THE CAPITAL STRUCTURE'S DETERMINANT IN FIRM LOCATED IN INDONESIA

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ABSTRACT

This research aims to identify the capital structure's determinant in companies located in
Indonesia. This research uses 97 panel data of companies located in Indonesia listed in Indonesian Stock Exchanges during period of 2010-2015. Seven hypotheses are composed to represent the main theory of Capital Structure. The method uses in this research is the verification method using Multiple Regression Analysis, Classic Assumptions Test, as well as hypotheses testing. The result shows that Firm Growth, Sales Growth, Profitability, Tangibility, Cashflows and Institutional Ownership partially affected to Capital Structure. While the Firm Size have no impact on Capital Structure.

Keywords: Capital Structure, Firm Growth, Sales Growth, Profitability, Firm Size, Tangible Asset, Cashflow, Institutional Ownership.

Introduction

I. INTRODUCTION

The corporate financial policy is a policy on how a firm doing investment to maximize profit, how a firm searching and acquiring fund to finance the investment, and on how a firm gain profit for the sake of their stakeholders especially for the firm's owner or stockholders. In the frame of investment funding, the firm will conduct financial decision related to internal funding (equity) and/or external funding.

The composition of both internal and external funding is called the firm's capital structure. It is a complex financial decision since it is related to other financial decision. Thus, in order to achieve the firm's goal in maximizing the wealth of the owner, a finance manager should measure its capital structure and comprehend its relation with financing risk, return, as well as the firm's value. A mistake made in capital structure's decision would cause an expensive capital cost that lead to a degrading investment return or even loss. An effective decision in capital structure will decrease the capital cost that lead to the maximization of profit and increasing the firm's value.

The industrial slowdown in 2013 followed by it increasing in 2014 causes a significant loss of opportunity to obtain profit. It is marked by profitability decrease during period of 2013- 2014. This phenomenon was also caused by many companies (issuer) became over aggressive in expanding business using external fund that caused a high capital cost and thus, reducing the profitability.

II. LITERATURE REVIEW AND HYPOTHESES
2.1 Literature Review
Modigliani-Miller Theory

The development of Capital Structure Theory was initiated with Capital Structure Theory by Modigliani and Miller in 1958 and known as the MM Theory. The essence of this theory stated that the firms value is not influenced by its capital structure, since the earning before tax (EBIT) has no relevant connection with firm's loan. Thus, the firm's capital structure is irrelevant with the firm's value.

The MM Theory was based on assumptions on limited condition and it is difficult to applied, which is the perfect capital market where there are no taxes, no transaction cost as well as without the bankruptcy cost. It is also assumed that the firms are only able to issue two kinds of securities. They are the risky equity and the risk-free loan. Another assumption is the investors have similar expectation to the firm's profit in the future. Therefore, based on these assumptions, according to MM Theory, the unlevered firm's value is identic with the levered firms. Thus, according to MM Models, the cost of capital of both firms are similar.

Signaling Theory

Signaling Theory of Stephen A. Ross (1997) is based on assumption that there is asymmetric information between stockholders and manager, where manager understand the firm's condition better than their stockholders. According to Ross, manager will avoid using loan when the firm is in bad condition in order to avoid default and losing their position. With this information asymmetry, when there is a changing in capital structure, the firm'svalue will be shifting since the investors will receive signal of this change. Moreover, Ross argue that when the firm issues new debt, it will signaling the stockholder as well as the investors on the firm's future development prospect. This happen since the additional debt will increase the financial distress cost and limited the utilization of cash flow. Investors will assume that the manager will only issue a new bond if they have confidence on the firm's future prospect in order to fulfill all obligations.

Pecking Order Theory

The Pecking Order Theory formulated by Myers & Majluf (1984) argue that there are "pecking order" in utilizing the capital. This theory is based on the concept of asymmetrical information between managers and investors (Ross, 1977). It is assumed that managers possess more comprehensive knowledge on the firm's condition rather than their stockholders or investors, and the managers will behave in accordance with the stockholder's best interest.

