the law enforcer itself who literary build and publish the policy to society. How could such condition exist within law enforcement and the current state administration?

Law awareness, from language perspective, consist of two words, which the first word is awareness which also means to know and understand. In general, they must understand and know about their regulation/law, according to Ewick and Silbey, they say: "Law Awareness" is the way of how people get to know with their law and its institutions, it is an understanding that provides people with meaning and experience of peoples' action.

According to Ewuick and Silbey, law awareness was formed by action as the result of practice for empirical study. In other word, law awareness is also called "Law as behaviour"

and not as “law as Norms and principals”. Thus, developing law awareness is not such an easy job, because not all people possessed the awareness intact.

Transportation Service council along with Police resort of Jember are the institution who plays important roles in socialising law awareness among society, they have duty to inform and enforce the mass transportation company service to register their company. Unfortunately, there are still many obstacles to achieve the vision. This phenomenon is caused by the majority of the transportation company that is still in form of individual, they are not willing to turn into legal counsel company registered in government within thousands reasons.

From the result of observation, it is revealed the disobedience of people is caused by by several reasons, as follow:

- They are not willing to register their SIUP (Trade Business License), Company Domicile, Taxpayer registration number, Company’s Deed;
- The amount of vehicle which is still low, the mostly have or 2 vehicles.

Beside, according Hudan Asrori, the administrator of PKB and BBNKB Police Traffic of Jember, Stated that the low rate of law awareness is caused by:

- The difficulties to register their company in government and the number of vehicle which is low;
- The vehicle owner refuse to possess more burdens by paying tax as their income is still inthe same rate even though the council will be protected by law.

According to Tjatur Sulistianto, the obligation to register the vehicle to become law council has been applied in the regency based on UULLAJ about the mandatory of people to register their mass transportation. But, the law awareness of society is caused by:

- General vehicle owner has low law awareness value within their anomy. It makes them unwilling to register or do some state administration.
- The low awareness of people made the administration of the state not developing which result in complicated process.
- The amount of vehicle which is not being worthy to be registered, one person only possessed one vehicle, that is why, registration becomes not attractive.

According to organda, the disobedience is caused by several factors as follow:

- People assume that the registration is too risky within big and difficult consequences, they think that it is not worthy as they already lent some money to bank and it has no value to be sold in future;
- The cost to register the vehicle is high within complicated process;
- The complicated administrative process.

Government needs some firm action to empower the law enforcement. Aligned with H.C. Kelman, he states that the law obedience consists of:

- The compliance obedience, people are afraid to violate the law because they are frighten of the sanction;
- The obedience identification, people obey the rule as they do not want to break any relationship with their colleagues;
- The internalization obedience, people obey the regulation naturally as they thought that rule is meant to be followed within tits intact intrinsic value.

By basing on the model of legal compliance then with the enforcement of minimal sanctions can provide compliance that is compliance, which is if a person is obedient to a rule just because he is afraid of sanctions.

Edward III (1980) asserted that the success of policy implementation is not only determined by the extent to which the implementers know what to do, but also determined by the will of the policy actors to have a strong disposition of the policy being implemented. This disposition is the willingness, desire, and tendency of policy actors to implement the policy seriously so that what the policy objectives can be realized. This disposition will emerge among policy actors, when it will benefit not only his organization but himself. Ultimately, the intensity of the disposition of the implementers can influence the policy's

performance. The lack of or limited intensity of this disposition, can lead to the failure of policy implementation.

According to the background of study toward the sanction implementation for the vehicle procurement which does not have legal license is that they need a strong will, desire, and a firm action to implement the sanction directly.

According to the writer's opinion, the sanction applied for the driver who does not register their vehicle is the suspended license. The sanction will be applied as long as they do not register their vehicle. By enforcing the sanction, the government expects that all vehicle owners will be willing to get legal status of their public transportation business. They will not be able to operate their business.

For additional policy, to motivate the vehicle owners, transportation State Service of Jember make free of the retribution cost when they want to extend their license to improve and increase the number of legal mass transportation. In one hand, police traffic office, it makes rule for every public transportation that is willing to extend their vehicle registration license, they must be registered as legal mass transportation first to pay the tax.

With the formation of legal entities, the government will more easily monitor the implementation of public transport. In addition, with a legal entity then the legal entity is obliged to have workshop so that more secure vehicle maintenance, which aims to improve the safety of public transport. Plus, legal entities are required to hire drivers according to the prevailing provisions, so criminality by drivers can be minimized.

Cultural factor. Culture awareness is an act to appreciate, understand, and comprehend toward the diversity within the cultures itself. Wunderle stated that there are several steps of culture awareness, as follow:

1) Data and information. Data is the smallest unit of information in cognitive perspective. Data consist of signals or signs which do not go through communication process between code of the systems, or the feeling of environment to detect humans. It is very important to have data and information to improve the communication process.

2) Cultural consideration, after achieving a certain information of a significant culture, we will acquire the understanding towards the culture and factor which becomes the value of the culture. This will be a consideration value about the concept possessed by a certain culture in general to achieve the meaning of cultural code. The cultural consideration will help us to improve and empower the communication and interaction.

3) Cultural knowledge. It is not easy to apply and implement a certain culture even though we already receive the information about the culture. But, the knowledge of a certain culture is a very important asset to face problems in future. The knowledge of other culture is important, but it is also important to learn and understands own culture. That is why, the understanding process of a culture could be maintained through certain trainings. Its purposes are to open the history and understanding of a culture. It includes the major issues of culture such as community, leaders, dynamic, culture's virtue and language competency to understand such culture.

4) Cultural competence. The highest level of culture understanding is cultural competence. The cultural competence is meant to make a decision and cultural intelligence. Cultural competency is the understanding of cultural flexibility. It is very important as it focuses on planning and decision making of a culture on a certain situation. The implication of cultural competency is the intensive understanding of a certain culture.

The knowledge of "what is law" is very important to raise the law awareness among society. It is impossible for a person to obey the rule if they he/she has no idea of what law are. It's very important for people to understand that law was build to protect them from such lawless condition. Beside of the knowledge of law, the understanding of law is as important as knowledge of law. When a person only knows and does not fully understand, then there will be a misunderstanding that resulted in the law not running as it should be. Understanding of the law becomes one thing that must be owned by every individual who run the law. Understanding in this case means the knowledge of each contents in a chapter as well as how the article can be formed and how to run the chapter. Next is awareness of a people's legal obligations to others. It is also important because it will make the law run as it

should be. When a person knows what he can and should not do to others, and realizes that there will be rewards from everything he does, good or bad, they will automatically have a legal consciousness. Accepting the law, even though people know and understand the law, understand their legal obligations to others, if they do not want to accept the law, then the conscious state of the law will not be realized and the law will not be able to walk as it should. Accepting the law is one sure rule that must be obeyed if the law wants to walk. Getting people to accept the law is not an easy matter, however, regularly taught teachings will have the effect of legal acceptance by the community itself. Thus, if it is analysed from several perspectives above, it is to change the negative culture that has become mindset of society, there are several steps to achieve the law awareness, they are as follow:

1) Action. This is the first and most important way to raise awareness among society. Action could be in a form of punishment if somebody violates the law, and appreciation who obey the law. From that statement, the illegal mass transportation who does not have legal registration must obtain the sanction by cancelling their legal route permission. The sanction come from police traffic office, the vehicle owner must first pay their tax of legal permission to extend their legal vehicle ID. For those who obey the rule, government will appreciate their struggle by decreasing their tax burden of PKB and BBNKB (Tax for motor transportation). The transportation division service could make free the retribution burden for the mass transportation who has registered their number.

2) Education. Everything about the awareness, knowledge, understanding, and law acceptance must be delivered in effective way. Education is one of effective way to deliver the information correctly. Starting from the traffic awareness, this attempt could be implemented by Organda of Jember Regency. Then, it will be delivered to the driver and students even in kinder garden level.

3) Campaign. Campaign is also a good way to introduce law to society. When somebody knows their law, the impact will be whether they receive an appreciation or sanction, thus, the law awareness will be automatically raised within. The campaign should be massive by using banners, videotron, or local radio to socialise the current policy and law to society in meantime.

CONCLUSION AND SUGGESTION

The obstacle of law legalization for public transportation in Jember is caused by the law policing itself, it is the governor regulation number 36 of 2016 which its contents has a clash with home affair ministry regulation number 28 of 2017 which caused in blurred law. The second factor comes from the officers who do not provide scheduled socialization and they do not judge with strict judgement. Thirdly, it is the law awareness from society, people are lazy to commence their administrative law to legalise their vehicle, the small number of their vehicle which one person only possessed one or two vehicles makes them unwilling to register their vehicle to government. Thus, the law awareness scale among society is still low. The last factor is culture impact which is similar to awareness factor. The culture of people who does not care with the safety, punctuality, and comfort of customers is a character which has been intact among societies; this makes them unwilling to register their vehicle. For various improper reasons and excuses, it is used to maintain a culture of indifference to the mandate of the law regarding legal obligations. So, it takes decisive action, massive campaigns and traffic awareness education to be able to change this negative customs.

Suggestions. Governor as the mandate to commence Governor Regulation Implementation must replace Governor Regulation number 3 of 2016 which is already cancelled by publication of Ministry of Home Affairs regulation number 28 of 2017. The sanction must be applied firmly by implementation of cancelling their legal route operation and their identity vehicle extension for police traffic office perspective that makes the willing to pay the tax first. In the other hand, transportation Service council must able to set free the charge of retribution of legal route extension and its kir in order to increase the number of legal mass transportation.

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THE ROLE OF PSYCHOLOGIST IN PSYCHOLOGY EXAMINATION TOWARDS DISCIPLINE LAW VIOLATION OF EAST JAVA POLICE OFFICERS

Saputra Nophaz Hanggara

Post Graduate School, Airlangga University, Indonesia

E-mail: hanggara.drummer88@gmail.com

ABSTRACT

This study aims to reveal and describe the role of psychologists in the police in terms of psychological examination related members of the troubled police (disciplinary offenses). The constraints of the implementation of police psychologists in terms of psychological examination related members of the police who have problems (disciplinary violations), namely the lack of psychological personnel in East Java Police and personnel in the ranks still not all understand the existence of a counsellor as a consultant and counsellor attitudes of personnel behaviour. Obstacles can also be obtained from the psychologist's interview process, such as close friend officers, higher officials, and problem family officers.

KEY WORDS

Psychologist, counselling, discrimination, violation.

Polri (Police of Republic of Indonesia) is the state instrument to control and manage society's order, enforcing the law, and provide protection service. In order to maintain the inner safe of the state, the article 13 number 2 of 2012 about Polri stated that the mandatory duty of police is to maintain the safety and society's order, enforcing the law, and provide protection service in order to maintain the inner safe of the state.

Accordance with the duty and function of police, the officer must able to learn knowledge such as psychology. This knowledge is very important for the corresponding occupation as the fundamental jobs of police officers needs high special ability or skills in psychology study. Moreover, the jurisdiction of police which covers national area, they are committed to perform in such quick action within fundamental psychological principles.

In fact, the field observation shows much disobedience by the officers. These are the list of ethic code violation performed by east java police officer (Polda Jawa Timur) which is categorized by its type (Table 1).

According to the table above, we can conclude that there are 10 types of discipline violence cases within 38 cases in total occurred during 2015. The unprofessional investigation dominates the cases above.

Ever since police and military were separated, the position and role of psychology is no longer on its state recognition. But, it turns into sub-police human resource division. Moreover, all terms and definitions of psychology study will be committed towards its organisation structure and occupation. The recognition has become a challenge to prove that such skills in psychology occupation will contribute huge aid in the development of police organisation. In other word, it will help the officers to reveal the case that need psychological stats approach.

There are some competencies to support the police officers role in society. First, it is the psycho-diagnostic skill; it is a skill to make precise conclusion and suggestion based on assessment and experiment toward the criminal, witness, and victim through psychological instruments. Second, depth interview, it is psychology data collection skill and gather some factual information directly to the testee (Criminal, Victims, Witnesses). Third is observation, a skill to focus and maintain the observation towards reaction or indication that may happen. It is a skill of psychological economical which has good impact in both direct and indirect way. The fourth, profiling skill, a skill of identification and analysis based on unique data about a certain individual or case that has some connection with civil law action. Fifth,

administration report skill, a police officer must be able to conduct a firm and communicative report. Sixth, it is educating skill (Leksono, 2010; 23).

Table 1 – The violation data of 2016 sort by type

No	Violation type	Total
1	Unprofessional investigation	6
2	Drugs Misuse	6
3	Fraudulence and Corruption	1
4	Authority misuse	8
5	Fresh Police Broker	4
6	Driving license broker	7
7	Family abuse	3
8	Thievery	1
9	Adultery	1
10	Illegal Firearm	1
Total		38

The skills above are meant to be applied by psychologist police officer while finishing their mandatory duty in human resource division. It is important to know that the division holds several functions. One of them is psychological operational function, personnel psychology, and all roles related to psychology study.

The purposes of this study are, as follow:

1. To identify and analyse the discipline violation by east java police officers through psychological examination;
2. To reveal the ethic code action of psychologist whether they already act in terms of law or not;
3. To study the obstacles of psychologist while examining the police officers who breaks the discipline law.

METHODS OF RESEARCH

The study uses qualitative method, an experiment approach which is applied to natural object condition. In this method, the researcher plays its role as the key instrument. The data collection technique was done by collective triangulation procedure. Meanwhile, the data is in the form of inductive. The result of study focuses on the meaning instead of the generalisation of the result. The study is descriptive qualitative type which follows phenomenology concept. It isolates both consciousness and phenomenon together, but it always connected each other in dialectic way.

Setting of study takes place in psychology division of human resource department of east java police. Because, the number of indiscipline officers in this area is still relatively high. The analysis unit of study is the psychologist's role who examines objects of the study. The source of data of the study covers many aspects of society, they are listed as follow; Head of the Department and Division, the psychologist of the department and division, the indiscipline officers. The table below provides more detail information:

Table 2 – The Source of Data

No.	Name	Position
1.	AKBP cucuk Trihono, S.Psi	Head of Division of Psi ROSDM Polda Jatim
2.	IPTU Yuliana Ratih, M.Psi, Psikolog	Psychologist of Polda Jatim
3.	Kompol Suyoto, Mpsi, Psikolog	Psychologist/Examiner
4.	R. Suryo Narmodo, MPsi, Psikolog	Psychologist/Examiner Polda Jatim
5.	IPDA Ismunandar	Indiscipline Officers of Bondowoso Police Resort
6.	Zakaria Tarmizi Maulana	Indiscipline Officers

The instrument of study uses interview guidance which provides possibility to ensure the similar data collection from each source of data descriptive qualitative by following the steps below:

- Analyze all the data that taken from different source in depth interview and documentation;
- Data condensation; by concluding all notes in the field observation, categorize the fundamental stuff which has concerned with the problem of study. Then, it is sorted in systematic way for better description;
- Categorization; by sorting out the data that has been analyzed and condensate by variable definition;
- Checking the data originality; triangulating the data by asking another informant about the originality of the data or crosschecking the data;
- Defining data; answering the research question could help the researcher to define them. It is being analyzed by analytic technique, it is a prototype from categories that has been found and to provide the suggestion from corresponding finding;
- Conclusion and verification, conclusion must be taken from research question formula.

DISCUSSION OF RESULTS

The psychologist's role in psychological examination. In police department, the psychological procedure procurement is stated in police counselling standard procedure from east java police division psychology department. The basic examination is stated in Polri Telegram no Pol 292/III/2009 about the instruction to the head of psi, they must be actively to do counselling periodically. In order to follow up the discipline violation by the officers, psychology contributes huge aid in minimize and preventing the disobedience from the officers as stated below:

- It helps police to identify the problem that result in indiscipline action:

As individual, the most occurred problems are family and self depression. It is mostly known to be the outcome of everyday behaviour of the police officers, as stated from the interviewee "*Problems in personal or family life, can determine the performance of members. Therefore, we ensure by helping to identify problems with each member who are otherwise having problems while on duty, resulting in disciplinary behaviour*". The problems followed officers would determine the working performance. Thus, it is urgent to identify the problem. Accordance with the types of discipline violation, the interviewee states "The abuses that are usually committed to indiscriminate behaviour based on the identification result are the inappropriate use of firearm, then the issue of infidelity that should not be done by a member of an honourable institution, and the dissertation".

- Forming the counseling team to reduce indiscipline action:

The counselling aid is provided before the officers take any judgment or punishment from police department. As the interviewee says, "*Before receiving disciplinary punishment, members who engage in an indisipiner must receive counselling. So that, the environmental atmosphere and emotional members are considered. Because, no matter how, the members still have the right*". The given counselling must be performed by chosen counsellor to avoid the injustice action that given to the officers who violates the ethic code. The counselling guidance is priority for the officers who carry bigger burdens and responsibility, they also do not have high skill in emotion management. Thus, they will be very fragile to emotional control. As the interviewee says "Need good stress management in the duty as law enforcers who have code of ethics, so counselling own guidance in member resource management is needed". There are some details that need to be concerned by the counsellors to maintain the emotional condition of the officers as follow: Mental and physical condition; First impression building; Become nice listener; Provide support and suggestion; Perception synch; Identify the strength and weakness of client; Collective deal of the current situation with client; Follow up and finishing plan.

The examination process toward indiscipline officers. Not infrequently, in carrying out its duties, members of the Police faced with problems that concern the emotional side so that affect the performance in the field. This was conveyed by the resource person, "The

duties of the police officers are facing directly with the public, facing various social, legal and psychological problems of criminals, so it is not infrequently also members emotionally provoked. This is what needs attention. "Police officers are faced with situations that can be directly related to the psychological side so they need to be concerned in counselling by psychologists. In carrying out the task there are several aspects that can contribute to form its capacity, especially related to the process of carrying out its work. One of them is a psychological factor that becomes part in performing their duties.

One case that could affect the officer is the inappropriate use of firearm. In one of case, there is indiscipline officer who use the firearm in not proper way which is stated as follow "I stole this firearm from the storage room of police office, to be sold. But, because of that, i must receive the indiscipline punishment. I do not have any firearm of myself, because my duty does not require that equipment". One of the officers has make confession that he stole the firearm from warehouse of the police of east java. In fact, the using of firearm by the inappropriate officers would result in traumatic behaviour.

The demanding pressure of live both in duty and family is the root of all firearm misuse. Such Zakaria's case, even though he does not have any firearm, because of the self esteem, he is willing to steal the firearm from warehouse. This case represents the aggression of which is the result of emotional pressure. The subject possesses high intelligence level within his current education and age. It means that the subject is able to complete easy mission, but his emotional condition block him to think in different way. This turns the subject to prioritise emotional rather than rational cognitive, thus he does not count his future possibility well. Concerning with the emotion instability, the subject felt lost of self-concept. This is shown by his aggressive action and impulsive without concerning the result of his action. This causes the subject to forget the concept itself and forget the responsibility as a member of the Police so that his logic of thinking is defeated by his emotional state and the desire of his moment without thinking about the risks / impact of his actions in the theft of firearms.

The psychologist of police department work by following the SOP which is already stated in Kapolri Telegram No: Pol 292/III/2009 about the instruction to the head of psi, they must be actively to do counselling periodically. The most frequent used method of counselling is observation technique. Observation is the activity of observing the behaviour of members who can identify the problem and the type of violation committed. In accordance with the statement of resource persons as follows "*first, if the procedure has in line with SOP, the first thing to do is observation, we will able to identify the early problem that will be our hypothesis as etymology of indiscipline actions of the officers*".

Counselling program in accordance with SOP will be done, firstly, with observation. Furthermore, as the informant said, "*Begin by looking deeper to determine a more appropriate approach to the subject. If the problem is a disciplinary offense then you should not use a purely humanistic approach, be directly with behaviouristic, behaviouristic and humanistic combinations, be directly with gestalt if possible.*" So, the observation will play a role in determining the right approach. If problems are related to disciplinary violations, then a gestalt humanistic and behaviouristic approach may be an option. Humanistic psychology emphasizes the need for mutual respect and without prejudice (between clients and psychologists) in helping individuals cope with their problems of life. While behaviouristic focuses its attention on something that may be an object of study, ie environment and behaviour, rather than focus on what is available in individuals, such as perception, thoughts, images, and feelings. If the case of a household or an interpersonal relationship related to a personal conflict that is not a violation of the discipline, then a humanistic approach in which the principle of exalting the value of humanity is promoted. While behaviouristic principled on the enforcement of reward punishment, while gestalt more compressive but must be based on a broad insight into all matters related to the subject and the problem. This will make the approach more appropriate for the counsellor.

The interview process must be based on the subject's problem and characteristic through previous individual understanding. This has been in concerned with the interviewee statement as he says 'The interview should be in accordance with the subject matter and the

personal characteristics we have successfully observed before approaching or establishing an initial relationship with the client'. Then, another interviewee add by saying 'If necessary, the psychologist should prepare an interview guide according to SOP guidelines'. Interviewee procedure helps the process to limit and maintain the main topic of discussion. Thus, it will focus to receive and provide patient with comfort, as a result, client will be easier to deliver their feeling and problems. It is important to ask permission to the client whether the researcher is allowed to take a note on what they had shared or not.

The guideline is very helpful for the researcher to remind the details while doing observation, such as the dress code, appearance, manners and expression. Te expression during data collection process, specific body gestures. The expression at the late session of interview, the most outcome expression from instruments to support the counsellor to understand the condition of the subject.

The Obstacle Faced by Psychologist during Examination Process. The small amount of psychologist provided by police is stated by one of the informant as he says "if the number on that specialist is very limited, it is not an option for us to commence inner reconsideration. The local doctor will be part of the team, we conscious of our limit, that is why, we will involve from another sector". Even though, east java police department lacks of psychologist resources, they overcome the problem by inviting local doctor to be involved in their psychological team to prepare their mental personnel condition. Unfortunately, the lack of psychologist also affects another division as stated by the informant as follow "the lack of psychologist also affect in the implementation of psychological test for fresh recruit once in six month".

Because of only small people with such profession are willing to work in police institution, it makes the psychologist resource in police become limited. As the interviewee says "the psychologists are not willing to contribute in police department because of its salary which is relatively small". But, the existence of psychologist does not affect the depression of the personnel. The interviewee adds "from all discipline cases that happened, there is no one cases that is caused by the duty burden, most of them are caused by internal or family problem".

To minimise the phenomenon, Polri has commanded its sub division including province, resort, sector police to commence annual meeting to discuss their obstacles during the personnel duty as the informant says "so, there is a certain discussion, we use it like coffee morning with some personnel, at that time, we talk about our job". Through this comfy talk, the purpose is to make personnel telling their inner problem, thus, they bring no depression while doing their duty and service to society. Moreover, as humans, police could also be depressed.

Nowadays, the role of psychology in law is only in procedural form. Moreover, it always occurs in law enforcer selection while being witness on court. There are several factors that cause psychologists are not willing to contribute in law environment, one of it is the unwilling psychologist to get involved in law. The scientist of psychology does not take the major role in law yet.

The head and personnel of police still do not understand the existence of counsellor as consultant as their guidance to control their behaviour. This is very common and could be accepted as the socialisation of psychology guidance is still on low average especially in east java police jurisdiction. As one of the interviewee states '*How to figure this, indeed for police psychologists' still need consolidation and socialization support. Sometimes, our position in the police force is still considered insignificant*'. It is very fundamental to commence consolidation and socialisation of psychologist role in east java police jurisdiction. Moreover, it needs trust of every personnel and the head division to ensure them that psychologist role is very important for their job and to help the head's duty.

To gain the effectiveness of the socialisation, it takes more than just a division to support it, all divisions of east java police must take part on it concerning with the consolidation of counsellor position. The first step is by socialising the counsellor position in the environment of police. It is important for position in Polri. As stated by the interviewee, he says "Yes, to maximize the role and position of the counsellor, it needs support from various

ranks in Polda, so they understand the actual function of the counsellor in providing guidance and counselling to the members (Personnel)".

There are several roles of psychology in consolidating law enforcement in east java police. First, psychology consolidates the personnel in law enforcement. Second, psychology could define and examine the psychological health of suspects, victims, and the witness, the police can determine the correct judgement from it. Third, psychology can enhance the society's awareness in obeying the law.

The obstacle could happen during the interview; there are several problems as follow;

1. The interviewee is the close friend. In some cases, the obstacles appear as a result of closeness between interviewer and interviewee. As the informant says 'it is hard when the subject is our close friend, the topic turns into subjective. But, if the counselling really need to reveal the problem, we need to build commitment among us before'. The interview that goes with counselling is very hard that some points the discussion turn so objective. The process will be easier if both of them commit on a certain rule to keep the interview in line before.

2. The interviewee possesses higher rank. The rank also affects the effectiveness of interview that try to got commenced by the psychologist. As the informant states "it can also, sometimes, turn into bias, if we do an interview with kanit (head of division) or visible or higher rank. Sometimes what will be resolved can be precisely targeted. Yes, because of the difference in rank, but once again it takes commitment between the psychologist and the member". Sometimes, the target and result of the interview become bias; it takes a certain commitment to solve the problem even though the interviewee has higher rank then the psychologist.

3. The interview is on serious family problem. The emotion of interviewee is commonly not stabile if they are on serious inner problems with their family. As the informant says "If there are members who have problems with this family it sometimes tend to be unstable or sensitive. Because, not everyone including members of the police wanted to open up and tell their family problems. We usually approach for those who have problems with families longer and try to be more relaxed or more humanistic". The interviewee becomes very sensitive in this situation, the approach should be more comfy and relax within longer counselling time, the psychologist could use family approach and humanistic as well. The personnel who has family problem is, freely, able to chose, motivate and actualise their inner self, thus, the overcoming problem tends to with their own way of choosing.

CONCLUSION

The psychological procedure procurement is stated in police counselling standard procedure from east java police division psychology department. The basic examination is stated in Polri Telegram no Pol 292/III/2009 about the instruction to the head of psi, they must be actively to do counselling periodically. The role is to help identifying problems that cause indiscipline action of the officers and to help the police to reduce it.

The implementation of psychological examination is in accordance with the SOP that is set in Telegram Chief of Police No: Pol 292 /III/ 2009 where by using observation and interview instruments within humanistic and behaviouristic approach.

The problems faced by psychologist are the limited and small number of psychologist available in police department, the position of psychologist counsellor and guidance is still under rated among police officers during the interview process, there are some problems as well, the problems occurs when the interviewee is close friend, higher officers, having bad day of family problem.

SUGGESTIONS

According to the conclusions above, there are some suggestions that could be offered as follow:

1. Police can hold the fresh recruit of psychologist officer with the help from Polri and East Java Human Resource Police Division. Thus, the recruitment does not only in inner officer but also from all aspects of society.

2. The state must help the police department about the law to involve psychological examination for the police officers. The support will turn the law stronger and more valid, thus Polri will feel the support from state itself.

3. Commence the counsellor consolidation among East Java Police Office. The personnel must reveal that such knowledge and counselling is very important as it will help them to do their duty to serve and maintain society.

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**THE EFFECT OF WEBSITE AND RELATIONSHIP MARKETING
ON PURCHASE INTENTION THROUGH BRAND AWARENESS:
CASE STUDIES ON RETAIL CUSTOMERS**

Pradiani Theresia*

Institute of Economic Science Asia, Malang, Indonesia

Nirwanto Nazief, Subiyantoro Edi

University of Merdeka, Malang, Indonesia

*E-mail: thdiani12@gmail.com

ABSTRACT

Indonesia is one of the countries in Asia Pacific with the largest e-commerce growth since 2017. Internet users have reached 63 million, about 95% of social media users. Website is one of the social media used by entrepreneurs for online marketing. Relationship Marketing is the company's strategy to attract purchase intention. MatahariMall.com is one of the O2O based online retailers and provides 2000 Indonesian outlets. Relationship marketing and brand awareness arise in the minds of customers when registering members. Research aims at identify and find the variables that are estimated to build purchase intention customers transact online at MatahariMall.com customers in Malang area. The results showed that the website and relationship marketing has strong and significantly effect on purchase intention through brand awareness. The better quality system website and commitment in relationship marketing built retail website can increase brand awareness built retail website, reflected from brand recognition, customers will remember the retail website because the price of products sold on the retail website is known to be affordable and affect the purchase intention, which reflected in the intend indicators, customers will see the affordable price and quality of products so willing to follow the offer displayed on the retail website and interested buy, then, reflected from the predict indicators of customers, interested to become an active member in the near future.

KEY WORDS

Website, relationship marketing, brand awareness, purchase intention.

Online retailers grew exponentially in the last 10 years since 2000. Global online retailing increased 17% annually, in the last 5 years, from \$ 236 billion in 2007, to \$ 521 billion in 2012, estimated at \$ 1248.7 billion by 2017 (Verma, Sharma and Sheth, 2015). This fact is encouraging for online shopkeepers. By 2020, according to the E-Commerce Association of Indonesia, it is predicted that e-commerce market transactions in Indonesia will reach US \$ 130 billion (Rp 1,700 trillion), with annual growth of 50%. Indonesia is one of the countries in Asia Pacific that has the largest e-commerce growth until 2017. Online shopping / e-commerce trends become the company's choice to run marketing activities (idEA, 2017).

Ganguly et al (2010), revealed the phenomenon of internet marketing world is increasing, proven many people who transacted buying and selling through the internet. Jupiter Corporation USA (2010) confirmed the sale and purchase transaction in USA in 2010 reached \$ 144 billion. The development of the Internet also penetrates the country that has a growing economic condition, developing, and entering a transition period such as ASIA. Grabner et al (2003) proves the key to online business is to build consumer confidence. Social media is a means that gives a real ease of communicating even if not face-to-face. Consumers can do a wide variety on social media, for example: searching for product information, comparing other products, to online purchases. This has an impact on companies that start using social media for business purposes, in increasing awareness,

engagement to consumers, and selling online. Purchase Intention online shopping customers woke up, because emerging brand awareness, after viewing the website displayed, companies need to build brand awareness by creating a relationship marketing strategy.

Building brand awareness and customer relationship marketing with the company needs to make various changes, in accordance with the development of information technology, so that the main objectives are achieved and win the competition. Relationship marketing today, as a valuable of marketing strategy for the company. Relationship marketing will produce greater productivity, specifically build brand awareness. Companies that focus on relationship marketing, have significant differences in sales volume and brand, compared to companies that are not focused. The concept of relationship marketing consists of components of behavior such as trust, commitment, and satisfaction, as the company's assets achieve a competitive advantage (Ghani, 2012). The more companies take advantage of relationship marketing with customers, will gain valuable information on how best to serve customers and prevent customers from switching to competing brands, as well as materials for strategizing marketing planning. Therefore, companies need to build customer relationships creating mutually beneficial rewards (Jesri et al., 2013).

Business can win the competition, if the company is able to build purchase intention customers to buy the product. When consumers want to buy a product, the brand name instantly comes to mind, it reflects the product has a high brand awareness. The cost to attract new customers, five times greater than the cost of retaining customers. The higher the customer knows the brand, the lower the business cost incurred (Chi et al, 2009). Relationship Marketing is strongly associated with trust, communication, and commitment to build consumer purchase intention, this supports trust commitment theory Morgan and Hunt (1994) which mentions the success of Relationship Marketing is built from relationship commitment and trust, together encourage marketers to work together to maintain relationships investment with partners. Gholami (2017) concludes, how the process of quality factor relations (trust, satisfaction, and commitment) translate into brand equity results, proven trust, customer satisfaction, and commitment positively impacts brand equity, and brand awareness as a mediator, significant between brand equity and relationship commitment.

Brand trust and brand attachment have a positive effect on purchase intention. This is supported by Yogesh and Yesha (2014) that, social media is most widely used as a source of information for convenience, effectiveness and credibility. Social media reviews and opinions also affect purchase intention and purchasing decision processes. Online retailers can increase the chances of retaining customers by focusing on relational. The findings in this study highlight several factors related to the important relationships that online retailers can retain customers (Mpinganjira, 2014). Online advertising activity positively affects the frequency of customer purchases, high awareness of online activity is also positively correlated with customer purchase intention (Blaga, 2015).

Ad design, content and size define purchase intention. The more specific, the better the design and the more detailed the content of the ad and the larger the ad size, the greater the likelihood that the respondent will buy the product. Convenience also affects the purchase intention of respondents (Anh and Tuan, 2016). Online shop is a purchase through the internet as a marketing medium, using the website as a catalog (Oliver and Anja, 2008). The interactive nature of the internet offers the opportunity for consumers to use web shopping facilities effectively by improving the availability of product information, enabling direct attribute comparison, and reducing the cost of searching for potential buyer information (Alba et al., 1997).

Web Online shop displays a variety of products and services that have its own appeal why many visited. This is supported by Kotler and Keller (2003: 186) that consumers have the desire to buy products based on the brand. Chandon and Muller (2003) concluded, that the development of electronic technology has increased consumer exposure to websites and digital brands. Currently, much attention is devoted to examining the effects of websites on price sensitivity, shopping behavior or satisfaction. Some studies alone try to emphasize the effect of the website on the actual brand image. The Internet, representing a new channel of

communication and distribution for brands, offers a new context for offline brands, which may have positive or negative effects for brand image.

Brand image can be built well if the website used internet advertising media to give attention of a mediation and communication from sources identified, to be given to consumer in taking decision now and future. More than that, it is very appropriate if internet advertising is defined form of communication in accordance with the definition of advertising obtained on the internet (Millan, 2004). The quality of website design as an advertising medium has an important role to attract consumers online shopping (Ganguly et al, 2010). The level of customer satisfaction of e-commerce is closely related to the quality of website design (Cho and Park, 2001). Ranganathan and Grandon (2002) convey website design describes the condition and situation of the company. When consumers shop online Shop, consumers do face-to-face techniques with the Internet without exertion. Website design is able to move consumers to take action face to face and play a role in influencing consumers (Wolfharger and Gilly, 2003).

Lee and Lin (2005) found that overall website design had a positive influence in shaping the level of customer satisfaction and service quality. In contrast to Besider et al (2002) which proves, website design has a positive effect on purchase intention. This is also stated by Chang dkk (2014) who argued that, website quality is the key factor of electronic commerce, because customer perception about website quality positively affect the interest of customers using the site and directly affect purchase intention. The scale of measuring website quality is, quality of information, system quality, service quality. Purchase intention of consumers arise because of brand awareness owned.

Brand awareness is a powerful strategy for influencing consumer purchase intention. When consumers choose and estimate the product, brand awareness has an important role, in the process of promoting and marketing the product. Companies use brand strategy as the primary focus for increasing market share effectively, by building consumer brand loyalty to build a strong image (Chang and Chang, 2014). Chou and Lien (2011) convey that, brand awareness of consumer main consideration. Brand awareness is important when consumers make purchasing decisions of foreign products: well-known brands (high popularity) are most likely to have positive feedback from consumers rather than anonymous (low popularity). Brand awareness by Hsieh and Chen (2011) enables consumers to easily recognize and deliver high-awareness product values, referred to consumers associating with a particular brand name when thinking about a particular product. A brand that is easy to remember according to Berry (2000) can create brand awareness products to consumers. One of the benefits of building website brand awareness. Attractive websites create issues that circulate quickly in cyberspace and real, and make people aware of brand presence, and increasingly curious and want to find out the product, resulting in the decision to consume products (Gensler et al, 2013).

The research gap found, Chianasta and Wijaya (2014) found, marketing promotion using social media Leonovo products in Indonesia did not have a positive impact. Ganguly et al (2010) is also mentioned different, first high consumer purchase intention when the website design of advertising media, offering lower prices and can build consumer confidence; second, the website contains cultural values will affect purchase intention. In contrast to findings from Siddique and Rashidi (2015) that, social networking is negatively related to brand awareness while blogs and media sharing are positively related. Hasanov and Khalid (2015) also stated that, website quality is not a decisive factor in increasing consumer purchase intention. Based on the difference of research result before, spur to deepen and do research about website and relationship marketing influence to purchase intention through brand awareness.

LITERATURE REVIEW

The results of Srinivasan et al (2016) study were used as a reference for social media marketing strategies for Micro Small and Medium Enterprises (MSMEs) for customer acquisition and retention. As they demonstrate that social media participation strongly

influences brand awareness, which ultimately increases market share. Barreda et al (2015) also proved, the extraordinary interactive and communicative capabilities of OSN (Online social network), was found as a valuable pioneer in building brand awareness. Alhaddad (2015) found Advertising Awareness has a significant positive impact on brand awareness, brand image and brand equity. Ukkwatte and Abeysekera (2015) found that hotel customers, proves relationship marketing is positively associated to brand equity. The results of qualitative analysis are found, consumers and being more confident and committed to the hotel because of relationship marketing. This is also being motivated to spread the good news to others and return to the hotel so that leads to the strengthening of brand equity. The results of relationship marketing have a positive impact on brand equity.

Kim and Ko (2010) also conducted research on the impact of clothing brand on marketing in social media on relationship marketing and purchase intention. The results show that managing relationship marketing on trust significantly improves purchase intention. Only trust in relationship marketing is significantly related to purchase intention. This is supported by Verma, Sharma and Sheth (2015) that identify specifically, the main thing that affects the relationship marketing and the consequences of relationship marketing in online retailing. The results show that relationship marketing is very important, so as not to switch to other sites. Trust is considered the determinant of success in online retailing. The main thing that drives relationship marketing, customer focus, motivation provides flexibility in spending time, reduced spending time, and sparingly, as it spares from unexpected buying (impulse buying). Trust is stronger in relation to expectations of continuity of purchase (expectation of continuity). The expectation of continuity is the intention of the customer to maintain the relationship in the future, with purchase intention, trust as an indicator of relationship marketing (Morgan and Hunt, 1994) strongly encourage purchase intention.

Yaseen et al (2011) also found in a study for 200 resellers that, the impact of brand awareness and loyalty was not significant, a significant impact of perceived quality on profitability. The conclusion is, brand awareness, perceptions of quality and loyalty have a significant impact on purchase intention. This is supported by previous research by Chang dkk (2014) to hotel customers, that purchase intention is positively influenced by the trust and quality of the website. The dimensions of website quality are system quality, service quality and information quality. Based on the difference of research result before, spur to deepen and do research about website and relationship marketing influence to purchase intention through brand awareness.

Purchase intention is still being used as a vital concept in marketing (Morrison, 1979). Purchase intention is a consumer plan to make an effort to buy a particular brand or product (Spears and Singh, 2004). The brand name has become the right tool for multinational companies as standardization to gain positive market share and benefit globally, examples of global brands such as Procter and Gamble, Unilever, Nestle, Prada, Rolex, McDonalds and Coca Cola (Smith and Brynjolfson 2001) . In modern times, brands have an important role to improve the country's economy. Global brands help national governments to improve short-term liquidity and finance short-term projects. A brand is a tool used by marketers to change consumer purchase intention. Today, consumers are more familiar with brands (Shehzad et al., 2014).

For years the evolution of the internet as a marketing medium has become a global phenomenon, leading to the rapid escalation of e-commerce in the last decade (Ganguly et al, 2010). Social media became the modus operandi of the 21st century. Building on the foundation of Web 2.0, social media applications have facilitated the growth of unprecedented human interaction in modern times (Balakrishnan et al, 2014). Many studies have proved that perceived customer confidence is the fundamental determinant in business transactions (Chu, 2009). This is an important step in building long-term relationships between buyers and sellers (Sirdeshmukh, 2002). With respect to the internet and e-business, increasing trust for customers is very important, without trust, customers will not be shopping online (Kim et al, 2008). In this study using several theoretical basis below.

Purchase intention. Consumer intention Purchase is a consumer behavior that has a desire in buying or choosing a product, based on experience in choosing, using and

consuming or even wanting the product. Consumer intention buying is something that arises after receiving the stimulus from the product it sees, from there arises interest to try the product until finally arises the desire to buy in order to have it (Kotler, 2005). Purchase intention indicates that consumers will follow the experience, preferences and external environment to gather information, evaluate alternatives, and make decisions. The indicators of purchase intention are explained by the following components: Schiffman and Kanuk (2007: 470), interested in finding information about the product, considering buying, interested in trying, wanting to know the product, wanting to have the product. Till and Busler (2000), purchase intention is measured through the likely dimension of a consumer purchase plan for a product. Based on Pavlou's (2003) argument, online purchase intention is a situation where the customer is willing and intend to engage in online transactions. Online transactions can be regarded as activities where the process of information retrieval, information transfer, and product purchase is done. The search and exchange of information is considered an interest in using the website; However, the purchase of the product is more in line with the interest to handle the website. Traditional retailers face huge challenges, a phenomenon today many young people are switching to online shopping (Krbová and Pavelek, 2015). Lifestyle changes show the current trend. Business communications have changed, and traditional businesses need to adjust and accommodate these changes. The world is now surrounded by high technology; Therefore businesspeople must adjust and understand how social network marketing can impact consumer purchase intention (Tor et al., 2017).

Yaseen et al (2011) said that brand awareness, perceived quality, and loyalty have an effect on purchase intention (purchase intention). Thus, it can be understood that the definition of purchase intention is a tendency to feel interested in getting activities and have goods and services. In general, people buy something is preceded by the purchase intention of the person against the goods to be purchased. The purchase intention indicator used in Ling, Chai and Piew (2010) research, is described in the following question, I will probably trade with this web retail in the near future, considering the opportunity, I intend to use this retail website, and I predict that I should use this retail website in the future. The result is that interest in impulse buying, quality orientation, brand orientation, online trust and online purchases of past experiences are positively related to online customer purchasing interest. Research conducted by Hausman (2009) indicator used is definitely, intend, likely and expect.

Brand Awareness. Brand (brand) is a product or service that has differences in certain dimensions, which distinguishes from other products or services designed to meet the same needs. These differences may be functional, rational, or directly related to the product performance of the brand. Differences may be more symbolic, emotional, or intangible related to what the brand represents or more abstract (Kotler and Keller, 2012: 241). There are two brands in Brand: Brand Equity and Brand development, Brand Equity Sub-Brand, Brand Awareness and Brand Perceived Quality, and Brand Brand is Brand Image and Perceived Quality. This research focuses on brand awareness (Brand Awareness). Brand awareness has a high correlation with the intensity of purchases, market share and other important brand equity, as well as business matrices. If the company has created a superior product and has a price and delivered a very good value, but product support has bad service, and no one has ever known the product, then the company has trouble selling the product. Brand awareness is very important. due to the strong brand base, as well as an important component of brand equity. The first step to building brand equity is brand awareness (Aaker, 2004).

Brand awareness is the ability of consumers to identify brands in diverse conditions (Keller, 2008: 51). Brand awareness is closely linked to brand power in the minds of consumers, which can be measured through the ability of consumers to identify brands in varying circumstances, namely, unaware of brand, recognition, brand recall, top of the mind brand (Aaker 1991: 62). Unaware of Brand is the lowest level in the pyramid of brand awareness, where consumers are not aware of a brand that is done with the help of recall (aided recall). Brand recognition is the measurement of brand awareness of respondents, where the awareness is measured by the help of questions asked assisted by mentioning the

characteristics of the brand product (aided question). Questions are asked to find out how many respondents need to be reminded of the existence of the brand. Brand recognition is a minimal level of brand awareness, with brand recognition reappearing after reassignment. Brand Recall is an unaided recall, or a brand reminder reflects what brands the respondent remembers after mentioning the first-mentioned brand. Top of Mind is the peak of mind that first appeared in the minds of consumers and was first mentioned by consumers.

Website. Website part of social media development and Web design that is the second generation, aims to facilitate communication, provide security of various kinds of information, interoperability and collaboration on the World Wide Web. "(Kaplan and Haenlein (2010) describe social media as a group of Internet-based applications built on the foundation of ideology and Web 2.0 technology, and which provides the possibility of user-generated content creation and exchange Web 2.0 technology on Social Web allows two-way conversations with consumers, enables brands to listen to consumers and respond (Fournier and Avery , 2011) .Consumers and organizations alike are increasingly using the web to discuss, share, and collaborate (Jones, 2010).

Ahn, Ryu and Han, (2007) found that Web quality, categorized in system quality, information quality, and service quality, had a significant impact on perceived ease of use, love of online retail users, and resulted in, encouraging the use of websites in context online retail. Website quality is a key factor in e-commerce, because customer perceptions of website quality positively impact their intention to use the site (Chang and Chen, 2008), and directly affect purchase intention (Knight, Choudhury and Kacmar, 2002). Website quality is a multi dimensional construction consisting of information quality, system quality, and service quality Chang et al (2014). According to Lin (2007), the scale of the three dimensional site quality model used is, Information and system quality is defined from a technical point of view, the quality of service from a customer-oriented perspective. Online advertising by Smith (2008), online web shop form of online advertising on social networking sites such as facebook world divided into 6 categories ad website, page ad, house ad, evented ad. Gift ad and video ad.

Relationship Marketing. Morgan and Hunt (1994) define Relationship Marketing in terms of trust and commitment. To develop long-term customer relationships, organizations must win the trust of customers, for which customer commitment to the organization must increase. This is done by keeping each other's promises. Morgan and Hunt (1994: 23) convey also that, the concept of trust arises, when one party has trust in the other side in terms of integrity and reliability. The extent to which partners can trust each other, understand the importance of the power of relationship marketing. Commitment as an exchange partner who believes that ongoing relationships with others is vital to assure maximum effort in defending it, that is, committed parties believe the relationship is worth doing to ensure it will last forever. When the organization is able to win the trust of the customer, the customer's commitment to the organization will simultaneously increase, so that the relationship between customer and organization will be established. Therefore, trust and commitment are regarded as two key principles in relationship marketing. In relationship marketing, satisfaction is important because, high relationship satisfaction can reduce the intensity of blame and unstable emotions in an unharmonious relationship (Caceres and Papparoidamis, 2007). In addition, relationship satisfaction also affects the company's performance both objective and subjective performance. For example, in the context of a buyer's relationship with the seller. Stock (2005) found that, there is an inverse relationship between satisfaction and objective performance measurement that refers to price sensitivity, the higher the level of customer satisfaction, the lower the sensitivity of consumer prices.

According to Ghani (2012) satisfaction is defined as an evaluation of the overall feelings resulting from specific exchange and acceptance relationships, considerations and feedback, and implementation of strategies based on any market information from the various parties involved. Ukkwatte and Abeysekera (2015) also convey that relationship marketing has a positive value impact on brand equity. Furthermore, this research can be considered important in order to prioritize strategies to achieve sustainability of competitive advantage. The concept and practice of relationship marketing marketing is useful in building

strong relationships with online retail customers (Bendapudi and Berry, 1997). The concept of relationship marketing has been useful in the development of definitions of new concepts such as trust, commitment, closeness and quality of relationships (Morgan and Hunt, 1994).

CONCEPTUAL FRAMEWORK AND HYPOTHESES

Chi, Yeh, Chien, and Yang (2009) research on cellular users and proven, brand awareness, perceived quality and brand loyalty to purchase intention have a positive and significant impact, and then the perceived quality of the user positively impacts brand loyalty, and the quality perceived users, and will mediate between the effects of brand awareness and purchase intention, and brand loyalty will mediate the influence between brand awareness and purchase intention. Ling, Chai and Piew (2010) findings suggest that impulse purchase intention, quality orientation, brand orientation, trust online and online purchases of past experience are positively associated with online customer purchase intention. This is also conveyed by Yaseen et al (2011), that from the point of view of retailers, brand awareness (brand awareness), perceived quality and loyalty affect consumer purchase intention. Research on airline passengers in China, (Choe and Zhao, 2013) results in that brand equity directly affects purchase intention; transition costs directly affect brand equity; and transition costs indirectly affect purchase intention. Brand marketing strategies, can be more effective for certain customer groups, including high-income customers, married, government employees, and employers.

When a person decides to run a business both offline and online, what he thinks is success. The success and recognition of the most important business brand while creating a business plan. Social media play a role to promote the brand, organize and market worldwide. The world is full of new things, media and digital communication technologies. The impact of promotion through social media is enormous and gives a combination of speed and relevance. Brand awareness of important factors increases the company's product sales ratio. The results of Arora and Sharna (2013) proved, social media the best tool in building brand awareness. Alhaddad (2015) conveyed internet advertising containing advertising awareness influential brand awareness and brand image, and impact on brand equity. Internet advertising consists of, I remember seeing an advertisement for this type of brand on social media, and social media is full of ads for this type of brand. Variable item for brand awareness is, I am aware of this brand, I can recognize this brand among the competing brands, I know what this brand is like.

