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EXTERNAL MOBILITY OF THE POPULATION OF MONTENEGRO: OVERVIEW

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ABSTRACT

Spatial mobility of population is one of the basic demographic determinants. Montenegro is characterized not only by internal migration, but also by external resettlement of population. An uncontrolled migration lead to the demographic polarization of the country is to widening of the emigration areas and narrowing if the immigration ones. So, Montenegro made a stride towards a new millennium with a polarized spatial distribution of population.

KEW WORDS

Montenegro, region, population, external migration.

Along with births and deaths, migration is one of the three demographic components of population change, and has often been described as the most difficult to measure, analyze, and predict. It is estimated that 3% of the world's population are external migrants, the United States being the country with the largest number of immigrants. In other regions, such as Asia, Latin America and Africa, the rate of emigration exceeds that of immigration, while in North America, Europe and Oceania, there is the opposite effect, that is, the percentage of immigrants exceeds that of migrants. The three largest flows of external migration are from Asia to Europe, from Asia to North America and from Latin America to North America. The global pattern reflects the importance of migration from less developed countries to more developed countries. Migrants from countries with relatively low incomes and a high rate of growth tend to move towards slightly richer countries where employment prospects are slightly more favorable. According to recent statistics, more than 20 million people have become in recent years forced immigrants, i.e. refugees, due to international and interregional conflicts, civil wars, natural difficulties, hunger and poverty.

Many studies deal with international migration - Montenegro (Penev, 2008; Rajović, 2011; Vukčević, 2016; Zlatičanin, 2016) as it is becoming an increasingly important component of population change (Freeman et al, 2013; Lowell, 2013; Predojević - Despić and Penev, 2014). External migration is a complex, percussive and dynamic phenomenon, therefore this text is not able to respond to all social, economic and cultural issues that arise. In that sense, text she tries to offer, from a geographical perspective, some answers and explanations of the phenomenon of "external migration" in Montenegro, in the more precise way in which it was possible to comprehend it, to get to know mentioned issues. So, this paper points to the main determinants of external mobility of the population of Montenegro.

MATERIALS AND METHODS OF RESEARCH

Some basic methodological principles for a critical geography of migration include interdisciplinary and comparative studies that can increase awareness of general trends and alternative approaches. According to Singleton (1999) the subject matter of international migration is cross - national in scope, whilst international migration statistics are the products of national government ministries, administrations and statistical institutes. The counting tools used to measure the phenomena associated with the movement of people across borders are limited, conceptually, linguistically and within the legal definitions applied by each

national jurisdiction. This creates constraint in the area of cross - national policy development as well as a challenge to researchers attempting to measure and analyze patterns of migration across Europe and between EU member states and other countries (Borkert et al, 2006; De Beer et al, 2010; Robertson, 2015; Boese and Marotta, 2017). The whole information volume in this article was obtained through specific methods for the selective research, respecting all its stages from the methodological point of view: identification of the researched issue, research framework delimitation, information collection, data processing, analysis and interpretation drawing up the conclusions. Research also played an important role in the article, which consisted, on one hand, in the identification of other studies and articles on the same subject, and in the processing of some statistical data, on the other hand. Hence, the information sources used can be classified into governmental sources (statistical, ministerial and from research institutes), and into non - governmental sources (independent publications) (Abel, 2010; Raymer et al, 2011; Raymer et al, 2013; Rajović, 2017; Rajović and Bulatović, 2017).

RESULTS AND DISCUSSION

Throughout the 20th century Montenegro has been a typical emigration area. Prior to 1990, the first major wave of emigration launched immediately after World War II, was directed to Serbia... In the period between 1953 and 1961 the net migration rate was negative (-7.2%). The second major wave of migration from Montenegro occurred in the 1965 - 1973 period. It was a massive emigration abroad, jointly organized by the Federal State Agency of the SFRY and the main migration receiving countries (Germany, Austria, France, and Switzerland) in the frame of guest-worker agreements (MMWD – Making Migration Work for Development).

According to the estimates provided by the Government of Montenegro, the number of expatriates and migrants from Montenegro worldwide is about 200.000, which is consistent with the estimated size of the Montenegrin Diaspora as estimated by the IOM. This number, would be larger if it would take into account Montenegrins by ancestry. Though the exact number of Montenegrin immigrants and their descendants around the world is unknown, the Ministry of Foreign Affairs estimated that their number is equal to the number of people currently living in Montenegro. Following Ministry of Foreign Affairs Montenegrin immigrants and their descendants live mostly in North and Latin America, Serbia, Turkey, Western Europe and countries of the former Yugoslavia, but a significant number of them live in Australia, Russia and some African countries (MMWD - Making Migration Work for Development).

Table 1 – Montenegrin Citizens Abroad by the Country of Residence (Census 2003)

United States	18.700	35,0%
Germany	11.344	21,2%
Switzerland	11.344	5,3%
Luxembourg	2.722	5,1%
Sweden	2.279	4,3%
France	1.288	2,4%
Netherlands	1.202	2,2%
Denmark	1.202	2,2%
Italy	1.198	2,2%
Other European Countries	6.194	11,6%
Australia	1.024	1,9%
Other non- European Countries	1.270	2,4%
Unknown	2.200	4,1%
Total	53.433	100,0%

Source: Statistical Office of Montenegro - Monstat (2008).

According to the data of the Statistical Office of Montenegro (2012) the number of citizens of Montenegro in abroad, or stay in the country in 2003 (Table 1) was: United States (18.700), Germany (11.344), Switzerland (11.344), Luxembourg (2.722), Sweden (2.279),

France (1.288), Netherlands (1.202), Denmark (1.202), Italy (1.198), Other European Countries (6.194), Australia (1.024), Other non-European Countries (1.270) and Unknown (2.200). According to the Euro barometer survey, conducted between March and May 2008, with the statement that "immigration greatly contributes to their country", agreed 44% of the citizens of the European Union, a disagreement was expressed by 47% (9% of the respondents did not know). However, a new wave of research in 2012, pointed to the positive change in the attitudes of citizens.

The same argument was supported by 49% of the population, an increase of 5 percentage points, and reduced the number of citizens that immigration negatively rate to 43% (the percentage of those who do not know the answers to that question has remained virtually the same 8%). The greatest differences were observed at the national level. While this stance supporting citizens of the old EU member states (89% in Sweden, 77% in Luxembourg and 66% in Portugal, and to a lesser proportion of the citizens of Denmark, Holland, Finland, Great Britain, Ireland, Germany, Spain and France), among residents of the new Member States this claim is much less widespread: 17% support in Estonia, 18% in the Czech Republic and 21% in Slovakia, Latvia and Cyprus (the Values of Europeans - Report 2012) (Poletti, 2013).

According to Nikitović (2009) migration is a phenomenon that is the most difficult to predict, especially in countries like Montenegro. There are several reasons for this, and they can be classified into two main groups. The first relates to the poor quality of data on external migration, and the other on a strong political and economic conditionality of migration flows. Namely, official data does not cover all the immigrants from Montenegro; thanks to the people who are leaving the country usually do not report a change of residence. Indirect conclusions on their number can be performed based on the data of countries receptor, but this applies only to persons who are registered (Rajović and Bulatović, 2017). "Today, the state administration of the immigration countries is under constant pressure because they have to balance between the opening and closing of borders" (Nowaczek, 2010).

In the series of factors according to Medar and Chirtoc (2012) can be identified in the decision mobility (Figure 1) include: economic and political causes, establishing mobility networks, previous experience of mobility, the need for professional development through continuing education in a county that provides higher education opportunities the county of origin and family reunification.

This interesting and an extremely research Medar and Chirtoc (2012) indicates that "Mobility phenomenon has existed since the beginning of mankind. Phenomenon has not stopped in time, but has changed and acquired new forms. The balance between population and resource changes by the emergence of a surplus population, representing a "emigration zone" or the occurrence of surplus resources, representing a "immigration zone". Mobility is one of the ways in which regions can adjust to economic change and a way that ensures growth. Mobility flows can act as an "automatic stabilizer" for the region, giving people the opportunity to improve their standard of living by moving to areas with conditions of employment and better living. The spatial balance of supply and labor demand often involves relocation, being involved the other family members (some inactive), in this case, the labor mobility being with implications not only by economical nature, but also by social and demographic nature. Is not to be neglected the role of migrants in increasing urbanization ratio of a region, and economic growth, the increase mobility is the main cause of population growth to city and urban population in general". In Montenegro, the development of economic life, changes occurred in the economic development process restructuring operated in the national economy caused population mobility from one region to another, mainly from economic reasons (Zhou, 2001; Jackson et al, 2001; Alba et al, 2002; Rosemberg et al, 2016).

According to Portes and Böröcz (1989) "the upper left cell on Figure 2 deceptions the common situation wish has given rise to most stereotypes about contemporary immigration. Manual labor migrants arriving in contexts in which their kind are unwelcomed or discriminated against tend to be channeled toward the lower tier of the receiving labor market.

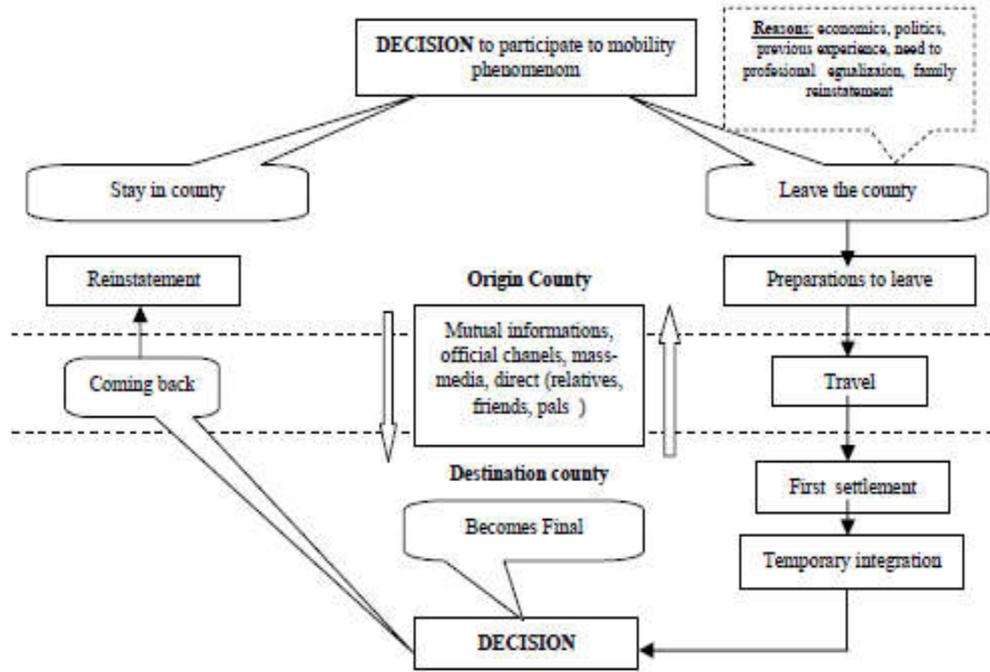


Figure 1 – Decision and mobility reasons (Medar and Chirtoc, 2012 according to Blaga and Moştenescu, 2008)

CONTEXT OF RECEPTION	CLASS OF ORIGIN		
	Manual Labor	Professional-Technical	Entrepreneurial
HANDICAPPED	Secondary Market Incorporation	Ghetto Service Providers	Middleman Minorities
NEUTRAL	Mixed Labor Market Participation	Primary Market Incorporation	Mainstream Small Busines
ADVANTAGED	Upward Mobility to Small Entrepreneurship	Upward Mobility to Positions of Professional and Civic Leadership	Enclave Economies

Figure 2 – A tipology of modes of incorporation of contemporary immigrants to the advanced countries (Portes and Bőröcz, 1989)

Characteristic of this secondary sector have been the subject of some controversy, but there is growing Conesus among scholars that is it defined by jobs which require little or no prior training, which cluster at the low end of the wage scale, which offer little or no mobility opportunities, and which are subject to rapid employee turnover” (Kritz et al, 1994; Elie et al, 2011; Piché, 2013; Kumar et al, 2014).

CONCLUSION

Our research records are based on similar research Mikačić (2000) indicates that spatial mobility of population is one of the basic demographic determinants. Regarding

migration, Montenegro is a dynamic country, which is characterized not only by internal migration, but also by external resettlement of population. An uncontrolled migration lead to the demographic polarization of the country is to widening of the emigration areas and narrowing if the immigration ones. So Montenegro made a stride towards a new millennium with a polarized spatial distribution of population (Rajović and Bulatović, 2016).

According to Analytical Study of Montenegrin Diaspora, a recent internal report from the Montenegrin Diaspora Administration notes the relevance of incorporating this population into the country's development: "Taking advantage of globalization trends and rationally laid out diplomatic networks, a foundation should be made for engaging competent members of Montenegrin Diaspora which would be in mutual interest for the country and its citizens abroad" (Bekteši, 2012). Managing this (human and intellectual) potential is an essential condition for further progress and development of Montenegro.

From the analysis of European external policies on migration according to Palm (2016) emerges a picture which can be summarized with four key concepts: externalization of migration control, conditionality in relations with third countries, focus on securitization of borders and absence of legal routes for asylum seekers. All these policies have undoubtedly negatively impacted the international protection guarantees. In 2016, this status quo has partially been challenged: the conclusion of a broad agreement with a third state on migration cooperation seems at first sight a positive step forward, even if, when looked at more closely, the latter reveals to be mainly a reflection of the abovementioned key concepts.

The recent New Partnership Framework nevertheless appears to have the potential to challenge the current setting: it aims on the one hand to create a single framework for agreements with third states to enhance coordination and avoid segmentation and, on the other hand, to take a more multi-focal viewpoint representing also the interests of third states. But in order for it to be so, the EU's solidarity impasse, demonstrated both by the lack of agreement on relocation and the absence of any discourse on opening regular access channels, needs to be overcome - but at present it sadly looks like the EU will continue on its path of turning to third countries in order to distract from its internal divisions (Palm, 2016).

The EU has developed its Global Approach to Migration as a possible way to establish comprehensive cooperation with non-EU partners from the East and the South on a whole range of migration issues, including the fight against irregular migration, legal migration, migration and development, and asylum policy. The approach also had a coordinating effect for internal EU policy-making. There have been, however, four main challenges hampering this policy domain: 1) the limited ability of the EU to define its migration policy with its 27 sovereign States; 2) tensions between the national and supranational level in the EU as regards international cooperation on migration; 3) the diverging interests and priorities of sending regions and/or partner countries; 4) the limited implementation capacities of the EU and its Member States, as well as of partner countries (Weinar, 2011),

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AGRICULTURAL DEVELOPMENT PLANNING BASED ON LOCAL RESOURCES IN DEPOK CITY, INDONESIA

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ABSTRACT

The background of this study is that Dewa Starfruit as a local resource in Depok City is threatened with extinction. The absence of regulations that protect these local resources and high rate of land use conversion causes decreasing number of starfruit plants and production. Starfruit farmers tend to switch professions to non-agricultural occupations. In national level, the largest number of agricultural business households experienced the greatest decline in horticulture subsector by 37.4% (Agricultural Census 2013). The elected regional head has branded Depok City with the tagline "friendly city" replacing Dewa Starfruit. The government's orientation and support for Dewa starfruit is fading away. Therefore, Depok City Government, especially DKP3, need to develop local resource-based agriculture development plan in order to be able to maintain local resources while improving it for society welfare. This research uses qualitative approach. The research informants were DKP3 apparatus of Depok City, Bappeda (Regional Government) apparatus of Depok City, field officer and farmer group. Data collection techniques used in-depth interviews and documentary studies. Data analysis utilized interactive model. Research results indicate that the development of local resource-based agricultural development plans has not gone well. Despite various supporting factors, there are existing inhibiting factors which are land use conversion had never been discussed; DKP3 Depok City efforts to safeguard agricultural issues in musrenbang has not been optimal; no field data update, either by counseling workers or farmers; DKP3 Depok City prioritized RPL activity; uneducated farmers; and absence of regional head support.

KEY WORDS

Planning, agriculture, local resources, plants, agricultural business.

Public administration possesses an important role in a country. This is exhibited by the regulations dynamics and transforming organization or state institution type, officials and staff placement, organizational structure, as well as appointment and dismissal mechanism at central and regional level (Keban, 2008). According to Thoha (2010), the orientation of public administration is directed to the public interest. Due to its orientation to the public, a nation strives in such a way to serve the public (Hardiyansyah, 2011). Development is crucial in conducting programs and activities to produce something for the public interest. Therefore it is necessary to apply administrative theory known as development administration. Katz (1971) as quoted by Kartasmita (1997) suggests that development administration is correlated and involved in mobilizing resources and its allocation for development activities.

Development begins with planning stage (Tjokroamidjojo, 1995a). Conyers and Hills (1994) define planning as a continuous process that includes decisions or choices on alternatives to resources usage in achieving future objectives. Tjokroamidjojo (1995a) states that this continuous factor covers two aspects: plan formulation and implementation.

Development planning allows a region to make changes and improvements through planning by utilizing its resources to achieve the desired goals. The agricultural sector plays

an important role in regional development. Unfortunately, the government's attention and support to the agricultural sector are considered not strict and prone to trade-offs (Hapsari, 2014). On the other hand, Indonesia's geographical condition located at the equatorial latitude provides a comparative advantage crops growth and becomes a local resource. Dewa Starfruit in Depok City is a local resource that has the potential to be developed. However, the absence of regulations protecting the local resources and the continuous land use conversion caused reduced total starfruit plants and farmers shifted to non-agricultural professions. Starfruit is included in the horticultural subsector of non-food crops, which is consumed or enjoyed by the community not as a staple food. In national level, the largest number of agricultural business households experiencing decline is in horticulture subsector at 37.4% (Agricultural Survey Year 2013). Dewa Starfruit as a local resource in Depok City would be threatened to extinct. Although Law No.41 / 2009 on Sustainable Land Farming Protection is aimed at protecting agricultural land, it does not dampen land use conversion in Depok. Likewise, Law No.13 / 2010 on Horticulture has not become a reference in the local resource-based agricultural development plan. Therefore, the Dept. of Food, Agriculture and Fisheries Dept. (DKP3) Depok needs to develop a local resource-based agricultural development plan to be able to maintain local resources while improving them for the welfare of the community.

Based on the described phenomenon, there are two problems raised in this research as follows: (1) How far is the formulation of the local resource-based agricultural development plan in Depok City; (2) What factors which support and inhibit their planning?

LITERATURE REVIEW

Tjokroamidjojo (1995b) describes the stages in a planning process includes development, programming, implementation, monitoring, and evaluation. Plan formulation is divided into a review of the circumstances, approximate circumstances, determining plan objectives, policy identification undertaken, and approval. Conyers and Hills (1994) describe the planning process as a closed cycle (Figure 1), wherein each stage there is certain goals. Therefore it is crucial to understand each stage. These stages are specified planning goals, formulate objectives, collect and analyze data, identify an alternative course of action, alternative appraisals, selection-preferred alternatives, implement, monitor and evaluate.

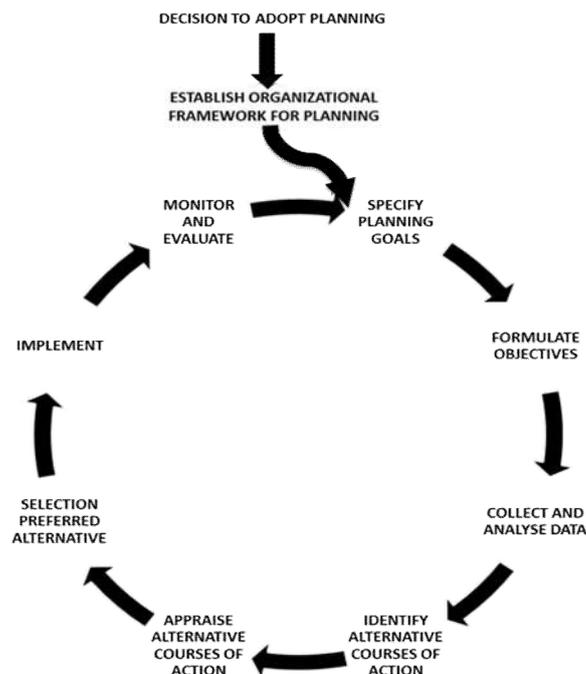


Figure 1 – Planning Process Cycle

Law No.25 / 2004 on SPPN divide the stages of national development planning into four: plan development, establishment, controls, and evaluations. Researchers refer to the Act to describe and analyze the development of local resource-based agricultural development plans in Depok City. The stages of plan development based on the Act is the draft development; *musrenbang* (discussion); and constructing final draft; as well as plan-establishment.

In general, the factors that support and inhibit plan development refers to the factors that affect development. These factors are the environment, human resources, planning system, technological development, and funding (Riyadi and Bratakusumah, 2004). According to Kuncoro (2004), there are two conditions contributing to planning development. Those are environmental pressure and community perspectives on the direction and meaning of development. According to Conyers and Hills (1994), government agencies are overly enjoying the administrative routine, therefore, planning targets are made only based on "guestimate" or allegations based on administrative experience alone rather than performing more accurate data analysis.

Depok city is a megapolitan area in Jabodetabek (Jakarta, Bogor, Depok, Tangerang, and Bekasi). Depok City consists area of 200.29 km². It has eleven districts. Population growth is increasing every year. In 2015 the population of Depok City amounted to 2,106,102 people. It is influenced by factors of high birth rates and demographic factors that cause high migration rate into Depok City.

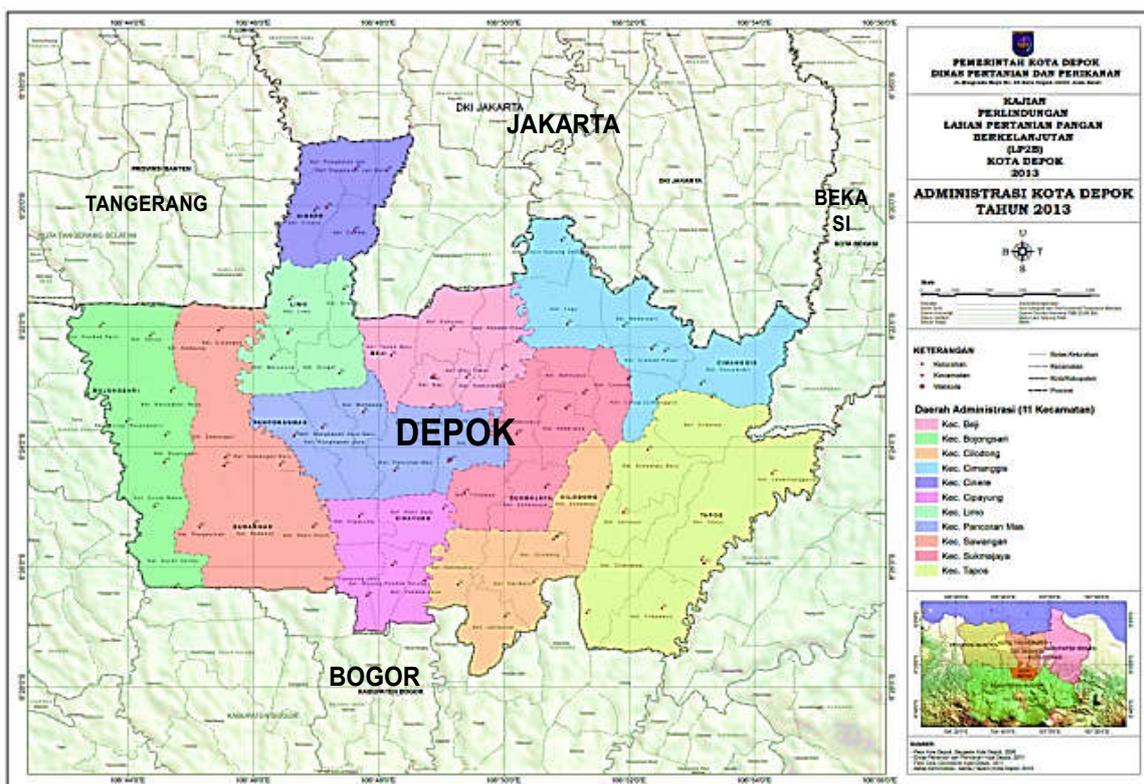


Figure 2 – Depok City Administrative Area

Land use in Depok City is dominated by 11,550 ha for settlements or 57.7% of the total area. The development of settlements in Depok City has a major impact on land functions change, especially agricultural land to non-agricultural. Another impact are farmers switching to non-agriculture professions due to land use conversion or sold their land to make ends meet. Depok City remains to possess farmlands despite its continually decreasing farmland, including the Dewa starfruit as exhibited in Figure 3.

METHODS OF RESEARCH

The focus of this research is the development of local resource-based agricultural development plan in Depok City; and the factors that support and inhibit the planning. This research uses a qualitative approach. Data collection techniques used was in-depth interviews and documentary studies. Informants in this research are apparatus of Food Security, Agriculture and Fisheries Department (DKP3) Depok City; the apparatus of the Regional Development Planning and Research Agency (Bappeda) of Depok City; field officer; and farmer groups. Data analysis techniques used interactive models (Miles et al., 2014) ranging from data collection, data condensation, and conclusions.

RESULTS AND DISCUSSION

The development of local resource-based agricultural development plans uses several approaches: political approach, technocratic approach, participatory approach and top-down and bottom-up approach. The political approach refers to the vision and mission of the elected regional head as stated in Law No.23 of 2014 on Regional Government. The technocratic approach in the form of development of the initial draft that will be used as a reference in development planning discussion (musrenbang). Top-down, bottom-up and participatory approaches is conducted through musrenbang activities ranging from urban to municipal levels involving all stakeholders. Development of local resource-based agricultural development plan refers to the Depok City Regional Medium Term Development Plan (RPJMD) and Strategic Plan (Renstra) DKP3 Kota Depok.

The first stage, preparing development plan draft. In this stage, the government of Depok City held a socialization of year to date development planning (T1). The socialization was held in the first month of each beginning of the year which was facilitated by *Bappeda Kota Depok* (Depok City Regional Government). The following activity involved Focus Group Discussion (FGD) on strategic issues that arise in the following year (T2). Unfortunately, the issue of land use conversion does not surface and has not yet become a common agenda for completion.

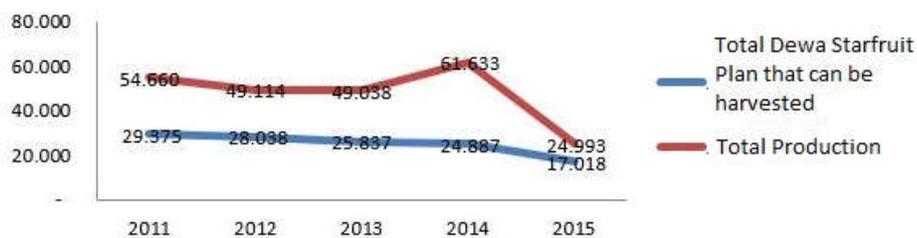


Figure 3 – Total Dewa Starfruit Plant that can be harvested and total production rate

The second stage, musrenbang activity. Musrenbang activity starts from urban village level to city level. Depok City Government has involved farmers in musrenbang activities from urban village to city level. This indicates that their existence cannot be ignored because it helped determining future agricultural development planning. At every stage of the musrenbang, agricultural issues are always proposed by farmers based on their needs. In each stage, the farmers are always accompanied by DKP3 apparatus of Depok City both structural and functional (counseling field). Nevertheless, Depok City DKP3 efforts to maintain agricultural issues are not optimally experienced by farmers. Therefore agricultural issues seem less weighty and popular than infrastructure issues. In addition, there has been no data update effort conducted by Depok City DKP3 part, especially counselors, along with the farmers on institutional information and agricultural productivity.

The third stage, forming development plan final draft. At this stage, all proposals of the development plan are sorted according to the city priority scale and future strategic issues. In its priority, DKP3 Kota Depok focuses on Sustainable Foodstuff (RPL) activities oriented towards food security programs.

The final stage, plan establishment. Development plan establishment is carried out by City Mayor in the form of an annual city planning document.

The shortcomings of efforts described above are also augmented by the obstacles in the establishment of local resource-based agricultural development plans. These inhibiting factors are uneducated farmers and weak commitment exhibited by the regional head. Supporting factors are conducive office internal environment, educated farmers, field officers who actively counsel the farmers, compact planning team, the use of internet-based technology in planning, the latest technology in agricultural cultivation, and adequate budget.



Figure 4 – Agriculture based development plan based on local resources

The development of local resource-based agricultural development plans is part of the overall development planning stage of the region. Political approach is the elaboration of the vision and mission of the elected regional head as outlined in the RPJMD of Depok City. As a result, all programs and activities are tailored based on the vision and mission. The technocratic approach is taken through FGD involving stakeholders and planning experts to prepare the initial work plan as a consideration of the development plans in the next period through *musrenbang* (discussion) activities. In an integrated way, a participatory, top-down and bottom-up approach is pursued in the *musrenbang* activities. It includes the delivery of government policies to communities. This also involved stakeholders from all elements of society as well as a selection of community aspirations to be taken and forwarded to the government.

The RPJMD and strategic plan (*Renstra*) of Regional Apparatus Organization (OPD) as a reference in developing local resource-based agriculture development plan contains the government's readiness to adopt future planning which according to Conyers and Hills (1994) is known as the decision to adopt planning. The RPJMD and *Renstra* contain objectives, targets, strategies, policy directions, programs and activities as the elaboration of the regional head's vision and mission. Conyers and Hills (1994) specify planning goals and formulate objectives exists in the mentioned development plan. Thus, DKP3 has been in a position to establish an organizational framework for planning.

In the development stage, the socialization activities of the year to date development plan provide an opportunity for the community to acknowledge target achievement. This is supported by Tjokroamidjojo's opinion (1995b) that in the planning stage it is necessary to review the situation while strengthening the organizational framework. Thus the community can propose reinforcing activity or cease unnecessary activity. After the socialization activities, the role of FGDs on strategic issues is very important to determine and predict future developments. This is in accordance with the planning stages proposed by Tjokroamidjojo (1995b) with the term "estimated circumstances to be passed". Unfortunately,

the issue of the agricultural land conversion has not been raised as if it has not been on local governments' agenda.

Musrenbang is the most decisive stage in the development plan. This is where community involvement in planning is exhibited. Suggestions on development are delivered by various levels of society including farmers. Usually, farmers propose the availability of facilities and infrastructure to increase agricultural productivity. Nevertheless, their proposals are rarely realized. In every musrenbang forum, farmers are always accompanied by DKP3 Depok City apparatus, both structural and functional (counseling field). The assistance will be more optimal should agricultural issues is carried out continuously, ranging from urban village level to city level. In addition, data updating on farmers and their institutions have not been done jointly by Depok City DKP3, more so by counselors and farmers. Therefore every proposal put forth by the farmers carry less weight considering it lacks updated data. Therefore it is not strong enough to be maintained because all programs and activities are conducted based on data and priority scale. A proposal with strong and valid information will be prioritized over a weak proposal.

The third stage involved finalizing development plan. At this stage, all data and information on the development are collected and made priority scale based sequence. In this case, DKP3 Kota Depok prioritizes RPL activities that are more inclined to food security than agricultural cultivation. Prioritized activity focuses on activities that support the RPL in the form of home gardening. RPL activities are derivative activities of the Ministry of Agriculture of the Republic of Indonesia. In Depok City, RPL activity is limited to the use of home yard conducted by housewives. However, this activity has not been applied widely or in the form of an area called KRPL (Sustainable Food Housing Area).

The final stage, the establishment of a development plan, is set in the form of a city-level annual planning document through a Mayor's Regulation.

The emergence of the tagline such as 'friendly city' replaces Dewa Starfruit as the city icon. Therefore it changed the orientation and support of Depok city government from local resources to other sectors. It thus signifies that the selection of programs and activities is determined through a political process (Conyers and Hills, 1994). Therefore, the support and involvement of regional heads are crucial for determining the sustainability of future planning (Fadlina, 2013; Hapsari, 2014). The development of local resource-based agricultural development plans would be better when supported by farmers. But the existence uneducated farmers will complicate the process. Because these farmers are not active in farmer groups and do not follow various agricultural activities. They have high tendency to sell or rent land. Thus land use conversion caused destruction of agricultural land due to development rate and farmers themselves to make ends meet.

The existence of factors supporting development plan is expected to encourage Depok City government, especially DKP3, as an endeavor to produce development plan based on high-quality local agricultural resources. It is expected to be able to improve the welfare of the community and at the same time maintain local resources owned.

CONCLUSION AND SUGGESTIONS

The development of local resource-based agricultural development plans is supported by a number of factors: conducive office internal environment, educated farmers, field officers who actively nurtured or provided counseling to the farmers, compact planning team, utilization of Internet-based technology, agricultural cultivation technology, and adequate budget.

However, there are several inhibiting factors. These constraints are (1) lack of discussion regarding land use conversion; (2) Unoptimal efforts to safeguard agricultural issues in Depok City DKP3 musrenbang; (3) lack of field data update, either by counseling workers or farmers; (4) DKP3 Depok City prioritized RPL activity; (5) uneducated farmers; and (6) absence of regional head support.

Based on the results of research, there are several suggestions produced to optimize plan development process. The suggestions are described as follows: protection of starfruit

farmland in the form of regulation and compensation to farmers who are willing to maintain their respective farmlands. It could be conducted in the form of subsidy, and tax exemption; hold internal consolidation of Depok City DKP3 in endeavor to discuss agriculture issues; monthly or quarterly data updated conducted by officer and farmer. It could be conducted by crosscheck method in the field or through social media application; integration of local resources into RPL activities.

Actions to be conducted to uneducated farmers are as follows: conducting intensive guidance to encourage active participation in groups and raises awareness to defend farmland from land conversion; Depok City DKP3 encourages the activity of the farmer group leader in order to involve all its members in counseling activities; DKP3 Depok City holds a competition to choose the winner farmer which require active farmer in respective group and able to increase productivity; joint commitment between leaders and subordinates in carrying local resources with comparative advantage.

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TEST OF COTTON LINES WITH DROUGHT TOLERANT INTERCROPPED WITH MAIZE

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ABSTRACT

The distribution of cotton cultivation is mostly located in the sub-optimal land due to competition with the field crop. The cotton cultivation in Indonesia is always done through intercropping with pulses. This research aims to test the suitability of cotton lines with drought-tolerant intercropped with maize. The research is conducted in February to August 2016 at Asembagus Experimental Garden, Situbondo. Planting materials used in this research are 6 lines and 2 varieties of drought-tolerant cotton consist of strain 03001/9, 03008/24, 03008/25, 03017/13, 06062/3, 06063/3, kanesia 10 and kanesia 14. The research prepared by the draft randomized group with three replications. The observation parameter consists of plant height, canopy width, number of generative branches, number of fruits, fruits weight, the yield of seed cotton, and corn dry results. The research result shows that the strain 03017/13 and 03008/24 have the highest consecutive acceptance of IDR 17,860,681 and IDR 17,520,879, the increase in revenue compared to monoculture is IDR 6,278,473 and IDR 5,668,191, seed cotton production amounted to 2470.01 kg/ha and 2329.72 kg/ha, maize production amounted to 2001.54 kg/ha and 2112.74 kg/ha, LER 1.68 and 1.60, number of harvested fruit of 12.66 and 11.76 fruits/plant, fruit weight of 4.05 and 4.17 g/fruit.

KEY WORDS

Intercropping, cotton, corn, field study, variety.

Cotton is an important plantation commodity in Indonesia to support the growing textile industry. Cotton is also a strategic commodity because it is used as one of the raw materials of bank notes. The cotton fibers are considered to be more flexible and not easy to damage. Furthermore, it is more resistant to the possibility of being doodled and will not be damaged by ironing (KOMPAS, 2016). The national cotton area in 2014 is 3,670 ha with a national production of 761 tons. The width distributions of national cotton planting by province and cultivation status in 2014 are Central Java (154 ha), Jogjakarta (18 ha), East Java (336 ha), Bali (150 ha), West Nusa Tenggara (136 ha), East Nusa Tenggara (63 ha) and South Sulawesi (2813 ha). While the national cotton imports in 2014 amounted to 711,744 tons (Dirjenbun, 2015). The increasing area of cultivation and productivity of cotton is still needed to meet the national cotton needs.

Cotton cultivation in Indonesia is always carried out through intercropping with *palawija* such as soybeans, maize, or green beans, and both in the rain-fed field or in the field after being used to plant rice. Cotton is only cultivated by intercropping or relay cropping with *palawija* as complementary crop instead of the main crop (Basuki et al., 2007). The selection of the type of *palawija* depends on the farmer's selection or the *palawija* that grows on the site. Generally, the type of plants that are intercropped has different age so that the peak of nutritional, water and light needs are also different and this will decrease the level of competition among the crops (Sullivan, 2003). After the *palawija* is harvested with the shorter age of plants comparing to cotton, the cotton crops will have enough time to grow and develop after the harvesting of the *palawija*.

The distribution of cotton cultivation is widely available in sub-optimal land due to competition with the field crops that is widely cultivated in the rice field. Thus, it requires cotton strains that has resistance to drought stress condition with limited water availability in order to obtain good cotton productivity. Besides, the effort to improve the farmer's income as well as reduce the risk of cotton harvesting failure can be achieved by using intercropping system between cotton and *palawija*. The recommended *palawija* corps are green beans,

soybeans, or maize adapted to the development area. Therefore, the testing of cotton strain with drought tolerant on the suitability of intercropping pattern should be done in order to know how much the productivity of intercropped cotton produced and the increase in the farmer's income generated from the intercropping activity with *palawija*.

MATERIALS AND METHOD OF RESEARCH

The research is conducted in February until August 2016 at Asembagus Experimental Garden (KP), Situbondo Regency, Indonesia. The planting materials used in this research are 6 strains of cotton crossing between cotton strains with drought-resistant character. Strain crossing was conducted from 1997 until 2006 and drought tolerant testing had been done in screen house in 2014. As the comparison, 2 varieties of cotton have been selected namely Kanesia 10 and Kanesia 14 with drought tolerant.

The study is arranged in a randomized group design with three replications. A cotton intercropping system with maize uses 3:2 cropping system and 2 lines of maize (Riajaya and Kadarwati, 2005). Cotton and maize cultivation in the intercropping system or monoculture is done at the same time. The size of per plot of the experiment was 18.5 m x 7 m with the provision of spacing on the intercropping of cotton of 100 cm x 12 cm with the plant spacing of cotton-maize of 50 cm and the plant spacing of maize intercropping of 70 cm x 20 cm. Meanwhile, the plant spacing of cotton monoculture is 100 cm x 25 cm and the plant spacing of maize monoculture is 70 cm x 20 cm.

The monoculture of cotton and soybean is used to count the decrease of cotton or maize yield to the intercropping of cotton+maize. The maize variety used is hybrid corn of double cross variety. While the comparative strain and varieties used are as follows:

1. Strain 03001/9 (DPX 7062-7077 X MYSORE VIJAYA);
2. Strain 03008/24 (NUCOTN35B X MYSORE VIJAYA);
3. Strain 03008/25 (NUCOTN35B X MYSORE VIJAYA);
4. Strain 03017/13 (NUCOTN35B X LAXMI);
5. Strain 06062/3 (KANESIA 7 X KI.502);
6. Strain 06063/3 (KANESIA 8 X KI.42);
7. KANESIA 10 variety (comparison);
8. KANESIA 14 variety (comparison).

The observations done to the cotton crops are plant height, canopy width, number of generative branches, number of fruits, number of harvested fruits, fruits weight, and seed cotton production. While the observations on maize plant are: plant height, canopy width, and corn dry results. The obtained data will be analyzed using analysis of variance (ANOVA) with SAS and follow-up test will be conducted using DMRT 5%.

RESULTS AND DISCUSSION

In general, the cotton cultivation condition in the intercropping pattern of cotton+maize is quite good as shown by the cotton height of 60 dap ranging from 103.2 cm to 119.4 cm. While the height of maize ranging from 165.7 cm to 181.1 cm. In the cotton monoculture cultivation, it is obtained the plant height ranging from 90.9 cm to 104.4 cm (Figure 1). There is a tendency of increasing plant height along with the increasing of plant age and the slowing of the plant height improvement after 75 dap in all of the cotton strains. This happens because the plants have entered the generative phase so that the energy produced by the plant is used to the formation of flower and fruit. In line with the research result of Riajaya and Kadarwati (2013) where after 75 dap of cotton crops, there is no longer increase the height and width of the canopy significantly, since it is considered that the most photosynthate is used for fruit formation

Intercropping cotton crops shows higher comparing to monoculture cotton. This happens because the process of elongating the crop of intercropping cotton crops in the competition to get sunlight with maize with higher habitus. Similarly, Gonias et al. (2012) states that light interception in the cotton will decrease as the age of the plant increases.

Furthermore, in the intercropping condition, the light interception accepted by cotton at the early growth stage will decrease. Light deficiency in young plant causes stems etiolation or elongation. Shaded condition cases the plant to grow longer as the plant attempts to find and get the sunlight (Sunday and Wahyu, 2012 ; Dewi, 2014).

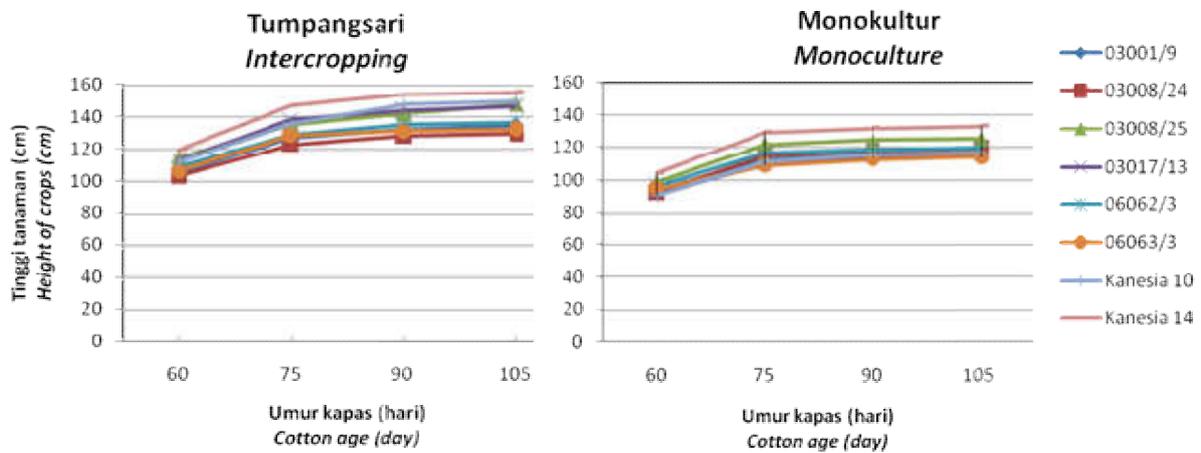


Figure 1 – Height of cotton crops at age 60-105 day after planting (dap)

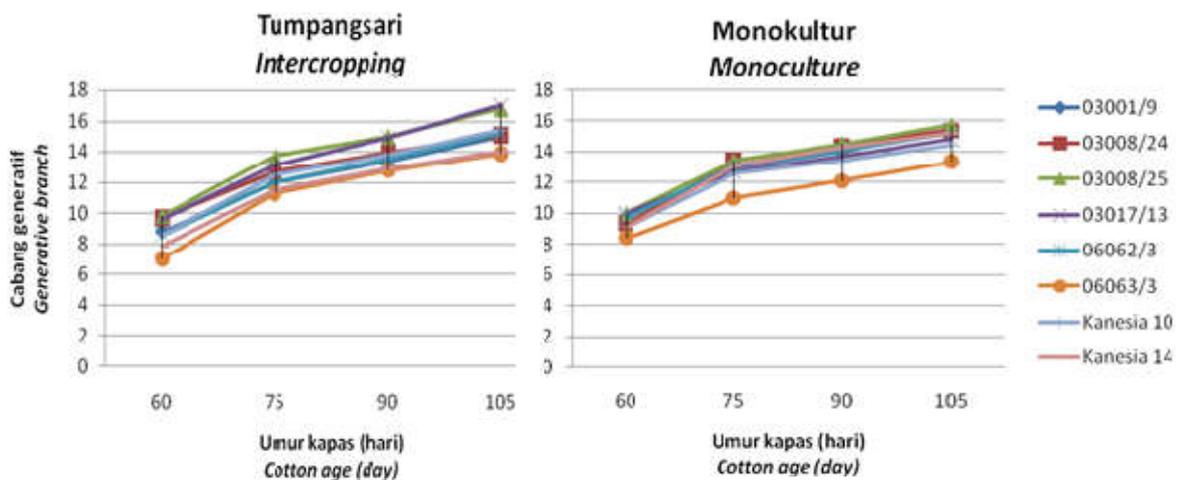


Figure 2 – Canopy width of cotton crops at age 60-105 dap

The width of the canopy of cotton crops at the age of 60 dap to 105 dap shows relatively the same. In the intercropping cotton crops, it can be seen that the canopy width ranging from 63.5 cm to 116.5 cm and the monoculture cotton crops ranging from 71.9 cm to 113.3 cm. This suggests that 50 cm plant spacing between cotton and maize do not suppress the growth of the cotton crops canopy. The cotton canopy is still possible to grow sideways on the sidelines of the empty space between maize. Thus allowing the formation of higher flowers and fruits in intercropping cotton cultivation such as in monoculture cotton. The reduced canopy width and the number of the generative branches in the intercropping system resulting in a decrease in the number of fruits formed from 60 to 120 dap comparing to it monoculture (Riajaya and Kadarwati, 2013). The 6 new strains of the cotton and 2 comparative varieties (Kanesia 10 and 14) give up and side growth pattern during the growth phase (age 60 to 150 days) (Figure 1; Figure 2). This shows that the maize does not disturb the growth of all the experimented strains and varieties of the cotton. The reason is that all of the strains have normal type of leaf and this has caused the early growth to be undisturbed and generally there will be an effect on the quality of the resulted fibers (Karademir et al, 2010; Safina et al., 2014).

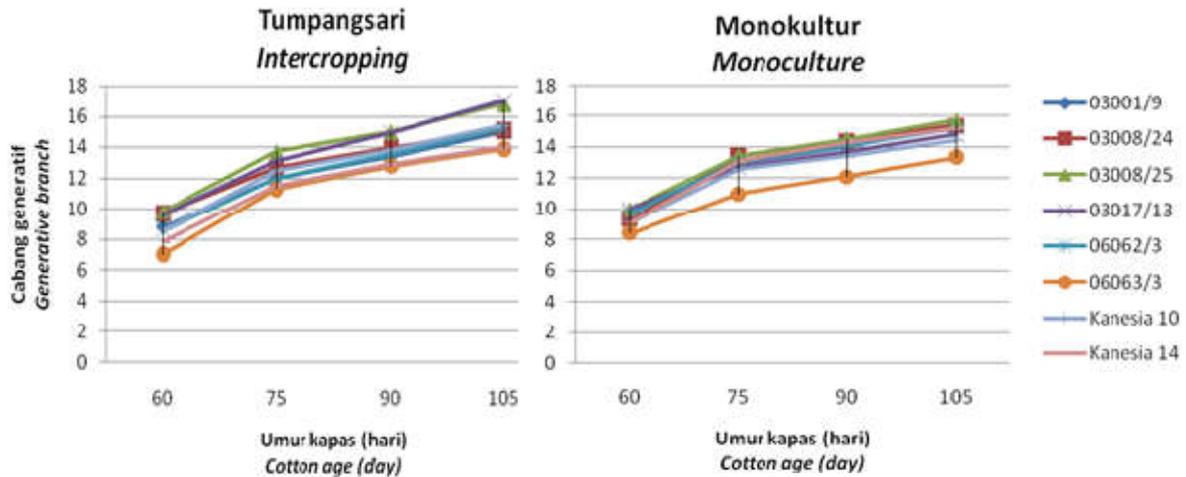


Figure 3 – The number of cotton generative branches at age 60-105 dap

At the age 60 dap, the generative branch of intercropping cotton has formed 7 to 9 branches while monoculture cotton will only form from 8 to 10 branches. There is an increase in the number of branches as the age of corps increase. The number of generative branches of the cotton is relatively good at the age of 105 dap both in intercropping or monoculture cotton. Although the range of the intercropping cotton is higher (13.9 – 17.0 branches) comparing to the monoculture cotton (13.3-15.7 branches). The growth pattern of the number of generative branches follows the pattern of the growth of corps height. The increase in the corps height is followed by the increase of the number of generative branches. The number of generative branches in the normal population ranges from 11.60 – 17.00 branch/plant (Riajaya et al., 2009; Riajaya and Kadarwati, 2013; Riajaya et al., 2009).

The number of fruit is one of the production components. In the intercropping cotton, there is a tendency of the increase in the number of fruits regularly started at the age 60 dap to 90 dap and then the number of fruits tend to stay and some were decreasing. Meanwhile, in the monoculture cotton, there is a tendency of the high improvement at the age of 60 dap to 75 dap and there is no significant increase in the number of fruits afterward (Figure 4). Zhang et al (2017) states that the dynamic of the cotton generative growth will be affected by the dynamic of the accepted temperature/heat and this will be different between monoculture cotton, intercropping cotton or relay planting. In addition, there is different nutrient absorption especially nitrogen between monoculture cotton, intercropping and relay planting (Zhang et al, 2008).

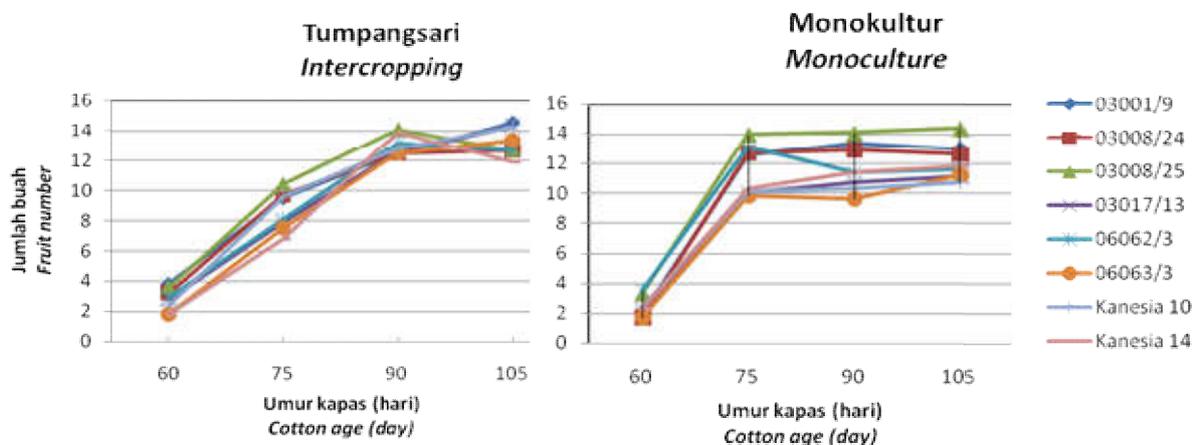


Figure 4 – The number of cotton fruit at age 60-105 dap

The increase in the fruit formation of monoculture cotton after the age of 60 dap is quite higher comparing to intercropping cotton. This could happen due to the limited availability of groundwater so that the generative phase occurs quicker than the intercropping cotton which is still possible to grow upwards. At the monoculture cultivation, the water evaporation process in the groundwater is higher due to the canopy of the monoculture cotton which has not overlap between the corps. Thus, there is an open space that can cause the increase of groundwater evaporation. The presence of sandy soil with the low value of water holding capacity has increased the high of evaporation and percolation of groundwater. Lumbanraja (2012) states that water efficiency on the open ground is quite low, but it should be noted that groundwater evaporation does not happen only in the widely-open ground but also in every part of ground not covered by the leaves of the corp. This condition also increase the nutrient absorption in the intercropped plant (Blaise et al., 2005) resulting in high-quality formed fruits.

The component of cotton result consists of harvested fruit and the weight of the fruit. These two components will determine the last result of the cotton. In the experiment of the intercropping of cotton-maize, the number of harvested fruit ranges from 10.35-12.66 fruit/crop with the highest number of the fruit at the cotton strain 03017/13. Furthermore, in the monoculture ranges from 10.83-13.55 fruit/crop with the higher number of the fruit at the cotton strain 03008/25. Variance analysis in the number of the fruit of intercropping or monoculture experiments shows no actual difference (Table 1).

There is a tendency to decrease the number of harvested fruit. This shows that not all of fruits that are formed can be harvested because it is affected by environmental factors such as groundwater availability and the presence of rain before the harvest. This will cause the fruit fail to bloom. The condition which is too dry when the cotton corps is about to enter the flowering and fruit formation phase can cause the flowers and fruits to fall. An excessive amount of water can cause deficiency due to the disruption of the pollination process, the fall of young fruit and the destruction of ready to harvest cotton fibers (DEWI, 2014). The number of fruits formed from the lower branches to the upper branches is not all harvested, due to the physiological loss or pest attack (Riajaya and Kadarwati, 2013).

Table 1 – The Effect of intercropping cotton and maize on yield components

No.	Strain	Number of harvested fruits		Fruit weight (g)	
		Intercropping	monoculture	Intercropping	monoculture
1	03001/9	10.80 a	12.95 a	4.04 bc	4.49 ab
2	03008/24	11.76 a	12.90 a	4.17 abc	4.11 ab
3	03008/25	11.10 a	13.55 a	4.29 ab	4.10 b
4	03017/13	12.66 a	11.13 a	4.05 bc	4.17 ab
5	06062/3	10.35 a	10.83 b	4.11 bc	4.45 ab
6	06063/3	11.40 a	10.96 a	3.51 c	3.86 b
7	Kanesia 10	12.36 a	12.05 a	4.86 a	4.98 a
8	Kanesia 14	10.95 a	11.36 a	4.33 ab	4.16 ab
	KK (%)	11.03	18.29	9.13	10.38

Note: numbers in the same column followed by the same letter are not significantly different with the DMRT 5% test.

In the intercropping cultivation, the weight of cotton fruits ranges from 3.15 g – 4.86 g while monoculture cotton ranges between 3.86 g – 4.98 g. The result of statistical analysis on the fruits weight parameter for intercropping cotton show that the comparison strain of Kanesia 10 and Kanesia 14 are not significantly different from strain 03008/24 and 03008/25 which means that they have higher cotton production potential comparing to other strains. Meanwhile in the statistical analysis in fruit weight for monoculture cotton show that the comparison strain is not significantly different from strain 03001/9, 03008/24, 03017/13, and 06062/3 (Table 1). There is no higher strain fruits weight comparing to the comparison strain of Kanesia 10, both in intercropping and monoculture. Khan And Khaliq (2004) conclude that cotton intercropping and palawija plan will give component result such as different number of fruits depending on it variety.

The result of seed cotton in intercropping cotton+maize ranges from 1,682.88 kg/ha to 2470.01 kg/ha. This indicates the adoption 3:2 pattern corresponding to intercropping of cotton+maize. Appropriate cultivation density for prospect cotton strain is 3 lines of cotton and 2 lines of maize with the productivity level of 1,563.9 kg/ha and maize 3,840,7 kg/ ha (RIAJAYA and KADARWATI, 2005). The highest result of seed cotton in intercropping cultivation pattern is reached by the strain 03017/13 amounted to 2470.01 kg/ha with corn yield of 2,001.54 kg/ha. The result of statistical analysis shows that there is no significant difference in strain 03017/13, 03001/9, 03008/24, 03008/25, Kanesia 10 and Kanesia 14 (Table 2).

Table 2 – Components of cotton yield and intercropping production of cotton and maize

No	Strains	Intercropping yield (kg/ha)		Cotton yield of monoculture (kg/ha)	Decreasing yield to monoculture (%)		NKL
		Cotton	Maize		Cotton	Maize	
1	03001/9	2082.88 abc	1892.41 abc	2399.20 ab	13.18	41.83	1,48
2	03008/24	2329.72 ab	2112.74 ab	2469.31 a	5.65	35.06	1,60
3	03008/25	2282.36 ab	1639.12 c	2596.03 a	12.08	49.61	1,46
4	03017/13	2470.01 a	2001.54 abc	2412.96 ab	-2.36	38.47	1,68
5	06062/3	1936.16 bc	2117.76 ab	2052.12 b	5.65	34.90	1,86
6	06063/3	1682.88 c	1747.23 bc	1786.77 b	5.81	46.29	1,50
7	Kanesia 10	2362.9 ab	2001.54 abc	2404.76 ab	1.74	38.47	1,63
8	Kanesia 14	2256.63 ab	1936.68 abc	2104.23 ab	-7.24	40.47	1,68
KK (%)		11.24	12.11	14.56			

Note: numbers in the same column followed by the same letter are not significantly different with the DMRT 5% test. NKL – value of land equality.

The high yield of seed cotton strain 03017/13 is supported by the existence of the highest number of harvested fruits compared to other strains (Table 1). This shows that the strain 03017/13 is capable to maintain the harvested fruits due to the sunlight and water competition during intercropping condition. The decreasing number and weight of the fruits in the cotton are more due to the decreasing of the efficiency of light interception for photosynthesis and the decreasing of net assimilation rate (Bednarz et al., 2000). So the strain 03017/13 has a chance to be selected as a superior strain because it is able to adapt well to the intercropping condition. Szumigalski and Van Acker (2006) state that the efficiency of the Nitrogen absorption in the intercropping cotton is higher than monoculture cotton. Thus, the nutrient that is brought to the fruits will be higher resulting in bigger fruits in those strains.

Meanwhile, the highest yield of seed cotton in the monoculture cotton is obtained from strain 03008/25 amounted to 2596.03 kg/ha and the result of analysis of variance shows that there is no significant difference in the strain 03008/25, 03017/13, 03001/9, 03008/24, Kanesia 10 and Kanesia 14. The highest decrease value of intercropping seed cotton against the monoculture is 13.18% namely strain 03001/9. Furthermore, the highest decrease of intercropping maize yield against monoculture ranges from 34.90% to 49.61%. Intercropping is an agricultural cultivation by planting two or more crops on the same land and at the same time to increase production per unit of land (Hugar and Palled, 2008).

The average yield of monoculture seed cotton shows not many difference from the intercropping cotton yield that is equal to 102.72 kg/ha. It is suspected that experimental conditions with very high sand content (> 90%) and monoculture crops have a lot of open space in the early phase of cotton growth resulting in high evaporation, which suppresses the growth and development of cotton. In all cotton strains and the comparison, varieties have a Land Equivalent Ratio (LER) of more than 1 with the highest value of 1.86 in the strain 06062/3. Generally, LER value above 1 means the land used for intercropping is more efficient than monoculture (Riajaya and Kadarwati, 2014). The same result was found by Metwally et al. (2012) and Metwally et al (2015) on the Egyptian cotton where intercropping with the maize can give the result of NKL ranging between 1.45 – 1.98 comparing to monoculture cotton.

The highest acceptance Price of intercropping of cotton+maize is obtained from strain 03017/13 with total acceptance of IDR 17,860,681 from cotton acceptance of IDR 11,856,048 and maize of IDR 6,004,633. While the second highest acceptance from stain 03008/24 with total acceptance of IDR 17,520,879 from the cotton acceptance of IDR 11,182,656 and corn of IDR 6,338,223. The results statistical analysis in the acceptance of intercropping cotton show no significant difference in the strains 03017/13, 03001/9, 03008/24, 03008/25, Kanesia 10 and Kanesia 14 while the acceptance of maize show no significant difference on 03017/13, 03001/9, 03008/24, Kanesia 10 and Kanesia 14 (Table 3).

Table 3 – Acceptance of cotton, maize and intercropping of cotton+maize

No	Strains	Acceptance (IDR)			Cotton monoculture	Increasing of acceptance to intercropping (IDR)
		intercropping of cotton+maize				
		Cotton	Maize	Cotton+maize		
1	03001/9	9,997,824 abc	5,677,220 abc	15,675,044 ab	11,516,160 ab	4,158,884
2	03008/24	11,182,656 ab	6,338,223 ab	17,520,879 a	11,852,688 a	5,668,191
3	03008/25	10,955,328 ab	4,917,374 c	15,872,702 ab	12,460,944 a	3,411,758
4	03017/13	11,856,048 a	6,004,633 abc	17,860,681 a	11,582,208 ab	6,278,473
5	06062/3	9,293,568 bc	6,353,281 ab	15,646,849 ab	9,850,158 ab	5,796,691
6	06063/3	8,077,824 c	5,241,698 bc	13,319,522 b	8,576,496 b	4,743,026
7	K 10	11,342,064 ab	6,004,633 abc	17,346,697 a	11,542,848 ab	5,803,849
8	K 14	10,831,776 ab	5,810,038 abc	16,641,814 a	10,100,304 ab	6,541,510
KK (%)		11.24	12.11	9.02	14.90	

Note: numbers in the same column followed by the same letter are not significantly different with the DMRT 5% test. Cost of seed cotton is IDR 4,800/kg and maize is IDR 3,000/kg.

The highest total acceptance of intercropping cotton+maize above the comparison (kanesia 10 and kanesia 14) is obtained from the strain 03017/13 and 03008/24 amounted to IDR 17,860,681 and IDR 17,520,879. Where the result of the analysis of variance of the strain shows no significant difference with the comparison cotton Kanesia 10 and Kanesia 14 (Table 3), with the increased value of acceptance comparing to monoculture amounted to IDR 6.278.473 and IDR 5.668.191. Thus, the strain 03017/13 and 03008/24 are the prospect cotton strain of drought tolerant with high suitability in intercropping pattern with maize.

CONCLUSION

The prospect cotton strain with high suitability, when intercropped with maize, is 03017/13 and 03008/24 with the highest acceptance of IDR 17,860,681 and IDR 17,520,879 so that the increase of acceptance compared to monoculture amounted to IDR 6,278,473 and IDR 5,668,191. The high acceptance is obtained from the production of seed cotton amounted to 2,470.01 kg/ha and 2,329.2 kg/ha, maize production amounted to 2,001.54 kg/ha and 2,112.74 kg/ha with Land Equivalent Ratio of 1.68 and 1.60. High cotton productivity is supported by the production component in the form of harvested fruits amounted to 12.66 and 11.76 fruit/plant and fruits weight of 4.05 and 4.17 g/fruit.

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IMPLEMENTATION OF EMPOWERMENT PROGRAM FOR FISHERMAN SOCIETY: A THEORETICAL REVIEW

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ABSTRACT

This article aimed at describing and explaining a set of theoretical review on the implementation of human empowerment program for fisherman society. This article was composed using review of related literature method. The result of the review points out some interesting findings: policy is a set of actions that contain some agreements agreed by a person or a group of people to solve certain problem or to achieve certain goal; implementation of a policy involves a long process in implementing the program which should be oriented to achieve the predetermined goals as stated in the policy; fisherman society can be classified into several categories, such as traditional fisherman, subsystem fisherman, pure fisherman, recreational and commercial fisherman; traditional fisherman refers to those who seize resources from the nature using traditional tools, small capital, and relatively simple organization; empowerment is an effort to develop certain capability or potential by driving, motivating and raising society's awareness upon their own capability to be explored; society empowerment is an attempt to strengthen the dignity of certain society, to get themselves free from poverty or poor quality of life. In another word, empowerment is a program that helps a society to grow their ability and independence.

KEY WORDS

Policy, implementation, empowerment, fisherman.

