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THE ANALYSIS OF HUMAN CAPITAL BUILDING AND FINANCIAL ASSISTANCE ON SMALL MEDIUM ENTERPRISES DEVELOPMENT IN MANADO AND TOMOHON

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ABSTRACT

In ASEAN, Indonesia as one of the developing countries that is continuously preparing themselves in order to compete with other countries in the case of ASEAN single market. Small Medium Enterprise is the best solution to facing the ASEAN Single Market and also to face unemployment as a one of Indonesia's problem. Small and medium enterprises play an important role for Indonesia economy development and also generating employment. The development of small and medium enterprises in urban areas is needed. Beside the vital role of SMEs to contributing significantly to economic growth and job creation SMEs are facing more challenges to operations and to grow from factors both inside and outside: the lack of access to external financing, and need human capital building. The objective of this research is to analyze human capital building and finance assistance to development of small and medium enterprise in Manado and Tomohon. The research type is quantitative research that associative with multiple linear regression analysis technique. There are 100 participant of SMEs are participated in this research. The result of this research shows that there is significant simultaneous and partial influence of Human Capital Building and Financial Assistance on small medium enterprises development in Manado and Tomohon. Regarding on the result to enhance the development of SMEs in Manado and Tomohon these proponents should be considered intensively.

Keywords: Financial Assistance, Human Capital Bilding, Micro and Small Enterprises

INTRODUCTION

In ASEAN, Indonesia as one of the developing countries that is continuously preparing themselves in order to compete with other countries in the case of ASEAN single market. Small Medium Enterprise is the best solution to facing the ASEAN Single Market and also to face unemployment as a one of Indonesia's problem. The important role of SMEs sector in generating growth, creating jobs and reducing poverty, especially in developing countries is widely acknowledged (Ogot, 2012). Small and medium enterprises play an important role for Indonesia economy development and also generating employment. Small Medium Enterprise (SMEs) are generally regarded as the engine of economic growth and equitable in developing economics (Agwu, 2014). The amount of labors involved in SMEs sector reach approximately 98% of all Indonesian workers.



Contribution of SMEs to the national GDP is also very significant, because the SMEs sector contributes for around 57% of total GDP in Indonesia.

A country can be prosperous if any entrepreneur has at least 2% of the population, while Indonesia is only having 0.18% of the population, or 400,000's of people who become entrepreneurs. So our country is still far short of the prosperity. Small and medium enterprises (SMEs) have been existed and major in establishments and contribution in global economy. Akande and Ojokuku (2008) stated that SMEs have greatly contributed in the creation of jobs, innovation and to economic growths which has been given a global acknowledgement and recognition.

The development of small and medium enterprises in urban areas is needed. SMEs play a big role in local economic performance. SMEs can be established in any locality for any kind of business activity in urban or rural area (Khalique, 2011). SMEs can be found in all provinces in Indonesia. According to Small-Medium Enterprise institute in North Sulawesi, there are 22.198 small enterprises and 2.826 medium enterprises in North Sulawesi. There are a lot of SMEs in Manado and Tomohon, which are New Segar (Roti Kering), Sinar Karya Stainless Steel (membuat pagar besi), and Pundi Emas (product kopi bubuk) and Badan Usaha Empat Saudara (produksi garam halus). Those SMEs are contributed to development of local and national economy and generate job employment. Beside the vital role of SMEs to contributing significantly to economic growth and job creation (Rebecca & Benjamin, 2009), SMEs are facing more challenges around the world in general and in developing local and national in particular. SMEs face challenges to operations and to grow from factors both inside and outside: the lack of access to external financing, and need human capital building.

According Snell and Lau (1994) found that small organization failed to develop skills, knowledge and competencies among workers in the small organization. This is mainly because of financial constraints and insufficient training. In the role of human capital building to small-medium enterprises development, Khan (2011) argued that in order to create a better change to SMEs, it can be generated by giving them such knowledge and skill of entrepreneurship and also give some training about entrepreneurship. Financial assistance also plays a vital role on small and medium scale enterprises development because bank or microfinance institutions have significant influence to the development of SMEs (Srinivas, 2014). According to the World Bank, there are 200 to 245 million enterprises that do not have a loan though it is important in facilitating access to finance.



Financing is frequently becoming a major hurdle to overcome the way to setting up and staying in business, with access to risk capital.

Along with SMEs development, it can be seen that the SMEs sector in the urban area has shown significant growth. For this reason, it is very interesting to know proponents above have a significant influence to the development of small and medium enterprises in Manado and Tomohon city.

Research Objectives

The objectives in this research are to find out the influence of:

1. Human capital building, financial assistance on small and medium enterprises development in area Manado and Tomohon simultaneously
2. Human capital building on small and medium enterprise development in area Manado and Tomohon partially.
3. Financial assistance on small and medium enterprise development in area Manado and Tomohon partially.

THEORETICAL FRAMEWORK

Business

Stephenson (2008) defines business as, "The regular production or purchase and sale of goods undertaken with an objective of earning profit and acquiring wealth through the satisfaction of human wants. According to Dicksee, Business refers to a form of activity conducted with an objective of earning profits for the benefit of those on whose behalf the activity is conducted.

Small Medium Enterprises

Small and medium enterprises (SMEs) play a vital role in contributing to the economies and considered as the backbone of economic growth in developing as well as developed nations. Like other developing countries, Pakistan's economist also largely based on SMEs (Khalique, 2011). The definition of small and medium sized enterprise (SME) varies. Because of the diversity of small business, every simple definition is subject to criticism.

Department of Micro Small Medium Enterprises Cooperative (MSME, 2004) defines SME as economic activities that meet these following criteria:

1. Having a net worth of at most Rp 200.000.000, - (two hundred million rupiah), not including land and buildings.



2. Having annual sales turnover that does not exceed Rp 1.000.000.000, - (one billion rupiah).
3. Owned by Indonesian citizen.
4. Standing independently, is not a subsidiary or branch company owned, controlled or affiliated directly or indirectly with medium or large businesses.
5. Shaped individual, a business entity that is not a legal entity, or incorporated entities

Human Capital Building

Schultz (1993) defined the term of human capital refers to processes that relate to training, education and other professional initiatives in order to increase the levels of knowledge, skills, abilities, values, and social assets of an employee which will lead to the employee's satisfaction and performance, and eventually on a firm performance. Lack of trained manpower and management skills also constitute a major challenge to the survival of SMEs.

Financial Assistance

Tambunan (2008) explained that the financial assistance is the aid of money given to facilitate business activities, it is enabling factor of production that is essential for any business, whether small, medium or large. Neti (2009) stated that financial assistance may act as a support in business development or capital for a new business. Small and medium enterprises are stifled because of poor financing and other associated problems. The problem of financing SMEs is not so much the sources of funds but its accessibility. Factors identified inhibiting funds accessibility are the stringent conditions set by financial institutions, lack of adequate collateral and credit information and cost of accessing funds.

Previous Research

Factors Affecting Business Success of Small & Medium Enterprises (SMEs) in Thailand by Chuthamas Chittithaworn (2011). This study attempted to identify factors that are affecting business success of small and medium enterprises (SMEs) in Thailand. The study examined eight factors that influence the SMEs business success. These factors are: SMEs characteristic, management and know-how, products and services, Customer and Market, the way of doing business and cooperation, resources and finance, Strategy, and external environment. The regression analysis result shown that the most significant factors affecting business success of SMEs in Thailand were SMEs characteristics, customer and market, the way of doing business, resources and finance, and external environment.



Human Capital Development and its impact on firm performance by Marimuthu (2009). The paper examines the extent to which human capitals have direct impacts on firm performance from various critical perspectives. It found that the human capital enhancement in organizations promotes innovativeness and greater firm performance. It is closely to some fundamentals of economics and firm performance including Small Medium Enterprises development

Financial Assistance to Micro, Small and Medium enterprises with References to Canara Bank by Srinivas K T (2014). The Study was aimed to find out the financial assistance to MSMEs sector by Canara Bank. The result is government continuously supporting the MSMEs to grow. The financial assistance provided by the Canara bank to various MSMEs is commendable and worthwhile.

Conceptual Framework

Partially ———

Simultaneously

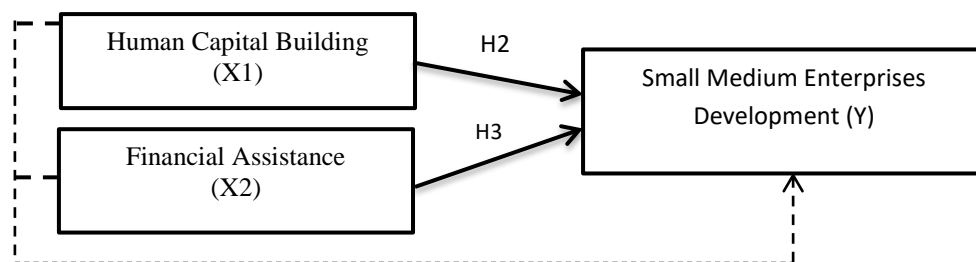


Figure 1. Conceptual Framework

Research Hypothesis

The research hypotheses of this research are:

H₁ : Human capital building, financial assistance, influence small medium enterprises development simultaneously

H₂ : Human capital building influence small medium enterprise development partially

H₃ : Financial assistance influence small and medium enterprise development partially

RESEARCH METHODOLOGY

Type of Research

This research is quantitative research method using causal type of research, to investigate the influence of human capital building, financial assistance, on small medium enterprises development in area of Manado and Tomohon.



Place and Time of Research

This research is conducted in rural area of Manado and Tomohon, North Sulawesi during the period of June to August 2017.

Population and Sample

The population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate (Sekaran & Bougie, 2010). The population in this research is the developed Small medium enterprises which located in area of Manado and Tomohon. Sample is a conclusion can be made from the sample about the population to achieve the research objective (Saunders & Thornhill, 2007). This research is based on Simple Random Sampling technique of Probability Sampling Method. 100 SMEs were conducted as the sample in this research.

Data Collection Method

The data used in this research consist of two types between primary data through questionnaires and secondary data taken from books, journals and relevant literature from library and internet to understand of theoretical support on this research.

Operational Definition of Research Variables

The general explanations about variables in this current study are stated as follows:

1. Human Capital Building (X1) is the process of improving skill and resources of people either in group or individual (Abdullah, 2009)
2. Financial Assistance (X2) is the activities by facilitating an access of finance to a group or individual in business development or capital for a new business (Neti, 2009)
3. Small Medium Enterprise Development (Y) is the improvement process of Small Medium Enterprise through several consideration or measurement (Hallberg, 2000)

Data Analysis Method

1. Validity and Reability Test
2. Classical Assumption
3. Multiple Regression Analysis Method

RESULT AND DISCUSSION

Validity and Reliability

Table 1. Validity Test

Indicators	Pearson Correlation
X1.1	.586
X1.2	.565

Indicators	Pearson Correlation
X1.3	.649
X1.4	.714



Indicators	Pearson Correlation
X2.1	.662
X2.2	.825
X2.3	.656
X2.4	.795

Indicators	Pearson Correlation
Y1.1	.607
Y1.2	.696
Y1.3	.735
Y1.4	.703

Table 2. Reability Test

Variables	Crobach's Alpha	N of Items
X ₁	.649	4
X ₂	.717	4
Y	.619	4

Source: Data Processed, 2017- IBM SPSS 22

From the table 1 and 2, it is shows that all instrument and indicators are valid and reliable

Classical Assumption

Table 3. Multicollinearity Result

	Collinearity Statistics	
Model	Tolerance	VIF
Human Capital Building	.680	1.470
Financial Assistance	.680	1.470

a. Dependent Variable: SMEs Dev

Source: Data Processed, 2017- IBM SPSS 22

Table 3 shows that the Tolerance value of human capital building is 0.680; financial assistance is 0.680; meaning the tolerance value of each variable is more than 0.2. The

VIF value of Human capital building is 1.470, financial assistance is 1.470, meaning the VIF value of each variable is less than 10. Since all the tolerance values are more than 0.2 and VIF value of each independent variable is less than 10, this research is free from multicollinearity.

