

THE CONSIDERATION AND PURPOSE OF BORROWING: AN EMPIRICAL EVIDENCE FROM INDONESIA LISTED COMPANIES

by Ventje Ilat 30

Submission date: 05-Jan-2021 01:32PM (UTC+0700)

Submission ID: 1483193716

File name: THE_CONSIDERATION_AND_PURPOSE_OF_BORROWING.pdf (130.03K)

Word count: 6491

Character count: 34386

THE CONSIDERATION AND PURPOSE OF BORROWING: AN EMPIRICAL EVIDENCE FROM INDONESIA LISTED COMPANIES

Ventje Ilat and Winston Pontoh

Faculty of Economic and Business, Sam Ratulangi University, Manado, Indonesia

ABSTRACT

Debt often graced in most of capital structure of companies, particularly in financial statement and became issues in context of trade off theory and pecking order theory in most studies. Debt usually related with profit matter, because it is always want to be achieved by every companies. It started when companies own equity is insufficient to create investment in company's assets for making profit, then it make debt is one alternative fund for financing investments aimed at achieving the desired profit. The objective of this study is to give answers as empirical evidence for the questions about why companies need debt and what is the relevance capital structure theory to explain this behavioral tendency in these period of observation. Conducting path analysis with trimming model as method of analysis, the results shows that, degree of operating leverage is negatively significant to debt equity ratio and debt equity ratio is negatively significant to return on equity. The implication of this findings shows the application of pecking order theory, because most of companies depend their funding from internal, which is make them have more stable cash flow and beside that, the consideration of business risk is very important so they keep the capital structure in optimum debt that make them have low probability of bankruptcy.

Keywords: Capital Structure, Profitability, Debt Equity Ratio, Return on Equity, Growth, Size, Tangibility

1. INTRODUCTION

There was an interested statement from Myers (1984), "How do firms choose their capital structures?" And the answer is, "We don't know." It was always became a question, why most of companies need debt for financing their operations? Because debt often graced in most of capital structure of companies, particularly in financial statement. Issues debt emergence always been in debate in context of trade off theory and pecking order theory in most studies. Is debt a coincidence factor? Is debt an important factor that needed by companies for financing its investments in order to achieve profit? What is the main reason for emergence of debt to each company?

We were noticed statement from Myers (2001) where, there were several useful conditional theories.

The trade off theory says that firms seek debt levels that balance the tax advantages of additional debt against the costs of possible financial distress. The tradeoff theory predicts moderate borrowing by tax-paying firms. The pecking order theory says that the firm will borrow, rather than issuing equity, when internal cash flow is not sufficient to fund capital expenditures. Thus the amount of debt will reflect the firm's cumulative need for external funds. The free cash flow theory says that dangerously high debt levels will increase value, despite the threat of financial distress, when a firm's operating cash flow significantly exceeds its profitable investment opportunities. The free cash flow theory is designed for mature firms that are prone to overinvest. Moreover, in general, industry debt ratios are low or negative when profitability and business risk are high.

Corresponding Author: Ventje Ilat, Faculty of Economic and Business, Sam Ratulangi University, Manado, Indonesia

Intangible assets are also associated with low debt ratios. High profits mean low debt and vice versa. But if managers can exploit valuable interest tax shields, the tradeoff theory predicts, then the result is opposite relationship. High profitability means that the firm has more taxable income to shield and that the firm can service more debt without risking financial distress.

Based on these theories, we strongly believe that, for companies in developing countries, profit represent primary factor which always wish to be achieved by every companies and that made companies must empowered all of its resources optimally, such as current assets, fixed assets and other assets. The problem arise when companies equity is insufficient to create company's assets, then it make debt as one alternative fund for financing investments aimed at achieving the desired profit. When a policy decided to acquire the debt, then another problem arise because lender would review the ability of companies for make profit, so the ability to make a profit or profitability is a key factor for the companies to obtain debt. But, when the debt were obtained, then the capital structure will change and as the consequences, the company's profitability reducing as the impact of interest expense and also, companies more closely to its risk of bankruptcy. So, consideration for profitability in capital structure is very important for every companies, because Myers (1984) stated, an unprofitable firm in the same industry will end up with a relatively high debt ratio.

Then, we reviewed the main points of (Myers, 2001; 1977; Kale *et al.*, 1991; Leland and Pyle, 1977) about relationship between debt, profitability and business risk. The other works, Myers (1984), added these relationship with growth and tangibility, while Mohamad and Abdullah (2012) and also Chen (2004) added with size. We noticed of some works about relationship debt, profitability and growth (San and Heng, 2011), relationship of debt and profitability (Nadaraja *et al.*, 2011; Ahmadinia *et al.*, 2012; Shubita and Alsawalhah, 2012; Ching *et al.*, 2011; Frank and Goyal, 2003), relationship of debt, growth and size (Homaifar *et al.*, 1994), relationship of debt, size and tangibility (Shamshur, 2010), relationship of debt, growth, size and tangibility (Shah and Khan, 2007; Lim *et al.*, 2012), relationship of profitability, growth and business risk (Lev, 1974), relationship of debt and growth (Sunder and Myers, 1999; Baker and Wurgler, 2002) and the relationship of debt, size, bankruptcy risk and tangibility (Marsh, 1982).

Then, we were identified that, most companies in Indonesia which are examines in this study, have debt over their equities, means the debt ratio is more than 1. In period of 2009 till 2011, there are some phenomenon showed by these companies, where their debt ratio (debt to equity ratio) is tendency to decrease and profitability (return on equity) is tendency to increase, while growth (change percentage in total assets) and size (natural logarithm of total asset) of these companies have tendency to increase, but tangibility shifting closely in constant and also, the business risk (degree of operating leverage) is high or below than 1.

