THE INFLUENCE OF FIRM CHARACTERISTICS ON CAPITAL STRUCTURE AND FIRM VALUE: AN EMPIRICAL STUDY OF INDONESIA INSURANCE COMPANIES

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Abstract

The purpose of this research was to determine the effect of variables dominant characteristics of the company, namely the size of the company, growth opportunities, profitability, liquidity, and tangibility to capital structure and to determine the effect on the capital structure of a company's value as well as to determine the trade-off theory or pecking order theory can be more precise in predicting changes in the different leverage between public insurance companies listed on the Indonesia Stock Exchange. This research used a sample of 10 insurance companies (non-life insurance) during the years 2008-2013. The analytical method used is panel data analysis method that uses a combination of data time series and cross section with technical applications panel random effect model and fixed effect models and data used are secondary data. This research indicate that the dominant variable characteristics that affect the company's capital structure is firm size and growth, while positive effect on the liquidity variable negative effect. Further positive effect on the capital structure of the company and the value of the trade-off theory can explain and more appropriate for the case of a public insurance company listed on the Indonesian stock exchange. This research result capital structure model for insurance companies. Therefore, researchers suggest to the management of insurance companies to conduct research on the optimal composition of the debt ratio that would set as a target so as to optimize the value of the company and the share price is concerned by lowering the cost of capital.

Keywords: Firm's characteristics, capital structure, company size, growth, liquidity, trade off theory, cost of capital

INTRODUCTION

Decision in the company's capital structure is a priority in the company's efforts to improve the performance of the company, the company's efforts to optimize returns or minimizing the cost of capital with the ability of the company in the face of competitive business environment. The capital structure of the company is a combination of different shares both ordinary and preferred shares, or a mix of all sources of long-term financing both equity and debt used by the company. Companies can obtain funds to finance its operations and expansion of the company. Funds can be obtained from internal and external sources, the funds obtained from external sources is the proceeds of creditors and investors, funds from creditors an external capital is a debt to the company, while funds from the investor's own capital.

The global economic crisis in 2008 is the impact of the crisis in Europe and America, which also resulted in the domestic capital market turmoil and falling stock prices significantly, as shown by the decline in the Stock Price Composite index (IHSG) is sharp, namely from 2830 in January 2008 to 1155 in November 2008 and down more than 50%.

IHSG impairment is also repeated in 2013, namely the JCI decline from 5200 into 3800 in July 2013. Individually several large companies both domestically and abroad is impaired very large market capitalization and this has resulted in the decline in value market of shareholder wealth.

When viewed from the side of the company, one of the consequences of the crisis are DER (debt to equity ratio) public companies in Indonesia, which rose sharply and reached the highest average in 1998 in the amount of 86%. According to Lasher (2003, 431), the optimal capital structure for most businesses is the level of debt between 30% -50%, and the debt levels above 60% can create excessive risk and should be avoided. This reference has many exceptions and not the rule that raw, but has become received wisdom as general guidance in managing the company.

Companies engaged in the field of financial institutions, especially insurance companies in the current economic conditions trying to find sources of funding to be further developed, including by way of a public company (*go public*). An insurance company that has gone public in general aims to increase the prosperity of the owner or shareholders by increasing the value of the company (Salvatore, 2005).

Determinants of capital structure in the form of the characteristics of companies consisting of company size, growth, profitability, liquidity, tangibility that into consideration in the decision of the company to the current funding interesting to study because until now it was not known how the public insurance companies in Indonesia decided to structure namely capital fund options internally and externally, as well as debt and equity. Therefore we need a study of

capital structure that can be a source of guidance in the management of public funds in insurance companies.

Based on data from empirical, insurance companies from 2008 to 2013 experienced a change of DER (debt to equity) are quite significant. DER increment can increase the value of the company (James, 1987). But what happens is the insurance company's share price less value increased significantly so that the value PBV (price to book value) of the insurance company does not comply with the expectations of shareholders.

Based on data empirical correlation between the change of capital structure (DER) with enterprise value (PBV), thus the phenomenon of problem that occurs in a public company engaged in the insurance business in Indonesia is the change in DER (Debt to Equity Ratio) is quite significant that is the ratio between equity and debt to rise DER can increase the value of the company. But what happens is the PBV (Price to Book value) of public insurance companies since the global crisis of 2008 did not show any significant improvement. PBV is a comparison between the current share price to its book value which is an indicator of company performance (Brigham & Ehrhardit, 2005: 456). At a public Insurance company in Indonesia occurred high leverage, so that when the economic downturn, the risks to be borne shareholders and the greater effect on the value of the company and the stock price.

According to Barclay and Smith (2001, 197), financial economists or practitioners in the world in dealing with the problem of capital structure still rely on rules of thumb of a successful practitioner. In some respects rules of thumb may be quite effective in certain situations, but the situation is changing all the time, the rules of thumb are likely to degenerate into dogma. Therefore we need a study of the company's capital structure so that the practitioner can manage its funding sources optimally.

According to Lasher (2003, 421), with capital restructuring, in this case the change of leverage (debt and equity composition), then the stock price will rise, because the optimal capital structure will be able to maximize the stock price. Under conditions of low leverage, improved slightly leverage will have positive effects for investors, but at the moment it will contain a high leverage high risk that the addition of a little leverage effect will be negative for investors. Optimal capital structure that will generate the maximum share price reached during the change from positive to negative effects. The position is optimal capital structure, when the addition of leverage, the stock price down so that it will no longer be at its maximum.