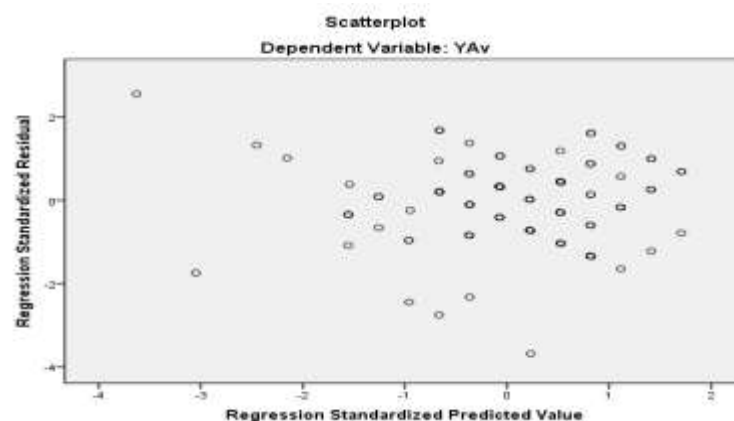


Figure 2. Heteroscedasticity result

Source: Data Processed, 2017- IBM SPSS 22



The Figure 2 shows that the pattern of points is spreading. The points are spreading above and below of zero point in ordinate. It proves that there is no heteroscedasticity in this regression model.

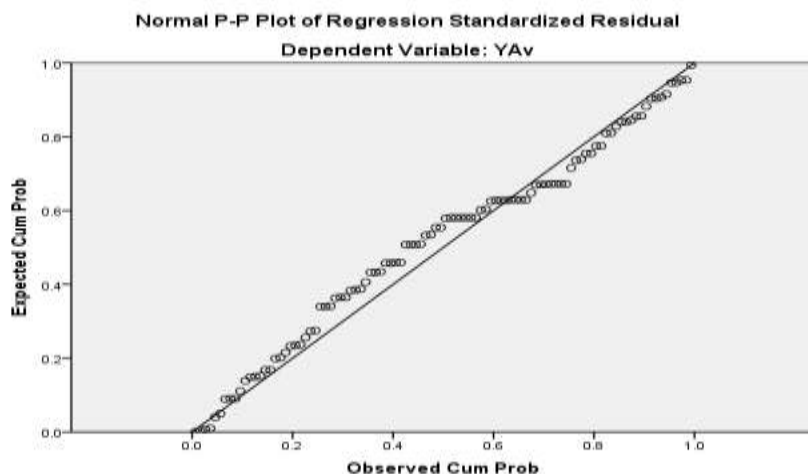


Figure 3. Normality result

Source: Data Processed, 2017- IBM SPSS 22

Figure 3 shows that the data spreads near the diagonal line and follow the direction of diagonal line. Therefore, the normality test is accomplished.

Multiple Regression Analysis

Table 4. Multiple Regression Result

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.589	.360		1.636	.105
Human Capital Building (X1)	.415	.098	.359	4.237	.000
Financial Assistance (X2)	.421	.078	.458	5.399	.000

Dependent Variable: SMEs Dev

Source: Data Processed, 2017- IBM SPSS 22

$$Y = 0.589 + 0.415X_1 + 0.421X_2 + e$$

From the multiple linear regression equation above, it can inform the interpretation as follows:

- 1) Constant value of 0.589 means that if the variables in this research of Variable X_1 and X_2 simultaneously increased by one scale or one unit will increase the Y at 0.589 point.
- 2) Coefficient value of 0.415 means that if the variables in this research of X_1 increased by one scale or one unit, it will improve and increase Y at 0.415.
- 3) Coefficient value of 0.421 means that if the variables in this research of X_2 increased by one scale or one unit, it will improve and increase Y at 0.421.

Multiple Regression Coefficient of Correlation & Determination

Table 5. Table R and R²

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.725 ^a	.525	.515	.33848

Predictors: (Constant), X2Av, X1Av

Source: Data Processed, 2017- IBM SPSS 22



The coefficient of correlation (R) measures if there is significant relationship between the four independent variables with dependent variable, the value of R is 0.725 which proves that the relationship among independents and dependent variable is very strong. The value of R² is 0.525, the coefficient of determination (R²) measures how far the ability of a model in explaining variation of dependent variable.

Hypothesis Testing

F-test

Table 6. F-test

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	12.289	2	6.145	53.631	.000 ^a
	Residual	11.113	97	.115		
	Total	23.402	99			

a. Predictors: (Constant), X₂, X₁

b. Dependent Variable: Y

Source: Data Processed, 2017- IBM SPSS 22

The level of significant of 0.05 and degree of freedom (df) of 2; 100, the ftable from F distribution table is F_{4; 100; 0.05} = 3.09, while fcount is 53.631 then the result is fcount > ftable : 53.631 > 3.09. Since the fcount is greater than ftable, H₀ is rejected and H₁ is accepted. It means that the independent variables significantly affect the dependent variable simultaneously.

T-test

Table 7. T-test

Variables	T	Sig.
Human Capital Building	4.237	.000
Financial Assistance	5.399	.000

a. Dependent Variable: SMEs Development

Source: Data Processed, 2017- IBM SPSS 22

By using the confidence level of 95% the T_{table} will be T_{100; 0.05} = 3.09. The partial influence of each independent variable will be explained as follows:

Human Capital Building (X₁) to SMEs Development (Y)

The hypothesis is reject H₀ and accept H₁ if T_{count} > T_{table} or accept H₀ and reject H₁ if T_{table} > T_{count}. In Table 6 the T_{count} of Human Capital Building (X₁) is 4.237. Comparing T_{count} with T_{table}: 4.237 > 3.09. Since the T_{count} is greater than T_{table}, H₀ is rejected and H₁ is accepted. Therefore, Human Capital Building has very significant influence to Small Medium Enterprises Development.

Financial Assistance (X₂) to SMEs Development (Y)



The hypothesis is reject H_0 and accept H_1 if $T_{\text{count}} > T_{\text{table}}$ or accept H_0 and reject H_1 if $T_{\text{table}} > T_{\text{count}}$. In Table 6 the T_{count} of Financial Assistance (X_1) is 5.399. Comparing T_{count} with T_{table} : $5.399 > 3.09$. Since the T_{count} is greater than T_{table} , H_0 is rejected and H_1 is accepted. Therefore, Financial Assistance has very significant influence to Small Medium Enterprises Development.

Discussion

This research want to know the significant influence to the development of Human capital building and finance assistance on Small and Medium Enterprise in Manado and Tomohon city. The research is collected data from 100 respondents that were categorized by gender, age and location. The data is taken from the owner of small medium enterprises in 1 area of Manado and Tomohon. The result shows those human capital building, financial assistance have positive influence on small medium enterprise development. Based on the hypothesis testing by using F-test and T-test, it is proven that there is linear relationship between independents and dependent variable simultaneously and partially.

Human Capital Building on Small Medium Enterprises Development

The development of small medium enterprises in area of Manado and Tomohon is inseparable from the human resource development of the entrepreneurs conducted by both central and local government. It is also supported by private parties who participate through promoting the SMEs sector in Manado and Tomohon. Various methods are used as a form of business to improve the quality of human resources of entrepreneurs in rural area such as training, managerial knowledge and various entrepreneurial skills. It is supported with previous study by Marimuthu (2009) which explored that investing necessary resources in developing human capital which tend to have a great impact on performance The researcher recognizes that if the proponents like human capital building continues to be implemented or even more developed to the small medium enterprises in rural areas of Manado and Tomohon, it will be a great advantage, especially in order to boost the development of small medium enterprises in areas of Manado and Tomohon.

Financial Assistance on Small Medium Enterprises Development

The essential of financial access has been experienced by small medium enterprises in areas of Manado and Tomohon. Based on the previous research by Srinivas (2014), it found that financial assistance plays a vital role to small medium enterprises because SMEs have been considered as the engine of economic growth. The researcher finds that financial



assistance has contributed greatly to the development of SMEs in areas of Manado and Tomohon. Financial access such as loans or funds provision from the government or various financial institutions for financing SMEs will ensure effective entrepreneurial development in areas of Manado and Tomohon.

CONCLUSION AND RECOMMENDATION

Conclusion

The final conclusions in this research are:

1. Human capital building, financial assistance, facilities & infrastructure support, and government policy have significant influence on small and medium enterprises development simultaneously
2. Human capital building has a significant influence on small medium enterprises development partially
3. Financial assistance has a significant influence on small and medium enterprise development partially.

Recommendation

The recommendation to development of SMEs in area of Manado and Tomohon has been made as listed below. The few things that must be considered by the government and private institutions related to these proponents, including:

1. Keep enhancing the human resources quality of entrepreneurs in Manado and Tomohon through various capacity building program such as training and leadership development, managerial knowledge and various entrepreneurial skills.
2. Government support agencies (bank or microfinance institution) that can help new SMEs with finance to giving out loans to the SMEs, concessional loans for SMEs should have low interest rates in order to ease the loan burden on the emerging ventures and easy to get access for loan.

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INHIBITORY ACTIVITIES OF ASCIDIAN *Herdmania momus* ON THE COLONY FORMATION OF CHINESE HAMSTER V79 CELLS, COLLECTED IN MANADO NORTH SULAWESI, INDONESIA

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ABSTRACT

The ethanol extract of ascidian *Herdmania momus* collected from Manado North Sulawesi was assayed against V79, the bioassay tested to V79 cells reflects the direct action of the compounds on the cells and also is used to select active compounds for the bioassay of inflammatory cytokine production. The inhibition activity against the colony formation of Chinese hamster V79 cells showed very weak inhibited. The HPLC separation of the ethanol extract yielded two interesting fractions **Fr.2.2.2** and **Fr.2.2.4**. were obtained from marine ascidian *H. momus*.

Keywords: Ascidian *Herdmania momus*, inhibitor, North Sulawesi, V79 Cells

INTRODUCTION

Ascidians or sea squirt belong to a group of sessile marine filter feeders, hermaphroditic, and many species are tolerant of wide range environmental conditions. Ascidian characterized by tough outer tunic and their ability to attach themselves to reefs and shells. Ascidians take many variations in form, which are conveniently divided into colonial and solitary species. The solitary ascidians generally live as isolated individuals, and colonial species are characterized by many small individuals, called zooids and living together in a common tunic.

The solitary ascidian *Herdmania momus* (Subclass Pleurogona, Order Stolidobranchia, Family Pyuridae) is found at tropical Indo-Pacific waters, subtropical and temperate water of South Africa and Australia. Most solitary ascidians develop externally, make them amenable for experimental, however, over the past years there are only three papers about chemical study have been reported.

