Institutional Ownership, Profitability, Tangibility, and Liquidity on Firms' Capital Structure

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Abstract: The purpose of this research is to identify the influence of institutional ownership, profitability, tangibility, and liquidity on capital structure. The sample in this research is sub-sector automotive and component companies which are listed in Indonesian Stock Exchange between the years of 2013-2017. This research uses purposive sampling method and multiple regression to see the contribution of each variable in influencing capital structure. The results showed that institutional ownership, profitability, tangibility have no influence toward capital structure whereas liquidity does have an influence toward capital structure.

1 INTRODUCTION

Every company that wants to start its business activities requires capital in its own business. Capital is one of the important things when starting a business. Therefore, the company must be able to determine how much capital is needed to finance its business activities.

Capital needed by the company can be obtained from various sources and with different types. The capital can be obtained from debt and equity. In this case, the company has its own goal of increasing the value of the company through increasing the welfare of the owner or shareholders. Financial management aims to maximize the welfare of the owners (shareholders) through decisions or investment policies, funding, and dividends that are reflected in the stock price in the capital market. In its efforts to manage and run the company, managers need to fund its business expansion activities. One alternative for the company to meet the fund is by issuing debt.

Debt policy is part of consideration in the capital structure. Capital structure is a financing consisting of long-term debt, preferred stock, and shareholder capital. After knowing the impact of differences in interests between shareholders and management in determining capital policy, the company is expected to be able to balance capital structure optimally including debt policy which is also a consideration in the capital structure in order to minimize capital costs and avoid conflicts between shareholders and management.

Modigliani and Miller (1958 and 1963) in Lim (2012) showed that, in theory, without taxes and information asymmetries, capital structure has no impact on firm value. The Modigliani-Miller Theorem proposed that, under perfect market conditions, a firm's financial decisions do not matter. Modigliani and Miller (1958) established the modern theory of capital structure where it stated that a firm's debt-equity ratio does not affect its market value. How a firm choose to finance its investment is irrelevant. Modigliani and Miller's theories in 1963 assumed the existence of a tax on corporate income. With this tax, MM concludes that the use of debt will increase the value of the firm because the debt interest cost is the tax deductible expense (Sjahrial, 2010: 193).

The problem in this study is whether institutional ownership, profitability, tangibility, and liquidity affect the firms' capital structure. This study examines the effects of factors with proven influences on capital structure in literature, along with industry effect and ownership effect.

2 LITERATURE REVIEW

The Agency cost theory (Jensen and Meckling, 1976; Jensen, 1986) in Chen, et al., (2014) claims that the optimal utilization of debt could increase the value of shareholders but overwhelming debt financing may cause damage. Firms incur agency cost to ensure agents (managers) act in the best

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interests of principals (shareholders). When there is a separation between ownership and management, the conflict of goals between managers and owners and between different stakeholders emerges. For instance, equity holders with residual claims and limited liability concern more about profit from venture investment, while the debt-holders concern more the security of their claims. Morellec et al. (2012) in Chen et al., (2014) examine the conflicts between shareholders and agents in capital structure decisions and confirm the conflicts in choosing an optional capital structure and how governance mechanism mitigating the issue.

The pecking order theory (Myers and Majluf, 1984) in Chen et al., (2014) proposes that firms usually prefer internal finance to external finance and prefer debt to equity when internal finance is insufficient. This is to avoid adverse effect of asymmetric information that investors tend to believe that firms issue equity when stock prices are overpriced and therefore stock price would fall after stock issue is announced. This debt policy is also related to the pecking order theory which states that if a company requires funds, the main priority is to use internal fund which is called retained earnings, because of asymmetric information, external funding is less desirable. If external funding is needed, the priority is debt, then the converted equity, and then the issuance of new shares. This theory occurs when asymmetric information indicates that managers know more about the prospects, risks, and values of the company than outside investors.