Ross, Westerfield and Jaffe (2002, 448), states that there is no definite formula to the calculation of the ratio of debt and equity that is optimal. Although the theory of capital structure is one theory among elegant and sophisticated in finance, but the practical application of the theory can be said to be unsatisfactory. Therefore, they are back on the reality of the real world,

in the form of an empirical pattern of concern for decision-making when formulating the policy of the company's capital structure. They also added that although there is no formula to determine the ratio of debt and equity for the entire company, but there is evidence that the company has a target ratio of debt and equity.

Based on the above phenomenon and the gap in theory, the authors are interested in doing research on the characteristics of the company, capital structure and corporate value in insurance companies, namely by making modifications research model Rajan and Zingales (1995) and Ozkan (2001) and Chang (2008). In this case, the central terra research is the determination or the determination of capital structure in Indonesia, by analyzing the source of funding decisions public insurance companies listed on the Stock Exchange for the next may be explained by the Trade-Off Theory and Pecking Order Theory.

Based on empirical data per December 31, 2013, the number of insurance companies that have a business license to operate in Indonesia is 398 companies, comprises 140 insurance and reinsurance companies, and 258 companies supporting insurance. Insurance and reinsurance companies comprised of 47 insurance companies, 84 insurance companies of which there are 10 insurance companies that have gone public, 4 reinsurance companies, 2 companies running program of social insurance and social security, and 3 companies running insurance for civil servants and police.

Based on the background and the identification of the above problems, the formulation of the problem in this study are as follows:

1. How does the variables dominant characteristics of the company, namely the size of the company, the company's growth, profitability, liquidity, capital structure and tangibility to the insurance company?

2. How does the influence of capital structure on the value of the insurance company?

3. Is the Trade-Off Theory or Theory Pecking Order can be more precise in predicting changes in leverage which differs between insurance companies?

LITERATURE REVIEW

Grand theory in this study refers to the theory of capital structure which was first published by Modigliani and Miller (1958, 1963) with the theory of Modigliani and Miller propositions I and II. The development of several theories and debates on the capital structure of the company, which is referred to as capital structure puzzle (Myers, 1984; Barclay & Smith, 2001). Barclay and Smith (2001, 197) states that that makes a capital structure debate are various different theories produce different recommendations, even opposing the decision making process, for example, some people Modigliani Miller holds the view that considers the capital structure is not

related to the value market companies. While most other people holds the view that the capital structure related to the company's market value.

Middle range theory refers to the theory of capital structure developed by Stiglitz (1969), Haugen and Papas (1971) with the trade off theory and financial distress, Jensen and Mecling (1976) with agency theory and Myers (1984) with Asymetric Information Theory.

Capital Structure Relevant theory, there are two basic theories, namely: Trade-off Theory (Fama and Miller, 1972; Jensen and Meckling, 1976; Myers, 1977; DeAngelo and Masulis, 1980; Jensen, 1986) and the Pecking Order Theory (Myers, 1984) that have different views on the existence of an optimal capital structure leverage targets.

According to the trade-off theory choice source of funds of the company, reflecting the company's managers attempt to balance taxshield of debts greater with increasing likelihood and cost of financial distress, including increased due not to invest in profitable projects, if too much or too little debt a company will be able to lower the value of the company. In other words, there is an optimal capital structure and the company has a target leverage moving towards the target of such leverage. Meanwhile, according to the signaling argument, company managers make decisions based mainly on the source of funds signaling effect of the decision, for example, the tendency of stock prices dropped significantly in response to offers of common stock and the rise in response to the recapitalization that increases leverage.

Based on the signaling argument, Myers (1984) build Pecking Order theory espoused by managers and stated that the company's capital structure is the cumulative result of a decision of individual funding sources. In connection with the adverse selection associated with the capital cost of internal funding sources are preferred over external. Sources of funds through debt would be preferred over equity. In other words, the company does not have a target leverage.

Applied theory used is research Rajan and Zingales (1995), Wald (1999), Ozkan (2001), Vourgaris et al. (2002), Korajczyk and Levy (2003), which shows that at the aggregate level, leverage the company in several countries are relatively similar, as well factors that influence it. While research Booth et al. (2001) and Chang (2008) conducted in 10 developing countries shows that the company's capital structure decisions are influenced by the same variables with developed countries.

Characteristics of Company

a. Company size (Size)

Various studies have been conducted in connection with the influence of the size of the company on the capital structure with the indicator ie financial leverage. There are various

reasons that can explain it. One is the large companies have bankruptcy costs per dollar of lower asset values and lower procurement costs for the use of debt securities compared with small companies. Therefore, large companies are more likely to charge a fee associated with the level of debt is smaller than the smaller companies. Bankruptcy costs are lower in large companies carrying on the use of a large debt. Results of the study Warner (1977) and Ang, Chua, and McConnell (1982) supports this argument.

b. Liquidity (Liquidity)

Liquidity ratio is the ratio used to measure a company's ability to pay the debt in the short term has matured. Saarani and shahadan (2013) states that there is a negative influence between liquidity with capital structure. This means that the company has good liquidity, the company will avoid debt.

c. The company's growth (Growth)

Azkan (2001) found that the amount of money spent by the company is inversely proportional to growth. The study also konsiten with the results of research by Bhaduri. Total assets chosen as a measure of growth taking into account the value of assets was relatively stable compared capitalized market value and sales (Shudarmadji, 2007). Research conducted by Sriwardany (2006) proved that the growth of assets negatively affect the financial performance and Kusumasari et al. (2009) proved that the growth of assets not significant effect on financial performance.

d. Profitability (Profitability)

Profitability is a picture of the performance of management in managing the company, size of company profitability can be assessed by various kinds such as operating income, net income, return on invetasi / assets, and the rate of return on owner's equity. Robert (1997) revealed that the ratio of profitability or profitability ratio shows the company's success in generating profits.

e. Tangibility

Various theories of capital structure stated that the company's asset structure can influence the choice of capital structure. Rajan and Zingales (1995, 1455) states that the tangible assets that will be easy to dikolateralkan so will reduce the risk of the lenders, because the assets are worth more in the scat liquidation so that losses will be suffered less. Therefore, the greater the portion of tangible assets on the balance sheet, the greater willingness of lenders to provide loans, so that the leverage will be even greater.