Barreda (2015) supports important social media (Online Social Networks / OSNs) which is an extension of the website brand, in an online branding strategy. virtual interactivity, system quality, information content quality, and activity, are beneficial to influence and generate brand awareness and trigger WOM (world of mouth). Al-Fawwaz et al (2015) found a significant positive relationship between brand awareness and Ecommerce sales. Srinivasan et al (2016) convey the participation of social media has a strong influence on brand awareness. The role of social media to build brand awareness is closely linked. The fastest growing media ad for advertising is the Internet. The current development, concerns of large populations are busy using the internet and websites. Godey et al (2016) conducted research on how social media marketing activities affect the creation of brand equity and consumer behavior toward brands. Research explores this relationship by analyzing the luxurious perfume brands (Burberry, Dior, Gucci, Hermès, and Louis Vuitton). The survey of 845 consumers in 4 countries (China, France, India, and Italy), which uses five brands studied in social media, found social media to have a significant positive effect on brand equity and on two major dimensions of brand equity: brand awareness (brand awareness) and brand image.

Vennila and Mekala (2017) also said that online marketing has a role to play in building big brands and companies known to the public. One way to increase online brand awareness through marketing channels. Relationship marketing emerges as the strongest marketing tool to grow customer loyalty, interaction and long-term engagement. Today in a day, companies throughout the industry rely on relationship marketing to expand market share, by

strengthening customer relationships (Gaurav, 2016). Ghani (2012), found in Malaysia, the relationship of car dealerships adopts moderate relationship marketing with high among each dealer with the company. This relationship, there is a difference between the relationship marketing component with the four car sales dealers against the company brand. The findings tend to show that relationship marketing is an important factor in proposing why a particular brand's sales volume is higher than others. Great attention to relationship marketing will create a significant difference in the company's brand sales. Verma, Sharma and Sheth (2015) said that building relationship marketing is important, because customers are not easy to switch to other sites. Trust is an important determinant of success in online retailing. Specifically the thing that drives relationship marketing to customer focus, which is the motivation to provide flexibility of shopping time, reduced spending time, and sparingly due to avoidance of unexpected buying (impulse buying). Trust is stronger in relation to expectations of continuity of purchase (expectation of continuity). The expectation of continuity is the intention of the customer to maintain a future relationship with an interest in buying. Continuity of purchase (expectation of continuity), is a very detailed concept where empirically, (expectation of continuity) uses various constructs similar to purchase intention. Trust as an indicator of relationship marketing (Morgan and Hunt, 1994) strongly encourages purchase intention or spending interest.

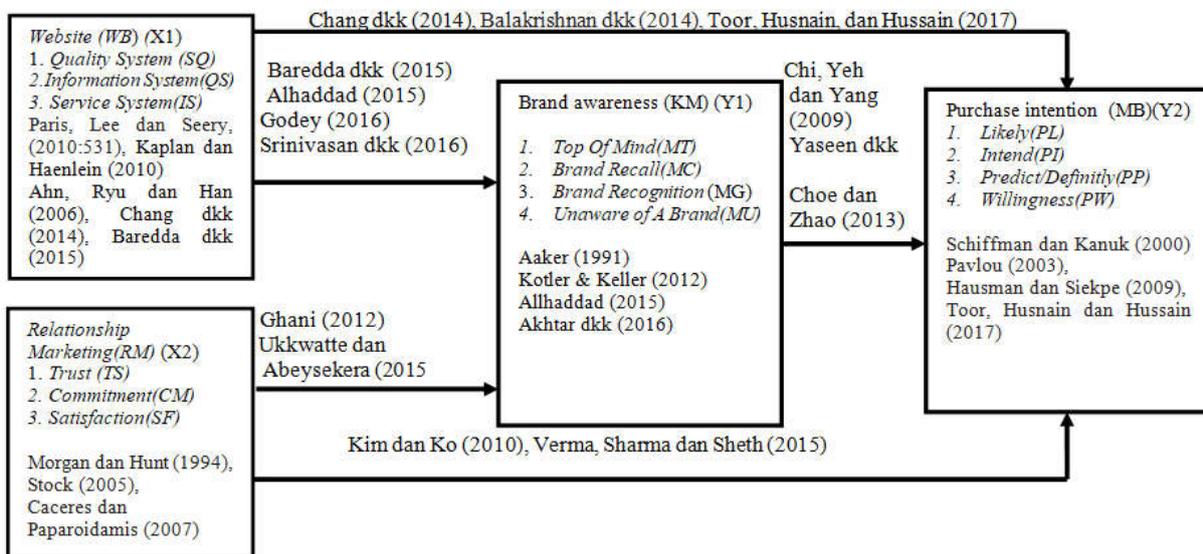


Figure 1 – Research Model

Clothes marketing in social media affects relationship marketing and purchase intention (Kim and Ko, 2010) managing customer relationships on trust significantly improves purchase intention, only trust in customer relationships is significantly related to purchase intention. Purchase intention is also affected by website design (Ganguly et al, 2010), website design can positively affect purchase intention, and reduce perceived risk. Variable website design items are information design, visual design and navigation design. The question variable variable for purchase intention is, I am interested in continuing to use an online store to buy products or services in the future, I would strongly advise others to use the online store that I use, and I can not transact with online stores any time soon. Websites that support online sales have gained significant popularity. Website engagement is positively related to attitudes toward the website, which ultimately affects consumers' desire to buy on the website (Jiang et al, 2010) Category of websites used, interactivity and involvement, variable items from purchase intention, likely, possibly, certain and definitely. Balakrishnan (2014) proves online advertising has a positive impact on brand loyalty and purchase intention in generation Y. Nikhashemil et al (2013) convey the same thing that is, web-based advertising (E-Advertisement) affect consumer purchase intention. The progress

of the World Wide Web has created a new form of retail transaction in electronic retail/e-retailing, so customer involvement in online transactions is important.

Based on the research model generate the following hypothesis:

Hypotheses:

H1: Website and Relationship Marketing have a significant effect on brand awareness on retail website customer of Malang Raya area.

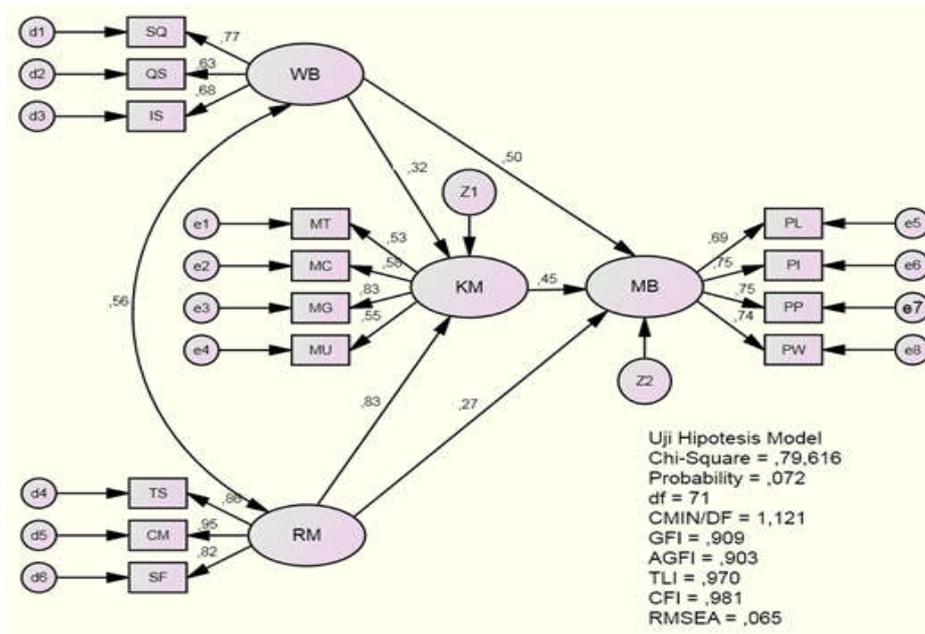
H2: Website and Relationship Marketing have significant effect to purchase intention on retail website customer of Malang area.

H3: Brand awareness significantly affects purchase intention on retail website customer of Malang area.

H4: Website and Relationship Marketing have significant effect to purchase intention with brand awareness as mediator to retail website customer of Malang Raya area.

RESULTS AND DISCUSSION

Model Conformity Test (Goodness of Fit). In accordance with the literature review and research objectives, an overall structural model was developed. Based on AMOS 22 computations, the SEM model is generated by a goodness of fit index, presented in Table 1. Next, the index values are compared to the cut-of values of each index. A good model is expected to have goodness of fit indices greater than or equal to the critical value. The results of the evaluation of Goodness of Fit Indices criteria indicate that the overall model evaluation has met, the model is acceptable.



Source: Primary data Processed 2018.

Figure 1 – Results of SEM Analysis

The result of SEM analysis in Figure 1 is explained as follows: website variables affecting purchase intention that is, quality system has the biggest contribution that is 0.77 reflected from MatahariMall.com website respond to customer transaction process, followed by information system equal to 0.68 and service quality 0, 63. Relationship Marketing SEM test results show that the largest contribution to affect purchase intention, is a commitment of 0.95, reflected from the website MatahariMall.com commitment to receive input from customers, followed by trust of 0.86 and satisfaction of 0.82. Brand awareness as the intervening variable of the website and relationship affects the purchase intention, which has the greatest contribution, the brand recognition of 0.83 is reflected from the customers know

MatahariMall.com because it has affordable products, followed by recall bronze 0.58, unaware off brand 0,55 and top off mind 0,53. Purchase intention of SEM test result which has the largest contribution of purchase intention intend and predict, each of 0.75, is reflected from the customer plan will follow the offer and consider online shopping, after seeing the product quality and affordable price in MatahariMall.com website, and customer in the near future will be an active member and buy products online, then followed by the willingness of 0.74 and likely 69.

Table 1 – Test Results of Goodness Of Fit Modified Structural Models

Goodness Of Fit Index	Cut-of Value	Results Model	Description
Chi-Square (df = 71)	91,670	79,616	Good
Probability Chi-Square	≥ 0,05	0,072	Good
CMIN/DF	≤ 2,00	1,424	Good
RMSEA	≤ 0,08	0,014	Good
GFI	≥ 0,90	0,909	Good
AGFI	≥ 0,90	0,903	Good
TLI	≥ 0,95	0,970	Good
CFI	≥ 0,95	0,981	Good

Source: Primary Data Processed 2018.

In Table 2, all variables have a value P (Probabilita) smaller or equal to 0.05, then it can be said to have a significant influence. All variables have a critical ratio (CR) greater than 2. In Table 3 it is shown that the total effect value of (0.647) is greater than the direct effect (0,505) and the total influence value of (0.644) is greater than the direct effect (0.274) , so the first hypothesis (H1), second (H2), third (H3) and fourth (H4) are statistically tested.

Table 2 – Influence of Website and Relationship Marketing to Brand Awareness and Purchase Intention

Variabel		Standardized Regression Weight	Estimate	S.E.	C.R.	P
Website	Brand Awareness	0,320	0,727	0,239	3,037	0,002
Relationship marketing	Brand Awareness	0,831	0,729	0,087	8,408	0,000
Website	Purchase Intention	0,505	0,937	0,193	0,859	0,000
Relationship marketing	Purchase Intention	0,274	0,196	0,082	2,384	0,017
Brand Awareness	Purchase Intention	0,445	0,363	0,086	4,211	0,000

Source: Primary Data Processed 2018.

Table 3 – Influence of Website and Relationship Marketing Against Purchase Intention through Brand Awareness

Variable	Direct Influence	Indirect Influence	Total Influence
Website terhadap Purchase Intention melalui Brand Awareness	0,505	$0,320 \times 0,445 = 0,142$	0,647
Relationship marketing terhadap Purchase Intention melalui Brand Awareness	0,274	$0,831 \times 0,445 = 0,370$	0,644

Source: Primary Data Processed 2018.

CONCLUSION AND SUGGESTIONS

Websites and relationship marketing affect brand awareness on retail website customers. Quality system of retail website that display product design according to customer requirement and respond to customer transaction process, along with relationship marketing built with commitment to receive input from customer and solve customer problem, can build brand awareness of customer with brand recognition, because retail website is known to display product goods at an affordable price. The results of the research are consistent with Bareda et al (2015), Alhaddad (2015), Godey (2016) and Srinivasan et al (2016) which states the website has an effect on brand awareness. Relationship marketing affects brand awareness, which means that increased relationship marketing can increase

brand awareness. The results of this study are consistent with Ghani (2012) as well as Ukkwatte and Abeysekera (2015).

Websites and relationship marketing affect purchase intention on retail website customers. Quality system of retail website showing product design according to customer requirement and responding customer transaction process, along with relationship marketing which is built with commitment to receive input from customer and solve customer problem, influence to purchase intention in intend and predict customer, that is after seeing product price an affordable customer considers buying, and after looking at the quality of the product, the customer is willing to follow the offer submitted by the retail website, then the customer predicts will be an active member and interested in online shopping in the near future on the retail website. The results of this study are consistent with Chang et al (2014), Balakrishnan et al (2014) and Toor, Husnain, and Hussain (2017), which states that the website affects purchase intention. Relationship marketing has an effect on purchase intention, the result of this research is consistent with Kim and Ko (2010) and Verma et al. (2015).

Brand awareness of customers formed from brand recognition, showing that retail websites are known to display goods products at affordable prices affect purchase intention affect customers in intend and predict customers, that is after seeing the price of affordable products customers consider to buy, and after seeing the quality of the product , the customer is willing to follow the offer submitted by the retail website, then the customer predicts will be an active member and interested in buying in the near future on the retail website, meaning that the increase in brand awareness can increase purchase intention. The results of this study are consistent with Chi et al. (2009), Yaseen et al (2011) and Choe & Zhao (2013).

Brand awareness in this brand recognition is a website known to display goods products at affordable prices, it is already formed in the minds of customers, mediate the influence of the website that prioritizes the quality of the system by displaying product design according to customer needs and respond to customer transaction process, also mediate relationship marketing , the company is committed to receiving suggestions and feedbacks as well as resolving customer issues thereby making customers comfortable. affect the purchase intention, in this case the customer is interested to follow (intend) bidding done retail website, after seeing the quality of the product and consider shopping online after seeing the price of the product, in addition the customer predict (predict) will be an active member and interested in buying in soon.

This research for the development of science in the hope can enrich the marketing concept, especially internet marketing, relationship marketing, brand awareness and purchase intention to be applied in retail marketing. For online companies, the quality of the website, always updating the content and the website design more attractive so as to increase customer purchase intention, such as the addition of features, payment method facilities, more detailed information and easy to understand, adding to the language vocabulary, product location information is clear, not just on special and important days, adding content about news or tips related to the product being sold, eg tips on how to care for clothing based on the type of cloth, giving greeting on special days commemorated by the customers, regular interesting promos through account customer-owned social media, product-variatif, type and price competitive, so that customers do not move to another marketplace, the addition of outlets on the location can be reached by the community. Companies in Relationship marketing, need to build a community by utilizing the latest information technology that can be accessed globally as a container for mutual communication and sharing for customers, to solidify customer relationships with companies that benefit both parties. For the following research, it is expected to develop the current research, by adding repurchase, customer loyalty and customer satisfaction, population variation and number of samples with addition of criteria and using or adding technical data analysis different from this research to be more complete, and findings obtained more leverage.

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THE EFFECT OF BRAND IMAGE AND SERVICE QUALITY ON CUSTOMER SATISFACTION AND LOYALTY OF IPHONE USERS IN SURABAYA

Fauzi Abdul Rozaq*, Harsono Soni

Sekolah Tinggi Ilmu Ekonomi Perbanas Surabaya, Indonesia

*E-mail: rezza.alkhatib@yahoo.com

ORCID: 0000-0002-9457-6865

ABSTRACT

This research aimed to know and learn customer satisfaction and loyalty of iPhone users in Surabaya. The concepts used in this research were brand image and service quality as independent variables and customer satisfaction and customer loyalty as dependent variables. The population of this research was all iPhone users in Surabaya. In addition, the sample used in this research was all users of iPhone type 5, 5s, 6, 6s in Surabaya. There were as many as 240 respondents of iPhone users in Surabaya used as the samples of this research. The data collection technique used was purposive judgment sampling. The data collection used an online questionnaire by sending a link to the respondents. The data were then analyzed by using WarpPLS 6.0. The research findings showed that there was significant and positive correlation among brand image on customer satisfaction, brand image on customer loyalty, service quality on customer satisfaction, service quality on customer loyalty, and customer satisfaction on customer loyalty.

KEY WORDS

Brand image, service quality, customer satisfaction, customer loyalty.

Currently, the development of communication and technology has increased very rapidly. A wide range of products are created to meet the increasingly diverse human needs. One of the main keys in the competition of technology is the company's ability to obtain and manage the information so it can be useful in making decisions in determining the company's strategy (Gans and Stern, 2003). Therefore, a company is required to be more creative in understanding the behavior of society so that the products offered can be accepted by the market. One of the largest communication companies that successfully penetrate the international market is iPhone.

In its development, Apple continues to innovate its products to keep up-to-date and in accordance with the era. Having a comparison, all these devices, from the oldest to the latest, all have experienced specification improvements that will certainly further facilitate the activities of its users.

Table 1 – Data on the Top 5 Vendors, Shipments, Market Share, and Year-Over-Year Changes in the 1st Quarter of 2015-2016

The Top 5 Smartphone Vendors, Shipments, Market Share, and Year-Over-Year Changes in the 1 st Quarter (in millions)					
Vendor	1Q16 Shipment Volumes	1Q16 Market Share	1Q15 Shipment Volumes	1Q15 Market Share	Year-Over-Year Change
Samsung	81.9	24.5%	82.4	24.6%	-0.6%
Apple	51.2	15.3%	61.2	18.3%	-16.3%
Huawei	27.5	8.2%	17.4	5.2%	58.4%
OPPO	18.5	5.5%	7.3	2.2%	153.2%
Vivo	14.3	4.3%	6.4	1.9%	123.8%
Others	141.5	42.3%	159.8	47.8%	-11.4%
Total	334.9	100%	334.4	100%	0.2%

Source: IDC worldwide quarterly mobile phone tracker, April 27, 2016.

According to table 1, sales figures of iPhone decreased by 16 percent. Apple reported that iPhone sales, totaling 51.2 million units in the 1st quarter in 2016, were similar to reports of shipping numbers from IDC. In the same last-year quarter, Apple sold iPhone as much as

61.17 million units. iPhone is the largest supplier for Apple with contribution to revenue reaches up to 68 percent. Revenues earned by this company experienced a very drastic decline with a decline in earnings up to 22.5 percent. It explained that for the first time they experienced a decline in sales since 2007. The decline in profits is also for the first time experienced by Apple Company since 2003. The company considers that the main cause is the strengthening US dollar currency, making global purchasing power decline. Apple is still very strong despite a drop in profits. Its profit in the first quarter of 2016 was recorded at 10.52 billion dollars (IDR 138.4 trillion). The company also has a cash of 233 billion US dollars or equivalent to IDR 3.065 trillion.

LITERATURE REVIEW

Brand Image. According to Schiffman and Kanuk (2010), brand image is a pervasive perception, shaped through experience, and is relatively consistent. Therefore, consumer attitudes and actions towards a brand image is one important element that encourages consumers to purchase a product (Faircloth et al., 2001). The better the brand image attached to the product, it will make consumers more interested to buy because consumers assume that a product with a trusted brand gives more sense of security when using it. According to Kotler and Armstrong (2010) the measurement of brand image can be performed based on the following aspects:

- **Strength.** Strength leads to a variety of physical advantages possessed by related brands that are not found in other brands. The advantage of this brand refers to the physical attributes of the related brand so that it can be regarded as an advantage over other brands. This strength group includes: the physical appearance of the product, the functioning of all facilities of the product, product price, and appearance of supporting facilities of the related product;
- **Uniqueness.** Meanwhile, uniqueness is the ability to distinguish a brand among other brands. This unique impression comes from the product attribute. Unique impression means that there is a differentiation between one product and other products. This unique group includes service variation and differentiation;
- **Favorable.** Favorable leads to the brand's ability to be easily remembered by customers. This favorable group includes the ease of the product brand to be spoken, the ability to keep in the customer's mind, and the suitability between the brand impressions in the customer's mind with the desired image of the company on the related brand.

Service Quality. According to Tjiptono (2007), service quality is the level of excellence expected and control over these advantages to meet customer desires. Service quality is influenced by two things: the perceived service and the expected service. If the perceived service is in line with expectations, the quality of service is perceived as good and satisfactory, but when it exceeds customer expectations it becomes the ideal service quality, (Caruana, 2002). Conversely, if the service received is lower than expected, the service quality is perceived poorly. The good and bad implications of the service quality depend on the ability of service providers to meet their customers' expectations consistently (Sureshchandar et al., 2002).

Parasuraman (1988) suggests that there are five key dimensions of quality service that include:

- **Tangibles:** it includes physical facilities and means of communication;
- **Reliability:** it is the ability to deliver promptly, accurately and satisfactorily the promised services;
- **Responsiveness:** it is the desire of the employees to help the customers;
- **Assurance:** it includes knowledge, ability, courtesy and trustworthiness by customers;
- **Empathy:** it includes the ease in making a connection, personal attention, and understanding of customer needs.

Customer Satisfaction. Customer satisfaction is the estimate of the results of marketing activities in a competitive business world (Szymanski and Henard, 2001). A company may gain success in marketing by offering the quality of the product or service. According to Sondakh (2014) there are five main factors that need to be considered in relation to customer satisfaction that include:

- Product quality. Customers will be satisfied if the results of their evaluation indicate that the products they use are qualified;
- Service quality. Customers will be satisfied if they obtain good service in line with their expectation;
- Emotional. Customers will feel proud and confidence that others will be amazed when someone uses a branded product and tends to have higher satisfaction. The satisfaction gained is not due to the quality of the product but the social value that makes the customer satisfied with a particular brand;
- Price. Products that have the same quality but set a relatively cheap price will give a higher value to its customers;
- Cost. Customers who do not need to spend additional costs or to waste time to get a product or service tend to be satisfied with the product or service.

Customer Loyalty. Customer loyalty has a considerable influence in marketing. Loyal customers will provide many benefits for the company, (Yang and Peterson, 2004). For instance, by the existence of customer loyalty, it will arise positive word of mouth that will grow the interest of new buyers. Other things related to loyalty will affect the intensity of repurchase, complaining behavior and price sensitivity (Gronholdt et al., 2000). Griffin (2002) explains that loyal customers have the following characteristics:

- Make regular repeat purchases;
- Purchase across product and service lines;
- Recommend the product to others;
- Demonstrate immunity to the full of the competition;
- Design and create loyalty.

Research hypotheses:

- There is a significant effect between brand image and customer satisfaction of iPhone users in Surabaya;
- There is a significant effect between service quality and customer satisfaction of iPhone users in Surabaya;
- There is a significant effect between brand image and customer loyalty of iPhone users in Surabaya;
- There is a significant effect between service quality and customer loyalty of iPhone users in Surabaya;
- There is a significant effect between customer satisfaction and customer loyalty of iPhone users in Surabaya.

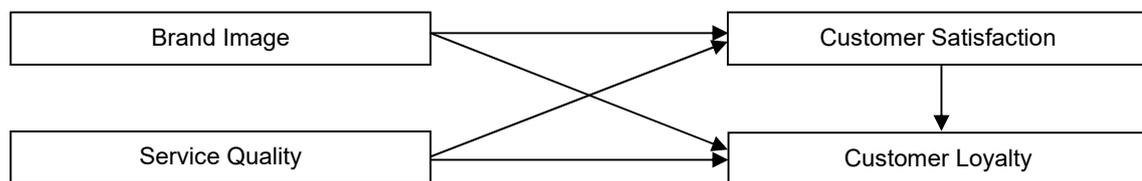


Figure 1 – Conceptual Framework

METHODS OF RESEARCH

The population of this research was all iPhone users in Surabaya. The sampling technique used was purposive judgment sampling by determining criteria or certain considerations in determining the sample. Respondents were active iPhone users who had been using the product for more than 6 months and are over 17 years old. A total of 240

respondents have filled out the online questionnaire form. The analysis used in this research included:

Descriptive statistics were used by describing the data collected to generalize the data that had been obtained. In this research, the data analysis technique used is by using the average valued from the class interval through the following formula:

$$CI = \frac{HS - LS}{(n)C}$$

Where: CI = Class Interval; HS = Highest score (5); LS = Lowest score (1); (n)C = Number of Classes (5).

Furthermore, from the above formula class interval of 0.8 is obtained. The following is an explanation of the average rating criteria of respondents' answers:

Table 2 – Class Interval

INTERVAL	RATING	SCORE
4,21-5,00	Strongly agree	1
3,41-4,20	Agree	2
2,61-3,40	Neutral	3
1,81-2,60	Disagree	4
1,00-1,80	Strongly disagree	5

Statistical analysis used in this research using WarpPLS 6.0. WarpPLS is used to test validity and reliability, as well as perform hypothesis testing.

RESULTS AND DISCUSSION

Brand Image Variable. Based on the findings of responses obtained on brand image variable, it could be explained that iPhone users had a positive response to the brand image indicator. It was proven from the existing 9 indicators in which only 3 indicators were considered neutral while other indicators provide the agreed response as described in the following table.

Table 3 – Respondents' Response against Brand Image Variable

No	Question Items	Responses					Mean	Category
		1	2	3	4	5		
1	BI1	13	18	50	112	47	3.67	Agree
2	BI2	9	17	39	115	60	3.83	Agree
3	BI3	16	55	94	53	22	3.04	Neutral
4	BI4	13	15	38	114	60	3.80	Agree
5	BI5	16	22	91	84	27	3.35	Neutral
6	BI6	16	36	88	68	32	3.26	Neutral
7	BI7	10	21	51	92	66	3.76	Agree
8	BI8	13	13	44	93	77	3.86	Agree
9	BI9	19	14	39	97	71	3.77	Agree
The average of brand image							3.59	Agree

Service Quality Variable. Based on the findings of responses obtained on service quality variable, it could be explained that iPhone users had a positive response to the indicator of service quality.

Table 4 – Respondents' Response against Service Quality Variable

No	Question Items	Responses					Mean	Category
		1	2	3	4	5		
1	SQ1	13	18	91	83	35	3.45	Agree
2	SQ2	13	21	82	97	27	3.43	Agree
3	SQ3	23	21	93	80	23	3.24	Neutral
4	SQ4	16	23	69	100	32	3.45	Agree
5	SQ5	13	17	61	101	48	3.64	Agree
The average of service quality							3.44	Agree

It was proven by the 5 indicators that there was only 1 indicator considered neutral while other indicators provide the agreed response as described in table 4.

Customer Satisfaction Variable. Based on the findings of responses obtained on customer satisfaction variables, it can be explained that iPhone users had a positive response to customer satisfaction indicators. It was proven by the 5 indicators that there was only 1 indicator was considered neutral while other indicators provide the agreed response as described in the following table.

Table 5 – Respondents' Response against Customer Satisfaction Variable

No	Question Items	Responses					Mean	Category
		1	2	3	4	5		
1	CS1	15	15	35	120	55	3.77	Agree
2	CS2	13	21	68	97	41	3.55	Agree
3	CS3	11	18	72	78	61	3.66	Agree
4	CS4	24	60	98	43	15	2.85	Neutral
5	CS5	15	19	51	113	42	3.61	Agree
The average of customer satisfaction							3.49	Agree

Customer Loyalty Variable. Based on the findings of responses obtained on customer loyalty variables, it could be explained that iPhone users had a positive response to the indicator of customer loyalty. It was proven by the 5 indicators that there was only 1 indicator was considered neutral while other indicators provide the agreed response as described in the following table.

Table 6 – Respondents' Response against Customer Loyalty Variable

No	Question Items	Responses					Mean	Category
		1	2	3	4	5		
1	CL1	15	29	53	92	51	3.56	Agree
2	CL2	17	26	71	76	50	3.48	Agree
3	CL3	8	35	68	87	42	3.5	Agree
4	CL4	16	37	88	61	38	3.28	Neutral
5	CL5	16	25	79	70	50	3.47	Agree
The average of customer satisfaction							3.46	Agree

Validity Test. In this research, the validity test used Pearson correlation test; an item is considered to be valid if it has a correlation significance p-value < 0.05. Validity test was performed on each indicator that will describe the validity of each variable.

Table 7 – Pearson Correlation of Brand Image

Variables	Indicators	Validity		
		Significance	Cut Off	Description
Brand Image	BI1	0.000	0.05	Valid
	BI2	0.000	0.05	Valid
	BI3	0.000	0.05	Valid
	BI4	0.000	0.05	Valid
	BI5	0.000	0.05	Valid
	BI6	0.000	0.05	Valid
	BI7	0.000	0.05	Valid
	BI8	0.000	0.05	Valid
	BI9	0.000	0.05	Valid

Table 8 – Pearson Correlation of Service Quality

Variables	Indicators	Validity		
		Significance	Cut Off	Description
Service Quality	SQ1	0.000	0.05	Valid
	SQ2	0.000	0.05	Valid
	SQ3	0.000	0.05	Valid
	SQ4	0.000	0.05	Valid
	SQ5	0.000	0.05	Valid

Table 9 – Pearson Correlation of Customer Satisfaction

Variable	Indicators	Validity		
		Significance	Cut Off	Description
Customer Satisfaction	CS1	0.000	0.05	Valid
	CS2	0.000	0.05	Valid
	CS3	0.000	0.05	Valid
	CS4	0.000	0.05	Valid
	CS5	0.000	0.05	Valid

Table 10 – Pearson Correlation of Customer Loyalty

Variable	Indicators	Validity		
		Significance	Cut Off	Description
Customer Loyalty	CL1	0.000	0.05	Valid
	CL2	0.000	0.05	Valid
	CL3	0.000	0.05	Valid
	CL4	0.000	0.05	Valid
	CL5	0.000	0.05	Valid

Reliability Test. The reliability test of this research used Cronbach’s alpha value, with the considerations that it is said to be reliably if it has an alpha coefficient value > 0.70.

Table 11 – Cronbach’s Alpha of Research Variables

Variables	Cronbach’s alpha	Cut Off	Description
Brand Image	0.891	0.07	Reliable
Service Quality	0.888	0.07	Reliable
Customer Satisfaction	0.776	0.07	Reliable
Customer Loyalty	0.880	0.07	Reliable

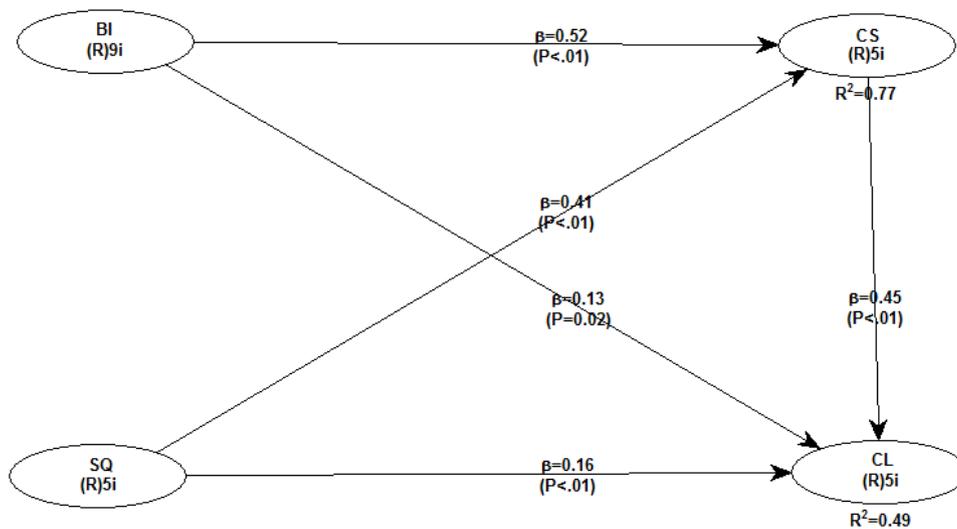


Figure 2 – Hypothesis Testing

Based on Figure 2 above, it can be explained that the hypothesis testing is as the following:

Hypothesis 1. The hypothesis of this research, brand image, has a significant and positive effect on customer satisfaction. The hypothesis is accepted with p-value < 0.05.

Hypothesis 2. The hypothesis of this research, service quality, has a significant and positive effect on customer satisfaction. The hypothesis is accepted with p-value < 0.05.

Hypothesis 3. The hypothesis of this research, brand image, has a significant and positive effect on customer loyalty. The hypothesis is accepted with p-value < 0.05.

Hypothesis 4. The hypothesis of this research, service quality, has a significant and positive effect on customer loyalty. The hypothesis is accepted with p -value < 0.05 .

Hypothesis 5. The hypothesis of this research, customer satisfaction, has a significant and positive effect on customer loyalty. The hypothesis is accepted with p -value < 0.05 .

DISCUSSION OF RESULTS

The Effect of Brand Image on Customer Satisfaction. Based on the descriptive research findings, the average respondents of this research agree to the questionnaire statements of brand image on customer satisfaction. It means that iPhone users are satisfied with the brand image owned by iPhone to its customers in Surabaya. Brand image has a close correlation to satisfaction. It can be explained because satisfaction can be formed from the company image. Respondents of this research were dominated by the age of 17-25 years old in which this age is the final adolescence. For the age groups, brand image is one of the factors affecting the purchase decision of the product. A good brand image of the product will result in its own pride in using the gadgets. In contrast to the age of 36-45 that belongs to the final adult period that becomes minority of respondents who were not too dependent on a brand or a certain pride but they depended on the ease of use and a more affordable price. Overall, the average respondent gave a positive value about the brand image owned by the iPhone in Surabaya.

The Effect of Service Quality on Customer Satisfaction. Based on the descriptive research findings, the average respondents of this research agree to the questionnaire statements of service quality on customer satisfaction. It means that iPhone users are satisfied with the service given by iPhone to its customers in Surabaya. Service quality has a close correlation to satisfaction. It can be explained because satisfaction is the impact of the services provided by the company. A person is satisfied if the service received is equal or greater than the customer's expectation. Similarly, when the services obtained are lesser than expectations, the customer can be dissatisfied. In this research, the service quality was affected by the respondents' occupations. Respondents were diminished by students in which students are the most sensitive responders to technological progress. The next is self-employed and state-owned/ private employee in which in their scope of work, technology becomes an important and supporting aspect. Thus, the quality of good service becomes sensitive to the field of work. In addition, iPhone is able to provide services that fit the respondents' needs. Thus, the average of the respondents gave a positive value about the service quality provided by iPhone users in Surabaya.

The Effect of Brand Image on Customer Loyalty. Based on the descriptive research findings, the average respondents of this research agree to the questionnaire statements of brand image on customer loyalty. It means that iPhone is considered to have a good brand image by iPhone users in Surabaya so it creates a loyal feeling from its customers. Brand image can directly affect customer loyalty. It can be explained because loyalty is formed from a good image owned by iPhone. Such a good iPhone image may result in significant customer loyalty. Someone feels loyal if the product has more pride than other similar products. The effect of the brand image on customer loyalty can also be explained by the age of the customer. The majority of customers were at the age of 17-25 years old in which this age is the most sensitive age to technological developments compared to other age groups. Thus, it can be explained that the average respondents provide a positive value of brand image in which it positively has impact on iPhone user loyalty in Surabaya.

The Effect of Service Quality on Customer Loyalty. Based on the descriptive research findings, the average respondents of this research agree to the questionnaire statements of service quality on customer loyalty. It means that the iPhone is considered to have provided good service for iPhone users in Surabaya so that it results in loyal feelings from its customers. Service quality can directly and significantly affect customer loyalty. It can be explained because loyalty is the impact of the services provided by iPhone itself. The services provided properly and appropriately can lead to customer loyalty. A person feels loyal if the service they perceived continuously is good and satisfies their needs. The effect

of service quality on customer loyalty can be explained also because the dominant respondents of this research were more to female than male respondents. Although there was not much different, women are more considering the effect of product quality to be purchased than the men do. Women are also more sensitive to the sophistication and certain features of iPhone so that women will be more loyal to iPhone. Overall, the average respondents provide a positive value to the services quality that has a positive effect on iPhone user loyalty in Surabaya.

The Effect of Customer Satisfaction on Customer Loyalty. Based on the descriptive research findings, the average respondents of this research agree to the questionnaire statements of customer satisfaction on customer loyalty. It means that iPhone users will be loyal because the customer is satisfied with the services provided by iPhone for its customers in Surabaya. The service quality has a close correlation to satisfaction. It can be explained because satisfaction is the effect of the services provided by the company. A person is satisfied if the service they receive is equal or greater than their expectation. Customer loyalty is very important for company in which it maintains the continuity of their business and the continuity of their business activities. Moreover, the loyal customers will expand their "loyalty" to other products made by the same manufacturer and ultimately they are consumers who are loyal to a particular manufacturer or company forever. Similarly, when the service obtained is lesser than customer's expectation, they will be not satisfied. Customer satisfaction and loyalty can also be explained by respondents' occupation. In addition to students, respondents with the occupation as entrepreneurs and employees of stated owned/ private also have a considerable amount. For these occupations, the satisfaction derived from iPhone arises because of the ability of iPhone to meet their needs, especially in meeting the needs of technology in carrying out their work. Therefore, obtaining satisfaction will lead to loyalty for the customer. Overall, the average respondents gave a positive value about the service quality provided by the company for iPhone users in Surabaya.

CONCLUSION AND SUGGESTIONS

Based on the results of hypothesis analysis and testing conducted in this research, the following conclusion can be drawn:

- Brand image has a significant and positive effect on customer satisfaction of iPhone users in Surabaya. Thus, it can be explained that creating a good brand image will increase iPhone customer satisfaction in Surabaya;
- Service quality has a significant and positive effect on customer satisfaction of iPhone users in Surabaya. Thus, it can be explained that in the presence of good service quality will increase customer satisfaction of iPhone users in Surabaya;
- Brand image has a significant and positive effect on customer loyalty of iPhone users in Surabaya. Thus, it can be explained that creating a good brand image will increase iPhone customer loyalty in Surabaya;
- Service quality has a significant and positive effect on customer loyalty of iPhone users in Surabaya. Thus, it can be explained that in the presence of good service quality will increase customer loyalty iPhone in Surabaya;
- Customer satisfaction has a significant and positive effect on customer loyalty on iPhone users in Surabaya. Thus, it can be explained that creating customer satisfaction will generate loyalty to iPhone users in Surabaya.

This research has been conducted according to the guidelines of scientific research, but this research cannot be separated from the limitations that include:

- This research was conducted using an online questionnaire so that sometimes the answers or responses given by the respondents are difficult to be controlled to determine whether or not the response obtained according to the real situation;

- At the time of conducting this research, there was a launching of new phone type which then affected the target of the respondents in which the respondents with the latest phone type cannot be the respondent of this research.

Based on the research findings that have been obtained, there are several suggestions as the following:

1. For iPhone, based on the research findings there are several suggestions that can be used for future improvement, among others:
 - Brand image can be improved by providing better service so that the product can be compared better with other competitors, creating more varied products and creating more affordable price so as to expand the segment on the market;
 - The service quality provided by the iPhone can be improved by performing fast services to its customers because the speed of service will increase customer satisfaction at the time of purchasing the product;
 - Customer satisfaction can be improved by creating a product with an affordable price so that the iPhone products are more easily afforded by its customers;
 - Better loyalty to iPhone users can be performed by increasing the interest of customers towards the iPhone products so that customers are not interested to move to other brands.
2. For further research, it is expected to be able to use more variables including dependent, independent and intervening variables so that it can contribute more references about the variables affecting customer satisfaction and loyalty. In addition, it might conduct the research on different companies that can be compared.

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THE EFFECT OF ENVIRONMENTAL AWARENESS ON CONSUMER BEHAVIOR OF ECO-FRIENDLY PRODUCTS MEDIATED BY ECO-FRIENDLY ATTITUDE

Hidayati Mustikaningrum

Faculty of Economics and Business, University of August 17, 1945 Semarang, Indonesia

E-mail: mustika.mom@gmail.com

ORCID: 0000-0002-5930-3562

ABSTRACT

Considering serious environmental issues that could endanger the environment, people are starting to realize and apply eco-friendly behavior by purchasing eco-friendly products. This research aimed to determine whether eco-friendly attitude mediated the effect of environmental awareness on consumer behavior of eco-friendly products in young housewives at the Faculty of Economics and Business, University of August 17, 1945 Semarang. The research sampling applied purposive sampling technique by distributing the questionnaires to 70 respondents of young housewives aged 21-35 years. The research findings indicated that: environmental awareness had positive and significant effect on consumer behavior of eco-friendly products; environmental awareness had negative and insignificant effect on eco-friendly attitude; eco-friendly attitude had positive and insignificant effect on consumer behavior of eco-friendly products; attitude was not proven to mediate the effect of environmental awareness on consumer behavior of eco-friendly products to young housewives of the students of the Faculty of Economics and Business, University of August 17, 1945 Semarang. It showed that high environmental awareness with the absence of positive eco-friendly attitude had been able to improve consumer behavior of eco-friendly products.

KEY WORDS

Eco-friendly product, environmental awareness, eco-friendly attitude, consumer behavior.

Considering serious environmental issues that could endanger the environment, such as illegal logging, water pollution due to industrial waste, air pollution in urban areas, and declining biodiversity quality, people are starting to realize and apply eco-friendly behavior by purchasing eco-friendly products (green products). Eco-friendly products are classified as new products created to overcome the existing global warming problems, as well as to anticipate further environmental damage. As a form of innovation, these eco-friendly products need a long time to socialize its benefits and be adopted by the public (Rogers 2003). Eco-friendly products are usually marked with eco-friendly labels attached to the products. The label is a sign that distinguishes the product from other products to help the consumers choose eco-friendly products which also serve as a tool for producers to inform the consumers that the products they produce are eco-friendly (Goleman, 2009).

Consumer demand for these eco-friendly products has encouraged the producers to change their business orientation by considering ecological aspects other than the economic aspects. Green marketing was carried out on a variety of marketing activities including product modifications, changes in the process, replacement of the packaging, even changes to the promotion. Green marketing is carried out by the company to meet the needs and desires of the consumers for eco-friendly products as well as corporate their responsibilities to the environment. Green marketing consists of a wide range of business activities which intends to satisfy customers' needs and wants, as well as diminish the negative impacts on the natural environment (Tiwari et al., 2011).

Besides the consumer behavior of eco-friendly products, the attention to the packaging is also important. Plastic has become a human need whose numbers of demand continue to increase. Plastic and Styrofoam are examples of packaging materials that are difficult to decompose and destroy naturally. It takes 1,000 to 5,000 years to decompose the plastic

naturally and it takes 50 to 1,000 years to make the Styrofoam decay by itself (Firdaus et al., 2008) If the plastic and styrofoam packaging are still used in large quantities, the balance of the environmental ecosystem will be threatened.

The effectiveness of this eco-friendly product begins with the consumer's awareness of the existence and function of the product. Consumer awareness of a product is usually used as an indicator of success over the product performance. It is because after the consumer has awareness, then the consumer will try the product until finally decide whether or not they will become a permanent consumer. In addition, consumers focus not only on their purchasing decision-making processes but also on awareness of the specific dimensions and characteristics of the product (Kwan et al., 2004).

Karavasalis et al (2015) stated that although consumers do not always buy eco-friendly products, consumers tend to do eco-friendly purchasing decision. Eco-friendly consumer behavior is characterized through attitudes and actions to protect the environment (Ali, 2013). A person can be an environmentally consumer if he/she cares about the earth; those are the people whose consumption patterns in terms of food, clothing, and every need, are oriented to the environment. For examples, people carry their own shopping bags, do not use chemical cleaners at home, replace tissues with handkerchiefs, try to reduce the amount of personal waste produced each day by bringing their own food containers when buying food, turning on air conditioner only when necessary, selecting plant-based foods than food derived from animal sources.

The research findings of Liping Fu et al (2018) suggested that pro-environmental attitudes were not significantly related to private pro-environmental behavior. Arttachariya (2012) stated that environmental awareness and environmental attitudes have positive correlation with the purchase of green products. This research is required to be conducted because there are still contradictions of previous research findings on the effect of environmental awareness and attitude toward the consumer behavior of green product. In this research, the variable of eco-friendly attitude is the mediation variable.

Young housewives are the most age group of concern in developing countries including Indonesia. Therefore, young housewives are also the target market of eco-friendly products which are classified as new products. The main thing that becomes the benchmark of consumer behavior eco-friendly product is the creation of the needs of young housewives of eco-friendly products on the basis of the benefits that the products offer. Based on the above problem, a research is required to be carried out with the research question "does eco-friendly attitude mediate the effect of environmental awareness on consumer behavior of eco-friendly products on young housewives of the students of Faculty of Economics and Business, University of August 17, 1945 Semarang?".

LITERATURE REVIEW

American Marketing Association (AMA) stated that the green marketing approach is the marketing of products that are mainly focused on environmental safety; it incorporates business activities which consist of packaging modification, production process, and green advertising (Yazdanifard & Mercy, 2011). Green marketing is also described as any promotional activity which highlights the environmental ethics as business fundamentals and it can perceive an advantage of switching consumer behavior towards a brand (Peattie & Charter, 2003). Green marketing consists of a wide range of business activities which intends to satisfy customers' needs and wants, as well as diminish the negative impacts on the natural environment (Tiwari et al., 2011). Green marketing also refers to an organization that puts its efforts in to promoting, pricing, and distributing products with eco-concerns (Sarkar, 2012).

Eco-friendly products are products made from natural raw materials, processed naturally, and marketed in a sustainable way with the nature (Goleman 2009). The consumed products are expected to form an eco-friendly and fair consumer behavior. Eco-friendly products are definitely organic products whose raw materials are developed in organic standards. Organic standards are the standard by which raw materials used to make

products are not sprayed with pesticides and do not use other chemical fertilizers (Sivertsen & Sivertsen 2008). Typically, organic products claim that the products are safer to use compared to products that use chemicals and they do not cause side effects for the consumers. Green/ eco-friendly products can be obtained on various types of goods, such as foods, containers, electronics, and cosmetics.

Consumption of eco-friendly products should be accompanied by more-wisely use of plastic packaging or Styrofoam. Plastic bags and Styrofoam are two types of packaging that is widely consumed. Plastics that we use are synthetic polymers made from petroleum that cannot be degraded microorganisms in the environment (Firdaus et al., 2008). Another type of packaging that is commonly used is polystyrene or better known as Styrofoam. Polystyrene is an aromatic polymer made from aromatic monomer styrene that is liquid hydrocarbons produced from petroleum. The people usually use polystyrene or Styrofoam in the form of food packaging and disposable drinking place (Daniel 2009).

Boztepe (2012) emphasized that the green consumers would stop consuming any harmful product which may affect their health, involve torture of animals and cause damage to the environment during production process, disposal or use. Eco-friendly behavior is consumer behavior that applies the concept of eco-friendly in every consumer behavior. According to Jayanti et al. (2014), there are some actions that must be performed as one of the consumer eco-friendly behaviors that is known as 3R (Reduce, Reuse, and Recycle). Karavasalis et al. (2015) stated that although consumers do not always buy eco-friendly products, they tend to do eco-friendly purchasing decision.

Environmental awareness is defined as the formation of environmental sensitivity through the conscious perception of environmental problems by the individual, and by behaving accordingly, taking precautions to protect the environment (Coertjens et al., 2010). Expected from the individuals, who are aware of the environment and worry about the effect of the environmental problems on themselves, to give importance to the environment and behave accordingly in each of their activities while living, because behaviors of the individuals against the environment result from a reflection of their environmental awareness (Gadenne et al., 2009). Kumar (2015) made an effort to know how we can create awareness among consumers about green marketing and to probe consumer attitude towards eco-friendly/ green products. The research stressed that marketers need to emphasize on green marketing as consumers are ready to pay a premium price for the green products.

Low consumer environmental awareness also causes low purchasing intentions on green products (Albayrak et al., 2013). Previous research findings, conducted by Ishawini (2011), showed that the overall environmental awareness was related to purchasing green products. There were also some researchers claiming that environmental awareness had positive and significant effect on purchasing behavior of green products (Akehurst et al., 2012). However, on the other hand, there were also researchers who pointed out the opposite result, that environmental awareness was not able to improve purchasing behavior of green products (Bamberg, 2003).

