THE INFLUENCE OF LEVERAGE AND DIVERSIFICATION TO FINANCIAL PERFORMANCE OFGENERAL INSURANCE COMPANIESN IN INDONESIA 2010-2014

Yulianti Muhammad Nuryatno

Universitas Trisakti

Abstract

The purpose of this research is to find out the influence of leverage and diversification to financial performance of general insurance companies in Indonesia. This research uses secondary data from Indonesian general insurance companies's financial report within year 2010 to 2014.

The population of this research is general insurance companies in Indonesia which listed as member of The General Insurance assosiation of Indonesia. The number of samples that used in this research are 10 general insurance companies which were selected based on purposive sampling method. This research used pooled regression models and hypothesis testing for each independent variable on dependent.

The Result of this research shows that leverage and diversification significantly affect positively to general insurance company's financial performance in Indonesia.

Keywords: leverage, diversification, financial performance, insurance companies, and ROE.

INTRODUCTION

In the era of globalization, people's demandsfor insurance is increasing therefore the growth or development of insurers in Indonesia has become and will be continue to increase. Fairly rapid growth began after the government issued a deregulation in the 1980s. And then confirmed by issuing the Law of the Republic of Indonesia No. 2 of 1992 on Insurance Business. With the deregulation and act, governments provide convenience in terms of license, which the purpose is to stimulate the growth of new companies, in the end will ultimately enhance the production / national premium. Expected, with the development of the insurance industry in Indonesia, it will be increase Indonesia's economic growth from year to year. Due to increased demands insurence, the insurers company trying to provide more insurence products to people. This triggers an insurance company's management wishes to make product diversification. Product diversification could be beneficial for company, or even make company's financial

performance declined. Therefore, it is important for further analysis regarding the effect of product diversification on financial performance of a company.

Beside product diversification, leverage is also a factor to be considered because it may be affect the financial performance of a company. Leverage is the ratio that used to measure the ability of the company to fulfil theirs long-term obligations. In insurance companies, the example of liabilities is a premium obligations that have been received from policyholders, funds from these premiums that will be managed and the results will be part to become claims that returned to policy holders, and the other part will become profits for the company. Both investors and management needs to consider the extent of increasing leverage is still profitable for a company or not. However, Foong and Idris (2012) has conducted research on leverage, product diversification and the performance of insurance companies. This study found that the leverage has a negative correlation to the performance of the company. Meanwhile, diversification of products (which further referred as diversification) can moderate the effect of leverage and financial performance so they have positive relationship. Meanwhile, according to research Achchutha and Jasinthan (2012) shows that leverage has a significant relationship to the financial performance of the company.

With differentiations in the results of research that have been done before about the effect of leverage and diversification to financial performance of general insurance companies in Indonesia, and then this research is done to get the empirical evidence.

Benefitsof this study are help management to analise financial performance, because ratio of leverage is very important in the insurance company which the source of the majority funding comes from the unearned premium (premium deferred). And also for decision making regarding product diversification that will be do in the insurance company.

LITERATUR REVIEW AND HYPOTESIS DEVELOPMENT

Insurance

Insurance comes from the word "insurance" that means coverage. Insurance is an agreement between the insured or the customer with the insurer or insurers. The insurer is willing to bear some losses that may come up in the future after the insured agreed on the payment of money called a premium. The premium is the money spent by the insured as compensation to the insurer

Under the law of Commercial act (KUHD) of clause 246th, Insurance is describe as an agreement which binding an insurers to an insured, to receive a premium, to provide reimbursement for him for the loss, damage or loss of expected profit, which may be suffered due to an event that is not certain.

Terms of the insurance agreement and rights and obligations of the parties contained in an insurance policy. Examples of insurance are insurance of life, accident, loss, health and fire insurance.

Party who transfer a risk called as the "insured", it is customers or people who delegate or transfer the risk to be received, while the party receiving the risks called as the "insurer" is the insurance companies that underwrite or replace the loss of the customer.

Agreement between the two sides is called a policy. This policy is a legal contract that explains all terms and conditions that protected. fees paid by the "insured" to the "guarantor" for the risk borne referred to as "premium". Amount of premium is generally determined by the "insurer" which consists of funds that can be claimed in the future, administrative costs, and profits.