Furthermore, we linking these variables to analyze the tendency to behave of these variables and to give an appropriate explanation about this phenomenon. Our objective of this study is to give answers as empirical evidence for the questions about why companies need debt and what is the relevance capital structure theory to explain this behavioral tendency in these period of observation, because we suspect, in developing countries such as Indonesia, this is about survival for sustainability matter of these companies, where bankruptcy is still the main consideration of companies in Indonesia, since financing decision is related with business risk. Our contribution by this study is not taking style pros and cons in significant or insignificant of others prior research, but through of our study we want to add another reference for next research in the same area to understand what is the reasonable debt philosophy, with explanation as neutral as possible, because we believe each period of observation in every research has its own phenomenon and has its own relevance theories to explain this phenomenon, since we keep up with Myers (2001) that, there is no universal theory of the debt equity choice and no reason to expect one.

2. LITERATURES REVIEW

First of all, we agreed with Myers (2001) that, there is no universal theory of the debt equity choice and no reason to expect one. Myers (2001), concluded in his research, first, firms prefer internal to external finance. (Information asymmetries are assumed relevant only for internal financing). Second, dividends are "sticky," so that dividend cuts are not used to finance capital expenditure and so that changes in cash requirements are not soaked up in short-run dividend changes. In other words, changes in net cash show up as changes in external financing. Third, if external funds are required

1 capital investment, firms will issue the safest security
 28 t, that is, debt before equity. If internally generated
 28 cash flow exceeds capital investment, the surplus is used
 1 pay down debt rather than repurchasing and retiring
 59 ity." As the requirement for external financing
 1 increases, the firm will work down the pecking order,
 from safe to riskier debt, perhaps to convertible
 securities or preferred stock and finally to equity as a last
 resort. Fourth, each firm's debt ratio therefore reflects its
 cumulative requirement for external financing.

Furthermore, Mohamad and Abdullah (2012),
 stated, trade off theory implies that leverage has
 74 itive relationship with profitability as contrary to the
 pecking order theory. Trade off theory considers the
 cost of bankruptcy associated with the debt financing
 and the benefit of tax advantage. Trade-off theory
 asserts that a company may set a target debt to
 company value and gradually moves towards it.
 30 According to this theory, the increase in debt level will
 30 rease the cost of bankruptcy, financial distress and
 agency, hence decrease the value of the company.
 Thus, a company needs to find equilibrium where the
 level of debt would be able to offset its costs (such as
 tax advantages of the debts) with the costs of possible
 financial distress. According to this theory, companies
 with high growth have more risk and higher financial
 distress costs, thus growth have an inverse relationship
 with debt level. However, if a company has higher level
 of fixed assets to serve as collateral for debt financing,
 it will give easi 27 access for the company to obtain
 debt, thus give a positive relationship between asset
 tangibility and debt level.

Nadaraja *et al.* (2011) stated, pecking order theory
 suggest that management would prefer equity
 financing in favor of debt financing in view of
 information asymmetry condition and benefit of
 reduced transactions costs. Based on this theory,
 highly profitable firms will tend to use internal
 funding, whereas firms with low profitability tend to
 use external financing. In the context of internal
 finance, the theory indicated internal fund such as
 retained earnings is preferred and as for external
 financing, debt is chosen over equity. Also, if a firm
 use of external financing would indicate that the firm
 is not profitable, its stock price may be adversely
 affected. This related to information asymmetric
 where the managers usually have more information on
 the firm. Therefore, they would issue new shares when

it is believed that the stock price is fairly or overly
 priced only. Ahmadinia *et al.* (2012), stated, the
 pecking order theory does not take an optimal capital
 structure as a starting point, but instead asserts that
 firms prefer to use internal finance (as retained
 earnings or excess liquid assets) over external finance.
 If internal funds are not enough to finance investment
 opportunities, firms may or may not acquire external
 financing and if they do, they will choose among the
 different external finance sources in such a way as to
 minimize additional costs of asymmetric information.
 12 order to minimize external cost of financing, firms
 12 fer to use debt leverage at first, then issuance of
 preferred stock and finally issuance of common stock.
 Ahmadinia *et al.* (2012), conclude there is a close
 relationship between profitability and capital structure.
 Homaifar *et al.* (1994) found, firm size and future
 growth opportunities appear to be important
 determinants of the capital structure. Shamsur (2010),
 found that size and tangibility have a significant
 relationship with debt to equity ratio. Supported by
 Shah and Khan (2007), found that tangibility and
 growth have significant relationship with leverage, but
 insignificant for its size. While in other side, Lim *et al.*
 (2012), found that size, growth and tangibility had not
 significant relationship with debt asset ratio.

Myers (1977), stated, factors should be associated
 with heavy debt financing are capital intensity, high
 operating leverage and profitability. Supported by
 Kale *et al.* (1991) that, business risk is one of the
 primary 4 terminants of a firm's capital structure,
 4 cause existence of debt in the capital structure
 4 reases the probability of bankruptcy and firms with
 4 ore variable cash flows, that is, higher business risk,
 have a higher probability of bankruptcy for a given level
 of debt. Bodie *et al.* (2009), stated that firms with greater
 amounts of variable as opposed to fixed costs will be less
 sensitive to business conditions. This is because in
 economic downturns, these firms can reduce costs as
 output falls in response to falling sales. Profits for firms
 with high fixed costs will swing more widely with sales
 because costs do not move to offset revenue variability.
 Firms with high fixed costs are said to have high
 operating leverage, because small swings in business
 conditions can have large impacts on profitability.
 Furthermore, degree of operating leverage greater than 1
 indicates some operating leverage, means, if operating
 leverage is change then profit will change in the same

direction, means, degree of operating leverage increases with a firm's exposure to fixed costs. Measurement for business risk supported by Chowdhury and Chowdhury (2010) that, business risk is represented by operating leverage and according to Lev (1974), that, in general, the higher the operating leverage, the higher the earnings volatility with respect to demand fluctuations related with growth and profitability.