Cherian & Jacob (2012) studied consumer's attitude towards environment-friendly products. They presented a conceptual framework of green marketing and various ways in which different consumer attributes are related to the concept of green marketing. It was concluded that there is a need for green marketing and a need for a shift in consumer behavior and attitude towards an environmental friendly lifestyle. The researchers recommended exploring the factors that encourage consumers to cooperate with green marketing, that is, through green product usage. Attitude towards the environment is a consistent learned reaction given as approaching environment-related matters positively, not approaching them or remaining impartial to them (Flamm, 2009). According to Erten (2005), attitude towards the environment is formed from all the positive or negative behaviors and opinions of people towards the environment such as fear, anger, unease, and value judgment which result from environmental problems, and a preparedness for the solution of environmental problems. The company must know the consumer attitude in purchasing decision because one's attitude is the result of a psychological process, then it cannot be observed directly but must be concluded from what they say and do (Suprapti, 2010).

Eco-friendly attitude is the psychological reaction to the environment shown by the individual and it affects individual's behavior (Chen, 2014). Eco-friendly attitude is generally associated with a person's level of interest to the environment. Eco-friendly attitude consists of several dimensions including: the importance of being eco-friendly, the inconvenience of being eco-friendly, serious environmental problems, and the level of company's responsibility (Jokom & Kristanti, 2014).

Research related to environmental awareness and attitude has been conducted by Albayrak et al. (2013) which showed that environmental awareness had positive and significant effect on consumer attitude. The research findings of Liping Fu et al (2018) suggested that pro-environmental attitudes were not significantly related to private pro-environmental behavior. Arttachariya (2012) stated that environmental awareness and environmental attitude had positive correlation with the purchase of green products. Previous research conducted by Paladino & Baggiere (2008) indicated that consumer attitude was able to mediate the correlation between environmental awareness and purchasing behavior of green products.

METHODS OF RESEARCH

Population and Samples. The population in this research was young housewives aged 21-35 years who at the time of the research were the students of the Faculty of Economics and Business, University of August 17, 1945 Semarang. The samples were 70 people based on the minimum sample size using Eq. (1).

$$n = \frac{(Z \frac{1}{2} \alpha)^2 (\delta)^2}{(\epsilon)} \quad (1)$$

With the level of error (α) 10%, then $Z \frac{1}{2} \alpha = 1.645$, and $(\epsilon) = 0.1$ standard deviation $(\delta) = 0.5$. Therefore, the minimum sample (n) was 67.65 rounded to 70 respondents.

Research Sampling and Data Collection. The research sampling used in this research was non-probability sampling technique. The type of the sampling was purposive sampling. Purposive sampling was a sampling technique based on certain considerations; the selected samples in the research were young housewives aged 21-35 years old. After the data were collected, the questionnaires were analyzed through its validity and reliability to get feasible data for the research.

Research Model and Hypothesis. The research model applied the paradigm of path analysis with 2 (two) regression equations consisting of simple linear regression and multiple linear regression using standardized coefficients consisting of: 1) $X_2 = b_2 X_1 + e$ and 2) $Y = b_1 X_1 + b_2 X_2 + e$. The research model could be described in the following Figure 1.

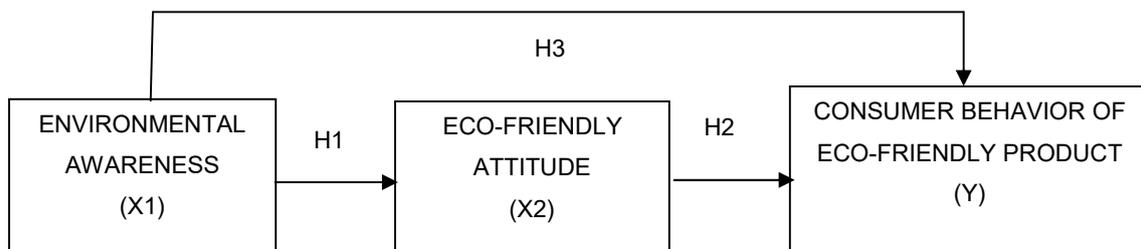


Figure 1 – Research Model

Research Hypothesis. Based on the research model, in Figure 1, there were 4 (four) hypotheses. The hypotheses were: 1) environmental awareness had positive and significant effect on eco-friendly attitude, 2) eco-friendly attitude had positive and significant effect on consumer behavior of eco-friendly products, 3) environmental awareness had positive and significant effect on consumer behavior of eco-friendly products, 4) eco-friendly attitude mediates the effect of environmental awareness on the consumer behavior of eco-friendly

products to young housewives of the students of the Faculty of Economics and Business, University of August 17, 1945 Semarang.

Research Variables and Indicators. Research variables and indicators as well as the measurement scales were presented in the following Table 1.

Table 1 – Research Variables and Indicators

No	Variables	Definition of the Concepts	Indicators	Measurement Scale
1	Environmental Awareness (X1)	Environmental awareness is defined as the formation of environmental sensitivity through the conscious perception of environmental problems by the individual, and by behaving accordingly, taking precautions to protect the environment	Positive attitude on eco-friendly products and packaging Making eco-friendly products a primary preference for shopping Starting to understand the aims of eco-friendly products Understanding the information of eco-friendly products, plastic packaging, and Styrofoam	Likert scale 1-5
2	Eco-friendly Attitude (X2)	Eco-friendly attitude is the psychological reaction to the environment shown by the individual and it affects the individual's behavior	The importance of being eco-friendly Serious environmental problems The level of government responsibilities	Likert scale 1-5
3	Consumer Behavior of Eco-friendly Products (Y)	Green consumers would stop consuming any harmful product which may affect their health, involves torture of animals and causes damage to the environment during production process, disposal or use	Consuming eco-friendly products and packaging Using plastic and Styrofoam packaging wisely Repurchasing eco-friendly products Recommending eco-friendly products and packaging Willing to pay with higher price	Likert scale 1-5

Source: the developed theories and research journals.

Validity and Reliability Tests. In order to measure the validity test, questionnaire or indicator was considered to be valid, if $r\text{-calculate} > r\text{-table}$, that is comparing total item value - total correlation at the result of reliability test with result of $r\text{-table}$ calculation. The reliability was tested with Cronbach's alpha (α) statistical test. A construct/ variable were considered to be reliable, if it gave the value of cronbach's alpha (α) > 0.60 .

With the help of SPSS computer version 22 for windows, the validity test applied total item value - total correlation (sample/ $n = 70$ and $\alpha = 0.05$, $df = n-2$, so $r\text{-critical} = 0.1982$). It was found that all indicators had $r\text{-calculate}$ larger than $r\text{-critical}$ (0.1982). Therefore, it could be said all indicators were valid. The reliability test of environmental awareness (X1) and eco-friendly attitude (X2) with consumer behavior of eco-friendly product (Y) were reliable because it had coefficient values above 0.6.

Normality Test and Classical Assumption Test. The regression model used must meet the following requirements: normality test (Kolmogorov-Simonov significance > 0.05) and classical assumption test (heteroscedasticity test and multicollinearity test). Heteroscedasticity test (glacial test significance > 0.05) and multicollinearity test (tolerance value of free variable > 0.1 and VIP value of free variable < 10).

Analysis Tool and Hypothesis Testing. Analysis technique of this research was path analysis. Path analysis was a technique used to analyze causal correlation that occurs by using multiple regressions if the independent variables affect the dependent variable not only directly but also indirectly (Ghozali, 2011).

Hypothesis 1, 2 & 3 tests were conducted by using t-test (partial) whereas hypothesis 4 test was conducted by using path analysis test with mediation test (intervening test). Intervening test was conducted to determine whether the variable used was intervening variable or not. Thus, it could be explained based on the path diagram model (Ghozali, 2011).

RESULTS AND DISCUSSION

The results of normality test and classical assumption test (heteroscedasticity test and multicollinearity test) had met the requirement of each test. Thus, a simple linear regression model as well as multiple linear regressions could be used for the path analysis model.

Table 2 – Regression Result of the Effect of Environmental Awareness on Eco-Friendly Attitude

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	12.045	2.086		5.773	.000
Awareness	-.035	.123	-.034	-.284	.778

a. Dependent Variable: Attitude

Based on the result of path analysis test (simple regression) in table 2, simple linear regression equation was $Y = - 0.034 X_1$ with Sig. value $t = 0.778 > 0.05$. This meant that environmental awareness had a negative effect of -0.034 and was not significant to eco-friendly attitude. The conclusion was that hypothesis 1 was not proven.

Table 3 – Regression Result of the Effect of Environmental Awareness on Consumer Behavior of Eco-Friendly Products mediated by Eco-Friendly Attitude

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	11.393	3.046		3.740	.000
Awareness	.405	.147	.316	2.757	.008
Attitude	.203	.145	.160	1.400	.166

a. Dependent Variable: Behavior

Based on the results of path analysis (multiple regressions) in table 3, multiple regression equation is $Y = 0.316 X_1 + 0.160 X_2$ which indicated that:

- Eco-friendly attitude had positive value of 0.160 and the Sig. value $0.166 > 0.05$. It meant that eco-friendly attitude had positive and insignificant effect on consumer behavior of eco-friendly products. The conclusion was that the hypothesis 2 was not proven.
- Environmental awareness had positive value of 0.315 and the Sig. value $0.008 < 0.05$. It meant that environmental awareness had positive and significant effect on consumer behavior of eco-friendly products. The conclusion was that hypothesis 3 was proved or accepted.
- *Mediation Test.* The mediation test was used to prove the eco-friendly attitude variable in mediating the effect of environmental awareness on the consumer behavior of eco-friendly products which could be illustrated in Figure 2.

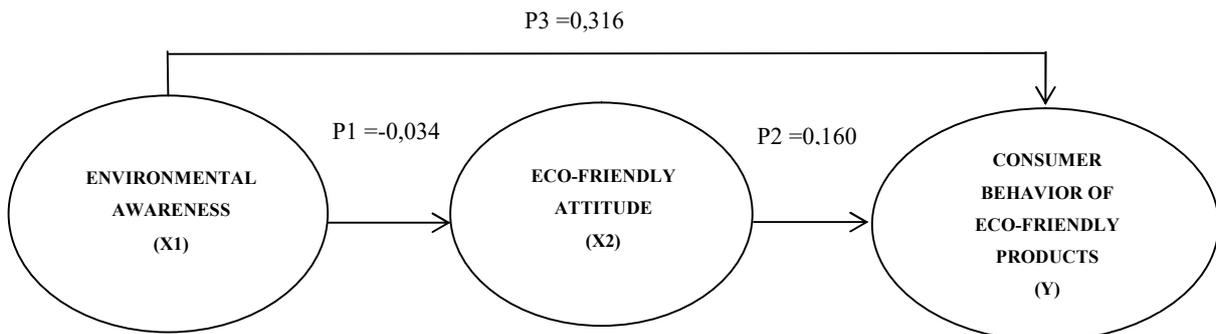


Figure 2 – Direct and Indirect Effects

Tests of Direct and Indirect Effects. Based on the discussion of path analysis, the path coefficient could be explained in the model of the effect of environmental awareness on consumer behavior of eco-friendly products mediated by eco-friendly attitude in the following table:

Table 4 – Direct and Indirect Effects

No	Direct Effect		Indirect Effect	
	Formula	Result	Formula	Result
1	Environmental awareness of consumer behavior of eco-friendly products $X_1 \rightarrow Y_1 = p_3$	$p_3 = 0.316$	Environmental awareness of consumer behavior of eco-friendly products through eco-friendly attitude $X_1 \rightarrow X_2 \rightarrow Y_1 = p_1 p_2$	$p_1 p_2 = -0.034 \times 0.160 = -0.005$

Source: Processed Primary Data.

Based on the analysis results shown in Figures 2 and 4, it was known that the path coefficient on the indirect effect of environmental awareness on consumer behavior of eco-friendly product after being mediated by eco-friendly attitude variable was $-0.005 <$ direct influence of environmental awareness on consumer behavior of eco-friendly products of 0.316 . Thus, eco-friendly attitude did not mediate the effect of environmental awareness on consumer behavior of eco-friendly products. The conclusion was that hypothesis 4 was not proven.

DISCUSSION OF RESULTS

The Effect of Environmental Awareness on Consumer Behavior of Eco-Friendly Products. The analysis result showed that environmental awareness had positive and significant effect on consumer behavior of eco-friendly products of $0,316$ with sig. value $0.008 < 0.05$. It meant that the better the environmental awareness, the better consumer behavior. It was in accordance with the findings of previous research conducted by Ishawini (2011) which indicated that the overall environmental awareness was related to the purchase of green products. It was also in accordance with the findings of the research conducted by some researchers who stated that environmental awareness had positive and significant effect on the purchasing behavior of green products (Mostafa, 2007; Akehurst et al., 2012).

The Effect of Environmental Awareness on Eco-Friendly Attitude. The analysis result showed that environmental awareness had negative and insignificant effect on eco-friendly attitude of -0.034 with sig. value $0.778 > 0.05$. It meant that the better the environmental awareness would decrease eco-friendly attitudes even though the effect was less meaningful. It was not in accordance with research conducted by Albayrak et al. (2013) which showed the findings that environmental awareness had positive and significant effect on consumer attitude.

3. The Effect of Eco-Friendly Attitude on Consumer Behavior of Eco-Friendly Products

The analysis result showed that eco-friendly attitude had positive and insignificant effect on consumer behavior of eco-friendly products of 0.160 with sig. value $0.166 > 0.05$. It meant that the better the eco-friendly attitude, the better the consumer behavior of eco-friendly products although the effect was less meaningful. This was consistent with the research findings of Liping Fu et al (2018) who stated that pro-environmental attitudes were not significantly related to private pro-environmental behavior.

The Indirect Effect of Environmental Awareness on Consumer Behavior of Eco-Friendly Product mediated by Eco-Friendly Attitude. The analysis result showed that the indirect effect of environmental awareness on consumer behavior of eco-friendly product after being mediated by eco-friendly attitude variable was $-0.005 <$ direct effect of environmental awareness on consumer behavior of eco-friendly product 0.316 . Thus, it could be concluded that eco-friendly attitude did not mediate the effect of environmental awareness on the consumer behavior of eco-friendly products. It showed that high environmental awareness with the absence of positive eco-friendly attitude had been able to improve the consumer behavior of eco-friendly products.

These research findings were not in accordance with Arttachariya (2012) who stated that environmental awareness and environmental attitude had positive correlation with the purchase of green products. Previous research conducted by Paladino & Baggiere (2008) showed the findings that consumer attitude was able to mediate the correlation between environmental awareness and purchasing behavior of green products. It meant that the effect of environmental awareness on the consumer behavior of eco-friendly products was not only driven by the positive attitude of eco-friendly but there were still other variables such as purchasing power. It was in accordance with the recommendations of the research conducted by Mustikaningrum Hidayati (2016, 2017) who stated that the effect of society awareness on eco-friendly products to the consumer behavior of eco-friendly products was mediated by socio-economic factors, namely income (ability of purchasing power), which was needed as the intervening variable that could improve the purchasing ability.

CONCLUSION AND SUGGESTIONS

Environmental awareness had positive and significant effect on consumer behavior of eco-friendly products to young housewives of the students of the Faculty of Economics and Business, University of August 17, 1945 Semarang.

Environmental awareness had negative and insignificant effect on eco-friendly attitudes to young housewives of the students of the Faculty of Economics and Business, University of August 17, 1945 Semarang.

Eco-friendly attitude had positive and insignificant effect on consumer behavior of eco-friendly products to young housewives of the students of the Faculty of Economics and Business, University of August 17, 1945 Semarang.

Attitude was not proven to mediate the effect of environmental awareness on consumer behavior of eco-friendly products to young housewives of the students of the Faculty of Economics and Business, University of August 17, 1945 Semarang.

It is necessary to conduct further research on purchasing power that mediates the effect of environmental awareness on the consumer behavior of eco-friendly products.

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THE REGULATION OF CAMPAIGN TOOL USE ON THE IMPLEMENTATION OF DISTRICT HEAD ELECTION IN SIDOARJO REGENCY

Anam Choirul

Postgraduate School, Airlangga University, Indonesia

E-mail: are6sda07.ca@gmail.com

ABSTRACT

The procurement of campaign tools distributed within same amount for every city or regency, there is no exception for the width of the area whether the city / regency are wide or small one. There is no much problem found on city as the width of it is commonly very limited, it ranges the same as around three to six sub-district. Unfortunately, the problem lies on the regency area, the width ranges around ten sub-districts and even more. This policy seems not fair for the politician as the amount of campaign tools they received are the same as city campaign which has smaller range.

KEY WORDS

Campaign tools, city, regency, sub-districts.

The installation of campaign tools by general election council is aimed to introduce the candidates of the future leader into society, article 28 the regulation of general election council number 7 of 2015 decide:

1. KPU of province/ Aceh KIP and KPU/KIP Regency/City provided the campaign tools from creating to installing the tools which is considered in article 5 act 2 alphabet c.

2. The campaign tools stated in act consist of:

- Baliho / billboard/ videotron, the largest size is about 4 m x 7 m, the amount of them are maximum of 5 for each candidates of regency or city;
- The largest flag is about 5 m x 1,15 m, each candidates could take up to 20 (twenty) pieces for sub-district;
- For banner, the largest size would be 1,5 m x 7 m, the council has provided no more than two pieces for each candidates.

Article 69 alphabet g Law number 1 of 2015 is about the details of the campaign that should not be prohibited by the candidates; they must not damage or relieve the campaign tools provided by KPU. Then, stated in article 187 act 3 Law number 1 of 2015, it is clearly stated that "every person who is consciously disobey the regulation of campaign of Regent or Mayor which is previously stated in article 69 alphabet g, alphabet h, alphabet i, or alphabet j, will receive criminal judge at least one month or six month at most, or they must pay fine for at least Rp100.000,00 or Rp1.000.000,00 at most".

There are many violations found during the election campaign. In order to reduce the violations, specifically, the violations which result in criminal act, article 152 act 1 Law number 1 of 2015 states "in order to equate the understanding and the procedure of criminal act during the election, the province election investigator, and/or Regency/City investigator, District Police and/or Sub-district police, and/or public prosecutor forms Central Law Enforcement".

Law number 1 of 2015 is supported with Law number 8 of 2015. Eve though it has been fixed, from the experience point of view, simultaneous districts election in 2015 still find some problems. One of the problem is the campaign system, more specifically, it is the campaign tools policy, thus the previous law has been amend into Law number 10 of 2016.

On previous law, number 8 of 2015, the installation of campaign tools is provided by government. The politician of parties found out that the amount of the campaign tools are too limited. Thus, many of the candidates initiate to pay their own campaign tools as it was prohibited by the Law number 8 of 2015.

In Law Number 10 of 2016, the installation of campaign aides is not only funded and implemented by the government but also can be funded and implemented by political parties / candidate pairs. With the permission of candidate pairs to add props campaign then there will be new problems related to campaign props such as design problems, the number and installation. Based on the above description of the author interested to discuss issues related to campaign props.

METHODS OF RESEARCH

Legal research is the process of discovering the rule of law, legal principles, and legal doctrines to address the legal issues faced. This corresponds to the prescriptive character of jurisprudence. In contrast to research conducted in descriptive scholarship that examines the truth of whether or not a fact is caused by a particular factor, legal research is conducted to generate new arguments, theories or concepts as prescriptions in solving the problems encountered. If on descriptive scholarship the expected answer is true or false, the expected answer in legal research is right, appropriate, inappropriate, or wrong. Thus it can be argued that the results obtained in legal research have contains value.

DISCUSSION OF RESULTS

Authority of Campaign tools Procurement:

Campaign tools procurement by general election council. In campaign tools procurement, the regulation has been fully conducted at article 28 about the regulation of general election council number 12 of 2016 which stated that:

Province KPU/ Aceh KIP or KPU/KIP Regency/City provided the campaign tools from creating into the installing process which already stated in article 5 act 3 alphabet c.

The campaign tools considered in act 1 covers:

- Baliho / billboard / videotron, the largest size is about 4 m x 7 m, the amount of them are maximum of 5 for each candidates of regency or city;
- The largest flag is about 5 m x 1,15 m, each candidates could take up to 20 (twenty) pieces for sub-district;
- For banner, the largest size would be 1,5 m x 7 m, the council has provided no more than two pieces for each candidates.

The candidates may enhance their own campaign tools within condition as follow:

- The size of campaign tools must be as same as the size of the campaign tools provided by the general election council of province/ Aceh KIP or KPU/KIP Regency/City;
- The copy of campaign tools must not exceed 150% of the maximum pieces provided by the general election campaign which is already stated in act 2.

In determining the maximum number of campaign tools which is considered in act 3 alphabet b, Aceh KIP or KPU/KIP Regency/City must coordinate the idea with the candidates of district head or with the political parties.

Aceh KIP or KPU/KIP Regency/City determine the number of maximum campaign tools as considered in act 4 with approved decision with Aceh KIP or KPU/KIP Regency/City.

The additional campaign tools made by the candidates must be attached with the signed approval from Aceh KIP or KPU/KIP Regency/City.

The payment bill must be attached and sent to Aceh KIP or KPU/KIP Regency/City.

The procurement of campaign tools provided by KPU are distributed within same amount for every city or regency, there is no exception for the width of the area whether the city/regency are wide or small one. There is no much problem found on city as the width of it is commonly very limited, it ranges the same as around three to six sub-district. Unfortunately, the problem lies on the regency area, the width ranges around ten sub-districts and even more. This policy seems not fair for the politician as the amount of campaign tools (APK) they received are the same as city campaign which has smaller range.

In the Campaign Facilitation arrangement by KPU, the Government should pay attention to the proportional principle. So that, there is a difference between districts / municipalities with a large area compared with small districts / municipalities. Facilitating the procurement of campaign props by the KPU should consider the number of sub-districts and villages in each regency / city, for example for the procurement of baliho at least 1 (one) point in each District is not beaten flat as it has only 5 points in each City District. For Batu City, this number may be considered quite enough and it looks festive because in Batu there are only 3 (sub-districts) but if compared with Sidoarjo regency which has 18 (eighteen) sub-districts, the amount is considered very less, especially when compared with Malang Regency, the number of municipalities are 30 areas. Similarly, for the procurement of the flags and the banners must consider the number of sub-districts and villages existing in the respective districts / municipalities so that it would be fair for the participants of the election.

The Additional Campaign Tools. The duty of general election council to provide campaign tools which is already stated in the regulation of general election council Law number 12 of 2016 is still far from the word ideal. Especially, it is not fair for the city or regency who possesses very vast area. Thus, there must be additional campaign tools for the candidates. So, the societies will able to identify their future leader. This regulation already published in the law number 12 of 2016 article 28 act 3 which stated that the candidates could add their own campaign tools with condition as follow:

- The size of campaign tools must be as same as the size of the campaign tools provided by the general election council of province/ Aceh KIP or KPU/KIP Regency/City;
- The copy of campaign tools must not exceed 150% of the maximum pieces provided by the general election campaign which is already stated in act 2.

The focus of the problem is in what extent the KPU could guarantee that the additional campaign tools from the candidates is exactly the same as the policies. Even though, the size or numbers of the campaign tools provided by KPU, it is already stated in the regulation of general election council number 12 of 2016.

There is another problem instead of the design and the size of the campaign tools, it is the time management of the campaign tools from KPU and from the candidates. Both must take place in the same time. the phase of the additional campaign tools from the candidates must keep up with the schedule from the KPU.

The Campaign Tools Procurement Control. in the government system of democracy, the ultimate power must be held by the society, the power is possessed by the general election which is free from any oppression. The development of a country is the thing that is very important to analyse and observe the political act from any legal institutions. Thus, the ultimate idea of the country will be achieved as stated in the opening fundamental constitution law of 1945 (UUD 1945) about civil sovereignty. As logical consequences for Indonesia, the movement is not just merely to observe the change the political behaviour within society in general, but it is also to observe the behaviour change of the elite politics (Alfian, 1981:8).

General election process is the important instrument for democracy country who follow the principle of representation (Moh. Kusnardi, 1983:238).

General election work as the tool to filter "politicus politicus" which will be the representation of society in council. The chosen politicians are considered as the individual or the community who have the ability or mandatory to speak up and act as bigger representation of a group through political parties (Miriam Budiarjo, 2008: 1).

An absolute election is needed by the country who follows the principle of democracy. Indonesia is one of country that follows the principle of democracy. Thus, election is very fundamental for leader change who take place in legislation council. The vision and mission of a country will be achieved by the change of leader acquainted from the general election (Mahfud MD,2009:1)

General election is one media for the society to give their aspiration which is very principal. So that, the implementation of election is very mandatory for the government to guarantee the distribution of civil aspiration based on the schedule of the state. According to

civil sovereignty, all aspects of the general election system is the ultimate decision of society to choose. It is the violation of human right if government is failed to hold general election without the agreement from society, or the government did not commence any general election (Jimly Asshiddiqie, 2013:416).

All elements of country should participate in general election process to achieve successful election. Started from government, election council, the participants of candidates, an dparticipation of society. Without active participation and coordination of all elements, the election would not run well and effective, for example is the campaign tools provided by KPU and additional campaign tools from the candidates, it must be controlled and observed by the council. Even though the limitation for each campaign tools is already stated in Law number 12 of 2016, in reality, many politicians or supporters of the candidates breaks the rule. In one hand, the number of general election council personnel is way less than the people that they must take care of. That is why, the role and support from society is very useful to prevent such an action. Because, without help of society, KPU will not able to commence perfect election.

From the confusion of campaign tools policy, there must be an agreement and major understanding for every element of participants. In this case, the government, election council, the participants and society, they all have their own role as follow:

- Government as the one who provide law and policies, they must revise the regulation or law which does not yet meet the requirement among society;
- KPU as the procurer of general election must be able to interpret regulation provided by the government, they must arrange the technical procedure based on the law which is more applicative in the field;
- KPU of Regency/city must be able to provide the planning based on the condition of current situation of the area. For example, when they need to measure the APK, KPU of Regency/city could not determine their decision only in the aspect of satisfaction; they must consider another aspect such as geographic, situation, and condition of sub-district or village;
- The election investigator must be fair at their role, they must face every violation without considering the backgrounds of the criminals;
- The participant or candidates of the election must obey the regulation stated on constitution and the regulation of KPU;
- The society must be active to observe the use of campaign tools, the help of society will be very helpful as the number of investigators is very limited. Moreover, the number of campaign tools are so wide that they spread in every village, society must be aware of it. Thus, the election process will be excellent.

The Authority of Campaign Tools Distribution and Installation. The system and procurement of general election always become mass interest among people for the government, thus, the concept of people, by people, and for people must e achieved by using the management and quality of the general election (Gaffar Janedjri, 2012:1).

As we know, the general election is seen by people as arena to form democracy and to replace the old leader with the new or the same as people elect their future leader periodically. General election is important instrument for the country that follows ideology of democracy, general elction is not only a process the implementation civil sovereignty, but it also work as instrument to observe the behaviour change of civil politics and direct periodic leader change. General election is very important for the procurement of Indonesia. The democratic election must be direct, in general, confidential, honest, and equitable. Before the election day, the candidates have several days to promote and campaign their idea to society. Campaign is the act if communication which is held by state. The procurement of campaign is mainly an institution or organisation. The organisation could come from government environment, private sector, or civil society (Antar Venus,2004:9).

Political campaign is the act which is systematic, organised, to promote the candidates to be, chosen as candidate, elected, or re-elected in a formal position (Toni Andrianus,2006: 185-186).

The act of campaign cover some activities as follow; limited meeting; dialogue and face to face meeting; public debate/open debate between candidates; distribution of campaign tools to the public; installation of campaign tools; mass media advertisement or electronic media; and/or other activities that do not break the regulation of campaign and constitution.

After KPU finish printing all the attributes for the candidates for their campaign, it is mandatory for KPU to distribute for each candidate as suggested in regulation of general election council number 12 of 2016 article 30 act 1. It stated that general election council of province/ Aceh KIP or KPU/KIP Regency/City distribute the campaign tools to the candidates or their supporting team. The campaign tools must be installed at the location determined by KPU.

Installing campaign tools is the most important phase that need an extra attention from both general election council, the candidates, and the investigators. Because, there are so many violations done by people who brake the regulations from KPU. The violations vary from the number of campaign tools to the invalid locations that must not be an option for the candidates to install them.

The main purpose for campaign tool installation is to introduce the candidates to society. The article 28 about the regulation of general election number 12 of 2016 stated that:

- Province KPU/ Aceh KIP or KPU/KIP Regency/City provided the campaign tools from creating into the installing process which already stated in article 5 act 3 alphabet c.
- The campaign tools considered in act 1 covers:

Baliho / billboard / videotron, the largest size is about 4 m x 7 m, the amount of them are maximum of 5 for each candidates of regency or city;

The largest flag is about 5 m x 1,15 m, each candidates could take up to 20 (twenty) pieces for sub-district;

For banner, the targets size would be 1,5 m x 7 m, the council has provided no more than two pieces for each candidates.

If we look closely, the article act 3, article 28 act 1, and article 30 act 1 regulation of general election council number 12 of 2016. There is a blurry future about the authority of campaign tools installation. In article act 3 and article 28 act 1, they state that the installation phase of campaign tools is the authority of KPU. In the other hand, article 30 act 1 states that KPU distribute/ hand over the campaign tools to the supporting team of each candidate. To prevent different interpretation, the authority of campaign tools installation must be fixed. There are three options whether the authority is given to the KPU, candidates, or both of them.

In this case, the installation authority could follow the local Regulation where the election will be held. As stated in KPU regulation number 12 of 2016 article 30 act 4, it is stated that the installation campaign tools must follow the ethic, aesthetic, cleanness, and the beauty of city or the area of election based on the recent constitution.

From the regulation above, we could assume that the installation of campaign tools must follow and coordinate the policy with local governance. Because, it is common for Regency or City to have their exclusive regulations about the installation of advertisement in public area. For example, in Sidoarjo regency, there is local regulation of Sidoarjo number 7 of 2007 about the procurement of billboard installation policy and Regent regulation number 51 of 2014 about the procedure if billboard installation.

CONCLUSION AND SUGGESTIONS

Regulation or the protection that regulate about the campaign tools procurement and installation is still not maximum, that is why, there are still many violations during the processes, the violations are broken by political parties member, the candidates of district head, or the supporters of each candidates.

Suggestion. Government as the one who provide law and policies, they must revise the regulation or law which does not yet meet the requirement among society. For example, the procurement of campaign tools does not concern with the wide of the district that hold election. Moreover, the authority of campaign tools installation policy is still not yet complete.

To prevent different interpretation, the authority of campaign tools installation must be fixed. KPU must arrange the technical procedure based on the law which is more applicative in the field.

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SOCIAL WELFARE: THE ANALYSIS OF SOCIAL CAPITAL OF SMALLHOLDER FARMERS

Agung Dwijatenaya Ida Bagus Made*

Faculty of Agriculture, University of Kutai Kartanegara, Indonesia

Kardinar Wijayanti Silvana

Tenggarong School of Economics, East Kalimantan, Indonesia

*E-mail: dwijatenaya@yahoo.co.id

ABSTRACT

The role of social capital on social welfare has been attracting interest from academicians. Indonesia as an agriculture country describes its demography with many smallholder farmers. Thus, the main purpose of this study was to investigate the effects of social capital of smallholder farmers on social welfare. The instrument used to collect data was questionnaire. The number of sample determined by using Slovin's formula then with Proportionate Stratified Random Sampling technique, the selection of the sample, which was groups of smallholder farmers in Kutai Kartanegara Regency. The hypotheses tested using the Product Statistics and Service Solution version 22.0 for Windows. Results of this study revealed that social capital has a positive and significant impact on social welfare. The influence of trust on welfare is positive but not significant. The influence of social network on welfare is positive and significant. The effect of social norms is not significant on welfare. Increasing trust in the members of farmer groups must be taken into consideration by building networks and promoting social norms. However, this effort cannot separated from the behavior of the leaders in this country, thus the public's trust keeps on decreasing.

KEY WORDS

Welfare, social capital, trust, networking, norms.

Every country in this world shares similar goal, which is to promote the welfare of its people. Similarly, Indonesia has been doing various efforts in the context of community welfare improvement. The nation has done various poverty alleviation programs, including in Kutai Kartanegara, one of the most natural resources endowed regencies in Indonesia, located in East Kalimantan Province. Although various poverty alleviation programs have been undertaken, they could not significantly reduce the poverty. In the Regency, the number of poverty can still be categorized as high despite the data shows a decreasing trend. In 2005, poor people in Kutai Kartanegara Regency amounted 56.99 thousand people while in 2017 it decreased to 56.57 thousand people (Indonesia Central Agency for Statistics, 2018).

The problems of poverty faced by developing nations, including Indonesia require various strategies to address the problems. Many experts argue that in addition to economic capital and human capital, the social capital of society is very decisive performance that ultimately affects the welfare. The most important key for development of smallholder farmer society is social capital. This can be seen from the life of farmers who promote mutual cooperation in every activity and the existence of mutual help to help among transmigrated people, as well as the existence of social norms including religious norms that are still upheld by the peasant community. As Coleman pointed out in Mangkuprawira (2010) that social capital facilitates individuals and groups who are developed by networks, beliefs, and social norms. Social capital is a neutral resource that facilitates community-dependent activities. Similarly, people who are members of the farmer group, then the ability of each member in utilizing social capital will be able to improve their welfare. Some experts believe that social capital can improve people's lives. If social capital can be managed properly, then the social

welfare of the community will increase (Baiyegunhi (2013), Handoyo (2013), Nasution, et al. (2014), Wuysang (2014), and Rohmani, et al. (2015)).

Social capital owned by each member of the farmer's group, if used well, it will be able to improve the welfare. As a case study in Kelurahan Bukit Biru, Tenggara (Sub-district of Kutai Kartanegara Regency), whether social capital can be utilized properly so that it can improve welfare. Therefore, this study aims to analyze the influence of social capital on social welfare, analyze the influence of trust on welfare, analyze the influence of social networks on welfare, and analyze the influence of social norms on welfare.

LITERATURE REVIEW AND HYPOTHESES

Welfare. The realization of a country's development success is shown through the increasing public welfare. As Nicholson (2002) puts it, micro-household welfare can be approximated by the Engel curve, which states that the share of food expenditure on household expenditure will diminish with rising incomes. Furthermore, in the state of the price of goods and people's tastes, the increase in income shows an increase in welfare. According to Spicker; Midgley; Tracy and Livermore; Thompson (in Suharto, 2006) the notion of welfare contains at least four meanings, which include; as well-being, as social services, in the form of social security, health services, education, housing, and personal social services, as social benefits, which are especially given to the poor, and as a planned process or business undertaken by individuals, social institutions, communities, and government agencies to improve the quality of life through the provision of social services, as well as social benefits. Stiglitz et al. (2011) states that social welfare is composed of the various demands that accompany it; standard of living material (income, consumption, and wealth), health, education, individual activities including work, political voice, and governance, social relationships and kinship, environment (present and future conditions), insecurity, or physical. All of these dimensions show the quality of life of the people and to measure it requires objective and subjective data. Further Stiglitz et al. (2) health, (3) education, (4) individual activities including work, (5) the basic dimensions to be taken into account in measuring wellbeing are (1) standard of living (income, consumption and wealth); (6) political and governance voices, (7) social relationships and kinship, (8) the environment (present and future conditions), and (8) insecurity, both economic and physical. All of these dimensions show the quality of life of the people and to measure it requires objective and subjective data. Research on the influence of social capital on welfare in Indonesia has not been done. Several studies on the effect of social capital on welfare are conducted by the following researchers. Meniarta, et al. (2009) research results are social capital in the form of values, mechanisms and institutions overcome various problems including welfare issues. Pramono's (2012) research findings are social capital has no significant effect on household poverty. Handoyo (2013) research findings are social capital especially trust and net-work contribute in improving welfare. The findings of Baiyegunhi (2013) study that social capital has a positive and significant impact on the welfare of rural households. Nasution, et al. (2014) research findings is increased access to social capital affecting the increase of rural household welfare. Wuysang (2014) the result of his research is social capital positively related to the income of farmer group members. The results of Rohmani's research, et al. (2015) shows the social capital of farm households have a significant effect on welfare. Based on empirical theory studies and empirical studies developed against the influence of social capital (trust, social network, and norms simultaneously affect welfare) are described as follows.

H1: Social capital (trust, social network, and norm) has a significant effect on welfare (Stiglitz, et al., 2011; Baiyegunhi, 2013; Handoyo, 2013; and Nasution, et al., 2014)

Social Capital. According to Putnam in Syahra (2003) social capital is defined as the characteristics of social organization, such as networks, norms, and beliefs that facilitate coordination and cooperation to get the joint benefits (features of social organization, such as networks, norms, and trusts, that facilitate coordination and co-operation for mutual benefit). Simply put, social capital is a characteristic of social organization that facilitates coordination

and cooperation for mutual benefit. Arsyad, et al. (2011) explains that social capital is a bottom-up phenomenon derived from a set of individuals forming a social network pattern based on the principles of mutual trust, social reciprocity, norms of conduct, and collective action. Furthermore, according to Coleman in Adler and Kwon (2002) social capital is described as Social capital is defined by its function. It is a social entity that describes the value of the relationship social, mutual trust, and mutual norms between individuals and societies Social relations is the most important element in social capital and is a resource.) According to Fujiwara and Kawachi in Thobias et al. (2103) social capital are the resources which is accessed by individuals and groups within a social structure, facilitating cooperation, collective action, and maintaining norms. According to Hasbullah in SyafrilHadi (2014) the core of social capital analysis lies in how people's ability in a group to work together to build a network to achieve common goals The cooperation is colored by a pattern reciprocal and mutually beneficial interrelation and built on trust supported by positive and strong social norms and values.

Trust. Economic welfare can be achieved by optimally utilizing the trust. As Francis Fukuyama in Syahra (2003) that the welfare and competitiveness of a society is determined by the level of trust between fellow citizens. The results of research Kabbaro, et al. (2014) show that trust as a dimension of social capital has a positive and significant impact on the family's objective welfare. The findings of study of Alfiasari (2008) those beliefs have a significant effect on improving the economic welfare of poor families. The results of Fotovvat, et.al. (2014) show that trust has an insignificant effect on sustainable development. Furthermore, the hypothesis that can be built based on theoretical and empirical studies is described as follows.

H2: Trust has a significant effect on welfare (Fukuyama in Syahra, 2013; Alfiasari, 2008; and Kabbaro, et.al., 2014).

Social networks. The social network of farming communities in Bukit Biru Village Tenggara Sub-district, Kutai Kartanegara Regency of East Kalimantan is formed from various factors, among others, the similarity of religion that is shared and are both transmigrating communities. The farmer groups formed on the basis of a common goal. As argued by Hasbulah in Supono (2011) that participation in a network is an element of social capital. Groups built on the basis of common orientation and goals with more modern organizational management features, have better participation rates, and a wider range of networks. Alfiasari (2008) research results show that social networks have a significant effect on improving the economic welfare of poor families. Zuhri's research, et al. (2012) concluded that villagers who have relatively strong social capital then the level of people's welfare tend to be high. The strength of social capital is determined by strong organizational networks. Research findings Kabbaro, et al. (2014) is a social network is an element of social capital has a significant effect on the family's objective welfare. Based on the above study the hypotheses that can be constructed are described as follows.

H3: Social Network has significant effect on welfare (Hasbulah in Supono, 2011; Alfiasari, 2008; and Kabbaro, et al., 2014).

Social norm (Norms). The norms that were built among the members of the farmer's group in the Bukit Biru Village Tenggara Sub-district of Kutai Kartanegara Regency were inseparable from the norm from which the farmers came from. Because the farmers are transmigrants that taste from Java Island, the social norms and customs of Java are dominant in this farmer group. According to Fukuyama in Adler and Kwon (2002) social capital is defined as a set of informal values or norms exchanged to the group to enable them to work together as a result of a certain set of informal values or norms shared among members of a group that permit cooperation among them). Svendsen and Svendsen in Rohmani, et al. (2015) norms are the basis of the actors to build joint activities. The results of Kabbaro, et al. (2014) showed a high average index of total suspension. The influence of norms on objective wellbeing is not significant. The finding of Alfiasari (2008) is a written norm having a significant effect on the objective welfare. However, the unwritten norms, traditional norms, and religious norms have nothing to do with improving the economic

welfare of poor families. The hypothesis that can be constructed based on theoretical and empirical studies is described as follows.

H4: Social norms have a significant effect on welfare (Fukuyama in Adler and Kwon, 2002 and Alfiasari, 2008).

According to theoretical and empirical studies, shown that social capital affects welfare. This study has similarities with previous research which is to examine the effect of social capital on welfare. However, this study also emphasizes on the investigation of the effects of social capital consists of trust, network, and social norms towards social welfare of farmer group members in rural areas. The similarities and differences of this study with previous research are explained in the discussions. In order to clarify, the conceptual framework of this study is illustrated as in Figure 1.

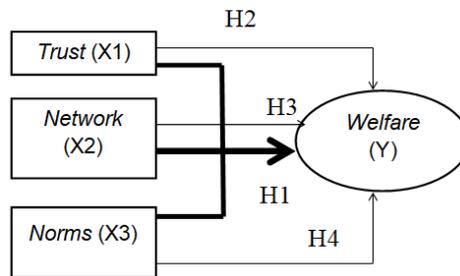


Figure 1 – Theoretical Framework

RESEARCH METHODOLOGY

This study used quantitative approaches. Sugiyono (2012) describes the research design using quantitative methods is one type of research that the specification is systematic, well planned and structured clearly from the beginning to the research design. The objects of this research were social welfare and social capital of smallholder farmers including farmer groups such as *Harapan Maju*, *Lumbang Paceklik*, *Karya Tani*, and *Berkat Sentosa* located in Bukit Biru sub-district Tenggarong, Kutai Kartanegara Regency, East Kalimantan. Social Welfare acted as the dependent variable (Y) while social capital sub variables such as trust (X1), social networks (X2) and social norms (X3) played as independent variables.

Primary data collected and obtained directly from the respondents whereas secondary data such as statistical numbers of smallholder farmers in Kutai Kartanegara Regency, information regarding the geographical area of this study and the condition of the poor were obtained from the official websites of Central Agency on Statistics of Kutai Kartanegara and Central Agency on Statistics of East Kalimantan.

Population of this study was 97 people and using Slovin formula (Sedarmayanti and Hidayat, 2002: 143) at the level of sampling error of 10 percent to obtain 49 respondents. Furthermore, to select the sample, researcher used proportionate stratified random sampling. As noted by Sekaran (2006), population stratification can be done based on region. For that reason, the number of samples of each farmer group was determined proportionally (Sugiyono, 2012), so that the number of samples for Harapan Maju farmer group was 14 people, 12 people of Lumbang Paceklik, 12 people of Karya Tani, and 11 people for Berkat Sentosa group.

The research instrument used in this study was questionnaire (structured interview). Measurement of research variables were based on indicators in the form of questions and statements to become research instruments. Validity and reliability tests for each question item was done through pilot test by distributing the questionnaire to 30 respondents. With Cronbach's Alpha value 0.916 (> 0.6), it means that the question items were reliable (Triton in Sujianto, 2009). The validity test results are valid (r counted > 0.3). Sugiyono (2012) stated that a question is valid if it has a correlation value (r counted) greater than the correlation value of 0.3 (r count > 0.3).

The analysis model used to test the proposed hypothesis is the Multiple Regression Linear model. The multiple regression analysis with the least squares equation is formulated as follows (Supranto, 2001).

$$Y=b_0+b_1X_1+b_2X_2+b_3X_3+e \quad (1)$$

Where: Y = Social Welfare; b_0 = constants; $b_1,2,3$ = Regression coefficient of each independent variable; X_1 = Trust; X_2 = Social Network; X_3 = Norm; e = Residual variable.

F test was used to prove whether social capital has simultaneous influence to social welfare. The t test was used to test the influence of each independent variable used in this study to the dependent variable partially. In order to ensure that the data was feasible to be analyzed with regression methods, we ran classical assumption tests.

Normality test. According to One-Sample Kolmogorov-Smirnov table, obtained the probability value or Asym.Sig (2-tailed) value greater than 0.05. This indicates that the data are normally distributed (Sujianto, 2009), as Table 1.

Table 1 – Normality Test Result, 2018

Variable	Asymp. Sig. (2-tailed)	Remarks
Trust (X1)	0.510	Nilai p > 0.05 = normal
Network (X2)	0.195	Nilai p > 0.05 = normal
Norms (X3)	0.214	Nilai p > 0.05 = normal
Social Welfare (Y)	0.101	Nilai p > 0.05 = normal

Source: Primary Data Processed by the Researcher.

Multicollinearity. The test results indicate that the VIF values for all independent variables (X) were less than 10 as shown in Table 2 below. It means that the independent variables are free from multicollinearity (Sujianto, 2009).

Table 2 – Multicollinearity Test Results, 2018

Variable	Tolerance	VIF
Trust (X1)	0.639	1.566
Network (X2)	0.559	1.789
Norms (X3)	0.522	1.915

Source: Primary Data Processed by the Researcher.

Heteroscedasticity. Heteroscedasticity test was done by correlating independent variables with ABRES. If the value of P value (significance) > 0,05, then concluded there is no heteroscedasticity. The test results showed that P value > 0,05 as Table 3 below:

Table 3 – Heteroscedasticity Test Results, 2018

Variable	P Value (Sig.)
Trust (X1)	0.971
Network (X2)	0.457
Norms (X3)	0.601

Source: Primary Data Processed by the Researcher.

Autocorrelation. The autocorrelation test was performed by using Durbin Watson test (DW test). The test results showed that there was no autocorrelation. This is indicated by the dW value of 1.827, dU of 1.673, and dL = 1.4136. The criteria of assessment as defined by Makridaktis in Sujianto (2009) if $dU < dW < 4-dU$, then there is no autocorrelation ($1,673 < 1,827 < 2,327$).

RESULTS AND DISCUSSION

General Descriptions of Research Area. The total area of Kelurahan Bukit Biru, Tenggara is 3,505 ha where the distance from the capital city of regency as the center of

government is about 3.5 km. The boundaries of Kelurahan Bukit Biru is in the west by Jahab, Rempanga in the east, South is bordered by Sumber Sari Village, Loa Kulu while the North is adjacent to Timbau Urban Village. Kelurahan Bukit Biru is a village that has a large agricultural area compared to other urban villages in Tenggara sub-district. The livelihood of the population is mostly as a farmer (30 %) and most of their highest education level is only at elementary school (38 percent), (Kutai Kartanegara Central Agency on Statistics, 2017).

Descriptions of Research Variables. Social welfare of smallholder farmers was analyzed through social capital analysis consisting of three elements namely trust, social network, and social norms. Thus, the research variables consists of a dependent variable and 3 independent variables. Dependent variable was social welfare (Y) measured through 5 indicators such as increasing asset ownership (Y1.1), income increase (Y1.2), family health increase (Y1.3), education of family member increase (Y1.4), and social kinship increase (Y1.5).

On the other hand, independent variables consist of 3 elements of social capital such as trust, social network, and social norms. Trust (X1) measured through 5 indicators namely trust building between members of farmer group (X1.1); trust towards rules exist in the group (X1.2); the level of trust of the members towards their group leader (X1.3); the level of trust of the members towards GAPOKTAN leader (X1.4); and the level of trust of the members towards extension workers (X1.5). Social network (X2) measured through 5 indicators such as Information spread widely among fellow farmer group members (X2.1); the mutual help between the members (X2.2); There is mutual cooperation between members (X2.3); technical assistance from the government (X2.4); and the role of private / NGOs in developing the farmer groups (X2.5). Social norms (X3) also measured through 5 indicators. Firstly, there is monthly discussion regarding each activity (X3.1); the frequency of discussion for every mutual cooperation activity (X3.2); rules within group is well implemented (X3.3); there is a habit of mutual cooperation (X3.4); and knowing that there is religious guidance in group activities (X3.5).