Indonesia is one of ASEAN countries, have a great marine invertebrates potential for the production of bioactive molecules of pharmaceutical interest. Research of marine natural product from Indonesia will be very useful to find new active secondary metabolites, can be developed as a drug candidate with SNI standart and also become the promising target for ASEAN Economic Community (AEC).



Over the past years, ascidians have been shown to be a prolific source of natural products with promising biomedical potential (Blunt, *et al.*, 2012). The ascidian has turned out to be a source of chemical structurally interesting and biologically active natural products, and most of these products fall within the area of cancer therapy, and significant number of ascidian-derived compounds have entered into preclinical and clinical trials as antitumor agents (Blunt, *et al.*, 2012; Faulkner, 2002).

Li, *et al.* (2012) was reported the most recent study of *H. momus* collected at Jeju Is, Korea they afforded seven new amino derivatives named as herdmanines E–J. The bioactivity of these compounds was tested against (PPAR)- γ and (herdmanines I, K, and J) showed significant PPAR- γ activation in Ac2F rat liver cells, while hermanine J exhibited strong PPAR- γ activation at 1 and 10 $\mu\text{g/mL}$. The third studied of *H. momus* collected at Dayawan Bay and obtained five compounds; oleic acid, β -sitosterol, p-hydroxybenhyde, ethyl- α -D-glucopyranoside, and thymidine (Cheng, *et al.*, 1995).

Therefore, this report was to investigate the influence of the ascidian extract on the colony formation of Chinese hamster V79 cells. This bioassay reflects the direct action of compounds on the cells (Oda, *et al.*, 2007).

As the part of our course studies to search the bioactive compound of ascidian, we were collected *H. momus* from Manado, North Sulawesi, Indonesia on September 2010, and the extract collected at Manado Tua Island was chosen for analysis. The HPLC separation of the ethanol extract led to the isolation of **Fr. 2.2.2** and **Fr. 2.2.4**.

METHODS

General

EI-MS was performed by a JMS-MS 700 mass spectrometer (JEOL, Tokyo, Japan). ^1H and ^{13}C NMR spectra were recorded on a JNM-AL-400 NMR spectrometer (JEOL). Preparative HPLC was carried out using L-6200 system (Hitachi Ltd., Tokyo, Japan). All chemicals and organic solvents such as ethanol, methanol, ODS C-18 were purchased from Wako Pure Chemical Industries Ltd. (Osaka, Japan).

Ascidian

The solitary ascidian was collected by scuba diving at the Manado, North Sulawesi, Indonesia in September 2010 and identified as *Herdmania momus* sp. The voucher specimen was deposited at the Tohoku Medical and Pharmaceutical University, Miyagi – Japan.



Cytotoxicity Assay of V79 cells

Chinese hamster V79 cells were grown as a monolayer culture in Eagle's MEM with 10% heat-inactivated FBS MEM (Nissui Seiyaku Co., Ltd., Tokyo, Japan). Culture were maintained at 37°C in a humidified atmosphere of 5% CO₂ and 95% air (Sato, 1992).

Relative plating efficiency

The relative plating efficiencies against V79 cells were determined as the ratio of the number of colonies in various concentrations of samples to that in the sample-free control. Two hundred cells were seeded on a 60/15-mm plastic plate with 4 mL culture medium and incubated overnight at 37°C. After each sample in DMSO (4 µl) was added to the culture medium, cells were further cultured for four days. The dishes were then fixed with methanol and then stained with 7% Giemsa solution. The numbers of colony (>50 cells/colony) in the sample plates were counted and compared with those in control cultures to assess the effects of the drugs on the plating efficiency (Sato, 1992).

Extraction and Isolation

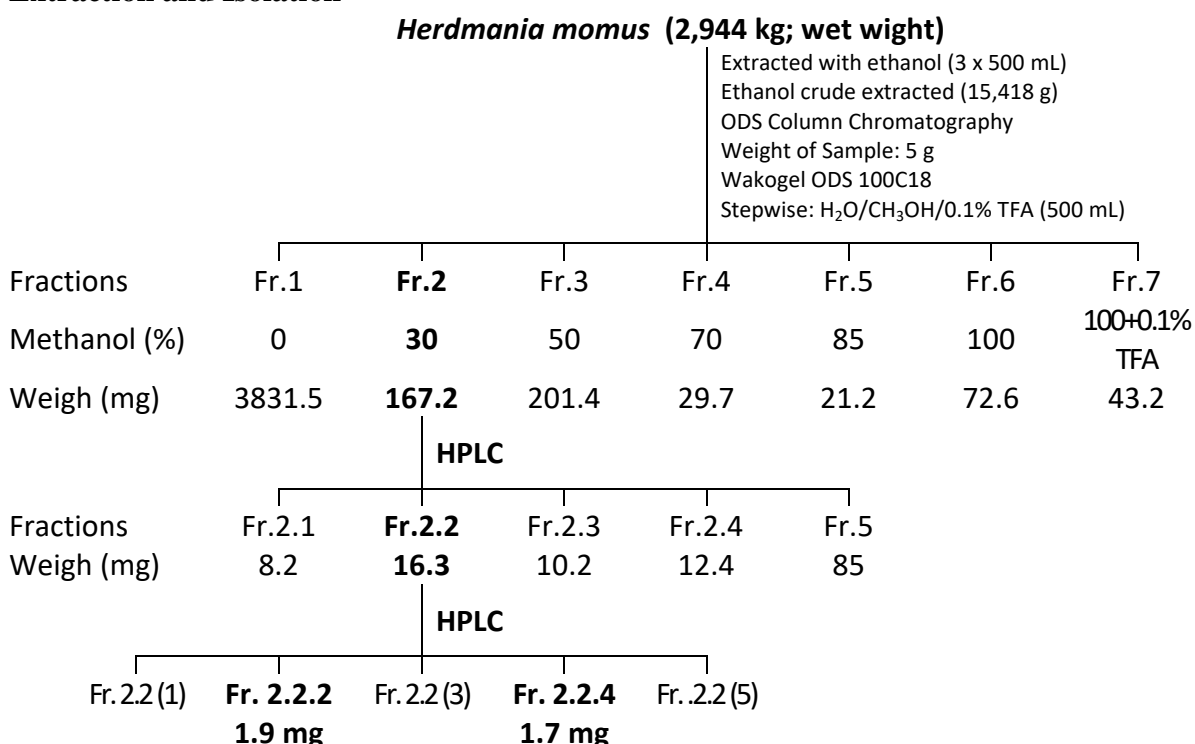


Figure 1. Bioassay-guided isolation procedure and HPLC for ascidian *Herdmania momus*

The ascidian (2.944 kg, wet weight) which collected from Manado Tua Island was immediately cut into small pieces and soaked in EtOH on the boat immediately after collection. The organism was further extracted three times with EtOH. The EtOH crude extract (5 mg) was suspended in H₂O and adsorbed on an ODS column (100 g). The ODS

column was eluted stepwise with 0, 30, 50, 70, 85, 100, 100% MeOH in 0.10% TFA aqueous solution into seven fractions (Fr.1 – Fr.7). Fr. 2, eluted with 30% MeOH, was concentrated to yield dark brown - gum (167.2 mg), and 25 mg/mL in MeOH (100 mg) of the fraction was purified by preparative HPLC (column, Pegasil ODS (10 mm x 250 mm); solvent 30% MeOH containing 0.1% TFA; flow rate, 2 mL/min; detection, UV at 220 nm) to give five fractions, then Fr.2.2. again was purified by preparative HPLC (column, Pegasil ODS (10 mm x 250 mm); solvent 20% MeOH containing 0.1% TFA; flowrate, 2 mL/min; detection, UV at 220 nm) to give **Fr.2.2.2** eluted at 37.34 min) as dark brown-gum (1.9 mg) and **Fr. Fr.2.2.4** (eluted at 47.58 min) as dark brown-gum (1.7 mg).

RESULT AND DISSCUSSION

Marine ascidian *Herdmania momus*

Marine ascidian *Herdmania momus* collected at Manado North Sulawesi, Indonesia (Figure 2).



Figure 2. Ascidian *Herdmanis momus*

Effect of crude extract to V79 cells

The ethanol extract was assayed against V79, bioassay tested to V79 cells reflects the direct action of the compounds on the cells and is used to select active compounds for the bioassay of inflammatory cytokine production. The crude extract showed 16.1 – 45.4 % of inhibition activity against the colony formation of Chinese hamster V79 cell with concentration at 50 µg/mL (Table 1). The inhibition showed very weak activity to the cells found in *H. momus* collected at Bunaken Island North and the highest collected in Bunaken Island South, 45.4%. All the sample collected from 5 sampling sites showed their inhibition very weak activity to the cells, < 50 % with concentration at 50 µg/mL.

Table 1. Cytotoxicity activity (V79) *Herdmanis momus* collected in Manado

Sample Number/ Code	Weight		Remarks (Identification)	Cytotoxicity V79	Sampling Site
	Organism (g)	Extract (mg)			
Hm 1	5,183	333750	<i>Herdmania momus</i>	45.4	Bunaken South
Hm 2	239	2437.21	<i>Herdmania momus</i>	26.6	Mantehage
Hm 3	685	5910.84	<i>Herdmania momus</i>	16.1	Bunaken North
Hm 4	2,944	15418.40	<i>Herdmania momus</i>	23.4	Manado Tua South
Hm 5	347	1694.14	<i>Herdmania momus</i>	29.4	Manado Tua East
V79: inhibitory activity (%) against the colony formation of Chinese hamster V79 cells at 50 mg/mL (90-100%, 60-90%, 50-60%)					

Isolation of Fr.2.2.2 and Fr.2.2.4

By the repeated HPLC of the marine ascidian *Herdmania* sp. collected at Manado Tua, Is. Indonesia, found two interesting fractions, as **Fr.2.2.2** and **Fr.2.2.4**.

Fr.2.2.2 (1.9 mg) was obtained as dark brown gum; The ^1H and ^{13}C -NMR spectra (CD_3OD) at δ 1.12 and 22.76 ^1H -NMR (CD_3OD) δ 1.12 (1H), 1.28 (1H), 1.40 – 1.46 (2H), 1.57 – 1.64 (1H), 3.00 (2H), 3.26 (1H), 3.66 (1H); ^{13}C -NMR (CD_3OD) δ 22.76, 26,98, 36.72, 38.88, 39.11, 48.6, 49.66, 161.46; EI mass spectra of **Fr.2.2.2** showed molecular ion peak at m/z 265 $[\text{M}]^+$. (Figs. 3 - 6)

Fr.2.2.4 (1.7 mg) was obtained as dark brown gum; ^1H -NMR (CD_3OD) δ 0.89 – 0.95 (2H), 1.28 (1H), 1.38 – 1.44 (1H), 1.61 (1H), 2.83 (2H), 2.99 (1H), 3.47 (2H), 3.61 (2H), 3.74 (1H), 7.16 – 7.29 (m, 8H); ^{13}C -NMR (CD_3OD) δ 22.77, 36.27, 36,72, 42.09, 127.46, 129.55, 129.79, 140.14, 161.50. EI mass spectra of **Fr.2.2.4** showed molecular ion peak at m/z 299 $[\text{M}]^+$. (Figs. 7 – 10).