San and Heng (2011), stated that capital structure is essential on how a firm finances its overall operations and growth by using different sources of funds. They found that no relationship between debt asset or debt equity ratio to return on asset. This findings supported by Shubita and Alsawalhah (2012), that there is significantly negative regression coefficient for total debt implies that an increase in the debt position is associated with a decrease in profitability: Thus, the higher the debt, the lower the profitability. Ahmad *et al.* (2012), found that only short term debt and total debt have significant relationship with ROA while ROE has significant on each of debt level. This findings has similar results with Ching *et al.* (2011), found that debt asset ratio effected to return on assets and supported by Mohamad and Abdullah (2012), found that debt equity ratio negatively related with return on equity but negatively insignificant association with return on asset. This indicates that any increase in ROE can be explained by a reduction in debt equity ratio but not for ROA. The regression results for debt asset ratio having negative association with ROE and ROA. This implies that the increase or decrease of debt level will significantly affect the firm's performance, which means that reducing the debt level will significantly increase ROE and ROA.

Leland and Pyle (1977) stated, firms with riskier returns will have lower debt levels even when there are no bankruptcy costs. This might be because, according to Baker and Wurgler (2002), the idea is that firms with substantial growth and investment opportunities have the most to lose when over-hanging debt prevents new capital from being raised or leads to an inefficient bankruptcy negotiation during which some investment opportunities are forever lost. According to Myers (1984), unusually profitable firm in an industry generating relatively slow growth. That firm will end up with an unusually low debt ratio compared to its industry's average and it won't do much of anything about it. It won't go out of its way to issue debt and retire equity to achieve a more normal debt ratio. An

unprofitable firm in the same industry will end up with a relatively high debt ratio. If it is high enough to create significant costs of financial distress, the firm may rebalance its capital structure by issuing equity. Risky firms ought to borrow less, other things equal. Here "risk" would be defined as the variance rate of the market value of the firm's assets. The higher the variance rate, the greater the probability of default on any given package of debt claims. Since costs of financial distress are caused by threatened or actual default, safe firms ought to be able to borrow more before expected costs of financial distress offset the tax advantages of borrowing. Firms holding tangible assets-in-place having active second-hand markets will borrow less than firms holding specialized, intangible assets or valuable growth opportunities. The expected cost of financial distress depends not just on the probability of trouble, but the value lost if trouble comes. Specialized, intangible assets or growth opportunities are more likely to lose value in financial distress. Borrowing against intangibles and growth opportunities. Firms holding valuable intangible assets or growth opportunities tend to borrow less than firms holding mostly tangible assets. There is plenty of indirect evidence indicating that the level of borrowing is determined not just by the value and risk of the firm's assets, but also by the type of assets it holds. Firms with high operating profitability and therefore plenty of unshielded income, may also have valuable intangible assets and growth opportunities. Another study by Sunder and Myers (1999) said that, growth firms that would be more likely to seek external equity financing at low debt ratios.

Frank and Goyal (2003) said, from the point of view of an outside investor, equity is strictly riskier than debt. Both have an adverse selection risk premium, but that premium is large on equity. Therefore, an outside investor will demand a higher rate of return on equity than on debt. From the perspective of those inside the firm, retained earnings are a better source of funds than is debt and debt is a better deal than equity financing. Accordingly, the firm will fund all projects using retained earnings if possible. If there is an inadequate amount of retained earnings, then debt financing will be used. Thus, for a firm in normal operations, equity will not be used and the financing deficit will match the net debt issues. At the typical firm, internal cash flow does lead to some reduction in debt issues, but the magnitude of the effect is surprisingly small once one includes the behavior of firms that do not have complete trading

records. There is a large literature showing a negative relation between leverage and profitability. However, as noted earlier, if internal cash flow measures future growth opportunities, then the tradeoff theory also predicts the observed negative relation on cash flows.

3. HYPOTHESIS AND MODELS

We summarized that, there were relationship between debt and profitability (Ahmad *et al.*, 2012; Ahmadi *et al.*, 2012; Shubita and Alsawalhah, 2012; Ching *et al.*, 2011; Nadaraja *et al.*, 2011; Frank and Goyal, 2003) and those variables also had relationship with business risk (Myers 2001; Kale *et al.*, 1991; Marsh, 1982; Myers, 1977; Leland and Pyle, 1977; Lev, 1974), growth (Lim *et al.*, 2012; San and Heng, 2011; Shah and Khan, 2007; Baker and Wurgler, 2002; Sunder and Myers, 1999; Homaifar *et al.*, 1994; Myers, 1984; Lev, 1974), tangibility (Lim *et al.*, 2012; Shamsur, 2010; Shah and Khan, 2007; Myers, 1984; Marsh, 1982) and size (Lim *et al.*, 2012; Mohamad and Abdullah, 2012; Shamsur, 2010; Shah and Khan, 2007; Chen, 2004; Homaifar *et al.*, 1994; Marsh, 1982). Then we developed the hypothesis for this study as follows:

- H1: Growth, size, tangibility, business risk and debt has direct relationship with profitability
- H2: Growth, size, tangibility and business risk, has indirect relationship with profitability, mediated by debt

Based on hypothesis we are describing the framework for this study in **Fig. 1**.

For testing of hypothesis, the equations for model has been developed as follows:

$$DER = \alpha + \beta GROWTH + \beta SIZE + \beta TANGIB + \beta DOL + \epsilon$$

$$ROE = \alpha + \beta GROWTH + \beta SIZE + \beta TANGIB + \beta DOL + \beta DER + \epsilon$$

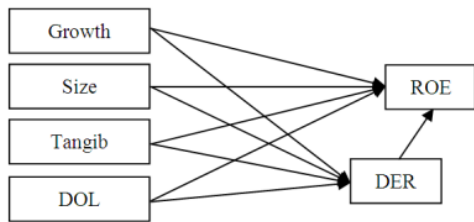


Fig. 1. Framework of study

4. METHOD OF ANALYSIS

4.1. Measurement of Variables

Method of analysis of this research is using path analysis with trimming model and variables which used in this research described as follows:

As proposed by Ahmadi *et al.* (2012), capital structure is usually measured by the following ratios: Ratio of debt to total asset, the equity ratio to total asset, a debt ratio to the equity and equity ratio to debt. Profitability is defined as the ability of a firm to gain profit. Profitability is the result of all financial plans and decisions. The ratio of profit to sell, Return On Asset (ROA) and Return On Equity (ROE) are generally applied to measure profitability. Based on this, we determine variables as indicators of capital structure is Debt Equity Ratio (DER), which calculated by total debt divided by total equity. Also, variables as indicators of profitability is Return On Equity (ROE), which calculated by net profit divided by total equity.