Table 4 – Descriptive Statistics of Research Variables, 2018

Variable	Indicator	Score												Mean
		1		2		3		4		5		6		
		F	%	F	%	F	%	F	%	F	%	F	%	
Welfare (Y)	Y1	0	0	0	0	2	4,1	14	28,6	27	55,1	6	12,2	4,75
	Y2	0	0	0	0	2	4,1	19	38,8	22	44,9	6	12,2	4,65
	Y3	0	0	0	0	3	6,1	18	36,7	24	49,0	4	8,2	4,59
	Y4	0	0	0	0	3	6,1	19	38,8	23	46,9	4	8,2	4,57
	Y5	0	0	0	0	2	4,1	14	28,6	27	55,1	6	12,2	4,76
														23,32
Trust (X1)	X1.1	0	0	0	0	1	2,0	13	26,5	29	59,2	6	12,2	4,82
	X1.2	0	0	0	0	8	16,3	20	40,8	18	36,7	3	6,1	4,33
	X1.3	0	0	0	0	5	10,2	17	34,7	24	49,0	3	6,1	4,51
	X1.4	0	0	1	2,0	10	20,4	15	30,6	22	44,9	1	2,0	4,24
	X1.5	0	0	0	0	4	8,2	8	16,3	34	69,4	3	6,1	4,73
														22,63
Network (X2)	X2.1	0	0	0	0	5	10,2	16	32,7	26	53,1	2	4,1	4,51
	X2.2	0	0	0	0	1	2,0	17	34,7	29	59,2	2	4,1	4,65
	X2.3	0	0	2	4,1	3	6,1	21	42,9	22	44,9	1	2,0	4,35
	X2.4	0	0	0	0	4	8,2	18	36,7	26	53,1	1	2,0	4,49
	X2.5	0	0	0	0	5	10,2	15	30,6	25	51,0	4	8,2	4,57
														22,57
Norms (X3)	X3.1	0	0	0	0	2	4,1	24	49,0	19	38,8	4	8,2	4,51
	X3.2	0	0	0	0	0	0	25	51,0	22	44,9	2	4,1	4,53
	X3.3	0	0	0	0	8	16,3	20	40,8	20	40,8	1	2,0	4,29
	X3.4	0	0	0	0	3	6,1	14	28,6	27	55,1	5	10,2	4,69
	X3.5	0	0	0	0	1	2,0	16	32,7	28	57,1	4	8,2	4,71
														22,73

Source: Primary Data Processed by the Researcher.

Table 4 above shows respondents' answers to social welfare with an average score of 23.32. This means that the majority of farmers declare that the level of people's welfare is in

the prosperous category. Welfare as measured by indicators of increased asset ownership, income increase, health status, educational degree, and social kinship were grouped in positive answers.

Trust of smallholder farmer community has been built since long time ago in Bukit Biru Village, shown from respondents' answers which stated that the trust between members, the level of trust toward the leader the farmer group, the trust level towards Gapoktan, and the trust level towards instructors were grouped in the good category.

The society who lives in Bukit Biru mostly came from villages in Java through transmigration program of the previous President. For that, social network tends to more strongly formed than other society. Average score of respondents' answers on social network was 22.57. This implies that the social network within them categorized as good. Any information received regarding welfare improvements spreads among fellow members well. This is because they share same emotions and feelings of being transmigrated individuals, so they tend help each other to stand up. Every effort for welfare improvements done through well managed mutual cooperation. The roles of extension officers and the private sector are running fairly well, as transmigration is part of government programs. This can be seen from the answers of respondents clustered on a positive answer.

Next, average score of respondents' answers on social norms was 22.73. This means that the social norms available are quite good. The existence of *musyawarah* (the Indonesian term for group discussion) in every activity including mutual cooperation activities become guideline for every member to act. In addition, the existence of religious norms and customs provide a standard for holding the norms to achieve common prosperity.

The Effect of Social Capital on the Social Welfare of Smallholder Farmers. Hypotheses tested using multiple linear regression analysis model with 95 percent confidence level ($\alpha = 0,05$). The results of the regression analysis were summarized in table 6 below:

Table 6 – Summary of Results of Multiple Linear Regression Analysis the Effect of Social Capital on Social Welfare, 2018

Variable	Coefficient	t Value	Sig.
Trust (X1)	0.123	0.795	0.431
Network (X2)	0.457	2.935	0.005
Norms (X3)	0.054	0.339	0.736

Constanta = 7,387 F count = 7.118, Sig.= .001
R = 0,567 R² = 0,322 F table = 3,23 t table = 1,68

Source: Primary Data Processed by the Researcher.

Based on table 6, we get the following regression equations:

$$Y = 7,387 + 0,123X1 + 0,457X2 + 0,054X3 \quad (2)$$

Where according to the equations, we can interpret that:

- The constant value of 7,387 means that if there is no social capital, the welfare of smallholder farmers in Bukit Biru, Tenggara is 7,387 units;
- The regression coefficient for Trust (X1) was 0.123 which means that each addition of activities related to public trust will increase social welfare by 0.123 units;
- The regression coefficient for Social Network (X2) was 0.457, which means that every change per activity related to social network will increase social welfare by 0.457 units;
- The regression coefficient for social norms was 0,054, states that every change per activity related to social norms will increase social welfare by 0,054 unit.

On the other hand, according to regression analysis, found that R value was 0,587 (Table 6) which means that social capital measured through trust, social network, and social norms has a moderate relationship with social welfare. The value of R square (R²) of 0.322 shows that the social capital was able to explain its effect on the social welfare of smallholder farmers by 32.2%, while the rest 67.8 % was explained by other variables which were not included in the model. According to Sugiyono (2012), it is classified as low effects.

Furthermore, based on the value of F count compared to F table ($7.118 > 3.23$), can be concluded that the proposed hypothesis (H1) confirmed, ie social capital consisting of elements of trust, social network, and social norms positively and significantly affect the social welfare. This result is in line with Baiyegunhi (2013); Handoyo, (2013); and Nasution, et al., (2014). However, the findings contrary to Pramono (2012). The growing trust of the members, either it is trust between members, trust in the leader of the farmer group, trust in Gapoktan leader, or trust in extension workers, if it is supported by the existence of social networks, and adherence to the prevailing norms, it can improve social welfare.

The Effect of Trust on Social Welfare. The effect of trust on social welfare was partially tested with t test. Based on the statistical test, found that the t count value was smaller than t table ($0.795 < 1.68$; significance level 0.0431). This means that partially trust has positive but not significant effect on social welfare. This result rejected hypothesis (H2) of this study and the findings from Alfiasari (2008) and Kabbaro, et al. (2014) which stated that trust has a significant effect on welfare.

The effect of Social Networks on Social Welfare. The effect of social networks on social welfare tested using t test and found that the t count value was greater than t table ($2.935 > 1.68$; significance level 0.005). This means that social networks affects positively and significantly to social welfare. Hence, hypothesis (H3) confirmed. The social network built in the smallholder farmer community in Bukit Biru, Tenggara can not be separated from the fact that they are transmigrated community. Thus, the mutual emotions are still strong for each other, making any information gained regarding welfare improvements is quickly communicated to fellow members. The mutual help that manifests from mutual cooperation between members is still quite good despite being plagued by the growing influences of globalization. In addition, the roles of government through extension and private role are still good.

The research findings that social networks have a positive and significant impact on welfare confirmed the findings of Hasbulah in Supono (2011); Alfiasari (2008); Zuhri, et al. (2012); and Kabbaro, et al. (2014). The common goal of establishing farmer groups is to improve welfare. Information as a source of change can quickly spread to each member, so that activities carried out in mutual assistance to help each other accelerate the achievement of welfare. In addition, coaching by extension workers and private parties also strengthens the social network so that welfare improvement can be more easily achieved.

The Effect of Social Norms on Welfare. The effect of social norms on social welfare tested using t test and found that the t count value was smaller than t table ($0.054 < 1.68$; significance level 0.736). This means that the effect of social norms on welfare is not significant (Hypothesis (H4) rejected). Although not significant, the effect of social norms on social welfare showing positive value. The findings of this study differ from Alfiasari (2008) which stated that social norms have a significant effect on welfare. The findings of this study are consistent with the findings of Kabbaro et al. (2014). Positive value of social norms implies that even though partially it seems to be weak in influencing social welfare, but the social norm namely *gotong royong* (Indonesian term for mutual cooperation) is one of the characteristics of the society which still well implemented. All activities such as discussion and mutual cooperation do not apart from the norms of customs and religion of the group.

CONCLUSION

This study aimed to investigate the effect of social capital on social welfare of smallholder farmers. Proposing four hypotheses, the results of the study revealed that we could only confirm two of them. Firstly, this study found that social capital positively and significantly affects social welfare of smallholder farmers. Besides that, this study also found that social network has positive and significant effect on social welfare. Although showing positive value, the effects of trust and social norms revealed to be insignificant on social welfare. Increasing trust in the members of farmer groups must be taken into consideration by building networks and promoting social norms. However, this effort can not separated from the behavior of the leaders in this country, thus the public's trust keeps on decreasing.

Since the model of this study was only able to explain about social welfare improvement by 32.2%, so further research can add some other variables or sub variables into the model. Besides that, further study can also widen the sample size to make the result of the study more generalizable.

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THE DEVELOPMENT OF COMMUNITY-BASED WOMEN'S EMPOWERMENT MODEL FOR POOR WIVES USING PARTICIPATORY POVERTY ASSESMENT METHOD

Muhsin Ahmad, Ristono Agus*

Faculty of Industrial Engineering, Universitas Pembangunan Nasional, Indonesia

Yuni Siswanti

Faculty of Economy, Universitas Pembangunan Nasional "Veteran" Yogyakarta, Indonesia

*E-mail: ahmad.muhsin@upnyk.ac.id

ORCID: 0000-0003-2457-268x

ABSTRACT

The Indonesian government has issued many policies on poverty alleviation programs but nothing has been able to significantly improve the welfare of the poor. This is because the programs are more on top-down model and prioritize the technical aspects. The poverty issues in some regions have diverse, specific, and multidimensional situations so that it is unable to generalize poverty from one region to another. This study examined poverty issues by involving the participation of poor people as the target of the programs to define poverty, identify potentials, and design solutions that can be conducted using the Participatory Poverty Assessment (PPA) method. The object of study was the wives from poor families in Srimartani village of Piyungan Bantul Yogyakarta. The results showed that the potentials of household resources of wives of the poor families consisted of 37,78% wives who have ever had their own businesses, 35,56% having experiences in trading, 15,56% having farming skills, and 11,11% having skills as laborers. The empowerment model is by providing *hardskill* and *softskill* training based on capability already possessed and business assistance.

KEY WORDS

Poverty, participatory poverty assessment, community, business.

The Indonesian government launched many poverty alleviation programs such as Presidential Instruction for Underdeveloped Villages (IDT), Social Security Network (JPS), Urban Poverty Alleviation Program (P2KP), Coastal Community Empowerment (PEMP) and Small Scale Fishing Enterprise Development Program (PUPTSK). However, these programs have not been able to significantly improve the welfare of the people. The causing factor of the lack of effectiveness of government programs in alleviating poverty is the policies that are designed to be *top-down*. The program solutions launched are more likely to be uniform while the poverty issues faced by the people are diverse and sometimes specific to a particular region.

Another cause is poverty reduction programs are more technical, bureaucratic, and give priority to direct cash or capital assistance. Poverty is a phenomenon that should be perceived systemically and holistically. This is because poverty is the effect of behavior that is not prosperous, and consumptive consciousness and does not result in any development. Poverty is more a habitual culture of society that must be addressed by using local wisdom approach because the problems faced by the poor are actually complex and specific. Poverty is not only caused by financial shortages but is also influenced by political, social, environmental, economic and network access factors.

Actually, there have been an idea of improving the *well-being* presented in the 1990s as a response to efforts to alleviate poverty. Citizens are directed to see poverty from their own point of view. The *Participatory Poverty Assessment* (PPA) method is a participatory analysis method to guide citizens in recognizing conditions and formulating their own solutions to alleviate poverty. PPA incorporates the poor directly in an interactive manner as

the target of the programs based on the assumption that the poor know better about their own poverty condition.

Indigenous people tend to be poor, having low health level and limitations to show the conditions at hand (Mohindra, Narayana and Haddad, 2010). Poverty needs to be resolved because people, especially for poverty-stricken children, are more vulnerable to low health level, mental problems, cognitive problems and limited livelihoods (Najman *et al.*, 2018), which affects the teenagers aged 14 and 21 years old at having risk of anxiety and depressed feelings or the adolescent and adult depression (Najman *et al.*, 2010). Poverty experienced by citizens is influenced by poverty that occurs in the environment (Schulz *et al.*, 2012). In certain cases such as agricultural areas, poverty is affected by crop productivity, land size, location, demography, and availability of irrigation facilities (Hussain *et al.*, 2006).

Poverty is an endemic problem that is a major concern of a country, such as poverty that has weakened the countries of the African continent (Nwankwo, 2013). The findings showed that socio-cultural ability is more dominant in poverty alleviation programs with entrepreneurship (Naminse and Zhuang, 2018). Poverty measurement is required by involving multidimensional because poverty is specific and different in each region so that local poverty is needed, identifies and describes their characteristics (Wang and Wang, 2016). The World Bank notes that poverty alleviation strategy is to involve the participation of the poor and improve the capability of its human resources (Gaiha and Kulkarni, 1998) by recognizing the regional potentials to improve productivity and sustainability (Olawepo, 2008). The effective community empowerment model is what is based on the criteria approach explored directly from the community as the target of the programs (Muhsin, Hapsoro and Yuni, 2018).

One of the reinforcement made on the capacity of the people is by focusing the development assistance shifted to providing the poor people the access to economic and basic services to meet their needs (Harpham and Anelay, 1999). A tool for conducting the literature and field gap approach is by conducting the community-based participatory research (Loo, 2014). Community mobilization is an important component in a participatory approach to development programs (Thomas *et al.*, 2012). The poverty reduction strategy is continually updated to adjust the time and conditions to get the right solutions at the right time by examining the potentials and involving many parties (Marcus, Wilkinson and Marshall, 2002).

This study aimed to understand and define poverty through the perspective of the poor people themselves by involving the poor in an interactive participatory manner on a series of interviews and Focus Group Discussion. The method used was Participatory Poverty Assessment (PPA) and variable selection method used was Analytical Hierarchy Process (AHP). The result of PPA became the materials to formulate the planning strategy of community empowerment development model for poverty reduction based on the aspiration and input of the poor people themselves which is aimed to match the condition of local problems.

The initial hypothesis resulted from field observation is that the community is still fragmented in defining poverty because it adjusts the criteria determined by the government. The poor, according to them, is the person recorded as a participant of the poverty alleviation program proclaimed by the government, namely GAKIN (Poor Family), or getting social assistance, namely RASKIN (Rice for the Poor), or requesting the Low-Economy Family Statement Letter (SKTM) from the Village Government, and or holding a Public Health Insurance (JAMKESMAS).

Another definition of poverty added is that poverty is identified for having no house to live, unable to afford school fees for children, having no fixed income, and having no vehicle to travel and a range of criteria that arise and vary in every region.

The poverty alleviation methods that have been launched do not always succeed in achieving the goals and most of them failed. It is because they are not observed by a study in applying suitable methods to empower people in a region. Even worse, outcomes of the Poverty Reduction Program of the Government are illustrated as a cash assistance which is

ready to receive and should be received by the people, so that there are many people who register themselves as the poor to get the assistance.

Such conditions make the community less productive but more consumptive and weak. The approach taken in this study was *Participatory Poverty Assessment* to formulate the poverty defined by the poor people. This study addresses several topics related to poverty, among others: the definition of poverty, the criteria of poverty, the causes of poverty, and the impact of poverty.

Through this method, it is expected that the public will be able to find the answers to the criteria of poverty that are appropriate to their own situation. Once they are aware of their condition, they are brought to answer the causes of poverty and how to overcome them and to get themselves out of poverty by empowering the potentials of both human and natural resources.

METHODS OF RESEARCH

This study used Participatory Poverty Assessment (PPA) method to define poverty definition by directly involving poor people in determining their own poor criteria. The most influential variables were determined by using Analytical Hierarchy Process (AHP) method. The primary data were collected using interviews and questionnaires to wives of the families recorded as participants of the government's poverty alleviation program. Secondary data were collected from the government and the Central Bureau of Statistics (BPS). This research was conducted in Srimartani Village, Piyungan Subdistrict, Bantul Regency, Yogyakarta.

Data obtained from the results of research were processed using SPSS software to determine the validity and consistency of data. The steps in data processing in this study were as follows:

- Identifying of the wives of the poor families as the object of research
- Preparing and completing the preliminary questionnaire.
- Identifying and defining criteria.
- Testing the validity and consistency of results.
- Introduction to poverty and self-potential.
- Determining the empowerment model.

RESULTS AND DISCUSSION

The respondents of this study are the wives of poor families in Srimartani Village who have different backgrounds in terms of age, educational background, business experience, and employment status.

Table 1 – Respondent Characteristics By Age

Age Group	Group I		Group II	
	Frequency	%	Frequency	%
21-30 years old	5	20	2	8
31-40 years old	9	36	8	32
41-50 years old	9	36	9	36
> 50 years old	2	8	6	24
Total	25	100	25	100

Source: Processed Primary Data.

Based on Table 1, it can be seen that most respondents are aged 31-50 years old (72% and 68%). This age group is not highly productive, but is still feasible and strong in working because it is assumed to not yet be included retirement age in terms of being Civil Servants, so it is still very possible to be independent and working.

Table 2 – Respondent characteristics by educational background

Educational Background	Group I		Group II	
	Frequency	%	Frequency	%
Not graduated from Elementary School	2	8	1	4
Elementary School	5	20	7	28
Junior High School	7	28	8	32
Senior High School	11	44	9	36
Total	25	100	25	100

Source: Processed Primary Data.

Based on Table 2, it can be seen that most of the respondents have junior and senior high school education (72% and 68%). The Ministry of Education and Culture of Indonesia (Kemdikbud) has set a 9-year compulsory education, so the minimum formal education to have is junior high school. Based on the government's policy, the respondents of this research have received sufficient education to be able to think about developing their own potentials and the surrounding resources.

Table 3 – Respondent characteristics by work experience

Work Experience	Group I		Group II	
	Frequency	%	Frequency	%
Available	23	92	22	88
Unavailable	2	8	3	12
Total	25	100	25	100

Source: Processed Primary Data.

Based on Table 3, it can be seen that most respondents already have work experience (92% and 88%). The high work experience shows that respondents already have the *hardskill* to try and have experienced system and work management. Differences in work experience will affect the method and type of self-potential development model that will be applied. Therefore, the identification of self-potential and resources to facilitate the respondents in order to start the business in accordance with the background of *hardskill* that has been formed, so it will be easier to generate and empower them in order to run the business well.

The respondents were divided into two groups in order to conduct test on their homogeneity by using Homogeneity Test. One of these tests that can be performed is the Cochran Test. The test is to be able to know exactly that each group has homogeneity. If each group is different, then it will be re-randomized, so that each group is really homogeneous.

Table 4 – Results of Homogeneity Test

No	Type	Homogeneity Test	Interpretation
1	Work Experience	0,726	Homogeneous
2	Education	0,565	Homogeneous
3	Age	0,076	Homogeneous

Source: Processed Primary Data.

Based on Table 4, it can be seen that the probability value of Wilcoxon Test and t test is greater than 0.05, so it can be concluded that the members in each group have many similarities, both from the type of work experience, education, and age. Therefore, the grouping of community empowerment participants conducted in this study has been appropriate because it is homogeneous.

The determination of the attributes considered in the assessment of the results of the mentoring and training programs in this study was conducted through *Focus Group Discussion* (FGD) for the wives of the poor families as the basis for the determination of the initial attributes. This is certainly based on initial research that the basic principle of research

is the model of *Participatory Poverty Assessment* (PPA). The initial attributes formed are then tested using the Cochran Q test in order to see the extent to which the attributes obtained are accountable, so that they can be the attributes that are fully considered in the assessment of the success of the mentoring program.

Hypothesis Test:

Hypothesis 1 states that: monetary assets can be increased through empowerment and mentoring models. This hypothesis can be proved by comparing the level of significance of the average of Pre- and Post-Test scores of all respondents with a critical value of 5%.

Table 5 – Pre- and Post-Test Scores for Monetary Assets

Group	Pre-Test Score Average	Post-Test Score Average	t-test value	Interpretation
I	600.000,-	696.000,-	7,805	Different
II	676.000,-	668.000,-	0,647	Not Different
I and II	638.000,-	682.000,-	0,219	Not Different

Source: Processed Primary Data.

Based on the table above, it is known that the significance value in group treated with training is 7,809. This number is greater than the t table, so it can be concluded that there is a significant difference between before and after the implementation of the empowerment model and mentoring, so that hypothesis 1 is accepted. While on there is a difference on the other t test value for the control group (Group 2) that is to prove that the result shows no difference when there is no training given, where this group has been stated homogeneous with Group 1.

Hypothesis 2 states that: There is a significant difference between the implementation of empowerment model and mentoring with the increasing goods. This hypothesis can be proved by comparing the average significance level of Pre- and Post-Test scores for each group with a critical value of 5%.

Table 5 – Pre- and Post-Test Scores for Goods

Group	Pre-Test Score Average	Post-Test Score Average	Wilcoxon test value	Tafsir
I	75,77	79,92	-2,35	Different
II	76,69	77,77	-1,607	Not Different
I and II	74,73	77,35	-0,219	Not Different

Source: Processed Primary Data.

Based on the above table, it is known that the value of Wilcoxon for group 1 is -2,35 so it is stated there is a significant difference in this group in the implementation of training, because the number is smaller than the critical Z value with a significance level of 0,05. While in group 2, the Wilcoxon test value is -1,607, greater than the critical Z value with a significance level of 0,05 so there is no significant difference between the Pre- and Post-test. Thus, it can be concluded that model 2 has no difference, whereas model 1 has a significant difference. Thus, hypothesis 2 is accepted.

CONCLUSION

The potentials of household resources of wives of the poor families consisted of 37,78% wives who have ever had their own businesses, 35,56% having experiences in trading, 15,56% having farming skills, and 11,11% having skills as laborers. The empowerment model is by providing *hardskill* and *softskill* training based on capability already possessed and business assistance. Group I, consists of people who have the ability to trade, was given business management training, expected that the business and financial management can be more professional. Group II, consists of people who have experience in cattle breeding/fish farming, both for catfish, cattle and goats, was given food efficiency training using fermentation, so that they can save more production cost. Group III, consists of people who have experience as temporary farmers but have no agricultural land, was given

the training of farming methods by optimizing the existing land, one of which by giving polybag agriculture training. Based on the discrimination test, it can be concluded that the people who were given the training as well as mentoring were more successful than the people who were not given training at all.

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ANALYSIS OF ORGANIZATIONAL CULTURE IN SUGAR FACTORY: A CASE STUDY OF PT PG RAJAWALI II

Mirzandiko Bayu Ramadhani*, Najib Mukhamad, Djohar Setiadi

School of Business, Bogor Agricultural University, Indonesia

*E-mail: bayuramadhanimirzandiko@gmail.com

ABSTRACT

Sugar in Indonesia is included in strategic staple food commodities. The level of sugar production and consumption in Indonesia from 2009 to 2016 has increased annually. However, the increase in consumption is not matched by the amount of production. PT PG Rajawali II is a company engaged in the sugar industry. PT PG Rajawali II has four sugar factories namely PG Sindang Laut, PG Tersana Baru, PG Jatitujuh, and PG Subang. This study aims to analyze the current organizational culture and expectation of the employees in the future. This study used a survey of Organizational Culture Assessment Instrument (OCAI) method. The result of this research is the difference of organizational culture on every PG under PT PG Rajawali II. The current organizational culture of PG Sindang Laut and PG Subang is a clan. Meanwhile, it is a hierarchy in PG Tersana Baru and PG Jatitujuh. Organizational culture expected to be dominant in PG Sindang Laut, PG Jatitujuh, and PG Subang is a hierarchy. Meanwhile, it is the market in PG Tersana Baru. This description of the organizational culture profile can be used as input for PT PG Rajawali II as the parent company to make policy which is compatible with the company's vision and mission to make better performance for PG.

KEY WORDS

Organizational culture, factory, quantitative description, performance.

The organization is an institution or place that people use to cooperate in achieving organizational goals effectively and efficiently. According to Robbins (1994), the organization is a consciously coordinated social unit with an identifiable boundary. It works on the basis of groups to achieve a common goal. The organization is led by a person and has a systematic structure. Vision, mission and common goal are one of the aspects of forming an organization. Wibisono (2006) argues that vision is a sentence that contains the ideals of an organization or company in the future. Meanwhile, the mission is a sentence that states the purpose of the organization and contains what is provided by the company to the community, whether in the form of product or service. The organization is considered good if its existence can contribute to the surrounding community.

According to Koentjaraningrat (2002), culture is the unity of idea, action and the work of human beings in the framework of the life of society that turns into human self-owning through learning. Culture is an integral part of human life and passed down from generation to generation. Culture is compelling and contains rules about what to do and not to do. A strong culture gives encouragement to the people within it to act in accordance with what is determined by the organization. Culture is the framework used to organize one's activities.

Similar to a human being, every organization has an identity. What is meant by identity is an organizational culture. According to Hasibuan (2011), the organization is a formal, structured, and coordinated union system of a group of people working together to achieve a particular goal. The organizational culture varies for each company. Organizational culture can be the key to a company's excellence if its organizational culture is embraced in accordance with the company's mission and vision. Proper organizational culture also has the effect to improve employee performance by creating a comfortable environment.

PT PG Rajawali II is a subsidiary of PT RNI (PERSERO) engaged in the sugar industry. There are four sugar factories owned by PT PG Rajawali II namely PG Sindang Laut, PG Tersana Baru, PG Jatitujuh and PG Subang. The overall sugar factory is located in West Java,

Indonesia. PT PG Rajawali II has the vision to become one of the best sugarcane companies in Indonesia with a strong financial structure and environmentally friendly.

The business development in the sugar industry and the high demand for sugar products force PT PG Rajawali II to continuously improve the company's performance. In reality, the company suffered the loss from 2012 until 2016. The loss of the company can be indicated that the company's performance was not good. One of the factors influencing the company performance is organizational culture. The problem with PG under PT PG Rajawali II is the changing policy of every change of leadership, lack of clarity of blueprint and long-term plan on PG, and no transition at the time of change of position. Basically, the company wants all employees to run their activities in accordance with the vision, mission, and corporate organizational culture. But in practice, the culture invested by the company is often ignored by employees. Furthermore, there is resistance to the organizational culture that exists in the company. Ivancevich, Konopaske, and Matteson (2006) argue that strong fear, anxiety, and rejection are due to the greater changes in human structure, task, technology, and asset.

Based on the background and the formulation of the above problem, the purpose of this study is to analyze the current organizational culture profile in PT PG Rajawali II and analyze the organizational culture profile expected in PT PG Rajawali II.

LITERATUR REVIEW

Organizational culture. According to Sutrisno (2013), organizational culture can be defined as a system of value, belief, assumption or norm that have long been accepted, agreed upon, and followed by members of an organization as a code of conduct and problem-solving organization. The above statement is similar to Kusdi's (2011) statement that organizational culture is the patterns of behavior, attitude, value, and the assumption that have been socialized by members of an organization to new members and somewhat stable over time. According to Mangkunegara (2007), organizational culture is an assumption or system of belief, value, and norm developed within the organization as a guide of behavior for all members of the organization to address the problem of external and internal adaptation. According to Siagian (2002), organizational culture is a common perception among all members of the organization about the essential meaning of life collectively. Meanwhile, according to Robbins & Judge (2013) organizational culture is the study of what people do in an organization and how their behavior can affect the performance of the organization. Luthans (2010) states that organizational culture is the understanding, prediction, and management of human resources within the organization.

Thus, it can be deduced from some of these definitions that the organizational culture is a system containing value, belief, and norm that are believed and executed by all members of the organization concerned with the purpose as a guideline of behavior, solving the problems of external and internal organization, and also about the essential meaning of life collectively. The organizational culture within an organization will vary with each other. However, the organizational culture will show certain feature, trait, or characteristic that will show its similarity.

Function of Organizational Culture. The function of culture is difficult to distinguish from organizational culture because it is a social phenomenon. The organizational culture of a company or organization has several functions. According to Robbins (1996), there are five functions of organizational culture as follows:

- Culture creates a clear distinction or limit between one organization and another;
- Culture provides a sense of identity for the members of the organization;
- Culture facilitates the emergence of organizational commitment rather than individual interests;
- Culture as a social adhesive to help unify the organization;
- Culture as a control mechanism that guides and shapes attitude and behavior of employees.

Kreitner and Kinicki (2005) divide the four functions of organizational culture namely: 1) As the giver of organizational identity to the employees; 2) Facilitate collective commitment; 3)

Provide social system stability; 4) Help to shape the behavior so that members can be aware of their environment

Based on these functions, it can be concluded that organizational culture has a positive function and also has an important role in achieving organizational goals. Culture is very useful in eliminating ambiguity among the employees because culture can strengthen the organization. Cultures can also inform the employees on how the work should be done and that the employees' thought is important. Organizational culture also has a function as a giver of identity, help to set limits in socializing, as well as generating employees' commitment.

Organization Culture Typology. Cameron and Quinn (in Kusdi 2011) develop cultural typology into four cultural dimensions based on competing values framework, among others:

1. Clan Culture. Organizational culture is characterized by a fun workplace such as a big family. The leadership of this culture is considered to be a mentor, even some people already like a father figure. The adhesive in this organization is loyalty and tradition. This type of organization gives great attention to the development of the people within as well as the importance of togetherness and morale. Success in this type of culture is shown when employees feel happy because they become part of the organization and can also show a sensitivity to the consumers. Participation, teamwork, and opinion are key in this type of culture.

2. Adhocracy Culture. This organizational culture is characterized by a dynamic and entrepreneurial workplace. In this type of culture, the brave leader takes risks as well as acting as an innovator. The adhesive in this organization is a commitment to the opportunity to experiment and innovate continuously. Success in this culture can be seen if they succeed in creating new and unique products that make them appreciate the innovation more. This culture deeply appreciates employees' freedom and initiative.

3. Market Culture. This organizational culture is characterized by a results-oriented workplace. In this type of culture, leaders usually have a hardworking nature emphasizing on achievement. The adhesive in this organization is the desire to win the competition. Employees are very concerned about the reputation of the organization and also a strong desire to beat the competitors. Success in this type of culture is seen by how much market share and how strong the market penetration of their products.

4. Hierarchy Culture. This organizational culture is characterized by a formal and structured workplace. In addition, the culture of this organization also greatly emphasizes the importance of good and neat structure in the organization. The model or management guideline used usually centers on tight control. The leader in this type of culture is usually a person who can be a coordinator or organizer who also prioritizes the efficiency in all fields. Success in this culture is seen from how timely the work schedule is completed, how low the costs are incurred, and how reliable the output is.

Competing values framework has six variables representing four cultures. The six variables are processed into questions that include: (1) dominant character, (2) leadership type, (3) management type, (4) adhesive organization, (5) strategy emphasis, and (6) success criteria.

METHODS OF RESEARCH

This study used Organizational Culture Assessment Instrument (OCAI) analysis. OCAI analysis is done by spreading the questionnaire. On the questionnaire sheet that had been provided, the respondents were asked to give a score on each of the existing cultural dimension based on the current and desired conditions. The OCAI analysis aims to assess four types of organizational culture containing six key dimensions of organizational culture. The four types of cultures are clan, hierarchy, adhocracy, and market. Based on this analysis, it can be known what culture stands out today and what is desired in an organization. After knowing the prominent culture, the management can use the data as a consideration in determining the appropriate strategy with the existing culture. Each culture has a different strategy for improving the quality of the organization. According to Kusdi (2011), there are two stages in the preparation of OCAI. First, the six cultural dimensions are operationalized into measurement variables that are divided into two parts: the current culture and the desired culture. Secondly,

each dimension is revealed to be a cumulative question indicator that will result in a score and will be used to indicate the position of an organization in the four quadrants of organizational culture.

This research was conducted in four PG under PT PG Rajawali II, namely PG Sindang Laut, PG Tersana Baru, PG Jatitujuh, and PG Subang in West Java. This research was conducted in August 2017 - November 2017. This research used purposive sampling with the aim of obtaining samples that have the desired characteristic or criteria such as having the position of general manager and head of the section on a PG. With this sampling method, it is expected that the results can describe the real state of organizational culture.

RESULTS AND DISCUSSION

The organizational culture profile of all PG Rajawali II is seen using the OCAI questionnaire on different value graphs, which are currently perceived and desirable in the future.

The OCAI analysis on Sindang Laut PG was conducted at the manufacturer of general manager and also on the section head. The results of OCAI analysis on PG Sindang Laut can be seen in Figure 1.

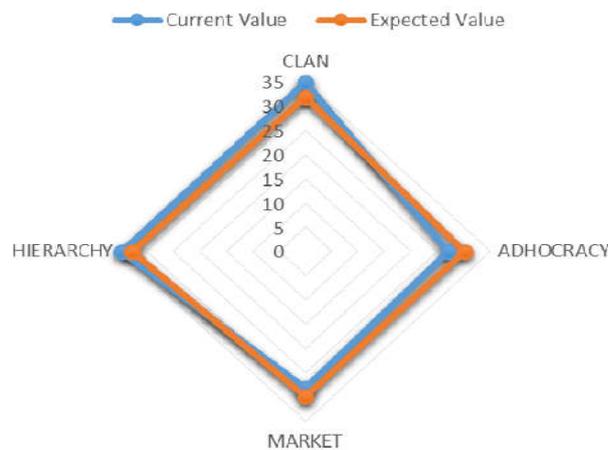


Figure 2 – The results of OCAI analysis on PG Sindang Laut

Based on Figure 2, the results of OCAI PG Sindang Laut analysis can be seen that the graph of the current value with Clan value = 34.925, Adhocracy = 27.125, Market = 28.23, and Hierarchy = 34.71. As for the expected value graph obtained Clan value = 31.83, Adhocracy = 30.11, Market = 29.83, and Hierarchy = 32.75. From the graph, it can be concluded that the current value is more dominant to clan culture. Clan culture can be interpreted that the existing organizational culture has a good teamwork with mutual trust. Thus, the relationship exists between the leadership and employees are like family.

Change is what expected from the analysis of organizational culture expected of the employees and leaders of PG Sindang Laut. The expected organizational culture is dominant hierarchy culture. The hierarchy organizational culture character is a structured and controlled place. The desired type of leader is someone who can be a coordinator and oriented towards the efficiency. A type of management that can provide a sense of security and relationship stability. An organization's adhesive that contains formal rule and policy. The emphasis of the strategy is more on efficiency, stability, control, and fluency. The criterion of success in the hierarchy culture is the efficiency for the welfare of employees in it which can be achieved.

The OCAI analysis on New PG Tersana was done at the manufacturer of general manager and also to the section head. The results of OCAI analysis on PG Tersana Baru can be seen in Figure 2.

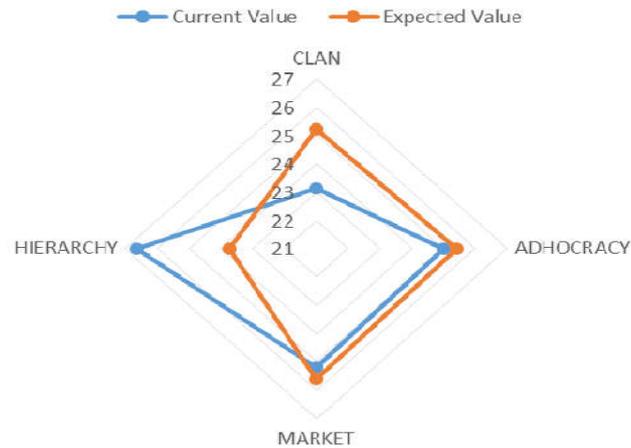


Figure 3 – The results of OCAI analysis on PG Tersana Baru

Based on Figure 3, the OCAI PG Tersana Baru analysis results above can be seen that the graph of the current value with Clan value = 23.125, Adhocracy = 25, Market = 25.2, and Hierarchy = 26.67. As for the expected value graph obtained Clan value = 25.2, Adhocracy = 25.41, Market = 25.625, and Hierarchy = 23.75. From the graph, it can be concluded that the current value is more dominant to the hierarchy organizational culture. The cultural hierarchy can be interpreted that a culture puts production efficiently with the aim of prospering employees and the leader of the organization. The hierarchy culture has a structured and controlled place character with a management type that can provide a sense of security.

The analysis of organizational culture expected of employees and leaders of PG Tersana Baru is the creation of dominant culture to market culture. The market culture has a character that is oriented towards a goal with an aggressive and results-oriented leadership type. Competitive management type and have high demands on achievement. The adhesive of the organization in this culture is the achievement of good results. The criterion of success is when a company wins the competition or becomes a leader in a competitive market.

The OCAI analysis on PG Jatitujuh was performed at the manufacturer of general manager and also on the section head. The results of OCAI analysis on PG Jatitujuh can be seen in Figure 3.



Figure 3 – The results of OCAI analysis on PG Jatitujuh

Based on Figure 3, the results of OCAI PG Jatitujuh analysis above show that the graph of the current value with Clan value = 30.08, Adhocracy = 25.8, Market = 29.62, and Hierarchy = 39.4. As for the expected value graph obtained Clan value = 31.15, Adhocracy = 29.91, Market = 30.14, and Hierarchy = 33.79. From the graph, it can be concluded that the current value is more dominant in the hierarchy culture. The hierarchy organizational culture character

is a structured and controlled place. The desired type of leader is someone who can be a coordinator and oriented towards efficiency. A type of management that can provide a sense of security and relationship stability. An organization's adhesive that contains formal rule and policy. The emphasis of the strategy is more on efficiency, stability, control, and fluency. The criterion of success in the hierarchy culture is the efficiency for the welfare of employees in the organization that can be achieved.

The analysis of organizational culture expected of employees and leaders of Jatitujuh PG is that no change to be made which means staying as the dominant in hierarchy culture. Employees and leaders of PG Jatitujuh can feel the culture existing today and they expect it to be as they wish. The emphasis on production efficiency for the achievement of welfare for all those in PG Jatitujuh is the key in order for PG Jatitujuh to get out of an unfavorable position. Negative gains in every sugarcane harvest season arrive as a basis for the company to be more efficient and effective in carrying out its operational activities.

The OCAI analysis on PG Subang was performed at the manufacturer of general manager of the plant and also to the section head. The results of OCAI analysis on PG Subang can be seen in Figure 4.



Figure 5 – The results of OCAI analysis on PG Subang

Based on Figure 4, the result of OCAI PG Subang analysis above shows that the graph of the current value with Clan value = 28.54, Adhocracy = 19.79, Market = 25.2, and Hierarchy = 26.45. As for the expected value graph obtained Clan value = 23.95, Adhocracy = 22, Market = 26.95, and Hierarchy = 27.08. From the graph, it can be concluded that the current value is more dominant in clan culture. Culture clan can be interpreted that the existing organizational culture already feels like family with good teamwork and mutual trust.

The analysis of organizational culture expected of employees and leaders of Subang PG produce is the dominant culture toward the culture of hierarchy. The hierarchy organizational culture character is a structured and controlled place. The desired type of leader is someone who can be a coordinator and oriented towards efficiency. A type of management that can provide a sense of security and relationship stability. An organization's adhesive that contains formal rule and policy. The emphasis of the strategy is more on efficiency, stability, control, and fluency. The criterion of success in the hierarchy culture is the efficiency for the welfare of employees in the organization that can be achieved.

CONCLUSION AND SUGGESTIONS

Based on the results of research and discussion on the analysis of organizational culture using Organizational Culture Assessment Instrument (OCAI) on PG under the auspices of PT PG Rajawali II namely PG Sindang Laut, PG Tersana Baru, PG Jatitujuh, and PG Subang. By using descriptive quantitative, then obtained the following conclusion:

- The currently dominant cultural profile of PG Sindang Laut and PG Subang which is Clan namely culture like family, the emphasis of strategy on human resource development, and good cooperation success criteria.
- The currently seen as the dominant cultural profile of PG Tersana Baru and PG Jatitujuh is Hierarchy namely formal culture, an organizational character that is structured, and success criterion is efficiency.
- The cultural profile of PG Sindang Laut, PG Jatitujuh, and PG Subang in the future is Hierarchy culture. This culture focuses on a structured and controlled place, an efficiency-oriented type of leadership, a type of management that can provide a sense of security or relationship stability. The formal policy is something that tackles the organization, emphasize the strategy on efficiency and stability, and success criteria is low-cost production.
- The profile of PG Tersana Baru culture to be desired in the future is the market culture. This culture is goal-oriented, has an aggressive leadership type with competitive management type. The adhesive of the organization in this culture is the achievement of good results. The strategy emphasis on achieving the target and the success criteria is to be a leader in a competitive marketplace.

Based on the results of the discussion and conclusions that have obtained, the suggestions that can be given in an effort to create an appropriate organizational culture on PG under PT PG Rajawali II are as follows:

- General Manager as a leader in every PG is expected to have a culture in accordance with the vision and mission of the company. Thus, the transfer of culture to employees can be carried out appropriately.
- In the overall organizational, Clan and Adhocracy cultures become culturally expected for some PGs. Some PGs prefer the company as big family, but some other PGs want a more dynamic and entrepreneurial company.

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BIOACTIVE COMPOUND AND NUTRITIOUS CHARACTERISTIC OF BITTER MELON FRUIT (MOMORDICA CHARANTIA L.)

Rohajatien Umami*

Doctoral Program of Food Technology, Faculty of Agriculture, University of Brawijaya & Department of Industrial Technology, University of Negeri Malang, Indonesia

Harijono, Estiasih Teti

Faculty of Food Technology, University of Brawijaya, Indonesia

Sriwahyuni Endang

Faculty of Medicine, University of Brawijaya, Indonesia

*E-mail: ummi.rohajatien.ft@um.ac.id

ABSTRACT

The bitter melon nutritious profile which was full of nutrition all contributed to flexibility towards curing some kind of diseases. The purpose of the research is to investigate nutritious composition of bitter melon (*Momordica charantia* L.). The parameter used to detect was as follow: ash content, water content, crude protein, crude fat, total carbohydrate, pectin, dietary fiber, calcium, vitamin C, β -carotene, diosgenin, stigmasterol, campesterol and β -sitosterol. The reseach finding showed that the carbohydrate content by different method in the bitter melon was about 60.7-70.90 %. The most dominant dietary fiber content was soluble dietary fiber including 19.2-21% pectin as wel as the most dominant phytochemical coumpound was β - sitosterol. Furthermore, crude protein content, crude fat, and ash from fresh bitter melon each was 12.8-15.4%; 0.2-0.4%; 11.6-13.4%. Moreover, micro nutritious content such as calcium, vitamin C, and β -carotene each was 676.2-713.4 ppm; 119.2-126.2ppm and 1.5-1.7 ppm. The existance of indigenous components made the bitter melon having high potential as one of the functional food sources.

KEY WORDS

Fresh bitter melon, phytochemical compound, nutrition, functional food.

The bitter melon nutritious profile which is full of nutrient consists of sample and beneficial complex phytochemical compound and all contribute to effective flexibility in curing some kind of disease. The use of bitter melon is not only used as a vegetable in Indonesia, but it is also used traditionally as phlegm emetic, lowering fever and increasing appetite. Bitter melon leaves is utilized as menstruation emetic, burning wound, skin, and worm medicine (Pramono *et al.*, 1998). The utility of bitter melon for southern Japanese society is to cure constipation, laxative and worm disease. Moreover, in India extract bitter melon is used to cure diabetic, rheumatic, *liver*, and *limfa disease* (Kumar and Bhowmik, 2010).

The phytochemical compounds in bitter melon are diosgenin and sterol compounds, such as stigmasterol, campesterol and β -sitosterol. Diosgenin and sterol compound were reported having hypocholesterolamic effect by inhibiting cholesterol absorption and increasing cholesterol secretion (Son *et al.*, 2007). Diosgenin was also reported as biologically active phytochemical that was used to cure some diseases such as leukemia, inflammation, hypercholesterolemia and cancers (Patel and Thompson, 2006). In addition, sterol compounds in bitter melon are sterol crop having similar structure with cholesterol that can inhibit intestinal cholesterol absorption and fat so that they increase bile acid secretion on lumen intestine (Lefebvre *et al.*, 2009).

Bitter melon has been known as vitamin source especially vitamin C as well as mineral, such as calcium, magnesium, iron, zinc, phosphorus, manganese, folic acid, and having high dietary fiber content (Krawinkel and Keding, 2006). Dietary fiber available in bitter melon

consists of soluble dietary fiber and insoluble dietary fiber. Dietary fiber has an important role to decrease body's weight because of some factors, that is, soluble dietary fiber is fermented in gastro intestine producing two gut hormone, namely, glucagon-like peptide (GLP-1) and peptide YY (PYY) having effect satiety so that dietary fiber can decrease energy intake significantly (Keenan *et al.*, 2006, Tucker and Thomas, 2009). Second, soluble dietary fiber affects the delay of gastro intestinal emptiness and decrease macronutrient absorption so that it decreases postprandial blood glucose content and insulin (Jenkins *et al.*, 1978).

Besides, the studies of soluble dietary fiber in bitter melon, characteristic of β -carotene content in bitter melon was also much reported. One of them was the research conducted by Abo *et al.* 1. They stated that β -carotene content of bitter melon was doubled compared with broccoli; calcium of bitter melon was doubled higher than spinach, and its total potassium content was doubled higher than banana. The dominant nutritious composition in bitter melon is vitamin C (570 – 36444) ppm, Calcium (130 – 433) ppm, diosgenin (1.69 mg/gm), and protein (9000 – 181000) ppm. Bitter melon consists of macronutrient such as protein, fat, and carbohydrate as well as micronutrient such as mineral and higher vitamin needed by human body (Ali *et al.*, 2008). In addition, bitter melon (*Momordica charantia*, L) is one of food material sources having potential to be developed in functional culinary involving saponin steroid compounds possessing good role to biological activities such as *antidiabetic*, *antihypercholesterolic*, *antiobesity*, *antitumor*, *antiinflammatory*, *analgesic* and *antidepressant* (Kumar and Bhowmik, 2010). However, study on nutritious component inside the bitter melon in East Java, Indonesia, is never done yet. By doing so, the research was focused on the nutritious characteristic of fresh bitter melon in Kediri area, East Java, Indonesia. Based on the characteristic result done, information on comprehensive composition of bitter melon is expected to give accurate information on the content of ash, water, crude protein and fat, total carbohydrate, pectin, calcium, vitamin C, β -carotene, diosgenin, stigmasterol, campesterol and β -sitosterol from bitter melon fruit in Kediri area.

MATERIALS AND METHODS OF RESEARCH

Material of bitter melon was harvested in Kediri residence. Bitter melon fruit from harvesting was moved to Food Industrial Laboratory, Department of Industrial Technology, Engineering Faculty, Universitas Negeri Malang using basket. The other materials used to analyze nutritious component as well as bioactive component analysis of bitter melon were attained from *Sigma Chemical Co.* and other chemical store in Malang city.

Bitter melon from farmer could be harvested 15 to 20 times every three days. On dry season, the frequency of harvesting was many more if it was supported with good maintenance of plant. The repetition of three times research was done by taking the bitter melon of second, third, and fourth harvesting. Bitter melon picked was packaged with thin plastic and put into fruit basket with maximum two piles that was arranged alternately. To avoid fruit crashing, piece of paper was interspersed between it. Preparation of bitter melon material that would be conducted to analyze nutritious component was done in Universitas Negeri Malang, Food Industrial Laboratory, Industrial Technology Department, Engineering Faculty. Bitter melon fruit having been harvested from the garden was prepared for the analyses of nutritious composition and bioactive compound involving: 1) ash, 2) protein, 3) fat, 4) total carbohydrate, 5) total sugar, 6) pectin, 7) calcium, 8) vitamin C, 9) diosgenin, 10) stigmasterol, 11) β -sitosterol, and 12) campesterol, 13) β -caroten

Nutritious component analysis consisting of water content, ash content, crude protein, crude fat, total carbohydrate, Total sugar, β – carotene, vitamin C and calcium measurement were done using AOAC method (Horwitz, 1975).

Water content. As much as 1-2-gram sample was put in the flask having been known its weight. Later, the flask and the sample were dried with oven on the temperature of 105oC for 6 hours until the weight was constant. Next, it was cooled in decicator and weighted. Then, sample was heated in the oven for 30 minutes, cooled, and weighted. Finally, this treatment was repeated until the constant weight was gained. Reduction of material weight is total water content inside the material.