The term 'policy' can be defined in various ways. This term is usually misused in referring to goals, program, decision, law, regulation, suggestions or major plan. The United Nations (1975) clarified that policy is a declaration of guidelines, orientations to certain action, plans to implement certain program or actions (Wahab, 1997). Basically, policy is a guideline or procedure to do an action. This guideline might be quite simple or complex, general or specific, broad or limited, overt or covert, loose or detailed, qualitative or quantitative, public or private. In line with the definition of a policy made by The United Nation, a policy is "*a proposed course of action of person, group, or government within an area given environment providing obstacles and opportunities which the policy was proposed to utilize and overcome in an effort to reach an goal or realize an objective or purpose*" (Islami, 2000). It is also defined that a policy is "*A purposive course of action followed by action or set actors in dealing with a problem with a problem or metier of concern*" (Wahab, 1999). Another expert explained that "*A policy ... consist of web of decisions and actions than allocate values*" (Wahab, 1999).

Besides those three definitions mentioned above, there are other definitions with slightly different essence in defining a policy. It can be inferred from those three definitions that basically, a policy consists of several elements: 1) a set of actions; 2) actions are performed by a person or a group of people; 3) there are solutions available for problems that occur, 4) there is certain goal.

From the combination of those four elements, it can be defined that a policy is a set of actions that reflects agreements made by a person or a group of people used to solve certain problems and to reach certain goals.

Even if the term policy can be used as a general term, usually it is more frequently and broadly used to refer to actions or programs made by a government within the context of a nation (public policy). Some experts have made some definitions of a public policy. One of which stated that public policy "*is whatever government choose to do or not to do*". Furthermore, it is highlighted that a government should set the objectives of certain programs

before implementing them. Public policy should be made upon clear public interest since it is not merely subjective ideas of certain government or officials. In addition, any undone action can still be considered as public a public policy even if it is not made by a nation since an undone action might have equal effect with certain completed action (Islamy, 2000).

A similar view was proposed by Dye in which it is stated that a policy *"....is what government say and do, or not do,. It is the goals or purposes of government programs...."* (Anderson. 1979). Another expert stated that *"public policies are those developed by government bodies and officials"* (Anderson. 1979). Lastly, the meaning of public policy is depicted as follows: *"A set of interrelated decisions taken by a political actor or group of actor concerning the selection of goals and the means of achieving them within a specified situation where these decisions should, in principle, be within the power of these actors to achieve"* (Wahab. 1998).

Regarding to those defintions, basically a public policy refers to any actions made based on public interests by considering social values that apply. Public administrators should always bring public interests into their polical discourse in order to prevent them from taking any decision based on their subjective interests. Therefore, it can be concluded that public policy is a set of actions done or undone by a government to achieve certain goal that carries public interests.

Based on various definition of public interests, there are some important elements of a public policy, which are: initially, public policy is a decision to implement certain action made by the government; public policy is not only declared, but it should also be implemented as a real action; public policy to do or not to do certain action is arranged based on certain reasons and objectives; any public policy should be made for public interests. (Islamy. 2000).

Implementation of a policy is a process to conduct a plan related to the policy made by government which is aimed at achieving certain objectives. The implementation process can be started when the objectives have been clearly determined along with detailed procedure and determination of funding source to reach the objectives. There are four key aspects in the implementation of a policy: who are being involved in the implementation, the administrative processes, and obedience upon the policy, effects and impacts of the implementation of a policy (Anderson. 1979).

In a broader context, implementation of a policy is a legal administrative tool that involves several actors, organizations, procedure, and technique in working collaboratively to run a policy in order to achieve its objectives. From another side, implementation is a complex phenomena which can be understood as *"those actions by public or private individuals (or groups) that are directed at the achievement of objectives set forth in prior policy decisions"*. Policy implementation is a crucial phase of a policy since it is not only involved with its mechanism, explanation, politics, prodecures, bureaucracy, but it also concerns aspects related to conflicts, decisions, and who obtain something from the implementation of a policy. Policy implementation might be more important than the policy making. Policies are only well-achieved expectations or ideal plans if it is not implemented (Wahab. 1998).

Policy implementation functions as a way to form a complex relationship that allows the objectives or targets of a policy to be obtained as an outcome. Unfortunately, seen from the perspective of public policy study, it has to be admitted that only in the last decade, social scientists especially politics experts began to grow attention to the the process of policy implementation and the acceptance to consider it as an integrative part of a policy making process (Wahab. 1998).

The process of a policy implementation should be well-controlled. Thus, it is inappropriate to assume that the implementation of a policy can run well without any obstacle. It should be taken into account that the implementation of a policy is a dynamic process which involves various factors. A legalized policy has a legal legitimacy from the legislative institution which should be taken into actions by the bureaucracy.

Shortly, policy implementation means to provide the means for carryin gout and to give practival effect. Based on this view, policy implementation is considered as a process to run a policy which are usually in the form of law, government rule, regional regulation, court

decision, executive orders of president's order.

Therefore, it can be concluded that policy implementation process does not only involve actions of the administrative institutions in charge for the program to grow obedience of the targeted group, but it also deals with a network of political and social groups which might either directly or indirectly influence the behavior of any parties which are involved in the program. Eventually, it might lead to the intended effects or even unintended effects (spillover/negative effects).

To make a policy implementation more effective, ones have to consider these two characteristics of a policy implementation:

Policy implementation is self executing. It means that by the time the policy is made, the policy is automatically implemented. For instance, the policy to acknowledgement of a nation to the sovereignty;

Policy implementation is non-self executing. It means that a policy can only be implemented when some institutions in charge act for it.

Theoretical framework of a policy implementation should start from the consideration of the objectives and the targets of the policy. The implementation of a policy might be different from implementation of other policies depending on the characteristics of the policy. Different decision makes different characteristics, structures and relationship among the factors that influence the policy. Thus, the implementation of the policy will be different. Policies can be seen from two perspectives; the amount of changes a policy brings to achieve certain objectives and how the implementation of a policy runs. A change is the most important indicator of a policy implementation since it involves these two following aspects.

Implementation is affected by how far a policy deviates from previous policies. In the context, incremental changes tend to raise positive responses rather than drastic changes. Incremental changes which result from incremental decisions are actually remedials that are directed to complete the already existing social gap rather than promoting the objectives of the policy in the future. This insight is different from the one that is made out of rational decision which is mainly oriented to create major and fundamental changes. As the result, the chance to spark conflicts and disagreements is higher.

Implementation process is affected by the organizational changes that are required. Effective implementation can be achieved if an organization is not required to create drastic reorganization. Failures in conducting social programs are mostly caused by the increasing number of requirements that should be fulfilled within the already existing structures and administrative procedures.

A successful implementation requires a good working system which involves four parameters, which are:

Overtime coordination. Coordination should not be limited to certain time in order to make it optimal and and informal;

Regular coordination. Coordination and monitoring should be clearly scheduled and agreed by the parties that are involved in the process;

Detailed logistics and fixed schedule. Implementation of a certain policy requires enough supply of logistics;

Clearly determined job descriptions. It is necessary to create detailed run down in order to make monitoring to each organizational unit easier (Parsons. 1997).

It takes effective approach to a system that emphasizes on strengthening the teamwork and clarifying the objectives, structures, theoretical framework and implementation to make a policy implementation successful.

Effective implementation requires these six conditions: clear and consistent objectives in order to provide clear evaluation standards and legal resources; rational cause-effect relationship that is able to strongly present how a new policy brings positive changes; legalized structure to provide the needs of the actors who are in charge of implementing a policy and to provide the needs of certain groups involved in the policy as the targets of the policy; experts should be involved in the implementation of a policy to effectively achieve the objectives of a policy implementation; supports from the parties involved in the program and supports from the officers in the legislative and executive institutions; there has to be some

positive socio-economic changes made by a policy that should not decrease the supports from politicians or raise any negative effects to the already settled mechanisms that support the policy.

Empowering fisherman society. Traditional fisherman are fisherman that use traditional tool in fishing, need small amount of capital and apply a relatively simple organization. In the daily basis, traditional fisherman mainly focuses on the fulfillment of their subsistence. It means that the profit from their fish sale is used to fulfill their daily necessities such as food instead of investing it back to enhance their fishing method. Usually, traditional fisherman is from poor families which are firstly affected by modernization and economic crisis (Satria dalam Suhartini, 2005).

Traditional fishermen depend on the condition of the nature. A long dry season does not only give them small fish seizures, but also put them into poverty and force them to request for some loan for living. The limited resources owned by traditional fisherman are the obstacles for them to reach higher social welfare and to get themselves free from poverty (Suyanto 1996).

Widodo (2006) grouped fisherman into four types:

Subsistence fishers, referring to fisherman that seize fish to fulfill their daily necessities;

Native/indigenous/aboriginal fishers are fisherman that have similar characteristics to subsistence fishers but they have the legal right to do small-scale commercial fishing;

Recreational fishers are fisherman who do fishing as hobby or sports;

Commercial fishers are the ones who seize huge amount of fish for commercial objective or to be sold in domestic market as well as to export them abroad. Commercial fishers are grouped into huge-scale fishers and small-scale fishers.

Fisherman can also be grouped based on the terminology of the fishing intensiveness including: fulltime fisherman, referring to fisherman who depend their lives on fishing; part-time fisherman, the ones who do not completely depend their lives on fishing (they have other earnings from other activities).

Fisherman can also be group based on the ownership: owner refers to the ones who own fishing resources such as ship and fishing tools; fishing crews, those who are paid to do fishing using the fishing resources provided by an owner.

According to Bailey in Widodo (2006), small-scale fisheries industries have these characteristics.

Small-scale fisheries industries are generally dependant to marine resources as their main job and their activities can be done along coastal lines. With this condition, good management of marine and fisheries is the key to the sustainable marine resource and its utilization.

Fisherman in this group has limited access to other jobs and most of them earn quite low income. Scarcity of fish in the ocean directly affects the quality of their life.

Small-scale fisheries industries also utilize technology such as ship and seizure tools but at a limited number and limited capacity. Hence, developing the industries and expanding their fishing areas to open sea would be difficult to conduct.

Small-scale fisheries industry is mostly located far from the central city in which both political and economic activity occurs. As the implication, fisherman have low bargaining position which appears to be a weakness since they have to compete with bigger-scale fisherman who employed productive devices such as purse seine, trawl and fishpond. Small-scale fisheries industries are very much vulnerable to get affected by extern factors that it is necessary to build certain protection system. The socio-economy status of fisherman is classified into: rich and wealthy; middle class; poor and very poor (Kusnadi, 2002).

Suharto (2005) stated that empowerment refers to the attempts to enhance ones' ability, especially ability of the weak groups to be able to; (a) fulfill their primary necessities and free from hunger, illiteracy, and illness; (b) utilize any productive resources that might be used to increase their income which allows them to buy any necessary goods or services; (c) participate in the process of nation's development and in any discussion to determine decisions related to them.

In line with the statement, empowerment is an answer to the disempowerment reality. Weak and poor people do not possess any adequate strength. Weak people are those who have no strength from the beginning and those who somehow lost their strength. People who lost their strength have experienced certain process that made their strength taken away from them (Pambudi, 2003).

Ife in Suharto (2005) explained that empowerment consists of two essential key word; power and powerless group. In this context, power does not only relate to political power, yet it refers to any power possessed by a person or some people to have personal choice or life chances to choose certain life style, place to live, or occupations; determination of their necessities based on their own preferences; ideas and ways to express their ideas within a forum or discussion without any pressure; ability to use, influence or access to any social program such as social welfare department, education, health services; ability to mobilize formal, informal or society resources; conduct economic activities and have the ability to manage production, distribution, exchanges or services; reproduction; the ability to access good health care for giving birth, child care, education and socialization.

Empowerment is an effort to develop a potential by driving, motivating and raising society's awareness upon their potential to be furthermore explored (Kartasasmita, 1996).

Empowerment process is a sustainable process one has to go through their life (on going process). Hogan in Adi (2002) explained that individual empowerment is a relatively long process that keeps running throughout one's life which is obtained from one's life experience. It is not an end-state, but a process that all human being experience.

Suharto (2005) explained that power is related to influence and control. This view assumes power as a fixed entity that cannot be changed. However, it is believed that power is not only limited to this view. Power is always present in any social relationship among human since power is created upon social relationship. Thus, it makes sense if power is changeable. Within this belief, empowerment is seen as process to change certain state. In addition, empowerment depends on; (1) the changeability of power. If the power is absolute, empowerment cannot occur. (2) Power is expandable which implies that power is not static; instead it is a dynamic state.

Regarding to those views, empowerment is a process and an objective at the same time. As a process, empowerment refers to a set of action to strengthen a power or to give power to powerless people including people who are poverty-stricken. As an objective, empowerment refers to the state or an expected result of a social change, empowered society, society with adequate knowledge, power and ability to fulfill both their physical needs and economical needs, as well as social needs such as self esteem, freedom to show opinion, proper occupation, ability to participate in social activities and independence. Empowerment as an objective has been misused as an indicator of empowerment as a process.

Payne dalam Cook & Macaulay (1997) stated that empowerment process is meant *"...to help client gain power of decision and action over their own lives by reducing the effect of social or personal block to exercising existing power, by increasing capacity and self confidence to use power and by transferring power from the environment to client"*.

Society empowerment can be conducted in a sequential order which consists of three phases; (1) initial phase, (2) participatory phase, and (3) emancipatory phase (Pranarka dan Prijono, 1996).

In the initial phase, the process is run by the government for the society. In this step, the society plays a passive and dependant role by only receiving and performing what is instructed by the government. Then, in the participatory phase, the government still provides the facilities but the society is actively involved to reach independence. Eventually, in the emancipatory phase, the society run the program themselves, by themselves, for themselves and the government gives full support along with the society. In this mature phase, the society has grown complete awareness of their autonomous energy, and they have developed their potentials and understanding how to utilize their potentials.

Emancipatory phase is the peak of the society empowerment program. At this point, the society has grown adequate ability in conducting any programs or activities to meet their

own expectations or necessities. In order to come to this point, there are mainly two conditions to fulfill which include the requirements in planning the development programs and the requirements in implementing the programs.

The three phases of society empowerment sometimes do not run in order. Some society might have grown adequate capability to start the process from the participatory phase.

An empowered society has some characteristics; democratization, equality between the society and the government, freedom of speech, freedom to be creative, freedom to make plans, freedom to manage local assets, rights to monitor government's performance, rights to enjoy the results of the society's work in achieving certain objectives of the society empowerment program (Suhendra, 2006).

Efforts to enhance society's life quality cannot be simply done by providing fund or charity programs since those kinds of actions might create bias which broadens the social gap among the society stratifications. Moreover, charity programs that provide full fund put poor families as the objects of the program and make them become highly dependant to the government. This way, poor families become weaker. Therefore, empowerment program is an appropriate program to run.

Empowerment program refers to a set of efforts that aim at enhancing human's quality of life and improving the condition of some unfortunate people who are being stricken by poverty and backwardness. In another word, empowerment is attempted to improve society's capability and independence.

This ideal concept of empowerment puts empowerment program in a strategic position in every nation's development program. Stakeholders' consting of the government, non-government parties and the society might out of the sudden put empowerment label in their programs. This condition is expected to trigger positive effects for the program. However, in administering a program, problems might appear. Therefore, it is necessary to determine strategic steps in empowering the society, in which empowerment program is utilized as anti-poverty program in Indonesia that can be administered through these following steps proposed by Tjokrowinoto (2004).

First, empowerment program is a requirement of anti-poverty program. Empowerment program emphasizes the feeling of being impotential experienced by poor families when they have to deal with unfavorable socio-politic structure. A concrete action can be started by raising society's critical awareness of the role of a society in the social-politic structure around their area. Without having adequate critical awareness, poor families remain powerless and they might grow the tendency to give up on their fate.

Second, after a society has raised adequate critical awareness, people would make certain attempts to cut off any exploitative actions done to poor people. Abolishing exploitative actions can be done through a thorough reformation on social aspect, culture, and politics. In short, we can let critical awareness grow within a society and the society should be let to do reorganization in order to increase their productivity and improve their quality of life.

Third, it is important to grow egalitarian in a society and enhance the understanding that poverty is not an end-fate, but it can be changed through social reconstruction. Poverty is changeable, and the one who can change it is the society itself. Poverty and social gap is not a fate given by the God, but it is the product of social construction made by the society.

Forth, implementing the development plans by getting poor families fully participated in the action.

Fifth, poor families need education and development of social and culture. Aside from the necessity to bring structural change, poor families should also grow positive values such as proper ways in planning a good life, optimism, changing their life style, improving their productivity and their quality, etc.

Sixth, infrastructure redistribution should be made equal and even. Even though the previous five steps can be achieved without adequate support of propoer infrastructure, but poor families generally do not have access to improve their economic condition, and they do not have any access to other aspects of life.

According to Schuftan (1996), society empowerment can be implemented using these four approaches:

- Service delivery which is characterized by direct contact with the society which appears to be the main cause of failures in implementing a development program.
- Capacity building which can be approached by improving society's knowledge, understanding, awareness and skills to optimize their capacity by using any available facilities to prevent the society development from failures.
- Advocacy which can be approached by determining a dynamic process in reaching a consensus and plans in implementing certain action.
- Social mobilization which should be approached by involving the society to actively participate in making assessment, analysis and actions within the implementation process of a program to find the fundamental factor that causes failures in a society empowerment program.

Kusnadi (2007) proposed some qualitative indicators of a well-empowered fisherman society, including:

Fulfillment of socio-economic welfare of individuals, families and society which can be seen from these following indicators: well-developing economic independence and well-enhanced entrepreneurship, increasing amount of saving and investment, well-fulfilled primary and secondary needs in the most optimal and sustainable way, high quality human resources;

Economic institutions function optimally and economic activities run in a stable and continue way;

Social organizations run their functions well as the instruments of regional development;

Easier access for the society toward economic resources; information, capital, market and technology;

Higher participation of the society in taking decision related to any development programs run in coastal areas and better critical awareness toward development issues in their area;

Coastal areas should be developed as the central of regional and national economic development that are able to attract more investment.

Furthermore, Kartasmita (1996) mentioned three ways to implement a society empowerment program, which are:

Creating favorable and supportive environment to enhance a society's potentials. This view regards an assumption that each individual and group has certain potentials which can be improved. The real essence of independence and empowered society is to raise awareness and belief that a society has the ability and potential to organize them by exploring individuals' potential.

Strengthening the potential or capability of a society by implementing real actions, sharing ideas, providing physical facilities (drainage system and electricity) as well as social facilities (schools and health care) that are accessible for anyone even those from the lowest social class. Accessible facilities such as financial institutions, training center, and marketing consultant available in rural areas empower the society.

Protecting and defending the interests of poor society. Empowerment program should prevent the number of poor families from growing or getting marginalized by the upper class. Therefore, empowerment program should provide protection and take sides with the lower class society.

Society empowerment is not limited to only economic development, but it taps on politic, social, and culture development. Thus, the society will eventually have higher bargaining position and high competitiveness to compete within regional or national market. The paradigm of society empowerment proposed in this article aims at uplifting the current condition which rather centralized (top down) by giving broader opportunities for poor society to plan and implement their own empowerment programs. They are also given authority to manage the funding provided by the government and non-government institutions to fund their own programs (Sutrisno, 1995).

CONCLUSION

Policy is a set of actions that consist of decisions agreed by certain group of people to solve certain problem and to achieve certain objective. Policy implementation is the process to administer a decision made by the government to reach the objectives of the policy.

Fisherman society can be grouped into: traditional fisherman, subsistence fisherman, native fisherman, recreational fisherman and commercial fisherman. Traditional fisherman refers to fisherman community that utilizes traditional tools in seizing fish, use small amount of capital and apply a relatively simple organization in doing their fishing activities.

Empowerment refers to an attempt to improve certain resource or potential owned by a society by driving, motivating and raising the awareness of the society toward its own capability be optimally explored. Society empowerment is an effort to uplift the condition of certain unfortunate society who is being stricken by poverty.

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INCREASING THE PRODUCTION OF RUBBER PLANTATIONS AND INVESTMENT OPTIONS OF RUBBER FARMERS IN JAMBI PROVINCE

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ABSTRACT

The objective of the research is to analyze the increase of rubber plantation production in Jambi Province, the factors affecting production, and the investment choice for farmers in increasing production. To know the factors that influence the production of smallholder rubber plantation in Jambi Province used multiple linear regression analysis. Furthermore, to explain the investment options for rubber farmers there are two options, namely intensification or extensification. The choice of intensification will lead to increased land productivity. Extensification options do not lead to increased productivity because there is no technological change, especially the use of modern inputs. The result of research shows that productivity of rubber plantation in Jambi Province which generally use traditional method is still low, that is equal to 865 kg/ha/year; the development of rubber plantation production in Jambi Province is quite rapid, at 2.65% per year (however, the increase in productivity of smallholder rubber plantations is slow, at 0.238% per year); the factor of the area of smallholder rubber plantation and the number of rainy days has a significant effect on rubber plantation production. This study reveals that farmers are more likely to choose extensification that can be done traditionally with lower risk levels, while intensification options should be done in a modern way, greater cost, and a greater risk of failure.

KEY WORDS

Extensification, intensification, production, productivity.

Jambi Province has economic potential in agriculture, where the agricultural sector contributes as much as 29.83% in Gross Domestic Regional Product (GDRP). From the agriculture sector, the plantation sub-sector is the largest in terms of 16.31% (BPS, 2015). There are 6 (six) commodities that have been established as leading commodities in Jambi Province, namely rubber, palm oil, coconut, cinnamon, coffee, and areca nut. Judging from the number of farmers and plant area, rubber commodity topped the area with 664,739 ha (Budidaya, 2015).

Rubber plantations (*Hevea brasiliensis*) in Jambi province are still traditionally cultivated, namely mixed cropping systems. On the same plot of rubber planted in conjunction with other crops and grow jostling with other plants. Therefore, the rubber plant has advantages, which are environmentally friendly and include the category of forestry crops as well as functioning as forest rehabilitation. Rubber plants is one type of plant that has a high tolerance to soil fertility (Falah et al, 2011).

Rubber plantations have the potential to grow and produce in 7 (seven) districts (of 11 districts /cities) in Jambi Province. Potential districts are Sarolangun, Merangin, Bungo, Tebo, Batanghari, Muaro Jambi and Tanjung Jabung Barat. Therefore, given the vastness of rubber plantations, the large number of farmers who depend on the plantation business, and the nature of their hospitality to the environment, the rubber plantation is considered very potential to be developed in addition to other plantation crops (BPS,2015). Rubber plantation has the potential to become "the prime mover sector" (base sector) in the regional economy in Jambi Province (Sorenson, 2007).

The productivity of rubber plantation in Jambi Province is relatively low. In 2014, land productivity is 960 kg/ha/year (Jambi Provincial Plantation Office, 2015) while the productivity of rubber plantation in South Sumatera Province (neighboring province) is 1.440 kg/ha/year (Agustina,2015). The productivity of rubber plantations in Malaysia is 1,100 kg/ha/year, India

1,334 kg/ha/year, Vietnam 1,358 kg/ha /year and Thailand 1,600 kg/ha/year (Boerhenhdy, 2013). To improve the productivity of the land needs improvement in technology or quality of the garden. Research on rubber plantations intensively cultivated in Indonesia, using 100 series rubber clones or 200 rubber plantations can produce 2,141 to 2,734 kg/ha/year (Daslim, 2014).

The phenomenon of low productivity of rubber plantations in Jambi Province cannot be fully explained by the classical economic theory approach, where the use of input (capital, labor, and technology) will increase production to the maximum point, $y = f(c, l, t)$ (Miller, 1997). Several studies conducted in Southeast Asia have found that productivity is influenced by other aspects outside the economic aspect. Among the social aspects that give rise to economic "dualism" (Booke, 1983), the cultural aspects that give rise to "agricultural involution" (Geertz, 1976), the moral-economic aspect that causes farmers to be reluctant to accept technology (Scott 1981), and the institutional and labor supply aspects (Hayami et al (1987).

Increased production of rubber plantations can be done in two ways, namely through intensification (improvement of cultivation techniques) and extensification (area expansion). Intensification is done with technological improvements so that land productivity increases. The low productivity of rubber plantations in Jambi Province shows that farmers are still reluctant to intensify. Rubber plantation replanting program as one of the intensification program through technological improvement with the aim of increasing land productivity has been done since 2006 but did not give satisfactory result.

This study aims to: 1) Analyze the factors that influence production, i.e. the area of land, the number of rainy days, the number of farmers, the price of rubber, the length of the asphalt road, and the capacity of the industry. 2) Analyze the increase of land productivity. 3) Analyze farmers' choice to extend or intensify.

METHODS OF RESEARCH

This research is a "survey" method (Yunus, 2010) taking place in Jambi Province, where rubber is the main product besides other plantation products. This research was conducted in 2016, ie from April to November 2016. Using secondary data existed in related institutions, including BPS-Statidtic Of Jambi Province (BPS), Plantation Office (Dinas Pekarkebunan), Public Work Office (Dinas Pekerjaan Umum), and Trade and Industry Offices (Dinas Perindustrian dan Perdagangan). This study uses secondary data which collected data from 2001 until 2015.

The main variables observed were rubber production and rubber land productivity. Furthermore, rubber production is related to rubber plantation area, number of rainy days, number of rubber farmers, rubber price, length of asphalt road, and rubber factory capacity to rubber price in Jambi Province. Further data collected by data tabulation and statistical analysis econometric with model of Multiple Linear Regression. Trend analysis and descriptive analysis. The mathematical relationship between the rubber plantation production variables and the factors that influence them can be written as the Multiple Regression Model as follows (Pindyck 1998).

$$Y_{1i} = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + e$$

Where: Y_{1i} = Production of rubber plantations in year i (Ton); B_0 = constants; $B_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ = Elasticity of the above variable E = error; X_{1i} = Area of rubber plantation produces in Jambi Province in year i (ha); X_{2i} = Number of rainy days in Jambi Province in year i (days/year); X_{3i} = Number of rubber farmers in Jambi Province in year i (mm³/year); X_{4i} = Rubber price in Province in year i (\$/Kwintal); X_{5i} = Length of asphalt road in Jambi Province in year i (Km); X_{6i} = Capacity of rubber factory in Jambi Province in year i (Ton / Year)

This research, analysis was use data processing program by the Application Program Eviews (Nachrowi, 2006). With this application program all the steps required in testing the econometric model can be done so that the final result can be trusted to draw conclusions.

RESULTS AND DISCUSSION

The factors affect Rubber Plantation Production

The development of rubber plantation production is a description of the progress and movement of development of a region, especially in the field of rubber plantation. The faster the development of rubber plantation production the more visible progress of development in the area. In general, the development of rubber plantation production is determined by the first, the expansion of the so-called extensification area and secondly, the addition of inputs called intensification. There are several factors suspected to affect rubber plantation production, i.e. land area, number of rainy days, number of rubber farmers, rubber price, length of asphalt road, and factory capacity.

Table 1 – Rubber plantation production and influencing factors in Jambi Province from 2001-2015

Num	Years	Production (ton)	Land area (ha)	Number of rainy days (days/month)	Number of farmer (mans)	Rubber price SIR 20 (\$/kw)	Length of asphalt road (km)	Factory capacity (ton/month)
1	2001	239,330	326,201	14.80	194,391	488,454.00	2,512.48	243,000
2	2002	239,625	329,471	15.01	190,113	572,286.00	10,164.99	43,000
3	2003	241,328	335,900	13.50	188,344	697,600.00	2,896.80	289,200
4	2004	236,317	325,076	14.20	216,724	114,540.00	2,387.08	364,500
5	2005	247,568	335,094	13.10	226,908	124,500.00	2,387.08	288,300
6	2006	266,263	337,028	8.60	228,576	168,633.00	2,387.07	324,300
7	2007	264,674	334,499	17.50	235,888	197,333.00	2,387.07	324,300
8	2008	271,752	337,417	15.80	246,380	24,821.00	2,387.07	339,300
9	2009	280,620	338,296	14.80	251,184	155.28	2,307.08	312,800
10	2010	288,981	342,261	18.40	251,403	294.83	2,417.01	312,800
11	2011	298,786	342,851	15.50	249,978	383.08	2,417.01	387,300
12	2012	322,044	349,184	13.80	252,505	313.33	2,441.41	360,800
13	2013	325,991	354,098	17.70	254,134	258.02	2,441.41	367,000
14	2014	342,998	357,138	15.80	255,663	130.85	2,441.41	472,200
15	2015*	350,457	359,128	14.70	254,813	230.00	2,441.41	472,200

Source: Processed from BPS, 2015 and the others.

After analysis with multiple regression model, by using application program "eviews" with stages as appropriate, multicollinearity test, autocorrelation test, heteroscedasticity test then obtained the result or model as follows:

$$Y = -812159,8 + 733,5238X1 - 0,063014 X2 - 0,033062X3 + 0,495689X4 + 3,239800X5 + 0,396676X6 + e$$

From the regression equation model can be explained that the result of R squared of 0.963942 obtained the understanding that the production function is able to explain the independent variables, namely the rubber plantation area, the number of rainy days, the number of rubber farmers, the price of rubber, the length of the asphalt road, and the factory capacity affect the dependent variable together, ie rubber plantation production with 96% confidence level and only 4% influenced by other variables.

Furthermore, the results of analysis through partial testing or individually obtained the result that the factor of rubber plantation area and the number of rainy days have significant effect on rubber plantation production. Other variables such as number of rubber farmers, rubber price, length of asphalt road, and factory capacity affect rubbers plantation insignificantly in Jambi Province.

Development of Production and Productivity of Rubber Plantation in Jambi Province. Production and productivity of rubber plantations is one indicator of the progress of rubber plantation development in Jambi Province. Increased production will show an increase in

farmers' income. Therefore, farmers will try to increase production in order to increase their income.

Productivity describes technological advances, whether biotechnology, chemical technology, or mechanization technology. The higher the productivity of the rubber plantation the more advanced the plantation and the more prosperous the farmers. Farmers' income depends on the total production they receive. Production can be increased by increasing the area of land (extensification) or increasing land productivity (intensification). The development of production, productivity, and extent of rubber plantations in the Province from 2001-2015 can be explained in Table 1.

Table 2 – The development of rubber plantation production and productivity in Jambi Province, 2001-2015

Num	Years	Production (kg)	Growth (%)	Land area (ha)	Growth (%)	Produktivitas (ton/ha)	Growth (ton)
1	2001	239,330	-	326,201	-	0.7337	
2	2002	239,625	0.12	329,471	0.99	0.7273	0
3	2003	241,328	0.71	335,900	1.91	0.7185	(0.01)
4	2004	236,317	(2.12)	325,076	(3.33)	0.7270	0.01
5	2005	247,568	4.54	335,094	2.99	0.7388	0.01
6	2006	266,263	7.02	337,028	0.57	0.7900	0.05
7	2007	264,674	(0.60)	334,499	(0.76)	0.7913	0
8	2008	271,752	2.60	337,417	0.86	0.8054	0.02
9	2009	280,620	3.16	338,296	0.26	0.8295	0.02
10	2010	288,981	2.89	342,261	1.16	0.8443	0.01
11	2011	298,786	3.28	342,851	0.17	0.8715	0.03
12	2012	322,044	7.22	349,184	1.81	0.9223	0.05
13	2013	325,991	1.21	354,098	1.39	0.9206	0
14	2014	342,998	4.96	357,138	0.85	0.9604	0.04
15	2015	350,457	2.13	359,128	0.55	0.9759	0.02
	Average	-	2.65	-	0.67	-	0.02

Source: Processed from BPS, 2015. Jambi in Figures 2001-2015.

Table 1 can be explained that the production of rubber plantations in Jambi Province from 2001 to 2015 tends to increase every year, except in 2004 and in 2007 there was a decline. The average rubber plantation production increased by 7,938 tons (2.65%) per year and the land area increased by 2,352 ha per year (0.67%) while the productivity only increased on average by 0.02 tons per ha or by 20 kg/ha/year. This illustrates that the increase in productivity is very slow and difficult to reach the ideal number as proposed Daslim (2014) that is equal to 2,734 kg/ha/year.

Extensification and Intensification Options. A farmer and his family in Jambi Province can live well if they have a land area of at least 2 ha. If a farmer and family owns less than 2 hectares then he will endeavor to expand his plantation land with available land. To find out how much land owned by farmers and their families in Jambi Province can be known as follows. The total area of agricultural land in Jambi Province as described in table 4 below is 4,451,861 ha, consisting of agricultural land of 4,220,199 ha and large plantation area of 231,662 ha. The number of farmers is 254,813 people (see table 3). According to the statistical data every farmer has a land area of 16.56 ha. This area is enough for the welfare of farmers and their families. However, the facts on the ground are less encouraging because there has been considerable imbalance in land ownership. Many farmers own a farm area of one hundred hectares and even a thousand ha. Conversely many farmers who have no land at all. In general it can be explained that farmers in Jambi Province only have land less than 2 ha.

To meet the farmers' need for land in Jambi Province, a farmer will expand the area. From a farmer's point of view (generally low-educated) that the land for agricultural land cultivation is still available, including in the form of shrubs, old rubber gardens, even forests they consider to be gardens. This has led to a large number of land disputes between farmers and other farmers, between farmers and urban dwellers with land in the village, and

even disputes between farmers and the government who consider farmers to have planted gardens in forest areas. The description of land cover in Jambi Province in 2014 can be seen in table 4.

Table 3 – The development of area, production, productivity and farmers in 2014

Year	Area (Ha)			Total	Production (Ton)	Productivity (Kg/Ha)	Farmers (HH)
	Immature	Mature	Damaged				
2004	89,730	267,706	7,868	365,304	795,848	2,973	216,724
2005	105,113	292,314	6,040	403,467	936,595	3,204	226,908
2006	107,231	308,629	7,028	422,888	1,018,768	3,301	228,576
2007	102,106	338,844	7,949	448,899	1,150,355	3,395	235,888
2008	114,778	363,869	5,490	484,137	1,203,433	3,307	246,380
2009	113,954	371,808	3,622	489,384	1,265,789	3,404	251,184
2010	107,022	402,221	4,716	513,959	1,392,293	3,462	251,403
2011	110,259	417,304	4,730	532,293	1,426,081	3,417	249,978
2012	150,998	433,405	4,937	589,340	1,472,852	3,398	217,542
2013	143,172	444,588	5,673	593,433	1,555,697	3,499	254,813
2014	125,655	519,710	17,481	662,846	1,571,535	3,024	255,932

Source: Plantation Office of Jambi Province, 2015. Plantation Statistics 2015.

Table 4 – Total land cover in Jambi Province in 2013

No	Region	Area (Ha)	%
A	Kawasan Lindung		
1	Hutan Lindung	191.130	3,56
2	Kawasan suaka alam, pelestarian alam	676.120	12,61
	a. Cagar alam	30.400	0,57
	b. Taman Nasional	608.630	11,35
	c. Taman Hutan Raya	36.660	0,68
	d. Taman Wisata Alam	430	0,01
B	Kawasan Budidaya		
1	Kawasan Pertanian	4.451.861	83,02
	a. Pertanian lahan basah	684.060	12,76
	b. Pertanian lahan kering/tegalan/kebun campur	3.767.801	70,26
2	Kawasan Pemukiman	43.631	0,81
	Total	5.362.742	100,00

The development of rubber plantation production in Jambi Province between 2001 and 2015 was quite rapid, with production increasing by 2,65% per year, Increased productivity of land runs slow, i.e. by 0,238 tons/ha/year (lihat Tabel 2). This explains that farmers are more likely to choose extensification than intensification, Intensification options will require modern business management, greater maintenance costs, and a greater risk of failure, The choice of extensification is done because of the social, cultural, moral, and labor aspects of the family as found by experts from the neoclassical group (Booke, 1983, Geertz, 1976, Scott, 1981, Hayami et all, 987) and Allowing farmers to cultivate with traditional management, at lower costs, and lower risk levels.

CONCLUSION AND RECOMMENDATIONS

The results showed that the regression model used in data analysis is good enough so that it can explain the influence of independent variables of 96%, It can be explained also that the factor of rubber plantation area, the number of rainy days has a significant influence on rubber plantation production, while the variable of the number of rubber farmers, the rubber price, the length of the asphalt road, the factory capacity has no significant effect on rubber plantation production in Jambi Province.

The development of rubber plantation production in Jambi Province is quite rapid, that in 2001 the amount of production was 239,330 tons and in 2015 rubber plantation production increased to 350,457 tons, The growth rate is also quite convincing, ie an average of 2,65% per year.

The results also reveal that farmers are more likely to choose extensification than intensification because traditional extensification options can be done traditionally, lower costs, and lower risk levels, Instead the intensification option should be done in a modern way, greater cost, and greater risk of failure.

It is suggested to be able to do further research, that is by using data of each regency which is Jambi Province, Using more and more extensive data, it is expected that the regression model obtained will be better and more reliable to determine future rubber plantation development policy.

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PLANNING ANALYSIS OF LAND AND BUILDING TAX OF RURAL AND URBAN SECTORS AFTER BEING LOCALLY TAXED

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ABSTRACT

This study aims to analyze the land and building tax planning of rural and urban sectors implemented by the Regional Revenue Office of Sumbawa Regency and to examine deeper the planning problems arising from the Land and Building Tax of Rural and Urban sector, hereinafter referred to as PBB-PP after prevailing the Law of Regional Tax and Regional Retribution #28 of 2009 (Law of PDRB). Data analysis is conducted by using Miles and Hubberman models. The results indicate that there are several factors that have not been optimal in land and building tax of rural and urban sector planning. These factors are human resources, administrative completeness, local policy, control and accountability.

KEY WORDS

Land, building, tax, planning, law, policy, supervision.

The era of regional autonomy nowadays provides an opportunity for a change in the national development paradigm from the growth paradigm to the equitable and equal distribution of development paradigm. This paradigm change, among others, is realized through the policy of regional autonomy and the balance of central and regional finances as regulated in a package of Laws namely Law Number 22 of 1999 on Regional Government and Law Number 25 of 1999 on Financial Balance between Central Government and Local government.

The policy of granting broad, real, and responsible regional autonomy and decentralization is a strategic step in two respects. *First*, regional autonomy and decentralization are the answers to the local problems of Indonesia in the form of the nation disintegration threat, poverty, development inequality, community life low quality, and human resource development (HR) problem. *Second*, regional autonomy and fiscal decentralization are the strategic steps of Indonesia to welcome the era of economic globalization by strengthening the regional economic base.

The autonomy mandated to districts and municipalities is performed by granting broad, real, and responsible proportionally, meaning that, the assignation of responsibilities will be followed by equitable sharing arrangements and utilization and national resources, central and regional financial balances. Fundamentals of the regional autonomy laws are the strong efforts to encourage community empowerment, initiative and creativity development, community participation, and roles and functions development of the Regional House of Representatives (DPRD). This law provides full autonomy to the districts and municipalities to establish and to implement policies according to community initiatives and aspirations. It means that the regions have been given full authority to plan, to implement, to supervise, to control, and to evaluate the policies of the region. With the growing participation of the people, decentralization will then affect the quality of other governmental components. One of them is related to the shift of government orientation, from *command and control* to be more oriented on public demands and needs. This kind of orientation will afterwards become the basis for the implementation of the government's role as a stimulator, a facilitator, a coordinator and an entrepreneur in the development process.

One of the broad, real, and responsible authority given to the region is through Law Number 28 of 2009 as the substitute of Law Number 18 of 1997 and Law Number 34 of 2000 regarding Regional Tax and Retribution (hereinafter referred to as the PDRD Law), the region has been given the authority to levy taxes (*taxing power*). Since officially applied on

January 1, 2010, local governments must prepare themselves to face the challenge of managing tax items which are previously administered by the central government to be handed over to the regions.

Law Number 28 of 2009 states that there are several types of taxes collected by the Regency/City. Regency tax types consist of: Hotel Tax; Restaurant tax; Entertainment Tax; Advertisement tax; Street Lighting tax; Non-metallic and rock mineral taxes; Parking Tax; Groundwater Tax; Swallow's Nest Tax; Land and Rural and Urban Building Tax; and Land and Building Title Transfer Duty. Especially on the division of Land and Building Tax in Urban and Rural Sector or it is more known as PBB-PP.

Land and Building Tax of Rural and Urban sector (PPB-PP) which is previously a central tax, transferred into local taxes, with various considerations. First, conceptually, Land and Building Tax of Rural and Urban sector (PBB-PP) can be collected by the region because it is more local, visible, immobile tax object, and there is a close relationship between the taxpayer and the beneficiary of the tax. Second, the transfer of Land and Building Tax of Rural and Urban sector (PBB-PP) to the regions is expected to increase Original Local Government Revenue (PAD) and to improve the structure of Local Government Budget (APBD). Third, the transfer of Land and Building Tax of Rural and Urban sector (PBB-PP) to the regions can improve services to the community, and can improve the aspects of transparency and accountability in its management. Fourth, based on practices in many countries, Land and Building Tax of Rural and Urban sector (PBB-PP) is included in the type of local tax (DJPK, 2014).

There are at least four basic changes set out in the law. First, changing the local taxes and retribution administration from *open-list system* to *closed-list system*. Second, granting greater authority to the regions through the expansion of the local tax base and regional retribution, the addition of new types of taxes that will be collected by the regions, and the provision of discretion to the regions to set tariffs within the prescribed maximum and minimum tariff limits. Third, improving the management system of local taxes and regional retribution through provincial tax revenue sharing policy to regency/city and *earmarking* policy for certain types of local taxes. Fourth, improving the effectiveness of local levies policy by changing the mechanism of supervision from the repressive system to preventive and corrective systems.

The local government of Sumbawa Regency is expected to be able to manage the PPB-PP optimally, so that the local revenue from the tax sector can be increased and can accelerate the regional financial independence in order to increase the fiscal capacity or ability to finance regional development. The local government of Sumbawa Regency should be fully aware that this Land and Building Tax (PBB) changing agenda is a big job, in addition to confronting some obstacles, it also needs time and careful planning to ensure that the process is working and is delivering optimal results.

Planning is an important step in local financial management; planning is the first step that must be done by the local government of Sumbawa Regency to look forward related to what actions should be taken to achieve certain goals (Mardiasmo, 2009). Government activities will be well implemented if all planning phases are realized consistently. Land and Building Tax of Rural and Urban sector (PBB-PP) should be a primadonna of the Sumbawa Regency's revenue, given the relatively large and fixed characteristics of the object with a value that always rises from year to year. However, the great potential needs a good and a reliable management system. Good management starts from good planning. The benefit of a plan is the direction and objective that must be achieved from time to time and as a reference in the operation of the relevant agencies. For the agencies given the tasks and functions of managing local revenue, revenue planning is a target that is usually presented quantitatively and expressed in unit of money prepared for a certain period. Here is a plan set by the Sumbawa Regency government for Land and Urban and Rural Building Tax as seen in the following table 1.

From table 1, the target of Land and Building Tax of Rural and Urban sector (PBB-PP) revenue in 2014 is the target set based on the Notification of Tax Due (SPPT) amount and value data as stated in the application of Tax Object Management Information System

(SISMIOP) submitted by the Directorate General of Tax, Tax Office (KPP) Pratama of Sumbawa in the early period of the transfer of Land and Building Tax of Rural and Urban sector (PBB-PP) to local taxes.

Table 1 – Target and Realization of PBB-PP Revenue of Sumbawa Regency after Becoming a Local Tax

Year	Description	Target	Realization	%
2014	PBB-PP Revenue	4.000.000.000	3.952.952.553	98,82
2015	PBB-PP Revenue	6.000.000.000	3.989.215.419	66,49
2016	PBB-PP Revenue	6.000.000.000	3.952.952.553	65,88
2017	PBB-PP Revenue	6.300.000.000	4.689.254.916	74,43

Source: processed secondary data (2017).

The planning improvement (target) drastically occurs in 2015 by 50% from the previous year and in 2017, the target increase is only 5% from 2016, it is an interesting phenomenon for researchers to analyze and understand how the Land and Building Tax of Rural and Urban sector (PBB-PP) revenue planning process, why the planning made then stated in the budget tends to do not have any increase, and has the planning process already illustrated the potential of actual revenue.

METHODS OF RESEARCH

The main objective of this research is to analyze, to understand, and to examine more deeply and more thoroughly the planning phenomenon of Land and Building Tax in Urban and Rural Sector (PBB-PP), hence, in this research, the approach used is qualitative approach. The consideration of the researcher using qualitative approach is because qualitative research is a research that attempts to understand phenomenon in its setting and its natural context (not in the laboratory) where the researcher does not try to manipulate the observed phenomenon (Patton, 2002). Creswell (2010) states that qualitative research is a method to explore and to understand the meaning that by some individuals or groups of people are considered coming from social problems.

Qualitative research considers everything that involves human beings to be complex and to be multidimensional, especially if it involves a group of people and their interactions, the complexity will be very difficult to be measured by statistical figures (Sarosa, 2012). Qualitative research seeks to understand the complexity of the researched phenomenon in which the researcher attempts to interpret a phenomenon and to understand a phenomenon from the point of view of the actor in it.

The paradigm used in this research is interpretive paradigm. The tradition of interpretivism emphasizes the effort of constructing and interpreting the actions of the people, both through their prior knowledge and as reflected through their experience (actors) involved in social action (Chua, 1988 in Djamhuri, 2011). Finding the hidden meanings behind social actions as understood by principals (the researched actors) through a good understanding effort is the goal of the interpretive sociology expressed by Djamhuri (2011).

Burrell and Morgan (1979: 20) describe the interpretive nature as a paradigm that has characteristics to understand and to explain the social world that cannot be separated from personal experience directly involved in a social process. The social role of society, the research bound to the norms, certain rules and beliefs, and the views and attitudes of informants (Muhadjir 2000: 12). The present research is conducted by interviewing several informants who have individual experience and are influenced by the research environment (Creswell 2015: 79).

The research method used in this research is by case study approach. According to Yin (2015), case study is an empirical inquiry that investigates phenomena in a real-life context, when the boundaries between phenomena and the context are not visibly apparent, and where multiple sources of evidence are used. The phenomenon and context of the Land and Building Tax of Rural and Urban sector (PBB-PP) planning in Sumbawa Regency is not

clearly visible, thus, various sources of evidence is utilized to analyze it. Case study is a research strategy in which the researcher carefully investigates a program, event, activity, process or group of individuals (Creswell, 2010).

Based on the definitions and the objectives in this study, the researcher refers to choose a single case study (*single case design*) with one unit of analysis (*holistic*). The unit of analysis is the case itself (Yin, 2015). This research is conducted in 2017 at Sumbawa Regency Revenue Agency. Sumbawa Regency Revenue Agency is an institution that is authorized in performing the levy and the management of local taxes including Land and Rural and Urban Building Tax in Sumbawa Regency.

RESULTS AND DISCUSSION

Land and Building Tax in Urban and Rural Sector (PBB-PP) depend on the fiscal potential of the producing region. The fiscal potential is all land and building that is *taxable* according to the Act. To be able to rely on Land and Building Tax of Rural and Urban sector (PBB-PP) revenue as one of the sources of regional revenue, a thorough approach is needed both to the Taxpayer and to the tax/fiscal officer since the object and subject of Land and Building Tax of Rural and Urban sector (PBB-PP) is very big and wide. This automatically needs the fiscal ability from planning, revenue, to operation.

The arrangement of Land and Building Tax of Rural and Urban sector (PBB-PP) revenue plan should be done well. The preparation of a realistic revenue plan will lead to actual performance. The benefit of a plan is the direction and objective that must be achieved from time to time and as a reference in the organization's operations concerned. The benefit of planning as an operational reference requires the fiscal official to work professionally, including the model determination of the Land and Building Tax of Rural and Urban sector (PBB-PP) revenue prediction. Until nowadays, there is no standard model to determine the Land and Building Tax of Rural and Urban sector (PBB-PP) revenue plan/ The determination of the revenue plan should consider the variables of revenue such as economic growth (GDRP), ability to pay, principal provisions, and arrears in each Land and Building Tax (PBB) service office (Nasucha 1995: 145). According to the General Director of Regional Financial Balance, Land and Building Tax of Rural and Urban sector (PBB-PP) revenue planning starts from the determination of the Land and Building Tax of Rural and Urban sector (PBB-PP) revenue-forecasting model, the calculation and stipulation of Land and Building Tax of Rural and Urban sector (PBB-PP) revenue target to the preparation of work programs to achieve the established targets and anticipatory steps if in the current period, certain targets cannot be reached.

In addition, planning (target) and achievement of targets (realization) are closely related to the performance of an organization (DGPK, 2014). In setting targets, the question of whether it reflects the true potential becomes an important part of the planning section of the regional revenue management organization to know more realistic Land and Building Tax of Rural and Urban sector (PBB-PP) revenue. If it is not done, then the determination of the revenue plan undertaken can be *underestimated* so as if the target is reached and describes the performance of the management of the Land and Building Tax (PBB) or otherwise.

There are 2 (two) methods of Target Determination of Tax Revenue used by Local Government, which are: *a. Top Down Method*, the top down target of Land and Building Tax (PBB) revenues is determined from the target area in advance which refers to the Compilation List of Tax Assessment (DHKP) in the previous year, then it is broken down into the target revenue per district. When discussed about revenue for each sub-district in the district level, by taking into account the amount of the potential revenue for each sub-district/village areas such as the Sales Value of Taxable Object (NJOP). In determining the amount of Land and Building Tax of Rural and Urban sector (PBB-PP) revenue plans, the sub-districts are based on the number of Notification of Tax Due (SPPT); *b. The Bottom Up Method*, the local government is more instrumental in terms of giving initial ideas to evaluate the programs that have been implemented while the of the Regional House of Representatives (DPRD) as a facilitator in a course of the program. Regional Revenue Office

(Bapenda) makes an analysis of the potential of several sectors of tax revenue. It is done by creating a targeting simulation by looking at trends or fluctuations or variations in Land and Building Tax of Rural and Urban sector (PBB-PP) revenue data from time to time.

Determination of Target Tax Revenue can also be done based on Planning Theory. In tax revenue planning, there are three approaches called (1) macro, (2) micro, and (3) incremental. The incremental approach is more practical and more pragmatic to be applied for local tax revenue planning. The method used in this incremental approach is done through calculating the realization of previous year's revenue with adjustments to economic growth and inflation rate. Adjustment can also be made to other variables such as interest, price, and oil and gas production, GDRP (Gross Domestic Regional Product), rupiah exchange rate on dollar, and other factors. On the other hand, the tax base variable pattern can be used as an option in the projection of tax revenues by taking into account the factors that influence, among others: macroeconomic condition, purchasing power, service provision, public policy, and population mobilization.

In determining the projection of local tax revenues, it is necessary to determine the classification of revenue potential for each type of local tax. The classification of potential tax revenues can be classified into: *a.* Prime Revenue; Regional taxes are included into prime revenue classification if the additional ratio (growth) is greater than or equal to one. *b.* Potential Revenue; Regional taxes are included into potential revenue classification if the additional ratio (growth) is less than or equal to one and the ratio of the proportion or contribution to the average total tax revenue or user charges is greater than or equal to one. *c.* Developing; Regional taxes belong to the developing classification if the additional ratio (growth) is greater than or equal to one and the ratio of the proportion or contribution to the average total local tax revenue is greater than or equal to one. *d.* Underdeveloped; Regional taxes are included into underdeveloped classification if the additional ratio (growth) or contribution to the average total local tax revenue are either smaller or equal to one.

In addition, to determine the potential of local tax revenues into the above classification, two main indicators are needed: *a. Proportion Ratio*; Proportion ratio determination is done by comparing the realization of revenue of certain types of local taxes and the average revenue of local taxes. The local taxes are mostly from the calculation of the total amount of local tax revenue divided by the number of types of local taxes. *b. Additional Ratio*; Determination of additional ratio is done by comparing the growth of certain tax types and the growth of total taxes and levies.

During this time, the targeting of local tax revenues has been based on incremental rules (a certain percentage is increased from last year) as conducted by the Sumbawa Regency Revenue Agency, not based on potential revenue. The potential of local revenue for each type of local tax has not been calculated thoroughly. The measurement of work performance in local tax revenue is still based on the collection ratio, which is the ratio used to measure the percentage of realization of local tax revenue from the target of local tax revenue and not the size of the coverage ratio, which includes the ratio of proportion and growth ratio. While the action plan of increasing regional revenue is more considered as a regular activity of levying organizations.

Estimating Growth with Extrapolation Technique; this is one of the simplest techniques for assessing growth, i.e. by doing assessment using two selected data to represent the data spread to be developed by the assessor. Therefore, the extrapolation technique assumes that the increment value of the dependent variable for each unit of change of the independent variable value is linear. Given that the technique is so simple, this technique can produce low accuracy value estimates. However, under certain conditions (limited technical facilities, or limited data available as a basis for assessment), extrapolation technique can be helpful to see a rough idea.

It cannot be denied that the amount of revenue or achievement of revenue targets is influenced by the level of public awareness in paying taxes. Not only the type of tax paid by the taxpayer, but also the type of tax that is paid on the basis of the provisions as well like Land and Building Tax of Rural and Urban sector (PBB-PP). The followings are some of the things that can affect the amount of Land and Building Tax of Rural and Urban sector (PBB-

PP) revenue in the region so that it will greatly affect the next planning process: *first*, the awareness of the people who are still low in paying taxes. The tendency of our society in general is to minimize the cost of spending including the expenditure to pay taxes, so it is frequently to see the new people will pay taxes when it is billed or when the tax obligations are associated with government services. *Second*, the public has not understood the tax functions yet; this is a factor inhibiting their own so they are reluctant to fulfill its obligations. This reluctance is caused more by the fact that the public has not understood the importance of the tax function yet, especially if the people do not or have not felt directly the result of the taxes they paid. Inequality of development perceived by the community in the village makes its own resistance in fulfilling the tax obligations. *Third*, there is no clear legal law related to Standard Operational Procedure (SOP) of Land and Building Tax of Rural and Urban sector (PBB-PP) so that there is a mistake in the document of determination. The occurrence of errors or mistakes in the determination of taxes becomes the next inhibiting factor. Although legally, such errors can be corrected through a process of correction or process of objection by the taxpayer, but it is difficult for some people to do due to lack of socialization on procedures for the management by the Regional Government, in this case, the Regional Revenue Agency. *Fourth*, the tariff is too much. Land and Tax Building (PBB) tariffs that are too much cause the burden of taxes to be borne by the community becomes larger, especially if the tariff is caused by the increase in tariffs from previous years. The experts argue that not always the increase in tax rates lead to an increase in revenue. It may happen that the taxpayer will make various efforts to reduce the tax burden or some business actors must roll out and stop his business because the tax burden is too much; if so, then it can be ascertained that the amount of tax objects will be reduced which ultimately leads to the decrease in revenue. *Fifth*, the lack of strict implementation of legal sanctions on local taxes. Land and Building Tax of Rural and Urban sector (PBB-PP) is basically a relatively cheap local tax for some people, only the number of objects that are relatively much and spread throughout the region. This condition causes the difficulty of active billing actions if certain taxpayers do not pay. Inevitably, it is possible to do but with the consequence that the cost to do needs a relatively larger billing. This condition also occurs in the imposition of legal sanctions to the taxpayer, for example, will the billing be active until the letter of force or confiscation on the Land and Building Tax of Rural and Urban sector (PBB-PP) obligation by a taxpayer who does not also pay the Land and Building Tax of Rural and Urban sector (PBB-PP) of fifty thousand dollars? Social sanctions would be more effective to enforce, where the Land and Building Tax of Rural and Urban sector (PBB-PP) pay-as-tax evidence is a prerequisite that should be attached in every governmental affair starting from the District/Village level. *Sixth*, the lack of facilities and infrastructure. It is related to the ease of making payment or filing services to the tax authorities either correction services, deductions or objections to the determined tax. The lack of facilities or the difficulty of the procedure causes people to be reluctant to process and consequently they do not fulfill their obligations.

CONCLUSION

The regional finance management is the whole activity that covers planning, implementation, administration, reporting, accountability, and supervision of regional finances. Planning phase is the first step that must be taken by the manager of local finance both local revenue manager and regional expenditure managers. Realistic planning will lead to real performance because planning is an operational reference for the tax authorities to work professionally. The arrangement of Land and Building Tax of Rural and Urban sector (PBB-PP) revenue plan is a quantitatively presented target and is usually expressed in unit of money prepared for a specified period of time.

There are several ways used by the local government of Sumbawa Regency, in this case, the Regional Revenue Agency as the organization of receiving revenue in planning and setting the target of Land and Building Tax of Rural and Urban sector (PBB-PP) revenue which are: 1. Targeting using *top down* and *bottom up* methods; 2. Determination of tax

revenue target based on planning theory with incremental approach (a certain percentage is increased from last year).

From the factors that inhibit the achievement of Land and Building Tax of Rural and Urban sector (PBB-PP) revenue target above, the efforts can be made to increase Land and Building Tax of Rural and Urban sector (PBB-PP) revenue. In general, these efforts can be done through two ways which are by intensification and extensification. a. The intensification method is to effectively and efficiently collect the existing Land and Building Tax of Rural and Urban sector (PBB-PP) objects and subjects such as calculating potential, counseling, supervision, and service enhancement and involving elements of government until the village level or Neighborhood/Hamlet level if necessary. b. The extensification method is to make efforts to collect new taxpayers through new registration. It is not impossible that the development of the region causes a change in the condition of the tax object so that there is an increase in the Selling Value of Tax Objects. These conditions should be understood by tax officials by proactively re-registering and/or collecting new data for revenue to increase. In conjunction with the above planning theory, if the Land and Building Tax of Rural and Urban sector (PBB-PP) in a region is included in the prime category, then the tax policy adopted in the previous year (including when the Land and Building Tax of Rural and Urban sector (PBB-PP) is managed by Tax Office (KPP)) can still be used by maintaining the growth rate and its contribution to the regional revenue. If it is included into potential revenue, then the effort that needs to be done is to intensify the collection of existing objects so that there is a growth of revenue. For the developing classification, the improvement efforts are done by digging up new sources by way of collecting new data or by adjusting the Sales Value of Taxable Object (NJOP) that has been too long unadjusted. If the Land and Building Tax of Rural and Urban sector (PBB-PP) is in the backward classification, then the improvement effort is done by re-registering, restructuring the tariff policy and re-adjusting the Sales Value of Taxable Object (NJOP). Undeniably, these things are coupled with the ability of people to pay taxes.

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**THE INFLUENCE OF BANCASSURANCE PRODUCTS AND RESPONSIVENESS
TO CONSUMER BEHAVIOR AND CORPORATE IMAGE AS MEDIATION VARIABLES:
A STUDY AT BANK METRO MADANI, METRO CITY**

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ABSTRACT

Behavior of consumers is an important factor in the purchase decision. The purpose of research is to know the influence of bancassurance products, responsiveness and company image to the consumer behavior. This research, using primary data collected by the method of explanatory survey and sampling techniques in the form of forcible entry, sampling of 250 respondents in Bank of Metro Madani, Metro City. The results of research: bancassurance products directly affect the conduct of consumer respondent; company image directly affects the conduct of consumers; bancassurance products directly affect to company image.

KEY WORDS

Bancassurance products, responsiveness, corporate image, consumer behavior.

The development of the business in the era of globalization is currently progressing, marked with the level of competition between companies that are increasingly stringent (Chhaochharia et al., 2017; Ling Liao & Chun Lin). The situation caused the company generally tries to survival, developing company, obtain optimal profit and sought to strengthen the position of the company in the face of competitors. A marketer is required to create the appropriate marketing strategy in order to Jakarta fierce competition with other companies (Kirchner, 2012). The management should be able to create products that are able to provide the characteristics of the consumer themselves in order to know the products marketed by the company (Chhaochharia et al., 2017). To deliver company identity for easy known consumer brands becomes a very important.

In the know consumers, we need to learn about consumer behavior as a manifestation of all the activities of the human soul itself (Anne M., 2017). The customer has the meaning of which is very important for a company, a company is highly unlikely to be able to survive without the support and the existence of consumers. Consumers are the main factor for the existence of a company (Albrecht et al., 2017). Therefore, the orientation on the customers is an absolute requirement that must be held by the company.

Knowing the behavior of consumers will help the company in identifying the market (Ferguson, 2017; Norouzi1, 2013). So the market segment will be more clear, real and effective. Learn about the behavior of consumers can know how consumers make purchases. The behavior of consumers in selecting a product is influenced by several factors among other social factors, a personal and psychological.

Marketing can occur and widespread not only limited in a country, but can only occur across the region between countries. According to (Balqiah, 2015; Khayul, 2012) mentions this consumer behavior exploded along with the emergence of the concept of marketing (*marketing concept*) in the world of marketing. This concept has the assumption that the company should be able to know and satisfy the desire, improve responsiveness and the needs of the target market (*target markets*) and able to offer with better than their competitors (Berry et al., 2017; Holweg, 2007). So that this concept has a focus on the

consumer side is different from other marketing basic philosophy, such as the concept of sales (*selling concept*) or other concept.

According to (Jackson & Anderson, 2007; Balqiah 2015) marketing strategy designed to improve the chances of consumers in order to give the response and positive feelings toward products and services for a specific brand and will try the products, services or the brand and buy it repeatedly (*it constitutes buying*).

Consumers are satisfied with the product or service companies typically will do the purchasing or recurring consumption (*it constitutes buying*), then they will become the loyal consumers (*loyal*) and even volunteering for company promotional activities (Puranam, 2017; Bernardes & Hanna, 2009).

Increasing sales, of course, will have an impact on improving the benefits that implicated to the welfare of the company and *stakeholders* (owner, top managers, employees, community customers and state). *It constitutes buying* allows companies to receive a more stable revenue flow or even improve with the *word of "* (news spread from mouth to mouth) from consumers.

To develop a good marketing strategy, marketer must know the characteristics of its consumers (Wugayan & Pleshko, 2011; Maja, 2015). To know which customers tend to buy its products, factors what about cause consumers prefer a product compared with other products, what criteria is used for consumer buying decisions, and from which consumers get information about product (Siu et al., 2013). Marketer need to devise a strategy based on the behavior of consumers namely the behavior before the purchase, purchase, and behavior after purchase (Soliman, 2011).

Each product has a life cycle limit banking product is no exception. For that banks are required to produce the products according to the needs of its client (Chhaochharia et al., 2017; Lung Peng, 2015; Paglia & Phlegar, 2015). In introducing new products to the stakeholders, banking not only using the resources it possesses only (Boubaker, 2017). Banks were also able to take advantage of the resources that are outside of the company name with how to develop cooperation in the form of a strategic alliance. One of the forms of cooperation that is currently gaining popularity in Indonesia is a form of marketing alliance between banking company with the insurance company. Cooperation in the market of banking products and insurance products is then known by the term *bancassurance*.

Bancassurance as new products produced in cooperation between the bank and insurance, of course, there are still many people that are ambiguous in interpreting. (Sendra, 2007) says that what is meant by the activities of the marketing cooperation between the bank and the insurance company hereinafter referred to as *Bancassurance* is an act of cooperation between the bank and the insurance company in order to market insurance products through the bank.

Different from other financial services business insurance business management at a glance need extra effort especially for visualization of the uniqueness and utility products offered so that it can be well distributed to the customers (Mukherji & Ananda M., 2017; Alavudeen, 2015). *Bancassurance* is one form of the development of the insurance product distribution channels through the present banking institutions. For the bank itself, *Bancassurance* is a new concept to build better business relationships and protected with the customers (Samaha et al., 2014; Gokalp, 2017).

The awareness of the bank is still a relatively low against the *bancassurance* is actually a separate question that requires more tracking. But however, *bancassurance phenomenon* thus indicating great opportunities of collaboration between banking and insurance institutions in meeting the needs of the broader market as well as the practice that occurs in other countries. (Sharma & Reddy, 2003; Kim et al., 2005; Bergendahl, 1983). Perhaps the one thing that is now required by the perpetrators of the insurance business is to understand the demographic profile and psychographics the inhabitants of this land and made as a basic capital for the development of insurance products.