Variables as indicators of determinant of capital structure:

- Growth (GROWTH), calculated by percentage change in total assets. This variable following measurement of (Titman and Wessels, 1988; Hovakimian *et al.*, 2001) and also Hymer and Pashigian (1962)
- Size (SIZE), calculated by log natural of total assets. This variable following measurement of (Hansen and Wernerfelt, 1989; Hoskisson *et al.*, 1994; Zhou, 2000; Dittmar, 2000; Hovakimian *et al.*, 2001; Cheng, 2005; Khrawish and Khraiweh, 2010)
- Tangibility (TANGIB), calculated by fixed assets divided by total assets. We summarized this variable from measurement of (Gompers, 1995; Rajan and Zingales, 1995; Hovakimian *et al.*, 2004; Baker and Wurgler, 2002; Molina, 2005; Khrawish and Khraiweh, 2010). We were excluded intangible assets and inventory from measurement of Titman and Wessels (1988) by reasons, intangible assets has unpredicted usage and inventory has short term turnover, these characteristics are different from fixed assets
- We were following suggestions by Kale *et al.* (1991), about variance cash flow for proxy of business risk, could not be assumed as constant considered the effect of depreciation, tax and interests. So we determine, business risk represented by Degree of Operating Leverage (DOL) is

calculated by percentage change in ³⁹Earnings Before Interest and Tax (EBIT) divided by percentage change in sales revenue, because we think this measurement is more realistic in present conditions. The variable measurement based on and (Bodie *et al.*, 2009; Myers, 1977; Chowdhury and Chowdhury, 2010; Lev, 1974)

4.2. Research Data

This research based on data from Indonesia Stock Exchange for period of 2009 to 2011, where 247 companies was chosen for samples in sectors as in **Table 1**.

5. RESULTS OF ANALYSIS

Results of regression was conducted and obtained standardized coefficient for the path analysis. The first statistics output by SPSS shows as in **Table 2**.

The second statistics output by SPSS shows **Table 3**.

The first result of regressions shows, growth, size and tangibility are insignificant relationship to debt equity ratio, while degree of operating leverage is negatively significant. The second result of regression shows, growth, size, tangibility and degree of operating leverage are insignificant to return on equity, while debt equity ratio is negatively significant. The mean value for each variables, are summarized in **Table 4**.

We summarized the results of regressions for standardized coefficients in **Table 5**.

We applied trimming model for path analysis and the result shows **Fig. 2**.

Table 1. Research data

Sectors	Amount
Agriculture	12
Mining	21
Basic Industry and chemicals	49
miscellaneous industry (automotive, components, textile, garments, footwear, cable, electronics)	38
Consumer goods industry	29
infrastructure, utilities and transportation	23
trade, services and investment	75

Table 2. Standardized coefficients of first model

Model	Standardized coefficients	Significance
Growth	0.033	0.361
Size	0.061	0.100
Tangibility	-0.014	0.696
DOL	-0.093	0.011

Dependent variable: Debt to equity ratio

6. DISCUSSION

From results of analysis, there are two implications of this research, first, if degree of operating leverage increase, then debt equity ratio would decrease. This is means that business risk for in this case represented by degree of operating leverage is very important factor for determinant capital structure related to bankruptcy and its impact to wealth of shareholders.

Table 3. Standardized coefficients of second model

Model	Standardized coefficients	Significance
DER	-0.522	0.000
Growth	0.013	0.673
Size	0.033	0.294
Tangibility	0.059	0.064
DOL	-0.030	0.343

Dependent variable: Return on equity

Table 4. Mean value of variables

DER	Growth	Size	Tangib	DOL	ROE
1.54	0.37	13.85	0.36	-14.60	0.13

Table 5. Path analysis

Variables	Direct effect	Indirect effect	Total effect
DER	-0.522	-	-0.522
Growth	0.013	-0.017	-0.004
Size	0.033	-0.032	0.001
Tangibility	0.059	0.007	0.066
DOL	-0.030	0.049	0.019

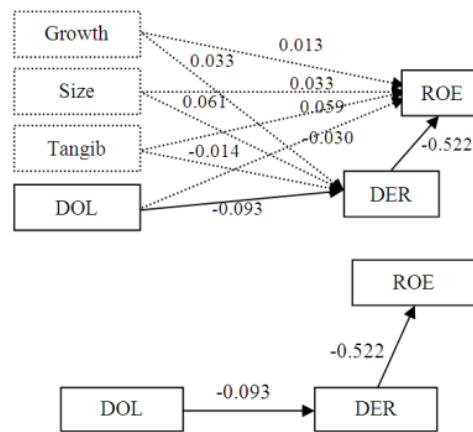


Fig. 2. Path analysis with trimming model

This findings are consistent with (Myers, 1977; Kale *et al.*, 1991; Nadaraja *et al.*, 2011; Bodie *et al.*, 2009). Second, if debt equity ratio increase, then return on equity would decrease. It means, although companies obtain large amount of debt but it cannot cross the line of the optimum debt or the profit will be decline. This findings are consistent with (Mohamad and Abdullah, 2012; Shubita and Alsawalhah, 2012; Ahmad *et al.*, 2012; Ahmadinia *et al.* (2012).

There are few points noticed from side of growth, size and tangibility as representation for assets specially for fixed assets because it is the most important factors for companies to create earnings, but still it is not significant to return on equity. Based on the mean values , the characteristics of the companies included in this research sample is a companies that has a profit, has a fairly low fixed costs based on degree of operating leverage, has a fairly size of assets, having a low asset growth, have low fixed assets and has high enough debt above the capital itself. Based on these characteristics, it can be said that the total assets in these companies largely financed by debt. However, mostly of debt was not allocated for investment in fixed assets and it shows from a comparison of fixed assets over total assets (tangibility) and growth in fixed assets, also, the value of tangibility shows a negative relationship between debt and fixed asset investment. With the investment in fixed assets is not oriented, then causes these companies have lower fixed costs refers to depreciation expense and interest expense of debt, so if the value based on the size, we were assumed that the utilization of the allocation of debt is more allocated to the investment in current assets, then the variable cost is a major cost element in cost structure for conducting the operations of these companies.