Financial Performance of Company

Performance is an overview of implementation level achievement from company activites for realizing the goals, objectives, mission and vision of the organization as stated in the strategic planning of a company (Rahayu, 2010). Meanwhile, according to Fahmi (2011: 239), financial performance is an analysis to see how far a company has implemented rulesof financial performance with correctly or not

In this research the company's financial performance measured by ROE. This ratio is used to measure the performance of management company to manage the available capital to generate profit after tax. The bigger ROE, the greater level of profit achieved by the company so the possibility of a company in problematic conditions is small.

Leverage

Insurance company's leverage showing the amount of liabilities compared to the equity owned. The most part of the liabilities on the insurance company is unearned premium which is a premium that can not be recognized as revenue because the coverage is still running at the end of the accounting period.

From previous research, conducted Foong and Idris (2012) and Maxella (2014) showedthat leverage partially has not effect on financial performance of company (which is calculated using ROE). Meanwhile, if diversification is a moderator of variable leverage, they will have positive effect on financial performance (ROE). Different from the above results, the study of Achchuthan and Jasinthan (2012) showedthat leverage has a significant positive relationship towards financial performance.

Diversification

Diversification may become one of option to develop an enterprise strategy. Diversification is a choice of strategic to improve the performance of the company (Pandya and Rao, 1998). According Resti Hand (2009), Diversification is company's efforts to develop their business by having more than one industry to enhance the company's growth.

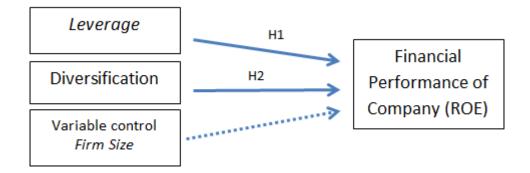
Meanwhile, according to Hariadi (2005: 37), diversification is a combination of several port folio investment by producing goods assortment, established a number of business units, or set up subsidiaries that are new or even buy a company that has been established, which intended to maximum benefit.

In the insurance companies, diversification of products typically aim to increase expected market share wich expected become linier with enhancement of company performance (profit or ROE). Besides, diversification of products is also expected to reduce the risk of claims by presenting a diverse product mix. General insurance is one of the insurance business with the most diverse product lines. The diversity of its product line to be an alternative to obtain a competitive advantage by leveraging the maintenance and management of competing business mix (Irfandy, 2012).

From previous research, Yulia Daning (2012) showed there is no difference in the company's financial performance betwen company which diversify or not diversify. While the research Shinta (2009) produce that diversification negatively affect financial performance. Different from the above two studies, research conducted by Maxella (2014) and Foong and Idris (2012) states that diversification which become variables moderate can positively affect financial performance.

Hypotesis

Picture1 Conceptual Framework Research



- H1 :Leveragepositively effect on the financial performance of general insurance company in Indonesia.
- H2: Diversifikasipositively effect on the financial performance of general insurance company in Indonesia.

RESEARCH METHODOLOGY

Study Design

The researchthat used in this thesis is correlational research. Correlational study is intended to look for or examine the relationship between variables. Object of research used in this research is financial performance (as calculated using ROE) as the dependent variable, while leverage and diversification as independent variables.

Population and Sample

The population used in this research were all general insurance companies registered as members in the General Insurance Association of Indonesia, amounting 84 companies (in 2014). By methode of sampling are using purposive sampling.

Criteria for companies that become sample are:

- 1. General Insurance Company to be listed on the Indonesia Stock Exchange (BEI) in 2010-2014.
- 2. Financial Statements data are complete, including data on product lines
- 3. Diversifying minimum 2 product lines.
- 4. Have a positive profit before tax in the period 2010-2014.

Data Source

The data used in this research is secondary data, ie data obtained directly. Secondary data used in this research are data and information from books, journals, research publications, articles, and other secondary data contained in the Indonesia Stock Exchange that can be seen on the website www.idx.co.id

Data Analist Method

This research uses descriptive analysis, panel data regression analysis and hypothesis testing. Descriptive analysis was used as supporting data to deepen the inferential statistical analysis.

Deskripstif statistics used in this study is the mean, maximum and minimum.