According to one of the insurance agents in another company (Warsito, 2011; Karimian, 2017; Prakash, 2017), obstacles that cause *bancassurance sales target* is not achieved is the awareness of the bank is still relatively low against the *bancassurance*, limits

the amount of income to get each month, and people think that insurance is not too beneficial.

To know the opinion of *bancassurance* and corporate value credibility in the eyes of the public or consumer, each company need the response from consumers in order to be used as a research material to take the next steps to be taken by the company. The response from the customers they utilized to measure the level of consumer satisfaction toward the products or services that they offer and also against the company itself (Reichhart et al., 2008).

The level of satisfaction that you want to reach each consumers, of course, is different and varied (Miller et al., 2002). Measuring customer satisfaction is an activity which has an important role in order to succeed in the current business climate. Measuring customer satisfaction can also be made to see how employees respond to the customer. As stated by (Khayul, 2012), that responsiveness as behavior that focuses on consumer, cause consumers will be satisfied if marketer respond to each question consumers quickly. Because each customer will want satisfaction toward goods or services consumed (Liljander, 1990).

Responsiveness include the ability to achieve the goal of taking into account the appropriate time scale with customer requests or changes in markets, to bring or maintain competitive advantages. Emergency power as the ability of the manufacturing system to make adjustments quickly and balanced with the changes predicted and unexpected characterize manufacturing environment today (Albrecht, 2017).

The impression of the experience of the experience that has been received by a person is the image of the company as stated by (Balqiah, 2015), that the image of the company based on what associate with companies or all information (perception, the conclusion, and trust) about what people believe. Trust is very important in building the image of a good company because the trust will generate a good memory and affect the behavior of consumers.

Corporate Image is the impression that appears in the mind of the customer when they hear the name of the product or service company that has been producing products or services. The Image of this company can affect the behavior of the potential customer and can form the purchase decision. The Image of the company is the result of the process in which the subscriber has comparing various companies attribute (El-Salam, 2013). Company image influenced by four things, namely morality, how companies have moral against social environment; management, how well the company manages all resources available; performance, how the performance of the company in its activities; and services (Barbu, 2012; Krakowiak & Malgorzata, 2013).

The Image of the company must be created, kept and reinforced in the mind of the customer. The Image of a strong company will cause differences from other companies. A strong company image affect consumers in decision-making the purchase. Better company image in the mind of the customer, the higher the customer trust in the company, this will increase the reputation of the company (Meredith et al., 2007; Maden, 2013).

Based on the background and conceptual framework above, this research done to test this hypothesis directly influence positively *bancassurance products* to consumer behavior, direct effect positive responsiveness to consumer behavior, direct effect positive image of the company to the consumer behavior, direct effect positive *bancassurance products* to company image and the direct effect positive responsiveness to company image.

METHODS OF RESEARCH

The approach of research done is the quantitative approach with survey methods. The study was conducted in January and March 2017 in Bank of Metro Madani, Metro City. Research constellation specify *bancassurance products* is an exogenous variable, responsiveness as exogenous variable, company image exogenous variable for consumer behavior, but as endogenous variables for *bancassurance products*, responsiveness and company image.

The target population is all customers of Bank of Metro Madani, Metro City in Lampung Province, the population in the year 2016 as many as 7.654 customers. Samples used 250 customers and the announcement samples by *proportional random sampling*.

The instrument used in this study is the multiple choice with 5 alternatives and using Likert scale model for *bancassurance products variable*, responsiveness, company image and consumer behavior. The preparation of the instrument covers the development dimension and the indicator in the preparation of the instrument, testing the validity and reliability of the revision of the instrument, finalization, and data collection.

Testing the validity of the instrument using the biserial correlation (Naga, 1992), and testing the reliability of using the internal consistency reliability coefficient (Steiner, 2003). For the scale of *bancassurance products*, responsiveness scale, the scale of the image of the company and consumer behavior scale, testing the validity of using chromatic "*Product Moment Person*" (Bluman, 2008) and testing the reliability of using "*Cronbach coefficient's*" (Cronbach Alpha, 1963).

Data Analysis Techniques include analysis of descriptive statistics, statistical inference, in linearity test, test and regression significance for the statistics multivariate using path analysis (*Structural Equation Modeling*). The processing and analysis of the data using *Microsoft Excel, SPSS, and LISREL*.

RESULTS OF STUDY

Requirements Analysis Test of Normality. Before doing data analysis, required test data normality analysis requirements as follows:

Table 1 – The Summary of the Test Requirements of the Normality

No.	Error Estimated Regression	L _{value}	L _{table}	Decision	Conclusion
1	Y ₂ on X ₁	0.051	0,056	H ₀ Acceptable	Normal
2	Y ₂ on X ₂	0.043	0,056	H ₀ Acceptable	Normal
3	Y ₂ on Y ₁	0.048	0,056	H ₀ Acceptable	Normal
4	Y ₁ on X ₁	0.054	0,056	H ₀ Acceptable	Normal
5	Y ₁ on X ₂	0.075	0,056	H ₀ unacceptable	Unnormal

Requirements Analysis Test of Homogeneity. The next analysis requirements test stage is homogeneity occurrence, know that samples from homogeneous distribution.

Table 2 – The Summary of the Test Requirements of the Homogeneity

No.	Variable	X ² _{value}	X ² _{table}	Homogenous
1	Y ₁ on X ₁	19,334	149,885	Homogenous
2	Y ₁ on X ₂	13,362	146,567	Homogenous
3	Y ₂ on X ₁	32,399	149,885	Homogenous
4	Y ₂ on X ₂	20,998	146,567	Homogenous
5	Y ₂ on Y ₁	48,799	143,246	Homogenous

Requirements Analysis Test of Linearity and the significance of Regression. The results of this test is used to determine the relationship between the variables with the requirements that each of the variables must have a linear relationship and regression significances.

Table 3 – The Summary of the test of Requirements and the significance Linearity Regression

The variables	Sig. Regression		Sig. Regression	Lin. Regression		Linearity of Regression
	F _{value}	F _{table}		F _{value}	F _{table}	
Y ₂ on X ₁	3.63	2.73	Significant	0.05	2.73	Linearity
Y ₂ on X ₂	4.37	2.73	Significant	0,045	2.73	Linearity
Y ₂ on Y ₁	6,02	2.73	Significant	0.03	2.73	Linearity
Y ₁ on X ₁	328,70	2.73	Significant	0.09	2.73	Linearity
Y ₁ on X ₂	0.04	2.73	Un Significant	0,079	2.73	Linearity

The results of the calculation of the path Coefficient, t_{value} . After requirement test analysis is done, next is doing the calculation and testing of each path coefficient as presented in the following image:

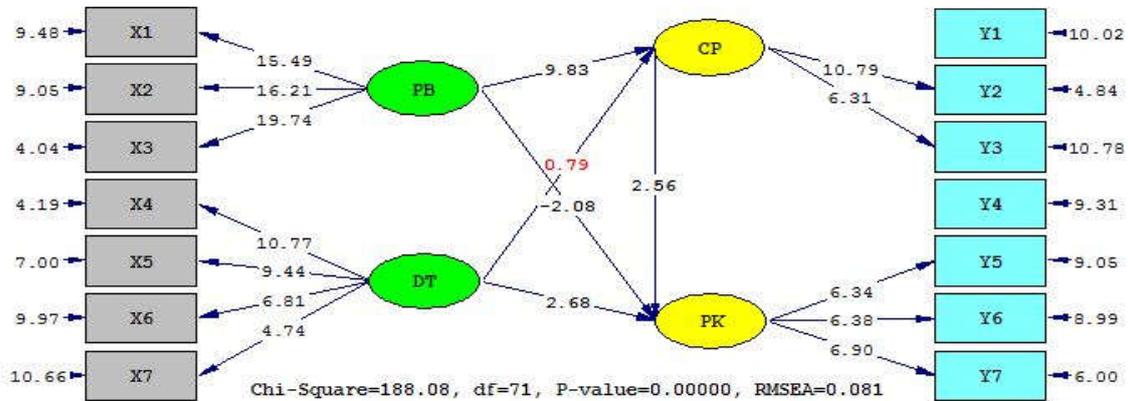


Figure 1 – The Path Model with t_{value}

Table 4 – Result of the Path Coefficient Calculation (t_{value})

No.	Variable	The Path Coefficients (ρ)		Decision	Conclusion
		SLF*	T _{value}		
1	Y ₂ on X ₁	0.56	2.08	H ₀ Unacceptable	Significant
2	Y ₂ on X ₂	0.23	2.55	H ₀ Unacceptable	Significant
3	Y ₂ on Y ₁	0.73	2.55	H ₀ Unacceptable	Significant
4	Y ₁ on X ₁	0.89	9,83	H ₀ Unacceptable	Significant
5	Y ₁ on X ₂	0,043	0,83	H ₀ Acceptable	Insignificant

*Standardized Loading Factor.

The Path coefficient Sub-Structure 1. The path coefficient analysis Model sub-structure 1 is stated in the form of common $Y_1 = \beta_{31}X_1 + \beta_{32}X_2 + \epsilon_1$. This testing will give decision-making hypothesis test 1, and 2.

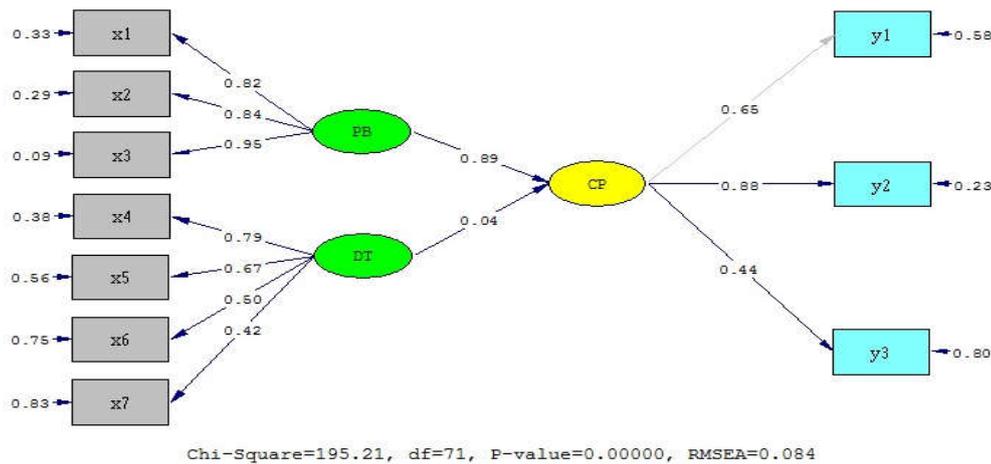


Figure 2 – The Path coefficient Sub-Structure 1

Based on the testing of the sub-structure of 1 obtained coefficient band (β local churchmen) of 0.89 and value of $t_{value} = 9,83 > table(0.05: 250) = 1.97$ then H_0 rejected and path coefficient β_{31} local churchmen is significant, means *bancassurance products* directly affects positively to the image of the company. The path coefficient (β_{32}) of 0.04 and value of $t_{value} =$

$0,83 < t_{table}(0.05: 250) = 1.97$ then H_0 accepted and drag coefficient band (β_{32}) is not significant, means responsiveness not directly affects positively to the image of the company.

The Path coefficient Sub-Structure 2. The path coefficient analysis Model sub-structure 2 is stated in the form of common $Y_2 = \beta_{41}X_1 + \beta_{42}X_2 + \beta_{43}Y_2 + \epsilon_2$. This testing will give decision-making hypothesis test 3, 4, and 5.

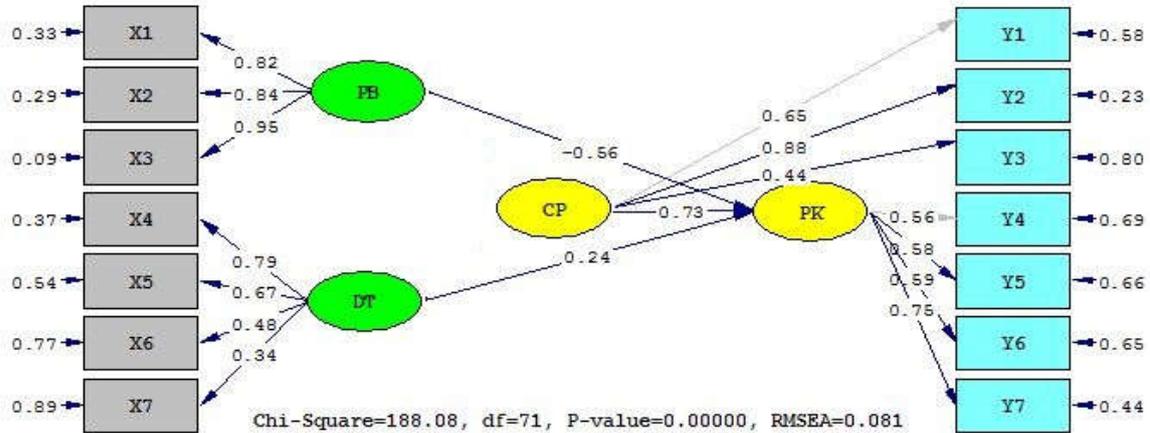


Figure 3 – The Path coefficient Sub-Structure 2

Based on the testing of the sub-structure of 2 obtained coefficient band (β_{41}) of -0,56 and value of $t_{value} = -2,08 > t_{table}(0.05: 250) = 1.97$ then H_0 rejected so path coefficient (ρ_{41}) is significant. This means that the *bancassurance products* directly affects the negative against the behavior of consumers. Chromatic band (β_{42}) of 0.24 and value of $t_{value} = 2.55 > t_{table}(0.05: 250) = 1.97$ then H_0 rejected so path coefficient (β_{42}) is significant. This means that the responsiveness directly affects positively to the consumer behavior. Coefficient band (β_{43}) of 0.73 and value of $t_{value} = 2.55 > t_{table}(0.05: 150) = 1.97$ then H_0 rejected so path coefficient (β_{43}) is significant. This means that the company image directly affects positively to the consumer behavior.

Based on the calculation of the line and the coefficient *t-value* for the purpose of testing the hypothesis that specified, shows that the four path coefficient > 0.05 and *t-value* > 1.97 , so H_0 rejected and four channel is significant.

Overall line diagram *standardized solution* for each of the variables through the program *Lisrel version 8.80* is described as follows:

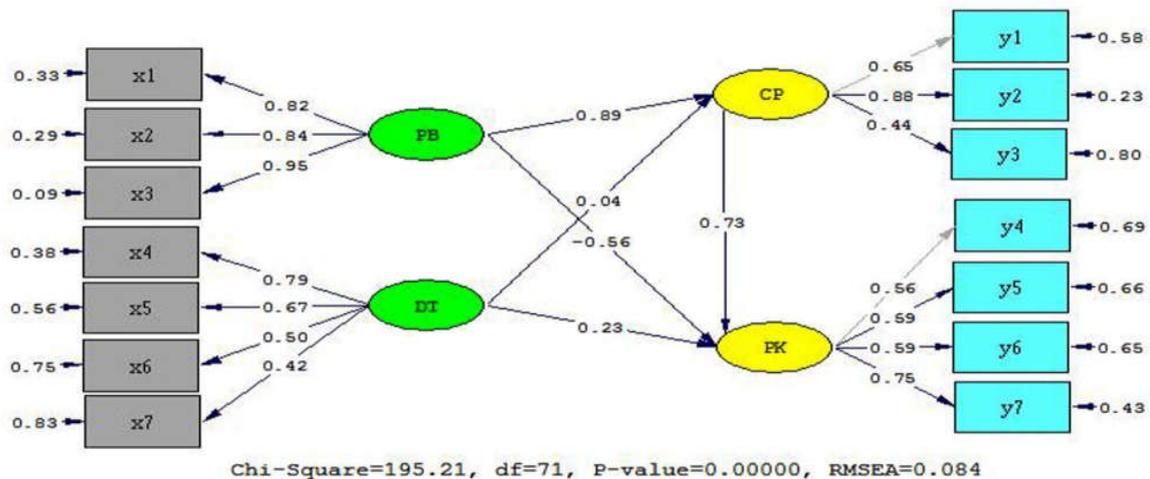


Figure 4 – Line Diagram Standardized Solution

Based on the picture 4 (Line diagram *Standardized Solution*), in addition to the existence of the influence of direct), there is also the influence of the total and not directly (*indirect*) between exogenous variables with the endogenous variable. Based on the *lisrel output* about *standardized total effect* shows that: (1) The total value of the influence of (*total effect*) *Bancassurance products variable*, responsiveness and the image of the company to the behavior of consumers with the value of the influence of the *direct effect* of each variables, because it is not mediated by other variables (intervening variable), (2) The total value of the influence of the *total effect*) *bancassurance products variable* power and responsive to the image of the company are also the same with the value of the influence of the *direct effect* of each variables, because it is not mediated by the intervening variable, (3) the influence of *indirect effect*) *bancassurance products variable* against the company image of $0.89 \times 0.73 = 0,650$, due to other variables (intervening variable) The company image of 0.73, while total influence is $0.23 + 0,650 = 0,880$, and (4) the influence of *indirect effect* variable responsiveness to consumer behavior of $0,043 \times 0.73 = 0,031$ due to intervening variables namely company image of 0.73, while total influence is $0.56 + 0,031 = 0,591$.

Description of the total influence of exogenous variable against endogenous variable above shows that this variable *bancassurance products* and responsiveness directly affects positively to the consumer behavior because of the intervening (mediation variable product image has a value greater influence compared with the variables which are not mediated by other variables. In other words, *bancassurance products*, responsiveness and company image with the same effect the behavior of consumers have value greater influence compared with only one exogenous variable which weighed down the consumer behavior. This also happened in the variable company image, *bancassurance products*, and responsiveness together affect the image of the company has a value greater influence compared with only one exogenous variable that affects the image of the company.

DISCUSSION OF RESULTS

There is a positive direct influence on Bancassurance Products Consumer Behavior. Based on the results of the study showed that the influence of *bancassurance products* consumer behavior. This shows that if in marketing *bancassurance products*, helping customers choose *bancassurance products* and offers insurance products done with proper and correct, then the decision-making process, product selection and satisfactory services will increase. So it can be attracted the interest of consumer toward greater *bancassurance products*.

The results of these findings in accordance with the research done by Nasrul (2014) that consumer behavior have a positive impact on the purchase decision life insurance.

There is a positive direct influence Responsiveness to Consumer Behavior. Based on the results of the study showed that the responsiveness have positive influence directly to the consumer behavior. This shows that if the speed in serving, help difficulties faced by the information and handling complaints very good, then the decision-making process, product selection, satisfactory services and consumer satisfaction will increase.

The results of these findings in accordance with the research done by Tarigan (2014) that the dominant response power variables affect customer loyalty.

There is the direct effect positive image of the Company to the consumer Behavior. Based on the results of the study showed that the image of the company have positive influence directly to the consumer behavior. This shows that if the services services provided satisfactory, its subsidiaries can be trusted, and company identity and clear, then the decision-making process, product selection, satisfactory services and consumer satisfaction will increase.

The results of these findings in accordance with the research done by Putri (2011) that consumer behavior had an effect on the consumer satisfaction choose *Oriflame Cosmetics products*.

There is a positive direct influence Bancassurance Products to company image. Based on the results of the study showed that *bancassurance products* have positive influence

directly against the company image. This shows that if in marketing *Bancassurance products*, helping customers choose *bancassurance products* and offers insurance products done with proper and correct, then a satisfactory services, company that can be trusted and company identity will increase.

The results of these findings in accordance with the research done by Prameswari (2011) that the value of the customer is able to increase customer loyalty, advertising appeal is able to increase customer loyalty, and competencies the sellers are able to increase customer loyalty.

There is no direct influence Responsiveness to company image. Based on the results of the study showed that did not affect the responsiveness of consumer behavior. This indicates that the speed in serving, help difficulties faced by the information and deal with complaints is very good and will not affect the quality of service to satisfy, trust to the company and company identity. But the company will continue to serve customers in accordance with the procedures and provide the quality of service to achieve maximum more customer oriented.

The results are not in accordance with the research done by Tarigan (2014) that there is the influence of the responsiveness and empathy for customer loyalty.

CONCLUSION AND SUGGESTIONS

Based on the results and the discussion of the research, it can be concluded that:

Bancassurance Products affect consumer behavior. This shows that the marketing *bancassurance products* to our customers and assist customers choose right *bancassurance products* is the determining factor of the most basic of customer desire. So that it can be said that the *bancassurance products* have been in accordance with the perception and hope consumer behavior.

Influential responsiveness to consumer behavior. This shows that the customer focus on the speed of the service and help the difficulties experienced by the customers is the factor that can increase the desire to buy consumers so that arise interaction is good. So that it can be said that the responsiveness has been in accordance with the perception and hope consumer behavior.

The Image of the company affect consumer behavior. This shows that a satisfactory services and trust to the company can increase the level of desire and customer satisfaction. So that it can be said that the image of the company is in compliance with the perception and hope consumer behavior.

Bancassurance Products affect the image of the company. This shows that the right *bancassurance products* offer is one of the determining factor the quality of service.

Responsiveness did not influence the company image. This shows that the responsiveness given by employees on the client, speed in serving the consumers, did not influence directly against the company image, although on the other hand can affect the purchase decision.

Based on the conclusions and implications of the research on the top, then can be recommended a few things as follows:

Bancassurance Products must have innovation and quality is better than that previously so that they can attract customers and potential customers.

The services must be more in increase on when the officers face consumers who have complaints and get difficulties.

The company must provide a satisfactory services so that the image of the company will be better and will always be remembered by the client and potential customers.

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THE EFFECT OF EXTERN AND INTERN ENVIRONMENT TOWARD BUSINESS STRATEGIES AND THEIR IMPACT TOWARD BUSINESS PERFORMANCE

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ABSTRACT

This study was done to see the effect of extern and intern environment toward business strategies and the performance of micro, small and medium enterprises. The population of this study was business owners in Bajawa Regency, Nusa Tenggara Timur Province, Indonesia, represented by 122 respondents as the samples of this study. The samples were chosen using a proportionate stratified random sampling. The data of this study were then analyzed using Partial Least Square technique. The result of this study shows that extern and intern environment have significant effects toward business strategies and performance as mediators.

KEY WORDS

Enterprise, extern environment, intern environment, business strategies, business performance.

Severe economic crisis that hit Indonesia in 1998 and 2009 is the proof of the importance of micro, small and medium enterprises (*MSMEs*) for the nations' economy. During the crisis, large and formal industries were severely impacted, yet *MSMEs* remained strong and saved the nation's economy. *MSMEs* were strong enough to support the production sector and employment. Small-scale and medium-scale enterprises aim at running business which also streng then the national economy at the same time based on the fair economy democracy. This understanding implies that *MSMEs* is a national factor to improve and develop the national economy since it involves a number of businessman who improve local potential based on the fair rule for anyone (Rio and Susiawati, 2016).

Recently, *MSMEs* receives an intensive attention from both government and non-government parties in relation to the tight competition in the global market, especially the competition among micro-scale and medium-scale enterprises (*MSMEs*). Within the tight competiton, *MSMEs* should be aware of any factor that might influence its performance including the environmental factor and business strategy.

Hubeis and Nijab (2014) mentioned that reformation of information and globalization lead to rapid and everchanging major changes in the environment which tend to be difficult to predict. As the impact, the competition becomes tighter and organizations face more complex issues. Regarding to the fact, it is necessary to make an analysis on the extern and intern conditions faced by businessman. Thus, business owners will grow awareness and understanding on the implications of the shifting condition to be able to compete in the market in the most effective way.

Solihin (2012) stated that extern environment allows businessman to identify various opportunities and theats, while the intern environment gives some insights about strengths and weaknesses. Another key factor in managing a business is the use of effective business strategies to win the market. Businessman is competing against each other to win the competiton. The attempts made to win over the competiton are referred as business strategies. According to Assauri (2013), business concepts and strategies are basicly attempts to relate certain stategy to the supremacies that can be obtained from the implementation of the strategy. This notion includes pattern of actions in implementing certain strategies to achieve certain target or expectation. Business strategy is an effort made to add uniqueness to business to win the market competition. The uniqueness can be

achieved if a company uses unique ways in promoting the values of a superior product to the consumers.

This study was brought as an immediate response toward the tight market competition faced by business owners (*MSMEs*) in Bajawa regency, Nusa Tenggara Timur Province, Indonesia. The researchers suspected some issues related to the lack of innovation, improper business strategies and slow reaction toward changes in business environment. Owners of *MSMEs* business tend to play passive in promoting their goods and services because most of them chose to patiently and passively wait for the consumers to come and buy their products. This condition is intrigued the researchers to conduct a deeper study on the dynamic business environment in Bajawa regency and its implication toward the use of certain business strategies in running certain business, as well as its implication toward the business performance. Bajawa regency is one of regencies in Ngada district, Nusa Tenggara Timur.

The fact that there were high numbers of owners whose business had not yet been legally registered in the Cooperative Department, *MSMEs*, Industrials and Trading Department in Ngada District. Based on the data, it has been known that only 174 people out of 458 business owners who have registered their enterprises. Another issue was related to the high number of micro enterprises while Bajawa regency is the central regency in Ndada district. The data released by the Cooperative Department, *MSMEs*, and Industry and Trade of Ngada District 2015 show that *UMKM* members were dominated by micro-scale business owners (82.97%), small-scale business owners (16.38%). There were only 0.66% of medium-scale business owners among them. Micro-scale business owners dominated the business activities in Bajawa regency as much as 82.97%.

Regarding to the problems which have been stated above, some research questions are formulated as follow:

- Does extern environment have a significant influence on business performance?
- Does extern environment have a significant influence on business strategy?
- Does intern environment have a significant influence on business strategy?
- Does intern environment have a significant influence on business performance?
- Does business strategy have a significant influence on business performance?

LITERATURE REVIEW

Rapid changes in business environment require business owners to always make use of any opportunities and to keep making innovation. This condition is an impact of the tight market competition in the business sector which appears to be an interesting issue for researchers all around the world to conduct their research on the business environment, business strategy and business performance. Previous research has provided references that help the researchers to determine the conceptual framework used in this study. Based on the predetermined conceptual framework, the orientation and the goal of the research can be determined.

Robbin (1994) mentioned that environment is related to any thing that is either directly or indirectly relevant for an organization in achieving its goals. In running a business, intensive interaction always occur between business owners and business environment since business and environment are mutual. Business runs in environment that provides qualified employees and resources in the production activities, besides the products of a company will always be sold back to the environment. On the other hand, the continuity and the usefulness of an environment also depend on the treatment given by the company itself.

Tan and Litschert (1996) mentioned that environment can be seen using two perspectives. First, due to the uncertainty of information, environment becomes a reliable source of information for a company. Second, environment is regarded as a rare and important source for a company to compete. David (2010) classified business environment into two major power; intern and extern. David (2010) stated that extern environment provides information related to opportunities which are beneficial for a company and threats that should be anticipated by a company. Wheelem and Hunger (2001) mentioned that intern

environment basically consists of; structure, culture, and resources. Hence, intern environment covers any factor that comes from the inside of a company including structure, culture and any resources which potentially influence business performance. Those aspects might appear as strength or weakness for a company in running business activities.

Wheelen and Hunger (2001) explained that business strategy refers to a set of a designed comprehensive plan on how a company achieves its missions and goals by utilizing its competitiveness within a limited resource. David (2006) stated that strategy is a potential action that is decided by the upper management and a company's big amount of resource. Therefore, it can be concluded that strategy is an arranged long-term plan made by a company to achieve the goals of the company.

According to Mulyadi (1997), business performance can be periodically measured from the operational effectiveness of an organization, parts of an organization and the employees based on the target, standard and predetermined criteria that apply. Basically, an organization is run by human. Thus, organizational performance should be measured upon human behavior in running their roles in an organization. David (1997) also highlighted that performance is an achievement or results that are achieved by an organization and usually they are in the forms of positive results. Organizational performance is important to measure since it provides data for the evaluation of the company and to control the company which result depends on each unit of an organization and the target set by the unit (Hunger dan Wheelen, 1996).

Wahyudi (1996) explained that extern environment is the potential strength from the outside of a company which has either direct or indirect influence on the company's performance. Meanwhile, Solihin (2012) mentioned that business environment aims at identifying any possible opportunities and threats. Thus, it can be concluded that extern environment refers to any kind of opportunities and threats that might influence an enterprise. The result of a study conducted by Hidayat (2003) indicates an influence of macro environmental factor toward marketing strategies and performance of a cement industry in Indonesia. Measurement on a company's performance is important for the evaluation and controlling process of a company. The measurement depends on how an organization unit is assessed, and the goals of the organization (Hunger and Wheelen, 1996). A study conducted by Arifin (2007) showed that business environment has certain influence toward business strategy and competitiveness and it also influences the performance of small-scale industries through the competitiveness strategy. Regarding the underlying theories and results of previous studies mentioned previously, the hypotheses of this study were formulated as follow.

H1: Extern Environment Significantly Influences Business Performance.

David (2010) stated that extern environment gives information related to any opportunities for a company and threats that should be anticipated by a company. In addition, Porter (1985) explained that a company might obtain its competitiveness by improving certain quality that can be offered to the consumers by conducting various strategies such as; offering lower price with better service for the consumers than other competitors. A study conducted by Banham (2010) stated that owners or managers of a business should have adequate comprehension and choose appropriate strategies in responding the potential of extern environment. Tan and Litschert (1996) also mentioned that the characteristics of an environment influence the strategy and strategic orientation in which the use of different strategy results different performance. Regarding to the theories and the results of previous study, the hypothesis of this study was formulated as follows.

H2: Extern Environment Significantly Influences Business Strategy.

Wahyudi (1996) stated that in order to win a market competition, a company should make use of its resources to identify the strengths and weaknesses to improve its competitiveness. Solihin (2012) also explained that business strategy should be made for certain business unit or for products, besides it should also emphasize on the improvement of products or services offered by a company within certain industry or market.

Sugiarto (2006) conducted a study which resulted to an interesting finding; competition in the environment gives negative influence toward small-scale industry, but gives positive

influence toward business strategy. Whilst, business strategy has a positive and significant influence on the business performance. Edelman (2004) also proved that business strategy significantly influences the performance, and strategy also plays a role as the mediator between the resources and performance. Meanwhile, human resource also has a positive and significant influence toward the strategy and the quality of the consumer service. Business resources which were measured in this study included the human resources and organizational resources with stonger emphasis on the use of business strategy for innovation and service. Thus, the hypothesis of this study was formulated as follows.

H3: Intern Environment Significantly Influences Business Strategy.

Solihin (2012) explained that intern environment provides information that can be used to identify the strengths and weaknesses of a resource owned by a company and the intern business process of the company. Amirullah (2015) mentioned that intern environment refers to factors inside an organization that reflect the strengths and weaknesses of the organization. David (1997) added that performance is the achievement or results obtained by a company which usually are in the forms of positive results. The study conducted by Tan and Litschert (1996) on electronics industries in China indicates that environmental changes influence the business strategy, and the use of certain business strategy influences the business performance. Regarding to the explanation, the hypothesis of this study was formulated as follows.

H4: Intern Environment Significantly Influences Business Performance.

According to Mulyadi (1997), performance can be periodically measured through the operational effectiveness of an organization, parts of an organization and employees based on the predetermined targets, standards and criteria. Solihin (2012) then specified business strategy should be made for business unit or products, and the strategy must be meant to improve the competitiveness of the products or services offered by a company within a particular industry or segmented market. Maridjo (2004) found in his study that market orientation has a significant influence on the generic strategic and business performance. Meanwhile, Luo (1999) stated that environment influences the strategic orientation and it has certain implication toward the performance of small-scale business. The form of strategy which effectively improves the performance is innovation. Therefore, the hypothesis of this study was formulated as follows.

H5: Business Strategy significantly influences the Business Performance.

This study aimed at testing and explaining the influence of extern and intern environments toward business strategy and business performance of *UMKM*. Regarding to the explanation of the background of the study, theoretical background, and the results of previous studies, this research was employed using the model seen from Figure 1.

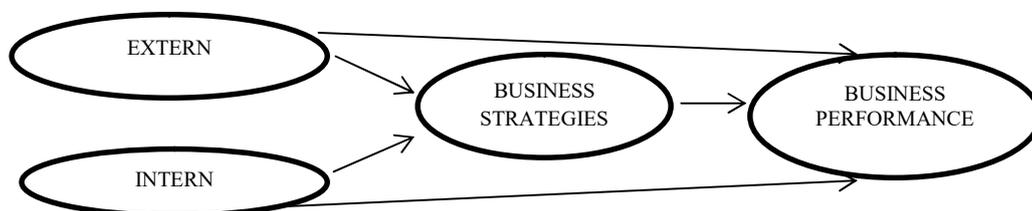


Figure 1 – The Research Model

METHODS OF RESEARCH

This study is an explanatory research which employed a quantitative approach. There were 122 *UMKM* owners from Bajawa Regency, Ngada District, NTT who participated as the samples of this study. The extern environment was measured using 10 items developed by Pearce II and Robinson Jr, (1997) and Wheelen and Hunger (1986). Intern environment was measured using 9 items proposed by Wheelen and Hunger (1996), Wahyudi (1996) and Amirullah (2012). The strategy was measured using 4 items which were developed by Porter (1980, 1985). Business performance was seen from 5 items as proposed by Mulyadi (1997),

Munawir (2000) and Luo (1999). Partial Least Square (PLS) was used to analyze the data. The use of proportional stratified random sampling enabled the researcher to have stratified number of samples to represent population of certain strata (Rambat, 2015: 74) as presented in Table 1.

Table 1 – Sample Proportion in this Study

NO	Regency	Population	Sampling Measurement	Number of Samples
1	Bajawa	19	$\frac{19}{174} \times 122 = 13,22$	13
2	Tanalodu	26	$\frac{26}{174} \times 122 = 18,22$	18
3	Kisanata	14	$\frac{14}{174} \times 122 = 9,81$	10
4	Jawameze	5	$\frac{5}{174} \times 122 = 3,5$	4
5	Trikora	26	$\frac{26}{174} \times 122 = 18,22$	18
6	Lebijaga	25	$\frac{25}{174} \times 122 = 17,5$	18
7	Susu	4	$\frac{4}{174} \times 122 = 2,8$	3
8	Ngedukelu	29	$\frac{29}{174} \times 122 = 20,33$	20
9	Faobata	26	$\frac{26}{174} \times 122 = 18,22$	18
-	-	174	-	122

RESULTS AND DISCUSSION

H1: Extern environment has a positive, direct and significant influence toward business performance. Extern environment has a positive influence toward business performance with path coefficient of 0.2042 and t statistic value 2.6589 greater than the t table (1.960) and significant at $p < 0.05$. Therefore, the null hypothesis is rejected and the hypothesis is accepted.

This result generally shows that the extern business environment in Bajawa Regency supports the business performance. It also implies that any change that occur to the extern environment would likely bring changes in the business performance. The society is known to be the most dominant indicator in which the products sold in the market have fulfilled the social values that apply in the society. Besides, this improvement is also resulted by the easiness in applying for capital support, active supports from the government in the form of trainings and business workshops, and the use of advanced technology to improve the production quality and better service quality.

H2: Extern Environment has a positive, direct and significant influence on business strategy. Extern environment is found to have a positive influence toward the business strategy at path coefficient of 0.3077 and t value of 3.8303 greater than the t table (1.960) and significant ($p < 0.05$). Thus, H0 is rejected and the second hypothesis of this study is accepted.

This result indicates that any changes that occur on the economy, social, government and technology aspects influence business owners to repond to any kinds of opportunities and threats. Business owners in Bajawa Regency applied pricing strategy and price differentiation as the reactions toward changes that occurred in the extern environment.

H3: Intern environment has a positive, direct and significant influence toward Business Strategy. Intern environment positively influences business strategy at a coefficient value of 0.4994 and t value of 6.2431 lesser than the t table (1.960), significant at $p < 0.05\%$. Those values are strong enough to reject the null hypothesis, which implies that intern environment plays a positive, direct and significant influence toward the business strategy. Therefore, the third hypothesis is accepted.

The hypothesis generally implies that business strategy applied by a business owner will run well if it is supported by good business environment. Thus, the more favorable the intern environment, the easier it is for a business owner to run the business. It can be inferred from the result of this study that business owners in Bajawa regency have optimally make use of the available resources in an organization by considering the easiness in

conducting marketing activities and to apply for capital loan through pricing strategy and differentiation.

H4: Intern Environment has a positive, direct and significant influence toward Business Performance. Intern environment positively influences business performance at a coefficient value of 0,2246 and t value 2,5458 lesser than the t table (1.960), significant at $p < 0.05\%$. This result rejects the null hypothesis, which implies that intern environment plays a positive, direct and significant influence toward the business performance. Therefore, the fourth hypothesis is accepted.

The result of the measurement shows that the intern environment seen from its function in Bajawa regency has been considered good enough to support the business performance. The most dominant function of the intern environment is the marketing since the company is located in a strategic area in the central of the district, supported by adequate production function for it is easy to get the production materials. Moreover, employees in the company are competent and huge amount of capital was available to support the business.

H5: Business Strategy has a positive, direct and significant influence toward Business Performance. Business Strategy positively influences business performance at a coefficient value of 0,4581 and t value 5,0597 lesser than the t table (1.960), significant at $p < 0.05\%$. This result rejects the null hypothesis, which implies that business strategy has a positive, direct and significant influence toward business performance. Therefore, the fifth hypothesis is accepted.

This result shows that the application of pricing strategy as the most dominant business strategy in Bajawa Regency gives positive contribution to the business performance including the effectiveness of the production process and the determination of competitive price. One of ways to measure a company's performance is by analyzing how the company responds or anticipates any change that occur in the environment by applying certain strategy to prevent the business from getting negatively affected by any change.

CONCLUSION

The result of this study to find the influences of extern and intern environment toward business strategy and business performance in Bajawa regency, Ngada district, Nusa Tenggara Timur supports the funding of some previous research done in Indonesia. This study has also proven that business environment in Indonesia is conducive enough for investors to run their enterprises. It is expected that the result of this study as well as the results of some previous studies enhance the motivation of the society to run their own business. National economic development and the advancement of a nation can be measured from the number of business owners in the country. Apart from that, enterprises in Indonesia especially *MSMEs* should consider some aspects, one of which is the way to implement appropriate business strategy as a response toward changes in the business environment. Business owners should also improve their capability in running their business. In this case, the government should act as a mediator in providing business trainings and workshops for the society. Business owners are also required to be aware of any changes that occur in the business context to be able to anticipate them by applying the best business strategy to maintain and improve the business performance. This study suffers from a weakness in which the samples are dominated by micro-scale business owners. Besides, the scope of this study is relatively narrow and limited to only business owners who have legal business license. It is suggested that future researchers increase the ratio of the types of enterprises. Future researchers are also expected to conduct similar study with broader scope of the study to be able to generate the result of the study.

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THE INFLUENCE OF LEARNING ORGANIZATION AND ORGANIZATIONAL STRESS ON PERFORMANCE OF CREATIVE INDUSTRY SMES WITH THE CREATIVITY OF ITS OWNERS/ACTORS AS MEDIATOR

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ABSTRACT

The purpose of this study was to determine the influence of organizational learning and organizational stress on the performance of creative industry SMEs with the creativity of its owners/actors as mediator. Type of data used in this research was primary data, namely in the form of questionnaires and partly done also with interviews directly. Data analysis technique used was path analysis method. The population of this research was the owners of SMEs located in Palembang City under the guidance of the Ministry of Cooperatives and SMEs of South Sumatra Province based on data of 2016, which is classified as creative industry SMEs in the area of Palembang City as much as 65 SMEs. The sampling technique was census method. Based on that number, the returned questionnaires only 63 questionnaires from 65 questionnaires distributed. The results of research stated: first hypothesis is accepted where there is influence of learning organization on creativity of SMEs actors, with the influence of 0.705 (70.5%); second hypothesis is rejected, there is no influence of organizational stress on creativity of SMEs owners. Third hypothesis is accepted, where there is influence of learning organization on performance of creative industry SMEs, with the influence of 0.229 (22.9%). Fourth hypothesis is accepted, there is influence of organizational stress on performance of creative industry SMEs, with the influence of 0.229 (22.9%). Fifth hypothesis is accepted, where there is influence of creativity of SMEs owners on performance of creative industry SMEs, with the influence of 0.254 (25.4%). Sixth hypothesis is accepted, where there is influence of learning organization on performance of creative industry SMEs through creativity of SMEs owners as mediator variable with total effects of 0.589 or 58.9%. Seventh hypothesis is accepted, where there is influence of organizational stress on performance of creative industry SMEs through creativity of SMEs owners as mediator variable, with total effects of 0.219 or 21.9%.

KEY WORDS

Learning organization, organizational stress, creativity, creative industry.

People are getting familiar with the home industry that sells creative ideas in generating revenue. Economists call it the "creative economy". The creative economy is one of the most important sectors that support the development of the national economy that contributes to the average gross domestic income of 7.8 percent per annum and employing an estimated 7.4 million people. From 2004 to 2010 creative industry exports increased by an average annual growth of 12 percent and recorded a value of 131 trillion rupiahs in 2010, and it is expected that by 2025 the creative industry accounts for 11 percent of GDP and 12-13 percent for exports (Executive Summary, 2006).

The growth of the creative industry still needs the support of various parties, so it has a great contribution to economic development. The problems faced today are the weak capability of human resources, especially creativity and innovation capabilities, thus impacting on the weakness of competitive advantage and business performance. The creative economy is the seventh most important sector of the ten national economic sectors. The creative economic contribution to the gross domestic product (GDP) in 2011 is able to create the added value of Rp 256 trillion and in 2012 is estimated to reach Rp 573.4 trillion. While the number of workers absorbed in the creative economy in 2011 reached 11.51 million people and in 2012 would increase to 11.57 million people. The number of businesses

in the creative economy sector in 2010 reached 5.5 million, where the handicraft sector reached 20.3% or 1.07 million, fashion of 20.1% or 1.06 million and the largest was dominated by the culinary sector which is 56.5 % or 2.797 million (Ministry of Industry and Trade, 2008).

Creativity and innovation of creative industry actors are needed to grow and compete, therefore creative business actors must be able to change the paradigm of culture in the context of performance-based art into performance-based entrepreneurship. Likewise, business actors are expected to turn their profit-oriented life culture into customer-oriented in order to establish a profitable cooperation in the long term. Creative industry actor is a good individual who has the ability to take the challenge, competitive, strategic and has a strong desire for business achievement (Halim, 2011).

The demand to advance SMEs, often make the owners/actors in SMEs feel burdened due to lack of supporting facilities that greatly hamper the operational activities of SMEs. Conditions in which SMEs are always required to contribute ideas and creativity for business progress because of competition and efforts to maintain business continuity leads to stress. While on the other hand, SMEs actors are required to create their business into learning organizations. Where all the elements in the business become proactive to increase self-desire, keep trying and keep learning by creating an open organizational climate and clear information flow. This condition will lead to a continuous process with reference to internal conditions of the organization that ultimately refers to external conditions and demands from outside of the organization.

Research conducted by Febrianty and Divianto (2017), the purpose of the research was to know the influence of entrepreneurial action group on the performance of SMEs through the role internalization of quadruple-helix innovation (Study on the creative economy-based SMEs in Palembang City). The results of the study stated: a. There is a significant influence on Entrepreneurial Action Group to Performance of Creative Economy-Based SMEs, b. There is a significant influence on the Entrepreneurial Action Group on the Role Internalization of Creative Economy-Based Quadruple Helix Innovation, c. There is no influence on the Role Internalization of Quadruple Helix Innovation on the performance of Creative Economy-based SMEs, d. There is significant influence on Entrepreneurial Action Group and Role Internalization of Quadruple Helix Innovation on the performance of Creative Economy-Based SMEs. Other research by Mulyana and Sutapa (2014) on Enhancement of Innovation Capabilities, Competitive Advantage and Performance through Quadruple Helix Approach: Study on the Creative Industry of the Fashion Sector. The results showed quadruple helix (intellectuals, government, business, civil society) have a significant effect on creativity. Intellectuals and business have a significant effect on innovation capability, but the government and civil society have no significant effect on innovation capability. Creativity has a significant effect on innovation capability. Creativity and innovation capabilities have a significant effect on competitive advantage and performance. Research on Increasing Competitiveness of SMEs Based on Innovation and Creativity (Strategy of Property Right Strengthening on Innovation and Creativity), by Darwanto (2013). This purpose of this study was to formulate an institutional strategy in encouraging innovation and creativity of SMEs actors with SWOT analysis method. This study also made comparative strategies to create strong institutions for the creation of creativity and art that can improve the competitiveness of SMEs from several countries. Problems of SMEs related to productivity include lack of property right protection over innovation and creativity. This results in the frequent occurrence of plagiarism in a product that is detrimental to the SMEs of product creators. The property right on the product or product design does not serve as a production incentive. The neglected property right creates a production disincentive. Therefore, there need to be incentives for the creators of production so that they remain driven innovation and creativity continuously. Steps that can be done is an appreciation through the granting of patents to SMEs that are innovative. This will encourage further creations and produce products with features and designs that attract consumers.

Therefore, the authors interested in examining the influence of learning organization and organizational stress on the performance of SMEs creative industries in Palembang City

with the creativity of the SMEs owners/actors as a mediator. The higher the level of creativity of the SMEs owners/actors in a city then the city can be called Creative City. Creative City means the city where government and society have creative ideas and supported by aspirational public policy in order to develop the potency and competitiveness of the region. The purpose of this study was to determine the influence of learning organization and organizational stress on the performance of SMEs creative industry with the creativity of SMEs owners/actors as a mediator.

LITERATURE REVIEW

Creative Industry

Claire (2009) wrote about how to grow creative economics in Tacoma, USA using an experiment called "Tacoma Experiment". This experiment recruited 30 people with professional backgrounds from various fields to work for a year. The process of the experimental project showed how the 30 people were keeping each other in communication so as to create a good relationship with each other. The core of the research is the exchange of ideas and information between individuals can increase the value of someone's creativity. The value of someone's creativity is believed to increase the communication. The research is enough to provide an overview of the development of creative economy.

The era of globalization has an impact on the shift in the paradigm of industry, from the era of industrialization to the information age and lately the era of the creative economy. The creative industry focuses on the creation of goods and services by relying on expertise, talent and creativity as intellectual property that will be able to encourage increased incomes. Creative industry is defined as an industry derived from the utilization of creativity, skills and individual talents to create welfare and employment through the creation and utilization of the creative power and creativity of the individual. There are 14 creative industry subsectors: advertising, architecture, art, craft, design, fashion, video/film/photography, interactive games, music, performing arts, publishing and printing, computer software, television and radio services, research and development (Ministry of Industry and Trade, 2008).

Definition of MSMEs. Law Number 20 of 2008 on Micro, Small and Medium Enterprises (MSMEs) defines MSMEs based on certain criteria, namely:

- Micro Enterprise is productive business owned by individual and/or individual business entity which meets the criteria of Micro Business as regulated in this Law.
- Small enterprise is a stand-alone productive economic enterprise undertaken by an individual or a business entity that is not a subsidiary or not a branch of a company which owned, controlled or constituted either directly or indirectly by a medium-sized or large-scale business that meets the criteria of a small business in this Law.
- Medium enterprise is a stand-alone productive economic enterprise, carried out by an individual or business entity which is not a subsidiary or a branch of a company that owned, controlled or otherwise part of either directly or indirectly by a small or large enterprise with net worth or annual gross sales as stipulated in this Law. The criteria of MSMEs by total assets and turnover in accordance with Law Number 20 of 2008:

Table 1 – The criteria of MSMEs by total assets and turnover

Description	Criteria	
	Assets	Turnover
Micro Enterprise	Maximum of 50 million	Maximum of 300 million
Small Enterprise	More than 50-500 million	More than 300 million-2.5 billion
Medium Enterprise	More than 500 million-10 billion	More than 2.5 billion-50 billion

Source: Law Number 20 of 2008.

Creative Industry. Creative industry is defined as an industry derived from the utilization of creativity, skills and individual talents to create prosperity and employment by generating and empowering the creative power of the individual (Ministry of Industry and Trade, 2007). The creative industry cited in Saksono (2012) is part of the creative economy, where the

creative economy is a system of transactions (supply and demand) which has a broader understanding than the creative industry. United Nations Conference on Trade and Development (UNCTAD) in "Creative Economy Report 2010" (2010) defined creative economy as *"The "creative economy" is an evolving concept based on creative assets potentially generating economic growth and development. It can foster income generation, job creation and export earnings while promoting social inclusion, cultural diversity and human development. It embraces economic, cultural and social aspects interacting with technology, intellectual property and tourism objectives. It is a set of knowledge based economic activities with a development dimension and cross-cutting linkages at macro and micro levels to the overall economy. It is a feasible development option calling for innovative, multidisciplinary policy responses and interministerial action. At the heart of the creative economy are the creative industries."*

The Government of Indonesia officially launched the Creative Economy Program (Presidential Instruction Number 6 of 2009 on Creative Economy Development) which must be implemented by several ministries/agencies and all local governments (provinces and regencies/municipalities). The President also proclaimed 2009 as *"Tahun Indonesia Kreatif"*. However, paying attention to the various limitations, the Government set the priority of the creative economy development in the period of 2009 - 2014 focused on 7 (seven) creative industry groups, namely: 1. architecture; 2. fashion; 3. crafts; 4. computer and software services; 5. advertising; 6. interactive games; and 7. research and development.

The Creative Industry Map in Indonesia's Economy Year 2020 (Data Global Business Guide Indonesia - 2011) shows the contribution of the creative industry in the domestic economy (<http://www.gbgindonesia.com>). The absorption amount of human resources reaching \pm 7.5 million workers in the sub-sector of creative industry indicates the potential of the country's youngsters creative talent. Latuconsina (2010) stated that creative human resource is a prerequisite for filling a role in the creative industry. The creative industry is the way to build a creative economy or knowledge-based economy.

The scope of the creative economy activities can cover many aspects. Ministry of Industry and Trade (2008) identified at least 14 sectors included in the creative economy:

Table 2 – Sub-sectors of Creative Economy in Indonesia

No	Sectors	Sub-sectors
1	Advertising	Process of creation, production, and distribution
2	Architecture	Building design, construction supervision, urban planning
3	Market of Art Goods	Unique and rare goods that have aesthetic art value
4	Crafts	Precious stones, natural and artificial fibers, leather, rattan, bamboo, wood, metal, glass, porcelain, fabrics, marble, clay, and lime
5	Design	Graphic design, interior design, product design, dan industry design
6	Fashion	Creation of clothing design, footwear design, and other fashion accessories design
7	Video, Film, and Photography	Production of video, film and photography services as well as distribution of video recordings, films and photographic results
8	Interactive Games	Video and computer games that have entertainment, agility, and education values
9	Music	Distribution, reproduction of recording media, representation-promotion management (agency) music, composer services, songwriting services and singing services
10	Performing Arts	Content development, show production, ballet shows, traditional dance, contemporary dance, drama, traditional music, theater music, and other performing arts
11	Publishing and Printing	Content writing and publishing of books, journals, newspapers, magazines, tabloids, and digital content as well as news agency activities
12	Computer and software services	Computer services, software development, system integration, system design and analysis, software architecture design, infrastructure design

Organizational Stress. The word "stress" comes from the Latin, *Stingere*, used in the XVII century to describe hardship, suffering, and misfortune. In a chance Smith in Tunjungsari (2011) argued that the concept of work stress can be viewed from several angles: first, work stress as the result of the workplace situation. Second, work stress as the result of two organizational factors namely involvement in tasks and organizational support.

Third, stress due to workload. Fourth, the result of excessive work time. Fifth, the work responsibility factor.

Kahn and Quin (in Ivancevich et al, cited in Dhania, 2010), added that work stress is a negative work environment, one of which is excessive workload at work. The same thing was also expressed by Keenan and Newton in Dhania (2010) stated that work stress is a manifestation of the blur of roles and excessive workload.

Stress is an internal condition that occurs with physical disturbances, environmental, and social situations that have potency in conditions that are not good. This opinion was expressed by Morgan & King (1986) quoted in Dhania (2010). "The feelings of distress experienced by employees in the face of work. This work stress is visible from the symptom, including unstable emotions, uneasy feelings, aloofness, sleeplessness, excessive smoking, can not relax, anxiety, tension, nervousness, increased blood pressure, and indigestion" (Mangkunegara, 2008). "Conditions which arise from the interaction between human beings and work characterized by human changes that compel them to deviate from their normal function." (Robbins, 2006).

The results of research by Kuan (1994), Bat (1995), Aun (1998) and Yahya (1998) cited in Dhania (2010) proved that excessive workload affects work stress. Furthermore, the research of Widjaja (2006) found that workloads that are too difficult to work and technologies that do not support to do the job well become a source of stress for employees.

Quick and Quick (1984) cited in Dhania (2010), categorized the types of stress into two, namely: Eustress, which results from a response to stress that is healthy, positive, and constructive, and the second Distress, which results from a response to stress that is unhealthy, negative, and destructive. Stress is an adaptive response to external situations that result in physical, psychological, and/or behavioral deviations in organizational members. The conclusion above shows the existence of certain conditions in the environment which is a potential source for the emergence of stress. How the shape of the stress depends on the unique characteristics of the individual concerned and appreciation of the potential environmental factors creates stress on it, even though almost every group of people are exposed to similar types of stress conditions, but this will result in different reactions, even in the face of the same type of stress or condition, each individual can vary the reaction pattern.

Influencing Factors of Organizational Stress. According to Mangkunegara (2008): "The cause of work stress, namely, the workload is too heavy, urgent work time, low-quality work supervision, unhealthy work climate, inadequate work authority associated with responsibility, work conflicts, value differences between employees and frustrated leaders in work".

According to Handoko in Tunjungsari (2011) revealed that there are a number of working conditions that often cause stress for employees, namely: 1. Excessive workload, 2. Time pressure, 3. Poor quality supervision, 4. Unsafe political climate, 5. Feedback on inadequate implementation of work, 6. The ambiguity of roles, 7. Frustration, 8. Interpersonal and intergroup conflicts, 9. Differences between corporate and employees values 10. Different forms of enterprise.

Work Stress Approach. According to Rivai (cited in Tunjungsari, 2011) work stress approaches can be done by:

- Individual approaches: a. Increase faith, b. Do meditation and breath, c. Do sports activities, d. Relax, e. Social support from friends and family, f. Avoid the boring routine.
- The company approaches: a. Improve organizational climate, b. Make improvements to the physical environment, c. Provide sports facilities, d. Conduct analysis and clarity of duties, e. Increase participation in decision-making process, f. Perform task restructuring, g. Apply the Goal-Based Management concept.

Learning Organization. Senge (1990) in Tobing and Fitriati (2009) said that learning organization is the organization where people continually expand their capacity to create the results they really want, where new patterns and thinking expansion are nurtured, in which collective aspirations are liberated, and where people are constantly learning to see together

thoroughly. Furthermore, Senge also said that the requirements of an organization into a learning organization that every individual who wants to compete in the business environment should make the organization as a "learning organization", by constantly adapting to the environment. Senge offered five disciplines known as "five new component technologies", which is believed to be the "discipline" that every organization needs to become the foundation for building successful learning organization to face and create changes.

Meanwhile, according to Marquardt (1996) cited in Tobing and Fitriati (2009), there are six skills an organization must possess to become a learning organization, the first five skills are the five disciplines of learning organization proposed by Senge, and supplemented by the sixth skill, that is dialogue. Dialogue is the ability to learn, hear and communicate with fellow members of the organization. In a company that has become a learning organization, skills are manifested by: the attitude of company members to be open, willing to listen, to discuss, give suggestions or criticism, and exchange ideas in conducting learning process and continuous improvement in the company.

Characteristics of Learning Organization. The learning organization has five main characteristics known as the five disciplines that are expected to bring the business organization into an innovative organization (Senge, 1990 cited in Dwiprabowo, Mulyaningrum, and Suwarno, 2013), namely: a. The organization basically consists of units that must work together to produce optimal performance, b. Personal Mastery, c. Mental Model, d. Shared Vision, and e. Team Learning.

Creativity. According to Hadiyati (2011), creativity is the initiative of a product or process that is useful, correct, appropriate, and valuable to a heuristic task that is an incomplete guide or guide that will guide us to understand, study or find something new. Suryana (2003) stated that creativity is: "Thinking something new". "Creativity as the ability to develop new ideas and to discover new ways of solving problems in the face of opportunities". Creativity is the ability to develop new ideas and discover new ways of looking at problems and opportunities whereas innovation is the ability to find creative solutions to problems and opportunities to enhance or enrich life (Zimmerer, 2008). Collaborative creativity is a prerequisite for innovation generation (Gerald, 2009).

A. Roe in Frinces (2004) stated that requirements of creative person are: a. openness to experience, b. observance seeing things in unusual ways, c. Curiosity/tolerance of apporites, d. independence in judgement, thought and action, e. needing and assuming autonomy, f. self-reliance, g. not being subject to group standart and control, h. willing to take calculated risks.

Business/SMEs Performance. Voss and Voss (2000) stated that business performance is defined as a measure of performance levels including sales turnover, number of buyers, profits and sales growth. Organizational performance or often referred to as business or company performance is an indicator of success rate in achieving company goals. Good corporate performance demonstrates the success and efficiency of corporate behavior. Many studies use different indicators to measure business performance. To measure business performance, it is usually done using profitability indicators over the past three years. Agarwal et al. (2003) measured business performance using two dimensions: the first dimension is financial performance or performance based on marketing such as usage level, profitability and market share, while the second dimension is subjective performance. Subjective performance is a performance measurement based on customer and employee satisfaction, such as service quality, customer satisfaction, and employee performance satisfaction.

METHODS OF RESEARCH

Research Design. The research design is a causal research. The research framework is presented in Figure 1.

Type and Sources of Data. Type of data used in this research was primary data, namely in the form of questionnaires and partly done also with interviews directly.

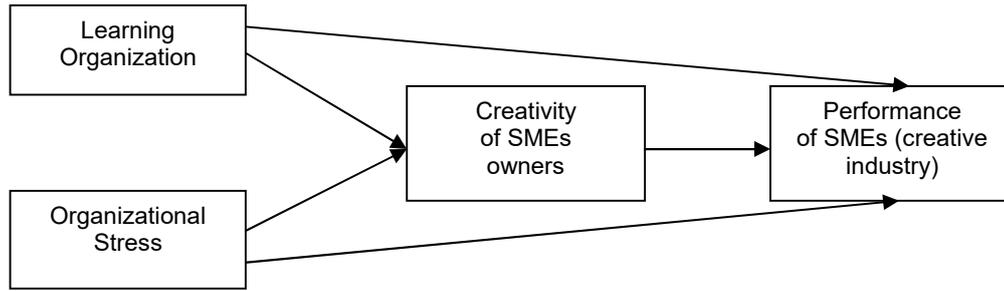


Figure 1 – Research Framework

Research Sample and Population. The population of this research was the owners of SMEs located in Palembang City under the guidance of the Ministry of Cooperatives and SMEs of South Sumatra Province based on data of 2016, which is classified as creative industry SMEs in the area of Palembang City as much as 65 SMEs. The reason for the selection of creative industry SMEs is creative industry SMEs absorb the most labor force compared to other sectors. The sampling technique was census method.

Research Variables Operational Definitions:

Table 3 – Variables Operational Matrices

Variable	Definition	Indicators	Number of Questions in Questionnaire	Scale
Learning Organization	Organizations in which people continually expand their capacity to create the results they really want, where new patterns and thinking expansion are nurtured, in which collective aspirations are liberated, and where people continually learn to see together thoroughly (Senge 1990, in Tobing and Fitriati (2009) So it is a process to improve action through better knowledge and understanding.	Learning method Learning environment Organizational culture	11 questions	Ordinal
Organizational Stress	Conditions which arise from the interaction between human beings and work characterized by human changes that compel them to deviate from their normal function (Robbins, 2006).	Excessive workload Pressure Unsafe political climate Feedback on inadequate implementation of work Frustration Interpersonal and intergroup conflicts Differences between corporate and employee values	7 questions	Ordinal
Creativity of SMEs owners	Creativity is the ability to develop new ideas and discover new ways of looking at problems and opportunities whereas innovation is the ability to find creative solutions to problems and opportunities to enhance or enrich life (Zimmerer, 2008).	Openness to experience Strong desire Confidence Independence in judgement, thought and action	4 questions	Ordinal
SMEs performance	A measure of performance levels including sales turnover, number of buyers, profits and sales growth (Voss and Voss, 2000).	Quantity Quality Knowledge Ability Skills Attitude Interaction	7 questions	Ordinal

Data Analysis Technique. Data analysis technique used was path analysis method. Path Analysis was developed by Sewal Wright in 1934. The path analysis for direct effect, indirect effect, and total effect. The structural equations of causality are as follows:

$$\text{Endogenous variables} = \text{Exogenous variables} + \text{Endogenous variables} + \text{Error}$$

Equation of Sub-structure I:

$$Y_1 = a + PX_1 + PX_2 + \zeta_1 \quad (1)$$

Equation of Sub-structure II:

$$Y_2 = a + PX_1 + PX_2 + Y_1 + \zeta_2 \quad (2)$$

Equation of Sub-structure III:

$$Y_1 = a + PX_1 + \zeta_1 \quad (3)$$

$$Y_1 = a + PX_2 + \zeta_1 \quad (4)$$

$$Y_2 = a + PX_1 + \zeta_2 \quad (5)$$

$$Y_2 = a + PX_2 + \zeta_2 \quad (6)$$

$$Y_2 = a + PY_1 + \zeta_2 \quad (7)$$

Where: X_1 = learning organization; X_2 = organizational stress; Y_1 = creativity of SMEs owners; Y_2 = performance of SMEs (creative industry); e_1 = Correlation coefficients outside the model; e_2 = Correlation coefficients outside the model.

Hypothesis Testing. Hypothesis test in this research was done to statistical hypothesis use t test and f test. Next, present the Coefficient of Determination value.

Research Hypothesis. Research hypotheses are as follows:

- H1: there is influence of learning organization on creativity of SMEs owners;
- H2: there is influence of organizational stress on creativity of SMEs owners;
- H3: there is influence of learning organization on performance of creative industry SMEs;
- H4: there is influence of organizational stress on performance of creative industry SMEs;
- H5: there is influence of creativity of SMEs owners on performance of creative industry SMEs;
- H6: there is influence of learning organization on performance of creative industry SMEs through creativity of SMEs owners as mediator variable;
- H7: there is influence of organizational stress on performance of creative industry SMEs through creativity of SMEs owners as mediator variable.

RESULTS AND DISCUSSION

Description of Respondents. In the research design has been explained that the respondents of this study are the owners of Small and Medium Enterprises located in Palembang city under the guidance of the Ministry of Cooperatives and SMEs of South Sumatra Province based on data of 2016, which belongs to the creative industry SMEs in the area of Palembang City. Based on that number, the returned questionnaires only 63 questionnaires from 65 questionnaires distributed. After the questionnaire ended, the researcher did the editing, coding and data entry for the preparation of data analysis. The results were not all questionnaires can be used as a basis for analysis. The following recapitulation of questionnaire data based on gender and educational background:

Table 4 – Characteristics of Respondents (SMEs owners/actors) based on gender

No.	Creative industry SMEs sector	Gender		Total
		Male	Female	
1	Fashion	3	11	14
2	Crafts	4	6	10
3	Publishing and Printing	7	2	9
4	Video, Film, and Photography	11	2	13
5	Culinary	4	13	17
	Total	29	34	63

Source: Processed primary data, 2017.

Based on Table 4, the percentage of female respondents of creative industry SMEs actors as many as 34 people more than male respondents of creative industry SMEs actors as many as 29 people (53.97%).