If variable costs are the major component in the cost structure of these companies, then its means the foundation of this companies are in the field of production operations until its marketing of the product, so it can be concluded that the companies in these sectors have a high level of competition and the potential risk business so that it caused these companies tend to avoid financial risks, including to avoid the debt. If this is indeed case, then this could explain the reason forth negative relationship between debt and fixed asset investment, because these companies will tend to avoid debt and use their own capital including retained earnings to be used in fixed asset investment, as said by Leland and Pyle (1977), where firms with riskier returns will have lower debt levels even when there are no bankruptcy costs. Under existing conditions, it can be

said that, the existing debt has been considered the optimum proportion of capital structure. Because if, the company invested in fixed assets by using an existing debt or perform additional debt, then it means profits will be taken to cover the cost of depreciation and interest expense of debt which will lead to further reduction in investment opportunities or make it difficult to finance. This reasons supported by Baker and Wurgler (2002), who said that, firms with substantial growth and investment opportunities have the most to lose when the over-hanging prevents new debt capital from being raised or leads to an in efficient bankruptcy negotiation during the which some investment opportunities are forever lost. On the other hand, the consequences of debt avoidance or useless debt than use their own capital swell as retained earnings, investment in fixed assets of these companies are going to have a low growth rate of the asset as a whole but are likely to have potential benefit, as said by (Myers, 1984; Kale *et al.*, 1991; Sunder and Myers, 1999; Frank and Goyal, 2003).

The tendency of behavior of these companies in obtaining debt or funding from outside sources indicate that the findings in this study support the pecking order theory of Myers (2001), related the factors should be associated with heavy debt financing are capital intensity, high operating leverage and profitability, Nadaraja *et al.* (2011) with the main point that, highly profitable firms will tend to use internal funding, whereas firms with low profitability tend to use external financing. The results of this study are not consistent with the results of the study by Homaifar *et al.* (1994), Shah and Khan (2007), except for size and Shamsur (2010), but results of this study is similar with Lim *et al.* (2012) and consistent with Shubita and Alsawalhah (2012), where we noticed the main point is the higher the debt, the lower the profitability.

7. CONCLUSION

In this case, basically companies in Indonesia had similar optimum leverage because they depend on using their internal fund (retained earnings) for making investment in their assets. Furthermore, this findings shows that, sample companies in Indonesia are very carefully obtaining debt as their second funding or these companies will take leverage proportionally after using their internal funding which is retained earnings.

As a whole, the research conclude, that large companies depend their funding from internal, which is make them have more stable cash flow and beside that, the consideration of business risk is very important so

they keep the capital structure in optimum debt that make them have low probability of bankruptcy. By this findings, it could be said that, companies in Indonesia examined in this study, specially listed in Indonesia Stock Exchange tend to have careful behavior for obtaining debt and have application of pecking order theory.

However, further study is needed to test the implications of trade off theory and pecking order theory, include to add more variable, because this study have simple model and just limited for period 2009 till 2011. Moreover, the scope of samples for further study need to expand for another sectors, for example finance sector and property sector.

8. CONTRIBUTION

We claims three contributions for this study. First, empirical evidence, where, in Indonesia as a developing country, the determinant of capital structures in most of companies is much more determined by business risk, or in the other words, obtained debt is more allocated to cover variable cost derived from current assets, because since investment in fixed asset is not a consideration, then fixed cost in cost structure of this companies are less. This reason explain why in results the tangibility shifting rely in constant, but growth (change percentage in total assets) and size (natural logarithm of total asset) of these companies have tendency to increase.

Second, application of pecking order theory in this period, since business risk is the critical factor and bankruptcy is the main consideration, companies tend to decrease their debt and this result in increasing profitability because of decreasing in debt interest. We refers it as well defined optimal debt ratio, as stated in the pecking order theory by Myers (2001). It is clear now why growth (change percentage in total assets) and size (natural logarithm of total asset) of these companies have tendency to increase, while debt is decrease. If debt is not the main source for funding, then what is the main source for funding? Of course, retained earnings and this is means, debt is companion fund that make these companies are profitable companies although they have high risk of business. By this findings, we could say, the debt philosophy from side of pecking order theory is to survive for sustainability.

Third, as reference for further studies. We give empirical evidence about determinant of capital structure and its impact to profitability from Indonesia as a developing country in the period after shock of global financial crisis in 2008. Also, by this study, we give the relevance theory to explain this phenomenon, but we are

not claims pecking order theory is the absolute theory, since we give an evidence that it could be applied in our samples for period 2009 till 2011. We hope this study could be reference by other researchers from other countries in the same area of studies specially for developing countries.