Regression analysis panel has three kinds of models, namely common effect, fixed effect and random effect.

a. Common effect Model

Common effects models is a simple model that incorporates combine all time series data with cross section, next, estimation models performed using OLS (Ordinary Least Square). This model assumes that the intercept and the slope of each variable equal to any object of observation. The weakness of this model is a mismatch model with the actual situation. Each object can be different conditions and the condition of an object one time with another time can differ

b. Fixed effect Model

Panel data model with Fixed Effects Model (FEM) assumes that fundamental of differences between individuals can be accommodated through intercept differences, but with same intertemporal intercept (time invariant). Fixed effect mean that the regression coefficient (slope) remains between individuals and intertemporal.

Intercept each individual is an unknown parameter and will be estimated. In general, by including a dummy variable (dummy variable), so the FEM is often called the Least Square Dummy variable (ISDV).

c. Randomeffect Model

Random effect model is used to overcome the weaknesses of the fixed effects model using a dummy variable, so the models experiencing uncertainty. The use of dummy variables will reduce the degrees of freedom (degree of freedom), which in turn will reduce the efficiency of the parameters to be estimated. REM uses residual suspected of having intertemporal and interpersonal relationships. REM assumes that each individual has a different intercept which is a random variable.

The decision to choose the type of model used in the panel analysis was based on two test, the Chow test (Likelihood Ratio Test) and Hausman test. Chow test is used to decide whether to use a common effect or Fixed effect. The decision to use a fixed effect or random effect is determined by Hausman Test. For hypothesis test, the t test and F test will be done, statistic t test basically shows how far the influence of the explanatory variables / independent individually in explaining the variation of the dependent variable (Ghozali, 2001). If the significance probability value t is smaller than 0.05, it can be said that there is a strong influence between the dependent and independent variables. While the F test shows whether all independent or independent variables included in the model have influence together on the dependent variable (Ghozali, 2001). Provisions used in the F test is as follows.

- 1. If F count larger than F table or probability is smaller than the significance level (Sig. <0.05), the research model can be used or the model is correct.
- 2. If the F count is smaller than F table or probability greater than the level of significance (Sig.> 0.05), the research model can not be used or the model is not appropriate.
- 3. Comparing the results of the calculation with a value F F value according to the table. If the calculated F value is greater than the value of F table, the research model was appropriate.

The coefficient of determination (R2) measure how far the ability of the model to explain variations in the dependent variable. Small R2 value means the ability of independent variables in explaining dependent variable is very limited. Mean, value that approaching one are independent variables provide almost all the information needed to predict the variation of the dependent variable studied (Ghozali, 2001).

RESULTS AND DISCUSSION

Statistik Deskriptive

In conducting the research, researchers took a sample of 10 general insurance companies listed in Indonesian Stock Exchange (BEI) in period 2010-2014, based on the criteria that have been mentioned in the previous chapter. Here's a list of companies that meet the criteria.

Table 1
Research samples

No.	Code	Name of Company
1	ABDA	PT. ASURANSI BINA DANA ARTA, Tbk
2	ASBI	PT. ASURANSI BINTANG, Tbk
3	ASDM	PT. ASURANSI DAYIN MITRA
4	AHAP	PT. ASURANSI HARTA AMAN PRATAMA. Tbk
5	ASJT	PT. ASURANSI JASA TANIA, Tbk
6	AMAG	PT. ASURANSI MULTI ARTHA GUNA Tbk
7	ASRM	PT. ASURANSI RAMAYANA, Tbk
8	LPGI	PT. LIPPO GENERAL INSURANCE, Tbk
9	MREI	PT. MASKAPAI REASURANSI INDONESIA, Tbk
10	PNIN	PT. PANIN INSURANCE

Source: www.idx.co.id

Statistics descriptive from processing of Eviews 8.0 produces an average value, maximum value, minimum value of ROE, LEVERAGE, PDIV, and FIRM SIZE that can be seen in the table below.

Table 2
Statistik Deskriptive

-				
	ROE	LEVERAGE	PDIV	SIZE
Mean	17,46	171,98	0,60	27,50
Maximum	34,42	589,07	0,78	30,69
Minimum	5,30	21,37	0,38	25,56

Processing by Eviews 8.0

Based on these results it can be seen that:

• Variable ROE has a minimum value of 5.30% and a maximum value of 34.42%, while the average value of 17.46%. The value of the minimum ROE of 5.30% owned by PT Lippo General Insurance Tbk in 2012 with a profit before tax of Rp 52.94 billion and total equity of Rp 1 trillion. The average value ROE of 1.46%

indicates that the average company using total equity company and able to generate a profit of 17.46% of the total equity.