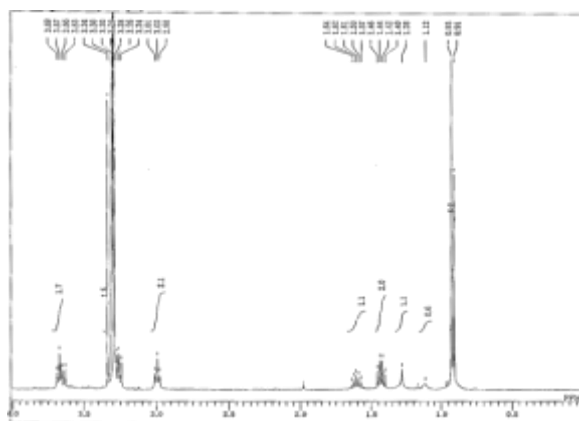


Figure 3. ^1H -NMR spectrum of **Fr.2.2.2**

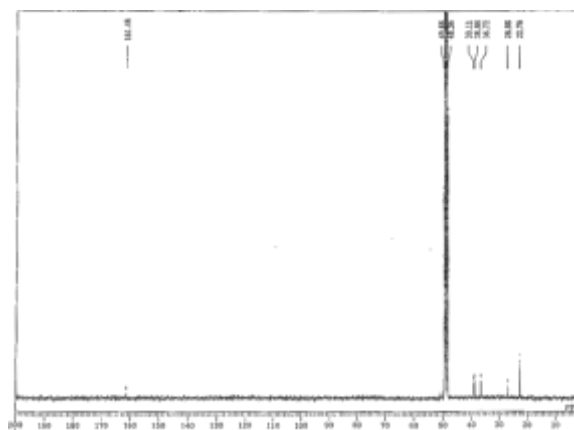
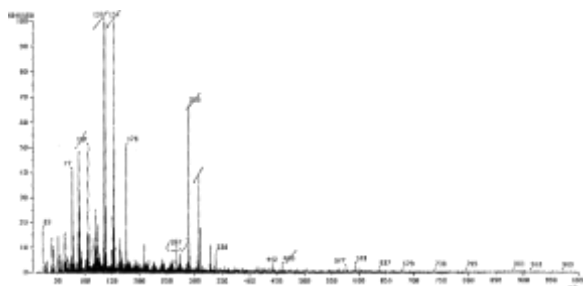


Figure 4. ^{13}C -NMR spectrum of **Fr.2.2.2**



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THE CORRELATION OF MANAGEMENT CONTROL SYSTEM COMPONENT AND FINANCIAL MANAGEMENT (CASE STUDY OF GMIM'S HOSPITAL IN MANAOD AND TOMOHON)

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ABSTRACT

In the era of ASEAN free market, companies that want to grow should have made changes. Among the changes made by the company is about the performance in the company or profitability. To be able to do so it requires the ability, the willingness of management who are experienced in managing and allocating the economic resources of the company systematically, effectively and efficiently so that the company to gain maximum profit, therefore the company must be able to control the assets, income and cost as much as possible. The study was conducted at GMIM Bethesda Hospital in Tomohon City and GMIM Pancaran Kasih Hospital in Manado City, North Sulawesi. The purpose of this research is to get empirical evidence about the relationship of management control system component (SPM), that is quality goal, quality feedback and quality incentive with financial performance at GMIM Bethesda hospital in Tomohon and Pancaran Kasih in Manado. Data analysis method used is correlation analysis method. The value of this correlation coefficient is the value used to measure the strength (closeness) of a relationship between variables. In this case between quality goal variables and financial performance, quality feedback and financial performance and quality incentive and financial performance. From the results of data analysis found that quality goal, quality feedback and quality incentive and have a close relationship with financial performance.

Keywords : Financial management, quality goal, quality feedback, quality incentive

INTRODUCTION

In MEA free competition, Hospitals are required to improve their performance. The hospital can be said to be a complicated business entity because it has many cost items from various activities so it is very difficult to control. As a consequence of this problem it is imperative for hospital managers to better understand financial problems, in order to achieve maximum efficiency in the use of hospital resources to improve competitiveness. To achieve these efficiencies requires better management implementation, including the field of planning and control of the use of available resources. One of the tools that the organization needs to realize the optimal planning and control is the budget (budget) is arranged well from year to year. So the hospital as an organizational unit requires control in performing its activities, more specifically how managers apply management control systems to their



employees so as to motivate employees in achieving organizational goals. Control can be done by providing a role for each manager to plan the revenue and / or costs he / she is responsible for, and then present the realization information of the income or expenses according to the responsible manager.

LITERATURE REVIEW

Management Control System

According to Robert N. Anthony and Govindarajan translated by Tjakrawala (2005), management control is imperative in an organization that practices decentralization. One view argues that the management control system must be in line with the company's strategy. This implies that the strategy was first developed through a formal and rational process, and this strategy then determined the design of the company's management system. An alternative perspective says that strategy emerges through experimentation that is influenced by the company's management system. According to this view, management control systems can influence the development of strategies. Anthony Dearden Bedford translated by Maulana (2000), controlling components or subsystems of SPM are: quality goals, quality feedback and quality incentives are expected to improve conditions that motivate business unit workers to achieve the desired outcomes or determined. This view holds that the control system will affect the direction and level of effort shown by the individual. Another dimension of a management control system that potentially affects workers and company performance is not included in this paper.

Quality Goal

Organizations generally use financial and non-financial measures to motivate managers to meet quality goals. Objectives are usually unrelated to time and have no time limit, though information gained during the management control process can cause the goal to change. Once objectives are established, strategic planning processes can be used to develop strategies in the form of ways to achieve goals. While programs for setting strategies are set up, it is often time to set general corporate policies such as statements to the public about the company's attitude that the consumer is always right, can be made as well. For the implementation of the program to implement the strategy can be embedded into the annual budget for management control in the year concerned. Goals, strategies and policies are considered to be in the management control process. Management control aims to implement strategies and interests with the efforts of managers and employees to achieve corporate organizational goals.



Quality Feedback

Feedback control system, often also called "ex-post control system". If a linear programming formulation of the planning process is reportedly applied successfully in relation to the petroleum refinery model in an attempt to test the possibility of system work. Feedback on performance is needed to enable employees to determine the relationship between their own behavior and outcomes from the production process. More broadly, employees receive and use the feedback as subject of checks and controls. In terms that affect performance, feedback lowers the motivational power almost exclusively from the information provided about employee performance about the level of clarity of the role of a task to be performed.

Quality Incentive

A departmental way of personnel improves job performance, motivation and employee satisfaction through compensation. Compensation is everything that employees receive as a reward for their work. Compensation issues may be the most difficult and confusing personnel management functions. Not only is giving compensation the most complex task, but also one of the most meaningful aspects to employees and organizations. Although compensation must have a logical, rational and sustainable basis, it involves many emotional factors from the employee's point of view. Compensation programs are also important to the company, as they reflect the organization's efforts to maintain its human resources. In addition, compensation (in the form of wages and other remuneration) is often the largest and most important cost component. If remuneration and remuneration are not properly administered, the company may lose its good employees and should incur costs to attract, select, train and develop its successor. Even if employees do not get out, they may become dissatisfied with the company and lower their productivity.

Financial Management

Usually the company's performance is measured based on the profit generated that can be directly seen in the income statement of the company. But for more accurate performance measurement is needed a more in-depth analysis of the financial statements of a company. This is general data available for that purpose. The financial statements are periodic "scorecards" that include investment returns, operations and expenditures.

The main purpose in a company is to achieve profit, it can be reflected from the performance of the company itself. Therefore, it is necessary to measure / assess the company's performance. The measurement is not solely on the input, but rather emphasized



on the output or benefit of the program. Measurement / performance appraisal is the process of recording and measuring the achievement of the implementation of activities in the direction of achieving the mission through the results displayed some products, services or a process. On that basis, performance measurement is a reasonable basis for decision making

Hypothesis

- H₀₁** : Quality goal does not have correlation on financial management.
- H_{a1}** : Quality goal has correlation on financial management.
- H₀₂** : Quality feedback does not have correlation on financial management.
- H_{a2}** : Quality feedback has correlation on financial management.
- H₀₃** : Quality incentive does not have correlation on financial management.
- H_{a3}** : Quality incentive has correlation on financial management.

RESEARCH METHODOLOGY

Population

The target population in this study is top management and middle management who are considered to be compiled to fill out the questionnaires that are in GMIM Pancaran Kasih Manado Hospital and GMIM Bethesda Tomohon Hospital. This study takes all the population because of the small scope of the respondents.

Analysis Method

The method used is correlation analysis method. According to Jonathan Sarwono (2006: 86) the value of this correlation coefficient is the value used to measure the strength (closeness) of a relationship between variables. The purpose of correlation test to test the relationship of 2 variables that do not show the functional relationship.

RESULT AND DISCUSSION

This research was conducted on 10 respondents that is top management and middle management of GMIM hospital. The study was conducted at GMIM Hospital Bethesda Tomohon and GMIM Hospital of Manado Love Paint. Management Control Systems in both hospitals were investigated based on observations, interviews, and questionnaire distributions. Management control is a process whereby managers influence other organization members to implement organizational strategy. This process involves interactions between individuals that can not be described in a mechanical way. Managers have personal goals and organizational goals. The main control problem is to influence managers to act for the achievement of their personal goals in such a way as well as to help the achievement of organizational goals for the achievement of goal alignment (Goal



Congruence). The following is presented a general overview of respondents who became the population in this study:

Table 1. Responden Characteristic Based on Gender

Gender	Number of Responden	Percentage
Man	6	60%
Woman	4	40%
Total	10	100%

Source : SPSS Output, 2017

From table 1 it can be seen that the respondent's gender consists of 6 men with a percentage of 60% and women as many as 4 people with a percentage value of 40%.

Table 2. Responden Characteristic Based on Formal Education

Formal Education	Number of Responden	Percentage
Bachelor (S1)	8	80%
Undergraduate (D3)	2	20%
Total	10	100%

Source : SPSS Output, 2017

From table 2 it can be seen that the education level of most respondents is Bachelor (S1), that is as many as 8 people with percentage value of 80% and 2 people with diploma education level (D3) with a percentage of 20%.

Table 3. Characteristic Respondent Based on Management Level in Pancaran Kasih Hospital

Management Level	Number of Respondent
Top Management	
1. Director	1
2. Vice Director	1
Middle Management	
1. Head of Financial Department	1
2. Head of Secretariat Department	1
3. Head of Nursing Department	1
TOTAL	5

Source : SPSS Output, 2017

Table 4. respondent Characteristic Based on Management Level in Bethesda Hospital

Management Level	Number of Respondent
Top Management	
1. Director	1
2. Vice Director	1
Middle Management	
1. Head of Financial Department	1
2. Head of Secretariat Department	1
3. Head of Nursing Department	1
TOTAL	5

Source : SPSS Output, 2017



From the questionnaires returned by respondents, as many as 10 people at GMIM Pancaran Kasih Manado and Bethesda Tomohon hospitals, aka data obtained from the results of the respondents are tabulated into the table according to their classification. The results obtained are then tabulated with the help of Microsoft Excel with store level corresponding to the lykert scale.