9. REFERENCES

- Ahmad, Z., N.M.H. Abdullah and S. Roslan, 2012. Capital structure effect on firms performance: focusing on consumers and industrials sectors on Malaysian firms. *Int. Rev. Bus. Res.*, 8: 137-155.
- Ahmadia, H., J. Afrasiabishani and E. Hesami, 2012. A comprehensive review on capital structure theories. *Romanian Economic J.*, 45: 149-164.
- Baklanov, M. and J. Wurgler, 2002. Market timing and capital structure. *J. Finance*, 57: 1-32. DOI: 10.1111/1540-6261.00414
- Bodie, Z., A. Kane, A.J Marcus and P. Mohanty, 2009. *Investments*. 8th Edn., Tata McGraw-Hill Education, Boston, ISBN-10: 0070151571.
- Cheng, J., 2004. Determinants of capital structure of Chinese-listed companies. *J. Bus. Res.*, 57: 1341-1351. DOI: 10.1016/S0148-2963(03)00070-5
- Cheng, Q., 2005. What determines residual income? *Account. Rev.*, 80: 85-112. DOI: 10.2308/accr.2005.80.1.85
- Ching, H.Y., A. Novazzi and F. Gerab, 2011. Relationship between working capital management and profitability in Brazilian listed companies. *J. Global Bus. Econom.*, 3: 74-86.
- Choudhury, A. and S.P. Chowdhury, 2010. Impact of capital structure on firm's value: Evidence from Bangladesh. *Bus. Econ. Horizons*, 3: 111-122.
- Chittam, A.K., 2000. Why do firms repurchase stock? *J. Bus.*, 73: 331-355.
- Frank, M.Z. and V.K. Goyal, 2003. Testing the pecking order theory of capital structure. *J. Financ. Econom.*, 67: 217-248. DOI: 10.1016/S0304-405X(02)00252-0
- Gompers, P., 1995. Optimal investment, monitoring and the staging of venture capital. *J. Finance*, 50: 1461-1489. DOI: 10.1111/j.1540-6261.1995.tb05185.x
- Hanlon, G.S. and B. Wernerfelt, 1989. Determinants of firm performance: The relative importance of economic and organizational factors. *Strategic Manage. J.*, 10: 399-411. DOI: 10.1002/smj.4250100502
- Hovakimian, A., T. Opler and S. Titman, 2001. The debt-equity choice. *J. Financ. Q. Anal.*, 36: 1- 24.

- 23 Hovakimian, A., G. Hovakimian and H. Tehranian, 2004. Determinants of target capital structure: The case of debt and equity issues. *J. Financ. Econom.*, 71: 517-540. DOI: 10.1016/S0304-405X(03)00181-8
- 22 Homaifar, G., J. Zietz and O. Benkato, 1994. An empirical model of capital structure: Some new evidence. *J. Bus. Finance Account.*, 21: 1-14. DOI: 10.1111/j.1468-5957.1994.tb00302.x
- 11 Hoskisson, R.E., R.A. Johnson and D.D. Moesel, 1994. Corporate divestiture intensity in restructuring firms: Effects of governance, strategy and performance. *Acad. Manage. J.*, 37: 1207-1251. DOI: 10.2307/256638
- 16 Hymer, S. and P. Pashigian, 1962. Firm size and rate of growth. *J. Political Econ.*, 70: 556-569.
- Kale, J.R., T.H. Noe and G.G. Ramirez, 1991. The effect of business risk on corporate capital structure: Theory and evidence. *J. Finance*, 46: 1693-1715. DOI: 10.1111/j.1540-6261.1991.tb04640.x
- 15 Khrawish, H.A. and A.H.A. Khraiwesh, 2010. The determinants of the capital structure: Evidence from Jordanian industrial companies. *JKAU: Econ. Adm.*, 24: 173-196. DOI: 10.4197/Eco.24-1.5
- Leland, H.E. and D.H. Pyle, 1977. Informational asymmetries, financial structure and financial intermediation. *J. Finance*, 32: 371-387. DOI: 10.1111/j.1540-6261.1977.tb03277.x
- 6 Lev, B., 1974. On the association between operating leverage and risk. *J. Financ. Q. Anal.*, 9: 627-641.
- 21 Lim, T.C., R. Chai, D. Zhao and X.Y. Lim, 2012. Capital structure and political patronage: Evidence from China. *Am. J. Bus. Manage.*, 1: 177-182.
- 18 Marsh, P., 1982. The choice between equity and debt: An empirical study. *J. Finance*, 37: 121-144. DOI: 10.1111/j.1540-6261.1982.tb01099.x
- 8 Mohamad, N.E.A.B. and F.N.B. Abdullah, 2012. Reviewing relationship between capital structure and firm's performance in Malaysia. *Int. J. Adv. Manage. Econom. I*: 151-156.
- 14 Molina, C.A., 2005. Are firms underleveraged? An examination of the effect of leverage on default probabilities. *J. Finance*, 60: 1427-1459. DOI: 10.1111/j.1540-6261.2005.00766.x
- 5 Myers, S.C., 1977. Determinants of corporate borrowing. *J. Financ. Econom.*, 5: 147-175. DOI: 10.1016/0304-405X(77)90015-0
- Myers, S.C., 1984. The capital structure puzzle. *J. Finance*, 39: 575-592. DOI: 10.1111/j.1540-6261.1984.tb03646.x
- Myers, S.C., 2001. Capital structure. *J. Econom. Perspectives*, 15: 81-102.
- 17 Nadaraja, P., A.H. Zulkafli and T.A. Masron, 2011. Family ownership, firm's financial characteristics and capital structure: Evidence from public listed companies in Malaysia. *Economia Seria Manage.*, 14: 151-156.
- 13 Rajan, R.G. and L. Zingales, 1995. What do we know about capital structure? Some evidence from international data. *J. Finance*, 50: 1421-1460. DOI: 10.1111/j.1540-6261.1995.tb05184.x
- 2 San, O.T. and T.B. Heng, 2011. Capital structure and corporate performance of Malaysian construction sector. *Int. J. Human Soc. Sci.*, 1: 28-36.
- Shah, A. and S. Khan, 2007. Determinants of capital structure: Evidence from Pakistani panel data. *Int. Rev. Bus. R.*, 3: 265-282.
- Shamshur, A., 2010. Access to capital and capital structure of the firm. Charles University in Prague.
- 24 Shubita, M.F. and J.M. Alsawalhah, 2012. The relationship between capital structure and profitability. *Int. J. Bus. Soc. S.*
- 7 Sunder, L.S. and S.C. Myers, 1999. Testing static tradeoff against pecking order models of capital structure. *J. Financ. Econom.*, 51: 219-244.
- Titman, S. and R. Wessels, 1988. The determinants of capital structure choice. *J. Finance*, 43: 1-19. DOI: 10.1111/j.1540-6261.1988.tb02585.x
- 37 Zhou, X., 2000. CEO pay, firm size and corporate performance: Evidence from Canada. *Canad. J. Econom.*, 33: 213-251. DOI: 10.1111/0008-4085.00013