- Variable Leverage has a minimum value of 21.37% and a maximum value of 589.07%, while the average value of 171.98%. minimum value of leverage that 21.37% is owned by PT Lippo General Insurance Tbk in 2010 with total liabilities of Rp 188.78 billion and total equity of Rp 0.88 trillion. The average value of Leverage which is 171.98% shows that the average company using the company's total liabilities to finance his operations and expansion is 171.98% of the total equity.
- Variable Herfindahl Index (PDIV) has a minimum value of 0.38% and a maximum value of 0.78%, while the average value of 0.6%. PDIV minimum value of 0.38% is owned by PT Asuransi Bina Dana Arta Tbk in 2011 with a total gross premium income of Rp 537.43 billion and total as much as 5 product diversification. The average value of 0.6% PDIV showed that on average each insurance product sold has a contribution of 0.6% total loss of credit insurance products are sold at an insurance company.
- Variable Firm Size (Size) as a control variable has a minimum value of 25.56 and a maximum value of 30.69 while the average score of 27.50. Size Firm minimum value of 25.56 held by PT Asuransi Harta Aman Pratama, Tbk in 2011 and a maximum value of 30.69 Firm Size owned by PT Panin Insurance Tbk in 2014.

Decision Selection Model

Chow Test

The following hypotheses were made in making the Chow Test:

Ho: Model Common effect is better

Ha: Model Fixed effect is better

The following output results from testing using the Chow test

Table 3
Results of ChowTest

Effects Test	Statistic	d.f.	Prob.
Cross- section F	7.006.567	9,37	0.0000
Cross- section Chi- square	49.742.154	9	0.0000

Based on test results obtained value of probability Chow Test Chi-Square cross section of 0.0000 <0.05. Thus hypothesis Ho is rejected, so that a better model in this study is the estimation of fixed effect.

Hausman Test

Here are the results of processing the output of the test using the Hausman Test:

Ho: random effect model is better Ha: fixed effect model is better

Table 4
Results of Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	9.05489	3	0.0286

In the table above can be seen that the probability of random cross section is 0.0286 < 0.05. Thus hypothesis Ho is rejected, so that a better model in this study is the estimation of fixed effect model.

Based on chow test and Hausman test, it can be concluded that the use of the most appropriate model is the Fixed Effect Model. Here are the results of the fixed effect model.

Table 5
Result of Fixed Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.	
С	-53.75971	60.79176	-0.884326	0.3822	
LEVERAGE?	0.031623	0.010469	3.020738	0.0046	
PDIV?	35.36209	16.68929	2.118.849	0.0409	
SIZE?	1.614465	2.109467	0.765343	0.4489	
R-squared	0.779055	Mean dependent var		1.745.507	
Adjusted R-squared	0.707398	S.D. dependent var		7.404.808	
S.E. of regression	4.005462	Akaike info criterion		5.832.090	
Sum squared resid	593.6178	Schwarz criterion		6.329.216	
Log likelihood	-132.8022	Hannan-Quinn criter.		6.021.398	
F-statistic	10.87190	Durbin-Watson stat		2.124.600	
Prob(F-statistic)	0.000000				

Based on table 4.5, results using the fixed effect model showed that both leverage and diversification has a significant influence on ROE. Adjusted R2 value of 0.707398 for the dependent variable ROE, larger than the model common effect. Watson stat Durbin-value of 2.1246.

Uji hipotesis

Based on the table above, the model equations from this research are:

ROA=35.36209PDIV + 0.031623LV + 1.614465LN + error

Where:

ROE: Return of Equity

PDIV: Index Herfindahl

LV : Leverage

LN : Natural Logarithm of Total Asset

➤ Individual (t-test)

Here are the results of the t test of the fixed effect model based on table 4.5 above:

1. Variable Leverage

Leverage testing on ROE with the hypothesis as follows:

H1: Leverage a positive effect on the financial performance of general insurance company in Indonesia.