Discussion

From the data obtained can be seen how much relationship between variables with the results of hypothesis testing using correlation analysis method with SPSS software and manual calculation as follows:

Table 5. Hypothesis test using correlation :

Variables	Pearson Correlation
Quality Goal	.589
Quality feedback	.819
Quality Incentive	.555
Financial Performance	1

Source : SPSS Output, 2017

In table 5 testing hypothesis with correlation analysis method between quality goal with financial performance $r = 0,589$. The number has a correlation with stronger closeness. Testing the hypothesis between quality goal and financial performance shows a positive correlation, which occurs the same direction of relationship between variables. That is, the greater the variable quality goal then the greater the variable financial performance. Sig value shows $> 0,05$ that is 0,073 then hypothesis test based on probability H_0 acceptable and H_a rejected. This means that quality goals are not related to financial performance.

In table 5 hypothesis testing with method of correlation analysis between quality feedback with financial performance $r = 0,819$. The number has a correlation with very strong tightness. Hypothesis testing between quality feedback and financial performance shows a positive correlation, where there is the same direction of relationship between variables. That is, the greater the variable quality feedback then the greater the variable financial performance. Sig value shows $< 0,05$ that is 0,004 then hypothesis test based on probability H_0 rejected and H_a accepted. This means that quality feedback is related to financial performance.

In Table 5 hypothesis testing with correlation analysis method between quality incentive with financial performance $r = 0,555$. The number indicates the correlation has a strong closeness. Testing the hypothesis between quality incentive and financial



performance shows a positive correlation, which occurs the same direction of relationship between variables. That is, the greater the variable quality incentive then the greater the variable financial performance. Sig value shows $> 0,05$ that is 0,096 then hypothesis test based on probability H_0 acceptable and H_a rejected. This means quality incentive is not related to financial performance.

Table 6. Coefficient Correlation

Variables	R
<i>Quality goal</i>	0,589
<i>Quality feedback</i>	0,819
<i>Quality incentive</i>	0,555

Source : SPSS Output, 2017

Testing with correlation formula between Quality goal and financial performance get result 0,589. The number indicates the correlation has a strong closeness.

Tests with the formula of correlation between Quality feedback and financial performance obtained 0.819 results. The number shows the correlation has a very strong closeness.

Testing with correlation formula between quality incentive and financial performance obtained result 0,555. The number indicates the correlation has a strong closeness.

CONCLUSIONS

1. Quality goal and financial performance has a strong closeness.
2. Quality feedback and financial performance has a very strong closeness.
3. Quality incentive and financial performance has a strong closeness.

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FINANCIAL SOUNDNESS EVALUATION OF SELECTED COMMERCIAL BANKS IN INDONESIA: AN APPLICATION OF BANKOMETER MODEL

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ABSTRACT

Derived from the public concern about which bank to choose to be work with because of many kinds of banks are available right now in the banking industry in Indonesia also because of the Asean Economic Community (AEC) era nowadays which is establishing a system of free-trading among ASEAN country, author wants to give a recommendation which banks are good to be work with also as a reference for the investors who are looking to invest especially in banking industry in Indonesia, using the new model developed by IMF in 2000 called Bankometer. It is using the 6 parameters of financial ratios which are; capital to asset; equity to asset; CAR; NPL; cost to income and loans to assets. This study examined 19 private owned banks with the criteria private owned bank with total assets Rp 50 trillion because of the availability of the bank and the published financial statements. The result shows all the 19 banks are termed into super sound bank for the last three years. The top three banks are: Bank of Tokyo Mitsubishi stood at the peak, followed by Citibank and BTPN.

Keywords: Bankometer, Financial Soundness, Private-owned banks

INTRODUCTION

Research Background

Financial institutions, especially bank plays a vital role as a financing vehicle to the economy movement of a country. A well-developed banking system is considered as the backbone of financial system of a country. It ensures the sustainable economic development and welfare by forming adequate capital and allocating funds efficiently for investment projects, payment services, healthy and robust financial systems (Rahman, 2017).

According to Kasmir (2010), bank is a financial institution with main core activity is gathering funds from the society and distribute the funds back to the society also provides other bank services. The other services provided by a bank are; remittances, making payments and billing.

In order to do these activities, bank needs customer which is the public, and for the public to entrust their money to the bank, bank must show the public that they are a trusted bank to be entrusted with the funds. To gain public especially customers trust, bank needs to



do the financial performance evaluation for every certain period. By doing the financial performance evaluation, public have the knowledge of how is the situation within the bank performance. So regarding to the ASEAN Economic Community (AEC), by this financial performance evaluation also could help the investors as a reference of which banks are good to invest with.

One of the method or model to evaluate financial soundness of a bank according to *Peraturan Bank Indonesia No. 13/1/PBI/2011* regarding *Penilaian Tingkat Kesehatan Bank Umum* stated Risk Profile, Good Corporate Governance (GCG), Earnings, and Capital are the assessment factors within the Risk-Based Bank Rating (RBBR) as a method to evaluate the financial soundness of a bank in Indonesia. The previous model to evaluate financial soundness of bank in Indonesia is CAMELS.

There are 118 of commercial banks who are competing to win the market listed in Bank Indonesia. Among the 118 listed bank there are top 10 banks which are; BRI; Bank Mandiri; BCA; BNI; CIMB Niaga; BTN; Panin Bank; Permata Bank; Maybank; and Danamon that have high market share based on asset in Indonesian banking industry according to Info Bank News (2017).

Table 1. List of banks in Indonesia with high market share based on Asset (Consolidation)

Rank	Bank Name	Total Assets	Market Share
1	Bank Mandiri	Rp 1.038.706.000.000.000	15,43 %
2	BRI	Rp 1.003.644.000.000.000	14,91 %
3	BCA	Rp 676.739.000.000.000	10,05 %
4	BNI	Rp 603.032.000.000.000	8,96 %
5	CIMB-Niaga	Rp 241.571.728.000.000	3,58 %
6	BTN	Rp 214.168.479.000.000	3,18 %
7	Panin Bank	Rp 199.175.000.000.000	2,95 %
8	Danamon	Rp 174.086.730.000.000	2,58 %
9	Maybank	Rp 166.678.902.000.000	2,47 %
10	Permata Bank	Rp 165.527.512.000.000	2,45 %
	Total	Rp 4.483.329.351.000.000	66,56 %

Source: Company Annual Report, 2016

Because of the many kinds of banks that are available right now, public or the society tends to be confused which bank to choose whether to deposit or borrow funds. The competition within state-owned and private owned bank to win over customers to proof that they are trusted bank to be invested with is getting intense. Basically, the difference between the state-owned and private-owned bank is the ownership structure. State-owned banks shares are fully or majority owned by the governance. Where, private owned banks shares are owned by private party. So in order to proof and show to the public or society that



private owned commercial banks are also trusted banks for the public, author wants to rate the financial soundness of private owned commercial banks in Indonesia, using the Bankometer model.

Therefore, by rating the financial soundness of private owned commercial banks in Indonesia using Bankometer model, the author aims to answer the public concerns about where to allocate their funds also as a reference to an investors which banks are good to invest with.

Research Objectives

1. To compare financial soundness among selected commercial banks in Indonesia using Bankometer model (Solvency score).

THEORETICAL FRAMEWORK

Bank

According to UU No. 10 Tahun 1998 bank is a business entity that collects funds from the society in the form of savings and distributes it to the society in the form of credit and / or other forms in order to improve the standard of living of the society.

Financial Statements

According to Kasmir (2010), financial statements are the report that shows financial situation of an institution in a certain period of time. The income statement and the balance sheet are the basic reports that a firm constructs for use by management and for distribution to stockholders, regulatory bodies, and the general public.

Bankometer

Bankometer model is a model to evaluate the soundness of a bank with the parameter uses Solvency (S-score). This bankometer is a new developed model by the recommendation of IMF in Shar (2010) which are combining of both CAMEL and CLSA-stress test.

The formula of Bankometer is such as follows:

$$S = 1,5*CA + 1,2*EA + 3,5*CAR + 0,6*NPL + 0,3*CI + 0,4*LA$$

Where,

“S” stands for solvency is a dependent variable. The independent variables under this model are:



X_1 = Capital to Asset ratio (CA)	: $\geq 4\%$
X_2 = Equity to Asset ratio (EA)	: $\geq 2\%$
X_3 = Capital Adequacy Ratio (CAR)	: $40\% \leq CAR \leq 8\%$
X_4 = Non-Performing Loans to Loans Ratio (NPL)	: $\leq 15\%$
X_5 = Cost to Income ratio (CI)	: $\leq 40\%$
X_6 = Loans to Asset ratio (LA)	: $\leq 65\%$

These percentages explain a bank that:

1. Has more than 4% capital to assets ratio
2. Has equity to assets ratio greater than 2%
3. Has capital adequacy ratio between 8% and 40%
4. Has controlled non-performing loans (NPL) ratio below 15%
5. Has maintained cost to income ratio less than 40%
6. Has maintained liquidity by controlling loans to assets ratio below 65%

May be classified as “super sound bank” under this Bankometer model.

The criteria to determine the soundness of a bank according to Altman in Rahman (2017) are as follows:

1. The banks having S score greater than 70 are solvent and termed as “Super sound bank”, holding favorable financial status.
2. The banks having S score less than 50 are termed as “Insolvent”, experiencing high risk of financial distress.
3. Last, the banks having S score between 50 and 70 are in moderate position and can be classified into “Gray Zone”, because of the susceptibility to error classification.

Financial Ratios

Financial ratios are used to evaluate the company management financial performance. Each ratio serves different purposes, depends on the objective a certain ratio is to be evaluated. According to Fraser and Ormiston (2004), the objectives will vary depending on the perspective of the financial statement user and the specific that are addressed by the analysis of the financial statement data. According to Dendawijaya in Said (2012) the following types of financial ratios are namely:

1. Liquidity ratio
 - a. Cash ratio

$$\text{Cash Ratio} = \frac{\text{Cash}}{\text{Current Liabilities}} \times 100 \%$$



b. Reserve Requirement

Reserve requirement is a requirement set to each commercial banks to sorted out some of their third party funds collected, to bank Indonesia. The percentage of RR has undergone several changes since 1997. Now the set percentage is 5% (Said, 2012).

c. Loans to Deposit (LDR)

$$LDR = \frac{\text{Total Loans}}{\text{Total Deposits}} \times 100 \%$$

d. Loans to Asset (LAR)

$$LAR = \frac{\text{Total Loans}}{\text{Total Assets}} \times 100 \%$$

2. Profitability ratio

a. Return on Asset (ROA)

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}} \times 100 \%$$

b. Return on Equity (ROE)

$$ROE = \frac{\text{Net Income}}{\text{Total Equity}} \times 100 \%$$

c. Operating Expense to Operating Income (OEIOI)

$$OEIOI = \frac{\text{Operating Expense}}{\text{Operating Income}} \times 100 \%$$

d. Net Profit Margin (NPM)

$$NPM = \frac{\text{Net Income}}{\text{Operating Income}} \times 100 \%$$

3. Solvency ratio

a. Capital Adequacy Ratio (CAR)

$$CAR = \frac{\text{Total Capital}}{\text{Risk Weighted Assets}} \times 100 \%$$

b. Debt to Equity (DER)

$$DER = \frac{\text{Total Debt}}{\text{Total Equity}} \times 100 \%$$

c. Long-term debt to Asset Ratio

$$LTD - AR = \frac{\text{Long - term debt}}{\text{Total Assets}} \times 100 \%$$



Previous Research

Amir Hussain Shar (2010) is studied about Performance Evaluation of Banking Sectors in Pakistan: An Application of Bankometer. In order to verify the Bankometer model, they also used the CLSA stress test to test the authenticate result from bankometer. And the result shows that, the banks that are categorized under stress from stress test are categorized as insolvent using Bankometer. And the banks categorized as sound bank also found solvent in Bankometer model as well. But there are also banks that are sound under stress but found insolvent for bankometer criteria. This is because, even the Bankometer is method came from CAMEL and CLSA stress test but there is an adjustment for the percentages. The big 5 banks already sound under CLSA stress test, but could not fulfill the Bankometer solvency requirements.