THE CONSIDERATION AND PURPOSE OF BORROWING: AN EMPIRICAL EVIDENCE FROM INDONESIA LISTED COMPANIES

ORIGINALITY REPORT

19%

SIMILARITY INDEX

12%

INTERNET SOURCES

18%

PUBLICATIONS

%

STUDENT PAPERS

PRIMARY SOURCES

- 1** Tsuji, Chikashi. "An International Survey of the Evidence of the Pecking Order Theory of Corporate Financing", Business and Economic Research, 2011. **1%**
Publication
- 2** docsdrive.com **1%**
Internet Source
- 3** Pal C. Johnsen, Richard G.P. McMahon. "Cross-industry differences in SME financing behaviour", Journal of Small Business and Enterprise Development, 2005 **1%**
Publication
- 4** JAYANT R. KALE. "The Effect of Business Risk on Corporate Capital Structure: Theory and Evidence", The Journal of Finance, 12/1991 **1%**
Publication
- 5** Allen N. Berger. "How Do Large Banking Organizations Manage Their Capital Ratios?", **<1%**

-
- | | | |
|---|---|-----|
| 6 | academicjournals.org
Internet Source | <1% |
|---|---|-----|
-
- | | | |
|---|---|-----|
| 7 | Amilcar A. Menichini. "On the value and determinants of the interest tax shields", <i>Review of Quantitative Finance and Accounting</i> , 2016
Publication | <1% |
|---|---|-----|
-
- | | | |
|---|---|-----|
| 8 | Muhammad Ishfaq Ahmad, Wang Guohui, Mudassar Hasan, Muhammad Yasir Rafiq, Ramiz-Ur Rehman. "Chapter 10 Financial Leverage Hits Corporate Performance", Springer Science and Business Media LLC, 2017
Publication | <1% |
|---|---|-----|
-
- | | | |
|---|---|-----|
| 9 | academic.oup.com
Internet Source | <1% |
|---|---|-----|
-
- | | | |
|----|---|-----|
| 10 | www.thescipub.com
Internet Source | <1% |
|----|---|-----|
-
- | | | |
|----|---|-----|
| 11 | Mikhail A. Gorshunov, Achilles A. Armenakis, Stanley G. Harris, H. Jack Walker. "Quad-qualified audit committee director: Implications for monitoring and reducing financial corruption", <i>Journal of Corporate Finance</i> , 2021
Publication | <1% |
|----|---|-----|
-

12

www.academia.edu

Internet Source

<1%

13

Nancy Huyghebaert, Lihong Wang. "Institutional development and financing decisions: evidence from a cross-regional study on Chinese listed firms", *The European Journal of Finance*, 2013

Publication

<1%

14

Tsung-Kang Chen, Yijie Tseng, Yu-Ting Hsieh. "Real Earnings Management Uncertainty and Corporate Credit Risk", *European Accounting Review*, 2014

Publication

<1%

15

repository.uir.ac.id

Internet Source

<1%

16

binghamton.edu

Internet Source

<1%

17

Alexander Wiener-Fererhofer. "Credit rating process", *Journal of Family Business Management*, 2017

Publication

<1%

18

Stefan Dierkes, Ulrich Schäfer. "Corporate taxes, capital structure, and valuation: Combining Modigliani/Miller and Miles/Ezzell", *Review of Quantitative Finance and Accounting*, 2016

Publication

<1%

19

Binti Mohamad, Nor Edi Azhar, and Noriza Binti Mohd Saad. "Working Capital Management: The Effect of Market Valuation and Profitability in Malaysia", International Journal of Business and Management, 2010.

Publication

<1%

20

"Theoretical Frameworks for Capital Structure Decision Making", Capital Structure Decisions, 2015.

Publication

<1%

21

Sun, Zhe, Tsvi Vinig, and Thomas Daniël Hosman. "The financing of Chinese outbound mergers and acquisitions: Is there a distortion between state-owned enterprises and privately owned enterprises?", Research in International Business and Finance, 2017.

Publication

<1%

22

manualzz.com

Internet Source

<1%

23

publications.aston.ac.uk

Internet Source

<1%

24

Nor Farhana Selahudin, Nor Balkish Zakaria, Zuraidah Mohd. Sanusi. "Remodelling the Earnings Management with the Appearance of Leverage, Financial Distress and Free Cash Flow: Malaysia and Thailand Evidences", Journal of Applied Sciences, 2014

<1%

25 www.aessweb.com <1 %
Internet Source

26 www.mfa.com.my <1 %
Internet Source

27 www.eajournals.org <1 %
Internet Source

28 Vandana Bhama, Pramod Kumar Jain, Surendra Singh Yadav. "Testing the pecking order theory of deficit and surplus firms: Indian evidence", International Journal of Managerial Finance, 2016 <1 %
Publication

29 Sanjay J. Bhayani. "Determinants of Capital Structure: An Empirical Analysis of Indian Private Corporate Sector", Asia Pacific Business Review, 2016 <1 %
Publication

30 "Effects of accounts Payable as Source of Financing on Performance of Listed Manufacturing Firms at the Nairobi Securities Exchange", International Journal of Research Studies in Agricultural Sciences, 2016 <1 %
Publication

31 www.freepatentsonline.com <1 %
Internet Source

32

www.iamot.org

Internet Source

<1%

33

ideas.repec.org

Internet Source

<1%

34

id.123dok.com

Internet Source

<1%

35

Tony W. Tong, Yong Li. "Real Options and Investment Mode: Evidence from Corporate Venture Capital and Acquisition", Organization Science, 2011

Publication

<1%

36

James Ntiamoah Doku, Fred Agbenya Kpekpena, Prince Yeboah Boateng. "Capital Structure and Bank Performance: Empirical Evidence from Ghana", African Development Review, 2019

Publication

<1%

37

www.virtusinterpress.org

Internet Source

<1%

38

www.minneapolisfed.org

Internet Source

<1%

39

Kheder Alaghi. "Operating leverage and systematic risk", AFRICAN JOURNAL OF BUSINESS MANAGEMENT, 2012