Ash content. As much as 0.5 -1 gram was weighed in dried porcelain cup that had been known its weight. Next, it was blazed in muffle until it was attained the whitish ash. Cup and ash were put in excicator. After it was cold, it was weighed. Finally, ash content was calculated using formula:

$$\% \text{ ash content (wb)} = \frac{\text{cup weight and ash (C)} - \text{cup weight (A)}}{\text{sample weight (B)}} \times 100\%$$

Crude Protein. Protein content analysis was conducted using microkjeldahl method. First, as much as 0.5-gram sample was put in kjeldahl flask. Second, it was added 1 item kjeldahl tablet and concentrated 20 ml H₂SO₄. Third, it was added 2 boiling stone. Destruction was done for 45 minutes (the clear color sample or green light sample). Next, it was cooled for 10 minutes on room temperature. Distillation process was done by adding 50 ml aquades into kjeldahl flask that had been cooled. Then, it was added NaOH 50% as much as 70 ml (brown color sample). Kjeldahl flask was installed in distillation tool. Afterwards, Erlenmeyer consisting of 3% of H₃BO₃ as much as 20 ml and addition of 3 drops metilen blue indicator is prepared to keep the yield. Distillation was executed until the resulted distillate achieved 80 ml. Distillate was done titration using HCL 0.1 N until the color changed to purple. Finally, protein content was calculated using formula:

$$\% \text{ Nitrogen} = \frac{(\text{ml HCl} - \text{ml blank sample}) \times \text{N HCl} \times 14 \times 100}{\text{sampleweight (mg)}} \times 100\%$$

$$\% \text{ Protein} = \% \text{ N} \times \text{conversion factor (6.25 for fruit)}$$

Crude fat. Fat analysis was done using extraction soxhlet method. First, refined dried sample was weighed as much as three grams sand packed with non-fat filter paper. Second, filter paper consisting of sample was put in extraction soxhlet tool. Next, condenser tool was installed above it and fat ash having been known its weight was installed below it. Petroleum ether solvent was put in as needed into fat flask and reflux was done for 5 hours until solvent that went down into fat flask had clear color. Solvent inside fat flask was distilled and solvent was kept again. Afterwards, fat flask consisting of fat from extracted result was heated on oven with the temperature of 105°C so that it reached constant weight and it was cooled in excicator. Later, fat flask and its fat were weighed. Finally, fat content can be calculated using formula:

$$\% \text{ fat} = \frac{\text{fat weight (g)} \times 100}{\text{sample weight}}$$

Total carbohydrate. Total carbohydrate was measured using by different method calculated using formula:

$$\% \text{ carbohydrate} = 100\% - \% (\text{water} + \text{ash} + \text{protein} + \text{fat})$$

Total sugar. At first, clear sample solution which was free from impurity was pipette as much as 2 ml. Second, it was put in reaction tube and was added 2 ml sulfate copper. Close reaction tube was placed into 100°C water bath for 10 minutes. Next, it was cooled using flowing water. After it finished, 1ml arseno molibdat reagent was added and mixed evenly. Reaction tube volume was thinned until the determined volume (10-25 ml) depend on the concentration of solution color. The absorbance value was determined on the wavelength (λ) of 500 or 520 nm. The same procedure for blank sample was done by changing sample with aquades. The making of standard curve was done started from concentration of 50, 150 and 300 µg/ml standard glucose solution. The same procedure is used to determine total sugar sample content.

β-carotene. The β-carotene content material that will be measured was refined using porcelain crusher. First, the material was weighed as much as 10 g. β- carotene inside

material was extracted using petroleum ether: acetone (1:1) so that phase ether-carotene was gained. Second, as much as 50 ml sample was washed off for 10 minutes using vortex/magnetic stirrer. Third, sample was filtered and separated using separated funnel. Its residue in the glass was rinsed out with the solvent and its extraction was repeated. Finally, 2 ml eluate was taken to observe its absorbance value in spectrophotometer with the wave length of 425 nm.

Vitamin C. Vitamin C analysis was done using Adebayo method (Adebayo, 2010). Indophenol's standard solution was prepared by mixing 0.05 g of 2,6-dichloro Indophenol added with water until 100 ml and filtered. As standard solution, 0.053 g vitamin C (ascorbate acid) was dissolved in 90 ml of 20% metaphosphoric acid and added with water until 100ml. 10 ml of the solution was pipette and put in Erlenmeyer and done titration with indophenol's solution until the color changed into stabile light red for 15 second. Additionally, extracted 2 ml juice from 'calyces' was pipette into Erlenmeyer. 5 ml of 20 % metaphosphor acid (as agent stabilizer) was added and improved until 10 ml volume sign was achieved. Moreover, the result was done titration with indophenol's solution until stabile light color was composed for 15 second. Finally, vitamin C content in 'calyces' was calculated using:

$$\text{Vit C inside } \mu\text{g}/100\text{ g} = \frac{\text{titration value} \times 0.212 \times 100}{\text{sample weight}}$$

Ca (Calcium). Calcium content was determined using atomic absorption spectrophotometer (AAS) in which dried ashing process of sample was conducted. First, calcium content was determined using percentage or smaller unit measurement (ppm). Ashing process started from weighing ovened porcelain cup which had been identified its weight. Second, 0.5-1 gram sample was added and heated on temperature of 600oC until white ash was composed. Third, ash in the cup was taken, cooled and added with concentrated HCl (6N) of 5 ml and heated in low heating until the result was dry. The heating was done again until it started boiling by adding some what aqueous HCl (3N) as much as 15 ml. The heating to start boiling was repeated again by adding 10 ml of HCl 3N. Afterward, it was cooled and filtered and cup washed with aquades at least three times. Washing water was filtered and filtrate produced was inserted into measurement flask and added with aquades until certain volume. Then, it was filtered and ready to measure its calcium content using atomic absorption spectrofotometer (AAS). Before it was used, AAS tool was set based on manual tool instruction. Later, standard solution, blank sample and sample were measured. During sample determination, standard value was periodically checked whether it was still constant or not. Finally, calcium content could be known from *print out* produced.

Bioactive Compound Analysis. Bioactive compound analyzed was saponin and steroid compound of cultivar aden bitter melon. The analysis done was diosgenin, stigmasterol, β -sitosterol and campesterol compound analysis. Diosgenin, stigmasterol, β -sitosterol and campesterol content were determined with LC-MS/MS instrument with diosgenin extraction procedure using Chapagain and Wiesman 5 method and sterol compound extraction procedure used Pereira *et al.* 15.

RESULTS OF STUDY

Composition of Nutritious Bitter Melon. Bitter melon nutritious component involving water, ash, crude protein and fat, total carbohydrate and β – carotene, vitamin C and calcium on the dry basis were presented in table 1.

Total Carbohydrate (65.8% \pm 5.1%) was the most dominant component result shown in table 1, namely total carbohydrate with calculation of by different method of bitter melon of about 60.7% to 70.9%, with total sugar content was as much as 4.7% to 7.3%.

Bitter melon phytochemical compound. Phytochemical compound content of bitter melon involving diosgenin, stigmasterol, β - sitosterol and campesterol content were presented in figure 1.

Table 1–Bitter melon nutritious composition

No	Nutritious Composition	Content	Unit (dry basis)
1.	Water content	93.7 + 1.7	%
2.	Ash content	12.5+0.9	%
3.	Crude protein	14.1+1.3	%
4.	Crude fat	0.3+ 0.1	%
5.	Total carbohydrate	65.8+5.1	%
6.	Pectin	20.1+0.9	%
7.	Total sugar	6.0 + 1.3	%
8.	β –Carotene	1.6+0.1	ppm
9.	Vitamin C	122.7+3.5	ppm
10.	Calcium	676.2+37.2	ppm

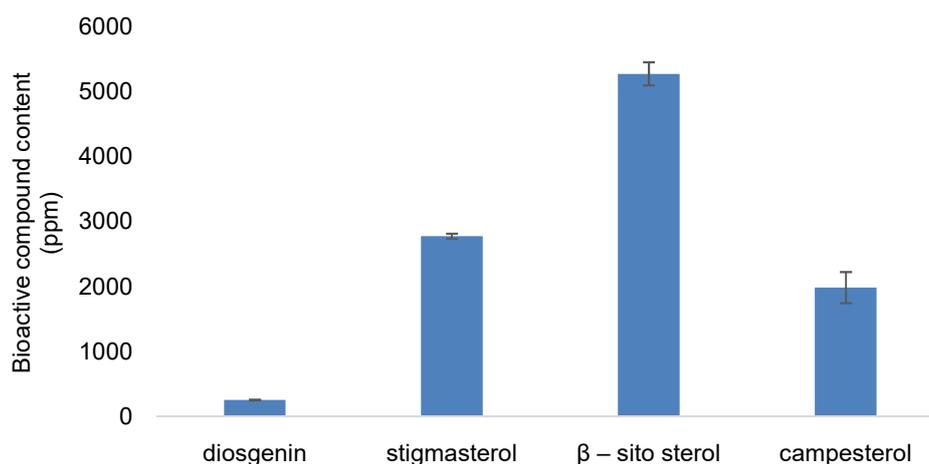


Figure 1–Bitter melon phytochemical compound content

The dominant bitter melon phytochemical compound content presented on figure 1 was β-sitosterol of about 5275 ± 177.9 ppm, followed by stigmasterol, campesterol and diosgenin compound each respectively of about 2774 ± 38.11 ppm; 1982 ± 239.4 ppm; and 249 ± 5.0 ppm.

DISCUSSION OF RESULTS

Bitter melon ash content is 11.6% to 13.4%. This ash content is approximately to bitter melon's leaves ash content that is in the group of vegetables ($10.4\% \pm 0.1\%$). It is higher than bitter melon's leaves in the group of young category ($9.4\% \pm 0.1\%$) and it is lower than bitter melon's leaves in the group of yellowing ($22.3\% \pm 0.2\%$). The dominant bitter melon micronutrient's component is calcium with the content of 676.2-713.4 ppm. Together with Vitamin D, calcium is the important micronutrient in maintaining the bone and teeth health. Calcium also has a role to alleviate insomnia, arthritis, menopause, premenstruation syndrome and cramps. The role of calcium in preventing obesity, large intestine cancer, hepatic disease and high hypertension are great possible (Wargovich, 2000). The component of dominant micronutrient of bitter melon respectively was calcium, followed by magnesium and iron with the lower content. Component of bitter melon micronutrient from vitamin category was vitamin C with the total of 119.2-126.2 ppm and total carotene content of 1.5%-1.7%. The two components were vitamin and antioxidant on bitter melon with higher content if compared with other vegetables such as cucumber (Abo *et al.*, 2008).

Bitter melon's macronutrient component consists of protein and fat, each with the content of 12.8% to 15.4% and 0.2% to 0.4%. This protein content is almost the same with crude protein content of bitter melon leaves in vegetable's category ($12.2\% + 0.3\%$) which is lower than young bitter melon leaves protein and higher than yellow bitter melon leaves on the research result conducted by Zhang *et al.* 22. Meanwhile, for the fat content of bitter

melon in this research result is lower compared with the research conducted. Water content of this vegetable in the research is high enough, that is, $(93.7 \pm 1.7)\%$. The water content value of this fruit was higher than bitter melon's water content in Zhang Min research finding of about $(73.5 \pm 1.2)\%$. The higher water content enables the growth of microorganism causing enzymatic reaction occurred and could alter the component inside (Andress *et al.*, 2006).

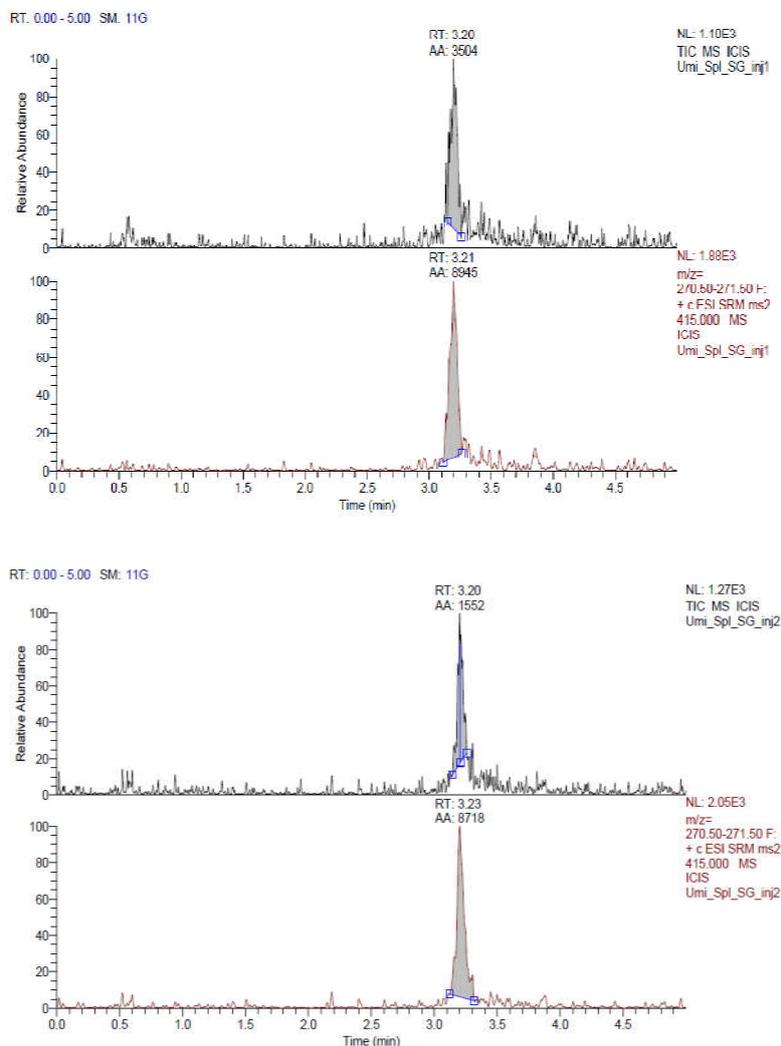


Figure 2–Chromatogram of Diosgenin Compound

Bitter melon diosgenin compound content was 243.8 ppm to 253.8 ppm. Diosgenin content of this fruit was higher compared with diosgenin content of this fruit from India, that is, 1690 ppm to 13660 ppm. However, in contrary, sterol content, that is, stigmasterol, β -sitosterol and campesterol of this fruit is still higher than sterol content from India, China, and Thailand. Sterol content of this research respectively each stigmasterol, β -sitosterol and campesterol started from 2735.8 ppm to 2812 ppm, 5097.2 ppm to 5453 ppm and 1742.2 ppm to 2221 ppm. The influence of diosgen into glucose content on the normal mice and diabetic mice was reported by Kato *et al.* (KATO *et al.*, 1995). The research result from Kato *et al.* stated that PO-1 and PO-2 new hypoglycemic drug presented showed that PO-2 drug had extraordinary hypoglycemic activity on normal mice, whereas PO-1 drug decreased little blood glucose. In addition, PO-1 and PO-2 showed significantly hypoglycemic effect on diabetic mice that is streptozotocin induced. However, steroid glycoside (diosgenin) did not show the influence on the blood glucose level both in induced streptozotocin diabetic mice and in normal mice. Anyhow, in Nualkaew *et al.* 13 research result stigmasterol showed significant influence ($p < 0.05$) toward the decrease of diabetic mice blood glucose content.

β -sitosterol and campesterol have influence toward blood glucose content follow Simonen *et al.* 17, stating that the absorption decrease from cholesterol and increase compensation from its synthesis directly could affect insulin resistance.

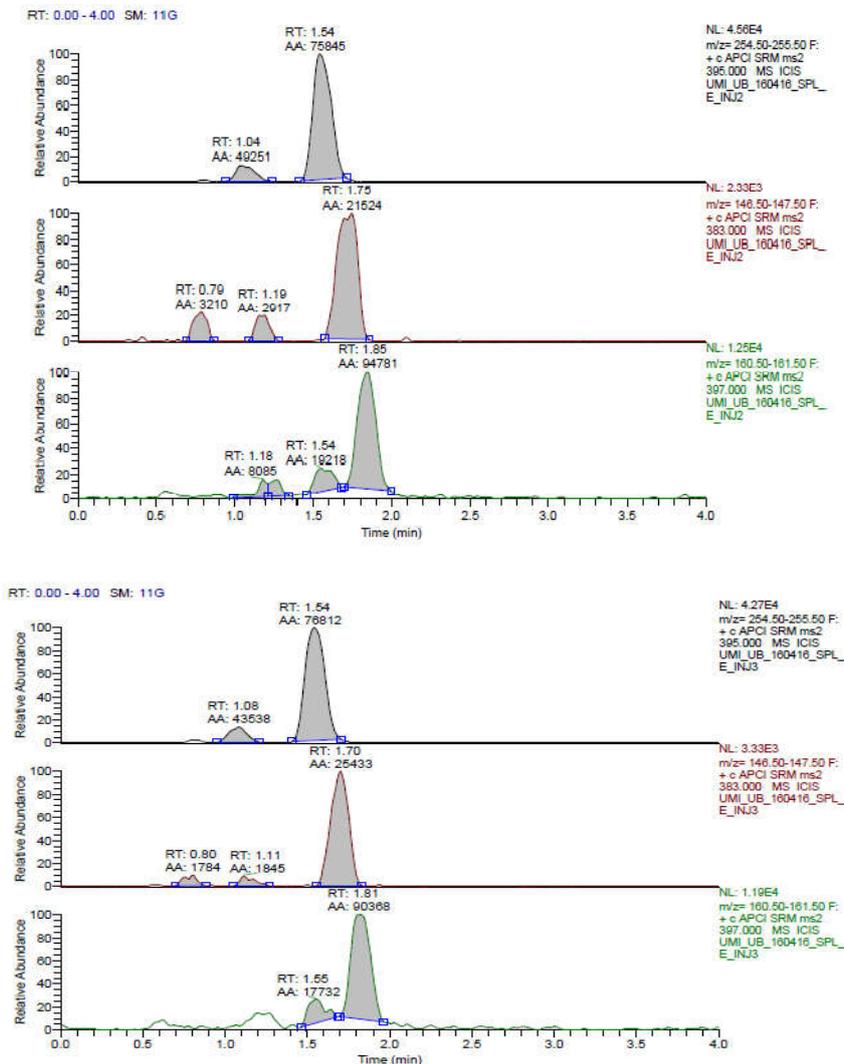


Figure 3—Chromatogram of Sterol Compound

Cholesterol was absorbed through complex mechanism and plant sterol in this case was β -sitosterol and campesterol that had a role in its process. In practice, plant sterol content, namely, β -sitosterol and campesterol significantly decreased blood glucose content on diabetic mice. Smahelova *et al.* 18 research finding showed the significant relationship between insulin sensitivity and glycemic index in increasing cholesterol synthesis and cholesterol absorption decrease.

CONCLUSION

Phytochemical compounds available in fresh bitter melon in this research were diosgenin in the amount of 243.8-253.8ppm, stigmasterol 2735.8-2812 ppm, campesterol 1742.2-2221 ppm and β -sitosterol 5097.2-5453 ppm. Total carbohydrate by different method was about 60.7-70.9%; crude protein 12.8% -15.4%; crude fat 0.2%-0.4%; ash content 11.6%-13.4%; calcium 676.2-713.4ppm; vitamin C 119.2- 126.2 ppm and total carotene (1.05-1.85) %. Both chemical and phytochemical components of bitter melon that is high enough on the research result revealed its potential as one of functional food sources.

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All the authors contributed together in conducting and preparing the research and manuscript.

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THE PARTNERSHIP ANALYSIS OF RICE SEED BREEDER WITH INVESTORS IN PIDIE DISTRICT

Hamdani***, Usman* Mustafa, Fajri
Syiah Kuala University, Banda Aceh, Indonesia
*E-mail: hamdanift@gmail.com

ABSTRACT

Rice seed is one of production input which significantly contributes the level of rice productivity. The efforts which need to be taken to ensure the availability of quality seeds from the superior seeds varieties in Pidie District are through the development of seed breeding. In that case, the farmers do not work independently but in partnership with entrepreneurs or investors. The research results show that the benefits of partnership with investors are the guaranteed availability of high quality seeds, fertilizers, and pesticides which are given by the financiers with a relatively affordable price.

KEY WORDS

Partnership, rice, seed breeders, investors.

Food is the most important basic needs and become the right of every people of Indonesia. Pidie Regency is one of rice production centers in Aceh, the number of demand for staple food will continue to increase in the future which must be fulfilled in line with the increasing population. This can be done by optimizing the entire set of seeding systems consisting of research subsystems, development of rice seed breeding integrated with National Rice Production Enhancement (*Peningkatan Produksi Beras Nasional, P2BN*) program and Field School of Inbred Rice Integrated Crops and Resources Management (*Sekolah Lapangan Pengelolaan Tanaman dan Sumberdaya Terpadu Padi Inbrida, SL-PTT Padi Inbrida*). In that case the farmers do not work independently but in partnership with entrepreneurs or investors which in the cooperation process will occur problems related to the the availability of seeds, fertilizers, and pesticides. The form of cooperation between the farmer with the investors is a pattern of *inti-plasma* (plasma-core) collaboration; the farmers act as *plasma* and the investors act as *core*.

Research Purposes:

- To find out the production cost sharing system of the partnership of rice seed breeder with investor in Pidie Regency;
- To find out the revenue sharing system of the partnership of rice seed breeder with investor in Pidie Regency;
- To find out the profit sharing system of the partnership of rice seed breeder with investor in Pidie Regency.

LITERATURE REVIEW

Grain (*biji*) and seeds (*benih*) have various meanings, depending on perspective of the review. Although each grain and seeds have different numbers, shapes, sizes, colors, materials and other things, it is actually the form of natural principal means of maintaining the survival of a species in the world (Rohela 2008).

The thing that underlies the establishment of a partnership are the common needs, business issues, and business benefits. The important thing in establishing a partnership is to make small businesses become market-oriented and commercial, business constraints solvability, and the concern of middle and large businesses owner. The role of partnership actors is where 1) large entrepreneurs conduct assistance, development, human resources guidance, funders, technology guidance, production equipment, guaranteed the purchase of production, and promotion of production; 2) Small entrepreneurs apply technology and make

agreements with large entrepreneurs, cooperation among small entrepreneurs to support the supply of production to large entrepreneurs, and the development of human resource professionalism (Hafsah, 2000)

The objective of the partnership is "*win-win solution partnership*", where both parties are partners and no parties will take disadvantage, both parties take benefit in partnership practices (Hafsah, 2000). According to Glover (1990), partnership is a series of activities between large and small companies in the form of complex "contract farming". While according to Gumbira,S (2000), the principles of partnership that must be in place to ensure the success of the partnership i.e. interdependence and mutual need, mutual benefit, have transparency, formal and legal, knowledge and experience transfer, exchange of information, problem solving and fair profit sharing. Income is the difference between revenue and all costs, where revenue itself is the multiplication of production and the selling price (Soekartawi, 1995).

METHODS OF RESEARCH

This research was conducted in Pidie District. The determination of the research location is done by *purposive sampling* which is determined based on the consideration that Pidie Regency is one of rice production center in Aceh Province. The object of this research is rice seed breeder and the investor. The population of this research is rice seed breeder and the investor. The sampling process in this study using *Simple Random Sampling* technique from the list of names of investors and rice seed breeder for some of those selected.

The data analysis is done by using qualitative and quantitative analysis, while hypothesis testing using independent test among pattern and partnership variables with testing criteria as follows:

- Accept h_0 , if $X^2_{count} < \text{than } X^2_{(table 1-\alpha=0,95df)}$;
- Reject h_0 , if $X^2_{count} > \text{than } X^2_{(table 1-\alpha=0,95df)}$.

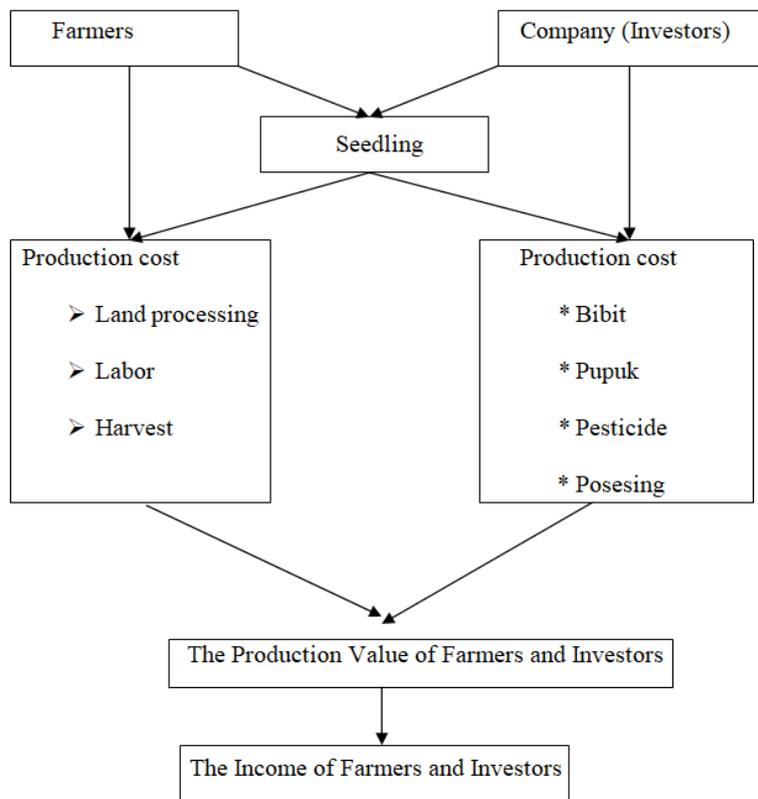


Figure 1 – Research Framework

RESULTS AND DISCUSSION

Pidie district is located at 4.30 - 4.6 NL and 95.75 - 96.20 EL. Pidie district is one of the districts included in the Province of Aceh which has a total area of 3,086.90 km², divided into 23 districts, 713 villages, 20 urban villages and 94 habitation, with Sigli Regency located approximately 112 km eastern of the capital Aceh Province.

Farmers' characteristics is the situation or general description of rice seed breeder in the research area, which are: age, farming experience, education, the number of farmers' responsibility (family member), and land area (Ha). The average age of farmers in Pidie Regency is 45 years, 8 years experience, 8 years education, 4 dependents and 0.70 Ha land area.

The production cost is all costs allocated by rice seed breeder during the production process. The average cost of rice seed production allocated by farmer breeder in research area is Rp. 4.963.556/Ha/one planting period. The cost consists of a plowing fee of Rp. 620.258/ Ha/one planting period, plant preparation Rp. 704.839/Ha/one planting period, planting of Rp. 1.127.742/Ha/one planting period, fertilizing, spraying pesticides Rp. 504.201/Ha/once planted. Costs allocated by the investors are the cost of seeds, pesticide, and fertilizer, and the cost allocated by investors is Rp. 10,074,289 in total which consists of the cost of seeds of Rp. 462.903.

The production of certified rice seeds in the study are all rice production that will be received by farmers in the form of physical breeding results of farm operations. The average production of rice seeds in Pidie regency is 5.724 Kg/Ha, with an average selling price of 4.800/Kg, resulting in the production value of Rp. 27.476.361/Ha/planting season..

The income rice seed breeder is the share of margin between the total revenue with the total cost allocated by rice seed breeder, the average cost borne by investors is Rp. 1.666.532.26/Ha/one planting period, and the borne by rice seed breeder is Rp. 4.310.331/Ha/ one planting period so the total production cost of Rp. 5,976,863/Ha/one planting period. Meanwhile the average production reach Rp. 5.724/Kg/Ha/one planting period, with average selling price 4.800/Kg, so that gross income is Rp. 27.476.361/Ha/one planting period, net income earned rice seed breeder in the research area of Rp. 21.499.498/Ha/one planting period. The result of ratio analysis show that the farmer bear bigger capital responsibility as many as 0.78 and investor only 0.28. Similarly, the revenue of farmers is 0.38 and investors 0.64 which mean investor get more revenue. While the income obtained by farmers is 0.68 and investors 0.32 which means more useful for farmers.

The calculation of R/C Ratio obtained value of 3.59. This value indicates that the seed breeding business in Pidie District is eligible to run. If the value of R/C Ratio is bigger than 1 (R/C>1) then the business is eligible to run. The result of X² test shows that income is very influential in performing its partnership $X^2_{count} \leq X^2_{table}$ (1- α = 0.05). While total cost and total revenue have no effect because $X^2_{count} \geq X^2_{table}$ (1- α = 0.05).

The reason for partnership of the the rice seed breeders with the investors are: 1) to get a proper capital assistance (32.26%), to develop knowledge, means that farmers can understand the science of cultivation, pest control from harvest and post-harvest. 2) to increase income (40.32%), means that farmers can increase their income because it is supported by the use of quality seeds, efficient use of fertilizers, well controlled maintenance, pesticide use. 3) market guarantee (19.35%), means that all rice seed production accommodated by investors at a higher price. In Pidie district, cooperation is established in the form of *inti-plasma* (core-plasma) partnership pattern which means partnership between investor with rice seed breeder; the investor acts as the *inti* (core) and the farmer as the *plasma*. In the general pattern of trading partnership, the financiers carry out their duties by providing guidance, production facilities, technical guidance, marketing the production of their partners i.e. rice seed breeder. Farmers perform their duties by preparing the land (for plantation), planting, pesticide spraying and harvesting. The partnership form such Agribusiness Operational Cooperation is not established.

The aspects of effective *inti-plasma* partnership pattern are as follows:

- *Aspects of Mutual Benefit (equality)*, the benefits of partnerships that have been felt by rice seed breeder are: 1) the existence of high quality seeds provided by investors at a relatively affordable price than when farmers buy in retailers, 2) the existence of fertilizer guarantee provided by the financiers although the fertilizer is in rare condition but the investor can provide it, 3) the pest is more controlled because the farmers do not felt difficult to buy pesticides, 4) the price is guaranteed; rice sold by farmers all in small and large quantities, 5) increasing in farmers' income is guaranteed because the price of seed purchased by investors is above market price.
- *Aspects of mutual need (equality)*, in general, equality is a balanced relationship (no disadvantageous in one side), equivalent for those who run a partnership, the aspect of mutual need in this partnership pattern can be seen from the cooperative relationship between farmers rice seed breeder with investors which is relatively equivalent. This situation can be seen from the authority on rice seed breeder which freely taking some decisions concerning to: executed business ties, price determination and the type of seed to be planted.
- *Aspects of Legality*, it relates to how farmers engage in partnership in relation to the rules that apply to farmers' partnership; written or unwritten, and how the rules are made and how the rules are implemented.
- *Aspect of Farmers Empowerment*, this aspect runs very well, because the investors directly develop the farmers and also assisted by the agricultural extension officer who served in the area.
- *Aspect of Social Capital*, this aspect shows the relatively high role of togetherness of farmers with investors, personal relationships, values of trust and participation of farmers in encouraging the effectiveness of the partnership.

CONCLUSION AND RECOMMENDATIONS

Based on the analysis of research results concluded that the income rice seed breeder is the share of margin between the total revenue with the total cost allocated by rice seed breeder, the average cost borne by investors is Rp. 1.666.532.26/Ha/one planting period, and the borne by rice seed breeder is Rp. 4.310.331/Ha/ one planting period so the total production cost of Rp. 5,976,863/Ha/one planting period. Meanwhile the average production reach Rp. 5.724/Kg/Ha/one planting period, with average selling price 4.800/Kg, so that gross income is Rp. 27.476.361/Ha/one planting period, net income earned rice seed breeder in the research area of Rp. 21.499.498/Ha/one planting period. The result of ratio analysis shows that the farmer bear bigger capital responsibility as many as 0.78 and investor only 0.28. Similarly, the revenue of farmers is 0.38 and investors 0.64 which mean investor get more revenue. While the income obtained by farmers is 0.68 and investors 0.32 which means more useful for farmers.

Considering the cooperation that so far has been very helpful to rice farmers in Pidie District, the role of partnership can be improved through the following way:

- For Investors: Increase assistance to rice farmers when experiencing problems in rice plants such as aphid attack, stem borer, rat pest, because this can affect the level of production produced; increasingly improving its service to rice farmers for the development that they want to achieve.
- For farmers: maximizing the good treatment of the rice plant to achieve maximum result; maintain a good cooperative relationship with the investors; attending every activity undertaken by the financiers and agricultural extension workers.
- For Government: assisting the experienced farmers rice seeding to continue developing their business; stabilize rice sale price during harvest season; provide continuous assistance to farmers and investors in Pidie District.

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STRATEGY FOR BUILDING COMMUNITY-RELIANCE IN MANAGING AND UTILIZING COMMUNITY FORESTS THROUGH THE POLICY OF COMMUNITY FORESTS DEVELOPMENT

Benjamin*, Hidayati Dewi Ayu

Sociology Departement, Faculty of Social and Political Sciences,
University of Lampung, Indonesia

Rosalia Feni

Government Studies Departement, Faculty of Social and Political Sciences,
University of Lampung, Indonesia

Kagungan Dian

Public Administration Departement, Faculty of Social and Political Sciences,
University of Lampung, Indonesia

*E-mail: bensosunila@gmail.com

ABSTRACT

The objective of this research is to provide policy recommendation with regard to strategy formulation for the development of community forests. The policy recommendation aims to improve local people's economy, to alleviate poverty and to achieve community-reliance through the utilization of community forest programs. This study is also aimed to strengthen roles and functions of various institutions to be synergized in empowerment activities in line with the jurisdiction of rights for management and utilization of community forest. This research used descriptive qualitative approach. Data was collected from Tanggamus Regency in Lampung Province of Indonesia through interviews. Secondary data was also obtained from related sources: literature and government regulations. This study found that the implementation of community forest policy is merely based on the government regulation. Another finding is that empowerment practices undertaken in the community forest is still lack of the involvement of stakeholders. In addition, there is a positive impact in the practice of community forest which can be seen from the level of public awareness to the forest and in planting crops. Therefore, this research suggests that: first, there is the need of policy to overcome bureaucratic system in applying the community forest management permits; second, it needs a new formulation of budget to facilitate the community in the application of the community forest management.

KEY WORDS

Community, forest, policy, reliance.

Forest is one of national development capitals which benefits people's lives and livelihoods. But, the destruction of forests as a result of a rapid utilization of forests which is not accompanied by the application of norms in a juridical way is very problematic. The fact is that the destruction of forests is againsts current forest management in preserving and utilizing nature for prosperity of people. More specifically, in the context of Lampung Province in Indonesia, forest destruction has reached at around 53 percent of national forest in Lampung. The conservation and development of forest as natural environment can be obtained, if people who live in the forest can protect and manage the forest in a good way. It is undeniable that forest destruction in Lampung Province, especially in Tanggamus Regency is caused by exploitation of the forest by people around the forest who deliberately exploit the ecological functions of the forest without restoring the forest. Data from a NGO called Watala and from the National Forest Protection Unit at Tanggamus Regency in 2016 shows that more than 7,000 encroachers have penetrated the protected forest through illegal

logging and looting of forest resources in an area called registering 30 at Tanggamus Mountain resulting the damage of 7,500 hectares or 79.54% of protected forests. Another problem is that the technical implementation of community forest has not been widely known to the public or insufficient information of regulations related to the implementation of community forestry at the village level. More problematic is where encroachers work for people who invest or support them financially to exploit protected forests, so that the benefit from forest exploitation will be shared among them based on agreement. Sometimes, people who invest money to encroachers are backed up by unscrupulous authorities.

The empowerment approach can be done with five ways, namely: possibility, strengthening, protection, support, and maintenance (Anwas, 2014). One of the empowerment approaches is the aspect of strengthening knowledge and ability of the community in solving problems and fulfilling their needs. Empowerment should be able to develop all capabilities and the confidence of the community which can support their sovereignty. Thus, there is the need for a policy aimed to empower the community in regard to the community forest. Community forest itself is a state/national forest whose utilization is aimed for empowering local communities, as described in the Minister of Forestry Regulation No.P.13/Menhut-II/ 2011. Community forest policies allow communities to manage some of forest resources with a specific regulation. Thus, community empowerment is seen as an effort to improve the ability and the sovereignty of the community (Bartlett, 2008). As a result, the community can optimally and fairly get benefits from forest resources through capacity building and access granting in the framework of community welfare. Moreover, the implementation of community forestry policy through local community empowerment starts from socialization and facilitation activities including the selection of methods and tools as well as strengthening the institutional function of the group of community forestry peasant. All these initial activities should be synergized to obtain the benefits of forest resources optimally and fairly without damaging forest functions and these also do not conflict with sustainable forest principles through the regulation of rights on the management and utilization of community forests. The activities include capacity building as well as access provision in the context of improving the welfare of local communities.

Furthermore, the important of this research is that the existence of forestry policy provides an opportunity for people to participate in managing forests or in benefitting forest for communities around the forests. This can be done by granting access rights to the community and by placing the community as the main actors for the forest development and management. The empowerment program needs people who live in and around the forest such as small groups' people consisting of several families, people who formed tribes or villages where they interact strongly between social, economic and cultural life of the community with the forest environment. According to Sutaryono (2008), rural communities around the forest are a society with relatively low in level of education, welfare, initiation and creativity. There is culture of acceptance with current situation and fatalist attitude make people always to be subordinated of systems, causing difficulties in the empowerment process. The typical of forest community is low in economic and educational levels which has a tendency to meet its needs depending on forest resources. Low levels of education make them less likely to be skilled at activities, let alone on issues they have never heard of and ignorance.

The lack of knowledge of people around the forest causes poor on managing community forests and people tend to exploit the potential of forest resources unfavorably, taking the forest resources by way of encroaching. These activities impact on a negative meaning for the forest, cutting down forest trees or plants without repairing the forest. Given the low level of knowledge for forest management, it also impacts the way people manage forests improperly. Encroaches' activities on forests result the forest destruction, although forest as natural environment needs to be preserved. Environment is one of the important elements for the life of living things: human beings, animals and plants. Environment becomes the determinant of how living things continue to grow and it becomes a place for them to live.

Research findings from Rosalia, et al (2016) found that the implementation of community forest policy in Tanggamus Regency can be said very disappointing where the technical implementation of community forest has not been widely known by the community and there is less intensive socialization about community forest, especially on technical implementation problems. These situations result in less understanding about rights and obligations for the management and utilization of community forests. There is also a jealousy among communities between who already have a community forestry permit and who have not received the permit. In addition, research by Rosalia, et al (2016) found that there is less effective rules indicated the existence of immoral apparatus to back up encroachers to seek individual profit by giving financial support to them to exploit the forests. Thus, this study aims to provide policy recommendation in relation to several aspects as follows: (a) economic role of the community. This means that there is the need to improve the economic role of the community through the utilization of community forest by groups of community forestry farmer in order to create food security. (b) support from public. This means that there is the need to strengthen institutions, especially farmer groups which are relevant in the process of conducting empowerment activities in forest management with balancing ecological functions and subsistence social functions of local communities.

In conjunction with Community Forestry stated in the Decree of the Minister of Forestry Number: P.37/Menhut-II/2007) juncto Regulation of the Minister of Forestry of the Republic of Indonesia No.P.13/Menhut-II/2010, state/national forest under forest management system aims to empower or enhance economic and cultural values as well as to provide benefits to local communities without disrupting its main functions. Moreover, based on data from Watala and World Agroforestry (2005), most areas in Lampung Province have implemented Community Forestry policies since 1998. Bandar Lampung and South Lampung areas, called register 19 Gunung Betung, are the first areas in implementing Community Forest policies. Generally, the process of community forest undertaken by communities is relatively similar, starting from forming community forest groups, followed by deciding areas, and creating and submitting proposals for a permit. The legal standing of the process is related to Minister of Forestry Regulation No P.37/Menhut-II/2007 on Community Forest (Hkm) along with Minister of Forestry Regulation No.P.13/Menhut-II/ 2010. The form of initiatives in supporting the development of community forest either by the government at regency or by communities/forest management groups in 8 regencies is relatively the same. They are socialization of policy, guidance, provision of assistance of seeds Multi Purpose Tree Species (MPTS) to community groups and giving license to manage the forests.

Table 1 – Form of Initiatives in Supporting the Implementation of Community Forestry

n/n	Form of Initiatives	
Regency/City	Government/Forestry	Groups
Bandar Lampung	<ul style="list-style-type: none"> - Policy Socialization - Guidance and Assistancy 	<ul style="list-style-type: none"> Forming Groups Group Meetings Permit Arrangement
Lampung Selatan	<ul style="list-style-type: none"> - Policy Socialization - Seedling Support - Monitoring Progress of the Group - Giving Permits 	<ul style="list-style-type: none"> Forming Groups Planting Forest Education Proposing Permit Group Meetings
Tanggamus	<ul style="list-style-type: none"> - Policy Socialization - Groups Monitoring - Granting Permits to the Community - Data Arrangements 	<ul style="list-style-type: none"> Forming Groups Proposing Field Facilitators Proposing Permits Group Meetings
Lampung Tengah	<ul style="list-style-type: none"> - Policy Socialization - Group Assistance - Establishment of Task Force Team for Forest Protection and Field Facilitators - Data Arrangement - Seedling Support 	<ul style="list-style-type: none"> Forming Groups Setting Up Group Rules Setting Up Workplan for Forest management Proposing Permit Proposing Field Facilitators Group Meetings Proposing New Group Proposing New Permits Comparative Field Study

Source: Watala Lampung.

According to Anwas (2014), the concept of empowerment itself evolves from the reality of helpless individuals or powerless societies. Powerlessness has weaknesses in various aspects, such as knowledge, experience, attitudes, skills, business capital, networking, passion, hard work, persistence, etc. Those weaknesses lead to dependence, helplessness and poverty. Empowerment itself is a concept related to power. The term power is often identical to the individuals' ability to make them independent gaining their needs as well as their ability to govern themselves, to organize others as individuals or groups/organizations, regardless of the needs, potentials, or desires of others. Empowerment is also as a process in order to provide power to powerless people and reduce power of parties who are very powerful. Similarly, empowerment is where people, organizations and communities are directed to be able to control or rule over their lives (Bartlett, 2008). Understanding empowerment emphasizes the aspect of the delegation of power, giving authority or transfer of power to individuals or society, so as to manage themselves and the environment in accordance with their desires, potential and ability.

The purpose of empowerment has various ways (Wilkinson, 1998). For instance, first is to improve understanding and knowledge through better education. Thus, empowerment should be designed as a form of better education. Improving education through empowerment is not only to material improvements, method improvements, time and time improvements, and facilitator and beneficiary relationships, but also to foster a lifelong learning spirit; second is to improve accessibility, meaning that with the growth and development of the spirit of lifelong learning, it is expected to improve accessibility, especially accessibility to sources of information/innovation, to sources of financing, to providers of products and equipment, as well as to marketing institutions; third is to have better action. This means that when there are good and improved education and accessibility with better resources, then there is an expectation of better actions; fourth is to have better institutions. This means that when there is the improvement of activities/actions undertaken, then it is expected to improve institutions, including the development of business-partnership networks; fifth is to have better business improvement, meaning that improvement on education such as on the spirit of learning, accessibility, activities and institutional improvement should be followed by the improvement of business undertaken; sixth is to have better income which means that with the occurrence of business improvements made, it is expected to improve income earned, including family and community income; seventh is to improve the environment. This means that income improvement is also expected to improve the environment both physical and social. The reason is that environmental damage is often caused by poverty or limited income; eight is to have better living. Once the level of income and improved environmental are achieved, the living conditions of every family and community is expected to thrive; ninth is to have better community. Better living condition which is supported by physical and social environment is expected to manifest better community life.

In terms of strategy for community empowerment, this study considers the People Centered Development approach (see Dasgupta and Beard, 2007). The approach recognizes the importance of the capacity of the community in enhancing self-reliance and internal power through the ability to exercise internal control over material and non-material resources through capital or ownership levies. Key strategies for community empowerment include: (a) strengthening access to law, information and economy; (b) reinforcing rights to access coastal tourist areas, right of use for withdrawal and right of management, (c) institutional strengthening to determine the direction of community empowerment policies in natural resource management and the environment covering such as social values, norms, players of the game, control, incentives, and needs (Hales, 2010; Bartlett, 2008). Community empowerment is not only to develop the economic potential of people, but also to improve dignity, self-esteem, as well as maintaining the local culture and values. In order to achieve the community empowerment, continuous strategic studies on the restructuring of social systems at micro, mezzo and macro levels are required (Hales, 2010). This is intended to enable local communities to develop their potential without experiencing external barriers to mezzo and macro structures.

Mezzo structure can be a regional government structure at the level of regency, city and province. The macro structure can be a central and national government structure (Wilkinson, 1998). The empowerment process is aimed to assist clients to gain power in making decisions, determining actions and self-control including reducing the effects of personal and social barriers in taking action. All these require ability and confidence in using power owned through the transfer of power and the support from the environment. In the implementation of empowerment program, it is necessary to have cooperation among various parties such as local governments, communities and social institutions that exist in the community. Harmonious, balanced and mutually beneficial cooperation will maintain the sustainability of the development program in order to achieve prosperity.

METHODS OF RESEARCH

This research was conducted based through fieldwork and laboratory activities. Data was collected from a case study which was Tanggamus Regency at Forestry Office and the community forestry in the regency area of 30 Tanggamus Mountain, Pekon Teratas, Kota Agung Utara District, Tanggamus Regency. Laboratory studies were conducted in the form of Focus Group Discussion (FGD) activities with other relevant researchers in the area of community empowerment. Qualitative approach through a case study was used with descriptive research type (Stake, 1995). In accordance with the research objectives, numbers of informants were interviewed such as local governments as policy makers and local communities, especially community forest, field facilitators in the implementation of policy utilization of community forestry programs in the region 30 Tanggamus Regency (Pekon Teratas). Primary data was obtained through key informants who are competent were chosen purposively. They are the Head of Forestry Service of Regency of Tanggamus, Head of Forest Management Division of Forestry Service of Tanggamus, Forest Community Association at Kota Agung Utara Tanggamus, Chairman of the Forest Protection Management and Conservation Group of Tanggamus Regency. Secondary data is also used documents, regulations and archives relating to the substance / research study. Data collection was done using research instrument through observation including supporting devices, recorder, interview guide, notes, pencils, and cameras (Silverman, 2012; Arksey and Knight, 1999). Data analysis was carried out through qualitative approach. To determine the validity of data, this study used 4 criteria, namely, credibility, transferability, dependability, and confirmability. To examine credibility, triangulation was used and analyzed through matching the patterns and trends of information that have been collected and used as a comparison material.

RESULTS AND DISCUSSION

Policy on the Development of Forestry and Estate Crops in Tanggamus Regency consists of improving the quality of apparatus resources, improving forest and land rehabilitation, enhancing the forest law enforcement and security, increasing the utilization of forest resources, increasing productivity of plantation enterprises through plantation development and agribusiness of plantation, increasing the value of plantation business products through improvement processed quality, market access, technology development and partnership development between the private sector, the government and the community.

Community Forest Policy. The community forest policy was issued in 1995 through the issuance of the Decree of the Minister of Forestry No. 622/Kpts-II/1995. Following the Director General of Forest Utilization is supported by Non-governmental Organizations, Universities and International Agencies, designing pilot projects in various places for forest concession management involving local communities. In 2007, there was national declaration of community forest as one of community empowerment pattern, besides people forest plantation and village forest. Community forest is a state forest whose main use is to empower local people. Community forests are expected to enhance the capability and

independence of local communities so that they can benefit from forest resources optimally and fairly through capacity building and access provision in order to improve the welfare of the local people in protected forest areas. The provision is that forests are not burdened with rights or permits for the utilization of forest products and become the source of local livelihoods. Permit for the utilization of Community Forest is granted for 35 years and can be extended according to the evaluation result in every 5 years. Community forests are for poor people at local communities who live in and around the forest and they rely on livelihoods from utilizing forest resources (Bartlett, 2008).

Communities which implement community forest policies may comply with required provisions. Community forests are not only as implementers of forest savings programs, but also as a way of learning. Community forestry programs can be a way to achieve sustainable development objectives. Constraints in the implementation of community forest policy are lack of community resources, facilitators and funding. These constraints will always exist in every strategy of implementing a development program, including community forest policy.