Based on the test results the fixed effect model, the variable leverage has significant influence to ROE. It is shown from the value prob value 0.0046 < 0.05 ($\alpha = 5\%$). Then, treatment of the test directions to determine whether the relationship between leverage and ROE is a positive or negative relationship. From the regression output above can be seen that the coefficient of leverage is worth 0.031623, of these figures can be interpreted that the relationship between leverage and ROE is a positive relationship, because if leverage increased by 1 unit, value of ROE will increase by 0.031623 units. So the conclusion is the hypothesis H1 is accepted with a 95% confidence level

The results was consistent with the results of research form Sivapalan Achchuthan and Thangarajah Jasinthan (2012) which results of this research indicate that leverage has a significant positive relationship to financial performance (ROE). Greaterratio of the total amount liabities (in which there are premiums received) to total equity, that represented by leverage, which is owned by a company, greater profit that will be received by the company. This can improve a company's ROE.

2. Variabel Diversifikasi (PDIV)

Diversification testing on ROE with the hypothesis as follows:

H2: Diversification positively effect on the financial performance of general insurance company in Indonesia.

Based on results fixed effect model test, variable diversification (PDIV) has a significant effect on ROE. It is shown from prob value 0.0409 < 0.05 ($\alpha = 5\%$). From regression output above can be seen that the coefficient diversification is worth 35.36209, from these numbers can be interpreted that the relationship between the diversification (PDIV) and ROE is a positive relationship, because if diversification (PDIV) increased by 1 unit, the value of ROE will increase by 35.36209 unit. So the conclusion is accepted hypothesis H2 with 95% confidence level.

Results of this research had different results from previous research, the result of Maxy Maxella (2012), Yulian Daning (2009), and Shinta Heru Satoto's (2009) result. Where the results of Maxy Maxella (2012) and Yulia Daning's (2009) research is a partial diversification variable does not have a significant

influence on financial performance, while results from Shinta Heru Satoto (2009) is a diversification negatively affect the company's financial performance. Theoretically, an increasing number of diversification will increase the number of products offered to the public, so that people will use product of insurance company, and then increase the premium income that would be obtained insurer. The increase in the number of premium income makes it possible to increase the amount of profit a company.

> F Test

This testing will be done by looking at the value of Probability (F-Stat), whereby if the value of Prob (F-statistic) <0.05, it means that all independent variables simultaneously affect the dependent variable, and vice versa, if the value of Prob (F statistic)> 0.05, it means that all independent variables simultaneously has no effect on the dependent variable. Based on Table 4.5 it can be seen that the value of Prob (F-statistic) is equal to 0.0000 or <0.05, it means that both leverage and diversification (PDIV) simultaneously affect the financial performance (ROE).

➤ Koefisien Determinasi (Adjusted R-Square)

This test will be performed to determine the percentage of variation of the independent variables used in the model is able to explain the dependent variable. As shown in Table 4.5 above, the obtained value of Adjusted R-squared of 0.707398, or 70.7398%. This means that the contribution of the independent variables used in the model is able to explain the dependent variable is equal to 70.7398%. while the rest (100% - 70.7398%) = 29.2602% influenced by other variables outside the model.

Contribution of the independent variables associated with significant value in the regression model above (Table 4.5), where both independent variables affects dependent variable.

CONCLUSION, MANAGERIAL IMPLICATIONS, LIMITATIONS, AND SUGGESTIONS

Conclusion

From results of research that conducted on the general insurance company listed on the Indonesia Stock Exchange which published their financial statements from 2010 until 2014, it can be concluded as follows: (1) Variability dependent variable Return of Equity (ROE), which can be explained by the variability of independent variables (Leverage and Diversification) of 70.7398%. (2) There is a positive and significant influence between leverage as independent variable and Return of Equity (ROE) as dependent variable. The greater amount of leverage, it will contribute to the addition of profit before tax, would then increase ROE. (3) There is a positive and significant influence between diversification as an independent variable with Return on Equity (ROE) as the dependent variable. The greater diversification of the product will increase the profit before tax that would increase the ROE.

Managerial Implication

Based on these results, both leverage and diversification has a significant influence on the financial performance as measured by ROE. This is proves that with the ownership of liabilities that greater than the total equity have the possibility to contribute to add profits of a company, because the addition of these liabilities could be used to finance operations and investment activities of an enterprise. Similarly, with the addition of product diversification in the insurance company, as long as the premium income earned is worth quite large, then the addition of product diversification will be improve the financial performance of companies which represented using ROE.