According to this theory, there is no optimal capital structure. Manager choose to finance only based on the lowest cost of capital. Moreover, the firm prioritize more on retained earnings as the source of financing compare to external finance since it has the lowest cost of capital.

A loan is the first priority when the firm decide to use their external finance rather than issuing new shares. Issuing new shares will be the manager's last attempt in financing since the asymmetrical information will cause the issuance of new shares will reduce the confidence of investors on the future prospect of the firm.

Firm Growth, Sales Growth with the Capital Structure

According to Pecking Order Theory by Myers & Majluf (1984), in investment financing, a firm will consider for the lowest cost fund. A firm will use their cheapest internal financing, followed by external loan. External equity is least alternative taken since it causes the highest cost of fund. Therefore, a growing firm tends to has higher leverage, when the internal fund is insufficient to finance their investment. The used proxy to measure the firm growth is the capital expenditure to assets ratio used in Titman & Wessel (1998) research and Kallapur & Trombley (1999).

Profitability with the Capital Structure

According to Packing Order Theory, there is no optimally capital structure. Manager choose to finance based on the lowest cost of capital. The firm would rather choose internal financing (retained earnings) than from external resource since it has the lowest cost of capital. Therefore, according to Packing Order Theory, the rate of retained earnings is inversely proportional with the leverage rates. This statement is supported by several researches such as Titman & Wessels (1998) and Rajan & Zingales (1995) that found profitability has a negativeimpact on firm's leverage rates.

Nevertheless, the Agency Cost Theory has a distinct argument. According to Jensen (1968), debt is a tool to control the manager's behavior since there is commitment to pay the loan interest in the future. Thus, it will not be used for personal interest. A large cash flow and profit firm will make the high debt ratio is able to restrain the manager's behavior in accordance to the interest of the firm. Harris & Raviv (1991) support this statement and states that a firm with strong financial position will have easier access of leverage. Several researches support the positive impact of profitability on leverage such as Jordan et al., (1998) and Hussain (1997).

Company Size with the Capital Structure

The firm size is related to its potency to face a financial distress. A large size firm is more diversified, thus will have a lower chance to face financial distress. Moreover, according to Trade-off Theory, the cost of financial distress is related to its leverage. A higher leverage increasing the potency of financial distress (Baxter, 1976 in Shah & Khan, 2007).

Therefore, a large size firm has a larger capacity of leverage. Thus, it can be concluded that there is a positive correlation between the firm size with leverage. Several researches support the statement that the firm size has positive correlation with leverage, for example Rajan & Zingales (1995) as well as Hussain (1997).

Tangibility with the Capital Structure

Tangible Assets generally gives higher collateral value compared to intangible assets. Therefore, tangible assets could support leverage more. Moreover, tangible assets could reduce the cost of financial distress since it has a high liquidation value. Bradley et al., (1984) stated that a firm with higher proportion of tangible assets has a higher financial leverage since it can afford to gain loan with their assets as collateral and thus, reducing loan interest.

Cash Flow with the Capital Structure

A leverage is viewed to reduce the agency problem from free cash flow. Jensen (1986) stated that the firm's loan is a substitution mechanism of dividend to control the agency cost from free cash flow. Barclay et al., (1995) stated that loan is an effective tool in reducing agency cost from free cash flow compared to dividend payment, it is because the responsibility to pay the loan and its interest is more effective that the discretionary dividend payment to reduce cash excess. The research conducted by Utami et al., (2011) found that there is a positive relation between free cash flow with leverage to the LQ45 index firms at Indonesian Stock Exchange.

Institutional Ownership with the Capital Structure
According to Agency Cost Theory (Jensen & Meckling, 1976), the separation of ownership and managerial will cause agency issues since there is an asymmetrical interest. Thus, the ownership structure will influence the firm's financial policy, including the capital structure.

