

PECKING ORDER THEORY TEST ON THE CAPITAL STRUCTURE OF INSURANCE COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE (IDX)

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Abstract

This study aims to analyze the effect of profitability, asset structure, and business risk on the capital structure of insurance companies listed in Indonesia Stock Exchange (BEI) in 2012-2016 and to know the pattern of financing pecking order theory applied to insurance companies listed in the Stock Exchange Indonesia (BEI) for 2012-2016. This research is explanatory research. The population in this study are all insurance companies listed on the Indonesia Stock Exchange (BEI) in 2012-2016 amounting to 12 companies and samples used in this study as many as 10 companies. The analysis method used is multiple linear regression analysis with t test. The results showed that profitability does not affect the capital structure of insurance companies, asset structure and business risk significantly influence the capital structure of insurance companies listed on the Indonesia Stock Exchange (BEI) in 2012-2016. While on pecking order theory testing, there are 3 (three) insurance companies that tend to follow the pecking order theory financing pattern and 7 (seven) companies do not follow the pecking order theory financing pattern.

Keywords: *pecking order theory, profitability, business risk, asset structure, capital structure.*

Abstrak

Penelitian ini bertujuan untuk menganalisis pengaruh profitabilitas, struktur aktiva, dan risiko bisnis terhadap struktur modal pada perusahaan asuransi yang terdaftar di Bursa Efek Indonesia (BEI) tahun 2012-2016 dan untuk mengetahui pola pembiayaan pecking order theory diterapkan pada perusahaan asuransi yang terdaftar di Bursa Efek Indonesia (BEI) tahun 2012-2016. Penelitian ini merupakan penelitian explanatory research. Populasi dalam penelitian ini adalah semua perusahaan asuransi yang terdaftar di Bursa Efek Indonesia (BEI) tahun 2012-2016 yang berjumlah 12 perusahaan dan sampel yang digunakan dalam penelitian ini sebanyak 10 perusahaan. Metode analisis yang digunakan adalah analisis regresi linier berganda dengan uji t. Hasil penelitian menunjukkan bahwa profitabilitas tidak berpengaruh terhadap struktur modal perusahaan asuransi, struktur aktiva dan risiko bisnis berpengaruh

signifikan terhadap struktur modal perusahaan asuransi yang terdaftar di Bursa Efek Indonesia (BEI) tahun 2012-2016. Sedangkan pada pengujian pecking order theory, terdapat 3 (tiga) perusahaan asuransi yang cenderung mengikuti pola pembiayaan pecking order theory dan 7 (tujuh) perusahaan tidak mengikuti pola pembiayaan pecking order theory.

Kata Kunci: *pecking order theory, profitabilitas, risiko bisnis, struktur aktiva, struktur modal.*
JEL: M31

1. Research Background

Insurance is a company that gives replacement guarantees for the risks faced by a person that could take form like death, damage, or loss, etc. Insurance company is a company with the activity of bearing other parties' risk as well as one of the community fundraising institutions. Lately the need for insurance services has been felt increasingly by both households and businesses in Indonesia, along with increasing public awareness of the importance of insurance. Certainly, every company will not be separated from financial activities. Within the company, financial activities are often referred as financial management. Financial management plays an important role in supporting company's growth. The goal for the long term financial management is to optimize company's value. The choice of company's capital structure involves pecking order theory between the risk borne and the rate of return. High risk will tend to lower stock prices, but it is also able to increase the expected rate of return, thus raising stock prices. Pecking order theory is a theory that explains company's ability to determine its optimal capital structure. This theory states that there is a sequence of financing decisions in determining the optimal capital structure, namely to choose internal financing source or external financing sources (with the order starting with debt and followed with the selection of securities and equity as the last alternative debt).

Capital structure composition affects company's value and company's financial position. The importance of choosing financing sources in a company has obligated company's management to understand factors that need to be considered in making decision to analyze capital structure policies. Managers will make financing decisions by choosing between internal and external fund sources. According to Brigham and Houston (2006), factors that influence capital structure decision making include sales stability, asset structure, operating leverage, sales level, tax profitability, control, management attitude, lender attitude and rating agent, market conditions, company's internal conditions and financial flexibility. Based on several factors that influence capital structure, this research uses three factors in insurance companies listed on Indonesia Stock Exchange (IDX). These three factors are profitability, asset structure, and business risk. The selection of these three factors is based on the fact that they are company's internal factors, where company's internal conditions greatly determine the composition of its capital structure.