Md. Zahidur Rahman (2017) is studied about Financial Soundness Evaluation of Selected Commercial Banks in Bangladesh: An Application of Bankometer Model. The calculation solvency score (s-score) shows that the selected private commercial banks in Pakistan for the year 2015 are all the banks attained the solvency score on bankometer procedure. So, all the banks are classified as “super sound bank” and have not experienced any financial distress during the year 2015. The top three banks with the highest s-score are; Al-Arafa Islami Bank Limited (s-score = 125,78%); City Bank Limited (s-score = 124,57%); and NCC Bank Limited (s-score = 123,38%).

Dr. Ismail Younes Yameen and Mr. Mohammad Sami Ali (2016) are studied about Evaluating the Financial Soundness of the Jordanian Commercial Banks by Applying BankoMeter’s Model. The result shows all the Jordanian commercial banks are financially sound, and none of them are has solvency score under the standard percentage. And they also find by using the bankometer would help the Jordanian banks to gauge the solvency problems.

RESEARCH METHOD

Type of Research

This research is a quantitative research with descriptive study that involves a numeric or statistical approach to the research design that examines the situation, as it exists in its current state. This descriptive study will examine the current financial soundness of the selected commercial banks in Indonesia with Bankometer (6 Solvency ratios).



Place and Time of Research

This research was conducted for all the selected commercial banks in Indonesia with the criteria Private Owned Banks with total assets more than Rp 50 trillion in 2016 with the time of the research for 2 months (July-August 2017).

Research Procedure

The procedures of conducting this research are as follows:

1. Define the problem
2. Determine the samples within the bank population
3. Determine the data for conducting the research
4. Input the data into the Bankometer formula
5. Comparing and rating the banks
6. Give recommendation

Population and Sample

Polit and Hungler (1999:37) referred the population as an aggregate or totality of all the objects, subjects or members that conform to a set of specifications. In this research the population was the 114 listed private-owned banks at Bank Indonesia. Sample is a subset of the population (Sekaran and Bougie, 2010). This research was conducted using purposive sampling with the criteria, private-owned bank listed in Bank Indonesia with the total assets more than Rp 50 trillion in 2016 numbered 19 banks as a sample of this research.

Data Collection Method

This study entirely depends on secondary data sources. In this research, 3 years financial data (2014-2016) have been used for the analysis purpose and these data are publicly available on their website.

Data Analysis Method

Bankometer model is a model to evaluate the soundness of a bank with the parameter uses Solvency (S-score). This bankometer is a new developed model by the recommendation of IMF in Shar (2010) which are combining of both CAMEL and CLSA-stress test.

The formula of Bankometer is such as follows:

$$S = 1,5*CA + 1,2*EA + 3,5*CAR + 0,6*NPL + 0,3*CI + 0,4*LA$$

Where,



“S” stands for solvency is a dependent variable. The independent variables under this model are:

X1= Capital to Asset ratio (CA)	: $\geq 4\%$
X2= Equity to Asset ratio (EA)	: $\geq 2\%$
X3= Capital Adequacy Ratio (CAR)	: $40\% \leq \text{CAR} \leq 8\%$
X4= Non-Performing Loans to Loans Ratio (NPL)	: $\leq 15\%$
X5= Cost to Income ratio (CI)	: $\leq 40\%$
X6= Loans to Asset ratio (LA)	: $\leq 65\%$

These percentages explain a bank that:

1. Has more than 4% capital to assets ratio
2. Has equity to assets ratio greater than 2%
3. Has capital adequacy ratio between 8% and 40%
4. Has controlled non-performing loans (NPL) ratio below 15%
5. Has maintained cost to income ratio less than 40%
6. Has maintained liquidity by controlling loans to assets ratio below 65%

May be classified as “super sound bank” under this Bankometer model.

The criteria to determine the soundness of a bank according to Altman in Rahman (2017) are as follows:

1. The banks having S score greater than 70 are solvent and termed as “Super sound bank”, holding favorable financial status.
2. The banks having S score less than 50 are termed as “Insolvent”, experiencing high risk of financial distress.

Last, the banks having S score between 50 and 70 are in moderate position and can be classified into “Gray Zone”, because of the susceptibility to error classification.

RESULT AND DISCUSSION

Result

Table 2. S-score calculation for the year 2016

$S = (1.5 \cdot CA) + (1.2 \cdot EA) + (3.5 \cdot CAR) + (0.6 \cdot NPL) + (0.3 \cdot CI) + (0.4 \cdot LA)$										
No	Variables	X1	X2	X3	X4	X5	X6	S-Score	Category	Rank
	Bank Name	$CA \geq 4\%$	$EA \geq 2\%$	$40\% \leq \text{CAR} \leq 8\%$	$NPL \leq 15\%$	$CI \leq 40\%$	$LA \leq 65\%$			
1	BCA	17	16.66	21.9	1.3	60.4	61.46	165.626	Super sound	7



$S=(1.5*CA)+(1.2*EA)+(3.5*CAR)+(0.6*NPL)+(0.3*CI)+(0.4*LA)$										
No	Variables	X1	X2	X3	X4	X5	X6	S-Score	Category	Rank
	Bank Name	$CA \geq 4\%$	$EA \geq 2\%$	$40\% \leq CAR \leq 8\%$	$NPL \leq 15\%$	$CI \leq 40\%$	$LA \leq 65\%$			
2	CIMB Niaga	14.66	14.16	17.96	3.89	90.07	74.55	161.017	Super sound	9
3	Panin Bank	17.01	17.17	20.49	2.81	83.02	62.78	169.538	Super sound	6
4	Bank Danamon	18.52	20.9	20.9	3.1	48.8	70.3	170.63	Super sound	5
5	Maybank	13.07	11.56	16.77	3.42	84.36	69.44	147.308	Super sound	14
6	Bank Permata	11.07	11.65	15.6	8.8	150.8	57.26	158.609	Super sound	11
7	Bank of Tokyo Mitsubishi	66.33	11.02	84.68	0.38	85.35	65.01	460.936	Super sound	1
8	OCBC NISP	14.69	14.12	18.28	1.88	79.84	67.56	155.063	Super sound	12
9	Bank Bukopin	9.31	9.05	15.03	3.77	86.97	68.76	133.287	Super sound	16
10	UOB	13.22	11.5	16.44	3.24	95.9	69.92	149.852	Super sound	13
11	BTPN	16.58	17.33	25	0.79	82	69.13	185.892	Super sound	3
12	Bank Syariah Mandiri	8.81	8.11	14.01	4.92	94.12	70.5	131.37	Super sound	17
13	Bank Sumitomo Mitsui	13.95	10.9	19.8	0.16	82.02	81.76	160.711	Super sound	10
14	Citibank	21.89	12.97	30	2.8	81.6	54.87	201.507	Super sound	2
15	Bank Mega	15.43	17.39	26.21	3.44	81.81	40.09	178.391	Super sound	4
16	DBS	16.14	12.16	20.21	3.74	89.55	60.62	162.894	Super sound	8
17	Standard Chartered Bank	11.64	0.93	16.59	5.41	98.7	39.09	125.133	Super sound	19
18	Bank Mayapada	11.35	11.59	13.34	2.11	83.08	77.58	134.845	Super sound	15
19	Bank Muamalat	9.36	6.49	12.74	3.83	97.76	71.72	126.732	Super sound	18

Source: Data Processed, 2017

Table 3. S-score calculation for the year 2015

$S=(1.5*CA)+(1.2*EA)+(3.5*CAR)+(0.6*NPL)+(0.3*CI)+(0.4*LA)$										
No	Variables	X1	X2	X3	X4	X5	X6	S-Score	Category	Rank
	Bank Name	$CA \geq 4\%$	$EA \geq 2\%$	$40\% \leq CAR \leq 8\%$	$NPL \leq 15\%$	$CI \leq 40\%$	$LA \leq 65\%$			
1	BCA	15.47	15.08	18.7	0.7	63.2	65.22	152.219	Super sound	10
2	CIMB Niaga	13.25	12.01	16.28	3.74	97.38	74.25	152.425	Super sound	9
3	Panin Bank	17.18	16.82	20.13	2.44	86.66	64.3	169.591	Super sound	5
4	Bank Danamon	16.61	18.19	19.7	3	52	68.79	160.609	Super sound	8
5	Maybank	11.44	9.99	15.17	3.67	89.18	71.39	139.755	Super sound	14
6	Bank Permata	11.89	10.3	15	2.7	98.8	68.9	141.515	Super sound	13



$S=(1.5*CA)+(1.2*EA)+(3.5*CAR)+(0.6*NPL)+(0.3*CI)+(0.4*LA)$										
No	Variables	X1	X2	X3	X4	X5	X6	S-Score	Category	Rank
	Bank Name	$CA \geq 4\%$	$EA \geq 2\%$	$40\% \leq CAR \geq 8\%$	$NPL \leq 15\%$	$CI \leq 40\%$	$LA \leq 65\%$			
7	Bank of Tokyo Mitsubishi	68.15	9.24	81.16	0.72	88.04	67.49	451.213	Super sound	1
8	OCBC NISP	14.52	13.62	17.32	1.3	80.14	71.28	152.078	Super sound	11
9	Bank Bukopin	8.88	7.98	13.56	2.83	87.56	69.99	126.318	Super sound	17
10	UOB	13.64	11.85	16.2	2.68	96.46	70.81	150.25	Super sound	12
11	BTPN	16.3	16.75	23.8	0.7	82	72.29	181.786	Super sound	3
12	Bank Syariah Mandiri	8.79	7.98	12.85	6.06	94.78	72.6	128.846	Super sound	15
13	Bank Sumitomo Mitsui	17.58	12.4	24.76	0.43	72.23	79.2	181.517	Super sound	4
14	Citibank	20.61	11.81	28.2	2.3	89.2	53.03	193.139	Super sound	2
15	Bank Mega	15.07	16.88	22.85	2.81	85.72	47.49	169.234	Super sound	6
16	DBS	15.73	11.82	19.44	4.16	95.28	65.54	163.115	Super sound	7
17	Standard Chartered Bank	11.24	0.63	16.06	4.78	101.14	41.82	123.764	Super sound	19
18	Bank Mayapada	10.29	9.7	12.97	2.52	82.62	72.38	127.72	Super sound	16
19	Bank Muamalat	9.05	6.21	12.36	7.11	97.41	71.25	126.276	Super sound	18