Table 5 – Characteristics of Respondents based on educational background

No.	Creative industry SMEs sector	Last Education			Total
		High School	D3	S1	
1	Fashion	4	7	3	14
2	Crafts	6	3	1	10
3	Publishing and Printing	4	3	2	9
4	Video, Film, and Photography	6	4	3	13
5	Culinary	6	7	4	17
	Total	26	24	13	63

Source: Processed primary data, 2017.

Based on Table 5. the average of creative industry SMEs actors have the educational background with S1 level as many as 13 people, D3 level as many as 24 people, and high school as many as 26 people. This shows that the educational background of creative industry SMEs is still not supporting the improvement of SMEs performance.

Validity and Reliability Test. The two procedures performed in this study measured the consistency and accuracy of data collected from the use of the instrument, namely (1) internal consistency test with Cronbach's Alpha statistical test, (2) correlational test between the score of each item with the total score (Ghozali, 2005). The results of reliability testing resulted in all items or questions are stated as valid. While reliability testing shows the value of Cronbach's alpha is greater than 0.50 so all the variables in this study are stated as reliable.

Classic Assumption Test. The classical assumption tests conducted in this research were multicollinearity, heteroscedasticity and normality test. The results show that the regression results were feasible to use.

Results of Hypothesis Test. Based on the results of linear regression testing and path analysis results for direct effects are presented in Table 6.

Table 7. The following presents indirect effects for learning organization and organizational stress on performance of creative industry SMEs through creativity of SMEs owners as mediator variable.

Table 8. The following presents total effects for learning organization and organizational stress on performance of creative industry SMEs through creativity of SMEs owners as mediator variable.

Influence of Learning Organization on Creativity of SMEs Actors. Based on the results of partial analysis, SMEs actors in Palembang City shows learning organization variable has significant positive value on creativity of SMEs actors with significant value of <0.5 , with the influence (R^2) of 0.705 (70.5%).

By becoming a learner organization, it will improve the competence and creativity of human resources in SMEs, which of course will produce creative and innovative process and product and able to compete. The more human resources in SMEs continuously do the

learning process and share knowledge of each and work together in the working group will increase the ability of human resource creativity in creating innovations on the SMEs. This is in line with the research hypothesis that is the influence of learning organization on the creativity of SMEs actors. The result of this study is in line with Salim and Sulaiman (2011) that learning organization has an effect on innovation ability.

Table 6 – Linear Regression Results and Path Analysis Results for Direct Effects

Hypothesis	Regression Equation	F value	R square	Hypothesis Confirmation
	Equation of Sub-structure III			
H1	$X_1 \rightarrow Y_1$ $Y_1 = a + PX_1 + e_1$ $Y_1 = 2.700 + 0.312 X_1 + e_1$ influence of learning organization on creativity of SMEs actors	145.675 (0,000)	0.705	Accepted
H2	$X_2 \rightarrow Y_1$ $Y_1 = a + PX_2 + e_2$ $Y_1 = 12.479 + 0.116 X_2 + e_2$ influence of organizational stress on creativity of SMEs actors	2.946 (0,091)	0.046	Rejected
H3	$X_1 \rightarrow Y_2$ $Y_1 = a + PX_1 + e_3$ $Y_1 = 14.251 + 0.314 X_3 + e_3$ influence of learning organization on performance of creative industry SMEs	18.096 (0,000)	0.229	Accepted
H4	$X_2 \rightarrow Y_2$ $Y_1 = a + PX_2 + e_4$ $Y_1 = 19.778 + 0.296 X_4 + e_4$ influence of organizational stress on performance of creative industry SMEs	6.579 (0,013)	0.097	Accepted
H5	$Y_1 \rightarrow Y_2$ $Y_2 = a + PY_1 + e_1$ $Y_2 = 13.317 + 0.889 X_1 + e_1$ influence of creativity of SMEs actors on performance of creative industry SMEs	20.720 (0,000)	0.254	Accepted

Table 7 – Linear Regression Results and Path Analysis Results for Indirect Effects

Hypothesis	Regression Equation
H6	$X_1 \rightarrow Y_1 \rightarrow Y_2 = (0.312 \times 0.889 = 0.277)$
H7	$X_2 \rightarrow Y_1 \rightarrow Y_2 = (0.116 \times 0.889 = 0.103)$

Table 8 – Linear Regression Results and Path Analysis Results for Total Effects

Hypothesis	Regression Equation
H6	$X_1 \rightarrow Y_1 \rightarrow Y_2 = (0.312 + 0.277 = 0,589)$
H7	$X_2 \rightarrow Y_1 \rightarrow Y_2 = (0.116 + 0.103 = 0,219)$

Influence of Organizational Stress on Creativity of SMEs Actors. Based on the results of partial analysis, SMEs actors in Palembang City shows organizational stress variable does not influence the creativity of SMEs actors with significant value of >0.5 . Thus, the second hypothesis in the study that states that there is an effect of organizational stress on the creativity of SMEs, rejected.

The effect of organizational stress is not necessarily negative or in other words, organizational stress can have a beneficial impact on the creative industry SMEs. The stress level of a particular organization stress is expected to spur the SMEs workers to be able to complete the job as well as possible. Workers or those in stress conditions will show behavioral changes. These changes occur as a form of effort to cope with the stress experienced. Although the actual appreciation on the factors of the environment that potentially bring stress to him, how to deal with or control of stress, the reaction to stress experienced, all depends on the individual concerned. Therefore it does not mean a similar

type or condition of stress, will cause the same reaction. The results of this study do not support the findings of previous studies conducted by Sabrina (2017), which partially proved that there is a negative and significant relationship between work stress on work achievement in TVRI Kaltim Station.

Influence of Learning Organization on Performance of Creative Industry SMEs. Based on the results of partial analysis, SMEs actors in Palembang City shows learning organization variable has significant positive value on performance of creative industry SMEs with significant value of <0.5 , with the influence (R^2) of 0.229 (22.9%). This influence can be enhanced, of course, with the role of learning groups creation and ongoing learning processes by both SMEs owners and employees. Workers in SMEs participate in the implementation of SMEs vision, evaluate work, and adapt the better production methods and apply product quality standards within SMEs in order to improve product quality so as to increase knowledge, skills and creativity of human resources in SMEs in creating innovation and performance improvement of SMEs in Palembang City.

The result of this study is in accordance with previous research conducted by Power and Waddell (2004) and Sampe (2012) which stated that learning organization has a significant relationship with the performance of SMEs. This is also in line with statements from Ellitan and Anatan (2009) that learning organization reflects that organization learns what needs to learn so that the organization has more performance than its competitors. Individuals in the SMEs who become learning organization will continue to improve their skills by continuing to learn and sharing knowledge with each other about better information and production processes so as to improve the performance of SMEs.

Influence of Organizational Stress on Performance of Creative Industry SMEs. Based on the results of partial analysis, SMEs actors in Palembang City shows organizational stress variable has significant positive value on performance of creative industry SMEs with significant value of <0.5 , with the influence (R^2) of 0.097 (9.7%).

The results of this study support the research of Sabrina (2017) entitled "The Relationship Between Work Stress And Creativity To Work Achievement on Employees At TVRI Kaltim Station". The research findings showed that no matter how small the dynamics of employee creativity will affect the high and low achievement of work performance. This result was caused by the working world of television stations require employees to have creativity in the form of fresh ideas that are not monotonous.

Influence of SMEs Actors Creativity on Performance of Creative Industry SMEs. Based on the results of partial analysis, SMEs actors in Palembang City shows SMEs actors creativity variable has significant positive value on performance of creative industry SMEs with significant value of <0.5 , with the influence (R^2) of 0.254 (25.4%).

Creativity related to human resources that exist in SMEs both owners and workers because they are the actors who create creativity in SMEs where SMEs continue the creativity will create a process and production that is modified and completely new so as to improve the performance of SMEs. SMEs that innovate also cannot be separated from the role of human resources to continue to learn in improving their knowledge and skills to produce a process or product that creative and innovative.

The result of this study is also in line with previous research from Salim and Sulaiman (2011) where innovation has a significant effect on improving the performance of SMEs.

Influence of Learning Organization on Performance of Creative Industry SMEs Through Creativity of SMEs Owners as Mediator Variable. Based on the results of partial analysis, SMEs actors in Palembang City shows the creativity of SMEs actors mediate learning organization on performance of creative industry SMEs. Therefore the total effects as 0.589 or 58.9%.

The learning process in SMEs must be related to creativity and innovation where the creative industry SMEs which good in doing knowledge development will be good also in producing/processing innovative/creative products and organizational learning reflects that the organization learn what it needs to learn so that the organization has a performance which is better and able to compete with its competitors.

Thus, the creativity of SME actors with the support of the creation of learner organizations within the internal scope of SMEs, then SMEs can produce a new product or process both the addition of different features of the products and processes that already exist as well as products and processes that are completely new so as to enhance the competitiveness and characteristics of SMEs so that in Palembang City SMEs are expected ready to compete with other competitors and improve the performance of SMEs.

Influence of Organizational Stress on Performance of Creative Industry SMEs Through Creativity of SMEs Owners as Mediator Variable. Based on the results of partial analysis, SMEs actors in Palembang City shows the creativity of SMEs actors mediate organizational stress on performance of creative industry SMEs. Therefore the total effects as 0,219 or 21.9%.

Excessive work stress will result in the decreasing creativity of creative industry SMEs actors, low-performing workers, insomnia, irritability, uneasiness, increasing errors, nervousness, anxiety, tension, doubts in work that ultimately result in decreased SMEs performance. Conversely, low organizational stress will increase creativity to the performance of creative industry SMEs. So it can be said that creativity is one factor that is very important to get the results of work or optimal performance.

CONCLUSION AND RECOMMENDATIONS

Based on the discussion that has been done, then conclusions are as follows: First hypothesis is accepted where there is influence of learning organization on creativity of SMEs actors, with the influence (R^2) of 0.705 (70.5%). Second hypothesis is rejected, there is no influence of organizational stress on creativity of SMEs owners. Third hypothesis is accepted, where there is influence of learning organization on performance of creative industry SMEs, with the influence (R^2) of 0.229 (22.9%). Fourth hypothesis is accepted, there is influence of organizational stress on performance of creative industry SMEs, with the influence (R^2) of 0.229 (22.9%). Fifth hypothesis is accepted, where there is influence of creativity of SMEs owners on performance of creative industry SMEs, with the influence (R^2) of 0.254 (25.4%). Sixth hypothesis is accepted, where there is influence of learning organization on performance of creative industry SMEs through creativity of SMEs owners as mediator variable with total effects of 0.589 or 58.9%. Seventh hypothesis is accepted, where there is influence of organizational stress on performance of creative industry SMEs through creativity of SMEs owners as mediator variable, with total effects of 0.219 or 21.9%. Further research should be developed to include ethnic/ethnic variables, Quality of work life, conflict of interest on family SMEs, Perceived Environment Uncertainty, and develop studies on social organization or at Social Worker to see the stress of work/organizational stress.

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UTILITARIAN AND HEDONIC VALUES THAT INFLUENCE CUSTOMER SATISFACTION AND THEIR IMPACT ON THE REPURCHASE INTENTION: ONLINE SURVEY TOWARDS BERRYBENKA FASHION E-COMMERCE'S BUYER

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ABSTRACT

This research aims to describe the influence of utilitarian and hedonic values toward customer satisfaction and repurchase intentions. The sampling method used for research is purposive sampling with 141 respondents who bought Berrybenka products. Based on the Structural Equation Modeling, it is found that utilitarian and hedonic values are significant towards repurchase intention through customer satisfaction.

KEY WORDS

Utilitarian value, hedonic value, customer, satisfaction, repurchase intention, e-Commerce.

One of the ways of needs fulfillment is going shopping. Grocery shopping is Indonesian citizen behavior. Individual's motivation to go shopping is different. According to Babin et al., (2000) motivational value why people go shopping is divided into two, i.e. utility and hedonic value. Value means a number of tangible or intangible good benefit, and perceived cost by a customer (Kotler and Keller, 2009:14). An individual who goes shopping based on the utility motivation will seek the utilitarian benefits from the product like the ease of use or product efficiency, while the one who goes shopping based on the hedonic motivation will search for hedonic benefits like the convenience of product selection process and entertainment obtained during going shopping. Based on the research result of techinasia.com, 69% motivation of Indonesian society to monthly go shopping comes from utilitarian shopping value in which they go shopping based on their needs, the product they search for and want. While 61% Indonesia citizen motivation to go shopping comes from hedonic shopping value, in which the consumer goes shopping because of it is able to bring happiness and forget the problem they face and relieve fatigue so that able to make them better (swa.co.id).

Motivation coming from the utility or hedonic value will simultaneously influence satisfaction. According to the Moon's (2016) research, utilitarian shopping value and hedonic shopping value has a positive influence on the customer satisfaction. Customer satisfaction is the sense of happiness or disappointed felt by someone since comparing perceived performance by product towards their expectation (Kotler and Keller, 2009). Customer will conduct an evaluation by comparing product performance that has been consumed or used with customer expectation. One of the impacts of satisfaction is repurchase intention. According to Jakada's (2016) research, customer satisfaction brings a positive influence on the repurchase intention. After the individual feels satisfaction, there will be reactions from consumer like talking about that s/he is satisfied, having repurchase intention, and recommending to other people that would be word-of-mouth.

Repurchase intention is a subjective possibility in which customer will continuously buy a product from the seller. This repurchase intention is commonly conducted by those who feel satisfied with the service given. After they feel satisfied there will be reactions from consumer like talking that they are satisfied, having repurchase intention, and recommending to other people that will be word-of-mouth.

Needs fulfillment of Indonesian citizen is various from the needs of insight, clothing, and etc. In accordance with survey conducted by techinasia.com (2013), it explains Indonesian citizen from the needs for book by 1.8%, cosmetic by 2.3%, accessories of hand phone by 2.8%, car accessories by 3%, handphone and plane ticket by 5.1%, wristwatch by 7.6%, bag by 20.2%, shoes by 20.2% and the most stuff needed by Indonesian citizen is

apparel by 61.7% bought through online shopping. Being seen from the total, Indonesian citizen puts their big needs on apparel.

Talking about the needs for apparel, nowadays, there are so many fashion retail shops in Indonesia. One of them is fashion e-commerce in which the trading is conducted by online through an electronic system like the internet, www, and etc. In accordance with the survey conducted by CNN Indonesia, E-commerce transaction in Indonesia was estimated reach up to Rp394.000.000.000 in 2016 (cnnindonesia.com). One of the fashion e-commerce in Indonesia is Berrybenka. It is a specialty online shopping site of fashion and beauty in Indonesia. Berrybenka sells more than 1000 local and international brand including in-house product label. Berrybenka itself sells product by online through website, application, and also provides physical store in several cities in Indonesia. One of the Berrybenka superiorities that are not owned by other e-commerce is providing a new system called Cash on delivery (COD) 2.0. This new system allows the customer to choose and pay the stuff or do the transaction through the website and take it to the nearest physical store. In addition, the customer is also permitted to choose the stuff they want without having to take all things ordered previously through the website in which this system truly eases and gives an advantage to the consumer.

LITERATURE REVIEW

Consumer Behavior. Consumer behavior discusses more the involvement of process when individuals or groups choose, buy, use or decide product, service, idea or experience to satisfy the needs and wants (Solomo 2013:31). Consumer behavior is the act involving consumer to find, buy, use, evaluate, and spend product and service they expect will satisfy them (Sangadji and Sophiah 2013:8). The stages that can be described based on the definition of consumer behavior are (1) the stage to feel there are needs and wants, (2) effort to get product, find information about product, price, and distribution channel, (3) consumption, usage, and evaluation of product after being used, (4) and post-purchase action in form of either satisfied or not.

Motivation and Customer Value. Value reflects a number of tangible or intangible benefit and perceived value by the customer (Kotler, Keller 2009:14). Definition of Consumer value according to Holbrok (2006) is an interactive relativistic preference experience. It means the interaction happens between the object (product) and subject (customer). The interaction between this object and subject is influenced by three senses which are comparative, personal and situational. The definition of sense, according to Solomon (2013:70) is a sensation directed toward spontaneous respond of sensor receiver within an individual like (eye, ear, nose, mouth, and fingers, skin) that will stimulate light, color, sound, texture and etc. According to Solomon (2002:102), motivation is a process influencing someone to act. It appears when there are needs to be fulfilled. Following is the explanation of the type of needs according to Solomon (2002:104).

- Biogenesis needs: needs for several important elements to live like water, food, air, etc;
- Psychogenic needs: needs obtained during the process of becoming a member of a culture like status, power, recognition, etc;
- Utilitarian needs: needs that stress on the object, tangible attributes of a product like a calorie contained within the food that will be consumed, quality of apparel product;
- Hedonic needs: experimental and subjective needs like enjoyment and self-reliance. etc.

Customer Satisfaction. According to Kotler Keller (2009), satisfaction is the sense of happiness or disappointment raising since comparing perceived performance toward their expectation. Satisfaction relates to the feeling and expectation when someone hopes or expects something and the result is same as the expected. According to Sumarwan in Sudaryono (2016), it is said that satisfaction and dissatisfaction is the result of evaluation from an experience of using or consuming product or service. The expectancy disconfirmation model is a model explaining the process of consumer satisfaction and

dissatisfaction formation, which is the impact of consumer expectation comparison before the buying or the real consumption with performance gained by the consumer. The result of the comparison is then grouped into disconfirmation and confirmation:

- Positive disconfirmation happens when the actual performance is bigger than consumer performance expectation.
- Simple confirmation happens when the actual performance is actually same as the expectation.
- Negative disconfirmation happens when the actual performance is smaller than consumer expectation.

Repurchase intention. Post-purchase behavior happens after the process of decision, the consumer will not stop until the process of consumption. The consumer will do an evaluation of the consumption conducted. This is called post-purchase alternatives evaluation for post-consumption. Post-purchase behavior, According to Kotler and Keller (2012), is divided into three types:

- Post-purchase satisfaction. Satisfaction is a function that is truly close to between expectation and product performance. If the performance is far from customer expectation so that they will be disappointed, but if fulfilling the expectation the customer will be satisfied and if beyond the expectation customer will be happy.
- Post-purchase Action. The satisfied consumer is a consumer who purchases again the product and also will talk good thing to another customer, while not satisfied consumer will ignore or return the product, they may find information stating higher value or make a public action by complaining to the company. One of the ways of post-purchase is doing repeat purchase.

METHODS OF RESEARCH

This was explanatory research aiming to explain the causal relationship between the variable to test the hypothesis (Singarimbun, 2014:5). This research was conducted at Berrybenka website (Berrybenka.com) with purposive sampling technique. The type of scale used was Likert scale with internet survey method. The population of this research was all buyers of Berrybenka product through the website as the end-user in Indonesia. It was tested to 141 respondents. Sample characteristics of this research were as follow:

- Arranging an online questionnaire using Google form;
- Questionnaire would be in form of link <https://goo.gl/forms/6Mlo26NaVlxptfb2>;
- The researchers collected sample from several social media, firstly is Instagram, by writing #berrybenkalook2017 on the search column and collecting user who uploaded a picture wearing Berrybenka product. The respondents filling this form are at least 18+ years old;
- After collecting sample from Instagram, the next social media used was twitter by going to the profile of @Berrybenka.com and then collecting user interacting with @Berrybenka.com account through tweets and reply;
- Another way to do is spreading link through timeline of Line and Whatsapp.

RESULTS AND DISCUSSION

The result of Goodness of Fit test indicates that there are no criteria that can represent Goodness of Fit, so it is conducted model modification by considering a recommendation from modification indices.

This part relates to the evaluation of coefficients or parameters indicating a causal relationship or the influence of one latent variable to another. The causal relationship is not significant if critical ratio value (C.R.) is in the range of -1.96 and 1.96 with a significance level of 0.05. Through the help of AMOS 20 program application is gained value estimation result of ratio model structural. The result of the calculation of those coefficients is shortly presented in table 5.25.

Table 1 – Model Goodness of Fit Evaluation

Goodness of Fit Index	Cut of value	Result	Description
Chi-Square / CMIN	< Chi-Table: <i>Good fit</i> > Chi-Table: <i>Poor fit</i>	82,212	Model <i>Poor Fit</i>
P-value CMIN	> 0,050: <i>Good fit</i> < 0,050: <i>Poor fit</i>	0,001	Model <i>Poor Fit</i>
CMIN/DF	< 2,000: <i>Good Fit</i> < 3,000: <i>Marginal Fit</i> > 3,000: <i>Poor Fit</i>	1,787	Model <i>Good fit</i>
RMSEA	< 0,080: <i>Good fit</i> < 0,100: <i>Marginal Fit</i> > 0,100: <i>Poor fit</i>	0,075	Model <i>Good fit</i>
GFI	> 0,900: <i>Good fit</i>	0,908	Model <i>Good fit</i>
AGFI	> 0,800: <i>Marginal fit</i>	0,843	Model <i>Marginal fit</i>
TLI	< 0,800: <i>Poor fit</i>	0,95	Model <i>Good fit</i>
CFI		0,965	Model <i>Good fit</i>

Table 2 – Hypothesis Test Result

Variable			Path Coefficient	Hypothesis Test Result		Conclusion
Exogenous	-->	Endogenous		CR	p-value	
Utilitarian Value (X1)	-->	Customer Satisfaction (Z)	0,585	4,751	0,000	Significant
Hedonic Value (X2)	-->	Customer Satisfaction (Z)	0,349	3,17	0,002	Significant
Utilitarian Value (X1)	-->	Repurchase Intention (Y)	0,016	0,119	0,905	Not Significant
Hedonic Value (X2)	-->	Repurchase Intention (Y)	0,092	0,881	0,378	Not Significant
Customer Satisfaction (Z)	-->	Repurchase Intention (Y)	0,869	5,454	0,000	Significant

Table 2 indicates estimation result and hypothesis test. Utilitarian value variable (X1) has Path Coefficient influence over the Customer Satisfaction (Z) by 0.585 with CR value by 4.751 and p-value by 0.000. Because p-value is < 0.05, the statistical hypothesis states that Ho is rejected which means that hypothesis one (H1) stating that utilitarian value has a significant influence on the customer satisfaction is accepted.

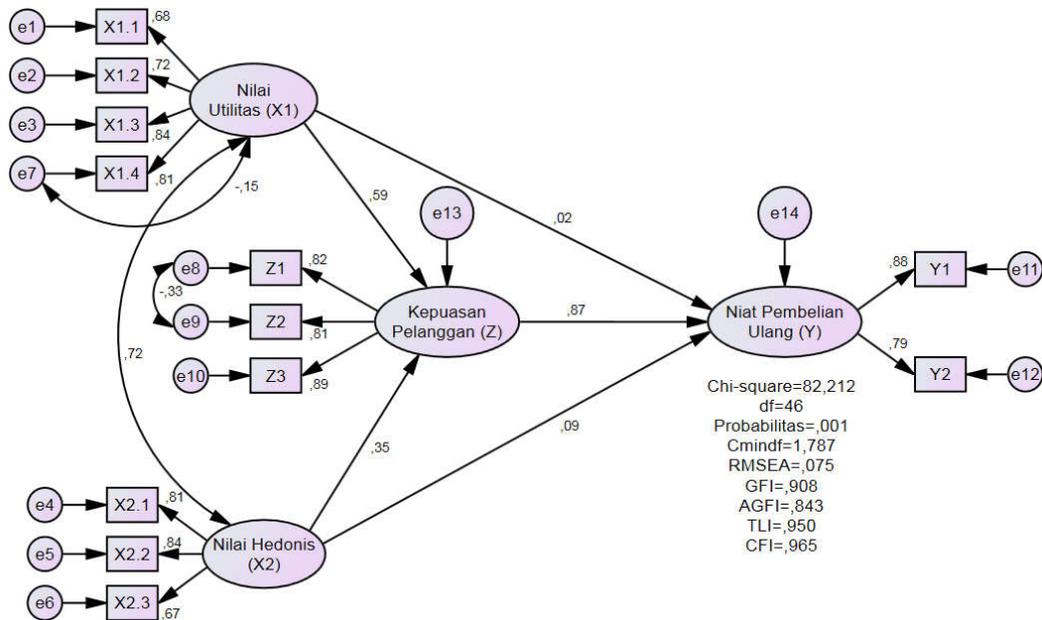


Figure 1 – Post-Modification Outer Model Chart (CFA) and Structural Model

Hedonic Value Variable (X2) has Path Coefficient influence over the Customer Satisfaction (Z) by 0.349 with CR value by 3.17 and p-value by 0.002. Because p-value is < 0.05, the statistical hypothesis states that Ho is rejected which means that hypothesis three (H3) stating that hedonic value (X2) has a positive influence over the customer satisfaction (Z) is accepted.

Utilitarian Value Variable (X1) has Path Coefficient influence over the Repurchase Intention (Y) by 0.016 with CR value by 0.119 and p-value by 0.905. Because p-value is < 0.05, the statistical hypothesis states that Ho is accepted which means that hypothesis two (H2) stating that utilitarian value (X1) has a positive but not significant influence over the repurchase intention (Y) is rejected.

Hedonic Value Variable (X2) has Coefficient Path influence over the Repurchase Intention (Y) by 0.092 with CR value by 0.881 and p-value by 0.378. Because p-value is > 0.05, statistical hypothesis states that Ho is rejected which means that hypothesis four (H4) stating that Hedonic Value (X2) has a positive but not significant influence over the Repurchase Intention is rejected.

Customer Satisfaction Variable (Z) has path coefficient influence over the Repurchase Intention (Y) by 0.869 with CR value by 5.454 and p-value by 0.000. Because p-value is < 0.05, the statistical hypothesis states that Ho is rejected which means that hypothesis five (H5) stating that Customer Satisfaction has a significant influence on the customer satisfaction is accepted. In order to ease outer model evaluation and also integrated with path analysis, it is provided outer model chart assessment and structural model as demonstrated in figure 1.

CONCLUSION

According to the stated problem, analysis result and hypothesis from the previous chapter so that the conclusions are as follows:

1. Utilitarian Value Variable (X1) has a significant influence on the Customer Satisfaction (Z) with estimation value by 58.5% and p-value by 0.000 with positive direction.
2. Hedonic Value Variable (X2) has a significant influence over the Customer Satisfaction (Y) with estimation value by 34.9% and p-value by 0.002 with positive direction.
3. Utilitarian Value Variable (X1) has a not significant influence over the Repurchase Intention (Z) with estimation value by 0.16% and p-value by 0.905 with positive direction.
4. Utilitarian Value Variable (X2) has a positive but not significant influence over the Repurchase Intention (Z) with estimation value by 0.92% and p-value by 0.378 with positive direction.
5. Customer Satisfaction Variable (Z) has a positive and significant influence over the Repurchase Intention (Y) with estimation value by 86.9% and p-value by 0.000 with positive direction.

The most influential indicator towards Utilitarian value Variable (X1) is convenience with loading factor by 0.84. The most influential indicator towards Hedonic Value variable is exploration with loading factor by 0.84. Indicator as Expected has the biggest loading factor at Customer Satisfaction variable (Z) by 0.89 and indicator of intention to engage in positive word-of-mouth has the biggest influence over the variable of Repurchase Intention (Y) with a loading factor of 0.88.

According to the conclusion drawn, so the suggestion can be provided is as follows:

1. For future researchers, it is better to add another variable of after and before customer satisfaction since the variable is influencing factors of customer satisfaction itself. In addition, the availability of more variable of post-customer satisfaction will be able to determine the impact of customer satisfaction itself. It is better to choose a product with long-term purchase as the object so that able to truly determine which one higher between utilitarian and hedonic value.
2. For website developer of Berrybenka.com, in accordance with research result for utilitarian value variable in which the highest factor is a convenience so that it is important for Berrybenka to be able to maintain the ease of use in the website, like the ease of payment, the ease of order, the ease of complaining delivery. The more ease the website uses, the more increase the utilitarian value obtained by the consumer and maintain consumer trust to make a transaction at Berrybenka. Furthermore, seen from hedonic value variable, the

highest influential factor is that exploration indicator is suggested to be able to improve product types, especially up-to-date new products since Berrybenka customer is happy to do exploration towards Berrybenka products.

In relation to the impact of customer satisfaction which is repurchase intention, an intention to engage in positive word-of-mouth is an indicator having the highest influence of repurchase intention variable, so this indicator can be a reference to conduct the promotion. For example, facilitating customer to give a review to the product can add a discussion or commend column towards the product. In addition, berrybenka's product delivery neatness can be maintained or improved since according to the research result, packaging neatness gets highest mean value from the respondent. It means that Berrybenka' packaging is truly safe and neat so that the quality of the product is being up during the delivery process. In addition, it forces Berrybenka to maintain the benefit value of the product itself since on average the customer buys Berrybenka product more about the benefit than the prestige. Due to the number of new e-commerce is getting higher, Berrybenka should be more selective to select a brand which wants to join and maintain the variation of products available at Berrybenka.

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EFFECT OF MONETARY VARIABLES ON CONVENTIONAL BANK PERFORMANCE AND SHARIA BANKS IN INDONESIA, 2010-2017

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ABSTRACT

The purpose of this study to determine the influence of monetary, interest rate, rupiah exchange rate and money supply on conventional bank performance and performance of Sharia bank. Population in this research is all conventional banking and all Sharia banking in Indonesia for 2010-2017. The sample is conventional bank as much as 14 banks, and Sharia bank as much as 6 banks with time series data of 30. The method used is Partial Least Square Analysis. The results showed that the interest rate has no significant effect on the performance of conventional banks and Sharia banks. The exchange rate has a significant and positive effect on the performance of both conventional and Sharia banks. While the variable amount of money in circulation has a negative and real effect on the performance of conventional banks and Sharia.

KEY WORDS

Interest rate, exchange rate, total money supply, bank performance.

Monetary policy (*kebijakan moneter*) is all the efforts or actions of the Central Bank in affect the development of monetary variables (money supply, interest rates, credit and exchange rate) to achieve certain economic goals (Litteboy and Taylor, 2006: 198; Mishkin, 2004: 457).

Monetary policy is to control or direct the macro economy to the desired (better) condition by regulating the money supply. While the meaning of better conditions is to increase the output, balance and / or maintaining price stability (controlled inflation). Through monetary policy the government can maintain, increase or decrease the money supply in an effort to maintain the ability of the economy still grow while controlling inflation (Rahardja and Manurung, 2008:256).

According to Nopirin (2000: 45), monetary policy is an action by the monetary authorities (usually the central bank) to influence the money supply and credit which in turn that will affect the economic activities of the community.

Theoretically there are two main lines of monetary policy transmission mechanism, namely through the money supply and the price line through interest rates. This rate of interest is important to the Indonesian economy. With monetary policy, the Central Bank (Bank Indonesia) can control the money supply and banking system.

In particular monetary policy can be interpreted as a macro action by influencing the process of making / printing money. The process of making / printing money can be affect the money supply so that it can affect the interest rate applicable in the money market, investment spending (I), aggregate demand (AD), price level (P) and output.

In its implementation, monetary policy can be expansionary (monetary policy), which is monetary policy through increasing money supply (MS) and / or interest rate reduction (i) in order to increase aggregate demand in economy and contractionary monetary policy) is monetary policy through reduction of money supply (MS) and or interest rate increase (i) with the aim of reducing aggregate demand in the economy.

Monetary targets or more, especially the control of the money supply is a pure monetary policy that is not accompanied by changes in the value of government spending, taxes and government transfers (Soediyono, 1994).

In monetary policy, the government can also control the money supply, credit and banking system (Nanga, 2005: 180).

According Mankiw (2007), external factors that affect the performance of banks is a macroeconomic condition. The macroeconomic conditions affecting the bank's performance are inflation, interest rates, and the exchange rate in an economy. These external factors are described as follows: Inflation; Interest Rate (SBI); Currency Exchange.

Macroeconomics is external factors consisting of events that come from outside the company, so that the company can not to control it (Djamil, 1989). According to Athanasoglou et al. (2006) states that bank profitability is influenced by internal and external factors. Further Athanasoglou (2006) explains that external factors are unrelated to bank management, but have an indirect impact on the economy and financial institutions.

METHODS OF RESEARCH

Influence of Interest Rate on CAR, NPL / NPF, ROA and LDR / FDR. The reference rate (BI Rate) is a variable affecting the level of bank liquidity in Indonesia. In accordance with Keynes's theory of liquidity preference, the benchmark of interest rate will affect the balance between demand and supply of money. Thus, monetary policy will affect the nominal interest rate in the money market (Mankiw, 2009). BI Rate as moderating variable to CAR, before it has absorbed determinant factors influencing it, there are currency exchange rate (exchange rate, external impact reflect), net export-import, money supply (M0, monetary base; M1). According to Sesy Rizkiyanti Oktavia (2010: 94), BI Rate has a positive and significant influence on CAR. This means that if an increase in the BI Rate, then the amount of CAR will also rise, and vice versa.

According Dwihandayani (2013, h.10). the relationship between the BI Rate and the NPL indicates a positive influence so that the greater the BI Rate, the greater the credit / NPL risk.

Naturally that all banks in Indonesia are obedient and obedient to Bank Indonesia (BI) which acts as a central bank with monetary authority, banking and state payment system. Bank Indonesia has a duty to maintain monetary stability among others through interest rate instruments in open market operations. Monetary policy through the implementation of interest rates are too tight, that will tend to be deadly economic activity. Vice versa, the increase in BI Rate has resulted in tight banking liquidity, so that banks have difficulty to obtain low-cost funds from third parties (demand deposits, savings deposits, deposits). This resulted in the cost of funds in the bank will increased / high. As a result, when there is a high increase in loan interest, the value of the customer's business is no longer comparable with the financing provided. If the customer has already started to object to a high interest rate then it will raise the possibility of bad credit. This theory is supported by Oktavia (2009) which states interest rates have a positive effect on ROA.

In the research conducted, Budi Asih suggested that the interest rate is used as one of monetary policy by Bank Indonesia to regulate the circulation of money. If the circulation of money is considered too much, then BI will increase interest rate certificates of Bank Indonesia and vice versa if the circulation of money is too little then Bank Indonesia will degrade interest rates. With the increase in the BI Rate will lead to increase the interest rates on deposits and credit. Thus will affect the Loan to Deposit Ratio / LDR (Bank Indonesia, 2010). The above is in line with the research of Devi Puspitasari (2010) where the BI Rate is used as a reference in monetary operation which is expected to affect the money market interest rate, deposit interest rate and long-term interest rate which will affect the people's desire to deposit or withdraw their funds in the bank.

Effect of Exchange Rates on CAR, NPL / NPF, ROA and LDR / FDR. The existence of foreign exchange has been used not only as a commodity in the money market, but also in export and import trade. When people want to buy goods sold in foreign currencies, especially the dollar, then people will exchange their money to banks and bank mediators such as money changer to get a dollar to buy the goods. This makes the circulation of rupiah in the community will go into the bank and become a source of funds that determine the liquid or not the bank. This is in accordance with the one proposed by Sukirno (2008: 397) where the exchange rate as the amount of domestic money required, amount of rupiah

required to obtain a unit of foreign currency. If the people need a lot of foreign money then the domestic currency will be much exchanged through the bank and will have an impact on bank liquidity.

Influence of Money Supply on CAR, NPL / NPF, ROA and LDR / FDR. The money supply in the broadest sense (M2) is the total amount of money officially issued by the central bank in the form of currency, or demand deposit and quasi money (savings, foreign currency, deposits) in the banking system (M1) plus the circulation of money in the market finance (Palley, 2014; Levagne, et all, 2014; Kyung, 2008; Siok, 2009). M2 macro variables will transmit to bank liquidity through third party customer funds (M1), value of securities assets, interbank transactions and cash opinions from depository services, settlement and storage of financial market transactions.

Approach Method. The population used in this study is the existing commercial banks (registered) at Bank Indonesia period 2010-2015. Based on the Indonesian Banking Statistics Indonesia (SPI) in June 2017 published by the Financial Services Authority and accessible through the website www.ojk.go.id on the menu Data and Statistics-Banking, where the number of commercial banks (conventional commercial banks and Sharia commercial banks) as much 115 (one hundred and fifteen) banks consisting of 102 conventional banks and 13 Sharia banks (4 state banks, 42 national private foreign exchange banks (BUSN foreign exchange), 21 national private non-foreign exchange commercial banks (BUSN Non Foreign Exchange), 27 development banks regional (BPD), 12 mixed banks and 9 foreign banks).

The sample is part of the object under study, (Umi Narimawati (2010: 38) states the sample is a portion of the population selected to be the observation unit in the study. Thus the sample is part of the population to be studied. Of the 115 (one hundred and fifteen) general banking population (103 conventional banks and 12 Sharia banks), the samples used / taken are 20 (twenty) commercial banks (14 conventional banks and 6 Sharia banks), with a total sample size ($20 \times 30 = 600$ samples). The sample selection criteria are as follows:

- Conventional Banks and Sharia Banks registered at Bank Indonesia and still operating during the period of study (2010 - 2016).
- The financial statements of the Bank under study (period 2010 - 2016) are available in full at both Bank Indonesia (BI), the Financial Services Authority (OJK) and the respective Bank's official website. In this research the type of data used is secondary data in the form of monetary report (interest rate, exchange rate and money supply) and quarterly financial report of Conventional Bank and Sharia Bank in Indonesia period 2010 - June 2017 and other data available in Bank Indonesia BI) and the Financial Services Authority (OJK) and other official sources supporting this research.

The secondary data is sourced from Bank Indonesia (BI), the Financial Services Authority (OJK), the official website of each Bank which is sampled, the literature and the previous research results that are related and related to this research. Methods of data collection in this study are:

- The method of observation is by direct observation of the Monetary Report (interest rate, exchange rate, and money supply) and Annual Financial Report on 20 (twenty) banks which become the sample of this study (14 conventional banks and 6 syariah banks) 2010 period - June 2017.
- Library research method (library research) is by studying and reviewing the various literature-related literature that will be studied.

In this study, researchers used descriptive analysis method and Quantitative Descriptive, namely:

- Inferential descriptive namely: a method to analyze monetary and financial data by means of inductive statistical analysis.
- Descriptive Qualitative namely: a method used to analyze the existing monetary and financial data by applying theory or concept to facts.

In the research, the data obtained and the proposed hypotheses will be analyzed and tested by means of analysis / statistical test of variance based structural equation or

Structural Equation Modeling (SEM) - Partial Least Square (PLS) using Smart PLS software program. The consideration of using SEM-PLS model, because of its ability to measure construct through its indicators, analyzing indicator variable, latent variable, and error of measurement and can do direct analysis (not one by one diregresi) relationship between independent variable (independent variable / exogenous) with dependent variable (dependent variable / endogenous).

According to Imam Ghozali (2006: 18), Partial Least Square (PLS) is a powerful analytical method because it does not assume data to be measured by a certain scale, the number of small samples. The purpose of Partial Least Square (PLS) is to help researchers to get the value of latent variables for prediction purposes.

RESULTS AND DISCUSSION

Effect of Interest Rates on Conventional Bank Performance and Sharia Bank. The hypothesis of monetary variables (interest rate, exchange rate, and money supply in partial and simultaneous) simultaneously affect the internal variables (credit policy and Conventional Bank operational policy). According to result of hypothesis test known that external factor have not significant effect to performance of bank proved with value of P Value equal to 0,302 bigger than 0,05 and coefficient value 0,885. This means that external factor variables consisting of indicators: interest rate, exchange rate, and money supply have no effect on bank performance as measured by CAR, MPL, ROA and LDR indicators. The results of this study Kamalia Octaviyanti, Sunu Priyawan and Tri Ratnawati (2013) in their research have founded that external factors using inflation indicators, SBI rates, and exchange rates significantly influence the performance of banks as measured by Return On Assets (ROA) and Return On Equity (ROE) and supports the results of research by Diyanti and Widyarti (2012) who found that external factors measured using inflation variables significantly influence bank performance, also support the results of Angrish (2010) study which states that macroeconomic variables other than GDP significantly explain the performance of banking. Furthermore, this result also supports the findings of Sitorus (2004) and Dermiguc-Kunt and Huizinga (1997 and 2001) who found that external factors such as inflation, SBI rates, and exchange rates (exchange rate) have a significant effect on bank performance. However, this result does not support Setiawan's research (2009) which found that external factors of inflation did not significantly affect bank performance as measured by ROA ratio. This difference of findings is possible because the observation period used in the study is in relatively stable condition where only in 2008 the banking industry in Indonesia experienced a slight shake due to subprime mortgage that occurred in the United States and not too use the financial cycle of the banking industry in Indonesia.

The Effect of Currency Exchange (Exchange Rate) on Conventional Bank Performance and Sharia Bank. The exchange rate is the price at which a country's currency can be converted into a currency of another country. The exchange rate of a currency affects the economy if the currency exchange rate depreciates. Fluctuations in exchange rate changes are the focus of the foreign currency market. The fluctuations in this currency will affect the amount of credit extended.

Tests in this study showed that the exchange rate has a positive effect on the total credit (financing). The results of this test show that the greater the exchange rate the greater the total credit. Based on the hypothesis test, it is known that exchange rate has no significant effect to operational policy and to bank performance as evidenced by P value 0,172 bigger than 0,05 and coefficient value of path to internal variable equal to 0,85 and from conventional internal variable to total credit of 0.828. This means that external exchange rate variables do not affect the internal variables of Conventional Banks, and when associated with bank performance as measured by CAR, NPL, ROA and LDR indicators are low.

These results are in accordance with the hypothesis formulated and support the results of Sukarno and Syaichu (2006), Setiawan (2009), and Olajide, Asaolu and Jegede (2011) studies that found that internal factors measured using CAR and LDR ratios have a positive

and significant impact on bank performance measured using ROA. The results explain that the better performance of internal factors of the bank, it will encourage the performance of banks in general in reaching the level of profitability for the better.

The results of Dinnul, et al (2017) obtained the result that exchange rate variable has no effect on bank performance (ROA). The results showed that the exchange rate variable against ROA, from the coefficient table obtained t_{count} of -0.089 which means $t_{count} < t_{table}$ ($-0.089 < 1.66023$) which shows the variable of inflation has a negative effect and the value of $sig\ t = 0.929$ which means $sig\ t > \alpha$ ($0.929 > 0.05$). Therefore, H_0 is accepted and H_a is rejected meaning partially there is no influence between Exchange Rate to ROA. Capital Adequacy Ratio (CAR) no significant influence on Return On Assets (ROA). This condition can reflect that the greater the CAR, the higher the bank's capital capacity in maintaining the possibility. The risks arising from loss of business activities but not necessarily significantly affect the ROA. On the other hand, high CAR can reduce the ability of banks in expanding their business because the greater the capital reserves used to cover the risk of loss. Inhibition of business expansion due to high CAR which will ultimately affect the financial performance of the bank. Results of supportive research conducted by Tan Sau Eng (2013) and Julita (2015). The test result of Exchange Rate or exchange rate has no effect on Return On Asset (ROA). In theory, the exchange rate or exchange rate must significantly affect the ROA of Sharia Banking, since the exchange rate will determine the return on real investment. A declining currency will clearly reduce the purchasing power of revenues and capital gains derived from any type of investment. This decrease in investment will affect the bank's operational activities. With the decline in investment, the demand for Islamic financing will also decline and will further affect the financial ratios of banks. Results research supported by Putri Asrina (2015) and Mariana (2015).

The theory that reveals how the exchange rate is determined is the purchasing power parity (PPP) theory. This theory states that the exchange rate between two currencies will make adjustments that reflect changes in the price level of both countries (Miskhin, 2008). Warjiyo, Perry, and Solikin (2003) in his monetary policy in Indonesia suggested that the exchange rate transmission mechanism emphasizes that exchange rate movements can affect the development of aggregate supply and demand, and further output and prices.

According to Umie Wulaningsih (2012) the size of the influence of exchange rate movements depends on the floating exchange rate system of expansive monetary policy by the Central Bank will encourage the depreciation of domestic currency and increase the price of imported goods. This will further boost domestic goods prices, although there is no expansion on the aggregate demand side. Then rising prices will have an impact on rising inflation, rising inflation will basically affect the interest rate. According Darmawi (2003) interest rate risk is one of the risks affecting the ATMR, so if the interest rate increases then the ATMR is inversely proportional. Research conducted Samson, Harley, and Amerah (2012) shows the exchange rate has a negative influence on the CAR.

Influence of Money Supply on Conventional Bank Performance and Sharia Bank.
The money supply in the broadest sense of the total amount of money officially issued by the central bank in the form of currency, demand deposit, and quasi money (savings, taro, deposits). This money supply represents the money supply which is the money circulating in the community. The results showed that the large amount of money in circulation has a significant effect on credit financing as evidenced by P - value of 0.000 which is smaller than 0.01 and the coefficient value of 0.784. This means that the external factor variable of money supply has a very significant effect on Total Credit (financing). This means that the high amount of outstanding amount is very significantly determined by the amount of credit (financing). The results of this study are in line with Maharani Ika Lestari (2007) that the money supply has a positive effect on Total Credit and Sesy RO (2010) that the money supply has an effect on Capital Adequacy Ratio (CAR) and its implication on working capital credit is very significant.

CONCLUSION

The results showed that the interest rate monetary factor has no significant effect on the performance of bank as evidenced by the value of P Value of 0.302 which is greater than 0.05 and the coefficient value of 0.885 lanes. This means that the monetary factor variable consisting of indicators: interest rates do not affect the performance of banks as measured by indicators CAR, MPL, ROA, and LDR. The monetary factor of the exchange rate has a positive and significant effect on the performance of conventional banks and Sharia banks as evidenced by the value of P value of 0.172 which is greater than 0.05 and the coefficient value of the path to internal variables of 0.85 and from conventional internal variables to total credits of 0.828. This means that external exchange rate variables do not affect the internal variables of Conventional Banks, and when associated with bank performance as measured by CAR, NPL, ROA and LDR indicators are low. The monetary factor with the indicator of the amount of money in circulation has a significant effect on credit financing as evidenced by the P - value of 0.000 which is smaller than 0.01 and the path coefficient value of 0.784. This means that the external factor variable of money supply has a very significant effect on Total Credit (financing). This means that the high amount of outstanding amount is very significantly determined by the amount of credit (financing). The results of this study are in line with Maharani Ika Lestari (2007) that the money supply has a positive effect on Total Credit and Sesy RO (2010) that the money supply has an effect on Capital Adequacy Ratio (CAR) and its implication on working capital credit is very significant.

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THE IMPACT OF COMPENSATION AND JOB MOTIVATION ON EMPLOYEE PERFORMANCE WITH JOB SATISFACTION AS MEDIATING VARIABLE: A STUDY AT BALI REGIONAL OFFICES OF DIRECTORATE GENERAL OF TAXES

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ABSTRACT

The purpose of this study is to analyze and obtain empirical evidence related to the compensation and job motivation toward the performance of employees of the Directorate General of Taxes through job satisfaction as mediating variables. The subject of this research is the employee of Bali Regional Office of Directorate General of Taxes. This research is explanatory with the number of respondents as many as 190 people. Methods of data collection through surveys using questionnaires. Data analysis technique used in this research is Regression Analysis and Path Analysis. The findings of this study showed that Compensation and Job Motivation had a significant effect towards Job Satisfaction, Compensation and Job Motivation had a significant effect towards Employee Performance. Furthermore, Job Satisfaction had a significant effect towards Employee Performance.

KEY WORDS

Compensation, motivation, job satisfaction, employee performance.

The Indonesia Directorate General of Taxes (DGT) has an important duty as an institution for collecting state revenues from the taxation sector. In the last decade, Indonesia's national income tax sector increasingly important because over the years, the proportion of state revenues from the tax sector increases. If in 2007 the proportion of tax revenue amounted to 61.6% of the total national income, in 2017 increased to 80% of the total national income and reached 1.498 trillion rupiah. Based on these achievements, in 2018 the goals target of national tax revenue set at Rp. 1.618 trillion. To improve the performance of DGT employees, the government provides special compensation system through Presidential Regulation no. 37 of 2015 in order to motivate tax officials in achieving organizational goals. Compensation is one element of human resource management system that can support the creation of organizational performance effectiveness and motivate employees to achieve high performance. Compensation consists of as any form of compensation the employee receives as a result of the completion of duties and performance within the organization, including prizes, rewards and other incentives. Castertter (1996) mentions that one of the purposes of compensation is to motivate employees to show optimal performance, so that employees' perception of compensation whether given fairly or not will affect their next performance. This is in accordance with Payne (2002) which states that compensation is one determinant of employee satisfaction, which will motivate employees to increase their productivity work. If the employee feels that his work will be rewarded with a fair compensation system then the employee will feel satisfied and motivated to produce better performance and vice versa if the employee feels his work is not appreciated then the employee's performance will decrease.

According Mangkunegara (2007) motive is a boost in the needs of employees who need to be met so that employees can adapt to their environment, while motivation is a condition that moves employees to be able to achieve the purpose of motive. Motivation has been a key issue for researchers studying organizational and individual performance for a number of years. It is seen as a major determinant of performance, and is considered a vital element in the relationship between compensation and performance when compensation is seen as a factor that motivates individuals to perform work. Organizational objectives will be achieved if all existing resources can be optimally utilized by the institution. The human

resources that will be used to manage the resources of an organization must have the high motivation necessary to manage the existing resources so as to provide maximum benefits. This utilization will be very closely related to the performance of each employee of the organization or company.

Robbins, et al (2003) briefly states that the relationship of job satisfaction with employee performance is a statement: "A happy worker is a productive worker" (for individuals). If applied in an organization then it can be said that organizations with satisfied employees tend to be more effective so that its performance is increasing.

LITERATURE REVIEW

According to Efendi (2012) compensation is the total remuneration received by employees as a result of the implementation of work in the organization in the form of money or other. If the compensation received by the employee can meet the needs of the employee, then the employee will strive to continue achievement that will certainly contribute to performance employees. Previous research has found that compensation has a positive and significant effect on employee performance (Artana, 2012: Sahlan, 2015: Suwati, 2013).

Panggabean (2004: 76) classified compensation into two groups, financial or nonfinancial. There are direct and indirect financial compensation. Direct financial compensation consists of salary / wages and incentives (commissions and bonuses). While indirect financial compensation can be a variety of facilities and benefits. Nonfinancial compensation consists of work environment, such as interesting tasks, exciting new challenges, acknowledgment, sense of accomplishment, working relationships, comfortable working environment etc.

Job satisfaction is the attitude of the individual and the emotional state of an employee to the job, the rewards received and the rewards that are believed to be received either in the form of financial compensation (salary or allowances) or non-financial such as promotional opportunities and psychological environment such as calming partners (Robbins, 2003). According to Luthans (2006) job satisfaction is influenced by several factors, among others: satisfaction with the work itself, ie variations in a particular job, methods and work procedures; satisfaction with compensation ie financial rewards received by employees include salaries and benefits; satisfaction of promotional opportunity, Opportunity to be promoted seems to have a diverse influence on job satisfaction, because the promotion can be in different forms and varied in return; satisfaction with supervision, Supervision is another important source of job satisfaction; satisfaction with groups or colleagues, Basically, the working group will affect the job satisfaction. Friendly and cooperative colleagues are a source of job satisfaction for individual employees; satisfaction with the condition / work environment, If good working conditions for example, then the employee will be more eager to work.

Motivation is a process of stimulating people to carry out activities in an effort to achieve the desired goals or targets effectively and efficiently (Adisasmita, 2011). Herzberg (in Waluyo, 2007) classifies motivation into two factors. The first factor, namely the motivator includes salary, wages, bonuses, corporate policies and administration, job security, working conditions, supervision guidance, and guidance co-workers. The second factor, namely hygiene that includes progress, recognition and status, occupation, achievement, growth possibilities, and responsibility. Perry and Wise (1990) gave three types of motives which encourage people to work. These are rational, norm-based and affective motives. Rational motives are concerned with self-interest, norm-based motives encourage behaviours oriented to the public interest, while affective motives concern willingness to help other people.

Dessler (2011) defines performance as a work achievement that is a comparison between the actual performance of employees compared with the expected performance of employees. According to Simamora (2006), performance is defined as the achievement of certain job requirements that ultimately can be directly assessed based on the resulting output. According to Handoko (2008) there are many factors that affect employee performance. Employees performance depends on motivation, job satisfaction, stress level,

physical condition of work, compensation system, job design and other economic, technical and other aspects. There are 6 (six) criteria for assessing employee performance according to Bernardin and Russel (1993) : (1) the quality of work, (2) the quantity of work, (3) timeliness, (4) Cost effectiveness, (5) Need for supervision, (6) Interpersonal impact.

METHODS OF RESEARCH

The study used a quantitative research methods, with the variables: compensation, job motivation, job satisfaction and employee performance. This research can be categorized as a causality research. The location of this research at the regional office of the directorate general of taxes of Bali. Sampling technique used in this research is to use Simple Random Sample. Margono (2004) states that simple random sampling is a technique to get a sample directly conducted on the sampling unit. simple random sampling is used because the population is relatively small. The samples was 190 respondents. This study used a questionnaire distributed to respondents. To examine the relationship between these variables, inferential analysis was used in the form of Path Analysis. The research framework is presented in Figure 1.

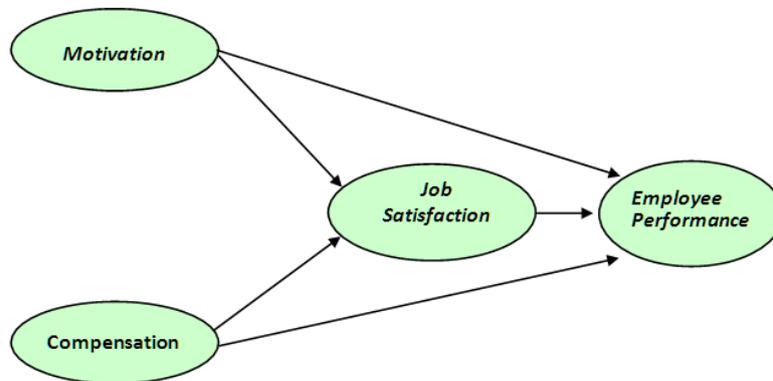


Figure 1 – Research Framework

Hypotheses:

- H1: Compensation and Job Satisfaction have a significant correlation;
- H2: Compensation and Employee Performance have a significant correlation;
- H3: Job Motivation and Job Satisfaction have a significant correlation;
- H4: Job Motivation and Employee Performance have a significant correlation;
- H5: Job Satisfaction and Employee Performance have a significant correlation.

RESULTS AND DISCUSSION

Hypothesis 1 stated that Compensation (X1) has a significant effect on job satisfaction (Y1). The results of regression analysis of Compensation (X1) on Job Satisfaction (Y1) which the results showed a significant probability value (p-value) of 0.000 with the path coefficients (beta) of 0.430 and a significance value less than 0.05. It can be concluded that the data support the hypothesis H1 where there is significant influence between Compensation (X1) on Job Satisfaction (Y1). This means compensation have a positive and significant effect on job satisfaction. This result supported by research results from Adeoye and Fields (2014) which concluded that there is a relationship between compensation and employee job satisfaction. This supports the view expressed in the many literature that if workers are dissatisfied with their compensation, the organization will experience low levels of job satisfaction, high absenteeism, and labor rotation.

Table 1 – Output of Path Analysis

Model	Path Coefficient	t	p	R2
Structural Model I				
X1 - Y1	0,430	7.161	0.000	0.502
X1 - Y2	0,385	6.406	0.000	
Structural Model II				
X2 - Y1	0,138	2.012	0.046	0.490
X2 - Y2	0,427	6.351	0.000	
Y1 - Y2	0,244	3.297	0.001	

Notes: Compensation (X1), Job Motivation (X2), Job Satisfaction (Y1), Employee Performance (Y2).

Hypothesis 2 stated that compensation (X1) significantly influence the employee performance (Y2) with significant value 0,000 smaller than α (0.05). This means that the higher the compensation given by the company will encourage producing a good and high employee performance. On the other hand compensation gives significant effect on employee performance with influence value of 0.385 or 38.5%. This means that compensation has a positive and significant effect on employee performance. In line with research from Qureshi and Sajjad (2015) which shows a positive relationship between compensation and employee performance. The effect of compensation on employee performance is also reinforced by Hameed et al. (2014) in his research, as well as research conducted by Jamil and Raja (2011) in which positive and significant compensation practices relate to the performance of public sector organization employees. Compensation is required to encourage employees to work harder in the hope of increasing the benefits they receive. Therefore compensation is the main entity that affects employee performance.

Hypothesis 3 stated that job motivation (X2) significantly influence to job satisfaction (Y1) with significant value 0,001 smaller than α (0.05). This means that the higher the job motivation given by the company will produce both good and higher job satisfaction. Job motivation significantly effects on job satisfaction with the value influence 0,138. This means motivation have a positive and significant impact on job satisfaction. Employees are internal consumers who must first be satisfied with their work in order to encourage satisfaction. Satisfied employees generally become more productive employees. Employee motivation is an important factor for the company's progress. Ogunnaike (2014) in his research shows the motivation of work, be it intrinsic motivation or extrinsic motivation is important in increasing job satisfaction.

Hypothesis 4 stated that job motivation (X2) significantly influence employee performance (Y2) with significant value 0,000 smaller than α (0.05). This means that the higher the job motivation provided by the company will produce good and high employee performance. Job motivation significantly effects on the employee performance with influence value of 0,427 or 42.7%. The results of this study are consistent with the results of research Seniwoliba dan Nchorbono (2013) which shows the motivation has a significant effect on employee performance. The higher the motivation of work will result in the higher performance of employees. An employee will have a good performance, if it has the desire, expectation, needs, goals, objectives, encouragement, and incentives supported by good work ability. So by motivating and improving the work skills of employees it can improve employee performance in order to maintain the company and still exist in the era of intense competition. Employees with high motivation will produce the best performance and productive, otherwise employees with low motivation will be low performance and productivity (Soegoto, 2009). Employee motivation is a form of willingness to strive to achieve organizational goals by paying attention to efforts to satisfy some needs, as well as efforts to improve and shape the knowledge, attitudes, and behavior of employees so that employees voluntarily try to work cooperatively with other employees to improve

Hypothesis 5 stated that job satisfaction (Y1) significantly influence on employee performance (Y2) with significant value 0,001 smaller than α (0.05). This means that the higher the job satisfaction perceived by employee will produce a good and high employee performance. Job satisfaction has a significant effect on the employee performance with

influence value of 0.343 or 34.4%. In line with the research of Perera et al. (2014) that job satisfaction has a positive effect on employee performance. According to research Aftab and Idrees (2012) there is a positive relationship between job satisfaction and employee performance. The high performance of each individual will help the organization to achieve strategic goals so as to maintain the competitiveness of the organization. Reinforced by research results from Cloud and Asghar (2014) that employee performance is best when they are satisfied with various aspects of their pay package. Research from Afshar and Doosti (2016) shows job satisfaction positively affect performance. Employee satisfaction tends to make better performance. The factors that contribute most to job dissatisfaction and affect employee performance are low salaries, job demands, low employment status, and social rewards.

CONCLUSION

The conclusion of this research is there is a significant effect of compensation on employee job satisfaction of Bali regional office of DGT. It can be concluded that the high or low levels of compensation will have an impact on job satisfaction. The higher compensation would encourage better employee satisfaction, while the low compensation would reduce employee job satisfaction. There is a significant effect of compensation on employee performance of Bali regional office of DGT. This means that better compensation given will be directly in proportional to the increasing of the employee performance. There is a significant influence of job motivation on employee job satisfaction of Bali regional office of DGT. It can be concluded that the better job motivation for employees will increase employee job satisfaction and vice versa, the decrease in employee job motivation practices will reduce employee job satisfaction. There is a significant influence of job motivation on employee performance. It can be concluded that the growing of the job motivation also supports employee performance improvement. It was found that there was a significant effect of job satisfaction on the performance of employees of Bali regional office of DGT. It can be concluded that good job satisfaction of the employees would be able to improve employee performance and conversely, the decline in employee job satisfaction helped reduce employee performance. It was found that in job motivation variables, indicators of training, promotion program and assessment program had been in line with expectations of respondents. It was also found that indicators that have the highest percentage score is satisfaction for colleagues. while the indicator with the lowest value is satisfaction of promotion opportunity. Job satisfaction factors still need improvement in the pattern and basis of consideration for promotion or mutation of employees. The current promotional system is not considered fair and transparent enough. Rotation and Promotion of employees also need to be re-evaluated to fit the existing compensation system. It has been found that in the variable employee performance, the indicator that has the highest percentage score is Quantity of Work while the indicator with the lowest value is work effectiveness.

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THE IMPACT OF THE FIRST GENERATION LEADERSHIP IN THE HUMAN RESOURCES LOYALTY GROWTH OF PT. KPA SURABAYA

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ABSTRACT

The objectives of research are: to know and to analyze the first generation leadership style; to know and to analyze the advantages and disadvantages of the first generation leadership; and to know and to analyze the impact of the first generation in the growth of human resource loyalty. This research used qualitative approach. Leadership style of (Late) SHH is a combination of Transformational Leadership Style, Entrepreneurship Leadership Style, and Authoritarian Leadership Style. In SHH's personality, who is strict and authoritative, there is a warm figure who can embrace all elements of employees at the factory of PT. KPA, and implements several types of styles in order to adapt to the situation in the field.

KEY WORDS

Human resources, leadership, loyalty, company.

Nowadays, with the increasingly rapid business development and the increasingly sharp competition level, the company must improve and develop its performance in all areas. Every company has a way of keeping its company maintained in the middle of a tight global competition. One of the areas that should continue to be leveled is Human Resources. Human resource is one of the most important assets in the development and achievement of the goals of an organization or a company. According to Hasibuan (2005), human resource management is "the science and the art of managing relationships and the role of labor to be effective and efficient, helping the realization of corporate, employee and community goals".

Talking about Human Resources, it will not be separated from leadership and employees because these two important elements have their respective roles in running a company. In a leadership, there is a leadership style that is expected to advance the company and the welfare of employees. Every leader has a different leadership behavior called a leadership style. A good leadership style is implemented to improve employee performance and to provide motivation to employees (Fatmawati, 2013). A good leader will not exist without a good subordinate, and vice versa. Both leaders and subordinates need each other to work together to make the company more advanced.

In general, the challenge of a leader not only focuses on the addition of productivity or employee work motivation, but also makes employees have a sense of loyalty to the company. It is because employee loyalty does not come by itself, but it takes the role of leaders and good management. According to Soegandhi and Sutanto (2013), loyalty will arise if a leader is able to maintain comfort in his work environment. Comfort is the result of policies issued and implemented within the work unit that he leads. It is reflected in the leadership style of an employer. Thus, it is very important for leaders to apply the right leadership style so that employee loyalty can be maintained.

However, it is not easy to grow a sense of employee's loyalty to the work they perform. The support from colleagues will help employees to improve their performance coupled with the support from leaders will help employees to remain loyal to the job (Full, 2013). At the present time, loyalty of the employees is not merely performing their duties and obligations as an employee in accordance with its job description, but doing the best possible to produce the best for the organization, (Soegandhi and Sutanto, 2013). Therefore, companies should be able to influence employee loyalty by providing job facilities, providing welfare benefits, and providing adequate wages (Martawi *et al.*, 2012).

Employee loyalty is the most important and must be owned by every employee in the company or any agency. Based on research that has been done, A. Suyunus Adiwibowo (2012) states that companies need employees who have high loyalty because with the high loyalty of employees, the employees can work in accordance with the standards given by the company and can improve the quality of work. Low employee loyalty can result in reduced productivity, high absenteeism, and non-compliance of employees to their employers (Nitisemito, 1991). Then, it can lead to behavior that is contrary to company goals that can damage the vision and mission of the company.