Table 2 – List of Working Area of Community Forestry in Tanggamus Regency

No	Location	Name of Group	Area	Number of Letters from the Minister of Forestry	Number of Permit
	Tanggamus Regency	-	2.547,22	-	-
1	Datarajan Village, Ulu Belu District	KPPM	593,58	SK 433/Menhut-II/2007 10 Des 2007	B.333/23/03/2007/12/2007
2	Payung Village, Kota Agung District	Koperasi Sumber Rejeki	499,56	SK 433/Menhut-II/2007/10 Des 2007	B.334/23/03/2007/12/2007 Date 01/12/2007
3	Datarajan Village Ulu Belu District	Koperasi Harapan Sentosa	300	SK 433/Menhut-II/2007 10 Des 2007	B.335/23/03/2007/12/2007 Desember 2007
4	Napal Village, Bulok District	Gapoktan Hkm	475,71	SK 433/Menhut-II/2007 10 Des 2007	B336/23/03/2007/12/2007 Date 01/12/2007

Source: Forestry Office department in Lampung Province.

The Implementation of Community Forestry in Tanggamus Regency. The Community Forest policy was enacted in the 1990s and it was implemented massively since in 2007. Community Forest is one of community empowerment patterns along with the Community Forest Plantation, Village Forest and Partnership Scheme. In several locations in Lampung Province, the implementation of community forest shows that the pattern of the arrangement is well developed, acceptable and carried out by both the government and the community. Community Forests as state forests which its main purpose is intended to empower and improve the welfare of local communities through the utilization of forest resources in optimal ways, fairly, and sustainable manner with keeping sustainability of forest functions. In addition, community forestry program is one of the efforts to save forests while providing benefits to the community through Community Based Natural Resource Management. Groups of communities are granted rights to access and manage forest resources. In this context, the role of field facilitators resides and settles in villages directly located in forest areas. They conduct discussions/FGDs and learn together with communities in order to manage forests properly. Community forests are intended for capacity building and for providing access to local communities in order to manage forests sustainably as well as to ensure employment availability for communities.

In solving the economic and social problems which exist in the community, it is needed the commitment of parties/stakeholders. It also needs to implementat community forestry program in the community. Communities conducting community forestry programs may comply with required provisions. The community is not only developed as a forest saving program, but also as a way for learning process. Thus, community forest programs can be a means to achieve Sustainable Development Goals (SDGs). In general, there are several constraints in implementing community forestry programs. They are availability of funding and the funding schemes as well as capacity gaps in community resources, facilitators and

the local government. These constraints will always exist in every stage and strategy for implementing development programs, such as community forestry programs. But, there is a positive outcome if the community forestry programs can be a way to strength and to build the capacity, empowe community potential.

The basic policy of the implementation of community forest in Tanggamus Regency refers to the law and legal products related to community forest, namely:

Table 3 – Legal Products Related to Community Forest

No	Legal Products	Remarks
1.	UU RI No. 5 Year 1990	Conservation of Biological Natural Resources and its Ecosystem
2.	Kep Menhut No. 622 Year 1995	Community Forest Guidelines
3.	UU RI No. 23 Year 1997	Environmental Management
4.	SK Menhut No.677/Kpts-II/1998	Community Forest
5.	UU RI No. 41 Year 1999	Forestry
6.	SK Menhut No.865/1999	Utilization of State Forest
7.	SK Menhut No. 31/2001	Community Forest
8.	UU RI No. 44 Year 2004	Forest Planning
9.	PP Menhut No.34 Year 2002	Forest Administration, Forest Management Plan, Forest Utilization and Forestry Utilization Forest
10	PP Menhut No. 6 Year 2007	Forest Administration, Forest Management Plan, Forest Utilization and Forestry Utilization Forest
11	PP Menhut No. P.37/ Year 2007	Community Forest
12	PP Menhut RI No.P.13/Menhut-II/2010	Third Amendment to Regulation of the Minister of Forestry Number .37/Menhut-II/2007 on Community Forest
13	The Minister of Forestry Decree Republik Indonesia No. P.52/Menhut-II/2011	Third Amendment to Regulation of the Minister of Forestry Numb P.37/Menhut-II/2007 on Community Forest
14	Tanggamus Mayor Decree No.B.334/23/03/2007	Granting of Business License of Community Forest Utilization (IUPHKm) to cooperative of Sumber Rejeki, Pekon Payung
15	Decree of Tanggamus Mayor No.B.335/23/03/2007	Granting of Business License of Community Forest Utilization (IUPHKm) to Kelompok Hutan Kemasyarakatan (KPPM) Pekon Datarajan, Ulu Belu District
16	Decree of Bupati Tanggamus No.B.264/39/12/2009	Granting of Business License of Community Forest Utilization (IUPHKm) to farmer group of Tani Margo Rukun
17	Decree of Bupati Tanggamus No.B.263/39/12/2009	Granting of Business License of Community Forest Utilization (IUPHKm) to farmer group of Tani Tunas Muda
18	Decree of Bupati Tanggamus No.B.262/39/12/2009	Granting of Business License of Community Forest Utilization (IUPHKm) to Farmer Group of Mandiri Lestari
19	Decree of Bupati Tanggamus No.B.260/39/12/2009	Granting of Business License of Community Forest Utilization (IUPHKm) to Farmer Group of Tani Hijau Makmur
20	Decree of Bupati Tanggamus No.B.265/39/12/2009	Granting of Business License of Community Forest Utilization (IUPHKm) to farmer group of Tani Bina Wana Jaya II
21	Decree of Bupati Tanggamus No.B.266/39/12/2009	Granting of Business License of Community Forest Utilization (IUPHKm) to farmer group of Bina Wana Jaya I
22	Decree of the Minister of Forestry No. 886/Menhut-II/2013	Determination of working area Hkm Gapoktan Beringin Raya Pekon Talang Berir, Pulau Panggung District Reg 30
23	Decree of the Minister of Forestry No. 886/Menhut-II/2013	Determination of working area Hkm Reg 30 Gapoktan Mulya Agung, Pekon Sidomulyo Semaka District
24	Decree of the Minister of Forestry No. 886/Menhut-II/2013	Gapoktan Tulung Agung, Pekon Talang Asah Semaka District
25	Decree of the Minister of Forestry No. 886/Menhut-II/2013	Gapoktan Hutan Lestari Pekon Gunung Doh, Bandar Negeri Semuong District
26	Decree of the Minister of Forestry No. 886/Menhut-II/2013	Gapoktan Tunas Jaya Pekon Atar Lebar Bandar Negeri Semuong District
27	Decree of the Minister of Forestry No. 886/Menhut-II/2013	Gapoktan Bakti Mandiri, Ulu Belu District
28	Decree of the Minister of Forestry No. 886/Menhut-II/2013	Gapoktan Wana Binangkit, Kota Agung Barat
29	Decree of the Minister of Forestry No. 886/Menhut-II/2013	Gapoktan Sinar Mulya, Ulu Belu District
30	Decree of the Minister of Forestry No. 886/Menhut-II/2013	Gapoktan Rimba Jaya, Ulu Belu District
31	Decree of the Minister of Forestry No. 886/Menhut-II/2013	Gapoktan Sumber Makmur Ulu Belu District Register 30

Table 4 – List of Farmer Groups of Community Forest in Tanggamus Regency, 2007-2010

No	Year	Number of Groups	Number of Household	Size of Area (Ha)	Permit Status
1.	1999	1	200	400	Temporary
2.	2007	5	2.015	2.570	Permanent
3	2008	9	-	12.905,05	In the Process of Submission
4.	2010	14	23.000	12.061,30	Waiting for Approval

Table 5 – List of Community Forest Groups at the area of Forest in Tanggamus Regency, especially at Kota Agung Utara and Tanggamus Mountain

No	Group Name	Letter of Decision	Number of Groups	Size of Area, ha	Remarks
1	KPPM Pekon Dataraja, Ulu Belu District Reg 30 and 32	SK.B.313/KWL 4/Kpts 2000 SK Tanggamus Regent No. 333/23/03/2007	11 Groups 33 KK	593,58	Permanent Permit for 35 Years
2	Harapan Sentosa Farmer Groups	SKB 162/Hutbun/Hk/2001	9 Groups 273 KK	300,00	Permanent Permit for 35 Years
3	Farmer Group of Sumber Rejeki Pekon Payung, Kota Agung District Reg 30	SKB 434/KWL.4/Kpts/2001 No B.334/23/03/2007	7 Groups 275 KK	499,56	Permanent Permit for 35 Years
4	Kop Bun Margo Rukun Pekon Ngari, Ulu Belu District	SKB.264/Hutbun/39/12/2009	6 Groups 282 KK	1428,70	Permanent Permit for 35 Years
5	Gapoktan Bhakti Makmur Pekon Teratas, Kota Agung District reg 30	SK.B.259/39/2009	11 Groups 565 KK	856,60	Permanent Permit for 35 Years
6	Gapoktan Karya Tani Pekon Penantian Ulu Belu Reg 39 dan 32	SK B.261/39/12/2009	653 KK	1.977,60	Permanent Permit for 35 Years
7	Gapoktan Beringin Raya Pekon Talang Berir, Pulau Panggung District Reg 30	No. 886/Menhut-II/2013	446 KK	907,78	Determining working area of community forest
8	Gapoktan Mulya Agung Pekon Sidomulyo, Semaka District	No. 886/Menhut-II/2013	961 KK	1662,64	Determining working area of community forest Reg 39
9	Gapoktan Tulung Agung Pekon Talang Asah, Semaka District	No. 882/Menhut-II/2013	926 KK	1.046,73	Determining working area of community forest Reg 39
10	Gapoktan Hutan Lestari Pekon Gunung Doh, Bandar Negeri Semuong District	No. 885/Menhut-II/2013	171	385,11	Determining working area of community forest Reg 39
11	Gapoktan Tunas Jaya Pekon Atar Lebar, Bandar Negeri Semuong District	No. 889/Menhut-II/2013	584	1264,72	Determining working area of community forest Reg 39
12	Gapoktan Bakti Mandiri, Ulu Belu District	No. 884/Menhut-II/2013	421	563,75	Determining working area of community forest Reg 39
13	Gapoktan Wana Binangkit, Kota Agung Barat District	No. 81/Menhut-II/2013	217	289,14	Determining working area of community forest Reg 30
14	Gapoktan Sinar Mulya, Ulu Belu District	No. 80/Menhut-II/2013	701	1.013	Determining working area of community forest Reg 39
15	Gapoktan Rimba Jaya Kec Ulu Belu	-	832	1600,00	Implementation, Measurement and Preparing Proposal
16	Gapoktan Sumber Makmur Kec Ulu Belu Reg 30	-	550	1300,00	Implementation, Measurement and Preparing Proposal

Table 6 – List of Community Forest Farmer Groups Holding Permanent Permits in Tanggamus Regency in 2014

No	Group Name	Letter of Decision	Number of Household	Size (ha)	Remarks
1	Gapoktan Sidodadi	No.8.464/34/II/2014 Tgl. 30-12-2-14	391	2,306	Permit from the Tanggamus Regent
2	Gapoktan Sinar Harapan	No.B.467/34/II/2014 Tgl. 30-12-2014	468	4,834	Permit from the Tanggamus Regent
3	Gapoktan Kelumbayan Maju	No.B.462/34/II/2014 Tgl. 30-12-2014	802	1,910	Permit from the Tanggamus Regent
4	Gapoktan Lestari Jaya	No.B.472/34/II/2014 Tgl. 30-12-2014	556	665	Permit from the Tanggamus Regent
5	Gapoktan Beringin Jaya	No.B.465/34/II/2014 Tgl. 30-12-2014	331	871	Permit from the Tanggamus Regent
6	Gapoktan Wira Karya Sejahtera	No.B.466/34/II/2014 Tgl. 30-12-2014	904	4,305	Permit from the Tanggamus Regent
7	Gapoktan Mulya Agung	No.B.459/34/II/2014 Tgl. 30-12-2014	961	1,473	Permit from the Tanggamus Regent
8	Gapoktan Tulung Agung	No.B.463/34/II/2014 Tgl. 30-12-2014	844	902	Permit from the Tanggamus Regent
9	Gapoktan Karya Tani Sejahtera	No.B.470/34/II/2014 Tgl. 30-12-2014	995	3,382	Permit from the Tanggamus Regent
10	Gapoktan Hutan Lestari	No.B.475/34/II/2014 Tgl. 30-12-2014	171	382	Permit from the Tanggamus Regent
11	Gapoktan Tunas Jaya	No.B.474/34/II/2014 Tgl. 30-12-2014	584	1,388	Permit from the Tanggamus Regent
12	Gapoktan Bakti Mandiri	No.B.476/34/II/2014 Tgl. 30-12-2014	421	473	Permit from the Tanggamus Regent
13	Gapoktan Wana Jaya	No.B.471/34/II/2014 Tgl. 30-12-2014	801	1,507	Permit from the Tanggamus Regent
14	Gapoktan Sinar Mulya	No.B.461/34/II/2014 Tgl. 30-12-2014	263	917	Permit from the Tanggamus Regent
15	Gapoktan Mahrdika	No.B.468/34/II/2014 Tgl. 30-12-2014	1,141	2,340	Permit from the Tanggamus Regent
16	Gapoktan Kuyung Jaya	No.B.469/34/II/2014 Tgl. 30-12-2014	1,044	1,514	Permit from the Tanggamus Regent
17	Gapoktan Wana Binangkit	No.B.473/34/II/2014 Tgl. 30-12-2014	106	288	Permit from the Tanggamus Regent
18	Gapoktan Maju Jaya	No.B.460/34/II/2014 Tgl. 30-12-2014	265	887	Permit from the Tanggamus Regent
19	Gapoktan Rimba Jaya	-	832	1,600	Implementation, Measurement and Preparing Proposal
20	Sumber Abadi	-	-	550	Implementation, Measurement and Preparing Proposal
21	Wana Arba Lestari	-	-	1,000	Implementation, Measurement and Preparing Proposal
22	Wana Tani Lestari	-	483	3,091	Implementation, Measurement and Preparing Proposal
23	Sinar Petir	-	-	-	Implementation, Measurement and Preparing Proposal
24	Trisno Wana Jaya	-	482	1,081,90	Implementation, Measurement and Preparing Proposal
25	Citra Lestari	-	694	955	Implementation, Measurement and Preparing Proposal
26	Wana Jaya	-	489	679	Implementation, Measurement and Preparing Proposal

Based on table 4, Tanggamus Regency submitted a proposal for community forest of 9 farmer groups with a total area of 12,905.05 hectares located in protected forest area register 21, register 27, register 30, register 32 and register 39 to the Ministry of Forestry in 2008 in accordance with the Decree of the Regent of Tanggamus Regency Number: 522/4111/39 dated 14 July 2008. Of the 9 Community Forest Groups proposed permission and then in 2009, 8 groups have been verified by the Ministry of Forestry with an area of 10,781 hectares. The Bakti Makmur Farmers Group in Pekon Teratas, Kota Agung District at Tanggamus Regency is applying for Community Forest Management Permit to the Forestry and Plantation Office of Tanggamus Regency. In 2010, there have been 14 community forestry farmer groups in Tanggamus Regency which have obtained the community forest management license, while 6 farmer groups are still in the process of applying for community forest management permit. The Minister of Forestry of the Republic of Indonesia, Mr Zulkifli Hasan on 22 April 2010 enacted the Decree of the Minister of Forestry of the Republic of Indonesia Number 751/Menhut-II/2009 which stipulates the Forest Zone as a Community Forest Working Area, in Tanggamus Regency of 12,061.30 hectares. The other 2 Farmer Group, namely Rimba Jaya in Ulu Belu District and Sumber Makmur at Ulu Belu District Register 30 implemented the measurement and preparation of proposal. Furthermore, in 2013, there are 8 Farmer Groups received licence of community forest management. All data can be seen in Table 5.

While two other farmer groups, namely Rimba Jaya at Ulu Belu District and Sumber Makmur at Ulu Belu Register 30, conduct the implementation of measurement and preparation proposal.

Cooperation between Government and Society for Community Forest Management Policy. Increase in number of community participations in both forest policy and management can prevent and mitigate forest destruction. The current forestry policy provides real opportunities for communities within and around forest areas. Community forestry policy allows communities to manage some of the forest resources. An effort for community involvement is carried out through strengthening community forest management institutions by establishing a forest management organization which has: (1) internal binding group rules in decision making, conflict resolution and other rules in organizational management; (2) rules in forest management; (3) recognition from the community through the Village; and (4) plan of location and area of work and management period. Facilitation to groups of community forestry farmers in preparing the Community Forestry Work Plan has been implemented in Tanggamus District. The activity was facilitated by the Ministry of Forestry of the Republic of Indonesia, the Unitary Forest Management Unit at Lampung Province.

Community Forest Policy. As mentioned above, community forest policy was initially issued in 1995 through the issuance of Forestry Ministerial Decree No. 622/Kpts-II /1995 followed by the Director General of Forest Utilization which is supported by Non-Governmental Organizations, Universities, and international agencies, designing pilot projects. All stakeholders contribute in various places regarding forest concession management involving local communities. In 2007, there was the year of national declaration for community forest which is one of community empowerment pattern along with community plantation forest and village forest. Community forest is a state forest in order to empower local people, expected to enhance the capability and independence of local communities so that they can benefit from forest resources optimally and fairly through capacity building and giving access provision in order to improve the welfare of local communities. Community forest only applies in protected forest areas and in production forests. The provision is that forests are not burdened with rights or permits for the utilization of forest products and the forests become source of local livelihoods. Permit for community forest utilization is granted for 35 year period and can be extended according to the evaluation result every 5 years. Community forests are dedicated to the local poor who live in and around the forest which they rely on livelihoods from the use of forest resources. Communities which implement community forest policies may comply with required provisions. Community forests are not only developed as implementers of forest savings programs, but also to be a means of learning process. Furthermore, community forestry programs can be a means to achieve

sustainable development objectives. There are constraints or limitations in the implementation of community forest policies where there lack of community resources, facilitators and funding. However, constraints and limitations will always exist in every stage of strategy for implementing a development program including community forest policy.

CONCLUSION AND RECOMMENDATIONS

This research concludes that the implementation of community forest policy in Tanggamus Regency is based on Forestry Minister Regulation No. 37 Year 2007 and its amendments, in conjunction with Minister of Forestry Regulation No P.88 / Menhut-II / 2014 on Community Forest and Ministry of Environment and Forestry Regulation of the Republic Indonesia Number P.83/MenLHK/Setjen/Kum.1/10/2016 on Social Forestry, namely by providing access to the community by involving communities to manage forests. The implementation of community forestry through empowerment activities undertaken cannot only be undertaken by forestry officers or Protected Forest Management Unity, but it also requires support and commitment of the parties in its implementation. The success rate of community forestry programs can be seen from the level of public awareness of forests, and public awareness in planting the plants that have been determined. Furthermore, several recommendations can be suggested as follows: first, constraints in the application of community forest management permits are a complex in the sense of bureaucracy, so that groups that will apply for community forest management permits are confused and lack the budget to apply for community forestry permits. Second, it, in the future very, needs to simplify the process of applying for community forest management permit, especially in the bureaucratic flow.

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THE INFLUENCE OF CONTRACT FARMING TOWARD THE FEASIBILITY OF QUAIL CULTIVATION BUSINESS IN SUKABUMI REGENCY

Juliyanti Indri*, Syarief Rizal, Harianto

School of Business, Bogor Agricultural University, Indonesia

*E-mail: juliyantiindri@gmail.com

ABSTRACT

The largest quail population of West Java located in Sukabumi, where its many residents do quail cultivation business. In growing its business, the breeders have problems such as scientific knowledge, capital, management, and marketing. One of the solutions is through a partnership with CV Slamet Quail Farm. This study aims to analyse the feasibility of quail cultivation business as well as profitability level of partner breeders and independent breeders in Sukabumi Regency by using investment criteria, and to analyse the sensitivity of quail cultivation business feasibility toward the partner breeders and independent breeders if there is increasing feed price, decreasing selling price of egg, and decreasing amount of egg production due to disease.

KEY WORDS

Investment analysis, sensitivity, partnership, quail cultivation business.

Agribusiness is one of the diverse employment sectors which can absorb massive workforce. Indonesia is basically an agrarian country where most of population work in the agribusiness sector. Currently, livestock is one of the agribusiness sectors which have a positive trend among the people; one of them is quail farms. One type of quail developed in Indonesia is *Coturnix japonica* which is originated from the Japan. The quail has a very high economic value where the meat, eggs, feathers, and feces can generate income and it is hardly produces any waste. Another advantage of quail cultivation is the price of quail eggs which are always above the production cost (Wuryadi 2014).

Based on data from Directorate General of Animal Husbandry and Animal Health, Ministry of Agriculture (2017), it is noted that the amount of production and consumption of quail eggs has increased annually from 2013 to 2016. The growth rate of its production in 2015 until 2016 has increased by 6.52%, while consumption of quail eggs increased by 16.4%. This explains that the increase in production is not accompanied with the increase of consumer demand. The condition shows an opportunity for farmers to gain profit in quail egg business development. The quail cultivation business development has been widely done, but still empowered by the UMKM breeders. Based on data from Livestock Department, West Java Province (2014), the largest quail populations in West Java is in Sukabumi District. Most breeders in Sukabumi join as partner farmers in CV Slamet Quail Farm (SQF). The group members of quail cultivation partner spread in 16 subdistricts in Sukabumi.

The contract farming is defined as an agreement between breeders and the company in product supply with a specified period of time and predetermined price (Eaton and Shepherd 2001). It is also one solution to overcome the gap between large entrepreneurs and small entrepreneurs (Hafsah 2003). CV SQF provides training, mentoring, and advisory services to address the gap between the company and partner as well as assist the selling partner farmer's production at a set price. According to Saputra (2009), the business partnership model should involve big business and small business by involving the bank as a lender in a cooperative engagement as outlined in memorandum of understanding (MoU). Until now CV SQF has cooperated with one of the banks in Indonesia to give credit to members of breeder partners so that they have no difficulty in terms of business capital.

Hafsah (2003) suggested that there are several types of partnership patterns which have been widely implemented, namely the plasma core pattern, sub-contract pattern, general trading pattern, density pattern, and franchising. The partnership pattern applied by CV SQF

with partner breeders is the free plasma core pattern, where there is no written bond between CV SQF and the breeders. A previous research by Suwanto (2003), suggested that quail livestock business is prospective as it has enormous potential resources and large market share. According to Eaton and Shepherd (2001), contract farming can provide countless benefits for the parties involved, especially for farmers/breeders, namely the provision of inputs and production services, credit access, the introduction of appropriate technology, expertise transfer, fixed prices, and access to reliable markets.

Farmers participating in the partnership program will generally have a higher rate of profit than independent farmers (Bolwig et al 2009). Yunus (2009) suggested that independent breeders are more profitable than those who become a member of partnership pattern. Sanjaya et al (2016) argued that based on financial analysis, the quail livestock business in Tebing Tinggi Okura Rumbai Pesisir is feasible to cultivate. Based on these descriptions, some studies need to be conducted to see the relationship between the partnership pattern with the benefits gained by partner breeders. The focus of this research is to analyse the quail cultivation business by considering revenues and expenditures of partner breeders and independent breeders in Sukabumi. Based on the description, the purpose of the study is to measure the level of profit gained in quail cultivation business between partner farmers and independent breeders.

METHODS OF RESEARCH

The location of this research was in Sukabumi Regency for both partner farmer and independent breeder. The determination of research location was done purposively or intentionally on the basis that Sukabumi is biggest quail egg producer in West Java and have partner breeders group, which CV SQF. The location of partnership implementation is in Sukabumi Regency, while the company is in Cikembar District. The data used in this research comes from primary and secondary data. The primary data generated from direct interviews with respondents in the field. The secondary data obtained from literature studies relevant to the research topic.

Data collection methods used were surveying methods, through direct interviews with the members of partner breeders and independent breeders through the questionnaire, and through direct discussion with breeders of CV SQF. The sampling method for partner breeder was random sampling, in which researchers randomly selected respondents from partner breeding members in the population. The sampling method for independent breeders was snowball sampling where researcher look for one independent breeder and ask the respondent to give information of others residing in Sukabumi. The number of quail cultivation breeders involved as respondents in this study is 20, consisting of 10 partner breeders and 10 independent breeders. The data analysis method used in this research is investment analysis to see the profit obtained by partner breeders and independent breeders.

CRITERIA OF FEASIBILITY

The assessment of investment analysis in this study was conducted by four criteria, namely: NPV, IRR, Net B/C, and PBP. By using this assessment, the benefits gained by partner breeders and independent breeders in Sukabumi District can be compared. Sensitivity analysis was also used to know the sensitivity of quail cultivation business to feed price change, production quantity, and selling price so that influences investment analysis assessment.

NPV or Net Present Value is the current value of a project's investment income flow by looking at the present value of a project's benefits with the present value of a project's investment cost (Gittingger 2008). Projects are considered feasible and profitable to be implemented if the value of NPV is positive. If NPV is negative, the project is considered not feasible to implement. In a negative NPV condition, it is better to run another better project than investing capital in the business.

The IRR or internal rate of return is the maximum interest rate can be paid to run the project, where the project can be run with greater internal rate return than the limit level which is

generally the opportunity cost of capital (Gittinger 2008). According to Sunyoto (20014), IRR is used to measure the benefit of own capital to generate profits. If the IRR value is greater than bank interest, then the project is eligible for a credit. If the IRR value is less than bank interest, then the project is not eligible for a credit.

Net B/C or benefit and cost ratio are obtained when the present value of benefit flows is divided by the present value of cost flow (Gittinger 2008). If the Net B/C is less than one, then the present value of cost will be greater than the present value of the benefit, and the first expense plus the return for investment in the project will not be able to return. The formal criteria used for Net B/C size selection of project benefits is by selecting all free projects with Net B/C value of one or more.

The PBP or pay back period is a method of investment or valuation calculation techniques on the lifetime of a project or business investment (Sunyoto 2014). PBP or repayment period is the return period of the total capital invested on a project, which is set from the beginning to the net value of the additional production so that it reaches the total amount of invested capital (Gittinger 2008). As long as the project can recover the investment cost before the project ends, the project can still be implemented. But if until the time the project ends it cannot return the investment cost used, then the project should not be implemented.

Sensitivity analysis is an analysis which considers the effect of the risk and uncertainty in the project analysis. It is done by switching value which is done by changing important variables, each can be separated or in combination, with a certain percentage which is already known or predicted. Then, an assessment is conducted to find out how the change sensitivity of those variables have an effect on investment analysis, namely NPV, IRR, and Net B/C value. In agriculture, the project varies due to four significant issues: price, implementation delay, cost increase, and yields. The changing factors will certainly affect the feasibility of a business or project activity. Therefore, it is necessary to analyse and identify the possible conditions from the appropriate information related to the business (Gittinger 2008).

RESULTS AND DISCUSSION

The background of partnership pattern formation on CV SQF originated from the desire of company's owner to develop quail cultivation business. The needs of clarity on price guarantees and understanding of good processing management make breeders interested in making partnerships. Thus, there is a mutual relationship between quail breeders with CV SQF. The partnership pattern applied by CV SQF with partners is free plasma core pattern, where there is no written bond between CV SQF and breeders.

CV SQF acts as a core company who plays a role in meeting the needs of seeds, feed, vaccines, vitamins, cage equipment, coaching services, and price guarantees. Partner breeders act as plasma obliged to sell their harvest to the company. The partnership undertaken by CV SQF is the free plasma core, where the partner breeders are allowed to sell the production and purchase livestock production facilities from outside other than CV SQF. In addition, breeders are allowed to sell egg production to other companies or parties, but the selling price of eggs should not be below the selling price of CV SQF. Partner breeders have an obligation to attend quail cultivation training and follow SOP which is set by the company.

Breeders who want to apply as partners of CV SQF must meet several requirements, namely following the compulsory training for 7 days and having owned/rent land for cages. Training is done so that farmers can apply the same quail cultivation system with CV SQF and follow the SOP. The quail cultivation training is free of charge. The partners who are new in raising quail cultivation is given special guidance and monitoring in process. The advantages obtained by partner breeders compared with independent breeders can be seen in Table 1.

The quail cultivation business in this research is divided into two patterns namely, partnership pattern and independent pattern. The former is a business pattern conducted by breeders and CV SQF according to the agreement of both parties. The independent pattern is conducted by breeders without agreement or cooperation with any party. The production focus of quail cultivation business is to generate consumed quail egg and meat.

Table 1 – Benefits Obtained by Partner Breeders Compared with Independent Breeders

No	Benefits	Partnership Breeders	Independent Breeders
1.	Getting theory and practice guidance on quail cultivation	✓	X
2.	Quail cultivation assistance in the field	✓	X
3.	Supervision facility on livestock's health	✓	X
4.	Selling price clarity for products	✓	X
5.	Getting capital for quail cultivation activities	✓	X*
6.	24-hour Consultation	✓	X
7.	Feed availability guarantee	✓	X

Note: ✓ (Yes); X (No); X* (Several independent breeders get capital in the form of loans from banks or investors with profit sharing system).

Based on partnership pattern research, breeders invested 5.400 quail aged 40 days with a portion of 5000 laying quails and 400 broiler quails. In the independent pattern, the breeders invested 5.402 quails aged 40 days with a portion of 5000 laying quail and 402 broiler quail. Female quails from breeders' own nursery are not sold and used as the replacement for rejected or dead laying quail. Laying and broiler quails are productive for 18 months or equivalent to 548 days. Based on the prevailed SOP, the quail nursery on partnership pattern requires 4 female quail and 1 male quail, whereas the independent pattern requires 5 female quail and 1 male quail.

A land area of 100 m² can accommodate 5,000-6,000 quails. The area is used for starter cage, grower cage, layer cage, hatchery room, and warehouse. Starter cage is used for quail aged 0-21 days. A starter cage unit can accommodate 240 quails consisting of 5 floors whose size are P=100 cm, L=60 cm, T=40 cm for each level. One grower and layer cage can accommodate 200 quails consisting of 5 floors with the size of P=100 cm, L=60 cm, T=30 cm for each level. Each starter, grower, and layer cage can be used for 3 years. The buildings used for quail cultivation are made of iron and plywood as well as tarps to close the cage.

The average consumption of quail feed in this study is 3.9 grams/quail/day for the age 0-7 days. For the age of 8-14 days, the average need is 7 grams/quail/day. The quail aged 15-21 days require approximately 9.4 grams/quail/day, while the 22-30 days requires about 11.3 grams/quail/day. As for the quail aged 31 days-reject an average requires 22.5 grams/quail/day. According to Wheindrata (2013), the average consumption of quails aged 0-7 days is 3.6 grams/quail/day, 8-14 days is 6.8gram/quail/day, age 15-21 days is 8, 9 grams/ quail /day, age 22-30 days is 10.8 grams/ quail/day, and age 31 day-reject is 14-18 grams/quail/day.

The vaccine for quail is given since the age of 4 days. The next vaccine schedule is at the age of 27 days, 60 days, and 2 months after the last vaccine schedule. The vitamin is given since the age of 1-14 days for the consecutive days with different doses and types of vitamins. Furthermore, at the age of 14 days-reject, the vitamin is given twice a week. Egg-tray is used to pack eggs to avoid damage, with the capacity of 100 items/tray. Disinfectant spraying is done twice a week, after using hatching machine and before the quails are moved from the starter to grower cage and from the grower to layer cage.

The breeders' income flow is obtained from the selling of consumed quail eggs, quail seed eggs, male quail, rejected quail, and quail poop. The average productivity level of laying quail and breeding quail is 80% per day. 5.000 laying quails produce 4,000 consumed eggs/day. 320 female breeder quails produce 256 seed eggs/day seed. The seed eggs which are not hatched are sold to other quail farmers. The male quail is sold as broiler quails at the age of 30 days. In the first year, the income from the male quail selling starts from the 3rd month. The average rejected quail reaches 50% of the population. The poop generated from 5,400 quails is approximately 1,5 sacks/day. The selling price of quail cultivation products on partnership pattern and independent pattern can be seen in Table 2.

Table 2 shows the selling prices differences between partnership patterns and independent patterns. The revenue of partnership pattern on the first year was Rp544.193.200 and on the second to seventh year was Rp555.921.200. The income of independent pattern in the first year was Rp 504.657.592 and in the second to seventh was Rp519.673.592. Based on the data processing from respondents of both pattern, it can be seen that partner breeders get

more income than the independent one, this is due to different selling prices between the two quail cultivation business patterns.

Table 2 – The Selling Price of Quail Cultivation Products on Partnership and Independent

Products	Partnership Pattern	Independent Pattern
Consumed quail egg	Rp 298/item	Rp 279/item
Seed egg	Rp 1,130/item	Rp 970/item
Male-quail meat	Rp 4,500/tail	Rp 7,000/quail
Rejected-quail meat	Rp 4,000/tail	Rp 5,200/ quail
Quail poop	Rp 10,000/sack	Rp 6,200/sack

The expenditure flow on quail cultivation business consists of investment cost and operational cost. The investment cost is the cost incurred by the breeders in the first year. Operational costs consist of variable costs and fixed costs. Investment costs consist of buildings, aviaries, hatching machines, vehicles, quail, and other equipment. The total investment cost to be spent in the first year by the partner breeders was Rp258.140.600, while the investment cost required by the independent breeders is Rp240.510.500.

Variable costs incurred by breeders consist of feed, vitamins, vaccines, egg-trays, and disinfectants. The average feed price for quail aged 0-30 days in partnership pattern is Rp6.682/kg, while the average feed price for quail aged 31 days-reject is Rp5.754/kg. The average feed price for quail aged 0-30 days in the independent pattern is Rp6.076/kg, while the feed price for 31 day-reject quail is an average of Rp5.876/kg. The total variable cost must be paid by the partner breeders is Rp305.640.538/year, while the independent breeder is Rp309.682.860/year.

The fixed costs consist of employee and owner salary, maintenance, electricity, land rent, telephone, transportation, and unexpected costs. Maintenance costs are budgeted at 1% which covers the vehicle, aviary/cage, and machine maintenance. The unexpected costs are budgeted at 2% of the total fixed costs. The total fixed costs to be incurred by partner breeders amounting to Rp120.582.000/year, while for the independent breeder is Rp118.100.000/year.

Investment analysis aims to determine the feasibility of quail cultivation business on breeders in Sukabumi. The investments analysis conducted on partnerships pattern and independent patterns using the principle of the current value of money is not equal to the future value of money. Investment analysis is also conducted to see what kind of quail cultivation business pattern is more profitable for breeders. The investment analysis in this study uses four criteria, namely NPV, IRR, Net B/C, and PBP. The interest rate used as a discount factor (DF) is 5% which follows the average bank interest rate in 2017. The results of the investment analysis on the partnership pattern and independent pattern can be seen in Table 3.

Table 3 – The Financial Analysis of Quail Cultivation Partnership Pattern

Assessment Criteria	Result	
	Partnership Pattern	Independent Pattern
Net Present Value (rupiah)	Rp 437.435.103	Rp 252.383.291
Internal Rate Return (percent)	48%	34%
Net Benefit and Cost Ratio	2,708	2,058
Payback Period (year)	2,58	3,64

NPV is the difference between the cost of revenue and expenses paid by breeders with DF of 5%. The NPV value obtained in the partnership pattern is Rp 437.435.103, while in the independent pattern is Rp 252.383.291. The NPV value in both patterns is positive, indicating that quail cultivation business on the partnership pattern and the independent pattern is feasible to be developed. IRR is the calculation of investment cost by calculating the interest rate of investment present value and Net Present Value in the future. The IRR value obtained on the partnership pattern is 48 percent, while in the independent pattern is 34 percent. IRR value is greater than the applicable discount rate of 5 percent. IRR > 5 percent indicates that quail cultivation business in both patterns is feasible to be implemented with an internal rate of return on partnership pattern and independent pattern are 48 percent and 34 percent respectively.

Net B/C is a comparison between positive Net Benefit value and negative Net Benefit value which has been factor-discounted of 5%. Net B/C value obtained in the partnership pattern is 2.708 which means that every Rp 1 capital issued by partner breeders will generate Rp 2.708 profit. The net value of B/C in the independent pattern is 2.058 which means that every Rp 1 capital issued by independent breeders will generate Rp 2.058 profit. Net B/C value which is greater than one indicates that quail cultivation business in both patterns is feasible to be developed. The period required for the return of all investment costs in partnership pattern and independent pattern are 2.58 years or equivalent to 2 years 6 months 29 days and 3.64 years or equivalent to 3 years 7 months 21 days respectively.

Sensitivity analysis was used to find out the maximum change in variable cost, selling price, and amount of production which can be tolerated so that quail cultivation business is considered as feasible. The determination of the switching value is obtained from the test results to produce the values of near-zero of NPV, near-discount rate of IRR, Net B/C equal to 1, and PBP which approach the project period. The result of switching value on partnership pattern and independent pattern can be seen in Table 4.

Table 4 – The Result of Switching Value on Partnership Pattern and Independent Pattern

Changes	Partnership Pattern (%)	Independent Pattern (%)
feed prices increase	29,38	16,66
selling price decrease	19,13	11,76
Production decrease	19,13	11,76

Based on the results of sensitivity analysis by using switching value presented in Table 4, the maximum limit of change toward feed-price increase, selling-price decrease of quail egg consumption, and quantity decrease of quail eggs consumption are 29,385469 percent, 19,126079 percent, and 19, 126080 percent respectively. If the change exceeds that limit, then quail cultivation business on partnership pattern will be unfavourable for partner breeders. The maximum limit of change toward feed price increase, selling price decrease of quail egg consumption, and quantity decrease of quail eggs consumption are 16,662,877 percent, 11,766656 percent, and 11,766656 percent respectively. If the change exceeds that limit, then quail cultivation business on the independent pattern will be unfavourable for partner breeders.

Based on the comparison of the maximum limit of changes, it can be seen that the feed prices increase have a smaller effect compared with selling-price decrease and production decrease in partner breeders and independent breeders. The result of switching value analysis to the pattern show that quail cultivation business is more sensitive to selling price decrease, and amount of egg production compared with feed price change. It can be seen from the significant percentage of change which can change the investment analysis value of quail cultivation business, both on the partnership and independent patterns. The maximum limit on partnership pattern has a greater value than the maximum limit on the independent pattern. This is due to the benefits obtained by partner breeders are greater than independent breeders.

CONCLUSION AND SUGGESTIONS

The investment analysis calculation result of NPV value obtained in the partnership pattern is Rp 437.435.103, while in the independent pattern is Rp 252.383.291. The IRR value obtained on quail cultivation partnership pattern is 48 percent, while the independent pattern is 34 percent. Net B/C value obtained in the partnership pattern is 2.708 which means that every Rp 1 capital issued by partner breeders will get a profit of Rp 2.708. The net value of B/C in the independent pattern is 2.058 which mean that every Rp 1 capital issued by independent farmers will get a profit of Rp 2.058.

Based on the investment analysis calculation, the level of profit gained in quail cultivation business on the partnership pattern is more profitable than the independent pattern. This is due to the price received by the partner breeders is greater than independent breeders'. The three-investment analysis shows the result of quail cultivation business in Sukabumi is feasible to be cultivated, both by partnership pattern and independent pattern, with PBP of partnership pattern

and independent pattern of 2.58 years or equivalent with 2 years 6 months 29 days and 3.64 years or equivalent to 3 years 7 months 21 days respectively.

The partnership pattern in quail cultivation business offered by CV SQF can provide value-added for partner breeders so that they can minimize losses and gain bigger profit. Based on sensitivity analysis by using switching value on the partnership pattern and independent pattern, it can be concluded that quail cultivation business is more sensitive to selling price changes and the amount of egg production compared with feed prices changes. It is necessary to have an explicit written contractual agreement about the rights and obligations between CV SQF and partner breeders. The purpose is to give mutually advantages for both parties and high commitment in running a partnership in quail cultivation business.

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PREVALENCE AND BACTERIAL ETIOLOGY OF MASTITIS IN SMALL RUMINANTS IN TORO LOCAL GOVERNMENT AREA, BAUCHI STATE, NIGERIA

Danmallam F.A., Postgraduate student
Pimenov N.V.*, Doctor of Biological Sciences, Professor
Moscow state Academy of Veterinary Medicine and Biotechnology, Moscow, Russia

Ngulukun S.S., Head of Department
Mwankon S.E., Researcher
Bacterial Research Department, National Veterinary Research Institute, Vom, Nigeria

*E-mail: pimenov-nikolai@yandex.ru

ABSTRACT

A study was conducted at Toro Local Government Area of Bauchi State, north-eastern Nigeria to assess the prevalence of clinical and subclinical form of mastitis in lactating small ruminants – sheep and goat and identify causative agents. A total of 348 mammary gland secretion (milk) samples comprising 108 and 244 from sheep and goats, respectively, were screened for evidence of mastitis. The overall prevalence of subclinical mastitis was found to be 16.7% (18/108) and 24.6% (60/244) in sheep and goats, respectively. The overall prevalence of clinical mastitis was found to be 5.6% (6/108) and 5.7% (14/244) in sheep and goats, respectively. California mastitis test (CMT) positive milk samples were subjected to bacteriological examination and found to be that in both sheep and goats, the predominant organisms responsible for mastitis were *Staphylococcus aureus*, followed by *Escherichia coli*, *Streptococcus* spp. and coagulase negative *Staphylococcus* and the least isolated microorganisms of different species including *Enterobacter cloacae*, *Klebsiella oxytoca*, *Klebsiella pneumoniae*, *Morganella morganii*, *Salmonella typhimurium*, *Proteus vulgaris*, *Citrobacter freundii* and *Bacillus cereus*. Therefore, it can be concluded that mastitis is an important disease affecting the productivity of small ruminants and quality of their product (especially milk) for their kids and consumers, hence measures need to be taken to control the disease.

KEY WORDS

Prevalence, small ruminant, mastitis, etiology, bacteria.

Small ruminants play an important role in the nutrition and income of people worldwide. It has been estimated that there are more than 460 million goats worldwide producing about 4.50 million tons of milk and 1.20 million tons of meat annually. Small ruminants in Africa produce only 14.0% of the world's milk [7].

Ogbeh A. (2016) spoke that, according to 2011 impressive statistics of National Agricultural Sample Survey indicated that Nigeria was endowed with an estimated 41.3 million sheep and 72.5 million goats, which had made Nigeria number one in livestock production in Africa [11], with the average daily milk production of 2.3 liters day⁻¹.

Goat milk is highly nutritious and has a similar nutritional profile to those of human's breast milk [6]. But milk quality may be affected by bacterial contamination of mammary gland, which causes clinical and subclinical mastitis [8].

Mastitis is a parenchymal inflammation of the mammary gland, characterized by physical, chemical and usually bacteriological changes in milk and pathological changes in glandular tissues [5]. The disease is caused usually by pathogenic bacteria and other microbes entering the gland through the teat duct [15]. Hence results in severe economic losses from reduced milk production, treatment cost, increased labor, milk withheld following treatment and premature culling [10].

In Nigeria several pathogens were isolated from cases of small ruminants mastitis, these include: *S. aureus*, *S. epidermidis*, *Corynebacterium* spp., *Str. agalactiae*, *Str. dysgalactiae*, *Micrococcus* spp., *Bacillus* spp., *Klebsiella* spp. *Pasteurella* spp., *Pseudomonas* spp., *Actinobacillus* spp. and *Alcaligenes* spp. [1].

Review of literature yielded very limited information on the diseases of small ruminants in Nigeria, particularly mastitis which is universally recognized as one of the most costly diseases in the dairy industry. This study was undertaken to isolate and identify major bacteria pathogens in the mammary gland secretion of mastitic sheep and goats.

MATERIALS AND METHODS OF RESEARCH

This survey was carried on 54 sheep and 122 goats with 108 and 244 quarters respectively from Magama, Unguwan Baro, Toro, and Tilde, located in Bauchi State, north-eastern part of Nigeria, were screened for mastitis using the California mastitis test (CMT) reagent. In the study areas, especially sheep are preferred animals next to cattle, which are manage under an extensive management system by an individual farmers. Farmers who own more than 5 sheep and goats keep their animals in barns while those who own less than 5 small ruminant animals keep them in their own houses.

To detect mastitis, physical examination including observation and palpation of the udders for symmetry and size, indurations and fibrosis, milk consistency and colour change, and any visible abnormalities were recorded. Sing of inflammation, lessions on the udder/teat skin, and presence of ticks were observed. Udders and teats were cleaned and dried before sample collection. The teats were disinfected with 70% alcohol before sample collection. The first few streams of milk were discarded and ten (10) ml udder half milk samples were collected in labeled sterilized test tubes and immediately transported in an icebox with ice to the laboratory for microbiological analysis.

Clinical mastitis was detected by gross signs of udder infection during physical examination and abnormal milk whereas subclinical mastitis (SCM) was recognized by apparently normal milk and positive (CMT).

The results for CMT were recorded as 0, trace, 1+, 2+ and 3+. In this study, CMT scores of 0 and trace were considered as negative while CMT scores of 1+, 2+ and 3+ were taken as indicators of subclinical mastitis.

The isolation and identification of bacterial pathogens were performed according to the procedure described by Quinn et al. (2002). In Brief, 0.1 ml milk sample was cultured on blood agar, nutrient agar, MacConkey agar and Brucella agar base. The inoculated plates were incubated at 37°C aerobically for 24-48 hours, while those on Brucella agar were incubated at 37°C anaerobically for 7 days. The bacterial pathogens were identified by morphology, haemolysis, Gram staining and biochemical test like catalase, oxidase, coagulase, reaction on SIM (sulphite, indole and motile) medium and fermentation of sugars.

RESULTS OF STUDY

Studies on the finding of the spread of mastitis among lactating small ruminants were carried out in the sheep and goat herds in cities of Toro Local Government Area of Bauchi State of the Republic of Nigeria. The results are shown in Table 1.

The data presented in Table 1 show that in the studied areas, regardless of the form of the disease, in the year mastitis was recorded from 15.4 to 18.8 and 14.3 to 30.4 in sheep and goats, respectively.

Out of the total of 108 samples examined, mastitis was diagnosed in 24 mammary gland secretion of sheep, which is 22.2 %. Out of these (24 affected samples), subclinical mastitis was diagnosed in 18 samples, which is 16.7 %, and clinically form - in 6 udder halves – 5.6 %. At the same time of the 244 examined udder halves secretion of goats, mastitis was found in 74 samples, which is 30.3 %. Thus subclinical mastitis was diagnosed in 60 samples, which is 24.6 % and the clinically expressed form - in 14 samples – 5.7 %.

Table 1 – The degree of prevalence of mastitis in small ruminants in Toro Local Government Area, Bauchi State, Nigeria

№	Name of town	Number of milking heads		Number of test samples		Forms of mastitis							
		sheep	goats	sheep	goats	subclinical				clinical			
						abs.		%		abs.		%	
						sheep	goats	sheep	goats	sheep	goats	sheep	goats
1	Magama	13	21	26	42	4	6	15,4	14,3	1	2	3,8	4,7
2	Unguan Barlo	13	24	26	48	4	12	15,4	21,4	0	4	0	7,1
3	Toro	16	51	32	102	6	31	18,8	30,4	3	5	4,9	5,9
4	Tilde	12	26	24	52	4	11	16,7	21,2	2	3	8,3	5,8
Total		54	122	108	244	18	60	16,7	24,6	6	14	5,6	5,7

From the data in the table 1 it shows that a particular danger is subclinical mastitis, occurring 3-4 times more often than the clinically expressed form of the disease.

Carrying out the bacteriological analysis on the scheme indicated previously (see Table 1) allowed obtaining the data on the microbial contamination of the affected sheep's and goat's mammary glands.

The results of bacteriological research allowed us to identify and partially characterize cultures of microorganisms in the secretions of the mammary gland. Their species composition is presented in Table. 2.