Source: Data Processed, 2017

Table 4. S-score calculation for the year 2014

$S=(1.5*CA)+(1.2*EA)+(3.5*CAR)+(0.6*NPL)+(0.3*CI)+(0.4*LA)$										
No	Variables	X1	X2	X3	X4	X5	X6	S-Score	Category	Rank
	Bank Name	$CA \geq 4\%$	$EA \geq 2\%$	$40\% \leq CAR \geq 8\%$	$NPL \leq 15\%$	$CI \leq 40\%$	$LA \leq 65\%$			
1	BCA	12.83	13.69	16.9	0.6	62.4	62.65	138.963	Super sound	12
2	CIMB Niaga	13.32	12.2	15.58	3.9	87.86	75.65	148.108	Super sound	8
3	Panin Bank	14.32	13.36	17.3	2.01	79.81	64.84	149.147	Super sound	7
4	Bank Danamon	15.1	16.67	17.9	2.3	55.7	71.01	151.798	Super sound	6
5	Maybank	12.69	10.11	15.76	2.23	92.13	74.15	144.964	Super sound	10
6	Bank Permata	10.7	9.22	13.6	1.7	89.8	70.89	131.03	Super sound	14
7	Bank of Tokyo Mitsubishi	79.27	9.05	77.77	0.96	56.74	74.22	449.246	Super sound	1
8	OCBC NISP	14.9	14.49	18.74	1.34	79.46	66.3	156.49	Super sound	5
9	Bank Bukopin	8.72	8.61	14.2	2.78	89.21	69.91	129.507	Super sound	16



$S=(1.5*CA)+(1.2*EA)+(3.5*CAR)+(0.6*NPL)+(0.3*CI)+(0.4*LA)$										
No	Variables	X1	X2	X3	X4	X5	X6	S-Score	Category	Rank
	Bank Name	$CA \geq 4\%$	$EA \geq 2\%$	$40\% \leq CAR \leq 8\%$	$NPL \leq 15\%$	$CI \leq 40\%$	$LA \leq 65\%$			
10	UOB	13.15	12.47	15.72	3.72	90.53	70.56	147.324	Super sound	9
11	BTPN	14.47	15.56	23.2	0.7	80	69.27	173.705	Super sound	4
12	Bank Syariah Mandiri	7.96	6.9	14.12	6.84	100.6	73.38	133.276	Super sound	13
13	Bank Sumitomo Mitsui	18.7	13.8	23.51	0.66	67.73	80.9	179.97	Super sound	3
14	Citibank	21.46	14.04	25.5	1.7	79.8	59.38	187	Super sound	2
15	Bank Mega	9.48	10.47	15.23	2.09	91.25	50.49	128.914	Super sound	17
16	DBS	11.4	11.26	16.15	4.27	86.32	62.9	140.755	Super sound	11
17	Standard Chartered Bank	11.58	1.84	16.87	1.62	92.92	46.13	125.923	Super sound	18
18	Bank Mayapada	8.1	7.68	10.44	1.46	84.27	71.85	112.803	Super sound	19
19	Bank Muamalat	9.26	6.29	13.91	6.55	97.38	69.05	130.887	Super sound	15

Source: Data Processed, 2017

Discussion

The results of calculating 6 Bankomoter ratios for the last three years are all the banks termed into super sound banks for having s-score above the standard which is 70. Means, those banks were solvent and not prone to financial distress according to bankometer model (Laila and Widihadnanto, 2017). The average s-score for the last three years are as follow; Bank of Tokyo Mitsubishi with highest s-score of 453,798; Citibank with 193,882; BTPN with 180,461; Bank Sumitomo Mitsui with 174,066; Panin Bank with 162,759; Bank Danamon with 161,012; Bank Mega with 158,846; DBS with 155,588; OCBC NISP with 154,544; CIMB Niaga with 153,85; BCA with 152,269; UOB with 149,142; Maybank with 144,009; Bank Permata with 143,718; Bank Syariah Mandiri with 131,164; Bank Bukopin with 129,704; Bank Muamalat with 127,965; Bank Mayapada with 125,123 and Standard Chartered Bank with 124,94.

CONCLUSION AND RECOMMENDATION

Conclusion



There are banks that have the ratios above the limit set by IMF in terms of Cost to Income ratio (CI) and Loans to Assets ratio (LA). Based on the results and discussions in the previous chapter, all of the 19 banks have consistently maintain their financial soundness as the solvency scores and have the s-score higher than the limit of 70 over the period of 2014-2016 and termed into super sound banks.

Recommendation

Based on the conclusion above, the recommendation that suggested in this research is to maintain the soundness as the solvency scores of all the banks in the future. Also for the banks that have CI ratio and LA ratio above the limit set by IMF, are to minimize their CI ratio below 40% because all the 19 banks in the last three years have not made into the standard and for Bank Permata, DBS, BCA, Panin Bank, Bank of Tokyo Mitsubishi, OCBC NISP, Bank Bukopin, BTPN, Maybank, UOB, Bank Danamon, Bank Syariah Mandiri, Bank Muamalat, CIMB Niaga, Bank Mayapada and Bank Sumitomo Mitsui to minimize their LA ratio below 65%.

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ANALYSING LOGISTIC MANAGEMENT OF CULINARY SMALL AND MEDIUM ENTERPRISE IN THE COASTAL AREA IN MANADO (STUDY CASE OF DABU-DABU LEMONG RESTAURANT)

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ABSTRACT

Small and Medium Enterprises have significant roles in developing the economy. Therefore developing SMEs is crucial to do including empowering the core business process of SMEs especially in culinary sector. The culinary sector is important because it might help to promote Manado through the food they provide. The culinary SMEs that lately became famous in Manado are the grilled fish restaurants especially those located in the coastal area of Manado that have high potential in attracting consumers due to their restaurant's location that built in the coast area which also help to add business competitiveness. In culinary SMEs, providing the food is the most critical aspect to do. Logistic management became crucial as a business activity that supports the Production and Operation Management. Logistic Management key activities considered as the indicators in determining the current logistic management performance and strategies applied by Dabu-Dabu Lemong restaurant to reach the satisfying level of logistic management performance. Using Qualitative research methodology, the owner of Dabu-Dabu Lemong restaurant was being interviewed and the result showed the logistic management performance of Dabu-Dabu Lemong culinary SME in Manado is in proper condition and there are total of 8 logistic management strategies that generated from this research.

Keywords: Logistic Management, Small and Medium Enterprises

INTRODUCTION

Research Background

Indonesia is a developing country which has many sectors to develop and one of those is economic sector. Talking about economic sector in Indonesia, one sector that absolutely attached and has big efforts in Indonesia's economy is SMEs or Small Medium Enterprises according to Tambunan (2005) in journal of Agus Setyaningrum (2016) SME is the prior key to the development of a country. From the data served by Department of Cooperation and SMEs in 2016 retrieved from Cnnindonesia.com, SMEs have important roles in national economic structure which held 99,9% contribution from the total business unit and held 97,2% contribution in absorbing the workforce in Indonesia, SMEs also contributed 60,3% in the GDP not only the contribution of SMEs that are important but also the fact that in Indonesia the total unit of SMEs are rapidly growing in early 2016 data showed by the Central Bank of Indonesia there are total of 56.539.560 units of business in Indonesia are



SMEs. These reasons concluded SMEs position in this country as vital including in Manado which Trading and Services Sector hold the biggest part. SMEs in Manado role an important part as economic motorcycle for the development of the city and data showed that SMEs are rapidly growing based on the total of units, in 2016 the total units of SMEs in Manado are 16.689 (Sixteen thousand and six hundred eighty nine).

Culinary business sector might not be the biggest sector of SMEs in Manado, but the government tend to pay serious attention towards this sector shown by how the government and Lion Group develop the *Windows of Indonesia* as *Kawasan Wisata UKM*. One culinary business that lately became famous in Manado is the grilled fish restaurant that obviously served grilled fish and other seafood dishes to the customer, what makes this restaurant unique is how they let the customer pick the raw food that customer wants to eat and let the customer see how they grilled the fish. The grilled fish culinary business showed a rapid growth by how the grilled fish restaurants are open and can be found easily on every corner of Manado, the most unique fact about the grilled fish restaurant is that they tend to be located at the coastal coast area in Manado. The logic reasons behind this statement are understandable which because Manado is a city that located at the bay of Manado and famously known worldwide with the coastal area. Therefore, the coastal area often became the area of business center including the grilled fish culinary business. The current position of Manado geographically has become an opportunity to Manado's culinary SMEs to promote their main product in this case the grilled fish and the government took this opportunity properly by conducted the international agenda in 2015 known as AEC (ASEAN Economic Community) which also becoming an intermediary of Manado's SMEs and the world to gain the world's attention by showing the main product of Manado And Dabu-Dabu Lemong present as the culinary SME that located right at the coastline of the coastal area of Manado.

In culinary SMEs including grilled fish restaurant, providing the food is the most critical aspect to do. This is where the logistic management became crucial as a business activity that supports the Production and Operation Management. The logistic management becomes connector of every part of the business, from the procurement of goods and services until connecting the enterprise with its supplier to the consumer and inside the logistic management all of the business activities happened. All the activities inside the logistic management must be done properly in order to maximize the function of logistic management, since the function of logistic management not only ensuring the logistic



activities done properly but also ensuring that all the logistic functions are integrated with other functions in a business, like the marketing, human resources, financial, sales manufacturing, information technology. Overall, in order to minimize the issues appear in business activities and developing the business, maximizing the logistic management performance is critical to SMEs especially in culinary sector, because we realized that in culinary sector the important of products (foods and beverages) or services quality are the main priority and this is why if the logistic of the product and material flow failed, it might impact the whole business of the SMEs in culinary sector.

Therefore, logistic management has proven to become the critical aspect in maintaining the SMEs development which led to an understanding that by noticing the logistic management in business process in this case Small Medium Enterprises also important to elevate the economic growth and this becomes the foundation of establishing the title of this journal which is “Analysing Logistic Management Of Culinary Small And Medium Enterprises In The Coastal Area In Manado (Study Case of DABU-DABU LEMONG Restaurant) ”.

Research Objectives

From the previous explanation we concluded that the research problems are:

1. How is the current Logistic Management Performance of Culinary Small and Medium Enterprises at Dabu-Dabu Lemong Restaurant?
2. What are the strategies of culinary Small and Medium Enterprises in Manado to reach satisfying level of Logistic Management Performance at Dabu-Dabu Lemong Restaurant?

THEORETICAL FRAMEWORK

Logistics Management

Logistic is a continuously developing science. The Council of Logistics Management defines logistics as the process of planning, implementing, and storage of raw materials, in-process inventory, finished goods and related information from point of origin to point of consumption for the purpose of confirming the customer requirements. Logistic management consists of five key activities as follows:

- a. **Facility Network Design:** Plant, warehouse, depot location, cross-dock operations, and retail stores.



The facility network creates a structure from which logistical operations are performed, it is also specify the work tasks related to processing customer orders, warehousing inventory, and materials handling.

- b. **Inventory Management:** Procurement and storage of raw material, components, work-in-progress, and finished goods. The objective in inventory strategy is to achieve desired customer service with the minimum inventory commitment.
- c. **Order Processing:** Information management and exchange, communication, data transmission, and data processing, import/export documentations. In most supply chains, customer requirements are transmitted in the form of orders and the processing of these orders involves all aspects of managing customer requirements from initial order receipt, delivery, invoicing and collection.
- d. **Warehousing, Material Handling and Packaging:** storage, cargo handling equipment, loading and unloading, containerization. Also include break-bulking, repackaging and quality inspection.

This functionality of logistics also represent and integral part of a logistics operating solution.

- e. **Transportation:** Physical movements of inventory from one place to another uses various type of carriers, cost of delivery. Three factors are fundamental to transportation performance:
 - 1. **Cost.** The cost of transport is the payment for shipment between two geographical locations and the expenses related to maintaining in-transit inventory.
 - 2. **Speed.** Speed of transportation is the time required to complete a specific movement.
 - 3. **Consistency.** Consistency of transportation refers to variations in time required to perform a specific movement for over a number of shipments. Consistency reflects the dependability of transportation.