This private company can be considered as a family company because its organizational structure and ownership involves family members. It is in accordance with the definition of *Dictionary of Law* (2002) as follows: *Company where most of the shares are owned by members of the same family*. In addition, according to Susanto (2005), *Family Business Enterprise* (or abbreviated as FBE) is a company owned and managed by family members of its founders. Both ownership and management are held by the same party, the family. Family company is characterized by the holding of key positions within the company by family members.

Taken from the data in the field, it is known that almost 64% of employees have been working in 10 years and 40% of employees have been working above 21 years. In this case, the majority of employees also feel the leadership of (Late) Mr. SHH - related to: the perceived leadership style of the first generation to the present, the things that drive them to remain loyal to the company, and their expectation for leadership style for the future. Thus, the criteria of informants, who will be excavated information, are the permanent employees of PT. KPA who have been serving over 10 years. The informants will be selected from the 11 working divisions in the company and family members of PT. KPA. It could be stated that PT. KPA is a pioneer and one of the oldest briquette factory in Surabaya area. In the future development, this family company needs reliable human resources and has the loyalty to compete with its competitors.

METHODS OF RESEARCH

This present research uses qualitative approach. Qualitative approach in this case is actually a research procedure that produces descriptive data in the form of written or oral words of people and behavior that can be observed. Therefore, the data collected is data in the form of words or sentences and images (not numbers). These data may include interview scripts, field notes, photographs, videos, personal documents, memos or other official documents (Moleong, 2005).

With this approach, the researcher can obtain a complete picture of the problem formulated by focusing on the process and searching the meaning behind the phenomenon that emerged in the research, with the hope that the information reviewed is more comprehensive, deeper, more natural and the way what it is. The subject of research in this research is the permanent employees of PT. KPA consisting of 11 divisions. The objects of research in this study include: (1) the first generation leadership style at PT. KPA; (2) the advantages and disadvantages of the first generation leadership at PT. KPA; and (3) the impact of the first generation leadership in the growth of human resource loyalty in PT. KPA.

Determination method of informant used in this research is *purposive sampling*. According to Sugiyono (2009), *Purposive Sampling* is a technique of sampling the source data with certain considerations, for example the person is considered most know about what is expected. The most important sampling procedure is how to determine a key informant or a particular social situation that is full of information. The basic key in *Purposive Sampling* is the mastery of information from the informant and logically that the key figures in the social process always directly control the information that occurs within the social process (Bungin, 2012). The use of *Purposive Sampling* in this research is aimed to know (1) how the leadership style of the first generation at PT. KPA, (2) what the advantages and the disadvantages of the first generation leadership at PT. KPA are, and (3) what the impact of

the first generation leadership in the growth of human resource loyalty in PT. KPA is. In this study, the criteria of sampling of informants are as follows:

- The informants have status as permanent employees of PT. KPA;
- The informants are employees who belong to 11 divisions (*Briquette, Oven-Charcoal, Packaging, Stuffing, Mechanical, General, Oven, Fire-Keeper, Security, PPC Leader, and Office Staffs (HRD, Marketing, Sales, Finance, Secretary)*);
- The informants have been serving over 10 years or have worked under the leadership of (Late) Mr. SHH;
- The informants have the status as a family member of the family company of PT. KPA.

The researcher uses two data sources to search and to collect data sources in this study and the results of data that will be processed namely: Primary Data and Secondary Data. The researcher uses several data collection techniques in this study namely: interview and observation.

The validity of data in qualitative research is as an attempt to increase the degree of data confidence. In qualitative research, the examination of the data validity is not only used to refute either the alleged unsatisfactory qualitative research, but also as an inseparable element of the body of qualitative research (Moleong, 2005).

The qualitative research of validity used is triangulation of data that utilizes something else outside the data for checking purposes or as a comparison towards the data (Moleong, 2005). Validity test through triangulation is done because to test the validity of data and information, it cannot be done with statistical tools. Similarly, the material of truth is not tested on the basis of the truth of the instrument, so that the substance of truth depends on an inter-subjective truth. Therefore, something is assumed to be true if it represents the truth of the majority or the importance of stakeholders (Bungin, 2013). In this study, the triangulation method used by the research is through source checks. Comparing and re-checking the degree of confidence of information are obtained from different sources.

RESULTS AND DISCUSSION

The First Generation Leadership Style at PT. KPA. A company will experience a life cycle. There are four stages of organizational life cycle, namely: Birth, Growth, Decrease, and Death, (Jones, 1995).

Based on the theory, it can be understood that PT. KPA in the first stage namely growth through creativity, (Late) SHH develops new products to the market through the development of skills and capabilities so that the company can grow. In this case, there is a leadership crisis resulting from a managerial system that is not yet fully under way. Afterwards, PT. KPA during the first generation leadership also experiences the second stage; i.e. growth through directors. With the leadership crisis, (Late) SHH takes full responsibility and organizes corporate strategy. The structure in this phase is designed by top managers and centralizes decision-making and limits the freedom to experiment, take risks, and become an internal entrepreneur.

Theory of *Organizational Life Cycle* is supported by the results of interviews with informants who have done researchers. From the interviews with the informants, it is found that the leadership style by the first generation, (Late) Mr. SHH has 2 types of classification. There are some informants who state that Mr. SHH's figure is a populist, but there are also some informants who state that Mr. SHH has an authoritarian leader figure. Several informants also use examples of prominent figure that they knew in which it is to illustrate the similarities to Mr. SHH's leadership style at PT. KPA. Thus, it can be understood that the style the first generation leadership of PT. KPA is a combination of Transformational Leadership Style, Entrepreneurship Leadership Style, and Authoritarian Leadership Style.

The Creation of a Sense of Kinship from the First Generation Leadership Period at PT. KPA. Developing family closeness like this can happen because (Late) SHH often introduces other members of his family to his employees. Especially when there is one member of his family who is celebrating birthday event, wedding, and so forth - Mr. SHH often invites

several employee representatives. Mr. SHH can create a close sense of kinship between employees because he is willing to mingle with all layers of the Human Resources element at PT. KPA both office staff and labor in the field. One of the ways he uses to cultivate family relationship is by inviting some employee representatives to attend family occasions, frequent meals, and being introduced to other family members. Thus, the feeling that employees also have a company is grown. It is presented by Mr. TC in the interview.

Mr. SHH's closeness as the leader of the company is also felt by the workers of PT. KPA. His concern for the workers is poured by providing pocket money and food when they work. Mrs. EV has a memory when Mr. SHH brought food directly to the back of the factory for the workers who were working in the night shift. Therefore, it can be known that (Late) Mr. SHH can create a close sense of kinship between employees because he is willing to mingle with all layers of the Human Resources element at PT. KPA starting from the workers to the office staff. Some of the ways used to strengthen family bonds are by inviting employees to attend family events, being introduced to other family members, often being invited to eat, and often brought food. Hence, the feeling that employees also have a company is there because employees think that (Late) SHH as a member of their own family, not as employer or superior.

The First Generation Leader as a Role Model. Some informants mention that (Late) Mr. SHH is a populist leader, a fighter who does not give up easily, cares about employees, and has a high sense of kinship. He wants to be a leader who can be a role model for his employees. Absolutely, with the kindness that he performs directly, it gives impact to all layers of employees. It is in accordance with the definition of Alrawabdeh (2014) which states that a charismatic leader is able to evoke powerful emotions. Leader is identified to be a role model by followers, trusted, respected, and have clear goals.

According to Pramudyo (2013), inspiring by modeling is the most effective way to exercise leadership and to influence the subordinates by making themselves leaders as models. The power of influence is determined by the ability to inspire subordinates through role modeling. Role modeling is manifested in two forms through passion and vision. Hence, it can be understood that the figure of (Late) SHH as the leader of the first generation and a role model for employees is the basic composition of his leadership. Mr. SHH has cultivated the leadership character and principles among his employees. This process of culture is done by internalizing the character and principles of leadership to all the subordinates so that they understand, live, and do it.

The Disadvantages of the First Generation Leadership Period at PT. KPA. According to informants, the shortcomings of the first generation of leadership at PT. KPA are somewhat egotistical, unclear job instruction, emotionally uncontrollable of Mr. SHH when he is angry, more likely to listen to feedback from family members, and ignores suggestions from employees.

The Less Controlled Emotion of the First Generation Leader. The aspect of shortcoming felt by employees or family members from the period of leadership of the first generation at PT. KPA in majority is related to attitudes of (Late) SHH who sometimes if he is angry, he is less controlled and he says rude words. In addition, when problems occur, Mr SHH also tends to listen to input from family members more than employees. It can happen because Mr. SHH is leader of a family company which with such behavioral trends will make employees feel unfair.

In this case, it is known that (Late) SHH, while serving as the leader of PT. KPA, has less stable emotions and tend to explode. This incident is most likely because of age, recurrence, anxiety, and stress, and side effect of medicine consumption. When there is a problem, Mr. SHH is also less able to listen to the input from the parties involved in it and tends to listen more to the advice of the family only. This is because PT. KPA is a family company and Mr. SHH, as the first generation leader, puts more trust in the second generation.

The Less Working Leadership Function and Managerial System in the First Generation Leadership Period of PT. KPA. Mr. JIN, the Finance Director of PT. KPA, states that (Late)

SHH has a tendency for *one-man-show* because the educational background is the graduate of fifth grade of elementary school and he is lack of the overall managerial system.

Mr. SHH's unclear work instruction and speech are sometimes stuttering, leaving employees confused and vulnerable to mistakes. In this case, the delivery of instructions that are not clear by Mr. SHH is influenced by the age factor which is old.

Based on the facts, Mr. SHH tends to less run the proper leadership function. According to Veithzal (2005), there are five leadership functions, namely: Instructive Function, Consultative Function, Participation Function, Delegation Function, and Control Function. In this case, the leadership of the first generation is less able to implement instructive and consultative function. Instructive function is somewhat hampered because Mr. SHH as a leader and a communicator cannot deliver the instruction work orders well and clear. Then, the consultative function cannot be implemented properly because Mr. SHH is less able to listen to employees' input as a consideration in decision making.

In addition, Mr. SHH is unable to implement an effective managerial system. It is because he applies the traditional management system and focuses more on Mr. SHH himself. This focus on individual performance leads to fragmented work in the hierarchical system (Suhartono, 2010). The existence of the focus on individual performance also results in performance management feedback which also comes from one source only that is from employer. The first generation managerial system is too focused on separate administrative practices, which in turn; it frequently leads to different problems and does not have clear objective goals between one another.

The Strict and Authoritative Attitude of the First Generation Leader. According to some informants, Mr. SHH also has a harsh character, so that if he wants something - he will insist on doing so. Selfishness in this regard is related to the attitude of Mr. SHH who often ignores suggestions from employees and tends to be *one-man-show*. Based on the results of interviews, some informants mention that Mr. SHH's selfish attitude often makes them inconvenient because sometimes what he wants is not rational. Absolute decision-making is performed by Mr. SHH without considering the factors that exist in the field. In accordance with the leadership function Veithzal (2005), consultative function cannot be realized properly because Mr. SHH is less able to listen to employee input as a consideration in decision making. Decision-making is only self-defined by Mr. SHH; subordinates are excluded from providing suggestions, ideas, and considerations in the decision-making process. Leadership orientation is focused only to increase employee productivity with less attention to the feeling and the welfare of subordinates (Hasibuan, 2007).

The Impact of the First Generation Leadership in the Growth of Human Resources Loyalty at PT. KPA. Loyalty is an asset to the company. Loyalty will arise if a leader is able to maintain comfort in his work environment. Comfort is the result of policies issued and implemented within the work unit that he leads. It is reflected in the leadership style of an employer. According to the journal of '*Relationship Leadership with Employee Loyalty to Superiors in HR Group PT. Bank DKI*' (Wisesa, 2008), there is a real, positive, and strong correlation between leadership and employee loyalty of HR group of PT. Bank DKI. Thus, it is very important for leaders to apply the right leadership style so that employee loyalty can be maintained.

Based on the results of research that has been done, the leadership of the first generation has a significant impact on the loyalty growth of human resources in PT. KPA Surabaya. It is indicated by the existence of data in the field which is known that almost 64% of employees have been working in 10 years and 40% of employees have been working over 21 years. According to '*How Employee's Loyalty Programs Impact Organizational Performance within Jordanian Banks?*', employee loyalty is not merely in form of physical loyalty or existence in an organization, but it includes thoughts, concerns, ideas, and dedication provided entirely to the organization. Mr. SHH as the leader of the first generation affects employee loyalty by creating a sense of satisfaction, financial reward, work motivation, performance appraisal, training, and a conducive working environment. Therefore, it can be known that the leadership of Mr. SHH gives a significant impact on the

loyalty growth with the fulfillment of aspects of loyalty in the employees and human resources of PT. KPA.

The Aspect of Obedience or Compliance on Human Resources of PT. KPA. According to Saydam (2000), the aspect of obedience is defined as the ability of an employee to obey all applicable official regulations and obey the official orders given by superiors who are authorized, and able not to violate the prescribed restrictions. In this case, the aspect of obedience to human resources of PT. KPA during the first generation of leadership is very high because the employees of PT. KPA are reluctant to the figure of (Late) Mr. SHH as the leader. The figure of (Late) SHH as a leader and a good role model become the holistic model illustration for employees of PT. KPA to always provide the best service for the company. He himself as a leader is able to apply his compliance or obedience to company regulations. A simple example is to come and to go home from work on time. It can be felt until now that all employees of PT. KPA are obedient to company regulations.

The Aspect of Accountability on Human Resources of PT. KPA. The aspect of accountability is the ability of an employee to complete the work submitted to him well, on time, and dare to take risks for decisions made or actions taken (Saydam, 2000). In PT. KPA, it is reflected that during the first generation leadership - employees have a sense of responsibility in the company. One of the informants, FSD, who has been working for 18 years at PT. KPA state that she is often moved in some division works while working in this family company. However, she is still willing to be placed in any division; FSD still reflects her sense of responsibility on the job given by the employer. Therefore, it can be understood that employees of PT. KPA has reflected the characteristics of a responsible employee to the company because (Late) SHH often gives advice to the employees. In addition, he implements this high sense of responsibility by becoming a real example for every employee. He is responsible for the company both when the company experiences an increase and decrease. He always gives the best for the progress of PT. KPA. It can be felt until now that all employees of PT. KPA have high morale and accountability for every job done.

The Aspect of Honesty on Human Resources of PT. KPA. The aspect of honesty in general is the harmony between the spoken or the deed and the reality (Saydam, 2000). There is one memorable moment that FSD cannot forget while working during the first generation leadership related to the issue of honesty. With a strict character of (Late) Mr. SHH, he does not tolerate any problems related to dishonesty to work. In that case, Mr. SHH immediately calls the police to check on something suspicious. This encourages employees to always be honest by always doing the task with full sincerity, not abusing the existing authority, reporting the work to the employer as it is, and do not cover the mistakes of work that has been done.

The Aspect of Dedication on Human Resources of PT. KPA. According to the majority of informants, they as employees of PT.KPA have contributed thought and energy to the company because of the factors from the leadership of the first generation itself. The growth of dedication aspect on human resources of PT. KPA is inseparable from the leader figure of (Late) SHH which reflects his great dedication while still active in work or in sick condition for the sustainability of PT. KPA. According to an informant namely Mr. TC, he claims to be able to learn many things from the leadership of (Late) SHH. Mr. TC as a financial officer who has been working for 26 years admits that his life motto can be found on the SHH figure which is about always sharing with others. Although (Late) SHH is gone, the leadership of the first generation has an impact in the growth of familial relationships that can be felt to this day. One example is the creation of a very close relationship between (Late) SHH with its employees. SHH often invites his employees to join a meal together and to be introduced to other family members. With the formation of such a work environment, Mr. TC admits to feel the company.

Hence, it can be known that the employees of PT. KPA have the characteristics of employees who have aspects of good self-service because they have the desire to work hard and the effort to maintain position because they feel it as the parts of the company; believe and trust the values that exist in the organization and apply it to yourself, and willing to work on the company for a long time. It is supported by field data indicating that nearly 64% of

employees have been working over 10 years and 40% of employees have been working over 21 years.

CONCLUSION

The thesis research that discusses the Impact of the First Generation Leadership in the Growth of Human Resources Loyalty of PT. KPA has produced the following conclusions:

The leadership style of (Late) SHH is a combination of Transformational Leadership Style, Entrepreneurship Leadership Style, and Authoritarian Leadership Style. In Mr. SHH's strict and authoritarian personality, there is a warm figure who can embrace all elements of employees at the factory of PT. KPA. Mr. SHH, as a leader and also a role model, wants to create a sense of shyness towards employees, not a fear of the leader. It can happen due to the fact that Human Resources of PT.KPA consist of various families and educational backgrounds. Hence, Mr. SHH implements several types of styles in order to adapt to the situation in the field because a responsible leader will understand which leadership style is appropriate and right to apply in his company.

The advantages had by the leadership of the first generation are a sense of close family, populist, high social spirit, and want to go to the field directly. The disadvantages of the first generation leadership are somewhat egotistical, unclear job instruction, emotionally overwhelmed, more likely to listen to feedback from family members, and ignore suggestions from employees.

(Late) SHH as the leader of the first generation affects employee loyalty by creating a sense of satisfaction, giving financial rewards, working motivation, performance appraisal, training, and working environment.

The impact of the first generation leadership style encourages the growth of loyalty aspect of PT.KPA among others: aspect of obedience or compliance, aspect of accountability, aspect of honesty, and aspect of dedication.

The first generation leadership style has a significant impact in the growth of human resources loyalty of PT. KPA.

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THE DETERMINANTS PERCEPTION OF TAX EVASION ETHICS

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ABSTRACT

This study aimed to examine the determinants perception of tax evasion ethics, and combined three models based on the research of McGee et al (2012), Lau et al (2013), Lemvora et al (2013). Data collection used survey method on 148 auditors who worked at Public Accountant Office (KAP) Big Ten. The result of this study showed that the justice and taxation systems affect significantly negative toward the perception of tax evasion ethics. Religiosity strengthened the effect of justice, taxation systems, and discrimination on the perception of tax evasion ethics.

KEY WORDS

Perception of ethics, tax evasion, justice, taxation systems, dicrimination, religiosity, materialism.

Tax becomes the source of revenue of Republic of Indonesia to create independence in improving development and growth of economy. In the compilation of state budget (APBN) in 2016, total domestic revenue that came from tax sector is set amounted to 84,96%, an amount of 1.546,7 trillion from total Rp 1.820,5 trillion (Direktorat Penyusunan APBN, 2016). This big contribution requires the government to improve the quality aspects of taxation in Indonesia, in terms of taxation systems as well as the human resources. However, for the past three years, the tax revenue every year always below the target, namely in 2014 only 92%, in 2015 reached 83,3%, and in 2016 was only 84,2%.

Director of Directorate General of Taxes under Ministry of Finance in period 2011-2014, Fuad Rahmady states that the awareness of Indonesian people to pay the tax were still low, that is corporate taxpayer only 8.7% and new individual taxpayer 30% (Wijaya, 2013). Other data showed that the obedient taxpayer only range from 60%-70% and it is dominated by individual taxpayer not corporate taxpayer (Saeroji, 2017). Minister of Finance in 2017, Sri Mulyani states that the ratio of Indonesian tax ranks are lowest in the world that is in the level 10, 3% (Sukmana, 2017).

Tax evasion often happens in Indonesia. The most loud case in news was Gayus Tambunan (Civil Servant class IIIA, Directorate General of Taxes under Ministry of Finance). Gayus involved in three layers of article, those were corruption, money laundering, and tax evasion. This case has negative impact on some of taxpayers in taxpayer compliance (Rini, 2013). The recent case of tax evasion happened, one of the cases of alleged bribery of tax abolition by PT EK Prima Ekspor Indonesia amounted to Rp 6 millions (Rozie, 2017).

Some of Indonesia's achievement which always low including, the actual revenue from the state tax revenues, tax ratio, and the level of compliance of taxpayers that can indicate the occurrence of tax evasion. Supported with the amount of cases of tax evasion revealed, further strengthening the fact that tax evasion is very widespread in Indonesia. This case cause big question, whether tax evasion is ethical to do? McGee (2016) discusses three views about the tax evasion ethics. Those three ethics namely tax evasion is always unethical, always ethical, and sometimes ethical.

In the study conducted by McGee (2006), tax evasion is considered an ethical action because the lack of justice in the use of money derived from taxes, the high levels of government corruption, and the benefits of tax money are less perceived by the public. Whereas according to Cohn (1998) in McGee et al (2008) based on literature and religious thought, it was revealed that tax evasion always unethical because there is pressure of

thought that should not underestimate fellow human beings. So, when someone does a tax evasion it will make everyone else look bad and this is a form of disdain for humanity.

McGee *et al.* (2012) conducted a study on dimensionality scale of tax evasion ethics by survey method around 1100 people in six countries, those are Argentina, Guatemala, Poland, Romania, England, and USA. The result of study found that tax evasion is sometimes ethical, depends on the condition of three dimensions perception ethical scale of items that examined, those are justice, taxation systems, and discrimination. The study with those three variables was also conducted by McGee and Guo (2007), McGee *et al.* (2008), Nickerson *et al.* (2009), and McGee *et al.* (2011). Research sample carried out by McGee *et al.* (2012), limited on the students who already graduated or not graduated yet. Although social research in this decade used many students samples, but McGee considered this thing as limitation in his research, because the samples is considered can or cannot even represent the population as a whole.

In other study, Lau *et al.* (2013) found another dimension that affect toward perception of tax evasion ethics, that is dimension love of money. In his study, Lau found positive relationship from love of money on perception of tax evasion ethics and intrinsic religiosity moderates the relationship. Other study that showed the effects love of money on the unethical behaviors carried out by Tang (1992), Tang *et al.* (2002), Tang and Chiu (2003), Tang *et al.* (2005), and Elias (2009). The limitation in this study that conducted by Lau *et al.* (2013) was only used intrinsic and extrinsic religiosity as moderation variables. Lau assumes that there are other variables that can be used, namely materialism. In other study, Lemvora *et al.* (2013) found the relationship between love of money with materialism. Individual who has materialistic character tend to impress other people (show off), obsessed with high achievement, and considered money is power. These individuals tend to use their money badly and will even act unethical.

This study is a model development of study perceptiop of tax evasion ethics by combining three models based on the previous studies conducted by McGee *et al.* (2012), Lau *et al.* (2013), and Lemvora *et al.* (2013). The research model of McGee *et al.* (2012) examine the effect of justice, taxation systems, and discrimination on perception of tax evasion ethics. The model study combined with the study of Lau *et al.* (2013) and Lemvora *et al.* (2013) that examined the effects love of money on the perception of tax evasion ethics with moderated by religiosity and materialism. Besides, this study develop new model, namely adding moderate variables of religiosity in the effect of justice, taxation systems, and dicrimination toward the perception of tax evasion ethics.

LITERATURE REVIEW

Perception is a process where individuals organize and interpret their sensory impressions in order to give meaning to the surrounding environment (Robbins, 1996). Perception is an interpretation and an individual's view of something (Muliari & Setiawan, 2011).

Tax ethics is an action to comply with tax regulations or tax laws that apply, in this case the taxpayer must be routine in paying taxes so that the country's development is done very well (Izza & Hamzah, 2009). Tax ethics is considered as a regulation that governing individuals in living their lives in the sphere of taxation, how they carry out their tax obligations, whether they have done right, wrong, good or bad (Suminarsasi & Supriyadi, 2011). From the above explanation, it can be concluded that the tax ethics is a behavior in the sphere of taxation to do taxation obligations properly and correctly.

Basically, tax evasion is a deviant act for violating established rules and can harm others. In other words, tax evasion is unethical act to do. However, based on the study of McGee (2006), not everyone considers tax evasion unethical. Tax evasion is also always seen as ethical act to carry out, or sometimes ethical, depending on the conditions that are happening in the surrounding environment.

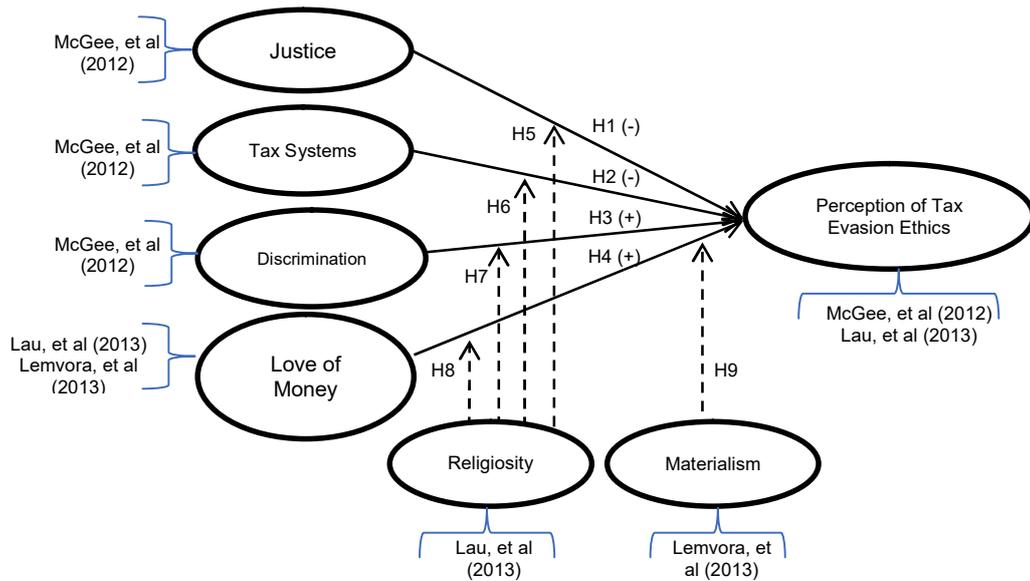


Figure 1 – Research Model (Source: Processed Data, 2017)

According to McGee et al. (2012), justice is a government action that related with the use of tax funds in a positive manner. Suminarsasi and Supriyadi (2011) define justice as a condition in which people should receive equal treatment in taxation and imposition by the state. The government is said to be fair if funds sourced from taxes are used properly. In addition, the treatment of taxation and imposition must be the same, as seen from the tax laws that have been prepared and implemented. Several previous studies have shown that justice negatively affects the perception of tax evasion ethics, that is, the higher the level of justice in the government of a country, then the people will have the perception that tax evasion is an action that is unethical. The study among others was conducted by McGee et al. (2007), McGee & Guo (2007), McGee et al. (2008), Nickerson et al. (2009), McGee et al. (2011), McGee et al., (2012), and Mukharoroh and Cahyonowati (2014).

H1: Justice negatively influence the perception of tax evasion ethics.

The tax system is defined into the scope of tax rates and the use of tax funds negatively, such as government corruption (McGee et al., 2012). Suminarsasi and Supriyadi (2011) state that the tax system is an existing taxation procedure, related to calculation, payment, and reporting. The tax system is good when it gives convenience to the taxpayer in every procedure. In addition, the tax authorities must play an active role in supervising and carrying out their duties with high integrity. On the contrary, the tax system is not good if the tax authorities cheat when conducting the system, such as corruption. Several previous studies showed that the tax system negatively affects the perception of tax evasion ethics. When the prevailing tax system is good, the public perception about tax evasion is unethical. The research studies were conducted by McGee et al. (2007), McGee & Guo (2007), McGee et al. (2008), Nickerson et al. (2009), McGee et al. (2011), McGee et al. (2012), Suminarsasi and Supriyadi (2011), and Mukharoroh and Cahyonowati (2014).

H2: The tax system negatively influence the perception of tax evasion ethics.

McGee et al. (2012) explained that discrimination is a different governmental treatment for certain conditions. The government is committed a form of discrimination if the policy applied is only advantageous to certain parties, and on the other hand, the other parties are disadvantaged. According to Suminarsasi and Supriyadi (2011), there are several policies that are considered as a form of discrimination in the taxation in Indonesia, such as the application of zakat to Muslims as a tax deduction and the existence of the Government Regulation No. 46 of 2013 in which the final tax is charged at 1% of gross income, regardless of whether the business suffered a loss or gain. Several previous studies showed that discrimination positively affects the perception of tax evasion ethics. When the number of discrimination within a country is high, the people will have the perception that the evasion

of taxes is ethically done. The research studies were conducted by McGee et al. (2007), McGee & Guo (2007), McGee et al. (2008), Nickerson et al. (2009), McGee et al. (2011), McGee et al., (2012), and Suminarsasi and Supriyadi (2011).

H3: Discrimination positively influence the perception of tax evasion ethics.

Tang (1992) explained that love for money is a measure of one's subjective feelings toward money. Individuals with high love for money are ethically less sensitive than people who have low love for money (Tang, 2002). Several previous research studies showed that love for money positively affects the perception of tax evasion ethics. When a person's feeling of love for money is higher, then everything will be done to meet his needs including the tax evasion. The research studies were conducted by Tang (1992), Tang et al. (2002), Tang and Chiu (2003), Tang et al. (2005), Elias (2009), Lemvora et al. (2013), and Lau et al. (2013).

H4: The love for money positively influence the perception of tax evasion ethics.

Glock and Stark (1968) in Ancok & Nashori (2001) defined religiosity as a system of symbols, belief systems, value systems, and behavioural systems centred on deeply understood and meaningful issues. Glock and Stark (1968) in Repstad & Furseth (2006) stated that there are five dimensions in religiosity, namely the belief, religious practice, the experience, the knowledge, and the consequential. Individuals with high religiosity will be more objective in assessing the justice applied by the government. The individual will be able to distinguish objectively between right and wrong, as well as fair and unfair, based on the internalized religious values within himself. The higher the religiosity of a person, followed by a government that has applied justice, the further the increase of public confidence in the government. This makes the public assume that tax evasion is increasingly unethical to do.

H5: Religiosity strengthens the negative influence of justice on the perception of tax evasion ethics.

Individuals with high religiosity will be more objective in assessing the prevailing taxation system. The individual will be able to distinguish objectively between the right and wrong things in the tax system, based on the internalized religious values within himself. The higher the religiosity of a person, followed by a good taxation system and the easy process of taxation implementation, the further the increase of the satisfaction of the community in settling its tax obligations. This makes the public assume that tax evasion is increasingly unethical to do.

H6: Religiosity strengthens the negative influence of the tax system on the perception of tax evasion ethics.

Individuals with high religiosity will be more objective in assessing the treatment of government discrimination. They will be able to distinguish objectively whether the people's attitudes or the government policy contains the elements of discrimination or not, whether there are some disadvantaged parties and other parties who benefit, based on the values of religion internalized in him. The high religiosity can reinforce the positive relationship between discrimination and the perception of tax evasion ethics. People will assume that the tax evasion is more ethical to do to get the things that become the rights within each individual.

H7: Religiosity strengthens the positive influence of discrimination on the perception of tax evasion ethics.

Religiosity moderates the positive relationship of love for money to the perception of tax evasion ethics. Several previous studies showed that religiosity moderates the positive relationship of money for love to the perception of tax evasion ethics. The higher the religiosity will lower one's love for money, and tax evasion increasingly unethical to do. The research studies were conducted by Lau et al. (2013), Rosianti & Mangoting (2014), and Hafizhah (2016).

H8: Religiosity weakens the positive influence of money for love on the perception of tax evasion ethics.

Richins (2004) stated that materialism is a person's attitude by prioritizing success, centrality, and happiness. In the context of success, the materialist will judge his and other

success by using a measure of the quantity and quality of what they have. In the context of centrality, materialists place the ownership and acquire all possessions in their lives. While in the context of happiness, the materialists will recognize that ownership is essential to satisfaction and well-being in their lives. Several previous studies showed that materialism moderates the positive relationship of love for money on the perception of tax evasion ethics. High materialism will increase one's love for money, and tax evasion is more ethical to do. The study was conducted by Lemvora et al. (2013).

H9: Materialism strengthens the positive influence of love for money on the perception of tax evasion ethics.

METHODS OF RESEARCH

The population in this study was external auditors' works in Big Ten, a Public Accounting Firm (KAP). Sample selection was done using convenience sampling method. In this study, the population was not known with certainty and the sampling technique used according to Abdillah and Hartono (2015) was at least 10 times of the number of hypotheses prepared. The hypotheses of this research were 9 hypotheses so that the minimum sample amount was 90 samples. The researchers determined the sample used twice the minimum sample, which were 180 samples divided equally into 10 Big Ten KAP. Thus, in a KAP 18 auditors will be taken as a sample.

This research used a computer-delivered survey technique in collecting the data, which was done by the internet (Hartono, 2015). Then, it was processed using Partial Least Square (PLS) statistical test tools with version 2.0 M3 SmartPLS ver software. The indicators of justice variables, taxation systems, and discrimination were based on the concept of Nickerson et al. (2009), McGee et al. (2012), and Suminarsasi and Supriyadi (2011). The variable of love for money was measured using Money Ethic Scale (MES) developed by Tang (2002) and adopted by Lau et al. (2013). Religiosity moderation variables used Glock and Stark indicator (1968) in Repstad & Furseth (2006). The materialist variable was based on the concept of Lemvora et al. (2013). Variable perceptions of tax evasion ethics were based on the concept of McGee et al. (2012) and Suminarsasi and Supriyadi (2011). The respondents will be asked to provide an approval response on a scale of 1 for strongly disagree up to 7 for strongly agree.

RESULTS AND DISCUSSION

The number of questionnaires distributed by the researchers was 180 questionnaires. The number of questionnaires that was not returned was 32 questionnaires and had been done reconfirmation stage for three times. Total questionnaires returned of 148 were processed entirely. Based on the survey results, the majority of respondents were male (54%) with age of 20-30 years (97%). The majority of respondent positions were junior auditors (58%) with length of working in KAP for 1-2 years (59%). The last education of majority of respondents were S1 (94%) and the education sector was accounting (100%).

The loading factor value of all constructs was more than 0.7, while the Average Variance Extracted (AVE) value and the communality value was more than 0.5. In addition, the AVE root value was more than the correlation of latent variables. The value of Cronbach's Alpha was above 0.6 and the value of Composite Reliability was above 0.7. Therefore, it can be concluded that all indicators in the instrument of this study was valid and reliable, so the hypothesis testing can be done.

The value of R^2 from the construct of this research was 0.6917. The value explained that variations in the change of perceptual constructs of tax evasion ethics can be explained by 69.17% by the construct of justice, taxation system, discrimination, and love for money, as well as the moderating constructs of religiosity and materialism. While the remaining 30.83% was explained by the other constructs outside this research model.

Table 1 – The Results of Main Hypothesis Testing

Hypothesis	Construct	Original Sample	T- Statistic	Result
H1	Justice -> Perception of Tax Evasion Ethics	-0,1418	4,7398	Accepted
H2	Taxation System -> Perception of Tax Evasion Ethics	-0,0927	2,0647	Accepted
H3	Discrimination -> Perception of Tax Evasion Ethics	0,5740	17,6499	Accepted
H4	Love for Money -> Perception of Tax Evasion Ethics	0,0904	2,5881	Accepted
H5	Justice*Religiosity -> Perception of Tax Evasion Ethics	-0,0704	1,7874	Accepted
H6	Taxation System*Religiosity -> Perception of Tax Evasion Ethics	0,9423	10,4490	Accepted
H7	Discrimination*Religiosity -> Perception of Tax Evasion Ethics	0,9219	15,9367	Accepted
H8	Love of Money*Religiosity -> Perception of Tax Evasion Ethics	-0,2666	1,7303	Accepted
H9	Love of Money*Materialism -> Perception of Tax Evasion Ethics	0,3066	4,7655	Accepted

Source: Primary Data Processed (2017).

Table 2 – Comparison between Value of Total Effect without Moderation Effect and Value of Total Effect with Moderation Effect

Hypothesis without Moderation Effect	Original Sample	Hypothesis with Moderation Effect	Original Sample	Result
H1	-0,1418	H5	-0,0704	Strengthen
H2	-0,0927	H6	0,9423	Strengthen
H3	0,5740	H7	0,9219	Strengthen
H4	0,0904	H8	-0,2666	Weaken
H4	0,0904	H9	0,3066	Strengthen

Source: Primary Data Processed (2017).

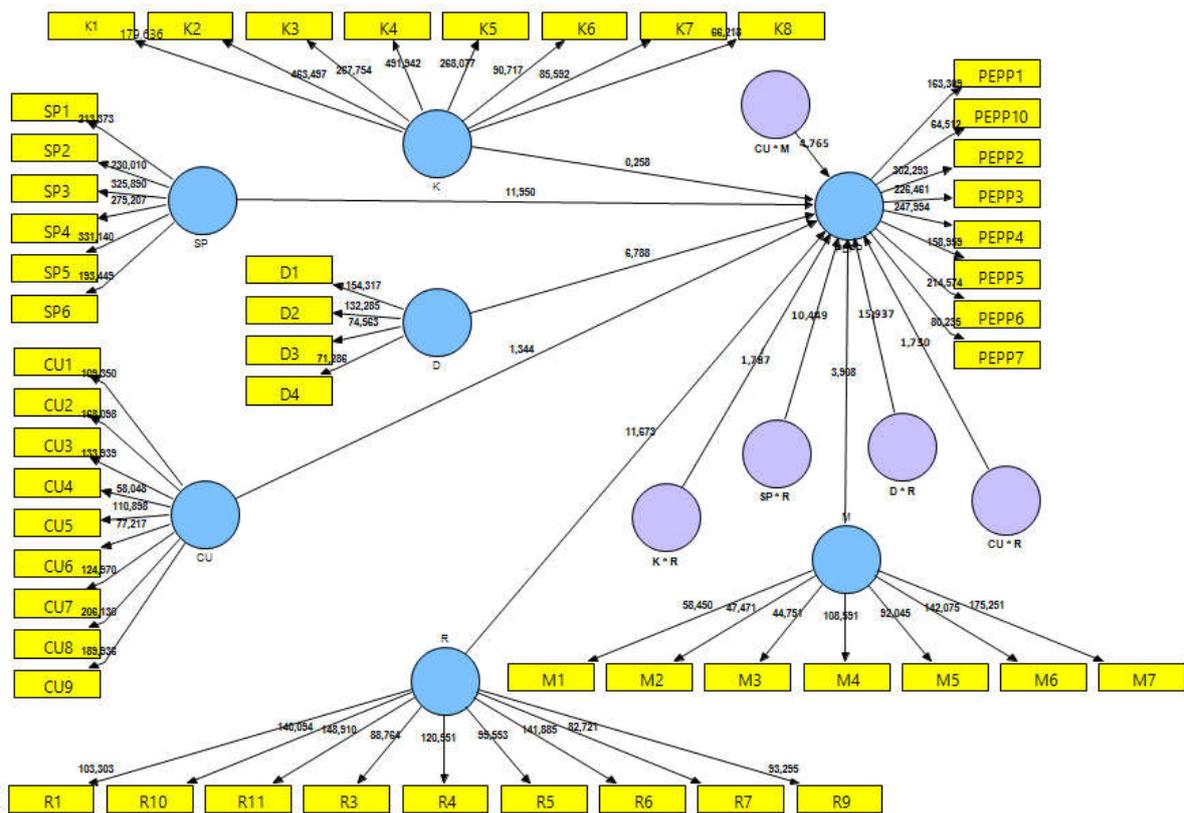


Figure 2 – Structural Model of Moderation Influence Hypothesis Testing (Source: Processed Primary Data, 2017)

Justice has a negative effect to the perception of tax evasion ethics. The higher applicability of justice in a country, the auditor's perception on tax evasion which considered ethical is getting lower. This result is consistent with various study from McGee *et al.* (2007), McGee & Guo (2007), McGee *et al.* (2008), Nickerson *et al.* (2009), McGee *et al.* (2011), McGee *et al.* (2012), and Mukharoroh and Cahyonowati (2014). A fair application of justice in a country will be perceived by its community. Low tax rates, wise usage of tax funds, and

justice in preparation and application of tax laws will boost public confidence to the government so it will increase public's sense of trust and security to pay their taxes. Public will entrust the management of taxes to the government. Thus, public will assume that tax evasion which violates the laws and harms the public is an unethical action.

Tax system has a negative impact to the perception of tax evasion ethics. The better the tax system application, the auditor's perception of tax evasion which is considered ethical will be lower. This result is consistent with the study of McGee *et al.* (2007), McGee & Guo (2007), McGee *et al.* (2008), Nickerson *et al.* (2009), McGee *et al.* (2011), McGee *et al.* (2012), Suminarsasi and Supriyadi (2011), and Mukharoroh and Cahyonowati (2014). Good tax system will provide convenience for the public to fulfill their tax obligations as well as if it's supported by a good human resources or tax officers. This condition will give a high confidence to the public as taxpayers. A good tax system, wise management of tax funds, competent and non-corrupt tax officers, and uncomplicated tax payment procedure will increase public trust to the tax officers and encourage public to pay their taxes. It will affect the auditor's perception that tax evasion is unethical thing to do.

Discrimination positively affects the perception of tax evasion ethics. The more discriminatory forms exist in the applicable tax regulations, the bigger auditors' perception that tax evasion is an ethical action to do. This is consistent with the study of McGee *et al.* (2007), McGee & Guo (2007), McGee *et al.* (2008), Nickerson *et al.* (2009), McGee *et al.* (2011), McGee *et al.* (2012), and Suminarsasi and Supriyadi (2011). Based on the statements from the questionnaire it appears that discriminations are exemptions in taxes. In tax regulations, government provides different treatment to various circles of community. It is regarded as a form of discrimination because it only benefits certain groups in society. If tax regulations are disadvantageous to some groups, especially the lower middle class, thus public confidence to the government will decrease. It will form a perception that tax evasion is an ethical thing to do or tax evasion may be conducted to cover the loss.

Money love has positive effect to the perception of tax evasion ethics. The higher a person's love for money, it means the higher his perception of tax evasion is an ethical thing. This is consistent with the study of Tang (1992), Tang *et al.* (2002), Tang dan Chiu (2003), Tang *et al.* (2005), Elias (2009), Lemvora *et al.* (2013) dan Lau *et al.* (2013). The more a person's love for money, the more likely this person will have a huge interest in money and tend to do everything to meet his needs for money despite having to commit unethical acts and harming other people, such as through tax evasion.

Religiosity strengthens the influence of justice, tax system, and discrimination against the perception of tax evasion ethics. However, religiosity weakens the influence of money love to the perception of tax evasion ethics. Glok and Stark (1968) in Repstad & Furseth (2006) states that there are five dimensions of religiosity, which is the belief, religious practice, the experience, the knowledge and the consequential. Perspectives of various religions are equal. It all has an average assumption that tax evasion is unethical when the tax system and justice is fulfilled. Individuals with religious orientation perceive that money is not everything to meet the needs. Individuals with high religiosity will relate their needs to the motivations and religious meanings they believe in. Ismail (2012) explains that individuals live according to their religion will have a religious orientation. These individuals will keep their commitment to their religion unconditionally and make decisions independently. Religion or faith is perceived as an inherent need in every action and considered as the most essential part.

Individuals with high religiosity will be more objective in assessing the application of justice by the government and the prevailing tax system. These individuals may able to objectively differentiate between the right or wrong, justice or injustice, based on the religious values internalized within them. The more religious of a person, followed by justice implementation, good tax system, and good facilitation of tax process by the government, it will increase public confidence in the government performance and increase public satisfaction in fulfilling their tax obligations. This will make public's perception of tax evasion is unethical to do. Moreover, individuals with high religiosity will be more objective in assessing the government discrimination. These individuals will be able to whether the

government attitude or policy contains elements of discrimination or not, whether there are some disadvantaged groups or others who gain benefits from it, based on religion values internalized within them. This will make public think that tax evasion is an ethical thing to do to gain each individual's rights. However, high religiosity will degrade someone's love for money and decrease someone's desire to conduct tax evasion, or assume that tax evasion is unethical. This result is consistent with the study of Lau *et al.* (2013), Rosianti & Mangoting (2014), and Hafizhah (2016).

Materialism strengthens the positive influence of money love to the perception of tax evasion ethics. The more someone's love for money accompanied by high materialism, the more perception that tax evasion is ethical to do. This result is consistent with the study of Lemvora *et al.* (2013). Materialistic individuals tend to have high level of luxury and expensive goods consumption (Trojsi *et al.*, 2016), and unable to make a saving (Christopher *et al.*, 2004). According to Garðarsdottir & Dittmar (2012), materialistic individuals tend to have a bad skill of managing money and a high level of consumption, and also followed by a high amount of debt. Materialistic individuals tend to desire a lot of money to buy all the luxury goods as a way to show off their identity. Individuals with high materialism tend to have a high consumption of expensive and luxury goods, have a poor management of money, and use money as a means to meet the needs and self-acclaimed in society, such as satisfaction, success, centrality, and happiness. High materialism will increase someone's love of money, leading to increase someone's desire to commit tax evasion, or perceives that tax evasion is ethical to do.

CONCLUSION

This research aims to examine the influence of justice, tax system, discrimination and loving money toward ethic perceptions of tax evasion by being moderated by religiosity and materialism. Survey process is conducted by sending questioner by email to 148 external auditors who work in KAP Big Ten. This research uses three models which refer to the research of McGee *et al.* (2012), Lau *et al.* (2013), and Lemvora *et al.* (2013). this research also develops new model, which is the moderating variable of religiosity in the influence of justice tax system and discrimination toward tax evasion ethics. The result of the research supports those three models.

The result of the research proves that the more justice implementation and tax system in a country, it will increase society trust to government, so that tax evasion that breaks the rule and harms society is not ethical to do. Other than that, the government's policy that has discrimination constituent will decrease society trust toward government, so that it will establish perception that tax evasion is the right thing to do. The high love feeling toward money will also make individual does anything to fulfill his/her needs about money, including tax evasion and the action is considered ethic to do.

Religiosity strengthens the influence of justice, tax system and discrimination toward ethic perception of tax evasion. However, it weakens the influence of loving money toward ethic perception of tax evasion. High religiosity in individual that based on religion values which are internalized in him/her will be more objective in valuing good and righ things. Individual is objective in valuing justice which applied properly by the government and tax system which ease people. So that tax evasion is considered as unethical to do. Other than that, individual with high religiosity is also more objective valuing government's policy that has discrimination constituent and harms one of parties, so that tax evasion is considered ethical to do to get the right of individual. However, high religiosity will decrease the feeling of loving money, so that it is considered unethical to do. In this case, high materialism will increase the feeling of loving money to individual, so that tax evasion is considered as an ethical to do.

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APPENDIX – QUESTIONNAIRE

Justice

1. Tax evasion is ethical, even though the fee is low.
2. Tax evasion is ethical, even though tax fund is used right and well.
3. Tax evasion is ethical, even though tax fund is used to build important public facility.
4. Tax evasion is ethical, if tax fund is used for activities that do not give profit for me.
5. Tax evasion is ethical, even though tax fund is used for activities that give profit for me.
6. Tax evasion is ethical, if a person has high income, he has to pay tax in high rate.
7. Tax evasion is ethical, if government is not fair in organizing the tax law.
8. Tax evasion is ethical, if tax officer is not fair in applying tax regulation.

TAX SYSTEM

1. Tax evasion is ethical, if tax rate is high and it is not suitable with the income.
2. Tax evasion is ethical, if tax system is not fair.
3. Tax evasion is ethical, if tax money that is collected is not maintained wisely.
4. Tax evasion is ethical, if tax fund source is from politicians who are corruption.
5. Tax evasion is ethical, if the procedure of paying tax complicates.
6. Tax evasion is ethical, if Directorate General of Taxation (DJP) does not give good socialization to ease taxes payment.

DISCRIMINATION

1. Tax evasion is considered ethical, if government does discrimination about religion, race and culture background.
2. Tax evasion is considered ethical, if government imprisons people because of politic opinion.
3. Tax evasion is considered ethical if zakat for Islam is used as tax deduction factor.
4. tax rate for business with turnover under 4,8 Billion is charged gross circulation, whereas for turnover over 4,8 billion is charged of profit. It is discrimination for small and medium enterprises.

LOVE MONEY

1. Money is good and worth it.
2. Money is important factor and interesting in my life.
3. Money represents my achievement, success and accomplishment.
4. Money distinguishes me to other people.
5. I am motivated to hard work because of money.
6. Money is my motivator.
7. Having much money is good.
8. I want to be wealthy.
9. My life is delight if i am wealthy and have much money.

RELIGIONITY

1. I believe to one God.
2. There are many mountains are evidences that God exist.
3. I believe that Scripture teaches ketauhidan, even though I have never read that.
4. I believe that fasting healthy.
5. I will always pray in good or bad situation because with the prayer I feel there is better change.
6. I pray regularly.
7. I feel that breath is God's love for His creatures.
8. I am afraid to God.
9. I am happy seeing other people follow their religion.
10. I always keep myself from unlawful income
11. I always try to avoid little or big sin.
12. I always help people who need me.
13. I tend to be honest, fair and not disgrace other people.
14. I will prevent actions that harm other people.

MATERIALISM

1. I am amazed with person who has luxury house, car and cloth.
2. My life is represented by things I have.
3. I like to have things that make people amazed.
4. I keep simple life after fulfilling my needs.
5. I buy things that make me happy.
6. I like luxury in my life.
7. My life is better if I have things that I haven't got before.
8. I am happier id I am able to buy many things.
9. Sometimes I am sad if I am not able to buy things I like.

ETHICAL PERCEPTION OF TAX EVASION

1. Tax evasion is ethical if tax rate is too high.
2. Tax evasion is ethical if tax money is not used to fund general state expenditure.
3. Tax evasion is ethical if i feel benefit from tax money.
4. Tax evasion is ethical because weak law.
5. Tax evasion is ethical if there is discrimination in tax.
6. Tax evasion is ethical if government is corruption.
7. Tax evasion is ethical if government is not transparent in establishing tax money.
8. Tax evasion is ethical if people with the same high income has to pay the same rate.
9. Tax evasion is ethical even though tax fund is used to a moral project.
10. Tax evasion is ethical if all people do tax evasion.
11. Tax evasion is ethical if taxpayer is not able to pay.

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GENDER, RELIGIOSITY, POSITIVE MOOD AND WHISTLEBLOWING INTENTION

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ABSTRACT

The purpose of this study is to prove the relationship of gender, religiosity to whistleblowing intention with positive mood as a moderating variable. The sample of this research is accounting of 41 students after the purposive sampling. Data analysis technique used is correlation test. The results of study provide evidence of gender relationship to whistleblowing intentions; religiosity has no relationship to whistleblowing intentions and positive mood is able to moderate the relationship between gender and whistleblowing intentions.

KEY WORDS

Whistleblowing, intention, gender, religiosity, mood.

Whistleblowing has gained global attention and popularity over the last two decades of this case centered on the disclosure of unethical or illegal behavior, employers or officials at work by employees to third parties (Johnson, 2003). Jeon, (2017) reveals that whistleblowers play an important role in opening unethical behavior in government and making government more transparent and accountable to the public. Sweeney, (2008) states that whistleblowing is more effectively applied to reduce fraud than internal audit, external audit, or internal controlling system. Whistleblowing action has been recognized as a control mechanism to prevent unethical behavior, and to protect the organization's long-term prosperity and to ensure good corporate governance (Eaton & Akers, 2007).

Some related fraud cases still exist quite a lot within an organization, it should be investigated about whistleblowing into an instrument to reveal it. Cunningham & Harris, (2006) one of the cases revealed was the case of the Enron company. Enron Board has conducted a variety of fraud in the form of accounting manipulation. The case was revealed by the action whistleblowing is the case of British Telecom. Fraud in British Telecom affects its public accountant. At this moment, affected by Price Waterhouse Coopers (PwC) which is a reputable public accounting firm in the world and includes the bigfour. This accounting fraud failed to be detected by PwC, it is precisely this fraud were detected by the reporting complaints (whistleblower), followed by a forensic accounting by KPMG. Fraud Accounting by British Telecom in Italy is actually relatively simple but the PWC auditor failed to detect it. Examples case involving whistleblowing that happened in Indonesia is Agus Condro in Bank Indonesia senior deputy elections and yohanes wowuruntu in case of system administration law bodies (Semendawai, et al., 2011).

Research on whistleblowing has been done using gender variables, religiosity and positive mood. Gender as variable is reused because there are inconsistencies in previous research. Regarding the variable religiosity, the measurements used by the researcher are Santa Clara Strength of Religious Faith (SCSORF) this can be said to be unique, because it adopts the si developed by (Plante & Boccaccini, 1997). This measurement has not been used for research in Indonesia, and the reasons behind the Santa Clara Strength of Religious Faith (SCSORF) do not contain any reference to a particular religious orientation, and are suitable for it class of people from all affiliates or groups to religion. Related variables Positive Mood This variable has not been used in Indonesia so it becomes unique to use. Researchers using this positive mood as a derivative refers to the study of Zhang et al, (2009) using a positive mood as moderation. The importance of whistleblowing action, especially to expose cheating, motivates me to do research related to this whistleblowing

intention. Here is my basic reason for researching this topic and the reasons for using variables.

Prosocial Behavior Theory. Brief & Motowidlo (1986) describes prosocial behavioral theories as members' behavior in organizations to address individuals, groups, or organizations in which they interact and adhere to organizational rules and are conducted with the intention of improving the well-being of individuals, groups, or organizations. Dozier & Miceli, (1986) whistleblowing is a form of prosocial behavior related to selfish and altruistic behavior. In other words, whistleblowing action is not entirely an altruistic act because it is also aimed at achieving personal gain. Prosocial behavior is a theory that supports the occurrence of whistleblowing. Whistleblowing is one of 13 forms of prosocial behavior (Brief & Motowidlo, 1986). In line with Dozier & Miceli (1985), whistleblowing behavior can be provided benefits to the organization or others while also benefiting the whistleblower itself so that whistleblowing can be regarded as prosocial behavior. Prosocial behavior can be used to describe individual ethical decision-making associated with intent to conduct whistleblowing.

Miceli et al, (1991) suggests tendency that more high from man for do whistleblowing. Lacayo & Ripley, (2003); Street, (1995) shows more men tend to do whistleblowing rather than woman. Dworkin & Baucus, (1998); Sims & Keenan, (1998) found that women are less likely than men to engage in whistleblowing because men tend to occupy high position and status than women in the organization. Status characteristics theory argue that those with higher status have more opportunities to contribute to group tasks, receive more positive evaluations and exert greater influence (Carli & Eagly, 1999).

H₁: A person who is sexually man will tend to have higher whistleblowing intentions than a woman who is gendered.

Planned Behaviour Theory. Planned Behavior Theory is a theory in psychology that explained by Ajzen, (1991). This theory connects faith with behavior. This theory say how an interest in behavior and behavior can be formed. Interest in behavior is defined as an indication of individual readiness to display behavior, or it can be assumed to be a precursor to action. Actions can be interpreted as visible responses from individuals with respect to given targets. Ajzen, (1991) formulated three behavior-forming predictors. The first is attitude toward the behavior, is a positive or negative evaluation of individual about the performance of self in certain behavior. Second, subjective norms, are individual perceptions of certain behaviors that are influenced by significant other judgments. Third, the perception of behavior control (perceived behavioral control), is the ease or difficulty to perform certain behaviors.

Individual more religiously comply with the law and will do whistleblowing whenever they are confronted with unethical behavior in the workplace (Rokeach, 1969; Fernando, 2006) suggests religious individuals behave in accordance with the values inherent in the religion and will not confront undeserved behavior, it is possible to conduct whistleblowing at any time in an unethical situation that is very high. But some studies have found that there are individuals who see violations in the workplace, but chose not to report to the employer or institution that has the proper authority may be because of persecution or torture and sometimes cancellations made by the public related to whistleblowing (Dyck et al, 2010).

H₂: Someone who is religious will have more intention to do whistleblowing.

Social Learning Theory. Bandura (1986), Social Learning Theory argues that one would foresee the possible consequences of their own actions by observing the consequences experienced by others. Positive mood will tend to increase observer's expectation of positive results because people with positive moods may be a little worried. Thus a person in a positive mood will be more likely to be involved in whistleblowing because they will receive less worry about the risks or consequences they will receive.

Rest (1986), suggests that within the decision-making process, moods can affect the anticipation of the individual future consequences and may increase or decrease the likelihood of turning ethical judgments into action. Social psychology studies show that when people are in the PM (positive mood) , they are more tend to help people, protect their organizations, and make constructive suggestions for organizations (George, 1991; Van

Scotter & Motowidlo, 1996). The role of PM (positive mood) in helping behavior implies that people with PM (positive mood) are more morally, more empathetic, and pay more attention to the welfare of others. Therefore, when someone positive mood must to make moral decisions about what is right or wrong.

H₃: Positive mood can moderate the gender relationship to whistleblowing intentions.

METHODS OF RESEARCH

This study uses a quantitative approach in the form of associative. Quantitative research is a research that emphasizes theoretical testing through measurement of research variables with numbers and data analyzed using statistics procedures (Indriantoro & Supomo, 2013). Research in the form of associative is research that aims to determine the relationship between two variables or more (Sugiyono, 2013).

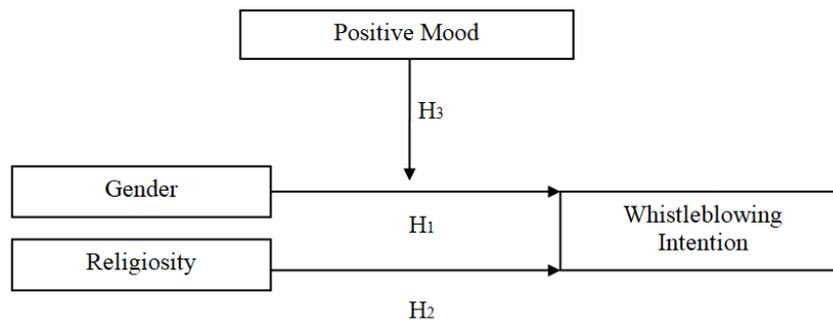


Figure 1 – Research Design (Source: data processed, 2017)

The data source used in this study is the primary data. Primary data collected by using a questionnaire containing a statement and cases distributed to respondents is a master of accounting student university airlangga in 2016 who have been working. Gender and religiosity variables as independent variables in which gender is measured by the dummy scale in which the male is given the number 1, while the woman is given the number 0. Religiosity is measured by the Santa Clara Strength of Religious Faith questionnaire or (SCSORF) developed by (Plante & Boccaccini, 1997). Furthermore, moderation variables were positive mood as measured by The Panas Scale developed by Watson, et al. (1988). Dependent in this research is the intention of whistleblowing which is measured by the indicator adopted from (Malik, 2010), using the Likert scale.

Table 1 – Sample selection process

No	Information	Total
1	Students of accounting master of airlangga university in 2016	85
2	Students who work	(44)
-	Total selected as sample	41

Source: data processed, 2017.

The equations used in this study are:

$$WBS = \alpha_0 + \beta_1 GENDER (X_1) + \beta_2 RLGS (X_2) + \beta_3 PM (X_3) + \beta_4 GENDER * PM (X_1 * X_3) + \mu$$

Where: WBS = Whistleblowing Intention; α = Constants; β = Regression coefficient; GENDER = Gender; RLGS = Religiosity; μ = Standard Error.

RESULTS AND DISCUSSION

The whistleblowing intention variable (WBS) has a minimum value of -14.00 and a maximum value of 20.00.

Mean value of 17,170 which means that the average intent of whistleblowing is quite high. The gender variable (GENDER) has a minimum value of 0, maximum value of 1 and a mean of 0.439. This mean value of 0.439 indicates that more women than men. The religiosity variable (RLGS) has a minimum value of 32.00. The maximum indigo is 47.00 and the mean is 39,122. The mean of 39,122 shows that religiosity is quite high in the respondents. Positive mood (PM) has a minimum value of 43.00, a maximum value of 79.00 and a mean of 52.634. On average the positive mood of the respondents was not high enough which amounted to 52.634.

Table 2 – Descriptive Analysis

n/n	N	Minimum	Maximum	Mean	Std. Deviation
WBS	41	14,00	20,00	17,170	1,610
GENDER	41	0,00	1,00	0,439	0,502
RLGS	41	32,00	47,00	39,122	2,675
PM	41	43,00	79,00	52,634	6,351

Source: data processed, 2017.

Based on the validity and reliability test that has been done, can be known data in this study is valid and reliable and can be tested continued. Therefore, the available data has been qualified to conduct further test that is correlation test. Correlation test is used to find out how far the relationship between independent variables to the dependent variable can be seen in Table 3 in below:

Table 3 – Correlation Analysis

Variable	Sig.2 tailed	Pearson correlation
Gender	0,000	0,646
Religiosity	0,392	-0,137
Positive Mood	0,392	-0,137
Gender*Positive Mood	0,000	0,635

Source: data processed, 2017.

Based on the above correlation analysis, the Sig.2 Tailed value is 0.00 < 0.05. This indicates a significant relationship at the 0.01 level. Then the gender variable (X_1) has a relationship with the whistleblowing intention (Y). These results accept the hypothesis H_1 stated gender has a relationship with the intention of whistleblowing. Furthermore, the religiosity variable of Sig.2 Tailed value is 0,392 > 0,05. This shows that there is no significant relationship. Then the religiosity variable (X_2) has no relationship with whistleblowing intention (Y). This result does not accept the hypothesis H_2 which states religiosity has no relationship to whistleblowing intentions.

Result correlation analysis for positive mood variable, Sig.2 Tailed value of 0.392 > 0.05. This shows that there is no significant relationship between positive mood variables (X_3) with variable intention of whistleblowing (Y). However, after the interaction with the gender variable (X_1), this positive mood showed a significant result of Sig.2 Tailed 0,00. These results show that the positive mood variable (X_3) is able to moderate the relationship between gender and whistleblowing intentions. These results accept the hypothesis H_3 which states a positive mood moderates the relationship of gender with the intention of whistleblowing.

DISCUSSION OF RESULTS

Gender and Whistleblowing Intention. The correlation test results show that there is a relationship between gender and whistleblowing intention. These results accept the hypothesis H_1 stated gender has a relationship with the intention of whistleblowing, which is where the men gender tend to have a higher whistleblowing intentions. This is because women are less likely than men to engage in whistleblowing because men tend to occupy

high status positions rather than women within the organization (Dworkin & Baucus, 1998); (Sims & Keenan, 1998). Status of characteristic states that those with higher status have more opportunities to contribute to group work, receive more positive evaluations and have more influence (Carli & Eagly, 1999).

These results support previous studies of Chung & Trivedi, (2003); Serwinek, (1992) indicates a gender effect on ethical behavior and obedience behavior (eg;whistleblowing). Liyanarachchi & Newdick, (2009) examined the effect of gender interaction on whistleblowing trends, where the results showed a significant gender effect on the relationship between the level of moral reasoning and whistleblowing tendencies.

Religiosity and Whistleblowing Intention. The result of correlation test proves that there is no relation between religiosity and whistleblowing intention. This result does not accept the hypothesis H₂ which states religiosity has no relationship to whistleblowing intentions. This is due to the persecution or persecution of individuals who do whistleblowing and several times the cancellation done by the community related whistleblowing (Dyck et al, 2010). The persistence and persecution of whistleblowing, the whistleblowing intentions will be reduced or even lost even though the individual can be said to be a religious individual. In addition, in the not available of a legal protection against the whistleblower or the whistleblower itself, of course also reduce or eliminate the intention of whistleblowing itself.

Religiosity has no relation to whistleblowing intentions also because of the perception that whistleblowing is also unethical. This argument is supported by Finn & Lampe's, (1992) research which states that accounting students strongly support whistleblowing as unethical behavior compared to participants who work as auditors. Rokeach, (1969) a religious individual is considered to have a relationship with one's ethical moral improvement. Religious individuals are more obedient to the law and will conduct whistleblowing whenever they are confronted with unethical behavior in the workplace. But a religious person has no connection with whistleblowing intentions because a person is religious but can not apply their moral teachings, nor will their morals change. A person who has no moral improvement has nothing to do with the intention of doing whistleblowing or obeying the rules.