Value Company

In this study the company's value is measured by PBV (price book value). The ratio of stock price to book value of the company, indicating the level of the company's ability to create value relative to the amount of capital invested. High PBV reflect stock price higher than the book value per share. The higher the stock price, the more successful the company to create value for shareholders. The success of the company creates value certainly gives hope to the shareholders in the form of larger profits as well (Sartono, 2001), simply states that the PBV is the ratio of the market (market ratio) which is used to measure the performance of the stock market price of the book value.

Insurance Company

There are several definitions of insurance companies among others by Mark R. Green (1992) (Principle of Insurance), insurance is an economic unit or risk by combining a variety of parties that have the same situation, in the face of financial losses, which arise not allegedly into a management (economics sense), insurance is an agreement between the insurer and the insured, in which the insurer with a reward (consideration / premiums) will take over the burden of the financial loss suffered by the insured, which arise unexpectedly (legal sense) According to Robert Mehr (1992), insurance is a means to reduce financial risk, by collecting exposure units in sufficient numbers, to make the individual losses can be estimated.

According to the Code of Commercial Law, insurance or coverage is an agreement by which a person committed to the insured, to receive the premium, to provide the replacement of financial loss to him on a damage, loss of expected profit, which may be suffered due to an event that uncertain.

According to Law No. 40 of 2014 on Insurance, insurance is an agreement between two parties, namely the insurance company and the policyholder, which became the basis for the acceptance of premiums by insurance companies in exchange for:

a. provide reimbursement to the insured or the policyholder for loss, damage, costs incurred, lost profits, or legal liability to third parties that may be suffered by the insured or the policyholder due to the occurrence of an uncertain event;or

b. provide payment based on the death of the insured or a payment based on the life insured with a predetermined amount of benefits and / or based on the results of fund management.

Research Objectives

The aim of this study is to provide the scientific benefits and provide a description of the capital structure in public insurance companies in Indonesia. In continuation with the purpose of the above research, this research is able to give at least three (3) common use as follows:

a. The practical usefulness of this research is to generate capital structure model for insurance companies that can be used as a basis for decision making within an enterprise funding sources as well as all parties concerned with the problem of the company's capital structure.

b. Are expected to know the variables that affect the characteristics of the company's capital structure and leverage the most appropriate level for a company that can be used to produce better decision-making regarding the source of funds of the company compared only based on rules of thumb.

c. For further research, the results of this study can be used as a reference to further deepen research in the field of financial management, particularly the issue of capital structure in public insurance companies listed on the Stock Exchange.

METHODS

Resources and Procedures for Determining Data and Information

Data used in this research is secondary data, that the financial statements for insurance companies that have gone public (Non-Life Insurance in Indonesia during the period 2008-2013. Source data is derived from the Indonesian Stock Exchange (BEI), and the Financial Services Authority and agencies ies and insurance companies relating to the research conducted.

The target population in this study is the insurance companies that have gone public to Insurance (Non-Life Insurance) in Indonesia are listed on the Stock Exchange from 2008 until 2013. The criteria listed on the Stock Exchange since 2008 is used because by adopting a model of partial adjustment towards the long-term leverage targets will require long-term data. Furthermore, methods of census conducted on the target population totaling 10 companies.

As already mentioned above, in this study will be used secondary data collection methods. Therefore, in the process of data collection needs to be accompanied by clarification of the data so that it can produce accurate data. Furthermore, the company with the missing observation for any variables in the model during the study period will be issued. As of December 31, 2013, the number of insurance companies that have a business license to operate in Indonesia is 398 companies, comprises 140 insurance and reinsurance companies, and 258 companies supporting insurance. Insurance and reinsurance companies comprised of 47 insurance companies, 84 insurance companies, 4 reinsurance companies, 2 companies

running social insurance programs and social security. In this study, the authors focused on insurance companies (Non-Life Insurance) that have gone public, as many as 10 company.

Variable Operationalization

The variables are operationalized in this research is all the variables contained in the research hypothesis formulated in the previous chapter, consisting of the first model: the dependent variable (dependent) is the capital structure (DER) and independent variables (independent), include the size of the company, the company's growth opportunities , profitability, liquidity, and tangibility. And a second model: independent variable is capital structure and the dependent variable is the value of the company (PBV).

a. Dependent Variable (Y2)

Y2 dependent variable in this study was measured by the Corporate Value Price to Book Value (PBV). PBV is the ratio between the market price per share to book value of equity per share (Brigham & Houston, 2007.126).

