



The Analysis of Company's Internal Factors That Affect Debt Level

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Abstract :

Purpose of this study is to analyze company internal factors that affect debt level, such as company profitability, company size, assets growth, and assets structure. This study used manufacturing companies data that listed in Indonesia Capital Market from 2001 until 2013 period. There are 104 companies listed on three sectors of manufacturing industry, but only Basic Industry and Chemicals sector is taken for this study. Descriptive statistic and multiple regression were used to analyzed and test the hypothesis. Result of this study indicate that assets growth, profitability, and assets structure affecting debt level, but firm size and dividend are not affecting debt level.

Keywords : Profitability, firm size, Assets Growth, Dividend, Assets structure.

Preface

Financing is one of many important company concern, source of the company financing are divided as internal and external fund. Internal fund that can be used as internal financing me from retained earning nor depreciation cost. Ussuallycompany used external fund, in form of debt as the first choice than the other, then issuing a new common equity to the capital market. Company financing becoming the serious thing to be noted, because company financing can affecting company capital structure and gave an impact to company cost of capital.

Cost of capital will affecting to shareholders wealth because it related to company net income and affecting earning per share. This is in line with Gitman (2003) proposed, that the company's goal is to maximize shareholder wealth.

Company capital structure is related to the capital component composition, where the increasing of one capital compenent will affecting to company business risk. For an example, if a company raised its leverage, it will raising company financial risk. On the other hand, company have another advantage by using leverage, such as income tax reduction because of interest payment.

Pecking Order Theory (Myers 1984 dalamAzib 2005)is a theory which states that the company will prioritizing internal financing first, and if necessary external financing, company will using debt as the first choice of external financing, and then issuing new common equity. The choosing of financing source it based on premise that internal financing will not causing any cost of capital, but external financing will causing cost such as interest nor dividend payment.

This study is conduct to know factors that affect debt level, another study was conducted by Azib (2005) using three variables (assets growth, firm size and profitability) are consider would affecting leverage of the firm. Conclusion of the studies, that all of the variables affecting to debt level.The purpose of this study is to get empirical evidence of any factors can affect the company debt level (leverage).





Theoretical framework and Hypothesis Development

Modigliani and Miller

Study of Capital structure, has been done to saw how company manage they fund and make capital structure policy. One of many capital structure theory is proposed by Modigliani and Miller, they proposed the first Capital Structure Theory. The theory state that debt ratio is not relevan and there is no optimum capital structure (Proposition I).

This theory state that company value is depend on company cash inflow and not depending to *Debt Equity Ratio*. Another assumptions of this theory, that there are no tax imposed, no asymmetry of information and no transaction costs. Modigliani and Miller made some modification from the earlier model and named it as proposition II where tax is imposed to company income and personal. (Frensidy 2008).

Agency Theory

Jensen and Meckling in 1976 proposed Agency Theory for the first time. Its states that management is the agent of shareholders and the shareholders as the owners of the company. The shareholders have hope that management as the agents will act for their interest, and for that the shareholders delegate their authority to the agent. Arising costs from oversight by management is called agency costs. Mayangsari (2001) says that the agency costs is the cost of management oversight to ensure that management acts consistent with the company agreement to the creditors and shareholders. Supervision can be done by performing financial audits and limitations on decisions that can be made by management.

If the company used external financing where the source is come from debt, its expected will reduce cost for management supervision by shareholders. Its happen because, when the creditor provide loans for the company, the creditor will perform surveillance in order to gain confidence that the company's as the debtor have ability to repay its obligations. In this case, debt can reduce agency costs.

Trade-Off Theory

Trade – Off Theory was proposed by Marsh (1982) for the first time, this theory is the modification from Modigliani and Miller proposition I. This theory states that company can set the target of optimal debt ratio. Optimal debt ratio is determined as a comparison between the benefits and company bankruptcy costs, which causes by debt. Basically, the company will require equity financing when the level of debt is already above the target or company requires additional funds from debt, if the company debt ratio that is below the targets. The theory is shown that a company will not have the optimal value if company use fund for financing only from debt or without debt at all. Indrawati and Suhendra (2005) states that the composition of the capital structure is the way to increase value of the company, and affect the company's stock price. Company optimal value is a point of showing the benefits of debt addition as large as the increase in the cost of bankruptcy because of raising debt level. The weakness of this theory is, ignoring the asymmetry of information and the cost of substitution of debt to equity.

Pecking Order Theory

Pecking Order Theory was proposed by Myers and Maljuf in 1984. Peking Order Theory states the hierarchy of financing, where the company will tend to using funds from internal sources rather than external financing. Pecking Order Theory has several



assumptions, (Mayangsari, 2001):

1. Companies tend to choose source of internal financing (retained earnings and depreciation).
2. External financing is used by hierarchy from the most secure financing until the most risky. Its starts from debt, convertible bonds, preferred stock and common stock.
3. Dividend policy carried out strictly and the amount of dividend payments made regularly without considering the condition of company profit or loss.
4. To anticipate a shortage or excess of cash flows, the company will take of available investment first.