Table 2 – The relative prevalence rate of various bacteria isolated from the milk samples of mastitis sheep goats

Microorganisms	Frequency and percentage of isolates					
	Clinical mastitis, no (%)		Subclinical mastitis, no (%)		Total	
	sheep	Goat	sheep	goat	Clinical mastitis, no (%)	Subclinical mastitis, no (%)
<i>Staphylococcus aureus</i>	3 (33.0)	6 (66.7)	9 (42.9)	12 (57.1)	9 (36.0)	21 (18.3)
<i>Staphylococcus auricularis</i>	-	-	-	2 (100.0)	-	2 (1.7)
<i>Staphylococcus chromogenes</i>	-	1 (100)	1 (25.0)	3 (75.0)	1 (4.0)	4 (3.5)
<i>Staphylococcus caprae</i>	-	-	-	3 (100.0)	-	3 (2.6)
<i>Staphylococcus hyicus</i>	-	-	-	2 (100.0)	-	2 (1.7)
<i>Staphylococcus epidermidis</i>	2 (66.7)	1 (33.3)	1 (50.0)	1 (50.0)	3 (12.0)	2 (1.7)
<i>Streptococcus agalactiae</i>	1 (33.3)	2 (66.7)	5 (31.3)	11 (68.8)	3 (12.0)	16 (13.9)
<i>Streptococcus dysgalactiae</i>	-	2 (100)	4 (57.1)	3 (42.9)	2 (8.0)	7 (6.1)
<i>Streptococcus pluranimalium</i>	-	-	-	3 (100.0)	-	3 (2.6)
<i>Streptococcus uberis</i>	-	-	4 (80.0)	1 (20.0)	-	5 (4.3)
<i>Streptococcus ruminatorum</i>	-	-	-	3 (100.0)	-	3 (2.6)
<i>Escherichia coli</i>	2 (40.0)	3 (60.0)	9 (42.9)	12 (57.1)	5 (20.0)	21 (18.3)
<i>Enterobacter cloacae</i>	-	-	-	3 (100.0)	-	3 (2.6)
<i>Klebsiella oxytoca</i>	-	-	2 (66.7)	1 (33.3)	-	3 (2.6)
<i>Klebsiella pneumonia</i>	1 (100)	-	3 (60.0)	2 (40.0)	1 (4.0)	5 (4.3)
<i>Morganella morganii</i>	-	-	1 (25.0)	3 (75.0)	-	4 (3.5)
<i>Salmonella typhimurium</i>	-	-	-	3 (100.0)	-	3 (2.6)
<i>Proteus vulgaris</i>	-	1 (100)	-	3 (100.0)	1 (4.0)	3 (2.6)
<i>Citrobacter freundii</i>	-	-	-	2 (100.0)	-	2 (1.7)
<i>Bacillus cereus</i>	-	-	2 (66.7)	1 (33.3)	-	3 (2.6)
Total					25	115

The table 2 shows the type and frequency and percentage of microorganisms isolated in the four locations. The standard primary and secondary microbial identification procedures conducted on the CMT positive mammary gland secretion (milk samples) of lactating sheep and goats has revealed the isolation of twenty common bacterial organisms. In clinical mastitis, *Staphylococcus aureus* were the most prevalent pathogens with prevalence rate of 36.0 % followed by *E. coli* (20.0 %), *Staphylococcus epidermidis* and *Streptococcus agalactiae* (12.0 %) each, *Streptococcus dysgalactiae* (8.0 %), and the least isolated bacteria were *Staphylococcus chromogenes*, *Klebsiella pneumonia* and *Proteus vulgaris* with prevalence of 4.0 % each. On the other hand, in small ruminants with subclinical mastitis, *S. aureus* and *E.coli* were the most predominant isolates with prevalence rate of 18.3 %

followed by *Strep. agalactiae* (13.9 %), *Strep. dysgalactiae* (6.1 %), and the least isolated microorganisms were bacteria of different species including: Coagulase Negative *Staphylococcus* (CoNS) – *auricularis*, *chromogenes*, *caprae* and *hyicus*; *Streptococcus* – *plurimalium*, *uberis* and *ruminatorum*; *Enterobacter cloacae*, *Klebsiella oxytoca*, *Klebsiella pneumonia*, *Morganella morganii*, *Salmonella typhimurium*, *Proteus vulgaris*, *Citrobacter freundii* and *Bacillus cereus* with the prevalence rate of 4.3 % and below (Table 2).

DISCUSSION OF RESULTS

Small ruminants farming play an important role in the economic development of people in Nigeria, especially those in the rural areas. In Nigeria, the number of farms of dairy goat and sheep is increasing annually. An important task in these farms is to obtain the maximum amount of products and preserve the health of animals. Although the rearing of small ruminants is easy, affordable, less labor-intensive than cow, it is highly profitable, it is seriously hampered by various diseases, firstly mastitis. Inflammation of the mammary gland (mastitis) in small ruminants is predominantly subclinical (Contreras et al., 2007).

The prevalence of subclinical mastitis in sheep (16.7%) reported in this study is in close agreement with previous findings of Okoli et al. (2006) who reported 15.5 % prevalence in ewes recorded in abattoir in Imo State, south-eastern Nigeria. According to the current investigation, the total prevalence of subclinical mastitis in goats (24.6 %) and this is higher than in most of the previous studies carried out in the last 20 years in Nigeria, where the scores are between 10-19.1 % [3,12,17], and this is in close agreement with the results reported in other countries of the world like 25.6 % in Yathui/Wamunyu ward in Kenya [9]. However, the present finding is lower than the prevalence reported by other researchers in Nigeria (47.6 % by Alawa et al. (2000) in Zaria, Kaduna State (Nigeria). Similarly, the average percentage prevalence of clinical mastitis in small ruminants – sheep and goats (5.7 %) could not be compared due to lack of similar reports in small ruminants in the available literatures under Nigeria. However, these findings support the report of Sakar et al. (2011) who reported in other countries of the world (Bangladesh) prevalence of clinical mastitis in goats to be 5.27 %, but higher than the prevalence reported by other workers in Dagestan – 1.57 % by Aliev et al. (2013) and in Kenya – 1.9 % by Laban N.M. (2017).

Staphylococcus was the most predominant isolate in our study which accounted for about 36.0 and 18.3 % of the bacterial isolated in clinical and subclinical mastitis, respectively. This finding is in accordance with the literature and previous reports (Tambuwal et al. 2017; Alawa et al. 2000), *E. coli* and *Streptococcus agalactiae* were the second predominant isolates with prevalence rate of 20.0% and 12.0% in clinical mastitis and 13.9% and 18.3% in subclinical mastitis, respectively.

CONCLUSION

From the present study, it was concluded that the goats were more affected with both clinical and subclinical form of mastitis than sheep. At the same time, the prevalence occurrence of subclinical form of mastitis is 3-4 times greater than the clinical form. Moreover, mastitis in dairy small ruminants caused by bacterial microorganisms is very high (36.0%) in the study areas, followed by *E. coli* and *Streptococcus* spp. These organisms were found as the most predominant species that could be associated with other bacterial species that caused infection in the udders of small ruminants – sheep and goats. Present results suggested good attention and management practices to control or prevent the occurrence of the disease.

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DIFFERENCE OF LIQUID SEMEN QUALITY ONGOLE CROSSBRED USING DIFFERENT EXTENDERS STORED IN ICE FILLED THERMOS

Sulistyowati Deny*, Graduate Student

Faculty of Animal Husbandry, University of Brawijaya, Malang, Indonesia

Yekti Aulia Puspita Anugra, Wahjuningsih Sri, Susilawati Trinil

Department of Animal Production, Faculty of Animal Husbandry, University of Brawijaya, Malang, Indonesia

*E-mail: denz.dvm99@gmail.com

ABSTRACT

The purpose of this study was to know the difference of liquid semen quality Ongole crossbred in CEP-3 (*Bovine Serum Albumin* (BSA) in CEP-2 substituted with 0,4% albumen) and tris aminomethane yolks without raffinose which stored in thermos contained with ice cubes. Research was conducted at Sumber Sekar Laboratory Animal Husbandry Faculty of Brawijaya University. The variables observed were motility, sperm membrane integrity and total motile sperm. Data were analyzed using unpaired design T test, total motile sperm tested using *Pearson's Chi Square* with expectation value of 40 million motile sperm/ml sperm. The results showed that the extenders treatment of P1 and P2 did not give significant difference ($p > 0,05$) to sperm motility, but gave significant difference ($p < 0,05$) on the 4th and 6th hours preservation to sperm membrane integrity of Ongole crossbred stored in ice filled thermos. The conclusion of the research was CEP-3 and tris aminomethan yolks without raffinose have the same ability to maintenance quality of Ongole crossbred's liquid semen stored in ice filled thermos.

KEY WORDS

Liquid semen, ongole crossbred, extender, membrane integrity.

Artificial Insemination (AI) technology that is commonly done in Indonesia using frozen semen. The problem of frozen semen used in rural areas were the lack of liquid nitrogen availability. The alternative solution for this were using liquid semen. Liquid semen needs an extender which capable of retain the semen quality and also gives a good nutrition for the sperm during the preservation and cryopreservation (Devita *et al.*, 2014; Firdausi *et al.*, 2014). An extender needs to be made from available and affordable ingredients (Susilawati, 2011).

CEP-3 (*Cauda Epididymal Plasma -3*) is an extender made from modified CEP-2 research result from Sholikhah *et al.*, (2016) by using a 0.4% egg albumin to substitute *Bovine Serum Albumin* (BSA) and added with 10% egg yolk. The extender can retain the Ongole crossbred semen quality which stored in 3-5° C until day 6. Other extender used is tris aminomethane research result from Ratnawati *et al.*, (2017) showed that in the tris aminomethane without raffinose extender able to retain the motility and progressive motility of Madura bull sperm during 5 days of cold storage.

AI practice in the field needs to be carried by medium from the storage to AI acceptor. The medium is expected to be able to retain the liquid semen quality. The available medium for inseminator is a thermos. The storage temperature that could retain the liquid semen quality is a low temperature (Soeparna and Arifiantini, 2013) hence in this research, ice is used to keep the temperature low for longer period.

In accordance to the explanation above, the research is using CEP-3 added with 10% yolk and tris aminomethane without raffinose added with 20% yolk as extenders which are kept in thermos filled with ice to determine which extender is better to be applied on Ongole crossbred liquid semen.

MATERIALS AND METHODS OF RESEARCH

The research is conducted from August until November 2017 in Sumber Sekar laboratory of Animal Husbandry Faculty of Brawijaya University, Malang. The material for the research is fresh semen from 2 year old Ongole crossbred with body weight 237 kg. The fresh semen used in the research have ++ mass motility and 50-60% individual motility. The yolk and albumin used in the research comes from layer hen (egg is 3 days old or less).

The method used is laboratory experiment with 2 treatment and 5 repetition. The treatments are: semen is diluted with extenders P1: CEP-3 + 10% egg yolk and P2: tris aminomethane without raffinose + 20% egg yolk. Liquid semen is stored in ice filled thermos with initial temperature 0°C. Observation is done after the storage at 0 hour until 8th hour.

Before the collection, the Ongole crossbred is fed and cleaned on it's preputium. Semen from the Ongole crossbred is collected twice a week using an artificial vagina. Semen is collected in the morning. The collected semen would be tested macroscopically and microscopically. Macroscopic test including volume, color, consistency and pH test. Microscopic test including concentration, mass motility, individual motility and sperm membrane integrity.

Preparation CEP-3 diluent. Measuring ingredient 0.88 g NaCl (Merck; pro analysi); 0.52 g KCl (Merck; EMSURE); 0.44 g CaCl₂·2(H₂O) (Merck; pro analysi); 0.81 g MgCl₂·6(H₂O) (Merck; pro analysi); 1 g NaHCO₃ (Merck; pro analysi); 1.10 g NaH₂PO₄ (Merck; EMSURE); 2.72 g KH₂PO₄ (Merck; pro analysi); 2.72 g fructose (Merck; Darmstadt Germany); 1 g sorbitol; 8.2 citric acid (Merck; EMSURE); 16.19 g tris (Vivantis Inc. USA), dan 0.05 g gentamycin. The ingredients then added to an erlenmeyer flask and also added 1 lt of deionized water (DI), homogenized with a stirrer for 30 minutes, pH is kept at 6.6 with NaOH as buffer, 0.4% albumen and 10% egg yolk is added when the mixture is used as diluents (Sholikah *et al.*, 2016).

Preparation Tris Aminomethan without Raffinose. Ingredients are 13.63 g tris aminomethane (Merck; pro analysi); 7.62 g citric acid (Merck; EMSURE); 15 g lactose (Merck KGaA Darmstadt, Germany) and 5 g fructose (Merck Darmstadt, Germany), mixed in erlenmeyer flask, added with 800 ml aquadest and homogenized with a stirrer for 10-15 minutes. The temperature is lowered to 37°C then added 1 g of penicillin and 1 g of streptomycin homogenized again for 10-15 minutes. 20% egg yolk is added when the mixture is used as diluents (Susilawati, 2013).

The observed variables in this research is the quality of the sperm of the diluted semen, including:

- Individual motility is the progressive movement of the sperm. A drop of semen is taken and put on on an object glass and covered with cover glass then observed with light microscope at 400x magnification (Susilawati, 2013; Ax *et al.*, 2008).
- Sperm membrane integrity is measured with *Hypoosmotic Swelling* (HOS) test by adding 0,1 ml semen in 1 ml of HOS solution (7.34 g natrium citric and 13.52 g fructose in 1000 ml aquadest) incubated in 37° C for 30 minutes then observed with light microscope at 400x magnification (Susilawati, 2013).
- Total motile sperm. Counting of motile sperm by multiplying semen volume with sperm concentration and progressive motile sperm percentage (Susilawati, 2013).

Data from the research is analyzed with unpaired design T test. In the storage period reacing 40% motility and total motile sperm are tested with *Pearson's Chi Square* with expectation value of 40 million motile sperm/ml.

RESULTS AND DISCUSSION

Ongole crossbred semen quality. Average Ongole crossbred semen quality which are used in this research is presented in Table 1.

The evaluation showed that the average volume of Ongole crossbred semen used in this research is 2.26±0.7 ml which is lower than Sholikah *et al.*, (2016) which is 5.9±1.9 ml. Semen volume still can be categorized as normal according to Garner and Hafez (2008), bull

semen volume is varied around 1-15 ml or 5-8 ml per ejaculation. Color of semen is yellowish white which is normal according to Susilawati (2013) who stated that bull semen color normally yellowish white or milk white caused by riboflavin content. Average pH is 7 which is normal in accordance with Garner and Hafez (2008) who stated that bull semen pH is around 5.4 to 7.8. Consistency is moderate with sperm concentration $1176.00 \pm 146.56 \times 10^6$ sperm/ml. The result is in accordance with Susilawati (2013) who stated that semen consistency is consistent with sperm concentration. Semen consistency is considered moderate if the concentration contains 1000×10^6 - 1500×10^6 sperm/ml semen.

Table 1 – Average Ongole Crossbred Semen Evaluation

Variable	Average
Volume (ml)	2.26 \pm 0.70
Color	Yellowish
Consistency	Moderate
pH	7.00 \pm 0.00
Concentration (10^6 /ml)	1176.00 \pm 146.56
Mass motility	++
Individual motility (%)	56.00 \pm 2.24
Membrane integrity (%)	53.71 \pm 6.16

Microscopical test result showed mass motility ++ and individual motility with average $56.00 \pm 2.24\%$. Fresh semen with mass motility ++ or more can be used in AI practices (Shukla, 2011). Individual motility still can be considered as normal according to Susilawati (2011) who stated that motility of fresh bull around 70-90%. Percentage of membrane integrity of fresh semen is 53.71 ± 6.16 which is lower than Costa *et al.*, (2016) result which is $75.52 \pm 12.66\%$.

Sperm Motility during The Cold Storage in Ice Filled Thermos. Ongole crossbred liquid semen is stored with the medium inside the ice filled thermos with 0°C temperature. Sperm individual motility is observed every hour until the 8th one. Average percentage of sperm progressive motility is presented in Table 2.

Tabel 2 – Average Percentage of Sperm Motility

Storage time (hour)	Sperm Motility (%)	
	P1	P2
0	41.00 \pm 2.24	42.00 \pm 2.74
1	38.00 \pm 2.74	40.00 \pm 5.00
2	35.00 \pm 5.00	38.00 \pm 2.74
3	34.00 \pm 4.18	37.00 \pm 2.74
4	34.00 \pm 4.18	36.00 \pm 2.24
5	30.00 \pm 7.07	29.00 \pm 6.52
6	26.00 \pm 6.52	27.00 \pm 7.58
7	24.00 \pm 5.48	23.00 \pm 9.75
8	20.00 \pm 10.00	22.00 \pm 9.75

P1: CEP-3 + 10% egg yolks;

P2: Tris aminomethane without raffinose + 20% egg yolk.

According to Table 2, the average percentage of sperm motility of PO bull in the research showed a decline the longer it stored in the storage whether it is in P1 medium or P2 medium. This is in accordance with Agustian *et al.*, (2014) who stated that the longer the semen is stored in cold temperature will cause the decline in sperm potency and progressive motility. The decline of individual motility during the cold storage is expected to be caused by the decline of used energy. Lukman *et al.*, (2014) stated that decline in motility percentage of sperm during the storage is caused because the source of energy used by sperm is *glycerylphosphorylcholine*, fructose and sorbitol content in the semen.

Unpaired design T test Data analysis showed that the storage from 0 until 8 hour don't show any significant difference between P1 or P2 on sperm motility despite the percentage in P2 is higher than P1. This is probably because both of the extenders still have the same

capability on protecting the sperm. The ingredients of the extenders and addition of egg yolk could protect the sperm from cold shock.

Sperm Membrane Integrity during Stored in Ice Filled Thermos. Plasma membrane integrity is needed to retain the sperm viability (Shukla, 2011). HOS test is an easier method to know the functional integrity of the sperm membrane. The principle of the method is by exposing the sperm in a solution with low osmotic pressure (Rizal and Herdis, 2008). According to Zubair *et al.*, (2013) an intact sperm plasma membrane have positive correlation with motility and abnormality hence the test could be used to determine the semen quality.

Table 3 – Average Percentage of Sperm Membrane Integrity

Storage time (hour)	Sperm Membrane Integrity (%)	
	P1	P2
0	44.62±11.79	50.58±2.76
1	40.25±10.65	43.61±7.19
2	31.41±13.00	44.05±9.02
3	42.96±20.91	39.80±8.29
4*	27.52±9.75 ^a	49.43±14.70 ^b
5	38.75±12.62	46.73±8.31
6*	23.06±15.45 ^a	52.87±7.71 ^b
7	25.66±14.46	44.05±17.42
8	28.90±12.88	40.78±13.35

P1: CEP-3 + 10% egg yolks;

P2: Tris aminomethane without raffinose + 20% egg yolk;

*) Different superscript in rows shows significant difference ($P < 0.05$).

Table 3 showed the percentage of sperm membrane integrity stored in ice filled thermos have a tendency to decline. The percentage is lower than Costa *et al.*, (2016) because the average membrane integrity of the fresh semen is lower $53.71 \pm 6.16\%$.

The unpaired T test result showed that there's a significant difference on storage time 4th and 6th hour which showed that P2 gives a better membrane integrity than P1 but doesn't show significant difference on other storage time. The difference is expected to be caused by the existence of lactose in P2 extender which used as energy source and also a reducing substance and have a more stable structure which minimize the lipid peroxidation. Lipid peroxidation could cause the plasma membrane damage which would cause death (Rizal and Herdis, 2005). The addition of egg yolk on both extenders acted as the extracellular cryoprotectant substance. Egg yolk contain lipoprotein and lecithin which purpose is to protect the sperm plasma membrane (Yulnawati and Setiadi, 2005; Susilawati, 2011).

Total Motil Sperm. The success on AI procedure is also determined by total motility and morphology of sperm (Nikbakht and Saharkhiz, 2011). The average of total motile sperm of P1 and P2 which stored in ice filled thermos is presented in Table 4.

Table 4 – Average Total Motil Sperm

Treatment	Total Motil Sperm (million/ml)	
	4 th hour	5 th hour
P1	34.00±4.18	30.00±7.07*
P2	36.00±2.24	29.00±6.52*
Expectation value of 40 million motile sperm/ml		

P1: CEP-3 + 10% egg yolk

P2: Tris sminomethane without raffinose + 20% egg yolk

*) significant difference ($P < 0.01$)

Analysis with *Pearson's Chi Square* on storage time on 4th and 5th hour with expectation value of 40 million motile sperm per 100 million concentration showed no significant difference ($P > 0.05$) on 4th hour, but showed a significant difference ($P < 0.01$) on 5th hour. This means that liquid semen on extenders P1 and P2 still can be applied for AI until 4th hour because the total motile sperm doesn't show significant difference with expectation

value of 40 million motile sperm/ml, while the ones stored until the 5th hour no longer able to be applied on AI because the significant difference with expectation value of 40 million motile sperm/ml.

CONCLUSION AND SUGGESTIONS

According to the research, it can be concluded that CEP-3 + 10% egg yolk extender (P1) have the same capability with tris aminomethane without raffinose + 20% egg yolk (P2) in retaining the motility of Ongole crossbred sperm stored in ice filled thermos as medium, but the P2 could gives a better sperm membrane integrity during the 4th and 6th hour of storage than P1.

Suggestion from the research that need to do further research using semen with individual motility $\geq 70\%$.

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THE EFFECT OF 17 α -METHYLTESTOSTERONE HORMONE APPLICATION ON MASCULINIZATION AND GROWTH RATE OF VANAME SHRIMP LARVAE (LITOPENAEUS VANNAMEI, BOONE 1931)

Saleh Sahlan M.*

Master's Degree Program, Faculty of Fisheries and Marine Sciences,
University of Brawijaya, Indonesia

Widodo Maheno Sri, Kilawati Yuni

Faculty of Fisheries and Marine Sciences, University of Brawijaya, Indonesia

*E-mail: humas@ub.ac.id

ABSTRACT

Sustainable development of *Vaname* shrimp aquaculture in the future depends on several things, one of which is the availability of the male parent in a sufficient quantity. Regarding this problem, sex reversal can be performed as the solution. Sex reversal is a technique of sex genetic differentiation to change sexes artificially from males genetically into phenotype females or vice versa. This research was intended to obtain the maximal mono-sex (single sex) male of *Vaname* shrimp using 17 α -methyltestosterone (MT) hormone through sex reversal technology to the limited sex change in *Vaname* shrimp, in which to date the *Vaname* male parent gained is still dependent on natural selection. This research used a descriptive and experimental method. The experimental research design used was a completely randomized design (RAL – *Rancangan Acak Lengkap*). The treatment given was immersing the shrimp larvae in 17 α -methyltestosterone (MT) for 8 hours at different doses of 0 mg/L, 5 mg/L, 8 mg/L, and 12 mg/L. The immersion of the post-larvae (PL1) of *Vaname* shrimp using the 17 α -methyltestosterone hormone gave a significant result ($P < 0.05$) on all of the treatments and control in which the highest percentage of male *Vaname* shrimp was obtained from the treatments with 8 mg/L and 12 mg/L doses, respectively reaching 64% and 66.7%. As for the weight growth, the immersion of the post-larvae (LP1) growth of *Vaname* shrimp using 17 α -methyltestosterone hormone provided a very significant result ($P < 0.05$) on all the treatments and control in which the highest weight growth (weight gain) and *Specific Growth Rate of Body Weight* (SGR BW) were shown by the treatments with 8 mg/L and 12 mg/L doses, respectively reaching 1.5415 grams and 1.5871 grams.

KEY WORDS

17 α -methyltestosterone, masculinization, *Litopenaeus vannamei*, post-larvae.

Shrimp is one of the export commodities with a high economic value and great demand by the world market. Production of shrimp, especially Vaname shrimp, is always increasing every year, especially Vaname shrimp. Vaname shrimp is an introduced shrimp originating from the western coast of Latin America and has been successfully cultivated in Indonesia. Production of *Vaname* shrimp during 2010-2014 increased by 20.49% from 206.578 tons to 411.729 tons (the Ministry of Maritime Affairs and Fisheries, 2014).

Fishery aquaculture activities, especially shrimp farming, continue to be developed in Indonesia due to the increased consumer demand from time to time, that is to meet the needs of export markets. The world market's high demand in this commodity is a potential opportunity for Indonesia's natural resources to increase the country's foreign exchange value from the aquaculture sector.

The sustainable development of shrimp aquaculture in the future highly depends on several things, including the availability of male *Vaname* shrimp in a sufficient quantity. So far, male *Vaname* shrimp is still dependent on natural selection, causing the existence of *Vaname* male parent is on a limited scale. In order that *Vaname* parent still continues to exist

in the future, a breeding program needs to carry out. Such a program is hoped to make the availability of *Vaname* male parent no longer depend on natural selection. In line with this, sex reversal can be one means that provides a solution to the problem. Sex reversal is a technique of sex genetic differentiation to change sexes artificially from males genetically into phenotype females or vice versa. Changes in sex can occur naturally and artificially.

Physiologically, fish sexes can be directed or determined by using steroid hormones. In a simple, hormone administration aims to influence the balance of hormones in the blood that, at the time of sex differentiation, is very determining whether a particular individual will be male or female, in which the hormone is injected from outside the body Sumantadinata and Carman (1995). This research aimed to obtain the maximal mono-sex (single sex) male of *Vaname* shrimp using 17 α -methyltestosterone (MT) hormone through post-larvae immersion – sex reversal technology to the limited sex change in *Vaname* shrimp, in which to date the *Vaname* male parent gained is still dependent on the natural selection. Therefore, as an alternative to solve the problem, it is necessary to conduct relevant research soon so that the *Vaname* male population no longer depends on nature.

MATERIALS AND METHODS OF RESEARCH

Research Material. The tools used in this research were concrete tubs, aerator, hoses and aeration stones, camera, duster, tissue, electric microscope, petri dish, a digital scale, caliper, measuring cups, refrigerator, basins/ washbowls, thermometer, DO meter, pH meter, and refractometer.

The materials used in this research were post-larvae of *Vaname* shrimp (*Litopenaus vannamei*), post-larva feed, Methyltestosterone hormone, ethanol of 70%, formalin of 10%, Aquadest, hematoxylin and label paper.

Test Animal Preparation. The test animals used in this research were 1-day old post-*Vaname* shrimp larvae (*Litopenaus vannamei*) originating from the Production Center of Parent of Superior Shrimp and Mollusk (*Balai Produksi Induk Udang Unggul dan Kekekangan – BPIU2K*), Karangasem, Bali. The post-larva selection was done morphologically based on its morphological features such as length, weight, organ completeness, and body color. The acclimatization did not require a long time because the *Vaname* shrimp examined came from the same place, namely *BPIU2K*.

Test Animal Immersion into 17 α -methyltestosterone hormone solution. The post-larvae (PL) of *Vaname* shrimp were randomly selected and stocked into immersion aquariums with a density of 10 PL/L, so the total post-larvae stocked in each aquarium was 100 post-larvae (PL). The immersion process was performed for 8 hours at doses of 0 mg/L, 4 mg/L, 8 mg/L, and 12 mg/L with three replications. After that, the post-larvae were filtered and re-stocked in an aquarium containing 10 liters of new seawater. The control treatment was prepared without the addition of 17 α -methyl testosterone hormone.

Test Animal Rearing. The rearing of the post-*Vaname* shrimp larvae (*Litopenaus vannamei*) was carried out in 12 units of aquarium container, each of which contained 10 liters of water with a density of 10 PL/ liter, so the total post-larvae stocked in each aquarium amounted to 100 post-larvae (PL). The rearing was done indoors to make the change between night and day not too significant so that the post-larvae were not stressed by temperature changes. Substitution of water as the maintenance media was done every two days as much as 60-70% by being siphoned using a small hose and then replaced with clean and sterilized fresh water. At the end of the rearing period, namely PL60, the post-larvae in each aquarium were collected by means of siphoning the water first, and then the collected post-larvae from each aquarium were weighed for the purpose of growth rate analysis.

Determination of sex and sex ratio. Observation of the post-*Vaname* shrimp larvae given 17 α -methyltestosterone hormone treatments through immersion was done at the end of the research. The female post-larvae were characterized by a thelycum which is described as a small indentation between the fourth and fifth walking legs on both sides. Meanwhile, the male post-larvae were characterized by the appendix masculine on a pair of the second natatorial (swimming) legs and the gonophores complex on the fifth walking legs.

Percentage of Weight Growth. At the end of the test, each individual of the post-larvae from each group treatment was weighed and measured to determine the body weight. From the body weight measurement, the average of the final body weight (BW) and specific growth rate (SGR) were calculated. The body weight was measured using a digital scale with a precision of 0.0001 gram.

Statistical Analysis. One analysis of variance direction (ANOVA) was used to determine the difference between the treatments. Duncan test was also conducted to determine the significance of the difference between the treatments. The significance level of the results was set at $P < 0.05$. All the statistics were performed using SPSS (version 16).

RESULTS AND DISCUSSION

Percentage of Male Vaname Shrimp (*Litopenaeus vannamei*). In this research, the identification of male *Vaname* shrimp was performed after 60 days of rearing, in which the post-*Vaname* shrimp larvae were randomly selected and stocked into immersion aquariums with a density of 10 PL/ liter, so the total post-larvae stocked in each aquarium was 100 PL. The immersion process was performed for 8 hours at doses of 0 mg/L, 4 mg/L, 8 mg/L, and 12 mg/L with three replications. Furthermore, the rearing was done for 60 days to prevent the identification from the occurrence of errors. To determine the percentage of male post-*Vaname* shrimp larvae, the external sex was identified using a microscope.

Based on the observed percentage of male *Vaname* shrimp, the treatments of 17α -methyltestosterone hormone administration with different doses resulted in a higher percentage of male *Vaname* shrimp compared with that without the 17α -methyltestosterone hormone administration or the control. The observation data on the percentage of male *Vaname* shrimp at the end of this research can be seen in the following table and figure.

Table 1 – Ratio Percentage of Male Vaname Shrimp (*Litopenaeus vannamei*) on Various Treatments and Control

Immersion Duration	Doses of 17α -methyltestosterone Hormone			
	0 Mg/L	4 mg/L	8 mg/L	12 mg/L
8 Hours	54.7±2.1 ^a	61.7±2.1 ^b	64±4.0 ^{bc}	66.7±2.3 ^c

The data shown are the mean \pm standard deviation.
The letters denote Duncan Test difference.

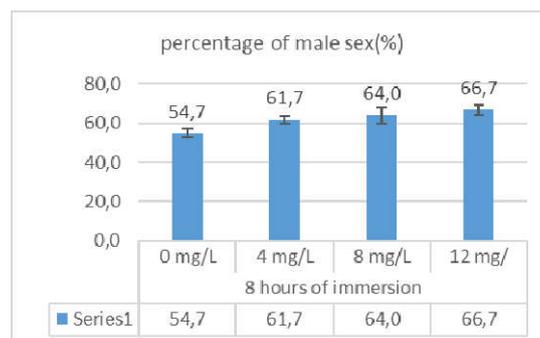


Figure 1 – Graph of Ratio Percentage of Male *Vaname* Shrimp on Various Treatments and Control

Based on the data above, it can be seen that the post-*Vaname* shrimp larvae (PL1) immersion using 17α -methyltestosterone hormone showed a significant result ($P < 0.05$) on all the treatments and control in which the highest percentage of male *Vaname* shrimp was obtained from the treatments with 8 mg/L and 12 mg/L doses, respectively achieving 64% and 66.7%. The 17α -methyltestosterone hormone containing steroids is an androgenic hormone, thus causing an increase in testosterone levels in the body of *Vaname* shrimp so as to generate masculinizing effects. According to Donaldson *et al.* (1978), steroids are hormones that can affect the reproduction of animals, stimulate the growth and differentiation

of genitals, as well as affect the behavior of fish and shrimp. Meanwhile, androgen hormones function to determine male sex and behavior, testicular development, sperm ducts and normal cleavage process of spermatogenesis.

Several factors affecting the success of sex reversal are size and age, duration of treatment, environment (Phelps and Popma, 2000), fish species, genetic, hormonal type, hormone dose, treatment time, (Dunham, 2004). Meanwhile, Tourir (1977) stated that sex reversal on *Macrobrachium rosenbergii* will be achieved well if done in the initial stadia before the formation of gonads. According to Charniaux-Cotton (1954), Hasegawa *et al.* (1993), and Tourir (1977), androgen hormones produced by the androgenic gland are responsible for influencing the development of primary and secondary male sexual characteristics in crustaceans.

Weight Growth of Vaname Shrimp. Based on the observed weight growth (weight gain) percentage of post-*Vaname* shrimp larvae, the treatments of the 17 α -methyltestosterone hormone administration with different doses resulted in a higher weight percentage of male *Vaname* shrimp compared to that without the 17 α -methyltestosterone hormone administration or the control. The observation data of the weight growth percentage of male *Vaname* shrimp at the end of this research can be completely seen in the following table and figure.

Table 2 – Ratio Percentage of Weight Growth and Specific Growth Rate of Body Weight (SGR BW) of Vaname Shrimp (*Litopenaeus vannamei*) on Various Treatments and Control

Immersion Duration	Doses of 17 α -methyltestosterone Hormone			
	0 Mg/L	4 mg/L	8 mg/L	12 mg/L
8 Hours	1.3601 \pm 0.0139 ^a	1.4601 \pm 0.0267 ^b	1.5415 \pm 0.0105 ^c	1.5872 \pm 0.0104 ^d

The data shown are the mean \pm standard deviation.

The letters denote Duncan Test difference.

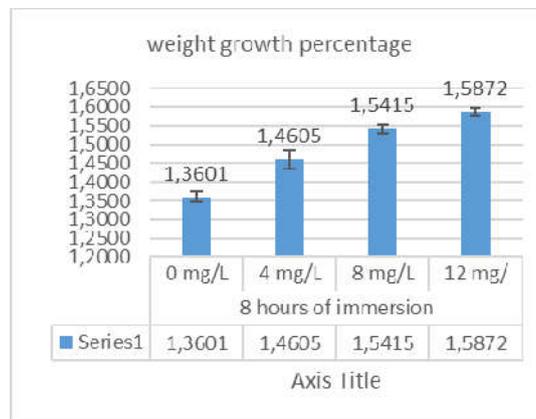


Figure 2 – Graph of Ratio Percentage of *Vaname* Shrimp Weight Growth on Various Treatments and Control

From the table and graph above, it is known that the post-*Vaname* shrimp larvae (PL1) immersion using 17 α -methyltestosterone hormone showed a very significant result ($P < 0.05$) on all the treatments and control in which the highest weight growth (weight gain) and specific growth rate of body weight (SGR BW) were obtained from the treatments with 8 mg/L and 12 mg/L, respectively reaching 1.5415 grams and 1.5871 grams. The increasing weight growth average of *Vaname* shrimp larvae if compared to the control in this research indicates that the 17 α -methyltestosterone hormone administration through immersion has been able to provide an effective effect on the weight growth of *Vaname* shrimp. This is consistent with Piferrer (2001) stating that the treatment of steroid hormones, in addition to affecting genital changes, can also have an impact on growth. According to Anthony *et al.* (1999), steroid hormones are greatly useful in protein synthesis in muscle formation. Meanwhile, Fullerton (1980) explained that, in addition to having androgenic properties, it

turns out that testosterone has anabolic properties, which can stimulate muscle growth. Because the concentration of dissolved synthetic hormones that enter the shrimp body is different, shrimps that absorb hormones with high concentrations grow much faster than other shrimps.

CONCLUSION

Based on the findings of this research, the use of 17 α -methyltestosterone hormone through immersion can increase the male *Vaname* shrimp percentage by 66.7% and the weight growth percentage by 1.5872 grams.

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THE DEVELOPMENT STRATEGY OF FISH PROCESSING INDUSTRY IN BANDA ACEH

Ernawaty*

Graduate Program, Syiah Kuala University of Banda Aceh, Indonesia

Indra, Ismayani

Faculty of Agriculture, Syiah Kuala University of Banda Aceh, Indonesia

*E-mail: ernawaty2019@gmail.com

ABSTRACT

The purpose of this study is to analyze and determine the development strategy that can be recommended in the fish processing industry in Banda Aceh. The analyses used are SWOT and QSPM analysis. The calculation result shows IFE matrix is 3,540 and EFE matrix is 3,024. Based on QSPM analysis results, there are 4 priority development strategies that can be recommended to the fish processing industry in the research area, i.e. perform diversification, promote, and innovate; increase human resource capacity through continuous coaching and training; establish partnership with other parties; strengthening and expanding local, national, and international markets.

KEY WORDS

Development, strategy, fish processing, business.

Processing of fresh / raw fish into processed fish is one form of handling of captured fish, to be durable and long lasting, but still favored by consumers and can also increase the value-added fishery products because at certain times the value of fish can be uneconomical where fish become decomposed and eventually thrown away if there is a surplus of marine fisheries production due to the lack of adequate supporting facilities such as ice factories, refrigerators, and fish processing factories.

The fish processing industry in Banda Aceh is still running conventionally, using only traditional technology, manual processing and the drying process still rely on sunlight. In that case, further research on the development strategy of the fish processing industry in the research area whether it can be one of the mainstay product of the region and become the processed type that can enrich the culinary in Aceh that can penetrate the industrial and overseas market, and increase the passion of the investor to invest in the research area so it will absorb many workers in the potential area in Banda Aceh and stimulate the growth of other fish processing industries, as well as improve the welfare of fishermen, processing businesses, workers, marketers of processed fish and also the surrounding community, so that the potential of this processed fishery can be a major driver of Aceh's economy in the future.

METHODS OF RESEARCH

This research was conducted in Banda Aceh, Aceh Province. The location determination was done with *purposive sampling* (Nasution, 2004), with the criterion that in the area is the area with fish processing industry. The objects of research are: the industry which process the sea fish into *abon* (shredded and dried fish), *dendeng* (jerked fish), and *kayu* fish bar; and related agencies. The scope of this research is the development strategy of marine fish processing industry.

The respondents are fish processor industries according to type of fish processing industry i.e. 2 respondents from *abon* processing industry; 2 respondents from *dendeng* processing industry; 4 respondents from *kayu* fish bar processing industry in the research area. The respondents from related offices are employees in charge to industrial and

fisheries development in Banda Aceh. The method of determining the respondents was done with *purposive sampling*.

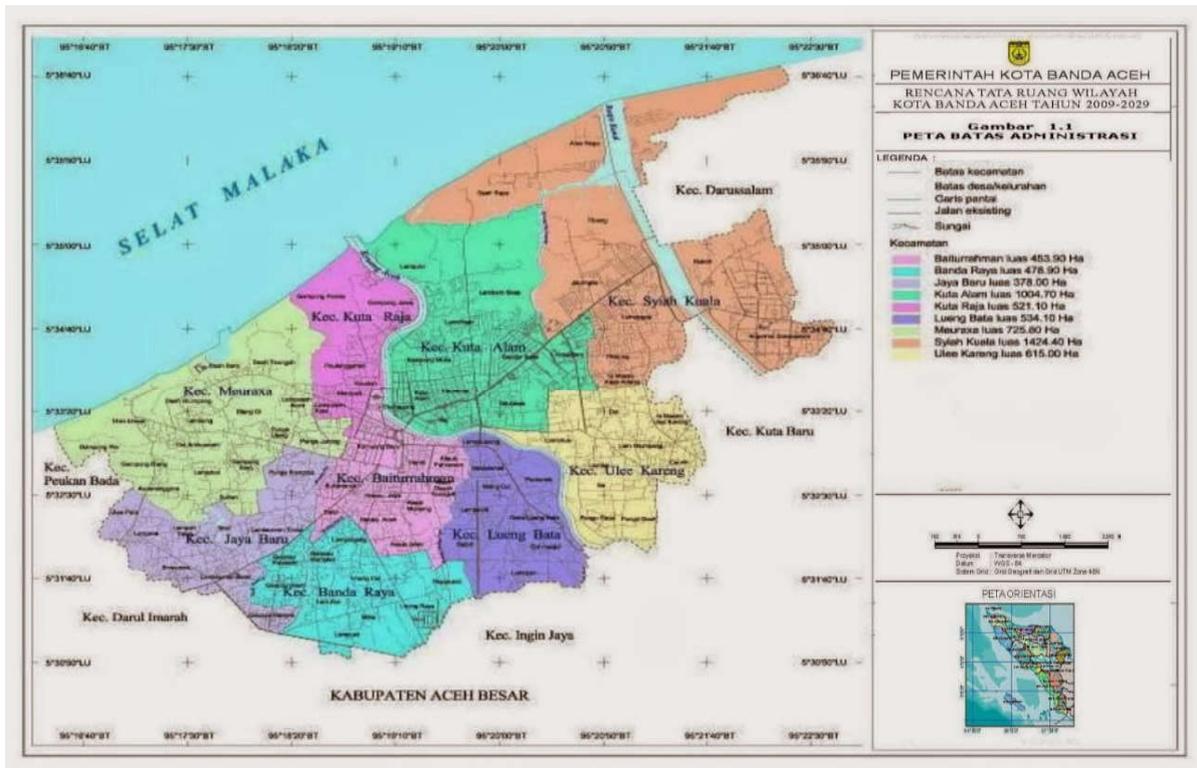


Figure 1 – Banda Aceh

The data collected in this study are consist of primary data and secondary data and arranged in such a way and corresponded to the needs of the analysis. Primary data obtained through direct observation and interviews with *key informants* by using the guided questionnaires that have been prepared previously. Secondary data is obtained from books, journals, literature, internet, and government agencies related to research. The analyses used are the analysis of *Strengths, Weaknesses, Opportunities, Threats* (SWOT) and *Quantitative Strategic Planning Matrix* (QSPM).

RESULTS AND DISCUSSION

The fish processing business owner should be able to predict what will happen in the future by looking at what happened in the past, so that the processor industry can prepare various alternative strategies to overcome any problems that arise so it will survive in the fluctuating condition of the country's economy. Table 1 below is the SWOT quality measurement and rate of the fish processing industry in the study area.

Based on Table 1 above it can be seen that the use of quality raw materials have the highest quality value of 0.151 become the *Strength* of the fish processing industry, with rating 4, and score 0.604, because the quality of good raw materials will certainly produce a good product as well; while the highest *Weakness* factor is traditional technology processing with quality value of 0.109, rating 4, and score 0.438, because the industry still rely on human-processing technology and minimal modern-technology assets; in the *Opportunity* factor, the highest quality measurement lies in the availability of abundant fish which is 0.150, rating 4, and score 0.601, because the production process depends on the availability of fish supply; meanwhile for the biggest *Threat* factor the effect is the price of raw materials with the quality measurement of 0.138, rating 3 and score 0.415, because if the price of raw materials rises, the processing industry will reduce the volume of its production or raise the selling price of its products.

Table 1 – SWOT Quality Measurement and Rate

Internal Strategic Factors	Quality	Rating	Score
<i>Strengths</i>			
1. Using high quality raw materials	0,151	4,000	0,604
2. Strategic industrial location	0,125	3,000	0,374
3. Easy processing and fast production cycle	0,140	3,000	0,419
4. Availability of experienced worker	0,136	4,000	0,543
5. Good product quality and innovation	0,143	4,000	0,574
<i>Strengths Score</i>	0,694		2,513
<i>Weaknesses</i>			
1. Traditional technology usage	0,109	4,000	0,438
2. Promotion	0,113	3,000	0,340
3. Waste management	0,083	3,000	0,249
<i>Weaknesses Score</i>	0,306		1,026
<i>Difference (Strengths - Weaknesses)</i>			1,487
Total	1,000		3,540
<i>External Strategic Factors</i>			
<i>Opportunities</i>			
1. Government support	0,134	3,000	0,403
2. Abundant availability of fish	0,150	4,000	0,601
3. Market	0,138	3,000	0,415
4. Partnership with other parties	0,099	3,000	0,296
<i>Opportunities Score</i>	0,522		1,715
<i>Threats</i>			
1. Competitor	0,111	3,000	0,332
2. Weather/Climate	0,126	2,000	0,253
3. Effect of the government's economic policy	0,103	3,000	0,308
4. Raw material prices	0,138	3,000	0,415
<i>Threats Score</i>	0,478		1,308
<i>Difference (Opportunities - Threats)</i>			0,407
Total	1,000		3,024

Source: Primary Data Processed 2017.

The source of fish taken from the Pelabuhan Perikanan Samudera Lampulo (Ocean Fishing Port; PPS) which is located not far (from 1 to 5 Km) from the industrial location and does not take a long time to transport the fish raw materials so the quality is maintained and minimize the transportation cost. The processor industry can ensure the use of good (even best) quality raw materials fish to produce the processed products because the Dinas Kelautan dan Perikanan (Department of Marine and Fisheries; DKP) Aceh in accordance with the Management of PPS Lampulo continues to increase the examination of the use of formalin, rodhamin and borax (dangerous fish preservatives) on fish, shrimp and other biota sold by traders in the PPS. According to the Head of DKP Aceh, the monthly supervision is stricted become twice a week, every Tuesday and Thursday at 07.30 to 10.00 WIB (Serambi Indonesia, 2017).

Fish processing process is quite easy because it using simple technology which can be done manually using human power and does not take a long time because it can be done 1 to 3 days including drying process for *dendeng* and *kayu* fish if only rely on sunlight, even for *kayu* fish the process can shortened by ½ day using sunlight and another ½ day by using fogging; while *abon* can be produced 1 day for 1 cycle of production. According Heruwati (2002) the fish processing activities in Indonesia are still classified as traditional fish processing and carried out on the scale of the home industry.

The fish processor industry owner has been running the fish processing industry for a long time -about 4-11 years- so she has been experienced with it. This fish processing industry has 2 to 4 workers who are always available in the business location, consisting of the owner himself, his family members, and the community around the business location.

The good quality processed fish products must have been known for most people, especially among culinary entrepreneurs in Banda Aceh such as food stalls, restaurants, and catering. They have become regular customers of these processors industry owners. The products have also been included in several exhibitions organized by the relevant agencies. Existing products such as innovation already packaged have been sold in souvenir shops

around Banda Aceh such as in Peunayong and Pasar Aceh. The promotion is generally only mouth to mouth (natural promotion process), so in the future it needs better promotion to improve its existence in the community so that the products are better known, sought, and purchased to increase its sales volume, so the industry income will also increase.

The geographical location of Banda Aceh may become an opportunity for the fish processing industry, in accordance with what was put forward by Putri et al. (2017) that Banda Aceh, which the area is mostly surrounded by ocean, has abundant sea produce, especially captured fish. Data of 2015 obtained from *Badan Pusat Statistik* (Central Bureau of Statistics; BPS) (2016) shows that the value of fishery production in Banda Aceh City for marine fishery subsector as much as Rp. 111.756 million. This is supported by the availability of adequate number of boat fleets in Banda Aceh as a vital equipment of supporting the result of captured fish of marine resources. The number of ships available in Banda Aceh City in 2012 is 423 units, 542 units in 2013, 2013 at 673 units, and 512 units in 2015 (Bappeda; Development Planning Agency at Sub-National Level of Aceh, 2016^a).

The policies of eradicating *illegal fishing* (one of them is done by drowning the foreign ships and ex-foreign ships) as a distinct step in the process implementation of Law no. 45 of 2009 on Fisheries to save fish resources at sea. This is one form of many support provided by the government to maintain the sustainability of fishery business in Indonesia including fish processing industry, because the rampant *illegal fishing* becomes one of the detentions in optimizing the marine resources in Indonesia. According to <http://en.beritasatu.com> in Nasirin and Hermawan (2017) states that due to *illegal, unreported, and unregulated fishing (IUU fishing)* Indonesia experienced a great loss, in line with that statement the Direktorat Jenderal Pengawasan Sumber Daya Kelautan dan Perikanan Kementerian Kelautan dan Perikanan (Directorate General of Supervision of Marine Resources and Fisheries of Marine and Fisheries Ministry; Ditjen PSDKP-KKP), Indonesia losses estimated Rp. 101,040 trillion / year due to *IUU Fishing*. Thus, the policy has had a positive impact on the sustainability of current marine resources; the increase of fish resources after the implementation of illegal fishing eradication policy that is with the increase of fish production landed at PPS Lampulo in 2015 as many as 11,105,093 Kg; and in 2016 as many as 12,579,921 Kg (The Technical Implementation Unit; UPTD PPS Lampulo, 2017).

The owners of these fish processing industries should continue to develop their potential, either independently or integrated by following coaching and training organized by government and private parties, especially in technology, management and marketing in order to improve the quality of industry in their business to increase profit. The training which ever been given is in the training on how to make drying fish; how to process fish according to the type of fish each processing steps; packaging; promotion product. The training was organized by the Dinas Pangan Pertanian Kelautan dan Perikanan (Department of Food Marine and Fisheries; DPPKP) and Dinas Kelautan dan Perikanan (Department of Marine and Fisheries; DKP) located inside and outside Banda Aceh such as Jakarta and Belawan, Medan. Among the interviewed respondents, there has been a trainer for beginner entrepreneurs. This can be used as an regional asset of human resources (HR) that must continue upgrading the knowledge in order to continue transferring knowledge to others who want to involved in the same business.