PBV : Market Price per share

Book Value per share

b. Dependent Variable (Y1)

Y1 dependent variable in this study adalan Capital Structure. Proxy capital structure in this study is the debt-to-equity ratio (DER) which is a ratio used to measure the use of debt to total shareholders' equity of the company (Walsh, 2003)

DER: Total Liabilities

Total Equity

c. Independent Variables

The independent variables are firm size (SIZE), Company Growth (Growth), Profitability (Probability), Liquidity (Liqudity) and tangibility.

a) Company Size (SIZE)

Company size is defined as the amount of funds the company. There are several indicators of the size of the company used by the researchers, are as follows: Ozkan (2001):

Size = the logarithm of total assets

Wald (1999):

Size = the logarithm of total assets

According Ozkan (2001), the use of sales or total assets as an indicator of the size of the company will not show a significant difference in the results. However, considering that small companies can also have great sales, for example, if a high level of turnover, so in this study the sale will not be used as an indicator of the size of the company. In addition to sales and total

assets. Titman and Wessels also use level to stop working (the quit rates) as an indicator of the size of the company. This reflects the phenomenon that a large company with an extensive career opportunities for its employees will have a low level to stop working. However, in this study stopped working level will not be used as an indicator of the size of the company with consideration of the limitations of the data. Furthermore, as is done by Ozkan (2001), Wald (1999), Chung (1993), and Titman and Wessels (1988), then in this study logatitma total assets will be used as an indicator of variable size companies.

b) Company Growth

What is meant by the growth opportunity is the chance of the company to be able to grow and include opportunities for investing in the future. There are several indicators that are used by researchers to measure the growth opportunities, including:

Ozkan (2001), Barclay and Smith (2001), Rajan and Zingales (1995):

$Growth = \frac{market\ value\ of\ assets}{book\ value\ of\ assets}$

Growth = the percentage change in total assets

c) Profitability is the ability likely to be profitable or earn a profit. There are several indicators commonly used by researchers in mengukurprofitabilitas, which are:

Titman & Wessels (1988):

$profitability = \frac{operating\ income}{totalassets}$

Following Titman and Wessels (1988), the company's ability to generate profit is calculated based on profitability ratio is the ratio of operating income to total assets. Because, to be known is the ability likely to be profitable or earn a profit only from the company's overall operating income.

d) Likuidity

Liquidity is the ability to meet short-term obligations. The indicator is a liquid asset. According to Ross, Westerfield, and Jaffe (2002) there are two types of measurements commonly used, namely:

$liquidity = \frac{totalcurrent\ assets}{totalcurrent\ liablities}$

In this study, follow Ozkan (2001), then it will use the ratio of current assets to current liabilities to measure the liquidity of the company's assets. In this case, the inventory will not be issued, because even though inventory is a current asset of the lowest levels of liquidity, but still can be converted into cash.

e) Tangibility

The indicators are tangible assets (tangible assets). Which includes tangible assets are land, buildings, structures, equipment, etc., that can dikolateralkan can be estimated in terms of the value explicitly, and can be thawed in the secondary market compared to intangible assets. While intangible assets consist of patents, trademarks, goodwill. Consequently, if a company goes bankrupt, the value of intangible assets depreciated very sharply. There are several indicators to measure tangibility is usually done by the researchers, are as follows:

Rajan dan Zingales (1995), Chung (1993):

$Tangibility = \frac{fixed\ assets}{book\ value\ of\ total\ assets}$

In this case the company under investigation is the insurance company that has gone public that has been listed on the Stock Exchange since 2008 and the minimum was recorded until the year 2011. Furthermore, the company with the observation is missing for any variable in the model during the study period will be issued. In this case the number of insurance companies surveyed for the study is that 10 companies which are all insurance companies that have gone public.

Table 1. Insurance companies surveyed

No	Name of Companies	Code
1	PT Asuransi Bina Dana ArthaTbk	ABDA
2	PT Panin Insurance Tbk	PNIN
3	PT Asuransi Multi Artha Guna Tbk	AMAG
4	PT Lippo General Insurance Tbk	LPGI
5	PT Asuransi Dayin MitraTbk	ASDM
6	PT Asuransi Mitra MaparyaTbk	ASMI
7	PT Asuransi Ramayana Tbk	ASRM
8	PT Asuransi Harta Aman Pratama Tbk	AHAP
9	PT Asuransi Bintang Tbk	ASBI
10	PT Asuransi Jasa Tania Tbk	ASJI

Source: Indonesia Stock Exchange

Research Model

In an effort to examine the existing problems, following which carried Ozkan (2001), in this study will be used where the partial adjustment model of the company's financial behavior characterized as partial adjustment toward long-term leverage target. Development or modification of the model is then performed in accordance with the characteristics of Indonesia. Within this framework will be able to analyze a potential determinant of leverage targeted and

the nature of the adjustments to the target. Next will be a case study on some of the company and will use simulation techniques. The capital structure model used in this study is a dynamic model. Here is a regression model for dynamic panel data:

Model1:

$DER_{it} = Y_0\,DA_{i.t-1} + Y_1\,Size_{it} + Y_2\,Growth_{it} + Y_3\,Profitability_{it} + Y_4\,Liquidity_{it} + Y_5\,Tangibility_{it} + \mu_{it}$

$\mu_{it} = \alpha_i + \alpha_{t+}\,e_{it}$

DA_{it} : *leverage* perusahaan i pada tahun t

μ_{it} : *composite error*

α_i : *time-invariant unobservable firm* dan/atau *industry specific fixed effects*

α_t : *firm-invariant time-specific effects*

e_{it} : *error terms* perusahaan i pada tahun t

Model 2:

$PBVit = Y\,DER + Cti + \mu_{it}$

PBV: Price to book value perusahaan ipada tahun t

e_{it} : *error terms perusahaan i pada tahun t*

Unobservable characteristics of companies that have significant implications on the company's capital structure decisions, such as managerial attitudes such as the ability and motivation, or attitude to risk, as well as industry-specific time-invariant effects, specific to the industry in which it operates such as barriers to entry, and conditions market factors contained in α. In this case, αi vary among companies assumed to be constant within each company. On the other hand, αt the same for every company at some point, but vary over time. Examples are macroeconomic factors such as the level of prices and interest rates. At is included in the control analysis for both aggregate time effects observed or not observed.