Publication

<1%

-
- 40 Carmen Cotei, Joseph Farhat. "An application of the two-stage Bivariate Probit–Tobit model to corporate financing decisions", *Review of Quantitative Finance and Accounting*, 2010
Publication <1%
-
- 41 www.semanticscholar.org
Internet Source <1%
-
- 42 Aren, Selim, Lutfihak Alpkhan, Bulent Sezen, and Ziya Alper Guncu. "Drivers of firms' debt ratios: evidence from Taiwanese and Turkish firms", *Journal of Business Economics and Management*, 2012.
Publication <1%
-
- 43 www.efnahagsmal.is
Internet Source <1%
-
- 44 www.research.manchester.ac.uk
Internet Source <1%
-
- 45 Vimala. "SELF POWERED ENERGY AWARE INTERNET OF THINGS", *Journal of Computer Science*, 2014
Publication <1%
-
- 46 Nandhini Devi R, Leones Sherwin Vimalraj S, Lydia J. "Optical Wireless Communication: A Survey of Recent Advances, Applications and Challenges", IOS Press, 2020
Publication <1%
-

47

Zigan Wang, Qie Ellie Yin, Luping Yu. "Real effects of share repurchases legalization on corporate behaviors", Journal of Financial Economics, 2020

Publication

<1%

48

Lakshmi Shyam-Sunder, Stewart C. Myers. "Testing static tradeoff against pecking order models of capital structure¹This paper has benefited from comments by seminar participants at Boston College, Boston University, Dartmouth College, Massachusetts Institute of Technology, University of Massachusetts, Ohio State University, University of California at Los Angeles and the NBER, especially Eugene Fama and Robert Gertner. The usual disclaimers apply. Funding from MIT and the Tuck School at Dartmouth College is gratefully acknowledged. We also thank two reviewers, Richard S. Ruback and Clifford W. Smith, Jr., for helpful comments.¹", Journal of Financial Economics, 1999

Publication

<1%

49

Gbalam Peter Eze, Akwarandu Uzochukwu. "The Impact of Debt on Capital Structure: Empirical Evidence from Nigeria", Asian Journal of Economics, Business and Accounting, 2020

Publication

<1%

Matthias Fahn, Valeria Merlo, Georg Wamser.

50

"The Commitment Role of Equity Financing",
Journal of the European Economic Association,
2018

Publication

<1%

51

Georges Dionne, Thouraya Triki. "On risk
management determinants: what really
matters?", The European Journal of Finance,
2013

Publication

<1%

52

www.elsevier.es

Internet Source

<1%

53

espace.curtin.edu.au

Internet Source

<1%

54

es.scribd.com

Internet Source

<1%

55

openaccess.city.ac.uk

Internet Source

<1%

56

Athenia Bongani Sibindi. "Determinants of
capital structure: A literature review", Risk
Governance and Control: Financial Markets and
Institutions, 2016

Publication

<1%

57

Richard G.P. McMahon. "Financial Slack
Amongst Manufacturing SMEs from Australia's
Business Longitudinal Survey: An Exploratory
Study", Small Enterprise Research, 2014

<1%

58

Lutz Hahnenstein, Klaus Röder. "Who hedges more when leverage is endogenous? A testable theory of corporate risk management under general distributional conditions", Review of Quantitative Finance and Accounting, 2007

Publication

<1%

59

Nuri Yildirim. "Not Leverage but Change in Leverage Matters for Firms' Future Growth: Evidence from Turkey's Top 1000", International Economic Journal, 2015

Publication

<1%

60

Feng-Li Lin. "Does Internationalization of The Electronic Industries in The US Make Financing and Dividend Different?", International Journal of Economics and Finance, 10/19/2011

Publication

<1%

61

download.atlantis-press.com

Internet Source

<1%

62

www.yumpu.com

Internet Source

<1%

63

Lanfang Wang. "Convertibles and milestones in staged financing", Journal of Economics and Finance, 04/2009

Publication

<1%

64

researchcommons.waikato.ac.nz

Internet Source

<1%

65

Beny Mulyana Sukandar, Noer Azam Achsani, Roy Sembel, Bagus Sartono. "Performance of Construction Companies in Southeast Asia using Static and Dynamic Panel Data", Asian Journal of Applied Sciences, 2018

Publication

<1%

66

Hubert Tchakoute Tchuigoua. "Capital Structure of Microfinance Institutions", Journal of Financial Services Research, 2014

Publication

<1%

67

www.ijbcnet.com

Internet Source

<1%

68

studymoose.com

Internet Source

<1%

69

Satish Kumar, Riya Sureka, Sisira Colombage. "Capital structure of SMEs: a systematic literature review and bibliometric analysis", Management Review Quarterly, 2019

Publication

<1%

70

Liang Han, Xin Xiang, Xingquan Yang. "chapter 2 Emerging Economies and Financing of SMEs", IGI Global, 2018

Publication

<1%

Ajid ur Rehman, Man Wang, Sultan Sikandar

71

Mirza. "How do Chinese firms adjust their financial leverage: an empirical investigation using multiple GMM models", China Finance and Economic Review, 2017

Publication

<1%

72

STREBULAEV, ILYA A.. "Do Tests of Capital Structure Theory Mean What They Say?", The Journal of Finance, 2007.

Publication

<1%

73

"Chapter 4 The Theory of Corporate Risk Management", Springer Science and Business Media LLC, 2008

Publication

<1%

74

Abdulazeez Y.H. Saif-Alyousfi, Rohani Md-Rus, Kamarun Nisham Taufil-Mohd, Hasniza Mohd Taib, Hanita Kadir Shahar. "Determinants of capital structure: evidence from Malaysian firms", Asia-Pacific Journal of Business Administration, 2020

Publication

<1%

75

Charles J. P. Chen, C. S. Agnes Cheng, Jia He, Jawon Kim. "An Investigation of the Relationship between International Activities and Capital Structure", Journal of International Business Studies, 1997

Publication

<1%

Exclude quotes Off

Exclude matches Off

Exclude bibliography Off