2.2 Hypotheses

The Research Hypotheses are formulated as follows:

Table 1 Hypotheses

	Hypotheses
Hypotheses 1	Firm Growth has significant impact on Capital Structure
Hypotheses 2	Sales Growth has significant impact on Capital Structure
Hypotheses 3	Profitability has significant impact on Capital Structure
Hypotheses 4	Firm Size has significant impact on Capital Structure
Hypotheses 5	Tangibility has significant impact on Capital Structure
Hypotheses 6	Cash Flows has significant impact on Capital Structure
Hypotheses 7	Institutional Ownership has significant impact on Capital Structure

III. RESEARCH MODELS
This research is using secondary data of the firm's annual and financial reports duringperiod of 2006-2015. The data is processed using Eviews software version 9. The population is all go public companies listed at Indonesian Stock Exchange (Bursa Efek Indonesia/BEI). The Purposive Sampling Method is used in order to fulfill certain criteria. Thus, the sample taken is 97 firms that publish their finance reports during research period in a complete order. The method used in this research is the Verification Method using the Multiple Regression Technique and Hypothesis Testing.

The Exogenous Variables in this research are: Firm Growth, Sales Growth, Profitability, Firm Size, Tangibility, Cash Flow, and Institutional Ownership. While the Endogenous Variable is the Capital Structure. The Research Model is as follows:

$$DER_{it} = a_0 + a_1CAPX_{it} + a_2SG_{it} + a_3ROE_{it} + a_4SIZE_{it} + a_5TANG_{it} + a_6CF_{it} + a_7INST_{it} + \varepsilon_{1it}$$

DER   : Loan to Equity Ratio
CAPX   : Capital Expenditure
SG   : Sales Growth
ROE   : Return On Equity
SIZE   : Firms Size
TANG   : Tangibility Asset
CF   : Cash Flow
INST   : Institutional Ownership
a_j : constanta |
a   : coefficient variabel
it   : individu ke 1, 2.........n
ε_{it} : error term

Table 2 Description of Variables

Variable	Indicator	Measurement
Endogenous Variable		
Capital Structure	Loan to Equity Ratio	$DER = \dfrac{Debt}{Equity}$
Exogenous Variable		
Firm Growth	Capital Expenditure (CAPX)	$CAPX = \dfrac{CAPX_t \mid CAPX_{t-1}}{Total\ Asset_t}$
Sales Growth	Sales Growth (SG)	$SG = \dfrac{SALES_t}{TA_t}$
Profitability	Return on Equity (ROE)	$ROE = \dfrac{Earning\ After\ Tax}{Equity}$
Firm Size	Firm Size (SIZE)	$SIZE = Natural\ Logaritma\ Total\ Asset$
Tangibility	Tangibility (TANG)	$TANG = \dfrac{FixedAsset}{TotalAsset}$
Cash Flow Ratio	Cash Flow (CF)	$CF = \dfrac{Net\ Earning}{Equity}$
Institutional Ownership	Institutional Ownership (IO)	$IO = \dfrac{institutio\ nal\ shared}{Total\ Equity}$

IV. RESULTS AND DISCUSSION

Based on the quantitative analysis result using multiple regression analysis of verification method, the research result's model is as follows:

$$DER_{it} = -22.497620 - 0.872572CAPX_{it} - 1.271488\ SG_{it} + 7.855546ROE_{it} + 0.010835SIZE_{it} -$$

$$0.328806TANG_{it} - 0.328806CF_{it} + 36.062850INST_{it} + \varepsilon_{it}$$

The result of multiple regression and hypotheses testing are as follows:

Table 3
The Research Result of the Capital Structure's Model

Exogenous Variable	Coefficient	t_statistic	Prob	Significant α = 0.05
C	-22.497620	-1.753313	0.04130	significant
Firm Growth (CAPX)	-0.872572	-4.666985	0.00000	significant
Sales Growth (SG)	-1.271488	-7.662587	0.00000	significant
Profitability (ROE)	7.855546	87.4633	0.00000	significant
Firm Size (SIZE)	0.010835	0.162966	0.87071	insignificant
Tangibility (TANG)	-0.328806	-1.930099	0.05520	significant
Cashflow (CF)	-0.328806	-6.927911	0.00000	significant
Institutional Ownership (IO)	36.062850	2.010293	0.04590	significant

Resource: Data processed

Firm Growth with the Capital Structure
The Coefficient of Regression Equation of the Firm Growth Variable (CAPX) to the Capital Structure is -0.872572. It means that the Firm Growth has a negative significant impact to its Capital Structure. Each Capital Expenditure growth will decrease the Loan to Equity Ratio (DER). This result implies that many companies still have a high growth potential since the loan financing option hasn't been fully used for their investment activity.