Limitation

(1) Data that used in this research were secondary data, so that researchers can not control the possibility of a miscalculation. The accuracy of data is highly dependent on the accuracy of the data provided in www.idx.co.id (2) Data sample that used in this research only took a general insurance company which listed on the Indonesia Stock Exchange, so sample that used is limited to ten companies, insurance companies who's not listed Stock Exchange is not investigated in this research. (3) The period of research was limited and used only for five years ie 2010-2014. (4) In this research used only leverage and diversification as independen variable, so others variable that may be affect company's performance was not investigated in this research. (5) Data was taken is the parent company's data, not including subsidiary, so the possibility of bias can be occur in this research.

Suggestion

The advice can be given on the results of this study are as follows: (1) It is recommended to conduct research using primary and secondary data. Researchers can conduct surveys to the insurance company to obtain primary data that required in the research. This way intended to obtain more accurate results and will become comparison with research that only used secondary data only. (2) Conducting research with more sample, can be done by increasing the number of years of research or to expand the numbers of insurance companies, not only listed in the Indonesia Stock Exchange (IDX). In this way were expected to obtain more accurate results. (3) adding different independent variables, that will be strengthen the predictions of general insurance company's financial performance. (4) Perform calculations using complete data, both the parent and the subsidiaries.

DAFTAR PUSTAKA

- aaui. (2015). *List of Members*. Retrieved (2015), from aaui (Asosiasi Asuransi Umum Indonesia): http://aaui.or.id/index.php/list-of-members#page
- Achchuthan, S., & Jasinthan, T. (2012, Oct). Impact of Financial, Operating Leverage on the Financial Performance: Special Reference to Lanka Orix Leasing Company Plc in Srilanka. *International Journal of Engineering Science Paradigms and Researches*, Vol.01.
- Ang, R. (1997). Buku Pintar Pasar Modal Indonesia. Jakarta: Media Staff Indonesia.
- Ardra. (2013). *Ekonomi: ardra.biz*. Retrieved 2015, from ardra.biz: http://ardra.biz/ekonomi/ekonomi-keuangan-manajemen-keuangan/pengertian-fungsi-tujuan-asuransi/
- Baltagi, B. H. (2005). *Econometric Analysis of Panel Data 3rd Edition*. John Wiley & Sons Ltd.
- Daning, Y. (2009). Analisa Kinerja Keuangan Perusahaan yang Melakukan Diversifikasi Usaha. *Universitas Brawijaya*. Malang.
- Dinoyudha. (2010, Oct 03). *Statistika Deskriptif*. Retrieved 2015, from dinoyudha.wordpress: https://dinoyudha.wordpress.com/2010/03/10/statistika-deskriptif/
- Fahmi, I. (2011). Analisis Laporan Keuangan. Bandung: Alfabeta.
- Foong, Y. S., & Idris, R. (2012). Leverage, Product Diversity and Performance of General Insurers in Malaysia. *The Journal of Risk Finance, Vol.13*(No.4), 347-361.
- Ghazali, N. A. (2001). *Aplikasi Analisis Multivariate dengan Program SPSS*. Semarang: Badan Penerbit Universitas Diponegoro.
- Hariadi, B. (2005). Strategi Manajemen. Malang: Bayumedia.
- Indonesia, B. E. (n.d.). *Laporan Keuangan & Tahunan*. Retrieved (2015) from idx.co.id: http://www.idx.co.id/id id/beranda/perusahaantercatat/laporankeuangandantahunan.aspx

- Irfandy, D. (2012). Analisis Pengaruh Leverage terhadap Nilai Perusahaan pada Perusahaan yang Melakukan Diversifikasi. *Universitas Gajah Mada*. Yogyakarta.
- Pandya, A. M., & Rao, N. V. (1985). Diversification Strategy, Profit, Performance and The Entropy Measure. *Journal of Strategic Management, Vol.21*, 155-174.
- Rahayu, S. (2010). Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan Dengan Pengungkapan Corporate Social Respocibility dan Good Corporate Governance Sebagai Variabel Pemoderasi. *Universitas Diponegoro*. Semarang.
- Satoto, S. H. (2009, Mei). Strategi Diversifikasi Terhadap Kinerja Perusahaan. *Jurnal Keuangan dan Perbankan, Vol.13* (No.2), 280-287.
- Singarimbun, M., & Effendi, S. (1995). *Metode Penelitian Survai*. Jakarta: Pustaka LP3ES Indonesia.
- Sugiyono. (1999). Metode Penelitian Bisnis. Bandung: Alfabeta.