1. The whole estimation is done with the program E-views 6 and in this study there are several statistical tests to be carried out, namely: Descriptive Statistics, to find out briefly the statistical data determinants of capital structure in this study is based on the mean, minimum, maximum and standard defiasi of the data 10 insurance companies recorded losses in the Indonesia Stock Exchange (BEI) for the period 2008 to 2013.

2. The results of the estimation using Pooled Least Square, Fixed Effect Model, Chow Test, Random Effect Model and Hausman Test, t Test, and F Test. To determine the effect of the characteristics of the Company's capital structure and then performed the same test to determine the effect of capital structure on firm value.

EMPIRICAL RESULTS AND DISCUSSION

To know a brief overview of statistical data determinants of capital structure in this study is based on the mean, minimum, maximum and standard deviation of the data 10 insurance companies recorded losses in the Indonesia Stock Exchange (BEI) for the period from 2008 to 2013.

Table 2. Descriptive Statistic

	PBV	DER	SIZE	GRO	LIQ	PRO	TGB
Mean	0.003064	1.175840	5.710757	0.201878	956.1850	0.329075	0.000472
Median	0.002599	1.001573	5.606506	0.194386	733.5562	0.236985	0.000249
Maximum	0.010617	6.327504	6.916525	0.406711	4075.057	0.853494	0.006684
Minimum	5.46E-05	0.041753	4.904028	0.072979	0.196700	0.024543	9.41E-05
Std. Dev.	0.002453	1.030919	0.480426	0.074745	849.4558	0.226972	0.000924
Skewness	0.939483	2.302917	0.721240	0.630314	1.433819	0.721647	5.539089
Kurtosis	3.789334	11.74566	2.835884	3.274261	5.414259	2.497832	36.04050
Jarque-Bera	10.38391	244.2507	5.269203	4.161007	35.13000	5.838169	3036.002
Probability	0.005561	0.000000	0.071748	0.124867	0.000000	0.053983	0.000000
Sum	0.183857	70.55039	342.6454	12.11268	57371.10	19.74448	0.028311
Sum Sq. Dev.	0.000355	62.70485	13.61776	0.329621	42572933	3.039455	5.04E-05
Observations	60	60	60	60	60	60	60
Cross sections	10	10	10	10	10	10	10

Sources: Indonesia Financial Service Outhority

Price to Book Value (PBV) of 0.010617 highest ASRM contained in the company in 2012 and the lowest was found in the company 0.0000546 PNIN 2009. The standard deviation of 0.0024 is smaller than the mean value of 0.003 indicates that the variables PBV has a small data distribution and variation of the distribution of data closer together.

Debt to Equity Ratio (DER) high of 6.327 contained in the Company ASRM in 2012 and a low of 0.0417 PNIN contained in the Company in 2011. The default value of 1,030 smaller than the mean value of 1.175 indicates that the variable DER has a distribution of data small and variations in the distribution of the data closer together.

Company size (SIZE) high of 6.916 contained in PNIN Company in 2013 and a low of 4.904 contained in the Company in 2008. AHAP standard deviation value of 0.480 is smaller than the mean value of 5.710 indicates that the variable SIZE has a small data distribution and variation distribution the data closer together.

Company Growth (GRO) high of 0.406 contained in AJST Company in 2011 and a low of 0.0729 LPGI contained in the Company in 2008. The default value of 0,074 defiasi smaller than the mean value of 0.201 indicates that the variable GRO has a small data distribution and variations in the distribution of the data closer together.

Company Liquidity (LIQ) is the highest for 4075 contained in the Company ABDA in 2012 and a low of 0.196 contained in ASDM Company in 2013. The default value of 846.1 defiasi smaller than the mean value of 956.1 indicates that the variable has a distribution data LIQ small and variations in the distribution of the data closer together.

Company profitability (PRO) is the highest of 0.853 contained in ASJT Company in 2011 and a low of 0.024 contained in the Company in 2013. ASBI defiasi standard value of 0.226 is smaller than the mean value of 0.326 indicates that the variable SIZE has a small data distribution and variation distribution the data closer together.

Tangibility Company (TGB) is the highest at 0,006 AHAP contained in the Company in 2013 and a low of 0.001 contained in the Company ASRM in 2011. The default value of 0.0009 defiasi greater than the mean value of 0.0004 indicates that the variable SIZE has a distribution data large and high data distribution variation.

Based on the standard deviation in the data cross secrion 10 insurance companies in the period (time series) 2008 -2013 has the characteristics of data in the variable Tangibility (TG) showed heterogeneity at the high level of variation data while data on variables Debt to Equity Ratio (DER), Size company (SIZE), Growth (GRO), Liquidity (LIQ) and profitability (PRO) indicates the level of data variation approaching the same (relatively homogeneous). Then to see the normality of the data it can be seen based on the value of Jarque Bera (JB), which all variable value greater than 5% indicates that the data were normally distributed.