The first factor is profitability. Profitability is the ability to generate profit. Profit is the net earnings after tax and company operational costs. According to Brigham and Houston (2011), companies with high profitability tend to use less debt. Companies with high profitability use their own capital in order to enjoy funding from retained earnings. The second factor is assets structure. Asset Structure is the allocation for each component of assets, both current assets and fixed assets. Brigham and Houston (2001) states that companies that grow rapidly should rely more on external financing. Furthermore, the costs to make an offering for company's share outweigh the costs of issuing bonds which in the end has encourage companies to rely more on debt. However, at the same time fast-growing companies often face greater uncertainty, which usually reduce their desire to use debt. The faster the company's growth gets, the greater their financing needs for the expansion will be. The greater the need for future financing gets, the greater the company's desire to retained their earnings will be. The last factor is business risk. Business risk is the uncertainty in the estimation of company's future

operating income. Brigham and Houston (2011) states that business risk is the risk of company assets if the company decided not to use debt. Business risk increases when companies use a huge amount of debt to meet their financing needs. Risk arises along with the emergence of cost of loans made by the company. The greater the cost gets, the bigger the risks faced by the company gets.

The hypotheses in this research are: H1: Profitability affects insurance companies. Research conducted by Santi and Devi (2013), titled Factors Affecting Capital Structure in Foods and Beverages Companies Listed on the Indonesia Stock Exchange, concluded that profitability has a negative and significant effect on capital structure. H2: Assets structure has a significant effect on insurance companies' capital structure. The research conducted by Nurbaiti et.al (2016) titled The Effect of Asset Structure, Profitability, and Sales Growth on Capital Structure (Study of Telecommunications Companies Listed on Indonesia Stock Exchange (IDX) in 2011-2015), concluded that asset structure partially has a significant negative effect on the company's capital structure (DER). H3: Business risk has a significant effect on insurance companies' capital structure. Research conducted by Sawitri and Lestari (2015) titled The Effect of Business Risk, Company Size and Sales Growth on Capital Structure, concluded that business risk has a significant positive effect on company's capital structure.

The objectives of this research are: to analyze the effect of profitability, asset structure, and business risk on insurance companies' capital structure and to find out the financing pattern of pecking order theory applied to insurance companies listed on Indonesia Stock Exchange (IDX) in 2012-2016.

2. Research Method

This research is an explanatory research, namely research that is based on theory or hypotheses will be used to test a certain phenomenon (Cooper and Schindler 2009). This research will explain the relationship between profitability, asset structure, and business risk to the capital structure and the relationship between financing deficits to companies' total debt level under the regards of pecking order theory.

The type of data used in this research is quantitative data, where data is processed using statistical calculation techniques. The quantitative data are in the form of annual report (income statement, balance sheet, statement of changes in equity, and cash flow statements) that belong to insurance companies listed on Indonesia Stock Exchange (IDX) for 5 years, namely from 2012 to 2016. Data sources used is secondary data, which means data were obtained from various sources such as documentation. Secondary data used is the insurance companies' annual statements. Data collection method used in this research is documentation method of secondary data by downloading insurance companies' annual financial statements listed on the Indonesia Stock Exchange (IDX) in 2012-2016 by accessing data through <http://www.idx.co.id>

Population studied in this research was insurance companies that were listed on Indonesia Stock Exchange in 2012-2016; which is as many as 12 companies. The sampling method in this research was carried out with purposive sampling method; which is an intentional sampling based on the criteria set out, namely: insurance companies listed on Indonesia Stock Exchange that continuously published annual reports during the research period (year 2012-2016), insurance companies listed on Indonesia Stock Exchange must have a positive net earnings during the research period, namely 2012-2016, and those insurance companies listed on Indonesia Stock Exchange must have distributed dividends annually during the research period, namely 2012-2016. Based on those criteria, there are 10 insurance companies that can be used as sample in this research.

The analytical tool used in this research is multiple linear regression analysis with t test using SPSS software. The analysis of multiple linear regression with this t test will be used to

test the effect of profitability, asset structure, and business risk on insurance companies' capital structure, and test the pecking order theory in order to find out the financing pattern of applied pecking order theory on insurance companies listed on Indonesia Stock Exchange (IDX) in 2012-2016.