Positive Mood moderate Gender and Whistleblowing Intention. The results of the correlation test proved that the positive mood was able to moderate the relationship between gender and whistleblowing intentions. These results accept the hypothesis H₃ which states a positive mood moderates the relationship of gender with the intention of whistleblowing. A men person tends to have higher whistleblowing intentions , that men is in a positive mood will certainly increase the intention of whistleblowing. This is because people with positive mood (PM) may be less concerned about potential risks, and are more likely to be involved in risk taking activities (Bless et al, 1996). Therefore, high positive mood people tend to believe that there is little risk they receive in the event of whistleblowing, and as well as severe retaliation or persecution will not befall them.

George (1991); Van Scotter & Motowidlo, (1996) people are in the PM (positive mood), they are more likely to help people, protect their organizations, and make constructive suggestions about the organization. Someone who is in a positive mood will take more moral action and empathize, in addition they will also make a moral decision about what is right or wrong. Bandura, (1986) Social Learning Theory argues that one would foresee the possible consequences of their own actions by observing the consequences experienced by others. Positive mood will tend to increase observer's expectation of positive results because people with positive moods may be a little worried. Thus a person in a positive mood will be more likely to be involved in whistleblowing because they will receive less worry about the risks or consequences they will receive.

CONCLUSION

Based on the analysis and discussion that has been presented, it conclusions as follows: gender related to whistleblowing intentions in accounting master student university airlangga 2016. Our Finding is women are less likely than men to engage in whistleblowing because men tend to occupy high position status than women in an organization, religiosity

no relation to whistleblowing intentions in accounting master student university airangga 2016. This is because the act of whistleblowing was also an unethical act, so that someone who is religious is not going to take this action and positive mood moderates the relationship of gender to the intention whistleblowing, this is because people with positive mood may be less concerned about the risks of potential, and more likely to engage in risk-taking activities, one of which is whistleblowing. For further research expected to enhance this research to expand the research area because in this study is only done on the student masters 2016, and then expected to add variables can explain behavioural research in whistleblowing.

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CUSTOMER LOYALTY CHARACTERISTICS IN OBSTACLES OF INTERNET BANKING ADOPTIONS

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ABSTRACT

This paper analyzes the characteristics of customer loyalty on the barriers in using internet banking with a qualitative approach through interviews to 10 informants who have or never used internet banking. Three types of obstacles perceived by customers include security threats, difficulty in operating internet banking, and unreliable access. There are three characteristics of customer loyalty in the face of these barriers, first, leaving internet banking categorized as low loyalty; second, limiting themselves using internet banking features categorized as medium loyalty; and third, finding solutions to overcome barriers categorized as high loyalty. The three characteristics motivated by 3 factors including customer knowledge, risk perception, and influence of other service choices.

KEY WORDS

Internet banking, loyalty, adoption, customer knowledge, risk perception.

Information technology in banking is one of the most important resources to improve customer service and satisfaction, as a tool that enables banks to serve better and compete in the banking industry. The main function of information technology is to collect, process, and distribute electronic information and support electronic transactions related to customer fund management.

Better service quality is the reason for bank to use information technology such as internet banking (Waithaka, 2015). Internet banking transactions can improve the ability of customers in making transactions, without being limited distance with the flexibility of transaction time every day 24 hours. Internet banking transactions are non-cash transactions with better security than traditional transactions, as customers do not have to carry cash in cash at risk of theft.

The advantages of internet banking are not only on the availability of service features relevant to the needs of customers, but also how the bank as an internet banking provider able to overcome and reduce the barriers perceived by their customers in using internet banking. Research conducted by Munusamy et al (2012), Aslam et al (2011), Agwu (2015) reveals several factors that become obstacles of customers in adopting internet banking such as complexity, operational difficulties, risk, security and privacy. Basically, these barriers are related to the level of ease of using internet banking, data security and electronic system security, as well as internet banking reliability that should be able to operate properly and available at all times.

LITERATURE REVIEW

The adoption of internet banking is a form of customer acceptance of electronic information and bank transactions (Al-Fahim, 2013), and the willingness of customers to use the bank's website (Saeidipour, 2013). Some internet banking research uses Technology Acceptance Model (Davis, 1986) as the theory in internet banking adoption research is Perkins and Annan (2013), Eze (2011), Lee (2008), Al-Smadi (2012). In Technology Acceptance Model, the word 'Adoption' is not used. Instead, the term 'Actual System Use' is used, ie the use of the system. In this study, internet banking adoption is intended as the use of bank website by customers.

Internet banking is one of the e-services. This is an online service that offers customers to be able to manage their own money saved in the bank. Nevertheless, customers can face various barriers that influence internet banking adoption as Munusamy et al (2012), Aslam et al (2011), Agwu (2015) have examined.

Munusamy et al (2012) examines the perceptions of customers regarding barriers to innovative technology-based products and services based on technology such as internet banking. There are 5 variables studied including perception of complexity, perception of operational difficulties, perception of risk, perception of high connection cost, and perception of inefficiency. Munusamy et al (2012) indicates that all variables categorized as obstacles have a significant effect on internet banking usage. Some customers have a negative image of internet banking channel that is perceived to be complex and difficult to use so that the use of internet banking services is limited. Difficulty in operating internet banking is especially faced by novice customers. They feel worried of clicking the false buttons that creates panic. Customers can perceive new technology as a threatening service and they reject it, lowering their interest in adopting internet banking, especially privacy threats. According to Munusamy et al (2012), there is no tolerance of unreliable internet banking services that may lead to distrust of customers, such as inaccurate data or the occurrence of 'Phishing' crimes in which personal data of the customer is accessible to unauthorized persons remotely without going through password security and username.

Aslam et al (2011) recommends to banks to develop internet banking after testing the barriers in internet banking adoption by active Internet users in Pakistan. Data were collected from 520 bank customers using internet banking services. The results indicates that security, privacy and high risk factors, lack of customer knowledge about the benefits of internet banking, the communication gap of customers and banks are significant barriers affecting internet banking adoption. Aslam et al (2011) advises to make bank communication channels effective in explaining the benefits of internet banking to customers, building better interpersonal relationships, one-to-one relationships, banks to customers. Aslam et al (2011) argues that bank performance is good if the storage of transaction data is safe and accurate, including safeguarding personal data of customers.

Agwu (2015) examines the barriers in adopting internet banking to explore the reasons for users as well as non-users of internet banking in Nigeria. The model theory used is Technology Acceptance Model (TAM), a model that has been used to explain consumer intentions using technology. The study show that security, privacy and infrastructure are the factors that significantly influence internet banking adoption. Customers can perceive security risks as an obstacle factor in the use of internet banking. Customers associate security risks with loss of money and are influenced by information from the media, in addition to customer concerns over security disturbances due to errors that occur in internet banking. Concerns over these security threats may diminish in the minds of consumers when consumers are aware of the many benefits gained when adopting internet banking.

METHODS OF RESEARCH

This study uses a qualitative approach. Data collection was performed with structured interview method to understand the factors shaping the behavior of customers against barriers in using internet banking. The data were obtained from primary sources, ie bank customer informants in Indonesia who still or have never adopted internet banking. Questions are raised regarding the obstacles experienced, informed decisions and actions facing these obstacles. The confidentiality of the identity of the informant is kept confidential, thus this paper the anonymous identity is used as informant 1, 2, and so on.

A pilot study was used in this study on 3 informants. Pilot study is intended to test the interview questions to assess the ability of informants to understand the intentions of interview questions. Additions and improvements to the questions were made to deepen the answer to the research problem.

Data analysis in this research is content analysis: Data collection; Focus on analysis; Information Categorization; Identify patterns between categories; and pattern interpretation between categories.

Ten informants were interviewed both directly and via telephone. These ten informants are still or have never adopted internet banking. Informant characteristics are aged 24 - 55 years old, employment, lecturers, and entrepreneurs in Indonesia.

RESULTS OF STUDY

A total of ten customer informants of internet banking users were interviewed to understand the barriers experienced in using internet banking and the loyalty characteristics of customers facing these obstacles. The analysis is conducted on the factors behind the behavior of customers in making decisions and actions to face barriers in using internet banking.

Barriers in using Internet Banking. Informants' perception toward barriers in using internet banking related to 3 types of barriers, they are Security Threat, Accessibility Difficulty, and Difficulty in Operating internet banking. Basically, the perceived barrier of informants in using internet banking is the inability or failure to use internet banking.

Security is an important factor in the use of internet banking as customer does not directly meet face to face with bank officials; transaction goes through the technology. Customer trust is created when internet banking security is good. The fifth informant and the ninth informant worried about the possibility of internet banking security attack that they did not want to use the fund transfer feature on the bank website, they only use the features of balance check and account mutation. The fifth informant explained his concern about the occurrence of internet banking hacking which some smart criminals use internet to do crime. The ninth informant explained that fund transfer feature on bank website is not used because of fear of the rampant crime action with information technology that can befall on him, for example the theft of personal data. He performed funds transfers done through ATM machine.

Reliability is ability of internet banking to be available properly, or services consistent with the rules. Several informants explained that problems encountered in using internet banking service are slow access of bank websites, sometimes breaking the bank's website connection, pending transactions, unavailability of transactions proof in real time. The barriers are perceived by most informants except the second informant.

The informants' comments are as follows: "I used internet banking, the problem is that the internet used to have trouble or access is slow, caused by internet provider" (informant 1), "the obstacle to communication sometimes access bank website broken, or signal problem, yet I do not have the will to stop using internet banking, the cause is sourced from the communication/signal of the device used" (informant 3). "Sometimes I have difficulty access internet banking, meaning the system down, for example when I have input data and system down then I have to repeat again enter data, the cause is on the bank" (informant 4).

Several other informants also complained about the slowness of internet banking access: "I often experience the problem of loading, sometimes it is fast sometimes or even access break when using internet banking, the cause is internal of the bank (informant 5)." The problem is on internet connections. I also experienced a delayed transaction, the cause of the tools used such as gadgets and the internet, the cause was also from the bank at certain hour where transactions are high, making internet access slow"(informant 6)." The problem is sometimes the signals in particular location so they cannot access internet banking" (informant 7). "There is a sluggish access to bank websites, the cause is slow internet connection or maintenance of the website of the bank, or the laptop used to access internet banking is infected by the virus" (informant 8). "The broken access was caused by the device used to access the bank website" (informant 9). "I've had problems signaling, if the transaction is over 9 pm, I can see the proof of the transaction on the next day, the cause of the bank website and mobile phone card" (informant 10).

The explanation from the informants above indicates slow or broken access which may be caused by a disruption of customer's device, high internet traffic, bank website accessed by customers at a certain time, or maintenance of the bank's website. Several informants were able to identify what caused the obstacles, and then determine the solutions and actions to overcome obstacles.

The first informant informed difficulty of using internet banking token device to conduct transactions. This situation is considered as a constraint factor as the informants' convenience in using internet banking decrease. These informants then decided to use ATM only.

Token device is a device used in internet banking transactions; bank will automatically send a unique token code for one transaction to the customer's token device. Some banks use token devices in the form of client's mobile communications devices. This token code is confidential data known only to customers who make transactions and is a form of transaction security.

Characteristics of Customer Loyalty in the face of barriers using Internet Banking. Customers face obstacles in using internet banking by leaving it, restricting its use or finding solutions to overcome these obstacles.

Informant 1 left internet banking, then switched to use ATM machine to make money transactions due to difficulty to use internet banking transaction support tools. This action can also happen to other customers. The informant 1 explained "I use ATM machine because it is difficult to use a token device, so for better fund transfer using ATM machine only". This customer behavior is categorized as Low Loyalty.

Limitation of using internet banking is caused by concerns about possible internet banking security risks. Informant 5 explained "I do not want to transfer funds. I just do check balances because there are external factors that can disrupt the hacker attack". Informant 9 explained "the rampant crime allows my personal data known, so I use internet banking to balance check only, to transfer funds I use ATM facility". The characteristics of these customers behavior are categorized Medium Loyalty.

Some informers who experienced slow internet banking connection or disconnection of internet banking tried to find a solution. There are 2 kinds of solutions; the first solution is handling the obstacles independently/alone because of their awareness that the factor came from the device they use, for example when the internet banking connection broke up, the informant restarted by logging-out and re-log in the bank website. The second solution is communicating it to the bank for immediate service improvements. These customer behavior characteristics are categorized as High Loyalty.

"I could not make transactions when the connection was disconnected, then I came to the bank to asked the officer what happened" (informant 3). "when the internet connection broke up, sometimes there was information on the bank's website that the bank system was down again, so I waited for a while, I logout and login again, the internet banking worked" (informant 4). "Delayed transactions sometimes occurred over 9 pm, I waited until the next day and obtained information from the bank website that the transaction has happened, if internet banking connection was slow, I prefer to change my gadget" (informant 6). "The broken access was caused by my gadget; I replaced the old devices with better new devices to access internet banking" (informant 9).

Based on the barriers experienced by informants and the behavior of informants facing the obstacles, there are several factors that lie behind the customer's behavior, they are Knowledge, Risk Perception, and other service Choices.

Customer knowledge is a factor behind the behavior of the customers in facing the obstacles of using internet banking. For example, informant 4 overcome the obstacles experienced by logging-out from the bank's website then re-login to recover. The slow internet banking access is by high traffic of bank's website at certain hours causing it to be slow. Likewise, informant 6 decided to replace his gadget as a solution based on his knowledge that the slow access problem using internet banking is not always caused by the bank but also can be caused by the gadget used by informants who have low ability.

Concerns about the risk of possible security breaches such as malicious hacker attacks on internet banking services prompted Informant 5 and 9 to decide to limit themselves using internet banking feature. The two informants did not use any more funds transfer facilities via internet banking. They only use check balance feature or the account mutation check, they were worried about the dumping of their personal data by malicious hackers.

The influence of other service options such as ATMs, SMS banking, or other internet banking services may encourage customers to prefer to use these other services rather than using internet banking of a bank with problems or obstacles. The goal is to enable customers to make transactions electronically, as experienced by the 1st informant decided to switch to the use of ATMs to make money transactions.

RESULTS AND DISCUSSION

Customer's knowledge is one of the factors that shape their behavior so as to enable customers to find solutions to the constraints faced. However, limited knowledge is also a factor that encourages customers to choose to move to other service options such as ATM. According to Aslam et al (2011), knowledge gap affects low adoption of internet banking. Customers with high loyalty characteristics are characterized by the ability to find solutions supported by adequate knowledge and learning skills, so they stay afloat to use internet banking optimally.

The risk perceived by customers as a possible security disturbance can influence the customer's decision to restrict them in using internet banking, for example, customers use internet banking only to check the balance, not for transfers. According to Agwu (2015) the perceived risk of customers is the risk of losing money due to mistakenly using of internet banking. According to Munusamy et al (2012) the perceived risk of customers can threaten customers leaving internet banking services.

In this study, the perceived risk of informants encouraged them not to leave using internet banking; they only limit the use of the features as the informants understood the benefits to be obtained from internet banking. Financial risk stems from threats to hacking crimes that can be performed by people who have ability to break through internet banking (Aslam et al, 2011). Customers with modest loyalty characteristics are characterized by an attitude that is based on concerns about security threats that they reduce the use of internet banking only for the purposes of checking balances or checking account mutations.

An alternative choice of other services may influence customers choosing to use other services rather than using internet banking with some barriers, such as customers switching to ATMs for transactions because of difficulty in operating token equipment. According to Aslam et al (2011) customers consider the cost compared to the perceived benefits obtained to choose other service alternatives. If internet banking services are perceived to require greater costs such as the difficulty of using internet banking, ATM usage, which is considered easier operation, will be the main consideration of the customer to be able to conduct the transaction. Customers with low loyalty characteristics are characterized as easily influenced by other service options, so they can easily abandon the use of internet banking.

A description of the characteristics of customer are grouped in three categories of High, Medium, Low Loyalty related to the ability of customers in facing the obstacles of internet banking is described in the following table.

Table 1 – Characteristics of Customer Loyalty in Barriers to Internet Banking Adoption

Type of Customer Loyalty	Customer Behavior	Factors behind the Customer Behavior
High	Finding solutions to overcome barriers and use internet banking optimally	Knowledge
Medium	Limiting the use of internet banking only for some features of internet banking	Risk Perception
Low	Leaving internet banking usage and switching to another service	Difficulty in operating internet banking

Implications of Bank Management. Bank as an internet banking provider has an obligation to improve services for their customers. Therefore, the perceived obstacles of customers in using internet banking become important inputs for Bank Management to improve the service that the barriers can be overcome or minimized.

Unreliability of internet banking, if it is caused by problem in the use such as slow or disconnected access, should be immediately communicated to the customer. Difficulty in using about internet banking security disturbance can be pursued by bank management through the correct education program that customer can overcome barrier of using internet banking appropriately. This educational program can be performed through educational videos on bank website, frequently asked via email correspondence or online chat, educational information through brochures, and explanations from customer service and call center.

Bank must have procedures to detect customer's perceived barriers, determine measures to overcome these barriers, and measure how the measures are taken effectively to resolve problems faced by customers in the use of internet banking. The procedure for handling customer barriers has become a tool for bank management to keep improving its services. Bank management should build an excellent security system to make customers trust in using internet banking (Akram and Asghar, 2012). In addition, Bank Management should be able to establish good communication with customers for good response affects customer satisfaction significantly (Doost and Ashrafi, 2014). Similarly, the ability of banks to manage the security of privacy information can also increase public trust (Irabatti, 2013). Bank management must also be able to manage priority issues to improve the quality of customer service (Ma, 2012).

CONCLUSION AND SUGGESTIONS

There are three types of obstacles faced by customers in internet banking usage: difficulty of using internet banking, security disturbance, and unreliable access. The customer's response to these obstacles is manifested into three types of behavior, leaving internet banking categorized as low loyalty, limiting themselves in using internet banking features categorized as medium loyalty, and finding solutions to overcome barriers categorized as high loyalty. The three behaviors are influenced by three factors including customer knowledge, risk perception, and influence of other service choice.

Further research can be carried out in finding out how bank as internet banking provider overcome the obstacles perceived by the customers. Further research with quantitative methods is still possible to determine the significance of knowledge, perceptions of risk, and the influence of other service choices on customer decisions in overcoming barriers using internet banking.

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SUPPLY CHAIN INTEGRATION IN SMALL MEDIUM ENTERPRISES: A SYSTEMATIC LITERATURE REVIEW

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ABSTRACT

Nowadays, Supply Chain Integration is getting known as an element in supply chain management that can achieve the intentions of supply chain. Supply chain management application in Small Medium Enterprises is rarely understood or even never used as an important aspect in running a business. There are only a few researchers who did a research on Supply Chain Integration in SMEs, therefore initiating a research on this aspect has its own challenges. This was caused by many gaps that appear within the research as the dimensions of the research are not suitable with the business criterias. For this article researchers realized the need to perform literature reviews to perceive the development and new discoveries that appeared in earlier researches. Systematic literature review is used as the method of this research so that the review can be explained systematically. Based on the discoveries from this literature review, there are methods or framework that can be used by researchers as well as practitioner to understand the application of Supply Chain Integration. Moreover, the existence of Supply Chain Integration within a business may increase performance, efficiency, customer value added, or even competitive advantages.

KEY WORDS

Supply chain, integration, SMEs, systematic literature review, business.

Small Medium Enterprise (SMEs) practitioners often have to encounter the impact of uncertainty that emerge from their business environment. Existence of the uncertainty within the business environment may cause accumulation in inventory or even loss (Xu et al., 2010). This certainly will lead to bad consequences when the business fail to manage the accumulated inventory and unable to distribute it to perform production process. This may even lead to degression of the business' competitive advantage.

SMEs may overcome this phenomenon in a better way if they are able to get resolutions for the occurring environmental uncertainty issue. Performing integration for stakeholders may help the business. By doing integration, SMEs may get informations on high quality materials at lower price, or even able to predict number of sales for every month with information on customer database. This is the matter that often looked by SMEs in order to sustain from the uncertainty of the business environment and the high rate of competition.

Furthermore, a business' operating cost also act as an affecting aspect in setting the final price. This can be done by applying supply chain within a business. Supply chain may help increase efficiency by intensifying the connection between the business and stakeholders (Ballou, 2004).

This can be done by performing integration within supply chain which can increase stakeholder's collaboration to the business starting from suppliers to consumers. Leuschner et al. (2013) explained that supply chain integration's ranges which can be integrated are consumers, suppliers, internal and external. Presence of integration within supply chain will certainly help SMEs to increase their competitive advantages, not only from the quality aspect, but the connection with the stakeholders can also increase sustainable loyalty and decrease environmental uncertainty which often encountered by SMEs.

In this case, Supply Chain Integration (SCI) is the fundamental aspect for completing supply chain management (SCM) (Forker et al., 2004). SCM in a business is certainly has a role in connecting the flow from upstream to downstream. The connection started from suppliers, consumers, human resources, and all the informations inside the business.

However, this concept mostly applied on larger scale businesses. In SMEs scale, the small scope of business becomes its own challenges for applying this concept. Most SMEs practitioners don't comprehend this concept; therefore utilizing SCM is rarely done in SMEs, including maintaining connections with suppliers or consumers.

In the explanation by Committee on Supply Chain Integration by The National Research Council (Commission on Engineering and Technical System, 2000) which published a book titled *Surviving Chain Integration: Strategies for Small Manufacturers*, mentioned that SMEs need to be aware of their own circumstances to find if there is any gap that occurred in achieving supply chain integration with their own capability, so that SMEs can systematically know what they have to do. In this statement, SMEs need to comprehend that SCI is an important aspect in running their business. This caused by nothing else but the business' objectives which are cost efficiency, quality, and loyalty.

Many researchers has conduct some researches about Supply Chain Integration to deepened the aspects that may affect the course of a business in order to integrate all supply chain. Researches on Supply Chain Integration has been quite challenging for the researchers because most SMEs practitioners have no insight on the concept of supply chain. SCI research focusing on larger corporation is more common than SMEs (Sastry, 1999).

In this research, researchers will use analytical approach to discover researches which have been done on SCI in SMEs. This analysis is done to figure out how to apply the theory that been used on SCI. Fundamentally, the purpose of this research is to identify SCI in SMEs with systematic literature review, and offer some suggestion or referrals for the future related researches. Systematic literature review method will provide informations which obtained from earlier researches, therefore researchers may give suggestions based on theory and empirical research.

Further, this entire article will discuss on the concept of Supply Chain Integration itself, the explanation on research methodology, and the result of systematic literature review, identifying obtained information and usage suggestions based on theory perspective.

LITERATURE REVIEW

Basically, supply chain management has a concept wherein supply chain process, production and information flow need to be integrated. This also discussed in the part about the objectives of supply chain management to coordinate every network in supply chain. Narasimhan & Jarayan (1998) explained that supply chain integration is defined as an expansion from every activity of supply chain member, supplier and customer to be simultaneously integrated.

Commission on Engineering and Technical System (2000) defined supply chain integration as a consumers and suppliers associations which use management techniques as well as optimizing performance. This shows that supply chain integration is done to increase performance and in executing it cooperation between all of the network within supply chain is needed.

The explanation on the dimentions of supply chain integration previously divided in two dimentions, internal and external integration, this explained by Narasimhan & Kim (2002) and Zailani & Rajagopal (2005). Based on newest research, there are three dimentions on supply chain integration explained by Flynn et al. (2010) and Wong et al. (2011) which are internal integration, supplier integration, and customer integration. This research will analyze three dimentions of supply chain integration.

Internal integration, as explained by Céspedes (1996), is a collaborative system of functions inside manufacture to achieve customer satisfaction. Therefore, in internal integration, an effort to collaborate in production process will achieve customer satisfaction. Kahn & Mentzer (1996) and Wong et al. (2007) explained that internal integration is a collaboration of all the organizational function by breaking all the boundaries. The presence of internal integration may cause the whole organization work together without having to

categorizing each and every task of the business function. Therefore, the information flow may spread faster without any boundaries between each function.

Customer integration explained by Bowersox et al. (2000) and Stank et al. (2001) which mentioned that by passing external integration, interorganization coordination in supply chain activities for developing main competence may appear. Fisher et al. (1994) added that to achieve customer integration, collaboration and information sharing between the company and customer will be needed in order for supply chain visibility to be better. This explanation defines that the presence of customer integration may allow company to discover customer's demand and needs. Therefore, it will be easier for the company to specify the strategy for the next target market. Swing et al. (2007) explained that applying customer integration is done to understand market expectation and the company will be able to react quickly and accurately. If the company is able to implement customer integration better, the business will develop more because it already has the ability to adapt to market's demand.

Supplier integration explained by Lai et al. (2010 and Ragatz et al (2002). They mentioned that by passing external integration, collaboration between manufacturer and supplier within all the production activity is needed. This is required in order to perform its production; the company will not be obstructed by the lack of materials or by the incompatibility of the materials or even can be more efficient to perform production. External integration as well as customer and supplier integration is focusing in building good connection toward customers and suppliers.

METHODS OF RESEARCH

This research will performed using systematic literature review. This method will help to identify literature reviews. Systematic literature review was adopted from Tranfield et al. (2003) which in the determination on inclusion and exclusion criteria in this research will not match with the recommendation. This methodology will help, researcher to find a comprehensive coverage literature. There are five phases in this approach by Tranfield et al. (2003), which is planning, searching, screening, extraction and synthesis, including reporting.

Planning. In this phase, the authors tried to define the review question. The Review question within this research is "How is the application of supply chain integration in SMEs?". The answer of this question will facilitate content and range of related theory and practice. The next step is to perform identification of database research and search string.

Searching. The search for articles related to the research question is performed through Scopus. Articles selection was based on the article that gives good presentation on supply chain integration, empirical research, and all research was done on SMEs. Keywords that are used in searching are "supply chain integration" and "SMEs". Researcher using those keywords to answer the review question.

Screening. The result of the search strings of this research were showed 43 articles listed with abstract. Researchers reviewed this search results using the research question i.e. supply chain integration in SMEs, of course towards inclusion as well as exclusion criteria which have been determined to simplify the article reviews from the search results. Inclusions criteria within this research are:

- Articles in english language;
- No duplication;
- Abstract contained explanation that matched the research question;
- Articles show empirical research method.

Whereas, exclusion criteria within this research are:

- Articles not in english language;
- Not in accordance to research question;
- Have duplications.

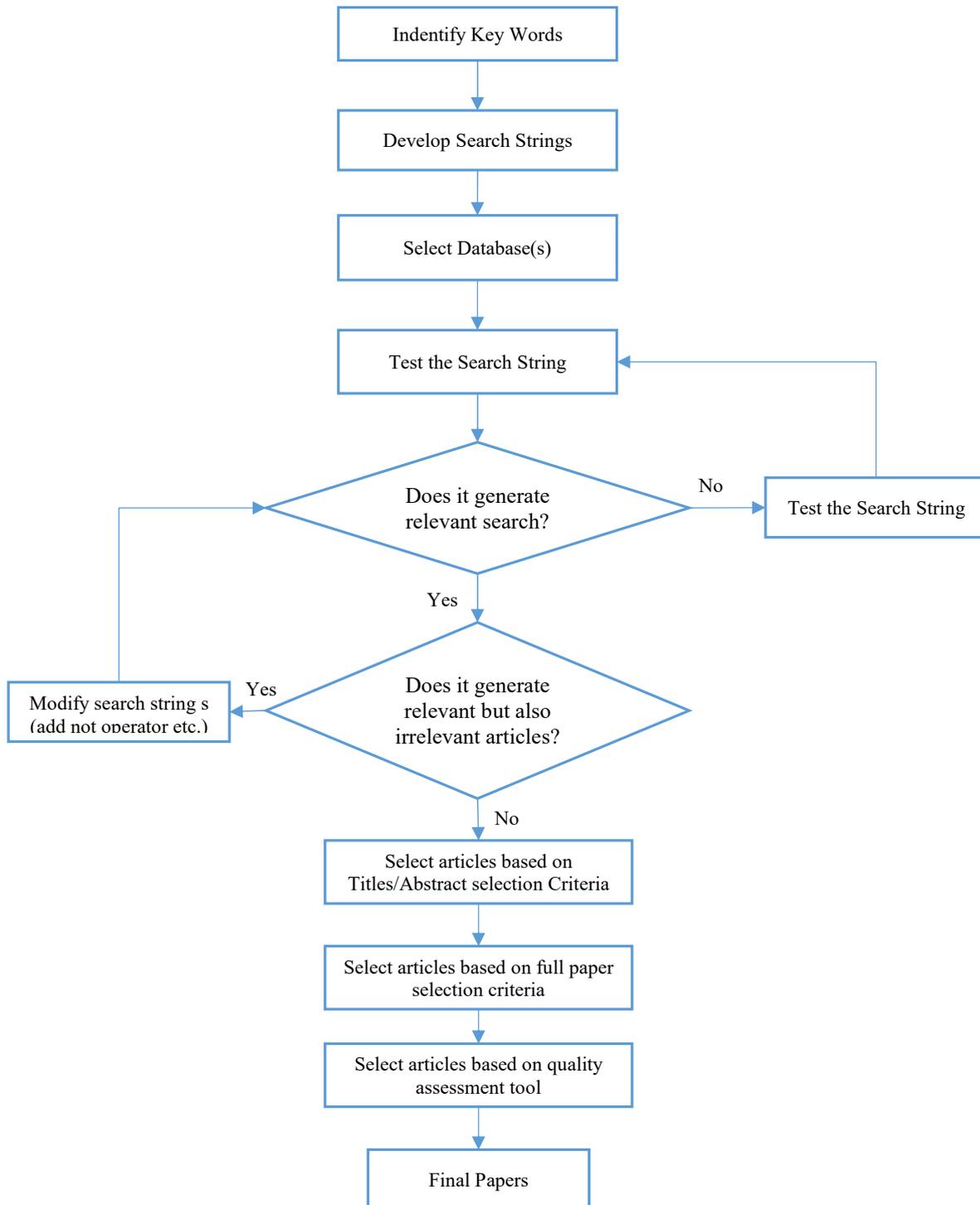


Figure 1 – Literature search process (Source: Chandorkar, 2013)

Extraction. Based on mentioned criteria, researchers found 7 relevant articles. This shows that research on this aspect is still rarely done. Subsequently, structural dissection are done to these 7 articles to get deeper reviews by using Excel as database of inclusion articles. Excel database is beneficial for structural dissection and reviews towards the articles using column section in Excel database (Trandfield et al., 2003). On this database, there are covering aspects which in each articles will be performed grouping based on public informations in a publication. These public informations are titles, writers, publishers, and year of publication. On this information, researchers may discover in what year research in this topic started to be done and in what year this research becomes substantial. Further,

main elements in this research such as purpose of the research, definition of the research, keywords, theory used within the research, aspects, and analyzed unit will be performed. The analysis unit act as focal point of this research, therefore the focus of this research is no other than SMEs.

RESULTS OF STUDY

In this section, the discoveries from systematic literature reviews will be explained following the performed identification based on group criteria within Excel database.

Classification based on Year and Publication. In this section, researchers will discover the amount of research has been done each year and which publication that published researches which are suitable to the research question.

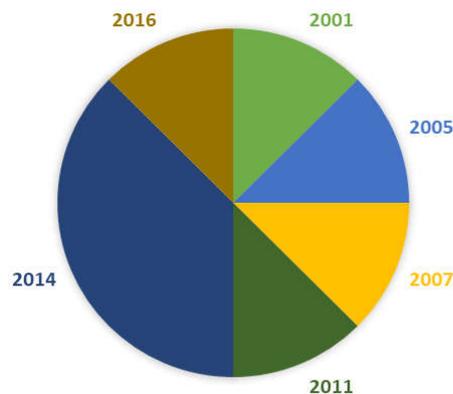


Figure 2 – Years of Articles Publication

Based on the existence of research in every year, researchers discovered that research on supply chain integration and the SMEs has performed since 2001. This shows that there are a lot of researchers who has realized the need to apply supply chain integration in SMEs. From the discovered 7 articles, researchers found that there is 1 published article in each year of 2001, 2005, 2007, 2011 and 2016. While in 2014 there are 3 published articles. This indicates that 2014 has the most published articles. Moreover, the publishers of these articles are known as Production Planning Control, International Journal of Production Research, International Journal of Supply Chain Management, International Journal of Business Science and Applied Management, The 11th World Multi Conference on Systematics, Cybernetics and Informatics, Jointly with the 13th International Conference on Information Systems Analysis and Synthesis, ISAS 2017, Integrated Supply Chain Management, dan Springer Science Business-Media Dordrecht. On the published articles from Production Planning Control, researchers discovered that there are 2 articles that suit the research question.

Classification Based on Theme. Based on performed systematic literature review, researchers discovered 2 themes in the research. First, is the application of SCI in SMEs. Second, is the influence of SCI application in SMEs. The articles using the first theme explained how SCI can be applied on field, while the articles using the second theme are explaining to discover the application of SCI in SMEs.

The application of SCI in SMEs. There are 3 discovered articles included in this first theme. The article from Palomero & Chalmeta (2012) by title *A guide for Supply Chain Integration in SMEs* explained that within the application of SCI, mainly in SMEs, there are a substantial amount of methods that are incompatible to be performed. This may lead researchers in the research to discover which methods can be the most compatible with the application of SCI in SMEs. Palomero & Chalmeta (2012) performed the research by using case study method toward 30 SMEs. The use of case study method may help researchers to

surpass challenges and gaps that exist within the attempt to discover the proper methods in the achievement of applying SCI in SMEs. For the researchers of this article, this research needed to be done since one of the issues on SCI application is when the adopted methodologies are incompatible with the characteristic of SMEs which can provide some guides for SCI application to decrease complexity levels in it (Humphreys et al., 2001).

Based on known theories, there are some methodologies that can be used in SCM such as Supply Chain Operation Reference (SCOR) model, Analytic Hierarchy Process (AHP), and Key Performance Indicators (KPIs). However, to the researchers, these methodologies are incompatible with the characteristic of SMEs themselves. In this research, researchers are using SCI-IRIS methodology. SCI-IRIS or Integration and Re-engineering is a methodology formulated by IRIS group in order to perform research towards SCI in SMEs in 2005 (Palomero & Chalmeta, 2012). SCI-IRIS method performed 9 phases in the research which are: SCI planning, analysis of the business, analysis of the supply chain, designing the balance scorecard of the supply chain, process design, organization and management of human resources, construction of the information system, implementation and continuous improvement (Palomero & Chalmeta, 2012).

The research performed by Palomero & Chalmeta (2012) discovered that using SCI-IRIS method; the discoveries that can be useful for SMEs management are occurring. This gives solution for the organization's classified issues during integration process. Moreover, one of the research findings shows that KPI can be used since it might be useful to define the responsibility areas that have to be done by SMEs. In this article, researchers could find out that there are very compatible methodologies to discover SCI application in SMEs. According to Palomero & Chalmeta (2012), these applied methodologies can be developed with more focus towards the procedures on solving the emerging and complicating issues faced by SMEs to gain access towards SCI application.

The existence of research result which opens the insight that there are approaches that may simplify the SMEs application of SCI will be very helpful to increase the relationship with the stakeholder. Various methods that have been used earlier can only effective if applied in large scale corporations. With these new findings, SMEs can also use these methods by eliminating gaps. These gaps are commonly occurring when the method used is incompatible with the business criteria.

Different from the research performed by Palomero & Chalmeta (2012), Campbell & Sankaran (2007) tend to explain the inductive framework to achieve SCI since there are participations from suppliers or resellers in SMEs that also involved in supply chain. The title of Campbell & Sankaran (2007) research is *An Inductive Framework for Enhancing Supply Chain Integration*. The existence of this framework intends for SMEs supplier or reseller to be able to applied SCI. Moreover, SMEs may also adapt to fit their business partners according to their business situation. This research done by Campbell & Sankaran (2007) was performed with in-depth case study. This method performed to understand current situation, one of the procedure is by doing in-depth interview to gain more detail comprehension from current situation. In this research, Campbell & Sankaran (2007) saw that development of the framework can be done by using a framework known as SCIEF (SCI Enhance Framework). Utilization of SCIEF in this research is performed because the framework deals with every integration' aspects in more enhanced way without having to use liker type or empirical questionnaire that usually used in preceding frameworks. In this article, researchers are able to announce that comprehending SCI application in SMEs can be done by using SCIEF in order to gain further informations.

The Influence of SCI application in SMEs. This theme explained that the existence of particular variable may increase integration on supply chain. SCI application may even increase a variable on a business. One of the researches performed under this theme is performed by Caskey et al. (2001) by title *Enabling SMEs to take full advantage of e-business*. In this research, Caske et al. (2001) discovered that e-business has developed enough to influence the relationship with business partners on supply chain. This research is also explain in details regarding the challenges faced by SMEs when going to deal with e-business current development to achieve supply chain integration. One of the examples can

be seen in the rapid growth of e-commerce and the support of internet that will be examined on its influence.

Caskey et al. (2001) performed this research by case study method using LOGSME as model for the analysis which will be done. The use of LOGSME in this research itself is intended to give solutions regarding the development of technology which lead to the existence of e-business in SMEs. The result of this research shows that the existence of e-business may increase supply chain integration which caused by cost reduction and the increase of reliability. However, this needs intense coordination between the partners and SMEs. For example, intense coordination can be done by doing periodic information exchange with the business partners i.e. manufacturers, distributors, and retailers (Caskey et al., 2001). Moreover, this research discovered that the food industry currently has the biggest challenges caused by the development of e-business. This research also discovered that currently retailers have begun to comprehend the power of the combination of e-business and supply chain. Furthermore, this research claimed that SMEs are unable to run their own e-business; therefore SMEs will need collaboration from every stakeholder in supply chain.

Other researchers that performed similar research are investigating the influence of supply chain integration on operational performance of a business. This research is performed by Annan et al. (2016) by title *Antecedents and Consequences of Supply Chain Integration: Empirical Evidence from a Developing Economy*. This research performed by using survey method and analyzed using Confirmatory Factor Analysis (CFA). Result of this research referred that the influence of SCI application will shows in the increasing on customer value and the operational efficiency of the business. Through the result of this research, Annan et al. (2016) pointed that better application of SCI within a business, particularly SMEs, will minimized operational cost and maximizing the formed value towards the customers. This discovery is relevant with the explanation from Danese & Romano (2011) who claimed that efficiency may occur when the company is able to performed inbound and outbound integration on its own supply chain.

There is other research which also analyzed the influence of SCI towards business performance of SMEs. This research is performed by Ozdemir et al. (2014), by title *Determining Critical Success Factors Related to the Effect of Supply Chain Integration and Competition Capabilities on Business Performance*. This research not only considering SCI on one side, the researchers are also considering competition capabilities (CC) aspect in order to figure out the influence towards business performance. This research is performed using survey method and analyzed using Structural Equation Model (SEM). Research from Ozdemir et al. (2014) is inspired by the competition occurring not only between businesses but also between supply chains. The enhancement of competition capabilities and integration of every supply chain member becoming more important aspects in achieving business excellence (Ozdemir & Aslan, 2011). This research discovered that the application of SCI and CC in a business may enhance business performance. This finding indicates that application of SCI within a business may increase business performance. This research even discovered two critical factors that may influenced business performance, which are reliability and lowest price.

Furthermore, other research which discussed the influence of SCI towards performance is Vivek et al. (2011) by title *Supplier partnerships, information quality, supply chain flexibility, supply chain integration dan operational performance: the Indian story*. This research performed with survey method and analyzed using Confirmatory Factor Analysis (CFA). Research performed by Vivek et al. (2011) is inspired by the substantial numbers of researchers who needed deep understanding regarding the critical issues of supply chain. Deep comprehension towards supply chain enables the company to achieve efficiency. Result of the research itself, which involving several elements of supply chain, shows on the supply chain flexibility element that in order to enhance the quality of informations within the supply chain, strong partnership between the company and suppliers need to be built. This shows that the strength of partnership can be built when supply chain integration applied on the business. This also mentioned in the result of a research performed by Zailani and Rajagopal (2005) which shows that a company's competitive advantage can be achieved

when the company is able to strengthen the relationship with the suppliers within its internal process, this occurs because SCI is holding the most important role in the business. The application of SCI within a business will give its own advantages as the internal and external aspects of the business can be integrated well.

Based on overall research under this theme, the influence of SCI towards business performance can be comprehended. The application of SCI may even disclose the insight for SMEs as they can discover the advantages of applying SCI. For example, some advantages are cost efficiency, adding value towards customer, or even competitive advantage. Even though the performed researches have their own limitations, they can help build new perspectives for future research as well as SMEs practitioners.

Classification based on Research Methods. Based on mentioned researches, the first theme may conclude as using qualitative method. This method performed by the researchers to gain deep comprehension towards SMEs criterias on applying SCI. Moreover, researches under the first theme are using case study method towards SMEs. Contrasting with the first theme, the majority of researches under the second theme are done using quantitative methods by performing surveys. Surveys are performed to collect a substantial amount of data which allows researchers to be aware of SMEs current behavior while applying SCI which may influence other variable of the business scope. The overall researches are performed with empirical approaches.

CONCLUSION

This research is performed using systematic literature review with the intention of answering the research question "How is the application of supply chain integration in SMEs?". Corresponding articles that matched the inclusion criterias are collected and assured as compatible to answer the research question. There are 7 articles collected after initiating search on Scopus. This research discovers that there are a substantial amount of researchers that already performed some research to comprehend the application of SCI in SMEs since 2001, and nowadays the researches are continue to grow. Various aspects of supply chain had also been researched.

There are two types of research methods that found during the review on this articles, which are case study and survey. This shows that the overall researches are empirical research, therefore researchers may directly comprehend the current situation of SMEs. In this research there are discoveries that may facilitate future researchers and practitioners.

First, for futur empirical researches, the application of SCI in SMEs may conduct by using SCI-IRIS method. SCI IRIS method gives detail phases that are need to be done. Palomero & Chalmeta (2012) discovered that the usage of SCI-IRIS method can solve deepest internal issues of SMEs. Future researchers may use this method in order to solve emerging issues of SMEs in the relation towards the stakeholders of their supply chain. For practitioners, the usage of SCI-IRIS method may provide guidance for SMEs.

Moreover, the inductive framework mentioned by Campbell & Sankaran (2007) has given a framework which compatible with the criteria of SMEs. This will facilitate future researchers in performing researches to comprehend more on the application of SCI. Furthermore, earlier research discoveries may be updated to adjust with current situation of SMEs as the framework may be more suitable to new issues and situation faced by SMEs.

Second, based on the discoveries, there are researchers who already performed researches on the influence of SCI towards SMEs performance. There are several elements in supply chain and other variables that are used to comprehend the influence of SCI application towards SMEs performance. Overall, researchers have assumed the application of SCI may increase SMEs performance. However, those researches still having some limitations which are the range of researches that only reach certain countries or the researches are not specifying towards SMEs or their types of businesses. For future researchers, performing researches on the influence of SCI towards business performance may be done with more specific business criteria or expanded to wider range of research.

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FORECASTING OF DEMAND QUANTITY OF CRYSTAL SUGAR IN INDONESIA

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ABSTRACT

Domestic sugar production increasingly unable to meet the needs of the community so that the shortage must be covered with imported sugar has continued to increase since 1990. Period 1991-2001, the sugar industry in Indonesia began to face a variety of significant problems. One indicator of Indonesia's sugar industry problem is the increasing trend of imports. The purpose of this research is to analyze the factors that influence the import of sugar crystal in Indonesia and to analyze the forecasting about Indonesian sugar import in the future. The projected amount of sugar imports in Indonesia in the coming years will continue to increase the import of crystal sugar in the next seven years by Indonesia reaching 425 thousand tons.

KEY WORDS

World sugar price, exchange rate, crystal sugar, demand.

Sugar is one of the commodities that play an important role in the agricultural sector, especially the plantation sub-sector in Indonesia. Sugar is also one of the basic needs of society and a relatively cheap source of calories (Agriculture Research and Development Berau, 2005). The position of sugar as a main sweetener can not be replaced by other materials used by both household and food and beverage industries.

Many factors affect the condition of the decline of sugar industry in Indonesia. In addition to reducing efficiency at the farm and sugar factory level, various factors such as government policy also significantly influence the decline of the sugar industry in Indonesia (Susila, 2005). The existence of sugar import policy raises the government's concern about high sugar imports, which is seen as a threat to food self-sufficiency. Food independence is important for a large populated developing country with relatively low purchasing power such as Indonesia. The stability of sugar prices in the domestic market at a level that can benefit the producers (sugar industry) and feasible for consumers, is an important thing to ensure the viability of the sugar industry and encourage the increase of national sugar production. Sugar needs can be fulfilled as one of the basic ingredients of society (Churmen, 2001).

Domestic sugar production increasingly unable to meet the needs of the community so that the shortage must be covered imported sugar continues to increase from year to year since 1990. Period of 1991-2001, the Indonesian sugar industry is the tendency of increasing import volume. Limiting sugar imports needs to be done to maintain the continuity of the sugar industry while maintaining affordable property by the community.

Many factors are causing the increasing import of sugar, especially the inability of the domestic sugar industry to meet the increasing demand of the community's sugar due to the increase of population and the increasing of income per capita. Efforts to achieve self-sufficiency in sugar have been carried out by governments through various policies. The objectives of this research are (1) to analyze the factors influencing the demand of import sugar in Indonesia, (2) to analyze the forecasting of import sugar in Indonesia in the future. So it is expected to know the factors that affect the demand for sugar in Indonesia and the forecasting of Indonesian commodity sugar in the future and the government can be more appropriate in making policy.

METHODS OF RESEARCH

The type and source of this research data is secondary data obtained from related institutions. Secondary data is data obtained from literature review and related institutions of research. Secondary data required are previous research results relevant to complement this research. The data were obtained by documentation and information retrieval from several related agencies, such as agriculture service, Central Bureau of Statistics (BPS), Indonesian Sugar Council, site of directorate general of plantation, (Ditjetben) and FAO website, USDA site, Word Bank website as well as various literature that support the preparation of this research. The type of data used is time series data from 1985-2013.

Quantitative analysis in this research use regression method with crystal sugar import equation model. After analyzing the equation model that will be used it will be followed by forecasting analysis. Forecasting method used in this study is a quantitative method that uses the method of forecasting regression model. This study uses a simple regression model to present the import activity of Crystal Crystals as its indendent variable, while other variables such as world sugar price, exchange rate, total demand of sugar crystal and the amount of imports of previous year become independent variable. The equation of simple regression model can be written as follows:

$$Mg = \alpha + \alpha_1 Pw + \alpha_2 ER + \alpha_3 Qd + \alpha_4 Mgt_{-1}$$

Forecasting method done using regression model in this research with the help of SAS 9.1.3 analysis tool. Forecasting method using regression model has several stages of analysis that must be done, according to (Sinaga and Sitepu, 2006) following the steps that must be done starting from: Model Specifications; Model Estimation; Model Simulation; Forecast of the explanatory values of variables; Forecast of dependent value 5 or endogenous.

RESULTS AND DISCUSSION

Stage analysis forecasting use the regression model of spesification model, estimation model, simulation model, forecasting values explanatory variable and predict value dependent or endogenous. Forecasting directly be carried out from bentik who has appropriate (Sinaga and Sitepu, 2006). The one conducted prior to stage specification model is to identify to menentukan do data series used have stationary, namely if the data time series look fickle it around on a level that remains. Data time series not stationary so will look increasing or decreasing respect to time .if the data series nonstasionermaka can be converted or become stationary with make fine distinctions, Namely data series native replaced in series of distinction.

The series data is made differentiation because the data initially indicates a stationary condition. Absolute stationary conditions are met for predictable forecasting. Results of stationary related variables studied ie imports. In the stationary test used is known from no 3 observations that exceed the standard limits of errors specified or 5 percent of the overall observations made.

The next stage is a model specification. Model specifications are the determining stages of the model used. In a study aimed at forecasting the importation of crystal sugar in Indonesia for the next seven years, the equation with simple regression model of sugar crystal import was prepared. The economic equation can be written $Mg = f(Pw, ER, Qd, Mgt_{-1})$, whereas in the stochastic model can be written as follows:

$$Mg = \alpha + \alpha_1 Pw + \alpha_2 ER + \alpha_3 Qd + \alpha_4 Mgt_{-1}$$

Where: Mg = Sugar crystal imported; Pw = world sugar price; Er = exchange rate; Qd = Crystals sugar demand of the previous year.

The next step is an estimation of the model performed with the help of SAS 9.1.3 software analysis tool by performing simple OLS regression analysis. After the estimation of

the model is known the estimation and statistical test of the model used. Estimated model estimation results as follows:

$$Mg = -18.6771 + 1.392984Pw - 8.63625ER + 3.180902Qd + 0.125407Mgt_{-1}$$

Other estimation result is statistical test which consist of value of R^2 , F test, and t test. The value of R^2 from the above equation model is 0,66170, it shows that the sugar crystal equation, the imported sugar of the previous year was 66.17%. Based on the results of testing the import model of Crystals conducted, it can be seen that the model used has been adequate. It is known from the probability value F arithmetic an F table so this indicates reject H_0 . Based on these results it can be concluded that all exogenous variables simultaneously affect the equation of sugar crystal imports. The value of t test shows all variables below 0.05 indicating that the variables in the equation significantly affect the import of sugar crystals.

The step of regression forecasting is model simulation; this is to test the accuracy of the model. Validation of this model aims to know the model used is good and appropriate to do the simulation or meramalkan value of the dependent variable. This stage will generate the criteria of model accuracy values. The values to be considered at this stage are mean error, mean% error, theil forecast error statistic, RMS% error, dist component and covar. The mean error value is -, 000003, this value indicates the bias is entirely decreased in the simulation value, in other words the average actual value underestimate the import model of crystal sugar by 0.0003 tons. The mean% error for this equation is 0,5151, this value shows the average error rate to the crystal sugar import equation, in other words the average actual overestimate value is 0,5152%.

The theile forecast error statistic value seen from the value of UI and U, on this equation is 0,0627 and 0,0314. This statistic is close to the ideal value of zero, indicating that the model simulation follows the actual data well. The value of RMS% error of 7, 3976%, this value indicates that the equation model of crystal sugar import overestimate, in other words equation model follow the actual data with error rate of 7.39%. Other values to be considered are the dist values and covars, the magnitude of dist and covar values of 1.00 and 0.90. The ideal disk and covar value is close to 1. Based on the available values it can be concluded that the parameter bias can be said to be not a serious problem and overall the model can be said to be good so the equation can be used as a forecast.

The next forecasting stage is independent and dependent varabel forecasting, this forecast is for the next 7 years from 2014 to 2020. The following forecasting results will be explained in the table below.

Table 1 – The results of forecasting logs of regression models

Observation	Mg	Pw	ER	Qd	Mgp_1
2014	5,63049	3,31928	0,17105	6,45204	5,32255
2015	5,60800	3,31336	0,17666	6,46144	5,47231
2016	5,60291	3,32610	0,18121	6,46847	5,56983
2017	5,60558	3,34562	0,18498	6,47397	5,63591
2018	5,61171	3,36519	0,18818	6,47846	5,68306
2019	5,61937	3,38224	0,19097	6,48231	5,71882
2020	5,62772	3,39666	0,19344	6,48574	5,74773

The estimate forecasting result of the above regression model is still in log form, so it must be returned or diantilogkan to know the actual number. Here the result of forecasting regression model setelah diantilogkan so that shows the value of numbers in the initial or real form in the table 2.

Based on the result of forecasting analysis of regression model above can be knowed value of import crystal sugar in Indonesia in the future continue to increase although not in amount too big. This is because the sugar is a sugar sugar consumed by the community. In the sugar demand variable which is certainly influenced by the population and income does not necessarily change the amount of sugar demanded by the community. Increased imports

of sugar crystals that are not too much may be due to decreased consumption or decreased individually these days.

Table 2 – Estimated Forecasting Results Antilog Regression Model

Observation	Mg	Pw	ER	Qd	Mgp_1
2014	427.061,09	2.085,84	1,48	2.831.652,79	201.159,97
2015	405.508,54	2.057,60	1,50	2.893.610,02	296.694,84
2016	400.783,65	2.118,85	1,52	2.940.830,54	371.389,82
2017	403.255,22	2.216,26	1,53	2.978.310,69	432.424,21
2018	408.987,47	2.318,41	1,54	3.009.261,99	482.014,39
2019	416.265,10	2.411,24	1,55	3.036.057,55	523.383,47
2020	424.345,89	2.492,64	1,56	3.060.130,87	559.409,71

It can be seen from the data collected by the national socio-economic survey institute shows that the decreasing condition in 2009 to 2013 are 79,4 Kg, 76,9 Kg, and 73,8 Kg, 64,7 Kg, 66,4 Kg respectively overall consumption of sugar crystals decreased by 4,08%. Increased demand for sugar is due to an increase in population. Imports of other sugars that show a very large increase in amounts are refined sugar. This is because the number of food and beverage industry in Indonesia continues to increase.

CONCLUSION

Factors affecting demand for import crystal sugar in Indonesia are world sugar price, exchange rate, and crystal sugar demand of previous year

The value of imports crystal sugar in Indonesia in the future continues to increase although not in an amount too large. This is because crystals sugar are the sugar consumed by the community. Increased demand for sugar is due to an increase in population. Imports of other sugars that show a very large increase in amounts are refined sugar. This is because the number of food and beverage industry in Indonesia continues to increase.

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THE EFFECT OF BRAND IMAGE AND PRODUCT ON CUSTOMER SATISFACTION AND WILLINGNESS TO PAY AT COFFEE BEAN SURABAYA

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ABSTRACT

The aim of research is to determine factors influencing willingness to pay on Coffee Bean's customers. This research used structural equation modeling with WarpPLS 5.0 software as the analysis tool. Before the analysis of hypothesis testing, outer model and inner model testing was firstly conducted. Outer model testing examined the correlation between constructs with latent variables of the research including discriminate validity, composite reliability, and average variance extracted. The data collection used convenience sampling method by randomly choosing all customers that purchase in Coffee Bean at Pakuwon Supermall Surabaya. The results showed that the proposed hypotheses were all accepted except one hypothesis on the correlation between the products and the willingness to pay in which had no significant correlation.

KEY WORDS

Brand image, product, customer satisfaction, willingness to pay.

Coming to the year of 2016, the ASEAN Economic Community (AEC) has been running even though only for one year. The ASEAN Community Economic program (AEC) applies the free trade system. Indonesia and all ASEAN members including Malaysia, Thailand and Vietnam have agreed on the agreement of ASEAN Economic Community (AEC).

By the enactment of the ASEAN Economic Community (AEC), investment, skilled labor, goods and services can be freely traded without any tariff or non-tariff barriers. As the result, the competition level among ASEAN countries will be tougher. By the enactment of the ASEAN Economic Community (MEA) with the principle of free trade, the ASEAN countries must improve the quality of their domestic products in order to compete with other ASEAN countries including Indonesia. If it is neglected, then other countries' products will invade Indonesian domestic market. A lot of products from other countries worryingly threaten the domestic industry which will eventually increase the trade balance deficit.

One of the industries in Indonesia that experiences a fairly competitive competition is the food and beverage industry. In Indonesia, the food and beverage industry is a café. The existence of ASEAN Economic Community (MEA) cafes in Indonesia will increase the number of its competitors such as franchise cafes from other countries that will enter to Indonesia. Therefore, Indonesian cafes must improve in order to face the increasing competition. To overcome this problem, most Indonesian cafes have anticipated it by improving product and service quality. One of them is applying halal and healthy certificates on all types of food and beverages.

In addition to those two, according to Neupane (2015), brand image is a symbol in the mind of every person in distinguishing a product with other products. Brand image is a form of negotiation on product, package, promotion, and advertisement. Based on customer perspective, brand image is the guarantor of reliability and equity of a consumer product. The next concerning factor is customer satisfaction. Customer satisfaction is the realization of the response to products and services, and the results about the characteristics of a product or service. According to Shahrudi and Naimi (2014) satisfaction is mostly described as a customer attitude about the provider of products or services.

Many previous studies have shown a direct correlation that product superiority has an effect on customer satisfaction. According to Haverila and Fehr (2016), customer satisfaction

is a more important aspect for companies that produce products than for service-based companies. By having brand image and customer satisfaction, the customer is willing to pay for the product. Willingness to pay is one of the important things for the companies because willingness to pay is a challenge for them. When a consumer is willing to buy, the projected profit the company desires can be achieved (Demirgünescedil, 2015).

One of the cafe industries in Indonesia is Starbucks, a coffee shop network from the United States which is based in Seattle, Washington. Starbucks is the world's largest coffee shop with 15,012 outlets in 44 countries. Starbucks sells coffee, espresso-based hot drinks, other hot and cold drinks, snacks, and cups and coffee beans. Starbucks Coffee was first opened in 1971 in Seattle by Jerry Baldwin, Zev Siegle, and Gordon Bowker. The first Starbucks cafés outside of Seattle were in Vancouver and Chicago in 1987 and the first branch outside of North America was located in Tokyo that was opened in 1996.

Excelso is one of the cafes in Indonesia other than Starbucks. Coming from the word "So Excellent" turning into "Excelso", this brand is one of the core players in the cafe industry in the vibrant increase of local and international cafes. Excelso is a subsidiary of PT. Kapal Api, the largest coffee bean producer in Indonesia. Since the opening of the first outlet, Excelso has owned 126 outlets up to now that spread across 16 major cities in Indonesia. In addition to Starbucks and Excelso, there is The Coffee Bean & Tea Leaf which is founded in 1963. The Coffee Bean & Tea Leaf serves over 100 million coffee and tea drinks annually all over the world. Providing the highest quality of coffee and tea for over forty years, The Coffee Bean & Tea Leaf is currently growing both domestically and internationally and has 400 outlets and more all over California, Arizona, Nevada, Hawaii, Singapore, Malaysia, Korea, Brunei, Indonesia, UAE, Israel, Australia, China, Kuwait, Egypt, Qatar and the Philippines. The Coffee Bean & Tea Leaf has come to Indonesia since 2001 and is managed by PT. Trans Coffee, a group of Trans Corp since 2006. Trans Corp is Indonesia's largest conglomerate company in their growth and success in various consumer sectors including media, entertainment, fashion, retail, food and beverages.

THEORETICAL FRAMEWORK

Brand Image is a strategic need that helps companies to create more value to customers and also to develop sustainable competitive advantage. A successful brand will increase consumer trust in intangible products and services. Customers will be better in visualizing and identifying their services (Shahroudi and Naimi, 2014).

Neupane's previous research (2015) explained that brand image is a group of mental associations in the customer's perception to increase the value of a product or service. Brand image is also an intangible and conditional asset for a company that is capable in generating company profitability and compromising functional and emotional value. Success category of a company's brand image means capable to generate customer awareness about a brand and optimize company profitability. Brand image can generate values in terms of helping consumers to get information about a company's products or services, get recommendations for buying, differentiate brands among competitors and give positive feelings.

According to Kotler and Keller, (2012) product superiority can be defined as the characteristic differentiation that is found between similar products leading to one product that is considered to have higher value and quality to the customer and or consumer. However, product superiority has different benefits during the service. Therefore, the final product is also a part of customer satisfaction assessment. Services and products are interrelated aspects. Service part includes the beginning and the ending of a purchase plan and covers a number of different phases. Meanwhile, the product is the final part of the relationship with the customer. Each product is interrelated hierarchically with other products. This product hierarchy starts from the basic needs up to certain items that can satisfy those needs.

Customer Satisfaction has been defined in various ways but conceptually, customer satisfaction is the result of the customer's perception of the value in the transaction or the relationship in which the value of the service quality perception is relative to the price and cost of customer acquisition. (Jahanshahi, et al., 2011). Customer satisfaction refers to the

fulfillment of consumer needs, expectations, or pleasure that comes from the satisfaction. In the marketing literature, customer satisfaction is often defined in terms of temporary short-term transactions while looking at the importance of overall satisfaction as a long-term process that affects consumer behavior. Operationally, the idea of satisfaction in this research refers to the overall customer satisfaction that comes from previous customer experience in brand consumption.

Customer Satisfaction can also be interpreted as the realization of the response to products and services, as well as the results about the characteristics of goods and services. In fact, customer satisfaction often occurs in customer experience on purchasing and consuming a product. Therefore, customer satisfaction will be measured through customer's satisfaction about the service. Two factors affecting the satisfaction are experience and expectation of service. Practical satisfaction is similar to attitude, so it can evaluate as a collection of satisfaction causes and various features of goods or services (Shahrudi and Naimi, 2014).

Willingness to pay is the willingness of individuals to pay for the goods or services they want. The number of people who are willing to pay depends on the economic value experienced by the consumers on the benefits of the goods. If a person believes that there is no alternative offer, the highest amount of money he/ she wants to pay equals to the quality of the goods and is the ordering price. If a person sees an alternative offer with an economic value under the utility, the highest price he/ she will receive equals to the economic value of the product and is the maximum price (Tully and Winer, 2014).

Willingness to pay is one of the important things for the company because willingness to pay is a challenge for them. By having willingness to pay, the projected profit that is desired by the company can be achieved. Consumer's purchasing intention is based on the perceived value of the product and consumer's willingness to pay for higher prices; loyalty paybacks are obtained when the perceived value is greater. Generally, willingness to pay (WTP) is willingness to pay some money to the consumers to get goods or services. According to Campbell et al, 2014, willingness to pay (WTP) is the maximum price of an item a consumer wants to buy at a particular time.

RESEARCH HYPOTHESES

Brand image can affect a number of customers to be willing to pay for a product; even some customers are willing to pay higher for similar products from other more relevant brands. Conceptually, according to Anselmsson et al. (2014), they described the brand image as the most useful indicator in the willingness to pay empirically. In addition, brand image is the most important way of willingness to pay where a brand image can create the value of a product. Anselmsson, et al., (2014) even argued that premium prices are the most important way in which brands can create shareholder value because it does not require direct investment to set a higher price. Based on the above description, the following is the proposed hypothesis:

H1: Brand image has a significant effect on willingness to pay.

According to Neupane (2015) a positive brand image has contribution in creating customer satisfaction. In addition, customer satisfaction also has a big role in creating a strong brand image for the company. Therefore, brand image is very important for a company in getting a lifetime loyalty of the customer. By having a brand image, a company can generate values in terms of helping consumers in getting information, generating reasons for purchasing, differentiating brands from competitors, giving positive feelings, and offering basic extensions. Generating and maintaining a successful brand image is an important role of company marketing and branding strategies. Poor brand image may cause a negative influence to the company. Negative influence worryingly decreases customer satisfaction of the company (Neupane, 2015). Based on the above description, the following is the proposed hypothesis:

H2: Brand image has a significant effect on customer satisfaction.

Customer satisfaction is customer's perception of the quality of a product which is based on customer expectations. Customers will compare product quality to their satisfaction

standard. Customers will be satisfied if the product quality exceeds their standards and customers will be dissatisfied when the product quality is below their standards (Haverila and Fehr, 2016). Customer satisfaction is defined as a benchmark to the extent of the product is successfully received and can serve the customer's expectations. The more challenging the competition in various industries, a company must improve the innovation and skills of individual employees so that the company may produce a product which is in accordance with consumer desires so that the product gets a competitive superiority that meet customer satisfaction. By the fulfillment of customer satisfaction, it will increase the sales and revenue of the company (Haverila and Fehr, 2016). Based on the above description, the following is the proposed hypothesis:

H3: Product has a significant effect on customer satisfaction.

Product is very important to be noticed by a company, especially a manufacturing company because a good product will create a willingness to pay to the consumers. If the company produces good products and the quality is guaranteed then willingness to pay will increase. By the increase of willingness to pay, it will increase product sales then the increase of the sales will also increase the company's profit (Muanas, 2014). The main determinant of willingness to pay for a product is consumer's perception of the utility of a product. The analysis of the market structure with the product is useful in identifying the usage situation in which the more attractive the product form or the more functions and benefits of the product will result the greater the willingness to pay but if the function and benefits of the product is very small then the willingness to pay for the product will also be small (Campbell et al., 2014). Based on the above description, the following is the proposed hypothesis:

H4: Product has a significant effect on willingness to pay.