The research method in this study consists of two models is as follows:

1. Model 1 to determine the effect of characteristics, such as company size (SIZE), Growth Company (GRO), Liquidity (LIQ), Profitability (PRO), and tangibility (TGB) of the Capital Structure (DER);
2. Model 2 to determine the effect of capital structure (DER) of the Company Value (PBV);

Results of the estimation by using Pooled Least Square, through the stages of testing the model as follows: pooled effect model, fixed effect model, chow test, random effects model and Hausman test, following the results of estimation with random effect model:

Table 3. Random Effect Model

Dependent Variable: DER?				
Method: Pooled EGLS (Cross-section random effects)				
Date: 05/31/15 Time: 17:36				
Sample: 2008 2013				
Included observations: 6				
Cross-sections included: 10				
Total pool (balanced) observations: 60				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
SIZE?	-0.841871	0.478814	-1.758242	0.0844
GROWTH?	-5.438158	2.729856	-1.992104	0.0514
LIQUIDITY?	0.000399	0.000133	2.999790	0.0041
PROFITABILITY?	0.950634	0.741039	1.282839	0.2050
TANGIBILITY?	-28.37145	114.2878	-0.248246	0.8049
C	6.400261	3.012139	2.124823	0.0382
Random Effects (Cross)				
ABDA--C	0.475677			
PNIN--C	-0.546134			
AMAG--C	-0.383636			
LPGI--C	-0.993296			
ASDM--C	0.142398			
ASMI--C	0.208329			
ASRM--C	1.500524			
AHAP--C	-0.355963			
ASBI--C	0.151529			
ASJT--C	-0.199428			
	Effects Specification			
			S.D.	Rho
Cross-section random			0.800459	0.5842
Idiosyncratic random			0.675290	0.4158
	Weighted Statistics			
R-squared	0.267723	Mean dependent var		0.382898
Adjusted R-squared	0.199919	S.D. dependent var		0.746600
S.E. of regression	0.667813	Sum squared resid		24.08260
F-statistic	3.948515	Durbin-Watson stat		1.675788
Prob(F-statistic)	0.004004			
	Unweighted Statistics			
R-squared	0.170340	Mean dependent var		1.175840
Sum squared resid	52.02371	Durbin-Watson stat		0.775749

Based on the table above, Rated R squared = 0268 from the table above shows that 26.8% of the variance DER can be explained by changes in variable SIZE, GROWTH, LIQUIDITY, PROFITABILITY and tangibility. And the remaining 73.2% is explained by other factors outside the model.

A. Simultaneous Test (Test F)

F test was intended to test whether the independent variables jointly significant effect on the dependent variable.

• H0: the independent variables together had no significant effect on the dependent variable

• H1: independent variables jointly significant effect on the dependent variable

Basic

Decision:

• If the probability (sig)> 0.05 or F arithmetic <F table then H0 is not rejected

• If the probability (sig) of <0.05 or F count> F table then H0 is rejected

Decision:

In the above table the value of F stat = 3.95 and sig = 0.004> 0.05, so H0 is rejected, meaning the independent variables such as SIZE, GRO, prob, LIG and TGB jointly significant effect on the dependent variable is the DER.

B. Testing Partial (t test)

T test was intended to test whether the independent variables partially significant effect on the dependent variable.

Hypothesis:

• H0: partially independent variables no significant effect on the dependent

• H1: independent variables partially significant effect on the dependent variable

Basic Decision

• If the probability (sig)> 0.05 or - t table <t <t table then H0 is not rejected

• If the probability (sig) of <0.05 or t <- t table or t arithmetic> T table then H0 is rejected

Decision:

The value of the variable sig SIZE = 0.0844> 0.05 so H0 is not rejected, which means that the independent variable SIZE partially no significant effect on the variable DER. But the real level (level of significance) α = 0:10, the value of the variable sig SIZE = 0.0844 <0:10 so that H0 is rejected, meaning the independent variable partial SIZE significant negative effect on the variable DER. SIZE higher, the lower the DER, and vice versa.

The value of the variable sig GROWTH = 0.0514> 0.05 so H0 is not rejected, which means that the independent variable partial GROWTH no significant effect on the variable DER But the real level (level of significance) α = 0:10, the value of the variable sig GROWTH = 0.0514 <0:10 so H0 is rejected, meaning the independent variable partial GROWTH significant negative effect on the variable DER. GROWTH higher, the lower the DER, and vice versa.

The value of the variable sig LIQUIDITY = 0.0041 <0.05 was so H0 is rejected, meaning the independent variable LIQUIDITY partially positive and significant impact on the variable DER.

Sig PROFITABILITY value = 0.2050> 0.05 so H0 is not rejected, which means that the independent variable does not affect terhadp PROFITABILITY DER variables.

Sig tangibility value = 0.8049> 0.05 so H0 is not rejected, which means that the independent variable tangibility no significant effect on the DER.

Furthermore, after knowing the effect of the characteristics of the company on the capital structure, the study continued to investigate the effect of capital structure (DER) to the value of the company (DER).

Results of the estimation by using Pooled Least Square, through the stages of testing the model as follows: pooled effect model, fixed effect model, chow test, random effects model and Hausman test, the following results with fixed effect estimation models:

Table 4. Fixed Effect Model

Dependent Variable: PBV?				
Method: Pooled Least Squares				
Included observations: 6				
Cross-sections included: 10				
Total pool (balanced) observations: 60				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
DER?	0.000259	0.000145	1.782255	0.0809
C	0.002760	0.000199	13.89591	0.0000
Fixed Effects (Cross)				
ABDA—C	-0.001081			
PNIN—C	-0.002692			
AMAG—C	-0.002668			
LPGI—C	-0.001202			
ASDM—C	6.71E-06			
ASMI—C	0.001575			
ASRM—C	0.004881			
AHAP—C	-0.000946			
ASBI—C	0.000356			
ASJT—C	0.001770			
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.914649	Mean dependent var		0.003064
Adjusted R-squared	0.897231	S.D. dependent var		0.002453
S.E. of regression	0.000787	Akaike info criterion		-11.29377
Sum squared resid	3.03E-05	Schwarz criterion		-10.90981
Log likelihood	349.8131	Hannan-Quinn criter.		-11.14358
F-statistic	52.51025	Durbin-Watson stat		1.522213
Prob(F-statistic)	0.000000			