Small and Medium Enterprises

There are several definitions of small and medium enterprises (SMEs) which commonly used in Indonesia prior to the enactment of Law no. 20 of 2008. While the Ministry of Cooperatives, Small and Medium Business Enterprises, defines an SME based merely on annual sales, the Central Statistics Agency uses number of employees as the main criterion to define an SME. The Central Bank employs different criteria to define SMEs, which



include not only the value of assets and annual sales, but also the amount of loan funding they have received. The 1995 Small Enterprise Act No. 9 is due to be amended in 2008 as the “Micro, Small and Medium Enterprise Act” The proposed definitions under this revision as of February 2008 were as follows:

1. A micro enterprise is based in a traditional industry and is managed privately, and has net assets of no more than 50 million rupiah (not including land or buildings) and annual sales of no more than 300 million rupiah.
2. Small enterprises are managed privately or by a corporate entity, but are independent from and are not the subsidiary or branch office of a medium or large enterprise. They have net assets of at least 50 million rupiah, and no more than 500 million rupiah (not including land or buildings), and they have annual sales of between 300 million and 2.5 billion rupiah.
3. Medium enterprises have net assets of between 500 million and 10 billion rupiah (not including land or buildings), and have annual sales of between 2.5 billion and 50 billion rupiah. Note that the net asset and annual sales figures defined herein are subject to change according to conditions by directive from the President.

Previous Research

Seung-Kuk Paik, Ph.D (2011) has conducted a research about Supply Management in Small and Medium-Sized Enterprises Role of SME Size and the result showed that there are different results between the Small and Medium-Sized Enterprises regarding with the purchase development and performance. This study had correlation in current research to strengthen the background which is the logistic management not only important to big industry but also important to SMEs, and also became benchmark in analyzing the result of current research. Nik Ab Halim Nik Abdullah, Sabariah Yaakub and Muhammad Subhan (2016) used qualitative method and conducted a study about Logistics and Supply Chain Related Issues Faced by Malaysian SMEs: A Case Study and the result showed that the most common issues identified are customer service issues and inventory management issues. There are theories and findings in this study, that have correlation to help current research to explain more about logistic management especially variables of logistic management activities that becoming reference for questions to the informants, and this is also conducting the same method with the current research which is qualitative method. Parinya Pattanawasanporn (2014) done the research in Thailand with the title Logistic and Supply Chain Management Approach to SMEs in Noodle Factory Industry – Lean and Six



Sigma Tool, the researcher found out that Logistic and Supply Chain Management are very important in business process especially in noodle factory, the good logistic and Supply Chain Management massively became a key to compete in the market since it affect all the business and manufacturing process for SMEs in Thailand and the overall process turned out to affecting the customers through the quality of the services that can be controlled and improve by improving the logistic and supply chain management. Six Sigma Method can apply thought the organization for solving problem and decrease defect and control of variation, Lean Method can identify problem and current state process, eliminate delay, and reduce waste such as reduce defect and reduce of deviation.

RESEARCH METHOD

Type of Research

This research used qualitative research methodology According to Punch (1998) Qualitative Research is empirical research where the data are not in the form of numbers. The type of this research is descriptive According to Burns and Grove (2003:201), descriptive research is designed to provide a picture of a situation as it naturally happens.

Place and Time of Research

The place chosen as research location is at the Dabu-Dabu Lemong restaurant, where the interviews conducted. The time of the research were conducted during April 2017.

Research Procedure

The procedure of this research in order to analyze the logistic management of Dabu-Dabu Lemong culinary SME in Manado are as follows:

1. Explore the theory about logistic management.
2. Do the observation towards Dabu-Dabu Lemong restaurant.
3. Arranging the questions for the interviewing process.
4. Execute the interview.
5. Analyzing and comparing the result.
6. Presenting the result.

Population and Sample

According to Sekaran and Bougie (2010) Population is the entire group of people, events, or things which a researcher desire to research. While Sugiyono (2007) stated that in qualitative research does not use form population instead using term “social situation” which consist of three elements: place, actors and activity. The social situation in this



research is all elements related to logistic management of Dabu-Dabu Lemong restaurant as Culinary Small and Medium Enterprises in Manado. According to Sugiyono (2007) sample in qualitative research is not called as respondent but instead a source, participant or informant.

Data Collection Method

Data collection method that used in this research are primary data and secondary data. The primary data are taken from unstructured one-to-one interview with the informants and the secondary data taken from books, journal, and relevant literature from library and internet to gain more of supportive information regarding with this research.

Data Analysis Method

According to Bogdan and Biklen (1982) Data analysis is the process of systematically searching and arranging the interview transcripts, fieldnotes, and other material that you accumulate to increase your own understanding of them and to enable you to present what you have discovered to others.

RESULT AND DISCUSSION

Result

Dabu-Dabu Lemong is one of the famous grilled fish restaurant in district Tuminting in Manado. The restaurant is located right at the coastal area of Karang Ria and built right in front of the coastline of Karang Ria beach. The owner named Ko Paolo has been interviewed regarding with the current logistic management performance and strategies regarding with their logistical management performance of Dabu-Dabu Lemong and the result are as follows:

Dabu-Dabu Lemong Restaurant's owner

Ko Paolo as the owner was talking clearly about their logistic activities inside their restaurant. He stated that inventory and storing are the most crucial keys in their grilled fish restaurant business and that happened because in order to assure their quality that later will be serve to customer, they had to make sure about their raw material's quality which is the fish. KoPao explained that they had more than one fresh fish supplier that supplied daily right to their restaurant, and not only the food's raw material but another equipment or components in order to support their main product also be controlled by them. He explained that procuring fresh fish every day is quite difficult and if there are issues regarding with the procurement of fish that will definitely influence the whole business. Similar condition also



occur in their storing activities, they stated that there are two kinds of storing fish which are storage in ice box and in the fridge and if they do any mistakes in storage that also will influence the whole business.

Another important aspect in their logistic activities is also the order processing, they explained that every indicators are important to them started from their information exchanging management between the owner and his wife to the supplier and also between the employee. Ko Pao explained that he as the owner had to control anything regarding with their stock, he had to control the information of raw materials that sold out and what are the raw materials that are in-stock. He also gave information that their restaurant has already apply the e-system in recording orders or e-note that conducted by his employee and this new system create an easier and more effective way of noting or recording customer's order that later become literally useful for their restaurant's record of sales.

Another important activity that they claimed to have is regarding with the supply's transportation. Ko Pao said that the cost he spent in transportation of raw materials procurement do not influence their business at all and even he thought that the cost is not a problem at all, he said that the main problem that might influence the whole business is the consistency of his supplier in procuring the raw materials. To avoid the issues Ko Pao stated that he had to order in a large number of fish supply to assure that their order give their suppliers more benefits than other restaurants, it does not matter the cost because as long as their fish stock is available they assure that the income will be equitable.

Discussion

Logistic Management Performance of Dabu-Dabu Lemong as the Culinary SME in the Coastal Area of Manado

Gulenc and Karagoz (2008) stated the general description of logistic is in 7R's which the ability to deliver the Right products to the Right customer in the Right quantity, in the Right condition, at the Right place and the Right time, at the Right cost. This becoming the standard in analyzing the logistic management performance of Dabu-Dabu Lemong culinary SME and based on interview that had been conducted. The most important key of logistic management activities of a restaurant is the inventory management which stated by the owner. Ensure the procurement of raw materials are enough for daily requirement becoming a prior to them, all because if any failure occurs in this activities might become failure in actualizing the purpose of logistic management according to the definition above in the previous chapter which define the purpose of logistic management is to fulfill the



customer's requirement. The answers that stated by Ko Paolo shows a similarity with the previous research on the theoretical framework by Abdullah, Yaakub and Subhan (2016) the result from this research stated that the main problem that occurred in SMEs logistical activities are came from customer's service and inventory management, the customer's service that we discussed here aimed to the terms of customer's requirement as the demand to their product/services.

The important aspect of activities in logistic management that prominent is how they maintain the component of their cooking and grilled process which are the equipment . The component must be observed all the time to avoid defect in providing the food. The fact that occurred also proved that the key activities that Bowersox, Vloss and Cooper (2013) stated in the previous research is supposed to be implemented properly to pursue the maximal performance in logistic management. Pattanawasanporn (2014)'s theory that elaborated in the previous research which is about the storage of raw material that becoming the important key in logistic management also proved by what Ko Paolo has been stated, storing the raw material is crucial in the business because if not properly applied the impact will be significant to their business, differentiate storages for different raw materials are even needed in the purpose of ensure the quality of their product is well maintained.

The theory about order processing as key activities in logistic management by Bowersox, Vloss and Cooper (2013) also implemented in Dabu-Dabu Lemong Restaurant. Ensure to note their order from customer and all the notes regarding with their stock are well controlled by Ko Paolo all because failing in recording the logistic process, might resulted in failing to provide customer's need and if happened often, the whole business will be impacted. The Journal in the previous research from Abdullah, Yakuub and Subhan (2016) which stated the inventory management issues is one of the common most issues appeared in the research, similar situation also appeared in the logistic activities of Dabu-Dabu Lemong since the product of them is supposed to be served fresh and delicious. The result of conducting the interview with Dabu-Dabu Lemong culinary SME owners showed the logistic process from the procurement of the raw materials regarding with the transportation and inventory until the exchanging information and communication process that becoming the key activities (Bowersox, Vloss and Cooper 2013) indicators in current research that validated in this restaurants have met their point of satisfying level.

Culinary Small and Medium Enterprises Strategies to Reach Satisfying Level of Logistic Management Performance



There are three logistic management keys activities according to Bowersox, Vloss, and Cooper (2013) that becoming the indicators in evaluating the logistic management performance of Dabu-Dabu Lemong culinary SME in Manado which are the Inventory Management, Order Processing and the Transportation. The result from interviewing Dabu-Dabu Lemong Culinary SME generated 8 strategies to reach the satisfying level of logistic management performance as follows:

1. Cooperate with more than one supplier.
2. Control and monitoring the supplier (including remind the supplier through calls or texts)
3. Be consistent in supplying raw material (regarding with the quality of product and time needed to prepare the product)
4. Differentiate the raw material storing (to avoid damaged in stock of raw material; rotten)
5. Keep the equipment clean and in good condition
6. Thoroughly noted the orders from customers (to avoid mistakes in serving food and as the sale's record)
7. Accurately note the stock of raw material (in and out stock)
8. Owner had to accurately control the process of logistics (including with the goods and services and also with the employee).

CONCLUSION AND RECOMMENDATION

Conclusion

Based on the result and discussion that has been elaborated in the previous chapter, there are several things can be concluded regarding with the logistic management of Dabu-Dabu Lemong Culinary SME in Manado:

1. Reviewing the Current Logistic Management Performance of Dabu-Dabu Lemong restaurant which categorized as Small and Medium Enterprise in Manado that previously has been observed using interviewing method, showing that Dabu-Dabu Lemong culinary SME logistical management performance on present day are in the satisfying level.
2. The Strategies that used to reach the Logistic Management Performance derived from the three indicators of logistic management key activities which anytime issues came up and interrupt the activities of logistic management, the Dabu-Dabu Lemong



restaurant always learn from their mistakes and level up their logistic management performance.

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