3. Result and Discussion

This research uses a sample consist of companies that publish financial statements from 2012 to 2016. The numbers of companies engaged in finance, namely insurance companies listed on Indonesia Stock Exchange (IDX) in 2012-2016 are as many as 12 companies. There is one insurance company that did not publish annual reports during the research period because it was listed on Indonesia Stock Exchange (BEI) in 2015, and there is 1 company that did not distribute dividends continuously during the research period. Taking into account the existing criteria, 10 companies were selected and could be used as samples. The processes of selecting samples used by researcher are shown in Table 1 below:

Tabel 1. Sample Selection Process

No.	Criteria	Number of companies
1.	Insurance company listed on Indonesia Stock Exchange	12 companies
2.	Insurance companies that did not publish annual reports continuously during the research period of 2012 to 2016.	1 company
3.	Insurance companies listed on Indonesia Stock Exchange from 2012 to 2016 that did not have a positive net income.	0
4.	Insurance companies listed on Indonesia Stock Exchange that did not distribute dividends continuously during 2012 to 2016	1 company
5.	Number of final sample	10 companies

Data source: Indonesia Stock Exchange website (www.idx.co.id).

Below is Table 2 that shows the result of multiple linear regression.

Table 2. The Result of Multiple Linear Regression

Variables	Beta	t-value	Prob. Sig. t
(Constant)	30.803	5.050	.000
Profitability (X1)	-1.749	-1.754	.086
Assets Structure (X2)	-2.721	-4.442	.000
Business Risk (X3)	2.112	3.875	.000

Source: Spss.

Based on Table 2, the results obtained showed that profitability have no significant effect on $\alpha = 5\%$. Whereas assets structure has a significant negative result and business risk has a significant positive result.

The calculation of pecking order theory test is used to determine whether the insurance companies apply financing pattern according to pecking order theory or not. The insurance companies' pecking order theory test results can be seen in table 3 as follows:

Table 3. Results of Pecking Order Theory Test

No.	Companies Code	Model	B	t.	Sig.
1.	ABDA	(Constant)	59.672	20.500	.000
		DEF (X)	-.003	-.477	.666
2.	AHAP	(Constant)	55.117	8.289	.004
		DEF (X)	.257	1.889	.155
3.	AMAG	(Constant)	38.725	7.456	.005
		DEF (X)	.021	.366	.739
4.	ASBI	(Constant)	67.771	34.013	.000
		DEF (X)	-.004	-.393	.721
5.	ASDM	(Constant)	94.222	9.553	.002
		DEF (X)	-.055	-1.378	.262
6.	ASJT	(Constant)	54.055	9.624	.002
		DEF (X)	.008	.175	.872
7.	ASRM	(Constant)	92.493	2.689	.075
		DEF (X)	-.027	-.305	.780
8.	LPGI	(Constant)	-18.524	-.652	.561
		DEF (X)	46.197	2.031	.135
9.	MREI	(Constant)	61.408	11.696	.001
		DEF (X)	.000	-.045	.697
10.	PNIN	(Constant)	26.373	3.686	.035
		DEF (X)	-1.352	-.610	.585

Source: As processed.

Table 3 shows the results of pecking order theory test with all existing samples. If beta (β) value is close to 1, then that company is declared to have followed financing pattern of pecking order theory. Whereas if beta (β) value is close to 0, that company is declared as one that does not follow financing pattern of pecking order theory. Betas (β) with value close to 1 are found in 3 companies. It can be concluded that these companies tend to follow the financing pattern of pecking order theory. While betas (β) with value close to 0 (less than 0.5) are found in 7 companies, thus it can be concluded that those seven companies do not follow the pecking order theory financing pattern.

The test result for hypothesis 1 shows that sig. value $0.086 > 0.05$, thus hypothesis 1 is rejected and this indicates that profitability does not affect capital structure. This can be interpreted that the increase or decrease in a company's profitability does not affect its capital structure, that return of assets does not affect its capital structure; because in terms of obtaining profitability, insurance companies do not depend on their total debt size (customers' claims), but they earn profits from their own capital invested in several types of portfolios. Thus, these companies do not consider return of assets in determining their capital structure, but they take in consideration the effort and profits earned by them. The results of this research are in line with the research objectives conducted by Nurbaiti et al. (2016) titled The Effect of Asset Structure, Profitability, and Sales Growth on Capital Structure (Study of Telecommunications Companies Registered on Indonesia Stock Exchange in 2011-2015), the research results concluded that profitability does not affect company's capital structure (DER).