The following are the results of statistical tests on the results of the study hypothesis defined as follows:

Hypothesis 1: "The characteristics of the company (SIZE, GROWTH, PROFITABILITY, LIQUIDITY, TANGIBIILITY) affect the capital structure (DER)". a) Company Size (SIZE)

• H0: no negative influence SIZE on the capital structure (DER)

• H1: There is negative influnce SIZE on the capital structure (DER)

Result:

Wuth real level (level of significance) α = 0:10, the value of the variable sig SIZE = 0.0844 <0:10 so that H0 is rejected, meaning the independent variable partial SIZE significant negative effect on the variable DER, so the higher SIZE , the lower the DER, and vice versa.

The size of the insurance company is a proxy of the possibility of bankruptcy, In addition, insurance companies are certainly more diversified so that the volatility of earnings and net cash flow will be smaller and will have more debt. Research conducted by Titman and Wessels (1988), Rajan and Zingales (1995) and Wald (1999) resulted in the conclusion that the size of the company adversely affect the leverage. The study also yields the same conclusion, namely the size of the insurance company has a negative and significant coefficient at 0.10 level.

b) Company Growth (GROWTH)

• Ho: no negative influence growth (GROWTH) to DER

• H1: there is a negative influence growth (GROWTH) to DER

Result:

the real level (level of significance) α = 0:10, the value of the variable sig GROWTH = 0.0514 <0:10 so that H0 is rejected, meaning the independent variable partial GROWTH significant negative effect on the variable DER. GROWTH higher, the lower the DER, and vice versa.

In this study, variable growth has a negative sign. This means that partial growth has a negative influence on leverage. Theoretically, as proposed by Chung (1993), Rajan and Zingales (1995), Barklay & Smith (2011), Booth et al. (2001), Korajczzy & Levy (2003) and Chang (2008).

The negative effect could be caused by the growth variable lending / debt claim the insurance company related to the growth of the insurance company's assets. It was partly because of the relationship between the shareholders of insurance companies that provide additional paid-in capital as there are provisions on minimum capital in insurance companies.

c) Profitability (PROFITABILITY)

• Ho: no negative influences profitability (PROFITABILITY) to DER

• H1: there is a negative influence profitability (PROFITABILITY) to DER

PROFITABILITY Sig value = 0.2050> 0.05 so H0 is not rejected, which means that the independent variable does not affect the variable PROFITABILITY DER.

The above results of empirical research shows that profitability does not have effect on leverage. This is not inconsistent with the Pecking Order theory that states high levels of profit led to the availability of internal funds higher, as a result of higher retained earnings.

d) Liquidity (LIQUIDITY)

•Ho: no positive influence on the DER LIQUIDITY.

•H1: there is a positive influence on the DER LIQUIDITY

Result:

Above sig variable LIQUIDITY = 0.0041 <0.05 was so H0 is rejected, meaning the independent variable LIQUIDITY partially positive and significant impact on the variable DER.

For liquidity variables, the results showed that liquidity has a positive and significant coefficient at 0.05 level. Research Ozkan (2001) regarding liquidity also resulted in a conclusion that is consistent with the Trade-Off theory stating that the liquidity of the insurance company's assets can be used to show how much these assets can be manipulated by the shareholders with the costs borne by the lender (the problem of asset substitution) which raises the cost of agency debt. An insurance company with substantial liquid assets which can use these assets to invest.

e) Tangibility (tangibility)

•Ho: There is no positive influence on the DER tangibility

•H1: There is a positive effect of tangibility to DER

Result:

Sig tangibility = 0.2050> 0.05 so H0 is not rejected, which means that the independent variable does not affect the variable tangibility DER.

Myers (1977) and Majluf (1984) states that owed against the property whose value is known to avoid costs due to asymmetric information and insurance companies with assets that can be used as collateral debt is expected to gain more by taking advantage of this opportunity.

Hypothesis 2:

"Capital Structure (DER) Positive effect on Company Value (PBV)". Based on test results Model 2, with fixed effect models, to test the hypothesis 2 as follows:

• H0: there is no positive effect of capital structure (DER) to firm value (PBV)

• H1: there is a positive influence DER capital structure on firm value (PBV)

Basic Decision

• If the probability (sig)> 0.10 or - t table <t <t table then H0 is not rejected

• If the probability (sig) <0.10 or t <- t table or t> t table

In the table Pooled Least Square estimation results with fixed effect models, can be seen in Table, the value prob: 0.0809 <0.10 then H0 is rejected then H0 is rejected so that no influence on the PBV DER and the effect was positive. Fixed Effect Model is used to determine the effect of capital structure on firm value was found that the value of the coefficient value of the F statistic of 0.0000 at significance level α = 0:10, so it can be concluded that the capital structure of the positive effect on the value of the company, meaning that any increase in debt (DER) will increase the company's value (PBV), if it has not reached the optimal capital structure.

Hypothesis 3.