There is some rationale of Myers why companies prefer using debt to meet the needs of funds:

- A. Capital market is losses suffered because of the asymmetry of information that occurs between market with the company's management. The management of company are more likely to issuing new common stockshares when the stock price is overpriced, it make price of the Company's outstanding shares become fall.
- B. Debt transaction costs are cheaper than issuing new shares.
- C. Tax reduction as a result of interest expense paid by the company.
- D. Company control can be maintained if companies use debt as a source of financing than selling shares as ownership of the company.

Assets Growth

Assets Growth is illustrating how company allocate its fund for operational and asset Investment. Company needs fund to financing its operational activity nor raising number of asset .

Fama and French (2000) in Hartono (2004) said that if company investing more than retained earning that its had, the most possible possibility for the company is raising company debt level.

Firms Size

Firm size is seen from the sums of the assets owned by the company in one periode. Firm size is influencing the creditor in giving the company loans. Size of big company make creditor more conviced to gave a loan, than to a small company. Small company is more depend to internal financing, but if small company used debt as the source of eksternal financing the interest rate is higher than interest rate for big company. Its because the risk of small company is more higher tha big company (Rahardjo and Hartatiningrum 2006).

Dividend

According to Hasnawati (2008) Dividends provide information of the rate of return that provided by the issuer and describe its financial condition. The size of dividend is depends on the measures taken by management in managing the company fund.

Asset Structure

Company asset structure, describe how management manage its finances by allocating source of fund and distribute to its assets. Asset structure in this study is reffered to ratio of fixed asset to total asset. The percentage of fixed assets to total assets is important, because fixed asset can be used as collateral for company loans (Margarethaand Sari 2005) and also



for raising value of the firm and the last is raised stock price..

Hypothesis Formulation

Asset Growth and Leverage

Increasing the number of company assets, requires allocation of funds. Funds allocated from internal source, are not closing the possibility that company will looking up for external financing which come from debt. If debt used as assets raising financing, it will causing leverage level will raising too.

Result of study that Saidi (2004), Azib (2005), and Ramjee and TendaiGwatidzo (2012) show us that asset growth has a positive effect to leverage level. But Harjanti and Tandelilin (2007) state that asset growth has a negative effect to leverage and the effect is not significant, its also confirming Eriotiset.al.(2007) research result. The hypothesis for both variables are:

H1: The growth of assets have a positive effect to leverage

Firm Size and Leverage

Firm Size is an indicator of company assets, big company will have an easier akses to get external financing from differences sources than a small company. This thing is possible because big company have a large number of assets, that can be used as collateral to get a loan nor to sell the equity to capital market (Wahidahwati, 2002).Seppa (2008) state that Company size appears to have weak relation with leverage being a significant variable only for Small Company. At the same time, Big Company do have higher financial leverage as reflected by mean values of debt to total capital.It can be concluded that larger the company, the greater also the debt amount of the company. Its confirmed by the result of Mayangsari(2001),Azib (2005),Eriotiset. al.(2007), Abor (2008),Karadeniz et.al. (2009),Ramjee and TendaiGwatidzo (2012), Gomez et. al. (2014)and also Varun (2014) study. Result of Saidy (2004) and Gomez et.al. (2014) research result shown that the effect of firm size to leverage is not significant and the correlation is positive. Based on the explanation, that the submitted hypothesis is:

H2: Firm Size have a positive effect to leverage

Profitability and Leverage

Company with a large profit, is tend to using debt in a little portion for its capital structure. Because, company will choosing internal financing from retained earning than have to search another financing from external. Companies make their financing decisions according to a hierarchical order: first, they turn to internal funds; if external finance is required, companies first issue debt, and as a last resort they issue equity (Myers, 1984). The reason for establishing a hierarchical order, concerning sources of finance is related to information asymmetry (Myers and Majluf, 1984). Result of study were conducted by Azib (2005), Harjanti and Tandelilin (2007), Kardeniz et.al. (2009) confirming that profitability have a negative effect to leverage and this is in line with Pecking Order Theory.

Mayangsari(2001), state that profitability have no significant effect to leverage and the correlation is negative and also confirming what Joshua Abor (2008), Ramjee and TendaiGwatidzo (2012)and Varun (2014) research result. Based on the explanation, so the hypothesis for both variables are:

H3 : Profitability have a negative effect to leverage.





Dividend and Leverage

Dividend payment to the shareholders will affecting company financial status, in this case is a level of cash. As a consequences from dividend payment, company will need fund more than usual to financing its operational and investing from internal sources nor external sources such as debt. Result of Siregar (2005) study, shown to us that dividend payment will raising leverage of the company. Based on the explanation, that the hypothesis for both variables are:

H4 : Dividend have a positive effect to leverage

Assets Structure and Leverage

Procurement of fixed assets generally require substantial funds, company will carry out a loan in the form of debt to meet those needs. It is based on the premise that increasing the number of fixed assets will affecting company for long-term, so that the company will use debt to financing investment in Fixed assets and use internal funds for the operations.