Satisfaction can be defined as a state in which the consumer has the needs, desires, and expectations that can all be met through the consumed product. Generally, satisfaction can be defined as feelings of pleasure or disappointment of a person from the comparison between the purchased products whether it is in accordance with his/ her expectations or not. Customer satisfaction is very important to maintain consumer willingness to pay, when the consumers feel satisfied with the quality of the products or services provided by the company then consumer willingness to pay will be maintained (Casidy and Wymer, 2016). Customer satisfaction or customer dissatisfaction to the product will affect the following behavior and high satisfaction will create an emotional bond of the customers especially concerning with willingness to pay. If a customer is satisfied he/ she will show a higher probability that can be proved by the higher level of willingness to pay. However, if the customer is not satisfied, it will cause the lower level of willingness to pay. Based on the above description, the following is the proposed hypothesis:

H5: Customer satisfaction has a significant effect on willingness to pay.

METHODS OF RESEARCH

This research used structural equation modeling (SEM) method that used WarpPLS 5.0 software as the analysis tool. Before the analysis of hypothesis testing, outer model and inner model testing was firstly conducted. Outer model testing examined the correlation between the constructs and the latent variables of the research including discriminate validity, composite reliability, and average variance extracted (AVE). In addition, inner model testing examined the correlation among the latent variables in this research.

The populations of the research were the customer of Coffee Bean outlet in Pakuwon Supermall. The samples of the research were 200 respondents which were in accordance with the minimum limit of CB-SEM. (Ghozali, 2014). Based on the time limitation, the samples of this research were all customers who bought Coffee Bean products in Pakuwon Supermall Surabaya. There was no limitation to how many times the customer bought Coffee Bean product because the research expected to get the respondents evenly both old and new consumers of Coffee Bean product. Therefore, data variability could be obtained in describing customer willingness to pay the product of Coffee Bean in the future. The

sampling technique to choose the respondent was convenience sampling which meant that the sample selection technique was when the researcher did not have data about the population in the form of sampling frame then the researcher chose the sample based on the principle of easiness in taking or choosing the sample (Abdillah and Hartono, 2015).

RESULTS OF STUDY

Based on the total of 200 respondents who filled in the questionnaire, information about general description of the respondents and the consumer profile of Coffee Bean are:

Table 1 – Description of Respondent Demography

Respondent Demography	(N)	%	Respondent Demography	(N)	%
<i>Gender</i>			<i>Occupation</i>		
Male	88	44.00%	Civil Servant	8	4.00%
Female	112	56.00%	Private Employee	98	49.00%
<i>Age</i>			Entrepreneur	67	33.50%
17-30 years	72	36.00%	Others	27	13.50%
31-40 years	77	38.50%	<i>Visit Frequency</i>		
41-50 years	30	15.00%	1 time	120	60.00%
>50 years	21	10.50%	2-3 times	44	22.00%
<i>Educational Background</i>			4-5 times	30	15.00%
Secondary School	27	13.50%	>5 times	6	3.00%
Associate's Degree	18	9.00%	<i>Payment Method</i>		
Bachelor's Degree	146	73.00%	Member Card	28	14.00%
Master's Degree	9	4.50%	Bank Mega Credit Card	97	48.50%
			Cash	51	25.50%
			Others	24	12.00%

Most of the respondents were female with the percentage of 56% while the rest were male. Most of Coffee Bean visitors were in the age group between 31-40 years of 38.50% while the respondents from the age group above 50 years had the smallest percentage of 10.50%.

Table 2 – Research Instrument

Indicators	Average	Loading	Reliability
<i>Brand Image</i>			
There are few reasons making me to leave Coffee Bean products	4.34	0.894	0.926
I am proud to tell others that Coffee Bean is a good brand	4.30	0.869	
I think that Coffee Bean is one of the best brands	4.03	0.848	
Coffee Bean product give a strong impression to my experience	4.29	0.870	
<i>Product</i>			
Coffee Bean products have consistent quality	2.98	0.801	0.925
The Coffee Bean product is what I need	3.31	0.862	
The taste of Coffee Bean products is always consistent	3.09	0.902	
The price of Coffee Bean products is quite affordable	3.02	0.906	
The presentation of Coffee Bean products is very interesting	3.83	0.213	
<i>Customer Satisfaction</i>			
I am very satisfied with Coffee Bean products	3.92	0.883	0.899
I really enjoy this Coffee Bean product	3.86	0.896	
I am very satisfied with the decision visiting Coffee Bean outlet	3.86	0.813	
<i>Willingness to Pay</i>			
I will still buy Coffee Bean products even if the price goes up	4.00	0.884	0.847
I will still buy Coffee Bean products even though the competitor provides a cheaper price	3.81	0.885	
I am very confident with the benefits provided by Coffee Bean products	3.17	0.287	
I am willing to pay a higher price for this Coffee Bean product than any other brand	3.19	0.162	
I am willing to pay more to visit Coffee Bean outlets than anywhere else	4.31	0.629	

Coffee Bean visitors were consumers who had a fairly high educational background because most of the respondents' educational background was master's degree with the

percentage of 73%. Respondents of the research had quite diverse occupations including entrepreneurs, private employees, and other jobs. The smallest number of respondents was civil servants with the percentage of 4% while the largest was private employees with the percentage of 49%. Most of the visitors came to Coffee Bean in the last 1 month only 1 time that was equal to 60% of the total respondents; it was only a small number of frequent visits more than 5 times. The most widely used payment method to do the transaction at the Coffee Bean was using Bank Mega credit card that was equal to 48.50% of the total respondents. It was because the use of Bank Mega credit card may get discounts up to 50%. The rest of the respondents used cash, member card of Coffee Bean or debit card.

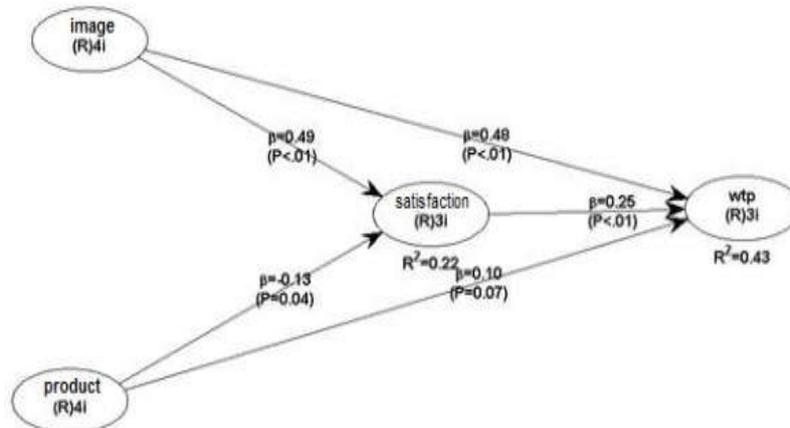


Figure 1 – Research Model

Statistical analysis using WarpPLS 5.0 program was preceded by validity and reliability test to determine the consistency of the measuring instrument whether it was capable to accurately describe the variables to be analyzed. The result of convergent validity test showed that there were 3 variables that do not meet the validity requirement: P5, KM3, and KM4 because their values < 0.05 . Subsequently, the variables must be excluded from the research and validity test. Meanwhile, the construct reliability test had also met the requirement of internal constructs consistency condition because each construct had cronbach alpha value above 0.7 (> 0.7) (Ghozali, 2014).

Table 3 – Hypothesis Testing

Hypotheses	Correlation	P Values	Cut Off Value	Conclusion
H1	Brand Image → Willingness to Pay	0.001	< 0.05	Significant
H2	Brand Image → Satisfaction	0.001	< 0.05	Significant
H3	Product → Satisfaction	0.035	< 0.05	Significant
H4	Product → Willingness to Pay	0.070	< 0.05	Not Significant
H5	Satisfaction → Willingness to Pay	0.001	< 0.05	Significant

The research results showed that all hypotheses of the research were acceptable except for hypothesis 4 which stated that there was no significant correlation between the product and the willingness to pay.

DISCUSSION OF RESULTS

The results of respondents' answers showing the number of 4.24 indicated that the average of all respondents agreed that Coffee Bean had a positive brand image. The brand image was realized by the respondents that Coffee Bean was different from other food and beverages outlets in which Coffee Bean is indeed aimed to the middle and upper class segment. It was known from the design of the place, the price of the offered product, and the service to the consumer. The respondents knew that buying the Coffee Bean products was

not just buying some drinks but the respondents also use it as a medium to socialize with friends, business relations, enjoy the convenience of the outlet, and show their existences to other people. There was a sense of pride for the respondents if they can buy Coffee Bean products. Thus, from the extra benefits felt by the respondents, then they are willing to pay more.

The results of this research indicated that there was a significant correlation between brand image and willingness to pay. It was in line with the results of a research conducted by Anselmsson, et al (2014), in which the consumer was willing to pay the product at a premium price because it was influenced by the social image, uniqueness, and product originality. As mentioned previously, the brand of Coffee Bean had a positive image for the respondents, the uniqueness of taste and originality of the offered product which were also different from other food and beverage outlet, so this may result the willingness of the respondent to pay more expensive.

The expectations of the respondents had been well met by Coffee Bean, none of the respondents complained about the service quality of Coffee Bean, so the respondents feel happy. Realization received by respondents was so far in line with reality in which it had never been less than what was expected so that the respondents were satisfied buying Coffee Bean products all this time. Coffee Bean was a national franchise restaurant that had the same standard of service and quality between one outlet and other outlets so it provided satisfaction guarantee to all consumers visiting Coffee Bean outlets at everywhere.

The results of this research indicated that there was a significant correlation between brand image and customer satisfaction which was in line with the results of research conducted by Neupane (2015) and Shahroudi and Naimi (2014), in which brand image could determine a consumer to feel satisfied or not satisfied in buying a product. In addition, customer satisfaction will affect customer loyalty to always buy the product. It had been described in this research model that in the research did not discuss about loyalty. This research was only limited to test empirically about how a consumer getting satisfied with a product; one of the response is willing to pay at a higher price.

The result of the respondent's answer, at the number of 3.10, indicated that the average respondent was less able to describe clearly about the product in Coffee Bean. It was because the products offered by Coffee Bean were almost similar to those offered by other brands including Starbucks, Excelso, and MaxxCoffee. Most of these brands also offered the main drink menu that was almost the same as Coffee Bean; it was coffee. However, in terms of product prices, Coffee Bean had a relatively high price compared to other brands. Respondents were less able to describe specific advantages offered by Coffee Bean products and the difference of Coffee Bean products compared to other brands.

Although Coffee Bean products were perceived equally in consumers mind with other brands, in term of product performance evaluation, the respondents had never experienced a problem. This relatively expensive product was appropriate to the quality given to the respondent. Starting from the raw materials, packaging, taste choices, beverage processing at Coffee Bean, many of these had accommodated the expectations of the respondents so that the product gave a sense of satisfaction for the respondents.

The results of this research, indicating that there was a significant correlation between product and customer satisfaction was in line with the results of research conducted by Haverila and Fehr (2015), in which the product could determine whether the consumers feel satisfied or not in consuming the goods and services. It was undeniable that the respondents came to Coffee Bean not only to enjoy the services offered but also to consume products of Coffee Bean especially coffee drinks. So far, the products sold had been able to meet the expectations of all respondents including in terms of taste and quality so that the product can significantly affected customer satisfaction.

The results also showed that willingness to pay was more affected by brand image variables than product variables. It was related to Coffee Bean products that were often perceived as the same as other competing brands. Meanwhile, the brand image of upper middle-class image had been experienced by the respondents that encouraged them to be

willing to pay more. Therefore, in other words, most of the respondents who came to Coffee Bean preferred to buy the brand rather than the quality of the product itself.

These insignificant results were also reinforced by the description of the respondents who pointed out that most of Coffee Bean visitors only came 1 time for last month. It indicated that the respondents coming to the outlet were just experimenting with the Coffee Bean brand. They were more familiar with Coffee Bean not from the products but so far from the well-known brand image. Most of the visitors were in the young age below 40 years. The average of their last educational backgrounds was undergraduate degree with the profession as a private employee or entrepreneur. It showed that the visitors were in middle class economic in which where the income earned was enough for just one or two visits to Coffee Bean in one month to just try the beverage, but when the visits were continued to always visit Coffee Bean in a frequent frequency it would have an impact on their financial ability.

The results of this research indicated that there was no significant correlation between product and willingness to pay which was not in line with the results of research conducted by Campbell, et al (2014), in which the product could directly determine the willingness to pay from a consumer in selecting the menu of local food. This difference outcome could be attributed to the fact that the previous research did not include the satisfaction variable that might affect willingness to pay.

Various responses from satisfied customers were willing to pay more, repurchasing, and were loyal to that particular brand. In term of loyalty, most of respondents are not really loyal customers to the brand of Coffee Bean. It was supported by descriptive data that 60% of respondents only ever visited Coffee Bean 1 time in the last 1 month. Besides, most respondents had also tried to move to other brand competitors.

So far, all respondents were satisfied with the service and products provided by Coffee Bean because it had been in accordance with the expectation so it was reasonable if the respondents were willing to pay more. That satisfaction could be realized because the price of Coffee Bean products were relatively expensive so it was worth with the convenient place (the ordinary Coffee Bean outlet was located in large malls of every big city), very friendly service from the crews, as well as good taste of the food and beverage.

The results of this research showed that there was a significant correlation between customer satisfaction and willingness to pay which was in line with the results of research conducted by Chaudhuri and Ligas (2016), and Casidy and Wymer (2016) in which the research proved that satisfied customers were willing to pay more to get the products.

CONCLUSION AND SUGGESTIONS

This research aimed to explain the factors affecting the level of willingness to pay from Coffee Bean consumers. The result of hypothesis testing showed that hypotheses 1, 2, 3, and 5 from the research were acceptable. Hypothesis number 4 was unacceptable because it formed insignificant correlation between the product and willingness to pay.

This research also had some limitations, including 1) not choosing the respondents at all Coffee Bean outlets in Surabaya so the description of the data distribution questionnaires was uneven, 2) most of respondents had only visited Coffee Bean 1 time in the last 1 month, so it was less precise to ask them describing customer satisfaction and the willingness to pay, 3) the variables under research were very limited on brand image, customer satisfaction, and product. Another new variable could be added in the following study.

The following are some suggestions that can be used for further similar research: 1) According to Coffee Bean, the competition between coffee outlets on the market today is very tough, especially when this sector is controlled by some big brands such as Starbucks, Coffee Bean, Excelso, and also MaxxCoffee. In terms of product, price, service, outlets design, and promotion to the four brands, they are almost known as equal for the people who do not have a meaningful difference between these brands. To win the competition in the coffee shop industry, Coffee Bean must have the right product strategy, which is a very authentic and different product from other coffee outlets. The result of the questionnaire showed that the average of respondents' answers to the product variables was neutral. It

was indicated that during this time, the respondents still felt hesitant to come to Coffee Bean just to buy the product. The product of Coffee Bean was lack of determinant factor of a respondent so that they were willing to pay more than other similar products. So far, the willingness of respondents to pay more was more influenced by the brand image of Coffee Bean itself. It was expected that the implementation of the right product marketing strategy, the brand image of Coffee Bean will become more positive to the people, increase customer satisfaction, and the desire to pay more also increase so that brand profitability and equity of Coffee Bean is very strong among consumers. 2) For further research, it is expected to complete the shortcomings of the limitations in this research. Further research is also expected to develop this research by taking another variable so that the analysis can be obtained widely and deeply.

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THE EFFECT OF MACROECONOMIC VARIABLES ON BANKING STOCK PRICE INDEX IN INDONESIA STOCK EXCHANGE

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ABSTRACT

Stock price index can be regarded as a barometer in the measurement of a nation's economic condition, besides it can also be used in conducting statistical analysis on the current market. Stock is the proof of one's share in a company in the form of securities issued by the listed go-public companies. This study was conducted to measure the effect of macroeconomic variables such as inflation, interest rate, and exchange rate on banking stock price index in Indonesia stock exchange or Bursa Efek Indonesia (BEI). The results of study show that inflation and exchange rate positively influence the stock price index. The positive effect of the exchange rate shows that issuers who were positively affected by Rupiah (IDR) depreciation appear to be the most dominant group. Meanwhile, the interest rate or Suku Bunga (SBI) has a negative effect. Lower interest rate stimulates higher investments and better economic activities which increase the stock price.

KEY WORDS

Inflation, exchange rate, interest rate, banking, stock price index.

Capital market plays a crucial role for a nation's economy since it runs two major functions; to provide business funding and to facilitate companies with investment from investors. Capital market cannot be separated from stock price index. Current amount of composite share price index or *Indeks Harga Saham Gabungan (IHSG)* has always been updated and displayed in electronic mass media or non-electronic mass media everyday.

Moradoglu, et al. (2000) stated that there have studies conducted on stock price behavior, especially related to its relationship with macroeconomic variables such as the ones conducted by Chen et al. (1986), and Fama (1981). Their studies show that stock price is influenced by fluctuation that occurs in macroeconomic variables. Their studies involved some macro-economic variables including; inflation rate, interest rate, exchange rate, industrial production index, and oil price. A number of studies have confirmed the effect of inflation rate toward stock returns such as the one conducted by Balduzzi (1994), Sitorus (2004), Schmeling and Schrimpf (2008). Interest rate that goes higher than the expected return makes investors choose deposits for their investment. In their studies, Lee (1992) and Gan et al (2006) have proven that interest rate has a significant influence toward stock price index.

Fabozzi and Franco (1996:724) mentioned that *an exchange rate is defined as the amount of one currency that can be exchanged per unit of another currency, or the price of one currency in terms of another currency*. Similarly, Ajayi and Mougoue (1996) also used macro-economic variables which were exchange rate and stock price in their studies. Their studies indicate a dynamic correlation between stock price and exchange rate in the top eight leading countries in capital market including Canada, France, Germany, Italia, Japan, Netherland, England and The United States based on the result of a measurement using bivariate error correction model. The results of those studies show a significant correlation between exchange rate and stock price (capital market and money market). Some other studies also support this view such as Dimitrova (2005), Sudjono (2002) and Sitinjak dan Kurniasari (2003) in which it is stated that rupiah exchange rate significantly influences the *IHSG*.

A contradictory result is shown by Gupta (2000) who conducted a study on the issue that occurred in Indonesia from 1993-1997 which concludes that there is no causal-effect

relationship between interest rate, exchange rate and stock price. This result is supported by the one found by Budilaksono (2005). However, a study conducted by Sitingjak and Kurniasari (2003) shows that exchange rate and interest rate have significant effects toward the *IHSG*. Yet, Saadah and Panjaitan (2006) did not find any dynamic or significant interaction between stock price and exchange rate.

The fact that previous studies show some debatable results upon the factors that influence *IHSG* has triggered researcher's curiosity in understanding "The Effects of Exchange Rate, Inflation Rate and Interest Rate toward Bank Stock Price Index in Indonesia Stock Exchange or *Bursa Efek Indonesia (BEI)* in 2010-2016".

LITERATURE REVIEW

Stock is defined as legal document that shows one's ownership upon a company (Fakhrudin and Hadianto, 2001: 6), and securities that show one's ownership upon a company that opens its stock (Darmadji and Fakhrudin, 2001: 5).

Based on the ownership, stock can be grouped into 2 types (Fakhrudin and Hadianto, 2001: 2012) which are:

Common stocks. Common stocks are stocks owned by junior investors who receive the lowest dividend and assets if the company were liquidated. Common stocks are the most common securities sold in the capital market. Stockholders of common stocks also possess these following rights:

Rights to Control – Stockholders have the right to vote for Board of Directors. This means that they are able to control anyone who are leading the company. Stockholders may use their right to control by issuing veto during the election of the Board of Directors in annual meeting of shareholders.

Rights to Receive Dividend – As owners of a company, stockholders receive profit from the earning of the company. A company would use most of the earnings to be invested back for the company and share a part of the profit to the stakeholders. This investment is called retained earning which is an intern source of fund. The unretained earnings are the ones that are shared to the stakeholders in the form of dividend.

Preemptive Right. Preemptive right is the right to have equal ownership if a company releases additional shares. When a company releases additional shares, the number of shares in the market is increased. As the result, the percentage of current stocks ownership is decreased. Preemptive right gives a priority for old stockholders to buy the additional shares in order to maintain the percentage of their ownership upon the company.

Preferred Stocks. Preferred stock is a combination between common stocks and debenture for it gives a fixed earning and dividend as expected by the investor. Preferred stocks are similar to common stocks since they reflect holders' ownership of a company equity, they are released without due date, and they require the company to pay dividend. Preferred stocks differ from debenture in three aspects; claim upon company profit and assets, fixed amount of dividend before the due date, redemption rights and they can be exchanged with common stocks.

The Correlation between Exchange Rate and Stock Returns. Theoretically, there are two perspectives upon the relationship between stock price and exchange rate. In one side, those who support the 'portfolio-balance' view believe that stock price negatively influences exchange rate (Saini et al., 2002). Company's equity which is a part of company's wealth has certain influence toward exchange rate through money demand. For example, the higher the stock price, the higher the demand for money and the higher the interest rate that apply. This condition attracts foreign investors to make investment which results to appreciation of domestic currency.

Furthermore, stock price also influences the exchange rate through money demand equation that forms a basic model of portfolio allocation and monetary policies as the result of the determination of currency exchange rate. In certain condition that precisely reflects real economic activities, changes upon stock price cause increase in money demand and increased values of domestic currency (Ajayi, Ibrahim, 2000). Solnik (in Ibrahim, 2000) stated

that stock price reflects macro-economic variables since it shows market expectation upon real economic activities. This model proposes currency exchange rate, in which any fluctuation of stock price might trigger some effects to the exchange rate. Solnik (in Ibrahim, 2000) also found a weak positive correlation between differences in stock returns (domestic minus foreign) and the changes of riil exchange rate. Mok (1993) has confirmed that exchange rate (FOREX) and stock price appear to be two independent variables. However, there is a two-way causal relationship between FOREX and closing as well as opening stock price. Exchange rate also influences the stock price, yet the growth of capital market also pushes the positive effect of the exchange rate.

The Correlation between Interest Rate and Stock Returns. Interest rate is the price of the loaned fund (Reilly and Brown, 1997). A company's plan to fulfill capital needs is highly influenced by the current rate of interest. Based on the interest rate, a company would determine either to release equity securities or loan/debenture. Debenture can be done if the current rate of interest is lower than the earning power of the capital addition (Riyanto, 1990). Lower interest rate decreases the loan fee. Low interest rate also attracts more investment and economic activities which eventually increase the stock price. In the context of property business, interest rate has a significant function in increasing transactions which results stronger influence toward a property business and gives direct influence to the increasing amount of stock returns. Interest rate also has a significant influence toward the stock price as stated by Granger (in Mok, 1993) that interest rate negatively affects the stock price. In line with the statement, Boedie *et al* (1995) also wrote that stock price is affected by some factors, one of which is the interest rate. This belief is also supported by Utami and Rahayu (2003), whose research result shows empirical proofs upon the effect of interest rate on stock price during economic crisis in Indonesia.

The Correlation between Inflation and Stock Returns. Results of previous research indicate a negative correlation between inflation rate and stock returns. Inflation is an aggregate price change. Studies on the correlation between inflation rate and stock returns have been frequently administered, especially in developing countries. Most of the studies indicate a negative correlation between inflation and stock returns.

Balduzzi (1995) observed the correlation between inflation and stock returns during January 1954 – 1976 and 1977 – 1990 which result shows that inflation has a negative influence toward stock returns. A relatively similar result was confirmed by Porter and Null (2007) in which it is found that inflation has a negative influence toward stock returns. Proter and Null found out a negative influence of real stock returns and inflation. When inflation is decomposed into expected and unexpected elements, real stock returns and expected inflation share a negative correlation.

Research Framework. Investors in Indonesia Stock Exchange have interests in the fluctuation of the composite share price index or *Index Harga Saham Gabungan (IHSG)* since the values of the stock portfolio highly depend on this index. Most stocks or stock portfolio moves in line with the index movement. Frensidy (2009) stated that stock price is highly influenced by macro variables such as risk-free interest rate, currency exchange rate, surplus of trade balance, foreign exchange reserve, and inflation.

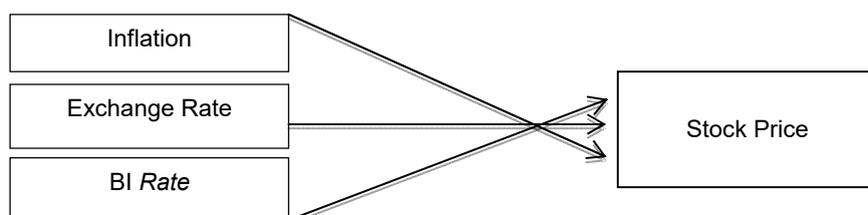


Figure 1 – Research Framework Used in this Study

Macro-economic variables in a country might influence the condition of the capital market. Setyawan (2009) mentioned that changes of exchange rate negatively affect the

movement of *IHSG*. Liu & Shrestha (2008) found a negative correlation between exchange rate index of domestic currencies in China, RMB, and stock price. Long-Term Interest Rate in China has a negative correlation to the stock price. Martini (2009) claimed that inflation and interest rate do not have any significant influence toward *IHSG*. Mok (1993) in Suyanto (2007) also did not find any significant correlation of interest rate and exchange rate toward stock price.

METHODS OF RESEARCH

Types and Source of the Data. Data related to inflation rate, exchange rate, interest rate and stock price index in Indonesia Stock Exchange from the time series data (monthly), from Januari 2010 to December 2015 were collected from secondary source such as reports from Indonesia Stock Exchange, financial statistics, Bank of Indonesia, etc.

Data Collection Method. The data were collected using documentary method in which the researcher collected some documents in the form of financial reports, monthly *BEI* statistics, reports of the development of *BI*, Central Bureau of Statistics or *Badan Pusat Statistik (BPS)* and other data from books or publication related to this issue which added up some objective information through websites.

Data Analysis Method. Regression data analysis method was used to analyze the data of this study. The basic regression analysis model of this study is following:

$$Y_t = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \mu_i$$

Where: Y_t = Banking Stock Price Index; X_1 = Inflation; X_2 = Exchange rate of IDR to USD; X_3 = *BI* rate; $\beta_1 \dots \beta_3$ = Coefficient of the independent variables; μ = error.

RESULTS AND DISCUSSION

The Estimated Linear Regression Model. Regarding to the reserach problems and the objectives of this study, the resreacher employed a multiple linear regression model. The regression statistic measurement has resulted in equation of banking stock price as follows:

$$Y = 476043.703 + 173.337x_1 + 0.612x_2 - 1211.768x_3 + \epsilon_t$$

Where: Y = Banking Stock Price Index; X_1 = Inflation Rate; X_2 = Exchange Rate; X_3 = Interest Rate (*BI* rate); $\beta_0 = 476043.703$, if the inflation rate, exchange rate and interest rate are assumed constant (*ceteris paribus*), then the banking stock rate price is at 476043.703; $\beta_1 = 173.337$, if there is 1% increase in the inflation rate while the exchange rate and interest rate remain constant (*ceteris paribus*), then the stock price will increase as much as 173,337; $\beta_2 = 0.612$, if there is 1% increase in the currency exchange rate, while the inflaion rate and interest rate remain constant (*ceteris paribus*), the stock price will increase as much as 0.612%; $\beta_3 = 1211,768$, if there is 1% increase in interest rate of *SBI*, while inflation rate and exchange rate remain constant (*ceteris paribus*), the stock price will decrease as much as 1211,768.

Table 1 – The Result of Multiple Linear Regression Test

Coefficients ^a						
Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.
	B	Std. Error		Beta		
1	(Constant)	476043.703	103506.043		4.599	.000
	Inflation	173.337	70.453	.302	2.460	.016
	Exchange	.612	.128	.700	4.790	.000
	SBI	-1211.768	222.541	-.843	-5.445	.000

a. Dependent Variable: Stock

Source: Data Analysis (2017).

A partial measurement of the regression coefficient tests the correlation among research variables in a separated way. The effect of each independent variable is partially reflected by the value of each t-statistic.

Partial Test. Partial test was done to see the effect of each independent variable (inflation rate, exchange rate, and *BI* rate) on the dependent variable (banking stock price index). If the p-value < significant level of 5%, it can be concluded that there is a significant effect of each independent variable on the dependent variable. Based on the result of the statistic measurement in this study, inflation has been known to have a positive effect to the banking stock price index during 2010-2015. The regression coefficient of the inflation is found at a positive orientation 173.337 and the t-statistics is found at 2.460 with probability value of 0.01. The significance value is lesser than the level of significance ($0.01 < 0.05$) which indicates that inflation has a positive and significant correlation to the banking stock price index in *BEI* in 2010-2015. This result accepts the first hypothesis of this study.

Meanwhile, the exchange rate of IDR to USD has been found to have a positive correlation with banking stock price index in 2010-2015. Based on the result of the measurement, the regression coefficient of the exchange rate is at a positive orientation at 0.612 and t-statistic at 4.790 with probability value of 0.00. The significance value is lesser than the level of significance ($0.00 < 0.05$) which means that exchange rate has a positive and significant influence toward the banking stock price in *BEI* during 2010 – 2015. Hence, the second hypothesis of this study is accepted.

Furthermore, the interest rate (*BI* rate) has been found to have a negative influence toward the banking stock price index in 2010 – 2015. The result of the measurement shows that the regression coefficient of the exchange rate is at a negative orientation -1211.768 and the t-statistic is 5.445 with probability value of 0.00. The significance value is lesser than the level of significance ($0.00 < 0.05$) which indicates that interest rate has a negative and significant influence toward the banking stock price index in *BEI* in 2010 – 2015. Therefore, the second hypothesis of this study is accepted.

Simultaneous Test. Simultaneous test was administered to see the simultaneous influence of the independent variables toward the dependent variable. In this study, F test was used to measure the simultaneous influence, in which if the prob $F <$ level of significance 5%, the independent variables simultaneously have a significant influence toward the dependent variable.

It can be seen in Table 9 that the independent variables simultaneously have a significant influence toward the dependent variable. This relationship is proven by the probability value at 0.00. Therefore, the fourth hypothesis of this study is accepted.

Table 2 – The Result of Simultaneous Regression Test

ANOVA ^a						
	Model	Sum of Squares	df	Mean Square	F	Sig. ^b
1	Regression	259525833813.947	3	86508611271.316	11.908	.000 ^b
	Residual	493989110201.554	68	7264545738.258		
	Total	753514944015.500	71			
a. Dependent Variable: Stock						
b. Predictors: (Constant), <i>SBI</i> , Inflation Rate, Exchange Rate						

Test of Classic Assumption. The result of Durbin-Watson test shows DW-statistic value of 1.447. compared to the table at 5% significance level, $n-k-1$, dL is obtained at 1.50 and $dU=0.123$ between the dL and dU ($dL < d < dU$). It means that the non-autocorrelation test cannot be drawn into conclusion. Yet, the Durbin-Watson values obtained in this study were between -2 and +2 which indicate that the regression model contains no sign of autocorrelation.

Multi-collinearity appears when one or more independent variables have strong correlation toward other independent variables. Multi-collinearity can be measured from (1) tolerance value and it's opposite (1) variance inflation factor (VIF). The two measurements show which independent variable is being explained by other independent variable.

Regarding to the correlation values among the independent variables, it is known that no variable has a relatively significant correlation to the independent variable. The result of tolerance test also shows that there is no independent variable with tolerance value lesser than 10%, which indicates no correlation between independent variables which tolerance values are greater than 95%. In addition, VIF value also shows similar result in which there is no independent variable with VIF value greater than 10. Therefore, it can be concluded that multi-collinearity does not exist among the independent variables used in this regression model.

The Effect of Inflation toward Banking Stock Price Index. The test shows regression coefficient of inflation is positively oriented at 173.337 with 0.01 probabilities. The significance value is lesser than the significance level ($0.01 < 0.05$) which means that inflation has a positive and significant influence on the banking stock price index of *BEI* during 2010-2016.

The positive coefficient value shows that 1% increase in inflation will be followed by increase in the banking stock price index as much as 0.06%. The result of this study supports the result of a study conducted by Wijaya Kusuma (2010). In his research, it is stated that inflation has a negative and significant influence on the banking stock price index in *BEI*.

According to researcher's explanation, the type of inflation might make some differences since demand-pull inflation occurred when the study was being conducted. Demand-pull inflation occurs as the result of increase in the total demand which not only it increases the price, but it also increases the production (output) (Nopirin, 2011). Companies increase their production and the price to get more profit because the demand is higher.

The Effect of Exchange Rate toward Banking Stock Price Index. Solnik (in Ibrahim, 2000) stated that stock price reflects macro-economic variables since it also shows market expectation of the real economic activities. Since the currency exchange rate, such as in the monetary context, correlates with other macro-economic variables, then any change in stock price might influence the exchange rate. Solnik (in Ibrahim, 2000) also found a positive yet weak correlation between stock returns (domestic minus foreign) and fluctuation of the real exchange rate. The test showed the regression coefficient of the exchange rate at the positive orientation 0.612 with 0.00 probabilities. The significance value is lesser than the level of significance ($0.00 < 0.05$) which indicates that exchange rate has a positive and significant influence on the banking stock price index in *BEI* during 2010-2015.

Coefficients with positive values show that 1% depreciation of IDR to USD will be followed by 0.612 increases in the banking stock price index. This result goes in line with the one conducted by Alpan Wijaya Kusuma (2010) which states that exchange rate significantly influences the *IHSG*. Exchange rate that has a positive influence shows that the most dominant issuer group is the one that obtain positive effects of IDR depreciation. IDR depreciation motivates companies that focus on running export business to increase their export volume. Most of the companies use local materials but they sell it in foreign currencies which give the companies higher profit.

The Effect of Interest Rate toward Banking Stock Price Index. Low interest rate causes creates lower loan fee. Lower interest rate also attracts more investment and more active economic activities which eventually increase the stock price. In property business, interest rate has a key role in improving transaction which strongly influences the performance of a property company and directly influences the increase in stock returns. It is stated by Granger (in Mok, 1993) that interest rate negatively affects the stock price.

The test has resulted a regression coefficient of *BI* rate in the negative orientation at 1211.768 with 0.00 probability value. The significance value is lesser than the level of significance ($0.00 < 0.05$) which means that *BI* rate has a negative and significant influence on the banking stock price index in *BEI* during 2010-2016.

Negative coefficient indicates that 1% increase in *BI* rate will be followed by 1211.768 decrease in the banking stock price index. This result supports Etty Murwaningsari (2008) which found that *BI* rate or interest rate has negative significant influence on *IHSG*. When the interest rate is high, individuals tend to make saving or deposit their money to get higher

returns. In another word, when the interest rate is low, people tend to buy more securities in their portfolio (Nopirin, 2000). Increase in *BI* rate drives investors to make saving and deposit their money which cause weak investment and eventually decrease the *IHSG*.

CONCLUSION AND SUGGESTIONS

Regarding to the result of the data analysis and the discussion of this study presented in chapter IV, conclusions are drawn as follow:

Inflation positively influences *IHSG*. In this study, demand-pull inflation occurred because of the increase in the total demand. This type of inflation does not only cause the price to increase but it also increases the output that eventually increase the profit obtained by a company. The increase in output can be seen from the gross domestic product (GDP) that keeps increasing each year. Higher amount of output is a good condition to enhance the investment.

Exchange rate positively influences *IHSG*. Exchange rate that has a positive influence shows that the most dominant issuers are those who receive benefits from IDR depreciation. Depreciation of local currency stimulates exporters to increase their export volumes. Export companies produce their products using local materials which later are sold in foreign currency for higher profit.

BI rate negatively influences *IHSG*. Increase in *BI* rate is a potential trigger that drives investors to save more or to deposite their money which decrease the amount of investment in the capital market. In another word, lower interest motivates investors to buy more securities in their portfolios.

Regarding to the conclusions and limitations of this study, some suggestions are made as follow:

Investors are recommended to pay more attention to macro-economic variables and stock trading volume before taking any decision related to their investment. Those information have been proven to have some influences toward the composite stock in *BEI* both simultaneously or partially. Therefore, that information should be taken into account in making any consideration to predict the *IHSG* before deciding to make any investment.

Investors should also regard any additional information to enrich their references in making decision related to their investment because there are some other factors that influence the movement of the stock price index aside from the ones that have been explained in this study.

Government should be wise in controlling the macro-economic conditions to keep the national economy good and stable. Thus, the investment can be enhanced.

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VALUE CHAIN ANALYSIS OF COFFEE INDUSTRY: A CASE OF JAVA PREANGER COFFEE IN WEST JAVA, INDONESIA

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ABSTRACT

The main objective of this study is to identify Java Preanger coffee chain in Indonesia. Java Preanger was the first coffee from Indonesia exported to Netherland in 1711, known as a cup of Java in international market, and especially in Europe. Identifying the coffee chain processing phase from coffee crop into green bean and coffee as beverage involves many stages, starts with cultivation, harvest, post harvest and processing stage. All these process are key information for farmer to increase their product quality and market access to improve welfare.

KEY WORDS

Coffee, value chain, West Java, Java preanger.

Coffee is one of the leading commodities that have potential to increase foreign exchange for Indonesia. The superiority and specialty coffee from Indonesia makes Indonesia known as main producer of coffee in the world specialty coffee, which is a coffee that has a characteristic of aroma and uniqueness taste. Specialty coffee from Indonesia already has a large market share in the United States and Europe due to its distinct flavour and aroma compared to other coffees. In addition, specialty coffee has a high competitiveness, indicated by the increasing demand for coffee in the international market. This makes specialty coffee Indonesia become a main commodity for export Based on data from BPS The value and volume of coffee exports in Indonesia are as follows:

Table 1 – Volume and Food On Board price of Coffee export from Indonesia 2010-2014

Year	Volume (Ton)	FOB thousand US \$
2010	433.595	814.331
2011	346.493	1.036.671
2012	448.591	1.249.520
2013	534.203	1.174.029
2014	382.750	1.030.716

Source: Statistical Center Body of Indonesia, 2014.

Table 1 above explains that Indonesia is experiencing a decrease in the quantity of coffee export volume in 2014 and the volume of coffee exports tends to fluctuate from year to year. In 2013 Indonesia has the highest export volume value for FOB (food on board in 2012 due to higher coffee prices. Fluctuating coffee export conditions can be attributed by the condition of the area, production and productivity of coffee in Indonesia shows in Table 2.

Table 2 – Area, Production and Productivity of Coffee in Indonesia Year 2011-2015

Uraian	Tahun				
	2011	2012	2013	2014	2015
Luas Areal (Ha)	1.233.699	1.235.289	1.241.836	1.230.495	1.233.227
Produksi (Ton)	638.647	691.163	675.881	644.592	665.256
Produktivitas (Kg/Ha)	702	745	739	716	721

Source: Directorate General of Plantation, 2015

Value chain analysis was a method to series of activities undertaken to produce a product ranging from conceptual to marketing activities, each of which activities that added value to the final product (ACIAR, 2012). Measurement of the value chain to be important in explaining activities ranging from the supply of raw materials, processing, to distribution to the consumer. Agro-industrial processing in this case have an important role to increase the value added of agricultural products into a final product that is ready for trading. This Concept analysis has been used to study political economy framework and international trade known as Global Value Chain (Gereffi, 1994; Kaplinsky, 2000, 2004).

The main objection of a value chain is to produce value added products or services for a market destination, by transforming resources and by the use of infrastructures within the potential and constraints of its institutional environment. Therefore, constraints for value chain development are in our view related to market access (local, regional, international) and market orientation (Grunert et al. 2005), available resources and physical infrastructures (Porter 1990: factor conditions) and institutions (regulative, cognitive and normative; Scott 1995).

Coffee crops produce cherry as the output product and transforming into green bean and becoming roasted beans after several stage of processing. The main product coffee was sold in green bean or roasted bean depends on the market request. The latest trend of the coffee market focussing on quality competition requires reliable supply chain relationships and contractual procedures for improving farm management procedures and product handling processes (Petkova, 2006). Among the various potential crops for commercialization, coffee Becoming as a likely agro-enterprise with great potential to provide farm employment and income generation opportunities in the mid hills of Nepal (CoPP, 2007). Coffee was a annual crops that harvesting after 3-4 years and cherry was the main product from crops. Harvesting coffee in Kenya always using manual labours to achieve cherry that already ripe, it needs a lot of labour and expensive (Chege, 2012). In Indonesia one of the potential coffees was Java preanger which have unique taste and aroma, which cultivate in west java region.

Coffee is processed either by wet method to produce parchment coffee or by dry method to obtain cherry coffee, In Nepal; dry processing was predominantly practiced in the past. But nowadays, this method has gradually been replaced by wet processing method. Wet method has also becoming more popular and been introduced for export of green beans (Deoju and Manandhar, 2004). The processing method is important for contributing the aroma and flavour in coffee cup quality. Therefore, the quality of coffee is dependent on careful postharvest processing. In primary coffee processing level which starts after harvesting up to drying of parchment, the fermentation of parchment after depulping is the most important stage for maintaining the quality of coffee. If fermentation lasts long, microbial inhibition takes place resulting to pungent flavour and stinker beans and ultimately affects cup quality. (Raghu, 2011)

In this paper we analyze the production chain of coffee based on the stage of production from input facilities, support, cultivation, harvesting, post harvesting, processing and marketing in order to understand where were the value is added in each stage. This paper also will explain the actor that contributed for increase value in Java preanger coffee and compares the value of benefits that received in each actor especially between farmer and middlemen.

METHODS OF RESEARCH

Value chain analysis is tools to show competitive advantage and showing the potential and the source of advantage. By designing activities and analyse the advantage factor from all the activities (Porter, 1985) value chain constructing the activities from the beginning until final product. In coffee production it's from cherry until coffee beverages as a final product, including all the actor that contribute in value chain from farmer until consumer. There always a linkage between the actor of chain, the linkages will show how efficient the production of these product. By systematic categorization of activities and identify the value that should be

upgrade and improve the product competitiveness. The activity in chain will divided into two activity, Primary and support activity. Primary activity directly involves in transforming product physically and transfer it into customer with after sales service, Support Activity role is to give the input by giving technology and human resource development. Primary activity consists of inbound logistic, operation; outbond logistics, marketing, selling and service. And in support activity consist of procurement, innovation with technology, human resource management and infrastructure.

Value chain analysis was methode to increase potential and competitive advantage, with identifying challenge in market and involves farmers as the main producer, it will upgrading the chain as a whole systemic benefits. In this paper we examine the chain activities that go in domestic market especially in coffee roastery and coffee shop in Indonesia. Indonesia coffee industry having a specific pattern of market, nowadays there was increasing demand in single origin coffee. The chain of coffee was including few actors like farmersntc, cooperative, supplier, roaster, trader and coffee shop. It needs inter – organisational analysis to see the value (price) in each stage in the chain. Identifying the price can explain us the value added in each stage of chain. We also discuss some economic and social impact between the farmer and the trader in coffee chain.

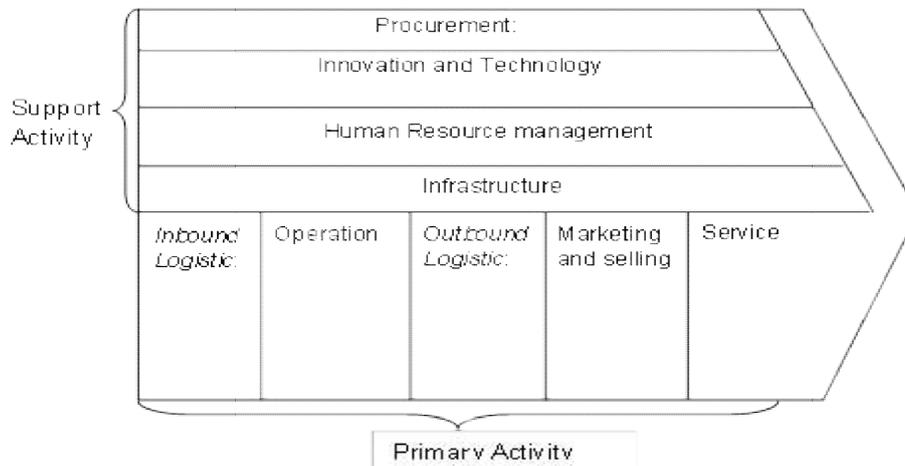


Figure 1 – Value Chain Activity (Source: Porter, 1985)

The primary activities selected to a cooperative that has a prior knowledge to coffee chain and its confirmed nya primary and secondary data sources. Mixed data sources were used for this study. Interviewer were choose by their knowledge and expertise at different stage of coffee value chain. For Farmer respondents using sampling techniques saturated or census of all population is used as a sample. The another respondents of this papar was coffee supplier, roastery and coffee consumer. Determination of the respondents involved in the value chain of Java Preanger Coffee done by snowball sampling is based on the value chain of information flow from the producer to the consumer. While the determination of the final consumer respondents to the analysis of critical success factors using the minimum limit of sampling as many as 30 respondents (Roscoe in sekaran, 1992). Methods of data analysis using Porter framework analysis (Porter 1985) and mapping analysis (Kaplinsky and Morris, 2001).

Interviews were doing by person to person and for customer , it conducte.d by email questionnaire. The secondary data and question was obtain from all interviewer that were specific to their area of specialties. Focusinh issue to upgrading management of famer in coffee chain. These data also came from visits to sites in west java, Indonesia where arabica java preanger was produced into final form and it organized only by the farmer cooperative union with their own simple technology.

RESULTS AND DISCUSSION

This value chain analysis was data that gathered in time – June 2017. In tis part we give the detail informatioan about value added at each stage and identify the actor of coffee chain in Indonesia. We will summarize the prices value in each actors and stage to give more explanation about the value chain of this commodities.

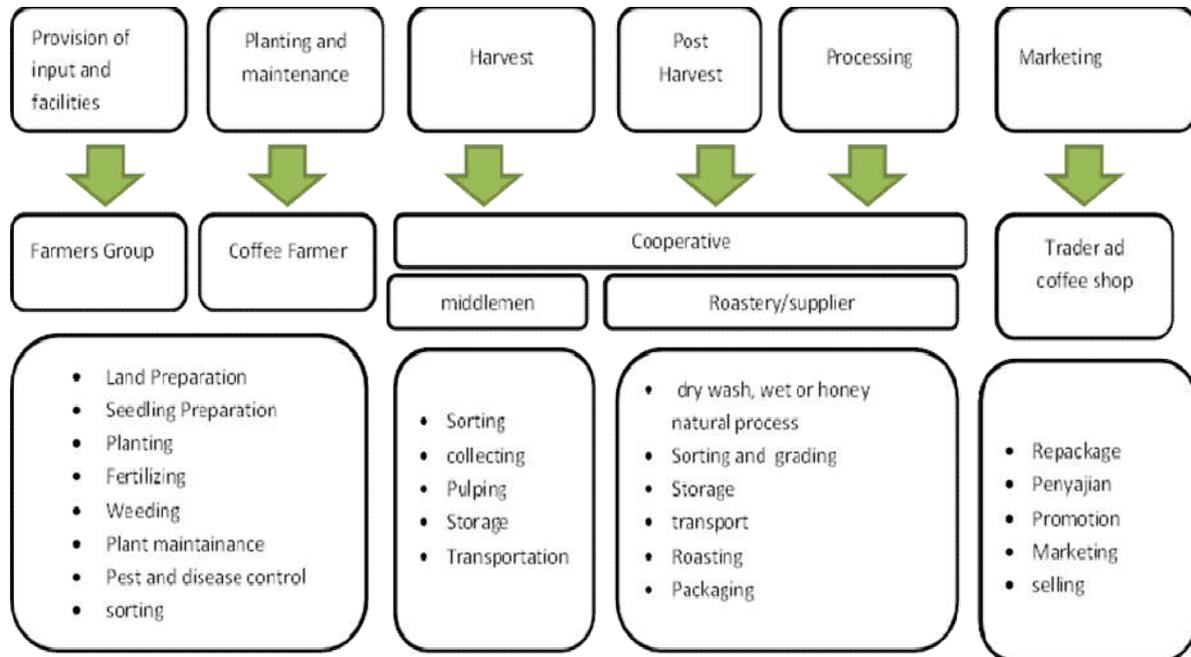


Figure 2 – Mapping Specific activity of Coffee Chain

In Figure 2 that shows us the process of coffee each stage in different actors with their activity. farmer group collaborate wit farmer to make sure the input and facilities for coffee cultivation. The main parts of these chain was Provision input and facilities, planting and maintenance , harvest, post havest, processing and marketing.

Actors in Coffee Chain. The actors in coffee chain consist of Farmer, Cooperative, Middlemen, Roastery, trader or coffee shop. The role of each actor will explained in detail below:

1. Farmer. Farmer as a main actor in this chain was a producer of coffee, their role was to preparing the seeds, cultivate crops, maintaining and protect them from pest and disease and harvesting the cherry from the crops. Majority of the farmer in west java was a indigenous society at that region. They learn coffee from their ancestors, Likely its more than 30 years. In production process there was few stage, consist of seedling, cultivation, fertilizing, pest and disease control, harvest and post harvest. Most of harvest product will be distribute to a middle men called “tengkulak”. Or Cooperative union. Most of the agreement was informal or not using contract. Just an agreement. In term of payment they using cash or phased payment.

2. Cooperative Union. Cooperative was a organisation that bought cherry from farmer. Cooperatives and private investors offer extension services and sometimes credit to coffee farmers. Farmers who sell parchment coffee do not receive these benefits. These benefits are predicted to have a strong effect in consumption smoothing and reducing poverty (Badiane et al., 1999). Coopertative inthis paper have a vital role in coffee chain, because their have a big part in post harvesting, processing and marketing. In this stage we will analyse more detail abaout the procedure and the activity that occurs in this specific chain.

3. Middlemen. Collective trader or middlemen have role to collecting the coffee cherry from farmer, ussually they buy it freshly and not processing. The price was determined by the trader based on quantity and cherry condition. In west java especially in cilengkrang region

the price of cherry was about Rp 7000 per kilogram. the collective trader will gathering all the cherry and will be processin into another stage and sell them to bigger suplier or Factory. The term of payment divided into two method, first was cash on the spot or they paid the coffee chery on the farm. Secondly was installment payment, they paid in process or not cash it could take 3-4 month. In this stage all the transportation cost was borne by the trader. They were came directly to the farm to get their cherry.

4. Supllier. Supplier was a main trader that collect their product from collective trader. They collect the product and processing them into final product and sell them in market. They have their own roasting machine with big capacity and packaging machine. They have another role to be exporters but in term of java preanger coffee still in development to export. The main activity from supplier of java preanger coffee was distributed the product to the other region like sumatra, java, sulawesi and bali with their own brand.

5. Roastery and coffee shop. Roastery and coffee shop was relatiely new actor in coffee chain in indonesia. Usually the domestic market was dominated with instan coffee from big company but nowadays as the third wave coffee also came in indonesia, the consumer wants more about coffee and they choose to appreciate single origin coffee with different techniqe of presentation. Roastery have role to roast the green bean from farmer or collective trader, after the roast process was packaging, they would package the product with their own brand and sell it to coffee shop or consumer. Roasting type in coffee consist of three types, light, dark and medium roast. Coffee shop having role to present the roast coffe to be the beverages that ready to consume. Different technique of coffee presentation become basic requirement in coffee shop, Barista was the people that create coffee with the special tehniqe. They learn about processing and presentation techniqe manual brew with vietnam drip, V60, Turkish, and espresso machine with their latte, machiato, cappucino was a differen kind of product made by barista. In this phase the price of coffee higher than another phase. It become premium quality beverages. Java preanger was one of the premium single origin coffee that have their own consumer. The sweet taste with nutty and caramel become the unique taste from Java Preanger coffee. The consumer usually order with maunual brew option to taste it deeply.

6. Consumer. Consumer of java prenager coffee was different , their targeted a middle until higher income people, usually was office employee or college student. The price of java preanger coffee higher than another coffee because its had a high quality and unique taste. The preference of java preaner consumer was to enjoy the taste and scent. These two factors was key point of java preanger competitivenes in market.

Main Activities in Coffee Chain. Main activity in chain was an activities that included the physical transformation of the product and its sales, continued by product distribution to the consumer and after sales assistance. The categories in the primary activities are as follows: Inbound logistics, operations, outbound logistics, marketing and sales and servicing (Porter, 1994). It will be explained in detail the activities of Coffee Industry in West Java.

a. Inbound Logistics. Inbound logistics was the integration of elements in the business that includes the activities of receiving, storing and distributing inputs of raw materials used in production. In the coffee industries, this process starts from the provision of facilities and infrastructure in the cultivation of coffee such as land preparation, certified seed preparation, and preparation of fertilizers and optical handlers. Usually these inputs are obtained from certified farmers or government grants. In the provision of seeds other than derived from government assistance the farmers also do the nursery process directly. Seeds are certified to have good resilience and production quality.

b. Operation. Operation is an activity that changes physical input into output The first activity done in coffee making is grading and sorting of coffee cherry. Cherry coffee used is a red color because it has a good maturity and good quality of this harvest process known as red picking. Another criterion of good cherry is the level of hardness and percentage of sugar content other than that the coffee fruit has a soft texture, slimy and slightly watery. Furthermore, it will be done one of the coffee processing process that is natural process that begins with drying, grinding, and sorting of coffee beans and grading based on seed size. Other types of process are honey, dry and wet process which will be described more clearly

in the table below. Once in the process of being green bean with various processes will be done roasting and will proceed by checking the quality of flavor, aroma and color through the process of cupping.

c. Outbound logistics. Outbound logistics are all activities in the collection, storage (storage) and distribution of output. The process of outbound logistic in the coffee business includes the preparation of stock and demand of coffee beans in several types of demand from the demand of natural types, honey, wet and dry process and demand in the form of green bean or roasting bean and coffee demand in ready-to-eat packaging will be distributed to coffee business actors such as wholesalers and coffee shops. In the distribution process the majority of coffee bean buyers come to the coffee collection location to make purchases and quality coffee beans, in addition to being picked up by the buyer there is a shipment of coffee beans to some fixed consumers in the coffee shop even though the amount is not much.

d Sales and marketing. Subsequent activities are marketing and sales that begin by disseminating information and promotions related to products to be marketed. Promotion is done in the form of providing information related to the superiority of the product and its uniqueness through the media information or the manufacture of outlets or coffee shops to market coffee products directly.

In the process of brand or packaging marketing becomes an important thing in attracting consumers to buy these coffee products. The completeness of the information in the packaging becomes one of the important things in the process of marketing and selling in the coffee product, the name of the coffee, the type and processing done and the date of roasting becomes one of the examples of information contained in the packaging. In the sales process is done in the form of informal and sold directly with payment in full or gradually. The products sold have different prices depending on the quantity and quality purchased by consumers.

e. Service. Subsequent activities are services aimed at maintaining and increasing the value of the product. Service activities undertaken in the coffee business is the delivery of coffee beans to consumers remain in accordance with the demand. In addition to these activities to check the quality of coffee beans when in the consumer is also one of the forms of service performed cooperative producers happy giri. Performing different types of coffee innovations through differentiation of coffee products such as coffee, coffee, coffee and candied coffee is a form of improving product quality and meeting market needs.

Supporting Activities in Coffee Chain. Support activities within the porter value framework have an objective to support the primary activity. One of its forms is technology, technology development, human resource management and infrastructure development (Porter, 1994).

a. Procurement. The activity of providing inputs is part of procurement, purchasing certified coffee seeds, fertilizers, and pesticides as well as purchasing huller machines, drying and roasting machines, office equipment and coffee outlet needs such as banners, promotional banners and others as part of activities in the coffee chain.

b. Technology Development. Technology development is one of the activities that support inbound logistics which will be related in transformation of physical transformation of input into output. In this research, cherry transform into a cup of coffee that ready to consume. The technology used in coffee business have several types starting from post harvest technology such as pulping machine, huller machine, and drying machine followed by processing technology such as roasting machine and grinder. Coffee bussines also required packing machine for packaging. in addition to tools and machinery in the production needed also some tools in coffee. To make a good coffe beverages its required various types of tools such as espresso machine, frenchpress, v60, and aero press.

c. Human Resource Management. Management especially in human resources becomes very important. Human resourcse in cooperatives were coffee farmers. stages of HR management in the cooperative was recruitment of new members, training, regular meetings and distribution of in). Registered members must pass through the selection stage of the cooperative board. the criteria needed are coffee farmers who are already producing

and lived in kecamatan cilengkrang, and willing to follow the membership rule. Share benefit system motivates farmers to produce with good quantity and quality because it will provide additional income. Members of cooperatives also have a role in maintaining the quantity of production and quality in the post-harvest and processing process.

d. Company infrastructure. Infrastructure is a supporting activity in a company in a cooperative some existing infrastructure is a nursery, a place of fermentation of coffee beans, coffee wash, drying and huller machine room, dryer. and roasting house and there is a coffee promotion outlet as a place to display coffee products and various derivatives of other products.

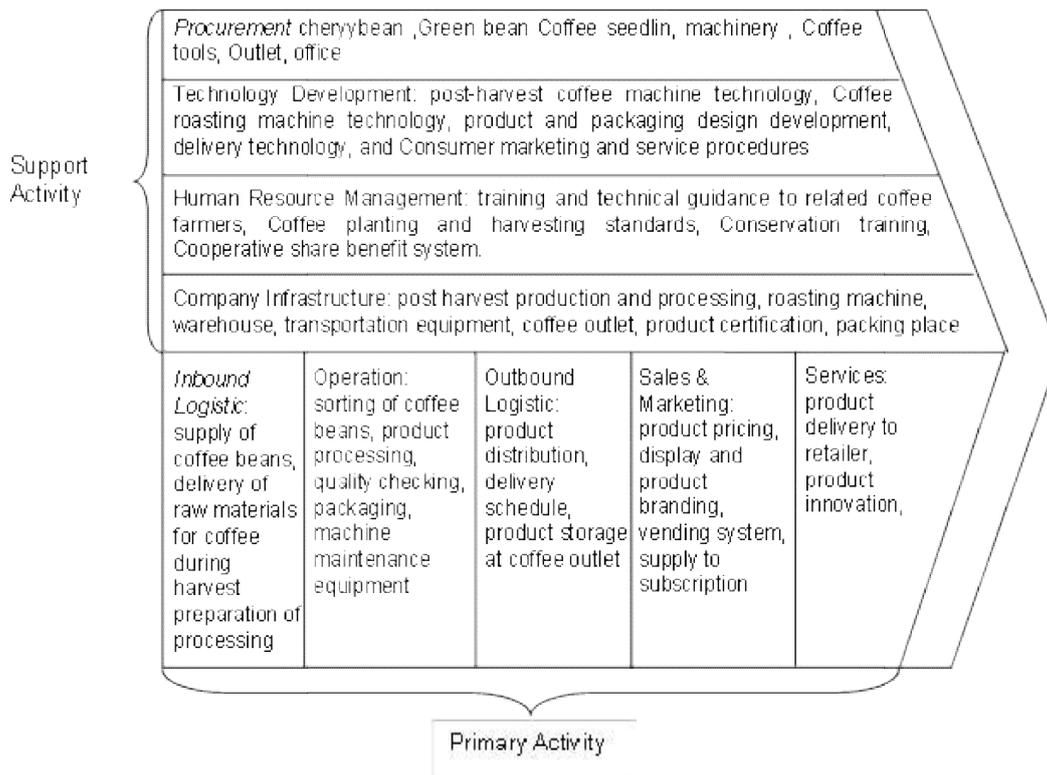


Figure 3 – Value Chain Framework of coffee

Marketing margins are used to determine the benefits that each value chain actor receives. Definition Marketing margins are the price differences that occur between value chain actors. Marketing margin method begins by calculating marketing margins, share prices at farm level, share prices at cooperative, retail and wholesale, and roaster levels. The division between cost, revenue, net income, and margin aims to look at the financial position of each offender against another. The following is a margin calculation table and price share of each value chain actor that can be seen on table 2.

Table 2 – Value added price at each stage of coffee chain in 1kg of coffee

Actors	Benefits			Margin	
	Price	Benefits	Benefit / unit	marjin/unit	%final price
Farmers	Rp8.000	Rp2.000	1, 40%	Rp8.000	3, 40%
Cooperative	Rp20.000	Rp4.000	2, 60%	Rp12.000	5, 10%
Trader	Rp80.000	Rp57.000	32%	Rp68.000	29%
Roastery	Rp235.000	Rp115.000	64%	Rp147.000	62, 50%
Total				Rp235.000	100%

The figures on table 2 identify the margin price in each actors. Farmer contribute 3, 4% in final price of coffee and roastery give 62, 50% of final prices. The initial cost of coffee in roastery are higher than another phase, because they need capital for buying roast machine,

sortation machine and packaging machine. The roaster need to get a certification of roastery skill. For farmer especially in west java region get their seedling from government support. and they bought another tools and ingredients like fertilizer, pest control, watering can and others. Cooperative have different roles in the stage of coffee. They have the second higher in term of cost because of post harvesting process also need machinery like milling and pulping machine.

CONCLUSION

The study has shown that the quality Java Preanger Coffee determined by good seedling, cultivation stage post harvesting and roasting. Post harvesting and roasting stage can added value of coffee to enter domestic and international market. Actors in coffee chain consist of farmer. For farmer there is room for upgrading the quality to increase the margin and benefits from coffee. Fitter and Kaplinsky (2001) showed, increasing differentiation of coffee prices at the retail or specialty shop outlets does not translate into increasing variance in prices paid at the farm gate. This means that farmer should do the processing until final product to achieve higher price at the farm gate. We also identify opportunities in term of create product besides coffee like Coffee leaf tea and Cherry snacks from the wastage of coffee. It will increase the income of farmer besides the main product. Recommendation for this research was to make a further value chain analysis about 1 or 2 year to see the dynamics change of value added in coffee chain. Including wider area of research like export also makes further analysis about the relation between producer, government and trader and their role to improve coffee chain in Indonesia.

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ANALYSIS OF DETERMINATION FOR FAIR REPLACEMENT VALUE OF LAND ACQUISITION FOR PUBLIC INTEREST: A CASE STUDY IN KACANG BUTOR VILLAGE

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ABSTRACT

Land acquisition has many obstacles due to the refusal of the landowners that will be acquired, this is because landowners disagree with the value of compensation provided by the government. This research aims to provide a solution for the problem so that the implementation of land acquisition can be done and the landowners can receive the compensation given. In this research used analytical descriptive method: to determine Fair Reimbursement Value, researcher combined the value of physical loss and the value of non-physical loss resulting from the calculation of premium, income tax, officials of the land deed, the interest of the waiting period, and other losses. The result of interview with landowners shows that they tend to choose the calculation from fair reimbursement value that calculated by researcher.

KEY WORDS

Land acquisition, development, public interest, fair replacement value, physical loss, non-physical loss.

Necessity of land for development in Indonesia is soaring, either as residence, place for doing business (Mulyanti, 2013), or infrastructure for public interest. Fratmawati (2006) assert that the need for land is a matter that concerned the most fundamental right of people. Therefore personal interest on land can be sacrificed for public interest. Development for public interest is aimed to embody just, prosperous, and welfare of society. It can be manifested as facilities and infrastructure that society need. In implementing the development of facilities and infrastructure, the obstacles often faced are the limited availability of land. Public facilities and infrastructure development can be accomplished if it is supported by the availability of land that the provision is made through the process of land acquisition.