"Trade-Off Theory or Theory Pecking Order more accurate in predicting changes in leverage vary between insurance companies"

This study seeks to uncover which theory is better able to explain the phenomenon of public funding sources insurance companies listed on the Stock Exchange. Here is presented a comparison of data between Trade-Off Theory or Theory Pecking Order, based on the test results:

Table 5. Theory Analysis: Trade off Vs Theory Pecking Order

Variabel	Result	Theory
(DER)	+	*Trade off*
SIZE	-	*Pecking Order*
GROWTH	-	*Trade off*
PROFITABILY	Si	-
LiQUIDITY	-	*Trade off*
TANGIBILITY	si	-

si: statistically insignificant

The results showed that the theory of trade off is more suitable for the case of a public insurance company listed on the Stock Exchange compared Pecking Order theory, namely the

presence of leverage and a gradual adjustment towards the target (leverage has the property of persistence over time) as stated in its terms of trade off theory as well as growth opportunities.

The results of this study reinforce qualitative research conducted by Chang (2008). Meanwhile, based on research results, the variable size of the company (size) and Growth (growth) negatively with leverage and there is a gradual adjustment of the leverage that is more consistent with the theory trade off. Based on the results of tests performed resulting research model that differentiates it from previous studies that the capital structure model for insurance companies which describes the relationship between the characteristics of the company with a capital structure in which the insurance company's capital structure in insurance companies influenced by the size of the company's assets, liquidity and growth the company and the level of tangibility profitabilias and insurance companies do not affect the capital structure and corporate value.

The value of the insurance company, as reflected in its stock price divided by equity book value (PBV) is affected by the decisions of its capital structure (DER). Here's Capital Structure Model for Insurance Company:

$$PBV_{it} = Y(Y_0 DA_{i.t-1} + Y_1 Size_{it} + Y_2 Growth_{it} + Y_4 Liquidity_{it}) + Cti + \mu_{it}$$

$$DER_{it} = Y_0 DA_{i.t-1} + Y_1 Size_{it} + Y_2 Growth_{it} + Y_4 Liquidity_{it} + \mu_{it}$$

$$\mu_{it} = \alpha_i + \alpha_{t+} e_{it}$$

Note:

PBV   : *Price to book value perusahaan ipada tahun t*

DER   : *Debt to equity ratio perusahaan i pada tahun t*

Y   : *Konstanta dari variabel*

DA_{it} : *leverage* perusahaan i pada tahun t

$Size_{it}$: *Ukuran asset Perusahaan i pada tahun t*

$Growth_{it}$: *Pertumbuhan perusahaan i pada tahun t*

$Y_4 Liquidity_{it}$: *Likuiditas perusahaaan i pada tahun t*

μ_{it} : *composite error*

α_i : *time-invariant unobservable firm* dan/atau *industry specific fixed effects*

α_t : *firm-invariant time-specific effects*

e_{it} : *error terms* perusahaan i pada tahun t

CONCLUSIONS

Based on the analysis of the capital structure in Indonesia, following conclusions can be drawn:

1. Based on the results of empirical research conducted by the researchers, the variables that affect the dominant characteristics of the company's capital structure (DER) at a public insurance companies listed on IDX are as follows:

   a. Company size (Size) affect the capital structure (DER) and the effect is negative, so the greater the size of the assets of the insurance company to equity ratio will fall, and vice versa. This shows that the insurance company in Indonesia with large asset size will have low DER, leading to the optimal capital structure as well as the risk of bankruptcy is small, so this impact on the value of the company continues to increase.

   b. Company Growth (Growth) affect the capital structure (DER) and the effect is negative, so the greater the rate of growth of insurance companies, the ratio of debt to equity will fall, and vice versa. This shows that the insurance company that has a good product innovation so that growth increases, the capital structure will be maintained in a condition that is always towards optimal.

   c. The company's liquidity (liquidity) influence the capital structure (DER) and the positive effect is that the greater the degree of liquidity, the insurance company debt to equity ratio will further increase to increase. This shows that the insurance company with sufficient liquidity to pay obligations to policyholders that is maturing or as a backup in case of a claim, so the level of customer confidence in the insurance companies will increase and have an impact on increasing the company's value.

   d. Profitability has no effect on leverage. This is in contrast with previous studies conducted on non-financial companies and the findings of the researchers and based on empirical research that the rate of profit insurance companies can not be connected with the capital structure of insurance companies and it is not consistent with the Pecking Order theory that states high rate of profit causes availability of internal funds higher, as a result of higher retained earnings.

2. Capital structure a positive effect on the value of the insurance company, which means that the increase in capital structure is followed by an increase in the value of insurance companies. meaning that any increase in debt (DER) will increase the company's value (PBV), if it has not reached the optimal capital structure.

3. Trade-Off Theory can be explained and appropriate to the case of a public insurance company listed on the Stock Exchange compared Pecking Order theory. Results of this study corroborate the qualitative research conducted by Chang (2008) conducted in the

company insurance business in Taiwan. Meanwhile, based on research results, the variable size of the company (size) and Growth (growth) negatively affect the DER and there is a gradual adjustment of the leverage that is more consistent with the theory trade off.

SUGGESTIONS

Based on the analysis of the capital structure in Indonesia, the following are suggestions for application in the field and for subsequent researchers. By the fact that for the case of Indonesia that the Trade-Off theory is more suitable for the case of a public insurance company listed on the Stock Exchange compared Pecking Order theory, the implication is the existence of an optimal capital structure, or at least there is a target in the company's capital structure and make adjustments towards the target.

Therefore, the management company must conduct research on the optimal composition of the debt ratio that would set as a target so as to maximize the value of the company and the share price is concerned by lowering the cost of capital. However, the use of excess debt capacity must also be examined in view of the increase in the portion of the debt will increase the risk of the company.

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