In addition, debt can be used for fixed asset investment financing, a large number of fixed assets can also be used as a guarantee for the company to borrow funds from creditors. If we see from two differences sides, assets can affect level of leverage. Ramjee and TendaiGwatidzo (2012), conducted a research, and the finding of the research that assets structure is positively related to leverage. Based on the explanation, that the hypothesis for both variables are:

H5 : Asset Structure have a positive effect to leverage

RESEARCH METHODOLOGY

Sampling

Purposive sampling technique is used in this study. Below are the results from samples selection shown as table 1:

No.	Information	Companies	Data
1	Listed manufacturing companies at Indonesia Capital Market, period 2001 - 2014 (Constantly listed)	104	1456
2	Listed Basic Industry and Chemical companies at Indonesia Capital Market, period 2001 - 2014 (Constantly listed)	43	602
3	Number of sample before outlier test	43	602
4	Number of Outlier sample		45
5	Number of Research data		557

Source :data tabulation



TABLE 2. OPERATIONAL DEFINITION AND DATA MEASUREMENT

Variable	Var. Definition	Indicator	Scale	Formula	Information
Asset Growth	Show how many funds are allocated by company for their assets	Asset Growth	Ratio	$\frac{TA_t - TA_{t-1}}{TA_{t-1}}$	TA _t , Total Asset for running year. TA _{t-1} , Total asset for last year.
Companies / Firm Size	Size of Company	Size	Logaritm	$\ln(\text{total asset})$	
Profitability	Company capabilities to gain profits in one period.	ROA	Ratio	$\frac{EAT}{\text{Total Assets}}$	EAT = Earning after taxes
Dividend	Portions of profits that given to shareholders.	DPR	Ratio	$\frac{\text{Cash Dividend}}{\text{Net Income}}$	
Asset Structure	Size of assets that can be pledged for debt.	FAR	Ratio	$\frac{\text{Fixed Assets}}{\text{Total assets}}$	
Leverage	Debt percentage compare to total assets.	Leverage	Ratio	$\frac{\text{Long Term Debt}}{\text{Total assets}}$	

Source : literature study

Data Analysis Method

Multiple regression tests are used to test the hypotheses, which goal is to test independent variables have correlativity to dependent variables. Regression equation that used is:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + e$$

Where Y = Debt, X₁ assets growth, X₂ firm size, X₃ The level of profitability, X₅ Dividend, X₆ Assets structure, e error.

RESULT

Data Statistic process output shown as table below:

Variable	Mean	Std. Deviation	Minimum	Maximum
LEVERAGE	0,1368	0,1012	0,0028	0,5143
GROWTH	0,1453	0,1425	-0,1354	0,7643
SIZE	389,688	16,135	238,614	418,624
ROA	0,0853	0,0505	0,0039	0,3105
DPR	0,3465	0,1898	0,0346	0,9531
FAR	0,3295	0,1610	0,0362	0,8074

Source: Data statistic process output

Test results shown as table below:





Variable	B	t	Sig.
Konstanta	-0,357	-2,218	0,041
GROWTH	0,134	2,135	0,052
SIZE	0,015	0,927	0,473
ROA	-0,392	-2,697	0,014
DIVIDEND	-0,039	-0,952	0,352
FAR	0,312	5,846	0,000

Source: Data statistic process output

Assets growth give positive effects and significant to company debt level. Assets growth shows the number of funds allocated by company to their assets. This study result is appropriate with Pecking Order Theory which has significance 0.052. So then can be concluded that first hypothesis accepted, which assets growth give positive effects to the debt level.

Based on hypotheses testing result, company size not affect to the company debt level. Based on significance value 0.473 so then second hypothesis is rejected.

Profitability (ROA) gives negative effect and significant to the company debt. Significance value to third hypotheses testing is 0.014 which means third hypotheses is accepted.

Dividend (DPR) is not affect to the company debt level. This opinion contradiction with Pecking Order Theory that stated company choose first external funding in form of debt more than others. Theory that can explain these findings is Agency Theory, where in order to reduce agency cost, debt and dividend provisions was conducted and can replace each others (Tarjo 2005). With significance value 0.352 can be concluded that these hypotheses (dividend give positive effect to leverage level) is rejected.

Asset structure (FAR) has positive way effect to the company debt. This things explain that company which has a big fixed asset will be easier to debt because fixed asset will be used as collateral. This is appropriate with Pecking Order Theory. Significance value 0.000 concludes that this hypothesis (asset structure give positive effect to leverage) accepted.

CONCLUSION

Based on the study result, can be concluded that asset growth has positive effect to the debt level. Firm size doesn't have effect to the debt level. Profitability (ROA) has negative effect to the debt level. Dividend payout ratio (DPR) doesn't have effect to the debt level. Asset structure (FAR) has positive effect to the debt level.

This study has a few limitations, number of sample that used in this study is limited to the manufacturing company (Basic and Chemical Industry subsector) that listed in BEI so that the study result insufficient to be generalized. This study only use five independent variables (asset growth (Growth), company size (Size), profitability (ROA), dividend (DPR), and asset structure (FAR) that suspected have effect to the company structure capital (leverage).

Recommendation for the further study is: should expand the population and not limited to the manufacturing company only but transportation and trading company.



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