The test result for hypothesis 2 shows that sig. value $0.00 < 0.05$, thus hypothesis 2 is accepted and this indicates that assets structure has a significant negative effect on capital structure. This can be interpreted that in making a financing decision, asset structure prioritizes equity financing; meaning that loan is only considered as a supplementary fund in order to meet company's financing needs. This research is in line with the research objectives conducted by Nurbaiti et al. (2016) titled The Effect of Asset Structure, Profitability, and Sales Growth on Capital Structure (Study of Telecommunications Companies Registered on Indonesia Stock Exchange in 2011-2015), the research results concluded that assets structure has a significant

negative effect on company's capital structure (DER).

The test result for hypothesis 3 shows that sig. value $0.00 < 0.05$, thus hypothesis 3 is accepted and this indicates that business risk has a significant positive effect on capital structure. This can be interpreted the greater business risk gets, the greater a company's capital structure will be. Investors tend to invest on companies with higher business risk rather than the one with lower business risk because they assume that if a company faces a higher risk, they will also earn higher return, because to get a huge profit, the company also needed to face a high risk. This research is in line with the research objectives conducted by Sawitri and Lestari (2015) titled The Effect of Business Risk, Company Size and Sales Growth on Capital Structure, the research results concluded that business risk has a significant positive effect on capital structure.

The results of pecking order theory test concluded that if value of beta coefficient (β) is close to 1, then the company tends to follow the financing pattern of pecking order theory. Whereas if the value of beta coefficient (β) is close to 0, then the company is declared as one that does not follow financing pattern of pecking order theory. Betas (β) with value close to 1 are found in 3 companies, namely PT. Asuransi Harta Aman Pratama Tbk (AHAP) with the value of 0.737, PT. Asuransi Dayin Mitra Tbk (ASDM) with the value of 0.623, and PT. Lippo General Insurance Tbk (LPGI) with the value of 0.761, thus it can be concluded that these three companies follow the financing pattern of pecking order theory, although it is probable that they follow it on certain years among the period of 2012 to 2016. While betas (β) with value close to 0 (less than 0.5) are found in 7 companies, namely PT. Asuransi Bina Dana Artha Tbk (ABDA), PT. Asuransi Multi Artha Guna Tbk (AMAG), PT. Asuransi Bintang (ASBI), PT. Asuransi Jasa Tania Tbk (ASJT), PT. Asuransi Ramayana Tbk (ASRM), PT. Maskapai Reasuransi Indonesia Tbk (MREI), and PT. Paninvest Tbk (PNIN), thus it can be concluded that these seven companies do not follow the financing pattern of pecking order theory.

4. Conclusion

Based on the results of pecking order theory test on capital structure using multiple linear regression analysis on insurance companies listed on Indonesia Stock Exchange (IDX) in 2012-2016, it can be concluded that: profitability does not affect insurance companies' capital, asset structure has a significant negative effect on insurance companies' capital structure, business risk has a significant positive effect on insurance companies' capital structure. In the test of pecking order theory there are 3 companies, namely PT. Asuransi Harta Aman Pratama Tbk (AHAP), PT. Asuransi Dayin Mitra Tbk (ASDM), and PT. Lippo General Insurance Tbk (LPGI) with beta coefficient (β) value close to 1, means these three companies follow the financing pattern of pecking order theory. Whereas 7 companies, namely PT. Asuransi Bina Dana Artha Tbk (ABDA), PT. Asuransi Multi Artha Guna Tbk (AMAG), PT. Asuransi Bintang Tbk (ASBI), PT. Asuransi Jasa Tania Tbk (ASJT), PT. Asuransi Ramayana Tbk (ASRM), PT. Maskapai Reasuransi Indonesia Tbk (MREI), and PT. Paninvest Tbk (PNIN) have beta coefficient (β) value for less than 0.5 (close to 0), means these seven companies do not follow the financing pattern of pecking order theory.

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