With the encouragement of Banda Aceh as a tourist destination for the last few years, increasing the number of domestic and foreign tourists who come to visit Banda Aceh it can be seen that from year to year the domestic and foreign tourists who visit Banda Aceh City continues to increase: in 2012 as many as 176,965 people, in 2013 188.035 people, in 2014 as many as 236,042 people and in 2015 reached 266,929 (Bappeda; Development Planning Agency at Sub-National Level of Aceh, 2016^a). This could make it a market opportunity for the fish processing industry to grow because the products can be used by tourists to take home their home country.

The number female workers (according to BPS number of female civil servants in 2015 are as many as 3859 people), the lack of consumers' time to prepare the type of food that takes a long time in the making process, causing many consumers, especially those who work, prefer practical food (convenient, fast and easy) more than self-processing food, it is in

accordance with what is submitted by *Direktorat Pengolahan Hasil* (Directorate of Processing Results) (2013): the development of value-added fishery products become something that must be done, this is due to the shifts that occur in the community, i.e: a) the changes of lifestyle ; b) changes in consumption patterns; c) the number of female workers; d) consumers prefer a more practical product and have a longer shelf-time. This is also in line with the results obtained by Karuniawati et al. (2017) that a female worker have higher frequency of purchasing processed fish compared to unemployed woman. According to BPS (2016) data, the average of consumption per capita for food of Banda Aceh's population, especially fish in 2014 is Rp. 82,597 and in 2015 of Rp. 73,732, this is the second largest expenses after expenses on practical food.

Table 2 – SWOT Matrix of Fish Processing Industry in Research Area

IFE	STRENGTHS (S)	WEAKNESSES (W)
	Using high quality raw materials (S1)	Traditional technology usage (W1)
EFE	Strategic industrial location (S2)	Promotion (W2)
	Easy processing and fast production cycle (S3)	Waste management (W3)
	Availability of experienced worker (S4)	
	Good product quality and innovation (S5)	
OPPORTUNITIES (O)	Strategy SO	Strategy WO
Government support (O1)	Product Diversification (S1, S4, S5, O1, O2, O3, O4)	Responsive to information and modern technology(W1, W2, W3, O1, O4)
Abundant availability fish (O2)	Market expansion and strengthening through partnership (S1, S2, S3, S4, S5, O1, O2, O3, O4)	Cooperate with both private or government investors, and academics(W1, W2, W3, O1, O2, O3, O4)
Market (O3)		
Partnership with other parties (O4)	Continuous capacity building of human resources either independently or by related parties (S4, S5, O1, O4)	
THREATS (T)	Strategy ST	Strategy WT
Competitors (T1)	Product Quality Improvement (S1, S5, T1, T3)	Alternative drying technology (W1, T2)
Weather/Climate(T2)		Carry out promotion towards both old and new customers (W2,T1, T3)
Effect of the government's economic policy (T3)	Development of production innovation, packaging and marketing (S2, S5, S4, T1, T2, T3, T4)	Waste processing becomes a new product (W3, T1,T3)
Raw material prices (T4)		

Source: Primary Data Processed 2017.

The number of owner who run the same industry causes the ownwe may compete in purchasing of raw materials. The same demand for raw materialst is likely to be a threat to the continuity the production process due to increasing price and limited access to raw materials. *The Masyarakat Ekonomi ASEAN* (ASEAN Economic Community; MEA), giving access to overseas products (around Southeast Asian countries) will be easier to enter Indonesia. If the local product is not able to compete it will soon disappear from circulation because it is unable to compete with imported products. This is in accordance with Wiranta (2015) who argued that weak bureaucracy support and technological backwardness is also a problem that causes the competitiveness of *Usaha Mikro Kecil dan Menengah* (Micro, Small and Medium Enterprises; UMKM) difficult to move up. It cannot even compete in overseas, when in the country alone is less marketable.

The fish processing industry must have various strategical alternative in the development of its business in order to face various challenges to survive in a fluctuating Indonesian economy. So the strategy that must be executed fish processing which consists of 10 strategies can be reclassified into 4 strategies as follows:

- Perform diversification, promotion and innovation;
- Escalate HR capacity through continuous coaching and training;
- Strengthening and expanding local, national and international markets;
- Establish partnership with other parties.

Table 3 – Results of QSPM Analysis (STAS Value) Priority Choice of Development Strategy of Fish Processing Industry in Research Area

No	Priority Strategy	STAS	Rank
1	Perform diversification, promotion and innovation	6,278	I
2	Escalate HR capacity through continuous coaching and training	6,101	II
3	Strengthening and expanding local, national and international markets	5,867	IV
4	Establish partnership with other parties	5,924	III

Source: Primary Data Processed, 2017.
STAS = Sum Total Attractiveness Score.

Based on QSPM analysis, 4 strategies of development strategy and its activities which can be recommended to fish processing industry in Banda Aceh are as follows:

- Perform diversification, promotion and innovation:

Perform quality control to maintain product quality from raw material selection to packaging; diversify products by making product variants: fish nuggets, *otak-otak* (grilled fish cake), *kerupuk ikan* (fish crackers), *kerupuk tulang* (bone crackers), *ikan kayu* crispy, *bakso ikan* (fish meatballs), *kaki naga* (fish drumstick); so that the consumer can choose the products according to their needs and tastes. Innovation can be done by adding flavor variants: original, sweet, spicy; for the industries that already have packaging to make more attractive packaging, including *Label Halal Majelis Ulama Indonesia* (Indonesian Council of Ulama; MUI) and product nutritional value, add recipes and cooking spices information in both inside and outside packaging. While for the industries that do not have packaging to make packaging attractive, hygienic and safe, so the product is secured and durable, include product brand information, *Label Halal Majelis Ulama Indonesia* (Indonesian Council of Ulama; MUI) and product information (such as product weight, expiry time and composition). This is in accordance with the results of research Effendi et al. (2016) that packaging designs influence purchasing decisions with the most influential variables are packaging labels.

In terms of promotion in increasing sales, can be done by marketing products directly to consumers either in offices, schools, airports, terminals by using a cooking demo system, potential customers can see first hand how the process of cooking into fast food and can instantly taste it so they are expected to be interested in purchasing this product; promotion through advertising in the mass media, distribution of brochures in public places; participating exhibitions frequently.

- Escalate HR capacity through continuous coaching and training:

Basically the fish processing's owner in the research area have been coached trained by related agencies such as the Dinas Kelautan, Perikanan dan Pertanian Kota Banda Aceh (Department of Marine, Fisheries and Agriculture of Banda Aceh), Dinas Peindustrian Kota Banda Aceh (Departement of Industry of Banda Aceh), and Dinas Perikanan dan Kelautan Provinsi Aceh (Department of Fisheries and Marine of Aceh Province), but in this modern era and strong business competition the fish processing's owner should always improve their knowledge and skills either independently by reading books / literature, internet, or follow various counseling and training. Therefore, it is necessary to improve the human resources' capacity sustainably; this can be done by participating in: counseling, guidance, consultation, internship, as well as training on production techniques of simple financial management; product diversification; processing technology; packaging; promotion and marketing. Through coaching, training, continuous facilitation of human resources capacity of fish processing industry both in terms of knowledge and skills can continue to be upgraded as the times progress.

It is in accordance with Howara (2013) which suggests that based on the SWOT analysis, the first strategy should be done is to empower the community, through improvement of human resources by providing training, coaching and apprenticeship to fishery companies, so as to obtain high value-added products, which is healthy so that the processed products are able to reach all the destination areas. Hendratmoko et al. (2015),

stated that find out the priority in the empowerment of fish processors can be done one of them with counseling, guidance, consultation, and training on fish processing techniques and business diversification in order to increase business so that processed products produced have high economic value, more hygienic processing methods and good quality with more modern technology so as to create product innovation.

- Establish partnership with other parties:

This strategy can be done by establishing and improving cooperation with government, private and academia; to create a good and creative business environment which can be done by establishing an active business group cooperation; guidance, supervision, counseling, mentoring from government and research recommendation from academia, for example find out the way of handling waste to be environmentally friendly or can become economical product, open access market information, technological innovation, sales promotion so as to produce quality products, safe for health and behavior in the market.

This is in accordance with Samadara et al. (2016) which stated that local governments and the public and private sector should be able to effectively identify, use existing resources and any means necessary to design and build the regional economy. The concept of partnership is a relationship of cooperation between business based on the principle of mutual support and mutual living based on the principle of kinship and togetherness. This partnership is one of the business strategies. Each of the actors involved directly must have a business ethic base that is understood and shared as a starting point in running the partnership.

- Strengthening and expanding local, national and international markets:

Strengthening the local market established through optimizing the marketing of local products. For local market strengthening, the government has a very important role to strengthen trade security in controlling imports to accommodate domestic products. In Kompas.com (2012) stated that according to the Secretary of the National Economic Committee, Indonesia's domestic market is still very potential until 2030. From the middle class factor with the character of high demand, the Indonesian market is very large. Based on data from the World Bank, Indonesia's middle class is 130 million people. While from the productive age (14-65 years), this is prevalent in all regions in Indonesia. 70% of Indonesian populations including productive age tend to have high purchasing power.

The market expansion can be done with the addition of new products that the community needs to complement existing products owned by the industry. This can be done by focusing on captive markets and more intensively on non captive markets. According to <https://en.wikipedia.org>, in Nugroho (2017) that the captive market is a market where potential consumers face the limitations of superior suppliers. The only option they have is to buy what is available or not to buy at all. Airports, hotels and terminals are also included in the captive market. Given the limited competition between suppliers in such places, the product can be sold at a high price.

Being a supplier of instant processed fish products during the Hajj season can also be done where currently the Hajj pilgrims will bring special food especially from the region of origin to meet their consumption needs while in Saudi Arabia. This will be a great opportunity for fish processors to meet the demand for these products because the numbers of Hajj pilgrims every year tend to increase. The following data reinforces the statement: According to Analisa news (Novandi, 2017) that the province of Aceh received an additional 1,282 quota of Hajj pilgrims by 2017. With the addition of this quota, it means that the hajj quota of Aceh during this pilgrimage to 4,393 people from previously only 3,111 people. So with the increase of Hajj quotas from year to year can make it as an opportunity for other fish processors industry, because according to expert respondents so far there is only one supplier for processed fish for Hajj pilgrims.

Improving and adding industrial infrastructure facilities such as using the internet, utilize applications such as Whatsapp, Facebook and BBM to further optimize the technology, which is done to speed up interconnection with colleagues or business partners so that business relationships can be done quickly, and efficient.

CONCLUSION

Based on QSPM analysis, there 4 strategies of development strategy and its activities which can be recommended to fish processing industry in Banda Aceh, i.e. 1) Perform diversification, promotion and innovation, 2) Escalate HR capacity through continuous coaching and training, 3) Establish partnership with other parties, 4) Strengthening and expanding local, national and international markets.

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ANALYSIS OF EXPOSED AND ACCUMULATED LEAD CONCENTRATION ON GOLDFISH GILLS (CYPRINUS CARPIO)

Waromi Rosalia, Student
Musa Muhammad, Kurniawan Andi, Lecturers
Faculty of Fisheries and Marine Sciences, Brawijaya University, Indonesia

*E-mail: rwaromy@yahoo.com

ABSTRACT

The purpose of this study is to analyze exposed and accumulated Pb concentration on goldfish gills (*Cyprinus carpio*). The method used is the experimental method and the design used in this research is Completely Randomized Design (RAL) consisting of four treatments and three replications. The goldfish were exposed to $Pb(NO_3)_2$ according to treatment and replication. Research result exhibited that Pb concentration in goldfish gills would accumulate as toxic in relatively small amounts on all treatments on the first day at 2.01 mg/l and control treatment (K1) of 2.36 mg/l at day-21. The highest concentration of Pb exposed and accumulated on goldfish gills was found in treatment 3 (L3) of 5.92 mg/l on day 21.

KEY WORDS

Lead, goldfish, concentration, gills.

Over time the use of heavy metal lead (Pb) is widely used in a variety of human activities such as the manufacture of batteries, ammunition, cables, lead plates, solder, pipes, paint, glass, ceramics, domestic waste, transportation and wastewater of lead mining (Lu, 1995). Water containing leads is caused by crystallization in the air. After a rain the lead is infused into waters, weathering rocks, the activity of the volcano and the process of erosion. One of the commonly used forms of Pb is $Pb(NO_3)_2$ which can cause pollution in the aquatic environment. It poses serious problems for the survival of aquatic organisms when they are exposed to it. Especially when it accumulated and exceeds the threshold. Aquatic organisms affected by $Pb(NO_3)_2$ are fish such as goldfish. Based on Khairuman's opinion (2005), goldfish (*Cyprinus carpio*) is one type of freshwater fish possessing high economic value and potential to be cultivated for a relatively short period of maintenance. Therefore goldfish is classified as a creature which is responsive to the environment. In addition, this particular fish can be used to evaluate the pollution levels of aquatic ecosystems. This goldfish can accumulate pollutants through the food chain (Farkas et al., 2002; Al and EI, 1999).

Lead is one type of heavy metal that can cause water pollution. Water polluted by Pb will have an impact on aquatic organisms (Ade et al., 2010). In order to determine the concentration of heavy metals in an aquatic organism, researchers used AAS method. AAS is a tool used to measure heavy metal components by absorbing light according to certain wavelengths by metal atoms in free conditions (Skoog et al., 2004).

The heavy metals that stay for long periods in the body of the organism will accumulate as toxins (Palar, 1994). Heavy metals in water will undergo a process of settling, absorption, and accumulated in sediments and aquatic organisms. There are several methods of heavy metals accumulation: through the skin, respiratory tract and food chain (Jardin, 1993).

Each type of heavy metal entering a water has different concentrations, but it will still pollute the aquatic environment and accumulate in the organism body. Before toxic heavy metals are dispersed throughout the body of the organism, it had to pass through the membrane and cell. Cell membrane will respond to heavy metals as a modification of cell membrane permeability. It would cause a disruption of ATP production resulting in disruption of the ion transfer system (Connell and Miller, 1995). This research has the purpose to know

the analysis of exposed and accumulated lead concentration (Pb) on goldfish gills (*Cyprinus carpio*).

LITERATURE REVIEW

Heavy Metals Lead (Pb). Lead (Pb) is one of the heavy metals that have the effect of poisonous and dangerous because it is both as pollutants and reactive interfere with survival of organisms that are in the waters. Lead or lead, in the scientific language called plumbum (Sumah and Aunurohim, 2013:7-8).

Mechanism of heavy metal's entry into the body of the fish through three phases namely: 1) through respiration or gills that absorb heavy metals. 2) through the food chain that is absorbed by the gastrointestinal tract and 3) the absorption of water into the surface of the body. The spread of toxic substances or heavy metals into the body will lead to damage to the permeability of the membrane so that it will interfere with the process of the formation of ATP followed by disruption of the system displacement of ions in the body (Connell and Miller, 1995:16-17).

Accumulation of Heavy Metals Lead (Pb). Waters that are contaminated or exposed by the heavy metals will affect aquatic organisms that live in it as with any other fish or goldfish. Accumulation in organism life can occur due to heavy metals that go into his body will form chemical bonds form complexes with organic substances found in the body. This impact of heavy metals is not fixed out of the body and stored in it (Benny et al., 2016:16-17). The process of accumulation of heavy metals in fish may occur in the physical or biological (biochemical). The physical process is the stick to heavy metal compounds on the surface of the body, the body, the Gill and other membrane holes sourced from water as well as compounds that stick to the pertikel. Biological process occurs through the process of the food chain that's been exposed and terinjek by heavy metals

(Nana, 2012:16-17). Lead is highly toxic heavy metals, have the nature of bioakumulatif in body organism and will hold water in accumulated until such organisms aren't able to tolerate the heavy metal content of lead in the body (Connell and Miller, 1995). Based on the opinion of the palar (2004) mention that the waters containing compounds or Pb ions which have a fairly high concentrations can cause death for biota living in the waters, where the concentration of Pb that reaches 188 mg/l can kill or resulting in death on fishes.

METHODS OF RESEARCH

The method used in this study is an experimental method, this method is a method of experiment used to investigate and test a theory to see a result of the variables or causal relationships that deserve to be investigated. Khotimah et al., (2013), states that The experimental method is to conduct experimental activities to determine a result. The results will confirm how the position of the causal relationship between variables is investigated. This research was executed from February to April - May 2018. This research was conducted in two laboratories: Fish Cultivation Laboratory FPIK and Chemistry Laboratory FMIPA University Of Brawijaya Malang East Java.

The design used in this study was Completely Randomized Design (RAL) consisting of four treatments and three replications. Goldfish live media was exposed to $Pb(NO_3)_2$ solution according to treatment and replication.

RESULTS AND DISCUSSION

Based on the measurement on exposed and accumulated Pb in goldfish gills according to treatment and replication, the average concentration of lead concentration (Pb) on goldfish gills (*Cyprinus carpio*) is exhibited in the Table 1.

Based on the results of Table 1 above it can be seen that during the 1st day all treatments do not change significantly. On the other hand the 21st day, each treatment undergoes significant changes or continue to increase in each treatment given. The

treatments are: control treatment (K1) without administration of lead exposure of nitric acid, treatment 1 (L1) with $Pb(NO_3)_2$ exposure 0.3 mg/l, treatment 2 (L2) with $Pb(NO_3)_2$ exposure 0.36 mg/l and treatment 3 (L3) with $Pb(NO_3)_2$ exposure 0.45 mg/l.

Table 1 – Average Measurement of Lead Concentration (Pb) on Goldfish gills (*Cyprinus carpio*)

Day	K1	L1	L2	L3
1	2.01	2.01	2.01	2.01
21	2.36	2.49	4.49	5.92

The Pb concentration contained in the aquatic biota is exposed $Pb(NO_3)_2$ on goldfish. It will be stored or accumulated from time to time. Therefore the aquatic biota can be used to indicate water pollution by heavy metals. According to Darmono (1995), the content of heavy metals in aquatic biota will usually increase over time as it is bio accumulative in nature. Therefore aquatic biota can be used as an indicator of heavy metal pollution in waters. The amount of heavy metal absorption and metal content weight in water is usually proportional, i.e the increase in heavy metal content in the tissue corresponds to the increase in the water content. In non-essential heavy metals (including lead), the content in the tissue increases steadily in accordance with the increase of heavy metal concentration.

The average result of Pb concentration measurement can be seen in Figure 1 below:

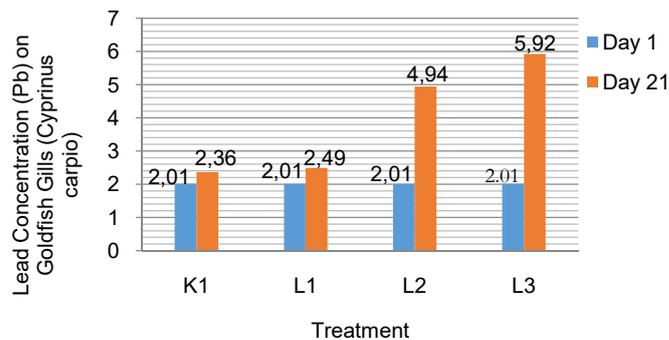


Figure 1 – Average Measurement Results of Lead Concentration on Goldfish gills (*Cyprinus carpio*)

The concentration of Pb on the gills of the goldfish will accumulate as toxic in relatively small amounts on all treatments on the first day 2.01 mg/l and the control treatment (K1) 2.36 mg/l on the 21st day as exhibited in figure 1 above. Heavy metals are generally toxic to living things. Although some of them are needed in small quantities (Supriyanto et al., 2007). Furthermore, the highest concentration of Pb exposed and accumulated in goldfish gills was in treatment 3 (L3) of 5.92 mg/l on the 21st day which can be seen in Figure 1. It indicates that Pb may contaminate and cause toxic properties. One of the pollutants that can pose a hazard, especially for fish, is heavy metal. This occurs when a number of metals have contaminated and found in high concentrations in the waters (Ade et al., 2010).

Accumulation of heavy metals in fish can occur due to contact between medium containing toxic with fish. Contact takes place with the removal of chemicals from the water environment into or the surface of the fish body, for example, heavy metals entering through the gills. The entry of heavy metals into the body of aquatic organisms occurs in three methods: through food, gills, and diffusion through the skin surface.

Gill is a respiratory organ or O_2 exchange organ. It often exposed to influence from water contaminants such as Pb. This is in accordance Wong's Opinion (2000) which suggests that gills, other than as a respirator, are also used as a means of regulating pressure between water and in the fish body (osmoregulation). Gills is the first organ that is directly related to toxic materials in the waters, with a wide and open surface, thus causing this section to be the main target for the toxic materials present in the waters.

CONCLUSION

Based on the research result, it can be concluded that exposed and accumulated lead concentration (Pb) on goldfish are indicated as follows: the lowest concentration was found on each day 1 treatment at 2.01 mg/l. It was also found in the 21st-day control treatment (K1) 2.36 mg/l. The highest concentration was found in 5.92 mg/l at treatment 3 (L3). It would pollute the aquatic environment and is considered toxic because the gill is a respirator organ directly related to water media exposed to pollutants such as lead (Pb).

SUGGESTIONS

Based on the conclusion presented above, it can be suggested that, in addition to knowing the concentration and accumulation of lead in each treatment given and exposed to the gills of goldfish, it is necessary to do further testing of lead concentration in some other goldfish organs so that will see the level of concentration and accumulation of different leads in each organs goldfish.

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THE IMPACT OF SUB-NATIONAL GOVERNMENT SPENDING IN MARINE AND FISHERIES SECTOR TOWARDS FISHERMEN'S INCOME: A CASE STUDY OF SABANG, INDONESIA

Dawood Taufiq Carnegie*, Masbar Raja

Faculty of Economics and Business, Syiah Kuala University, Banda Aceh, Indonesia

Mahyi Saputra, Student

Master Program in Economics, Syiah Kuala University, Banda Aceh, Indonesia

*E-mail: taufiq.dawood@unsyiah.ac.id

ORCID: 0000-0002-3264-2177

ABSTRACT

This study aimed to determine the impact of government spending in marine and fisheries sector in the form of fishing boat provisions to fishermen in Sabang, Indonesia. This study used primary data which was divided into two groups: beneficiary and non-beneficiary groups during 2013-2015 by using 60 fishermen. The data were analyzed using impact evaluation method. The findings showed that there were differences in the income between the action group that received the boat assistance with the size < 5GT and the control group as the comparison group that did not receive the assistance. The income difference, resulting from this assistance, was IDR 253,334 per month. It showed the real impact of physical assistance in the form of ship/ boat to the fishermen's income. The policy implication of this result is that this activity can be continued by more selectively verifying the submission request proposal so that the expenditure in marine and fisheries sector from Regional Government Budget (APBK) is evenly and in accordance with the target. In addition, it is also necessary to conduct socialization in which the assistance is not only in the form of physical assistance but also the assistance in the form of soft-skill including trainings.

KEY WORDS

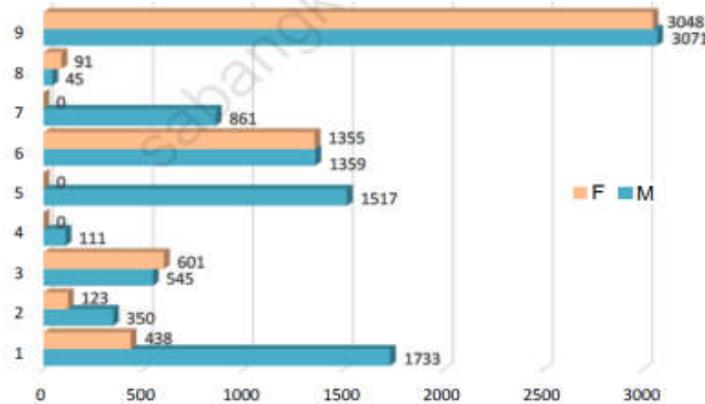
Regional Government expenditure, impact evaluation, income, fisheries.

The marine and fisheries sector is one of the sectors that sustain the Indonesian economy considering the vast area of the waters compared with the land area with the potential in every region that is different in large numbers. The expected direction of development is development that can improve the welfare of the society either whole or partially. Thus, the direction of development of the marine and fisheries sector is also a unity that affects each other. In this case, the marine and fisheries sector related to the level of fishermen's welfare that can be measured by increasing the living standard of the fishermen (Mous et al., 2005). The effort made to improve the marine and fisheries sector for a region are the participation of local/ municipal governments and the enormous involvement in sustainable development.

Sabang City is located in Weh Island of Aceh Province and is an area of archipelago that most of its territory is confronted with the sea, so it can be said that in a large number of coastal areas, the society are domiciled and have livelihoods as fishermen. According to Tipping (2016) fisheries are an important source of nutrition, income and employment for millions of people around the world. Sabang City consists of two sub-districts namely Sukajaya and Sukakarya Sub-Districts, each of which covers eighteen gampong(s) (villages) in which ten gampong(s) are located in Sukajaya Sub-District and eight gampong(s) in Sukakarya Sub-District. Most of the gampong(s) are directly adjacent to the sea namely the Andaman Sea and the Malacca Strait. With the characteristics of the region and the potential possessed by Sabang City, the marine and fisheries sector can be one of the sectors that

can be relied upon in the development and improvement of the welfare of its society (Mustaqim, 2018).

With the number of fishermen growing from year to year, it shows that the business opportunity to become a fisherman is very promising viewed from the potential of the available natural resources. Another thing that allows the business opportunities to be a fisherman is derived from parent's job who also works as fishermen.



Source: Analysis of Labor Condition of Sabang City 2015

Figure 1 – Working population based on occupation and gender in 2015

Based on Figure 1, Analysis of Labor Condition of Sabang City 2015, based on the description of the figure, it shows that the working population is based on the occupation and gender. Number 1 is for agricultural, plantation, forestry, hunting and fisheries work. Number 2 is for mining and quarrying, number 3 is for excavation, number 4 is for electricity, gas and drinking water, number 5 is for construction, number 6 is for trading, restaurant and accommodation services, number 7 is for transportation, warehousing and communications, number 8 is for financial institutions, real estate, rental companies and services and figure 9 is for social, social and individual services. Based on the figure of occupation, generally, the category of agriculture, plantations, forestry, hunting and fisheries for 2015 is in the second position compared to other categories. It shows that the marine sector is still a big interest of some people of Sabang City to become fishermen.

In Sabang City, most fishermen are labors who work for fisherman boss. However, it is possible that the labors with sufficient experience can become fisherman boss with the assistance from the government. It is also supported by the budget for the marine and fisheries sector which continues to grow every year. The development of budgeting is related to the Regulation of the Minister of Home Affairs number 32 of 2011 which is subsequently amended by Regulation of the Minister of Home Affairs number 39 of 2012 in which the contents of the Minister of Home Affairs Regulation is about granting funds derived from Regional Government Budget (APBK) funds. The issuance of the Minister of Home Affairs Regulation on grant and social assistance provides an opportunity for the community to make a proposal for grant assistance. Department of Marine and Fisheries which is one of the working units of the city in charge of the marine and fisheries sector and also received proposals submitted by the community, especially people who work as fishermen.

To provide answers to the proposals submitted, the Department of Maritime and Fisheries of Sabang City has prepared programs and activities so as to respond to the desire of small fishing communities to get the assistance. These programs and activities are contained in the Strategic Plan of the Department of Maritime and Fisheries Affairs of Sabang City, namely the Capture Fishery Development Program conducted through the Procurement of Fishing Means. From the many proposals submitted, all of these proposals are submitted to obtain assistance in the form of means therefore they are all submitted to the District Device Work Unit (SKPK) related to marine and fisheries; in this case is the

Department of Maritime and Fisheries of Sabang City. Proposal for assistance related to request for assistance in the form of funds (money) is submitted to the Department of Income, Financial Management and Regional Property of Sabang City. The form of assistance submitted through the proposal mostly applying for a boat to go fishing.

The provision of this assistance is also supported by bank account number that was not previously available in the Minister of Home Affairs Regulation number 13 of 2006. However, after the amendment of Regulation of Minister of Home Affairs number 21 of 2011, bank account number that supports to provide assistance directly to the community is available. This bank account number is included in the type of shopping with the code 5.2.2; the code of goods and services shopping whose name of the account is the purchase of goods. It will be submitted to the community/ third parties. This direct goods donation is not an asset to the Local Government.

Based on Table 1, programs and activities directly related to the community, especially fishing communities, increase in the budget on the activities of fishing facilities from 2013 to 2015.

Table 1 – Budget for the Program of Maritime and Fishery Department of Sabang City Associated with Direct Assistance of Goods to Fishermen Society (IDR Thousands)

Programs	Fiscal Year						
	2010	2011	2012	2013	2014	2015	2016
Community Empowerment in Supervision and Control of Human Resources	541,335	486,554	778,474	171,966	1,041,797	892,159	319,999
Development of Capture Fisheries	-	-	3,031,939	2,831,498	18,641,902	17,864,284	9,895,188
Activity: Procurement of Fishing Facilities	-	-	199,209	1,396,086	2,192,460	3,160,433	2,200,912
Development of Aquaculture	55,980	148,000	211,899	70,370	275,500	382,338	603,870
Optimizing Processing and Marketing of Fishery Production	252,000	380,331	81,327	91,948	305,293	941,317	481,929

Source: Budget Implementation Document of Maritime and Fishery Office of Sabang City, Fiscal Year 2010-2016.

Table 2 – The Role of Field Jobs against Gross Regional Domestic Product of Agriculture, Livestock, Plantation, Hunting and Agricultural Services Category (Percent) 2011-2015

Field Jobs		2011	2012	2013	2014	2015
Agriculture, Forestry and Fisheries		7.73	7.66	7.56	7.59	7.59
1.	Agriculture, Livestock, Hunting and Agricultural Services	5.26	5.20	5.23	5.23	5.19
	a. Food Crops	0.29	0.30	0.30	0.30	0.30
	b. Seasonal Horticultural Crops	0.17	0.17	0.17	0.16	0.16
	c. Seasonal Plantation	0.07	0.07	0.07	0.07	0.07
	d. Annual Horticultural Crops and others	0.60	0.60	0.59	0.60	0.59
	e. Annual Plantation	1.64	1.62	1.67	1.62	1.60
	f. Farms	2.43	2.38	2.36	2.42	2.42
	g. Agricultural and Hunting Services	0.07	0.06	0.06	0.06	0.06
2.	Forestry and Logging	0.10	0.10	0.09	0.09	0.09
3.	Fishery	2.30	2.27	2.27	2.26	2.24

Source: Gross Regional Domestic Product According to Field Jobs of Sabang City in 2011-2015.

From the available budget, based on the above data, it can be known in the 2013 to 2015 period that Department of Maritime and Fisheries of Sabang City has allocated the budget to be able to realize the request for assistance from a number of proposals submitted by the fishermen. The final expectation is that the fishermen who previously conducted fishing activities by riding on other fishing boats can use their own boats so that their increase in economic level can be realized through their increased income. However, with the increasing funding of programs and activities in the marine and fisheries sector that

increase annually, there is a negative correlation in which the value of Gross Regional Domestic Product for agriculture, livestock, plantation, hunting and agricultural services category especially in the sub-category of fishery continue to decline. The decline of Gross Regional Domestic Product can be seen in the Table 2.

This study was conducted to know, observe and analyze the impact of expenditure of Regional Government Budget (APBK) of Sabang City to increase fishermen community's income in the capture fishery of Sabang City. The impacts to be observed are the specific impacts for fishermen through a fishery development program that is implemented with the provision of fishing facilities.

METHODS OF RESEARCH

Research Setting, Subject and Data Collection Technique

The study was conducted in two sub-districts in Sabang City where there were individuals and groups of beneficiaries in the form of goods whose funds came from Regional Government Budget (APBK) of Sabang City which was implemented by the Department of Maritime and Fisheries of Sabang City. The required data were obtained by using two kinds of study consisting of field study and literature study. Field research was conducted to obtain some primary data directly from the respondents by using interview, observation, and questionnaire techniques (Marschan-Piekkari and Welch, 2004). The secondary data were obtained from the Department of Maritime and Fisheries of Sabang City and other agencies associated with this study.

Research Population and Sample

The population is fishermen communities who has submitted proposal of grant assistance of goods and have received grant assistance of goods with population amounted to 145 people in fiscal year 2013 until 2015. The sample of this research is taken from both sub-districts in Sabang City which receive grant assistance of goods in the form of ship/ boat under 5 GT. From the calculation, it obtained the number of samples as many as 59 people who then fulfilled into 60 people or 49.51% of the number of fishermen. The research sampling was performed randomly using simple random sampling. Then, the number of samples taken—based on each assistance year—is redefined by the formula:

$$n = \frac{\text{Class Population}}{\text{Total of Population}} \times \text{The total of defined population}$$

Data Analysis Method

The data analysis method used in this study is impact evaluation method. According to the World Bank in (Onwuegbuzie & Hitchcock, 2017) the impact evaluation method is a method used for measuring a particular development activity such as programs and activities which are used to systematically identify the positive or negative effects of programs and activities on household, institutions and environment objects. This method is used to determine the impact of success of a government program on the marine and fisheries sector to the fishermen's income in Sabang City.

According Suryahadi in (Anggriani, 2012) impact evaluation method is conducted by comparing the two groups by performing measurements of indicators before and after the program/ activity or intervention of particular group. The measured indicator is the monthly income level for each group; as the baseline is the income of the action and control groups of the fishermen in 2012. The impact indicator which is an indicator after the intervention of the program is the level of income of the action and the control groups in 2016. The differences of the indicator value at impact and baseline were calculated from each group. Furthermore, the two differences were subtracted (the difference in the difference), resulting in the value of the impact from the program intervention.

The formula for calculating the difference in the difference is as follows:

$$\Delta Y = (Y_{A1} - Y_{A0}) - (Y_{K1} - Y_{K0})$$

Where:

- Y_{A0} = Fishermen's income per month before boat provision;
- Y_{A1} = Fishermen's income per month after boat provision;
- Y_{K0} = Fishermen's income from control group per month before boat provision;
- Y_{K1} = Fishermen's income from control group per month after boat provision.

If it is illustrated, then the impact measurement from the expenditure of Regional Government Budget (APBK) of the marine and fisheries sector in the form of ship/ boat assistance can be seen in the following figure:

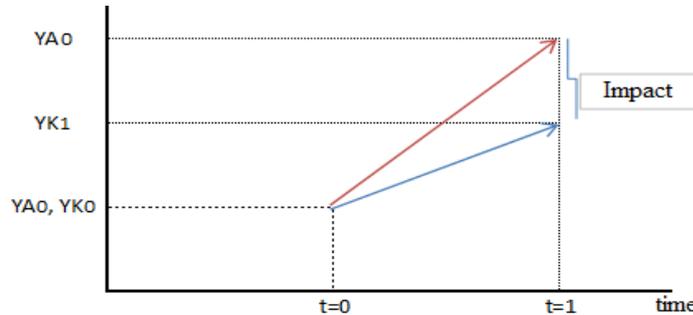


Figure 2 – Impact Measurement on Control Group

The steps taken to analyze the impact were: 1) performing validity test and reliability test, 2) performing independent t-test and compare-means test, and 3) calculating the impact by: calculating the average difference of income per capita and per month from action group before and after boat assistance and calculation of yield difference on points a) and b).

RESULTS AND DISCUSSION

Reliability Test and Validity Test of the Data. Data collection to seeing the impact of the expenditure of Regional Government Budget (APBK) is in the form of boat assistance based on a verified proposal and it was obtained through questionnaire data from the action and control groups. Prior to the analysis of the assistance impact of the expenditure of Regional Government Budget (APBK), reliability and validity tests should be conducted. The data collection that has good quality is the result of reliable data collection that has proven its reliability and validity which is determined by the quality of the research instrument (Kuncoro, 2003).

Reliability testing aims to measure the questionnaire that is an indicator of the variable or construct in which the questionnaire is considered to be reliable if one's response to a statement is consistent or stable over time. A measuring tool in the form of a questionnaire is considered to be reliable if a measurement with the same measuring tool repeatedly will give relatively the same results. To know the reliability of a questionnaire, it uses a statistical approach to see the reliability coefficients in which if the reliability coefficient is greater than 0.60 then it can be said that the whole statement is reliable. Reliability test used in this research is using Cronbach Alpha (α) method.

Based on the reliability test using SPSS version 22, the result obtained from Cronbach Alpha is 0.643 in the action group and 0.688 in the control group. It indicates that the Cronbach Alpha value is greater than 0.60 which can be said that the occurrence of measuring error in the questionnaire filled by the action and control groups is likely to be low. The complete reliability test results can be seen in the following Table 3.

Table 3 – Table of Reliability Test

No	Groups	Cronbach's Alpha
1	Action	0,643
2	Control	0,688

Source: Primary Data Processed.

Furthermore, validity test is conducted with the aim to measure the validity of a questionnaire. A questionnaire is considered to be valid if the questions on the questionnaire are able to reveal something that will be measured by the questionnaire. If the level of validity of a variable is higher, the test is increasingly mastering the target and increasingly showing what should be shown. Validity test using Pearson correlation is performed by calculating the correlation coefficient between each value on the question with the total value of the question number. The significance of correlation coefficient obtained is then tested by comparing the r-table value. If the result of r-count is greater than r-table, then the questions are valid. From result of validity test to action and control groups, result obtained is r table value equal to 0.2542 for each sample consisting of 60 fishermen. The result of the validity test for the questionnaires for each action and control groups can be seen in Table 4 and Table 5. The test result in the action group shows that the mean value of r-count > r-table. It indicates that all questions in the questionnaire are significant and are considered to be valid.

Table 4 – Table of Validity Test of Action Group

Questions	r-count	r-table	Results
Attending training	0.369	0.2542	Valid
The attended training	0.345	0.2542	Valid
The year of getting assistance	0.31	0.2542	Valid
Boat ownership before getting assistance	0.264	0.2542	Valid
Type of boat used previously	0.405	0.2542	Valid
Type of ship/boat obtained from the assistance	0.64	0.2542	Valid
Frequency in going out of sea in a month	0.418	0.2542	Valid
Duration in going out of sea to catch fish	0.801	0.2542	Valid
Duration required to reach the target of the fishing area	0.646	0.2542	Valid
Distance to the fishing area	0.847	0.2542	Valid
Cost to go to sea	0.689	0.2542	Valid
Cost (working capital) to go to sea in one time	0.495	0.2542	Valid
The average of fish catching in one time sailing	0.621	0.2542	Valid
The sale result of fish catching in one time sailing	0.631	0.2542	Valid
The average result of fish catching in kg	0.533	0.2542	Valid

Source: Primary Data Processed.

It applies to the validity test in the control group where the value of r-count > r-table. It also shows that all questions in the questionnaire are able to be understood by the respondent so that all questions in the questionnaire are significant and can be considered as valid. An invalid answer explains that the respondent has homogenous answer so that the value of r-count tends to be smaller.

Table 5 – Table of Validity Test of Control Group

Questions	r-count	r-table	Results
Duration of working as fisherman	0,38	0,2542	Valid
Frequency in going out of sea in a month	0,29	0,2542	Valid
Duration in going out of sea	0,748	0,2542	Valid
Duration required to reach the target of the fishing area	0,733	0,2542	Valid
Distance to the fishing area	0,868	0,2542	Valid
Cost (working capital) to go to sea in one time	0,884	0,2542	Valid
The origin of capital to go to sea	0,535	0,2542	Valid
The average of fish catching in one time sailing	0,549	0,2542	Valid
The sale result of fish catching in one time sailing	0,519	0,2542	Valid
The average result of fish catching in kg	0,407	0,2542	Valid

Source: Primary Data Processed.

Independent t-Test and Compare Mean Test. The impact evaluation test of expenditure from Regional Government Budget (APBK) to the income of action and control groups was done by performing t-test independently and compare mean test. It aimed to see the average comparisons or increases in earnings before and after receiving the assistance as well as

testing the differences in treatment of the groups that receive assistance with those who do not receive assistance. This research uses nominal income variable from action group of fishermen and control group of fishermen. The data processing using T-test was performed by using SPSS version 22.

Independent and compare mean tests were used as different test form, but both have unequal treatment. Independent test was performed to test the differences between the two groups with the same initial conditions while the compare mean test was performed to test the changes of each group separately. The average value of each group was taken as an impact form of expenditure from Regional Government Budget (APBK) to fisherman's income.

This test used the H0 hypothesis on the average income of the action and the control groups which has no difference as a result of expenditure from Regional Government Budget (APBK). Meanwhile, H1, which is the average income of the action and control groups, has a difference due to expenditure from Regional Government Budget (APBK). The decision to accept and reject the hypothesis can be seen in the t-test for equality table with the following conditions: if sig. value < 0.05 then H0 is rejected and it is concluded that there is a difference of income between the two groups. Conversely, if sig. value > 0.05 then H0 is received or the two groups have no difference in income.

Results and Income Analysis on Action and Control Groups. The steps prior to analyzing the income of each group are: first the intergroup testing needs to be performed firstly so that the set of groups selected as the research sample does not contain differences or have the same initial conditions. Test results can be seen in Table 6 as follows:

Table 6 – The Results of Independent t-Test

Variable	Initial Group	Mean	Mean Difference	T-test Equality of means	Sig.
Nominal income	Action	2.525.000	11.667	0.151	0.880
	Control	2.513.333			

Source: *The Result of SPSS Output, 2018 *significance of 5 percent.*

Table 6 describes the indicators in viewing the differences using the income of action and control groups variable before obtaining assistance from the Regional Government Budget (APBK). The results explained that the action group had an average value of IDR 2,525,000 and the control group's income mean was IDR 2,513,333. The group income difference is explained by the mean difference of IDR 11,667. Statistically, both groups obtained t-test equality of means of 0.151 or sig 0.880, so the conclusion is that H0 is accepted. The initial conditions of the action and the control groups had no income difference due to the sig. value of 0.880 is greater than 0.05 or 5 percent. These results illustrate that this study is appropriate in taking samples of 60 people even though nominally they have differences.

Secondly, after the conformity of each group is obtained, the next step is to examine the impact of expenditure from Regional Government Budget (APBK) to fishermen's income. The impact of Regional Government Budget (APBK) in this study applies only to the action group whereas the control group does not get assistance from Regional Government Budget (APBK). The result of group differences from the Regional Government Budget (APBK) assistance is described in the following Table 7.

Table 7 – Fishermen's Income Before and After (Compare Mean)

Groups	Before (2012)	After (2016)	Mean Difference	T	Sig.	Conclusion
	Mean	Mean				
Action	2.525.000	3.075.000	550.000	19.87	0.000**	H0 is rejected
Control	2.513.333	2.810.000	296.666	19.74	0.000**	H0 is rejected

Source: *The Result of SPSS Output, 2018 *significance of 5 percent ** significance of 1 percent.*

Table 7 shows the action group that uses the assistance from Regional Government Budget (APBK) and action group that does not use the assistance from Regional Government Budget (APBK). The effects of both groups were examined from 2013 to 2015. The income of the action group before using the Regional Government Budget (APBK) was 2,525,000 and the control group 2,513,333. Furthermore, the income of the action group after using the APBK assistance was 3,075,000 and the control group income was 2,810.00. The increase in action group's income was 550,000 and control group's income was 296,666. Statistically, both groups are significant then there is a difference or change of income or reject the H0 because the value of sig. is 0.000 less than 1 percent but the impact of the Regional Government Budget (APBK) to the action group's income is greater compared to the control group.

The difference in impact evaluation method in Table 8 explains that assistance can provide a substantial increase in the income of fishermen compared to those who do not receive assistance. The income gap between the action group and the control group is 253,334 for 3 years. This difference may be even greater in the coming year.

Table 8 – Impact Evaluation

Groups	Before (2012)	After (2016)	Changes in Percentage (%)	Mean Difference	Impact (ΔY)
	Mean	Mean			
Action	2.525.000	3.075.000	21,78	550.000	253.334
Control	2.513.333	2.810.000	11,81	296.666	

Source: *The Result of SPSS Output, 2018.*

The use of assistance received by the action group is generally in physical assistance namely the assistance of boats with a size smaller than 5 GT. Previously, these fishermen had to work on other people or ride on other fishing boats so that their catch was sold by way of profit sharing. It caused the income of fishermen to be under 2.5 million rupiah per month. With the assistance of these boat, the fishermen can travel a longer distance so that they can catch more fish and this assistance can reduce the cost to make their own ships.

The findings of this study have similarities with a study conducted by Anggraini (2012) which states that the group receiving assistance has real incomes compared to the group that does not receive the assistance. These findings are also supported by Muchlisin (2013) which states that subsidized physical goods assistance can provide stimulus for fishermen but on condition that subsidized conditions are in line with the demand of fishermen although the provision of assistance in the form of cash is not very effective.

CONCLUSION AND SUGGESTIONS

The action group has an average value of income of IDR 2,525,000 and a control group of IDR 2,513,333. The group income difference is explained by Mean Difference of IDR 11,667. Statistically, both groups got T-test equality of means of 0.151 or Sig 0.880. Thus, the conclusion is that H0 is received where there is no difference in income in the initial conditions of the action group and the control group. The income of the action group after using the Regional Government Budget (APBK) assistance was IDR 3,075,000 while the control group's income amounted to IDR 2,810,000. The increase in action group's income was IDR 550,000 and the control group's income was IDR 296,666. Statistically, both groups are significant where the difference or change of income occurs so that H0 is rejected because the sig. value is 0,000 less than 1 percent. Difference in impact evaluation explains that assistance can provide a considerable increase in fishermen's income compared to non-beneficiaries. The income gap between the action group and the control group is 253,334 for 3 years. This difference may be even greater in the coming year.

Based on the findings and conclusions of the research then it is recommended as follows:

- For the government of Sabang City, the assistance in physical form gives a real impact on the change of fisherman's income. Therefore, the program is feasible to be

continued. Then, the government should be more selective in verifying the incoming proposal for the request for assistance so that expenditure from Regional Government Budget (APBK) is in line with the target and evenly.

- Furthermore, the government also needs to conduct socialization about the Regional Government Budget (APBK) and it is endeavored to be the priority of the fishermen. The assistance is not only physical but also soft-skill training such as post-fishing handling.
- This study is very limited to be reviewed and taken as policy. Therefore, further research can review the changes in fisherman's income from the soft-skill or training that has been received compared to income from the physical assistance.

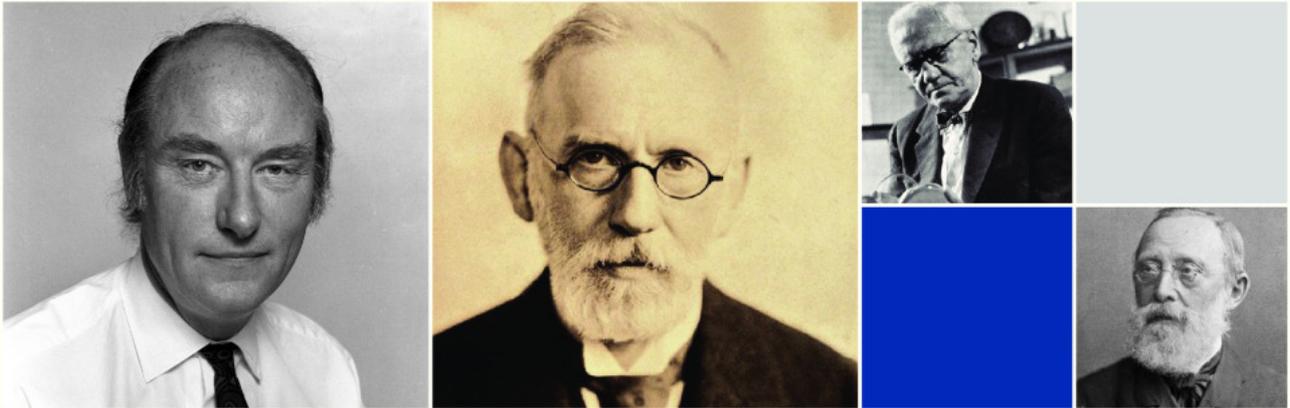
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