Sales Growth with the Capital Structure
The variable of Sales Growth (SG) has regression coefficient of -1.271488. Therefore, it can be concluded that Sales Growth has a negative significant impact to the Capital Structure. A firm who has growth on their sales is able to maximizing the profit and enabling the firm to expand using their retained earnings without using their credit opportunity.

Profitability with the Capital Structure

The Regression Equation Coefficient for Profitability (ROE) is 7.855546. it means that Profitability has positive impact on Capital Structure. This result support the statement from Harris & Raviv (1991) that a company who has a strong financial position and high profitability will be benefited from easier access of credit.

Firm Size with the Capital Structure
The result of Regression Equation with the coefficient of 0.010835 indicate that the impact of Firm Size located in Indonesia doesn't have significant impact to the Structure of Capital. Therefore, this result does not support the Trade-off Theory that stated that a large size firm tends to be more diversified, thus more unlikely to face bankruptcy than the smaller one. Therefore, a large size company tends to have a higher loan ratio than smaller firm.

Tangibility with the Capital Structure
The result of Regression Equation with the coefficient of -0.328806 shows that the impact of Tangibility to the Capital Structure is negative, where a higher fixed assets ratio causes a decrease on loan to equity ratio (DER) and vice versa. This result support the statement of Titman and Wessel (1998), based on the Agency Cost Theory, stated that from the agency problem aspect point of view, it is easier to monitor a firm with larger tangible assets than its intangible assets. A company with higher intangible assets ratio would also have a higher loan ratio to increase firm's monitoring.

Cash Flow with the Capital Structure
The Regression Equation Coefficient for Cash Flow variable is -3.781593. It means that cash flow has a negative significant to the Capital Structure. This result is in contrary with the Agency Cost Theory that stated loan is an effective control tools to reduce free cash flow in a firm in order to avoid it being used for the interest of manager. Therefore, a high cash flow causes a higher loan.

Institutional Ownership with the Capital Structure
The Regression Equation Coefficient of Institutional Ownership (IO) is 36.06285 which means that Institutional Ownership has positive impact to Capital Structure. A frim with most capital owned by institution that in Indonesia, most of the firm's capital is owned by its subsidiary. Thus, most vote in capital structure's policy is determined by management. Therefore, the firm is able to determine to add its capital from external fund without strong intervention.

V. CONCLUSION
This research analyse the determinants or factors that could influenced the capital structure of firm's located in Indonesia during period of 2010-2015. The Capital Structure is measured by the firm's Loan to Equity Ratio (DER). The Firm Growth is measured by two variables, the Capital Expenditure (CAPX) and Sales Growth (SG). Profitability is measured by Return on Equity (ROE). The firm size is measured by the Total Assets Logarithm (Ln TA). Tangible Assets is measured by Tangibility (TANG), Cash Flow is measured by Cash Flows (CF), while Institutional Ownership is measured by IO.

Based on data analysis, it can be concluded that Profitability and Institutional Ownership (IO) have positive and significant impact on Capital Structure. The Firm Growth (FG), Sales Growth (SG), Tangibility (TANG), and Cash Flow (CF) have negative and significant impact on Capital Structure, while Firm Size has positive but insignificant impact on Capital Structure.

The result of this research is expected to contribute on firm's financial policy especially on firm's capital structure. There are researches that have coefficient in contrary with this research hypotheses. Therefore, further researches could be conducted using different indicators.

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