To accommodate fair and democratic land acquisition process of development for public interest, owners of the land are given feasible and fair compensation. There is a regulations that issued to accommodate fair and democratic enforcement of land procurement i.e. Law No. 2 of 2012 regarding Land Procurement for Development for Public Interest. Home Affairs (Regulation of Minister of Home Affairs) No. 15 of 1975, regarding Provisions Concerning Procedure of Land Acquisition; Presidential Decree No. 55 of 1993 regarding Land Procurement for the Implementation of Public Interest Development; Presidential Regulation No. 36 of 2005 which was subsequently changed to Presidential Decree No. 65 of 2006 regarding Land Procurement for the Public Interest Development are the others regulations regarding land acquisition of development for public interest.

Legislation is issued in hope of mitigating every problem occurred in land procurement process. Implementation of land procurement is often constrained by discrepancy between the value of compensation offered by government and value of compensation expected by the landowner affected by the exemption. The above regulations basically provide solutions for land acquisition of development for public interest, but sometimes there are still problems that cause obstruction of land procurement for development for public interest. Discrepancy in expected value of compensation occurs likely due to information asymmetry between government and landowners.

Government maybe has more awareness regarding the exact amount of compensation for land acquisition but landowners don't. Information asymmetry characterizes almost every

types of assets (Adler, Stringer, and Yap, 2016) land particularly. Land is one of the most essential assets because of its characteristic that prone to be subject of compulsory acquisition for public interest (Ogedengbe, 2007) especially in developing countries (Odudu, 2017) such as Indonesia. Land that acquired by government will be used to renew and to develop new infrastructure which are often defined as public purposes (Mangioni, 2010). Adam (2015) explicate that soaring demand for land is due to growing number of people causing increased demand for housing and residential development. In this case, government is required to provide what society needs (Alemu, 2013).

In determining the amount of compensation for land acquisition, government is constrained by several things, such as information asymmetry. Alemu (2013) generally explains that there are three problems that always occur in land acquisition process, namely legal, technical and financial. Furthermore Alemu (2013) in his research mentioned that the greatest reason for landowners objections to land acquisition (especially in Ethiopia) is inadequacy of compensation given by government. It shows that the main problem in land acquisition especially in developing countries in is inadequacy felt by landowners. Existence of external appraisers is an essential aspect to mitigate information asymmetry (Muller III and Riedl, 2002) and provides an objective assessment of compensation from a third party point of view.

A significant amount of research about land acquisition or expropriation for public interest has been done before. Although some previous studies have been done in developed countries but majority of them have been done in developing countries, such as Nigeria (Babatunde, Adeniyi, and Awodele, 2017; Odudu, 2017; Ogedengbe, 2007; Opawole and Jagboro, 2016a; Opawole and Jagboro, 2016b), Ethiopia (Adam, 2015; Alemu, 2013), Pakistan (Noor, Khalfan, and Maqsood, 2013), Estonia (Dickinson, 2010), Malaysia (Omar and Ismail, 2009) and Australia (Mangioni, 2010; Newell, Chan, and Goodridge, 2011). Similar studies have also been done in Indonesia such as Fratmawati (2006) and Mulyanti (2013) studies. Both of previous studies focused on legal aspect regarding land acquisition for public interest, but our research is focused on financial aspect that is the most significant aspect arousing detention in development of infrastructure and facilities for public interest.

This research is conducted in Indonesia which in fact is a developing country with a very high population that continued to grow year by year. Object in this study is focused on development plan of standard water reservoir Kacang Butor Village, Badau District, Belitung Regency, Bangka Belitung Islands Province. Development plan for standard water reservoir facility didn't proceed as well as planned because there was no agreement between government and landowners regarding the value of compensation. Public Work Service as the executor of land acquisition use Tax Object Sales Value to determine exact amount of compensation for land acquisition. Compensation calculation based on Tax Object Sales Value id rejected by landowners because it is not in accordance with landowner expectations.

This study tries to determine the exact amount of compensation that can be accepted by landowner whose land is acquired by using Fair Replacement Value. This study is important to conduct because obstacles that driven by discrepancy of expectation for compensation between government and landowners can be detrimental for area where construction of facilities for public interest take place. Alemu (2013) also assert that the purpose of development for public interest is to ascertain safety and security, health and welfare, social and economic enhancement, and protection and restoration of natural environment. Inhibition of development for the public interest due to disagreement for land acquisition compensation from the government can cause delays in improving aspects of community life.

METHODS OF RESEARCH

This research is conducted in Kacang Butor Village, Badau District, Belitung Regency, Indonesia, especially in land acquisition location that will be built standard water reservoir. Area that will be used as standard water reservoir consists of 27 land plots that have breadth

approximately 152,323 m². This research uses case study method to elucidate descriptively about phenomenon that occurred, namely landowners refusal whose land will be used to develop standard water reservoir in Kacang Butor Village due to discrepancy of the compensation value given by government. There are two types of data used in this research, namely:

Primary data derived from interview results with some key informants who are relevant parties involved in execution of land acquisition in Kacang Butor Village, namely:

- Mr. A husband of landowner.
- Mr. D external appraiser from Public Appraiser Office.
- Mr. R from Kantor Public Work Service Office.
- Mrs. S from National Land Agency Office/Ministry of Agrarian and Spatial Planning of Belitung Regency.

Secondary data acquired with documentation technique on some documents obtained from relevant agencies with research object, such as National Land Agency Office/Ministry of Agrarian and Spatial Planning of Belitung Regency, Public Work Office, Plantation Service, and from local urban village office. Secondary data required in this study inter alia:

- Regulations regarding fair replacement value of land acquisition for development for public interest.
- Data of RT and RW of Belitung Regency.
- Market data for buildings, businesses and plants.

Researcher then determines compensation calculation technique that will be used to determine exact amount of compensation that will be given to landowners whose land will be acquired. In contrast with government who too simplify the amount of compensation determination using Tax Object Sales Value which eventually lead to landowners refusal. Government doesn't have clear standards or guidelines for asset valuation like United Kingdom (Andrew and Pitt, 2000; Andrew and Pitt, 2004; Connellan, 1997; Dent, 1997) which lead to compensation determination for land acquisition that to simplistic. Researcher therefore determines the exact amount of compensation or Fair Replacement Value by taking into account physical loss and non-physical loss. There are two reasons why this calculation technique is chosen, namely (1) calculation technique using fixed rates such as those performed by Public Work Service is more susceptible to landowners refusal (Yuan, 1990), and (2) this compensation determination technique is accordance with compensation determination technique in Australia and is proven more acceptable for landowner whose land will be acquired (Newell *et al.*, 2011).

Data analysis technique in this research is divided into several phases, namely:

The first phase refers to Noor *et al.* (2013), which is to analyze archived data obtained to determine the exact amount of Fair Replacement Value of land acquisition.

Researcher divides land area that will be appraised based on land potential into three type of land, i.e. highway roadside land, village roadside land, and inland ground.

Research determines Fair Replacement Value by calculating physical loss value using market approach and non-physical loss value that consists of premium (solatium and cost of moving and discharging), cost of transaction (Income Tax and cost of Land Deed Official), waiting period interest and other losses.

Researcher then conduct an interview with key informants to ask comparison between compensation that based on Tax Object Sales Value and Fair Replacement Value to conclude whether Fair Replacement Value is more acceptable by landowners or not.

RESULTS AND DISCUSSION

Object in this research is 27 land plots that will be acquired and used as standard water reservoir with breadth approximately 152,683 m². Important places/buildings that can become a guidance where the object of assessment is HAS Hanandjudin Airport, Kacang Butor Village Office, Kacang Butor Primary School, Tajam Mountain.

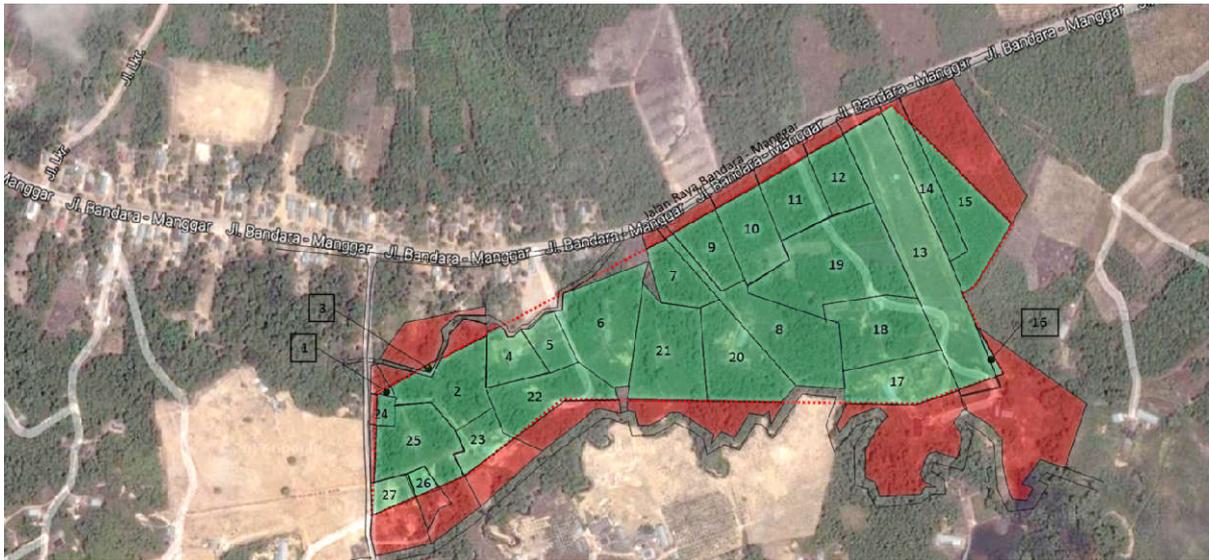


Figure 1 – Land Condition Without Scale

Determination of boundary is conducted by making a map about land zoning based on proof of land ownership rights. Data collected are 27 proofs of land ownership rights. Proof that has been collected is proof of ownership other than certificate. Every proof is not a certificate of ownership, but still in the form of Land Certificate and Deed of Relinquishment of Rights on Land. Researcher also conducted observations and interviews with local village apparatus. It aims to obtain data regarding land sale and purchase transactions that occurred in area of research object i.e. Kacang Butor Village from 2010 to 2016. This data is then used as comparative data (market comparison) on land that will be acquired.

There are 9 comparative data used to analyze that meet physical characteristics, have similarities and are located close to appraisal object. It is expected that with similarity and location that adjacent with the object then adjustment in method of market data approach is not significant. Researcher then divides 27 land plots which are an appraisal object into 3 groups of land appraisal objects based on type and distance of appraisal object or zoning location. It is done to facilitate data analysis in determining market value, so in analysis of market value determination as physical loss there are three market values of land per square meter. The three land parcels consist of highway roadside land, village roadside land, and inland ground.

Highway Roadside Land. Highway roadside land is a land parcels located in roadside of Airport - Manggar highway in Kacang Butor Village.

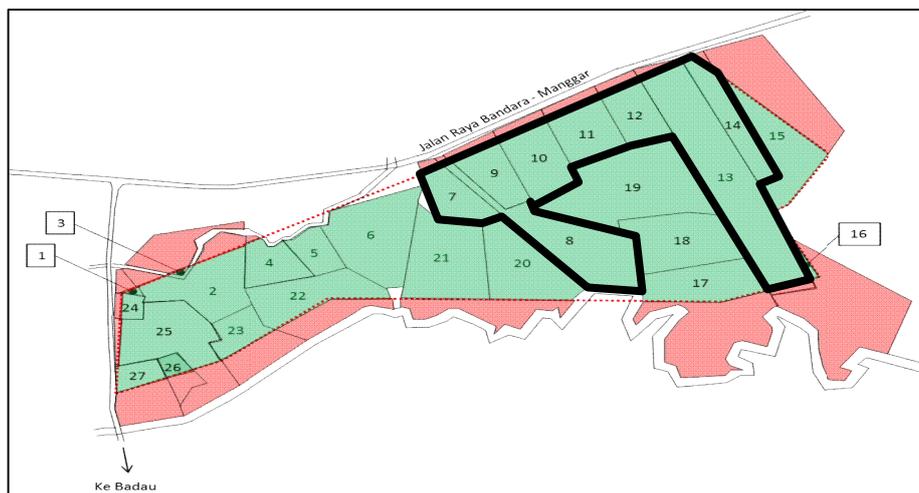


Figure 2 – Highway Roadside Land

Researcher argues that land plot located in roadside of highway has the highest market value compared with other land plots. It is due to ease of access to the highway and it is directly tangent to the highway.

Table 1 – Comparative Data of Highway Roadside Land

No.	Owner of Land	Land Type	Width (m ²)	Bid Price	Land Price (m ²)	Proof of Ownership
1	Yuda	Roadside	7,500	250,000,000.-	33,300	SKT
2	Marli	Roadside	7,240	300,000,000.-	41,400	SKT
3	Kokoy	Roadside	8,000	240,000,000.-	30,000	SKT

Village Roadside Land. Village roadside land is a land parcels located adjacent with village roadside. This group of lands is not directly adjacent with Airport – Manggar highway but located side by side with village road leading to Badau. Therefore, researcher deduces that land market value in this group called village roadside land is smaller or lower compared with market value of highway roadside land.

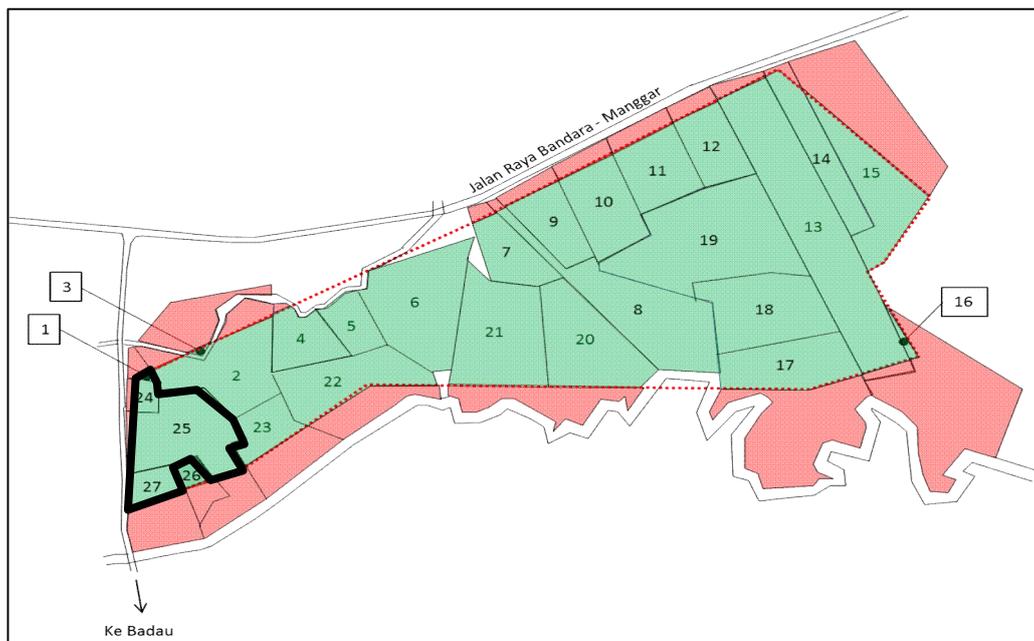


Figure 3 – Village Roadside Land

Table 2 – Comparative Data of Village Roadside Land

No.	Owner of Land	Land Type	Width (m ²)	Bid Price	Land Price (m ²)	Proof of Ownership
1	Yuda	Roadside	7,500	250,000,000.-	33,300	SKT
2	Marli	Roadside	7,240	300,000,000.-	41,400	SKT
3	Kokoy	Roadside	8,000	240,000,000.-	30,000	SKT

Inland Ground. Inland ground is a land located deeper than highway roadside land and village roadside land. According to researcher observations, this group called inland ground has the lowest market value compared with highway roadside land and village roadside land. It is due to inland ground location that makes this group of land unfavorable.

Table 3 – Comparative Data of Inland Ground

No.	Owner of Land	Land Type	Width (m ²)	Bid Price	Land Price (m ²)	Proof of Ownership
1	Masri	Inland	8,000	72,000,000.-	9,000	SKT
2	Yuli	Inland	5,000	60,000,000.-	12,000	SKT
3	Budi	Inland	7,000	60,000,000.-	8,500	SKT

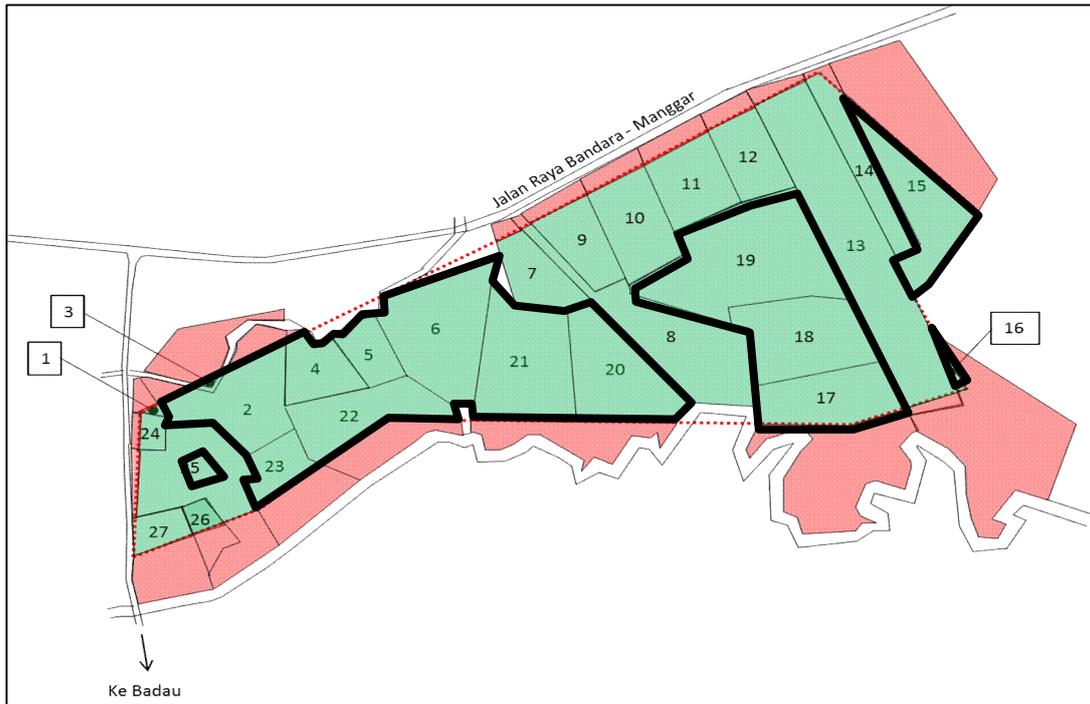


Figure 4 – Inland Ground

Fair Replacement Value Analysis. Fair Replacement Value in this research is a sum of physical loss that generated from land market value and non-physical loss that generated from Land and Building Title Transfer Duty (BPHTB), cost of Land Deed Official (PPAT) and waiting period interest. Table 4 presents value of physical loss and non-physical loss, while Table 5 exhibits calculation of Fair Replacement Value.

Table 4 – Value of Physical Loss and Non-Physical Loss

No.	Physical Loss	BPHTB (5%)	PPAT (1,5%)	INTEREST (2%)	Non-Physical Loss
HIGHWAY ROADSIDE LAND					
1	1,643,648,800.-	82,180,000.-	24,650,000.-	32,870,000.-	139,700,000.-
VILLAGE ROADSIDE LAND					
2	208,853,700.-	10,440,000.-	3,130,000.-	4,180,000.-	17,750,000.-
INLAND GROUND					
3	775.848.600	38,770,000.-	11,630,000.-	15,510,000.-	65.910.000
Total	2.628.351.100	131,390,000.-	39,410,000.-	52,560,000.-	223.360.000

Table 5 – Calculation of Fair Replacement Value

No.	Land Zoning	Physical Loss	Non-Physical Loss	Fair Replacement Value
1	Highway Roadside Land	1,643,648,800.-	139,700,000.-	1,783,348,800.-
2	Village Roadside Land	208,853,700.-	17,750,000.-	226,603,700.-
3	Inland Ground	775,848,600.-	65,910,000.-	841,758,600.-
Total		2,628,351,100.-	223,360,000.-	2,851,711,100.-

According to Table 4 and 5, it can be concluded that Fair Replacement Value which consists of physical loss and non-physical loss components exhibit that value generated above actual market value of land sold directly or not through land acquisition mechanism. Researcher gets some evidence from interview conducted with several key informants. Firstly, through interview with landowners it is known that some landowners questioned the difference in basic calculation of land per square meter. After socialization regarding why there is a difference in calculation of land base with Public Appraiser Office, landowners have better understanding about how the difference occur and receive fair replacement value that has been determined.

CONCLUSION

This study is conducted due to a dispute regarding compensation value of land acquisition for public interest. Government previously used Tax Object Sales Value as a basis for calculating compensation for land acquisition that considered less appropriate for determining compensation value for landowners whose land is acquired for development of infrastructure and facilities. The existence of non-physical loss calculation provides value added for land that will be acquired, so that the final value for compensation becomes greater or equal with market value, and if the value is above or at least equal with market value, then it is certain that the value that generated with calculation conducted by external appraiser is higher than Tax Object Sales Value. Interpretation of Table 4 and Table 5 along with interview result shows that replacement value provided from fair replacement value mechanism accommodate landowners expectation for amount of compensation they will receive.

Nevertheless there are some aspect that can't be fully accommodated through calculation of Fair Replacement Value by summing physical loss and non-physical loss value. In line with statement from Adair and Hutchison (2005) that explicate about inherent risk which in appraisal process of an assets, so there is no appraisal process that can be conducted flawlessly and satisfy all related. Researcher refer to Adam (2015) also gives some suggestion to government that financial compensation is not the only way to compensate landowners whose land is acquired for facilities development for public interest. Government may also consider land readjustment as an alternative of indemnification.

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EFFECTS OF HOUSEHOLD DEMOGRAPHICS ON THE TECHNICAL EFFICIENCY OF COWPEA FARMERS: EVIDENCE OF STOCHASTIC FUNCTION ANALYSIS IN NIGERIA

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ABSTRACT

Technical efficiency of cowpea production in Nigeria has been associated with numerous factors, comprising institutional, production and farmer specific factors. However, outcomes regarding the latter continued to receive attention, given the resource poor nature of farming households. This study therefore examined the effects of household demographics on the technical efficiency of cowpea farmers in Niger State, Nigeria. Data were obtained through structured questionnaires administered to 286 respondents. Descriptive statistics and stochastic frontier analysis model were used for data analysis. The study revealed that household demographics and educational status have direct statistical effects on the technical efficiency of the cowpea farmers. The key challenges witnessed by respondents were lack of credit and low income as reported by 83.22 and 74.83% of the respondents respectively.

KEY WORDS

Household, demographics, technical efficiency, cowpea, production.

Agriculture is the back bone of Nigeria's economy; as it contributes 23.1% to the Gross Domestic Product (GDP) and accounts for 38% of the working population (Federal Ministry of Budget and National Planning, 2017). However, the sector is believed to be one of the country's potential sources of revenue that is still underdeveloped and unexplored. For instance, estimated 80% of the available land in the country is arable, with potentials for cultivation (Info Guide Nigeria, 2014). The agriculture sector is also dominated by the crop sub-sector, which accounts for about 85% of the sector, covering cash and arable crops, including cowpea.

Cowpea is a tropical annual herbaceous legume grown majorly in Nigeria and it provides income and employment opportunities for most people in the rural areas of the country. Nigeria is the largest producer in the World, as it produces an estimated 2.17 million tons annually (Food and Agricultural Organization, 2014). However, cowpea production in Nigeria has been sub-optimal, with producers' technical efficiencies below the frontier in most parts of the country. In most cases, resources were either under or over-utilised (Sofoluwe and Kareem, 2011; Egbetokun and Ajijola, 2008; Abba, 2016 and Abdui, Makama and Mika `il, 2013). However, while affirming that traditional farms are characterised by low use of purchased inputs other than labour and associated with low yields, Norton, Alwang and Masters (2015) argued that traditional farms tend to be poor, but efficient. This controversy remained largely unresolved in spite the dynamic nature of the study of economics.

Demographics on the other hand, involves the study of specific population based on factors ranging from age, sex, to their hobbies and lifestyles in order to be able to characterize and assess the behaviour of the population (igi-global dictionary). Expectedly, these specific characteristics play key roles in farmers' production activities from whatever perspective it is being viewed. Sofoluwe and Kareem, 2011; Abba, 2016 have established the effect of farmers' demographics on technical efficiency. Given the associated factors impinging on farmers' efficiency under cowpea production in the study area, there are doubts, whether farmers' demographics have any meaningful effect on farmers' technical efficiency. Thus, a pertinent question to ask therefore is whether demographic composition

has an effect on farmers' technical efficiencies. Therefore, this study described the demographic characteristics of cowpea farmers in the study area, assessed the effect of household demographics on the technical efficiency of respondents and identified challenges limiting cowpea production in the study area.

Basically, the initial discourse on efficiency stems from equity consideration and was premised on three theories, namely the Pareto Efficiency or Pareto Optimality, the Kaldor-Hicks improvement and the Zero Profit Condition or Zero Profit Theorem (Intelligent economist). While Pareto optimality theory was premised on making one individual better off without making any other worse off (termed Pareto Efficient), Kaldor-Hicks Efficiency was based on logic that Pareto Optimal outcome can be reached by arranging sufficient compensation from those who are made better off to those who are made worse off. Zero Profit Theorem on the other hand, states that entry into a compatible industry will continue until all opportunity for positive economic profit is reduced to zero. With the pioneering work by Farrell however, efficiency theories have focused on input output relationships, output optimization, given a set of input prices, productivity, performance, quality and profit. Also, the trend in efficiency estimation has gone from double to single model estimation, using either the parametric and or the non-parametric approaches. However, recent insight differentiated between productivity and efficiency, with the former viewed from the current rhetoric of output optimization from a set of inputs, while the latter was viewed from the perspective of optimal resource allocation (Norton, Alwang and Masters, 2015), with the resolve that smallholder farmers are associated with low productivity but are largely efficient in terms of resource allocation. Thus, Farrell identified three forms of efficiency, namely technical, allocative and economic efficiencies. Technical efficiency is the ability of a firm to produce a given level of output with a given minimum quantity of input under certain technology. Allocative efficiency on the other hand relates to choosing an optimal set of inputs with given set of input prices. Economic is a product of the technical and allocative efficiencies and relates to the concept productivity, performance, quality and profit. This study draws mainly from Farrell's efficiency theories with focus on the technical efficiency.

METHODS OF RESEARCH

The study was carried out in Niger State, situated in the North Central of Nigeria. The state lies in the Guinea Savannah Vegetation Zone and is located within Latitudes 8⁰11'N and 11⁰20'N and Longitudes 4⁰30'E and 7⁰20'E. Niger is bordered to the north by Zamfara State, to the northwest by Kebbi State, to the south by Kogi State, to southwest by Kwara State; while Kaduna State and the Federal Capital Territory borders the State to northwest and southwest respectively. The State also shares a common international boundary with the Republic of Benin at Babanna in Borgu Local Government Area (LGA). Niger State consists of twenty five LGAs grouped into three administrative Zones, namely 1, 2 and 3; with the zones having 8, 8 and 9 LGAs respectively. This study was conducted in Zones 1 and 3 of Niger State. Agriculture is predominant in the state, with cowpea, rice, yam, sugar cane, maize and millet, being the major crops grown.

A multi-stage sampling technique was used for this study. The first stage was a purposive selection of Zones 1 and 3 out of the three Zones in the State, given the preponderance of cowpea farmers (Niger State Agricultural Mechanization and Development Agency, 2016). The second stage was a selection of two LGAs each from the two Zones. The third stage was the random selection of 2 villages from each of the selected LGA, giving a total of eight villages. In the fourth stage, sampling of farm households in each village was determined proportionately using Yamane's model (Equation 1).

$$n = \frac{N}{1+N(e)^2} \quad (1)$$

Where: n = Sample size to be determined; N = Population size; e = limit of tolerable error (precision level = 0.05); 1 = constant.

The data for the study were generated through primary sources and were collected with the use of structured questionnaire designed in line with the research objectives. This was administered to the respondents with the assistance of trained enumerators. Data collected were majorly demographic and input-output data covering variables like age, marital status, household size, household decision maker, while the input-output data covers production inputs used for cowpea production- land, seed, fertilizer, labour, capital, output of cowpea, among others.

Descriptive statistics such as frequency distribution tables, percentages and mean were used to describe and characterize the respondents and identify the challenges to cowpea enterprise, while the Stochastic Frontier Analysis was used to determine the effect of household demographics the technical efficiency of cowpea farmers.

The explicit form of the model is expressed as:

$$\ln Y = \ln \beta_0 + \beta_1 \ln X_1 + \beta_2 \ln X_2 + \beta_3 \ln X_3 + \beta_4 \ln X_4 + \dots + \beta_7 \ln X_7 + (V_i - U_i) \quad (2)$$

Where: \ln is natural logarithm; β_0 = Constant; $\beta_1 - \beta_7$ = Coefficients of production factors to be estimated; $(V_i - U_i)$ = Composite error term; Y = Output of Cowpea (Kg); X_1 = Farm size under cowpea (Ha); X_2 = Quantity of fertilizer (Kg); X_3 = Family labour (Man-days); X_4 = Hired labour (Man-days); X_5 = Agrochemicals (Litres); X_6 = Capital inputs (depreciation on fixed cost items such as hoes, cutlasses (₦)); X_7 = Seed used (Kg).

The effect of household demographics was determined using the inefficiency function specified thus:

$$TE = \delta_0 + \delta_1 Z_1 + \delta_2 Z_2 + \delta_3 Z_3 + \delta_4 Z_4 + \delta_5 Z_5 + \delta_6 Z_6 + \dots + \delta_{23} Z_{22} \quad (6)$$

Where: Z_1 = Household size (Number of persons in the HH); Z_2 = Gender of HH head (Male =1, Female =0); Z_3 = Marital Status (Single Yes =1, No =0); Z_4 = Marital Status (Married Yes =1, No =0); Z_5 = Marital Status (Divorced Yes =1, No =0); Z_6 = Age of decision maker on technology utilization (Years); Z_7 = Gender of decision maker on technology utilization (Male =1, Female =0); Z_8 = Years of farming experience (Number of years); Z_9 = Educational level (Number of years spent in formal school); Z_{10} = Farm size (Hectares); Z_{11} = Employment (Number of those employed in the HH); Z_{12} = Household Composition - Adult male (Number); Z_{13} = Household Composition - Adult female (Number); Z_{14} = Household Composition - Children (Number); Z_{15} = Number of extension visits (Number); Z_{16} = Membership of Cooperative society (Yes =1, No =0); Z_{17} = Number of languages spoken (Number); Z_{18} = House ownership (Male =1, Female =0); Z_{19} = Income of Household Head (Naira); Z_{20} = Access to Credit (Yes =1, No =0); Z_{21} = Access to insurance (Yes =1, No =0); Z_{22} = Technology Utilization (Index); δ_0 = Constant; $\delta_1 - \delta_{22}$ = Coefficients to be estimated.

RESULTS AND DISCUSSION

Demographic characteristics of respondents. Table 1 shows that most (79.75%) of the farmers in the study area were between the ages of 20 and 50 years, with mean age of 45 years. People within this age range are believed to be in their active ages, implying that the farmers are capable of high productivity and are likely to utilize new technologies. This is in consonance with outcome of the study by Okwwoche *et al.* (2010), who pointed out that younger farmers are more susceptible to utilize new technologies than older farmers. In all, 76.92% of the sampled respondents were males and the decision makers of their households. Most (89.88%) of the respondents have one educational qualification or the other. The implication is that most of the respondents are literate, with their educational status expected to aid them in applying new technologies. Kimenye (2001) and Nkonya *et al.*, (1997) reported that education have positive and significant relationship with technology utilization. The results from Table 1 further shows that 48.25% of the farmers have between 1.0 ha and 1.9 ha, with a mean of 0.9ha. This indicates that the respondents are small-scale

producers, with obvious implications for enterprise scale and commercialization. However, Fasasi (2007) noted that the small scale farmers are responsible for the bulk of the food produced in Nigeria. Most (56.3%) of the respondents had household comprising 6 -11 persons. The mean household size was 10, implication that, respondents on the average maintain large family sizes. This could be an asset for family labour, although extra expenses may be incurred with respect to feeding, health and education. According to Perz (2003), a large household may encourage utilization of labour-intensive improved inputs. Farmers with 6-10 years experience (39.15%) predominate and this is followed by 23.78% of farmers with 11-15 years experience.

Table 1 – Distribution of respondents according to household demographics

Variables	Frequency	Percentage	Mean	Standard Deviation
Age				
<31	21	7.35	44.6	8.69
31-40	97	33.92		
41-50	110	38.48		
51-60	56	19.59		
61 and above	2	0.70		
Decision maker				
Male	220	76.92		
Female	66	23.08		
Educational level (Number of years spent)				
0	29	10.14		
1-6	173	60.50		
7-12	67	23.43		
13 and above	17	5.95		
Farm Size				
0.1-0.9	102	35.67	0.9	0.60
1.0-1.9	138	48.25		
2.0-2.9	42	14.69		
3.0>	4	1.40		
Household Size				
<6	31	10.84	10	3.96
6-11	161	56.3		
12-17	82	28.67		
18-23	12	4.2		
>23	0	0		

Source: Field Survey, 2016.

Effect of Household Demographics on the Technical Efficiency of Cowpea Farmers. The estimated coefficients of the Stochastic Frontier Analysis as presented in Table 2 shows that the estimated sigma-square (0.19) and gamma estimate (0.99) were significant at 1% level of probability. The latter shows that, there was 99% variation in output resulting from technical inefficiencies of the farmers. The estimate of the parameters of the stochastic production frontier indicated that the coefficients of all the significant factors included in the efficiency function were positive, implying that increase in the use of any of the factors led to increase in technical efficiency, *ceteris paribus*.

Specifically, inputs with respect to farm size, hired labour, agrochemicals and seed were all positive and statistically significant at 1% level of probability implying that an increase of 1% in these inputs resulted in an increase in output by 0.753%, 0.013%, 0.049% and 0.043% respectively. This aligns with the outcomes of studies by Bekele (2003), Boris *et al.* (1997), Nyagaka *et al.* (2010) and Agwu (2004).

With respect to the inefficiency model, gender of household head was positive with coefficient of 0.471, which was statistically significant at 5% level of probability. The implication is that gender of household does not increase efficiency. Farm size was negative with coefficient of -0.149 which was also statistically significant at 5%. The implication is that farm size increase efficiency. This is in line with Boris *et al.* (1997) and Tanko *et al.* (2008)

that reported that farm size has a significant influence on farmers' efficiency, but in contrast with the study of Akinwumi *et al.* (1996) that reported that farm size has no influence on farmers' efficiencies. Educational level was positive and statistically significant at 10% with a coefficient of 0.011, implying that educational level does not increase efficiency. This runs contrary to the studies of Kimenyi (2001), Mendola (2007) and Okoye *et al.* (2006) who reported that education promoted farmers' efficiency. The coefficients of being single and divorced were positive with values 0.432 and 0.408 respectively and significant at 1% level of probability while being married was negative with coefficient -0.316 and also significant at 1% level of probability. This implies that marriage increases efficiency. This may be as a result of the advantage of the combined efforts of married people in acquiring agricultural information and pulling funds together to utilize technologies as against those of respondents that were single and divorced. Gender of decision maker on technology utilization, employment, number of extension visits, house ownership, income of household head and access to credit were significant at 1% level of probability and negative with coefficients -0.096, -0.190, -0.654, -0.000 and -0.919 respectively. This implies that these variables increase efficiency.

Table 2 – Effects by household demographics on respondents' technical efficiency

Variables	Parameter	Coefficient	Standard-error	t-ratio
Efficiency model				
Constant	δ_0	7.669717	0.596637	12.85***
Farm size	δ_1	0.753937	0.018543	40.66***
Fertilizer	δ_2	0.001615	0.001688	0.96
Family labour	δ_3	0.004146	0.002880	1.44
Hired labour	δ_4	0.013527	0.001918	7.05***
Agrochemicals	δ_5	0.049946	0.006792	7.35***
Capital inputs	δ_6	0.148705	0.085850	1.73
Seed	δ_7	0.043970	0.016770	2.62***
Inefficiency model				
Constant	δ_0	2.391503	0.396236	6.04***
Household size	δ_1	-0.024572	0.128653	-0.19
Gender of HH head	δ_2	0.471671	0.183052	2.58**
Marital status – single	δ_3	0.432319	0.100134	4.32***
Marital status – married	δ_4	-0.316448	0.088266	-3.59***
Marital status – divorced	δ_5	0.408890	0.101565	4.03***
Age of decision maker on technology utilization	δ_6	-0.004401	0.004860	-0.91
Gender of decision maker on technology utilization	δ_7	-0.736329	0.113748	-6.47***
Years of farming experience	δ_8	0.005219	0.007013	0.74
Educational level	δ_9	0.011691	0.006355	1.84*
Farm size	δ_{10}	-0.149852	0.060949	-2.46**
Employment	δ_{11}	-0.096400	0.025215	-3.82***
HH Composition – Adult male	δ_{12}	-0.025457	0.131227	-0.19
HH Composition – Adult female	δ_{13}	0.131568	0.131523	1.00
HH Composition – Children	δ_{14}	0.050560	0.128153	0.39
Number of extension visits per production season	δ_{15}	-0.190364	0.046078	-4.13***
Membership of Cooperative society	δ_{16}	-0.087049	0.093143	-0.93
Number of languages spoken	δ_{17}	-0.079570	0.050572	-1.57
House ownership	δ_{18}	-0.654500	0.131643	-4.97***
Income of Household Head	δ_{19}	-0.000016	0.000002	-9.62***
Access to Credit	δ_{20}	-0.919833	0.144010	-6.39***
Access to insurance	δ_{21}	-0.113649	0.125463	-0.91
Technology Utilization	δ_{22}	0.459189	0.140217	3.27***
Sigma-squared	σ^2	0.191528	0.029841	6.42***
Gamma	Γ	0.996769	0.001083	920.13***

Log likelihood function = 149.55944*** LR test of the one-sided error = 294.69447***

*** Significant at 1%, ** significant at 5%, * significant at 10%

Source: Computation from survey data, 2016

This agrees with the studies of Katungi (2006), Habtemariam (2004), Boris *et al.* (1997), Kidane (2001), Getahun (2004), Mbanasor *et al.* (2008), David (2005) and Okoye *et al.* (2006). Technology utilization was positive with coefficients 0.459 and was statistically significant at 1% level of probability, implying that technology utilization decreases efficiency.

This could be as result of inadequate and wrong utilization, arising from inadequate knowledge.

The frequency distribution of technical efficiency levels for cowpea farmers in the study area is presented in Table 3. The mean technical efficiency was 0.791, which suggested that on the average, the observed cowpea output was 21% less than the optimum output. This implies that the cowpea farmers on the average were technically efficient (0.791) and were 21% below the frontier due to technical inefficiency. This situation can be enhanced by adopting best practices of existing technologies. The result further indicates that technical efficiency indices range from 44% to 96% for the study area, with an average of 79%.

Table 3 – Technical efficiency distribution of Cowpea farmers in Niger State

Technical Efficiency Score	Frequency	Percentage
0.31 – 0.40	47	16.43
0.41 – 0.50	1	0.35
0.51 – 0.60	11	3.85
0.61 – 0.70	31	10.84
0.71 – 0.80	15	5.24
0.81 – 0.90	38	13.29
0.91 – 1.00	143	50.00
Sample size	286	100.00
Minimum score	0.445	
Maximum score	0.9622	
Mean score	0.791	

Source: Computation from survey data, 2016.

Challenges to Cowpea Production. The key challenges hindering cowpea production in the study area were lack of credit (83.22%), low income (74.83%), high cost of hired labour (74.83%), risk of new technology (64.69%), complexity of technology (60.84%) and limited knowledge of equipment use (57.34%) (Table 4).

Table 4 – Challenges hindering Cowpea production

Challenges	Frequency	Percentage
Risk of new technology	185	64.69
Complexity of technology	174	60.84
Doubts in Profitability	44	15.38
Lack of credit	238	83.22
Low income	214	74.83
Low accessibility	90	31.70
Language barrier	30	10.49
Insufficient training	50	17.48
Societal factors	65	22.73
Religious inclination	47	16.43
Cultural inclination	68	23.78
Little knowledge of equipment usage	164	57.34
Little or no experience in cowpea farming	77	26.92
Doubts in efficiency of equipment	113	39.51
Use of hired labour	152	53.15
Large size of land cultivated	128	44.76

Source: Computation from survey data, 2016.

CONCLUSION AND RECOMMENDATIONS

On the basis of the outcome of this study, the study concluded that some household demographics had significant effect on the efficiency of cowpea production in the study area. Consequently, the study recommended as follows:

The need to encourage married people into cowpea production, given the benefits in pooling resources together to obtain efficiency inducing technologies;

Without prejudice to the emphasis on productivity and given the untapped arable land resources, it is imperative for the Niger State Agricultural Mechanization and Development Authority to create awareness for acreage expansion in order to enhance the efficiency of cowpea farmers.

Given the importance of asset ownership in household empowerment and efficiency enhancement, there is the need to support technologies that will raise cowpea returns on investment with a view to enhancing the acquisition of relevant assets and adequately position cowpea farmers for investment in their cowpea enterprise; and

It is imperative for policy makers in the state to take cognizance of farmers' demographic characteristics in policies relating to cowpea improvement in the study area.

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ANTIBACTERIAL COMPOUNDS ACTIVITY OF MANGROVE LEAF EXTRACT RHIZOPHORA MUCRONATA ON AEROMONAS HYDROPHILA

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ABSTRACT

Pathogenic bacterial infections such as *A. hydrophyla* in fish cultivation are common problems. *A. hydrophyla* belongs to a group of bacteria resistant to more than one type of antibiotic. This study aims to determine the antibacterial activity of *R. mucronata* mangrove leaf extract and to identify potential antibacterial compounds. The research procedure includes extraction, compound refinement, phytochemical test, antibacterial activity test, and KBM-KHM Test. The results show that the antibacterial ability possessed by *R. mucronata* leaves crude extract increased after the extract was purified utilizing separating funnel. The lowest concentration of methanol fraction extract capable of inhibiting *A. hydrophyla* (KHM) growth was at 8.25 ± 0.39 ppm, while the lowest concentration of *A. hydrophyla* was 32.99 ± 1.56 ppm. Bioactive compounds contained in methanol *R. mucronata* leaves extract are alkaloid compounds, flavonoids, and tannins. Out of the three compounds detected, antibacterial activity is thought to be derived from flavonoid and tannin compounds.

KEY WORDS

Organic solvents, separating funnel, phytochemicals, extract.

Aquaculture is one sector that plays an important role in fulfilling global food needs. Increasing the need for cultivated fish increases aquaculture activities. Fish deaths during cultivation, especially those caused by pathogenic bacterial infections, are still a common problem. *Haemorrhagic septicemia*, the rot of fan/tail and epizootic ulcerative syndrome are diseases of aquaculture caused by *Aeromonas hydrophila*.

Treatment of fish that have been infected by bacteria, especially *A. hydrophila*, in cultivation to date still use antibiotics. The use of antibiotics is one-factor triggering bacterial resistance, even against some types of antibiotics. *A. hydrophila* is one of the bacteria resistant to several types of antibiotics such as penicillin, ampicillin, cephalothin, streptomycin, amoxicillin, oxytetracycline, and streptomycin (Stratev, 2016; Adanir and Turutoglu, 2007).

Utilization of mangroves as drugs raw material has long been developed traditionally by coastal communities (Bandaranayake, 2002). *Rhizophora mucronata* is one type of mangrove that is known to have biological activity. The bioactive compounds of *R. mucronata* are derived from secondary metabolite products such as saponins (Mahato et al., 1988), alkaloids (Gurudeeban et al., 2013) and flavonoids (Nurdiani, R, and Awaludin, A, 2012). *R. mucronata* has antibacterial properties against several Multi Drugs Resistance bacteria (MDR) that infect humans such as *Escherichia coli*, *Staphylococcus aureus*, and *Klebsiella pneumonia* (Joel and Bhimba, 2010).

The purpose of this study was to determine the antibacterial activity of *R. mucronata* mangrove leaf extract and to identify the class of potential antibacterial compounds.

MATERIAL AND METHODS OF RESEARCH

The research material used was *R.mucronata* leaf. Collected leaves are fresh leaves (still attached to tree trunks) between 10-16 cm. Leaves are then cleaned with aquades to remove dirt and sun-dried. The dried leaves are mashed until the *R.mucronata* leaf turned to powder.

The method used in this study is laboratory experimental. Obtained data were analyzed utilizing the descriptive method.

Extraction. A total of 1000 g mangrove leaf powder is macerated utilizing three different solvents based on their polarity levels. The polarity is n-hexane (nonpolar), ethyl acetate (semi-polar) and methanol (polar). It was conducted in order to dissolve all types of bioactive compounds contained in *R.mucronata* leaves. Leaf powder is macerated with a ratio of 1: 2 (leaf powder: solvent) in stages for 3 x 24 hours. The filtrate obtained from the result of maceration was steamed by utilizing rotary evaporator at temperature $\pm 40^{\circ}\text{C}$. The filtrate evaporation process aims to remove the solvent from the extract to obtain a crude extract of *R.mucronata* leaf (Trianto et al, 2004; Mulyani et al, 2013 and Lim et al, 2017).

Compound Separation. Compound separation used in this study is separation funnel method. This process aims to purify the compounds contained in the extract by attracting other compounds having different polar properties.

***A. hydrophila* Bacteria Stock Preparation and Suspension.** *A.hydrophyla* were obtained from BBPAP Disease and Pest Laboratory, Jepara. To obtain a stock of pure cultures, *A.hydrophila* were inoculated into a medium made of Tryptic Soy Agar (TSA) by scraping bacterial colonies utilizing ose needles and incubated at $\pm 37^{\circ}\text{C}$ for 24 hours.

Preparation of bacterial suspense was performed by inoculating bacterial colonies in 10 ml Tryptic Soy Broth (TSB) liquid medium and incubated at $\pm 37^{\circ}\text{C}$ for 24 h. Suspense bacteria obtained was put in a vortex process for homogenization prior to use on antibacterial activity test (Sumaryati and Sudiyono, 2015).

Antibacterial Activity Test. The antibacterial activity test aimed to determine the antibacterial potency of *R.mucronata* leaf extract and extract the separated funnel fraction. The test was performed in agar diffusion method. *R.mucronata* leaf extract is placed into a petri dish filled with agar medium and suspended *A.hydrophyla* seeped on disc paper. The antibacterial potency is shown from the clear zone formed around the disc, indicating that the compounds contained in the extract are able to inhibit or kill the growth of *A.hydrophyla* (Schlegel and Schmidt, 1994). The antibacterial activity test used three different concentrations at 1000 ppm, 100 ppm and 10 ppm in three repetitions. The incubation period was conducted for 3x24 hours and the measurement of clear zone diameter was conducted every 24 hours. Drag zone value is the diameter of the clear zone - the diameter of the disc paper.

Minimum Concentration Test (KBM) and Minimum Killing Concentration (KBM). KHM and KBM test aims to determine the minimum concentrations that can inhibit and kill *A.hydrophyla*. Determination of KHM value was conducted utilizing agar diffusion method with test concentrations of 1000ppm, 2000ppm, 3000ppm, 4000ppm, 5000ppm, and 6000ppm. Positive controls used ampicillin and negative controls used DMSO. The test solution was obtained by diluting the extract with DMSO until the desired concentration was obtained. KHM observation was conducted visually by observing the presence or absence of the inhibit zone formed as well as measuring the size of the inhibit zone diameter (mm). The determination of KHM and KBM values was conducted according to Bloomfield (1991). The concentration KHM and KBM value were obtained utilizing curve between X-axis In Extract concentrations (ln Mo). Y-axis is the quadratic value of resistor area (Z^2).

Qualitative Phytochemical Test. Phytochemical tests were performed to determine the class of compounds contained in the extract. The test was performed according to the procedure described by Setyowati et al (2014), which is an identification of alkaloids. It involved 0.5 g of extract was added to 1 ml of HCL 2M and 9 ml of aquades, heated for 2 min, cooled and filtered. Reagent dragendorf were added afterward. Should orange to brown color is formed then the extract contains alkaloid compounds. Identification of flavonoids was

conducted to dissolve the extract in hot methanol. 0.1 g of Mg powder and 5 drops of concentrated HCL were added. Should orange color is formed then the extract contains flavonoid compound. Tannin identification was performed by adding 1 ml of FeCl₃ 1% to the extract. The appearance of blue or greenish color indicates the content of tannin compounds. Saponin identification was conducted by dissolving the extract in 10 ml hot water, then shaken for 10 seconds. The content of saponin compound is detected should it formed foam and does not disappear when 1 drop of concentrated HCL is added.

Quantitative Phytochemical Test. Quantification of bioactive compounds in *R.mucronata* leaf extract utilizing UV-Vis spectrophotometer at 517 nm wavelength.

RESULTS AND DISCUSSION

Extraction. The extraction process is carried out by maceration or immersion method to dissolve the bioactive compound contained in *R.mucronata* leaf. Dried and mashed *R.mucronata* leaves are weighed to 1000 g (from 5640 g of initial weight before dried and mashed) of leaf powder. It is then soaked in an organic solvent with multilevel polarity. Extraction results are exhibited in Table 1.

Table 1 – *R.mucronata* leaf extraction results with 3 different solvents

Solvent	Extract Weight (g)	Extract Immersion (%)
n-Heksan	7.07±0.25	0.71
Etil Asetat	37.51±0.45	3.803
Methanol	18.47±0.71	1.91

Antibacterial Activity Test on *R.mucronata* Leaf Extract. The antibacterial activity test on the crude extract of *R.mucronata* leaves to *A.hydrophyla* aims to determine the antibacterial activity possessed by the three extracts. The soluble compound in the methanol solvent and ethyl acetate exhibited the presence of antibacterial activity with the formation of the inhibitory zone, whereas in the n-hexane solvent there was no inhibition zone. The result of antibacterial activity test on the crude extract of *R.mucronata* leaf is exhibited in Figure 1.

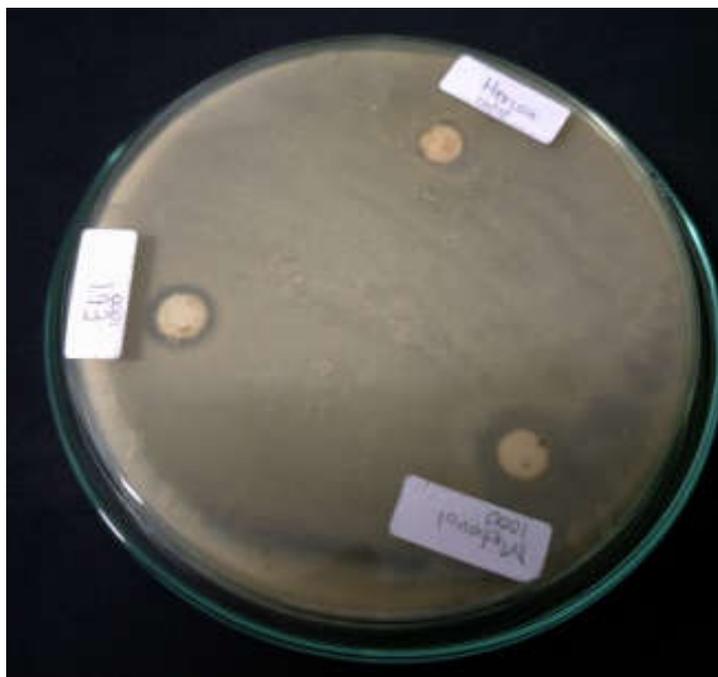


Figure 1 – Results of antibacterial activity test crude extract of *R.mucronata* leaf

The diameter of the inhibition zone formed from the antibacterial activity test of the crude extract of *R.mucronata* was 6.5 ± 0.58 mm (1000 ppm extract with methanol solvent),

2.7 ± 0.84 (1000 ppm extract with ethyl acetate solvent). Observation on the amount of drag zone diameter was conducted for 3x24 hours. Research result exhibited a decrease in drag zone diameter within 48 hours and 72 hours on both extracts and at every concentration. This indicates that the antibacterial activity possessed by *R.mucronata* leaves is bacteriostatic (Dwijoseputro, 1987, Schlegel and Schmidt, 1994). Antibacterial activity test on a crude extract of *R.mucronata* leaves exhibited that the extract produced by methanol solvent has the greatest inhibition zone compared to the others. This indicates that the antibacterial compound *A.hydrophyla* is a polar compound.

Crude extract and methanol solvent were purified utilizing separating funnel. A total of 15 g of crude extract were separated. Extract fraction is shown in Figure 2.

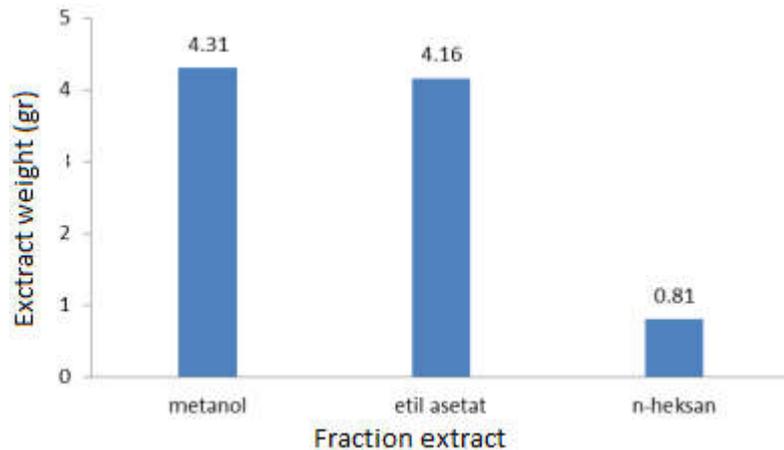


Figure 2 – Graph of weight extract fraction from separated funnel method results

The methanol fraction extract was tested for antibacterial to determine the difference between antibacterial activity possessed and crude methanol extract solvent activity. The results exhibited that the methanol fraction extract had a larger inhibitory zone diameter compared to the crude extract. Nevertheless, both types of extracts possess similar antibacterial bacteriostatic property. Comparison of two extract inhibitory zone diameter at a concentration of 1000 ppm is exhibited in Figure 3. The inhibit zone was formed by methanol fraction extract of 6.9 mm at a concentration of 1000 ppm. It indicates that the *R.mucronata* leaf possesses moderate resistance to *A.hydrophyla* according to Greenwood (1995) (Table 2).

Table 2 – Classification of inhibiting responses according to Greenwood (1995)

Inhibiting diameter (mm)	Inhibiting Power Category
≥ 20	Very strong
10-20	Strong
5-10	Medium
≤ 5	Weak

In contrast, antibacterial test results of *R.mucronata* against *Staphylococcus aureus* performed by Gurudeeban, et al., (2013) exhibited strong antibacterial activity (19.56 ± 0.19 mm). The resistance to *A. hydrophyla* growth is lower compared to *S.aureus*. It is thought to be caused by both bacteria types. *A.hydrophyla* is a gram-negative bacteria whereas *S.aureus* is gram-positive. The complexity of the gram-negative structure is higher than that of the simpler gram making the cell wall structure of gram-negative stronger and more difficult to destroy by bioactive compounds (Sari et al 2010).

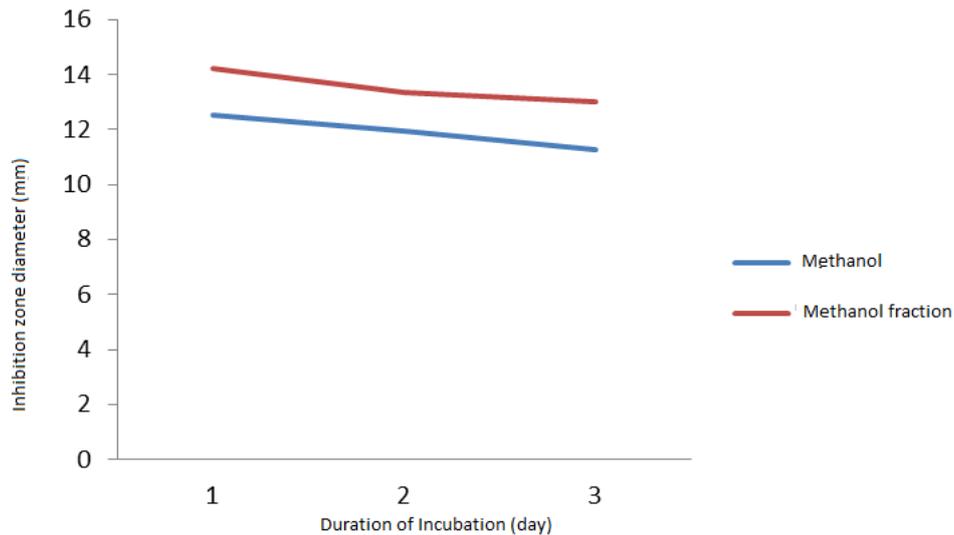


Figure 3 – Graph of inhibition zone diameter comparison between crude extract and methanol fraction extract

KHM and KBM Test. KHM and KBM tests were performed on the extract of the separated methanol fraction. This test aims to determine the lowest concentration capable of inhibiting the growth of *A. hydrophyla* and kill the bacteria. Methanol fraction extract was dissolved in DMSO, therefore the negative control used is DMSO. Positive control used ampicillin-type antibiotics. The parameters measured in determining KHB and KBM are the resistor zones forming around the disc paper. The antibacterial test results exhibited that in all test concentrations (6000, 5000, 4000, 3000, 2000, and 1000 ppm) exhibited antibacterial activity.

Based on the measurement of the drag zone formed, it is known that the size of the inhibit zone is directly proportional to the test concentration. The higher the concentration of the inhibitory, the higher the formed drag test zone is (Figure 4). The smaller zone of inhibition was formed at a concentration of 1000 ppm. It is suspected due to decreasing bioactive content contained on the paper disc as the concentration decreases. In addition, the small inhibitory zone may also be affected by the presence of bacterial colonies that are resistant to the bioactive compounds contained in the extract (Trianto et al., 2004; Edberg and Berger, 1986).

The existence of the inhibit zone formed indicates that the bioactive compound contained in the extract of the methanol fraction works to inhibit the growth of *A. hydrophyla* and is not the activity of the test solvent (DMSO). This is exhibited from the absence of inhibition zone in the negative control.

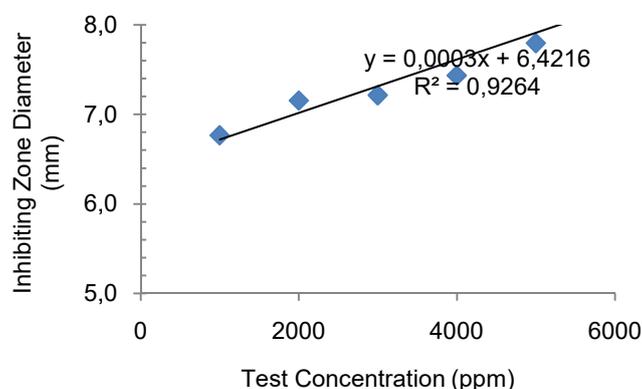


Figure 4 – Graph of inhibiting zone diameter on methanol fraction extract

The result of diffusion disc test exhibited KHM value of methanol fraction extract at 9.46 ± 0.39 ppm. This indicates that *A. hydrophyla* growth can be inhibited by the extract at the lowest concentration of 8.25 ppm. While the ability to kill *A. hydrophyla* from *R. mucronata* extract is found at the lowest concentration of 37.84 ± 8.51 ppm. The value of KHM and KBM is exhibited in Table 3.

Table 3 – Graph of inhibit zone diameter on methanol fraction extract to *A. hydrophyla*

Parameter	Repetition			Average	Stdev
	1	2	3		
KHM	7.84	8.67	11.87	9.46	2.13
KBM	31.36	34.67	47.472	37.84	8.51

Phytochemical Test. The phytochemical test aims to detect the bioactive compounds contained in the extract of *R. mucronata* leaf methanol fraction. The test results are exhibited in table 4.

Table 4 – Results of Phytochemical Test

Compound	Detection	Concentration (ppm)
Alkaloid	+	135
Flavonoid	+	1205
Tanin	+	580
Saponin	-	-

+ Exists; - None

The test results exhibited that the bioactive compounds contained in the extract are phenolic compounds such as flavonoids and tannins. The largest concentration of compounds contained in the extract is flavonoids. Flavonoids are polyphenolic compounds produced by plants (Tarahovsky, et al., 2014). These compounds are commonly found in leaves, stems, flowers, and fruits. Flavonoid compounds and their derivatives have the potential to become antibiotics for bacteria resistant to many antibiotics, such as *A. hydrophyla*. In addition, there are fewer side effects caused by these compounds compared to other natural compounds (Tarahovsky et al., 2014; Cushnie and Lamb, 2005). In addition to flavonoids, suspected antibacterial activity in *R. mucronata* leaf extract also comes from Tannin compounds. According to Hogarth (1999), complex phenolic compounds such as tannins are able to inhibit bacterial activity, therefore, it is often used in the pharmaceutical field. Tannin compounds work as antibacterial to bind and precipitate proteins and promote dehydration of mucosal tissue. In addition, tannins are also able to precipitate other macromolecules such as cellulose and pectin (Manito, 1981 in Trianto et al., 2004).

CONCLUSION

Research results exhibited that the compound possessing antibacterial ability on *R. mucronata* leaves dissolved in methanol solvent. Bioactive compounds that potentially possess antibacterial activity were flavonoids and tannins. The lowest concentration of methanol fraction extract capable of inhibiting the growth of *A. hydrophyla* (KHM) was 9.46 ± 2.13 ppm, while the lowest concentration of *A. hydrophyla* was 37.84 ± 8.51 ppm.

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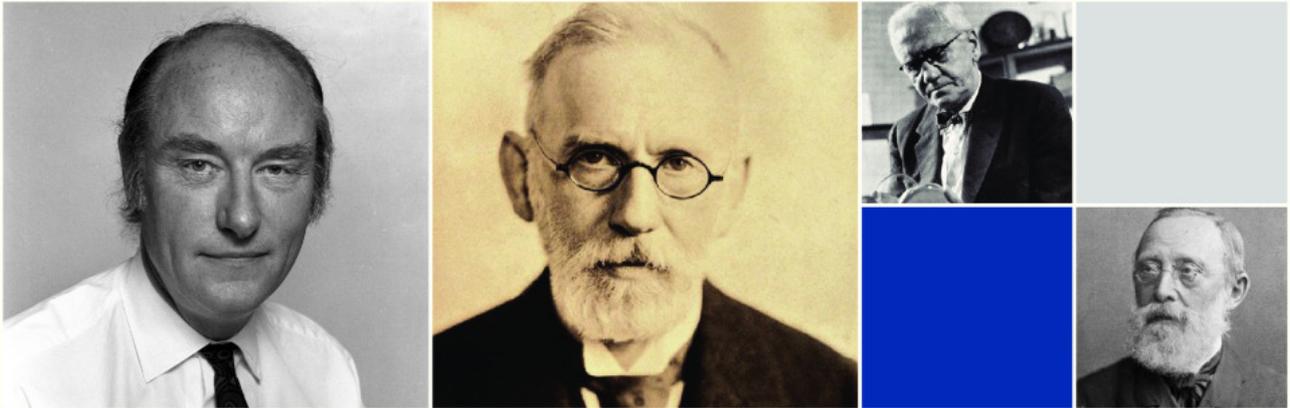
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