The trade-off theory argues that a firm is faced with increased financial risk when obtaining tax saving from debt financing (Kraus and Litzenberger, 1973) in Chen et al., (2013) and the optimal capital structure can be achieved when the marginal present value of the tax shield is equal to the marginal present value of the costs of financial distress arising from additional debt (Warner, 1977) in Chen et al., (2013). In actual conditions, there are things that make the company unable to maximize the debt as much. This is because the higher the debt the greater the interest to be paid. The company will owe up to certain debt levels, where the tax savings from additional debt equals the cost of financial difficulties. The cost of financial difficulties is the cost of bankruptcy or reorganization, and the increased agency costs resulting from the decline of a company's credibility. According to Megginson (1997, 322), there are several factors included in the trade-off theory in determining optimal capital structure such as: taxes, agency costs, asset characteristics, ownership structure, and costs of financial difficulties. However, this still maintains the assumption of market efficiency and asymmetric information as consideration and benefits of using debt. Achievement of optimal debt level is reached when the tax savings reached the maximum amount of the cost of financial distress. Financial distress is a condition in which a company experiences financial difficulties and is threatened with bankruptcy. If the company goes bankrupt, then bankruptcy costs will arise which are caused by compulsion to sell assets below market prices, company liquidation costs, and so on (Sjahrial, 2010, 202).

2.1 Institutional Ownership and Capital Structure

According to the agency theory, Jensen and Meckling (1976) described that total agency costs could be minimized by the optimal structure of leverage and ownership, but no clear predication is concerned with the relationship related to debt level (Huang and Song, 2006) in Lim (2012). Agency theory suggests that ownership structure is correlated with financing decision due to conflicts of interests between different stakeholders (Chen, 2013). Furthermore, Myers and Majluf (1984) in Sias (2004) stated that if institutional information – gathering and trading produces information, the adverse selection costs of equity may decline, thus leading firms to tilt toward a higher percentage of equity financing in their capital structures, and institutional holding and debt would be substitutes. According do Douma, George, and Kabir (2003) in Pirzada et al. (2015), the firms with higher level of debt, cost of capital would be higher. In such scenario, a firm will have to perform better than it would have been otherwise. McConnell and Servaes (1995) in Pirzada et al., (2015) argued that firm value and capital structure could be closely correlated. On the one hand, high leverage may reduce the agency cost of outside equity, and increase firm value by encouraging managers to act more in the interest of shareholders. More efficient firms may also choose higher equity capital ratios, all else equal, to protect the rents or franchise value associated with high efficiency from the possibility of liquidation. If leverage is relatively high, further increases may generate significant costs including bankruptcy cost and may thus lower firm value.

H1: Institutional ownership has a significant effect on capital structure.

2.2 Profitability and Capital Structure

Profitability measures the effectiveness of the business in generating profits. According to the capital structure theory, Myers and Majluf (1984) in Lim (2012) demonstrated that firms have a pecking order in funding their activities and they preferred internal finance to external finance. This theory predicts that the relationship between profitability and capital structure is negative. Generally, firms with higher profitability tend to create more capital flow to enterprises and then the sufficient retained earnings internally generated could be utilized as internal finance. However, the signalling theory predicts a different opinion that profitability and financial leverage is positively correlated. Higher leverage indicates the good performance of business, thus managers and investors are more confident about future operation. Jensen (1986) in Lim (2012) pointed out that the relationship is likely to be positive, while Titman and Wessles (1988) in Lim (2012) predicted that larger firms may tend to have a higher debt capacity. Modigliani and Miller (1963) in Vo (2017) state that a company may opt for debt in order to take advantage of tax shields. Moreover, (Friend and Lang, 1988; Harris and Raviv, 1991: Rajan and Zingales, 1995; Booth et al., 2001: Sbeti and Moosa, 2012) in Vo (2017) stated that the relationship between the capital structure and profitability is both theoretically and empirically controversial. In the trade - off theory, more profitable firms should have higher leverage because they have more income to shield from taxes (Acaravci, 2015), but in the pecking – order theory, firms prefer internal financing to external. So more profitable firms have a lower need for external financing and therefore should have lower leverage (Bauer, 2004) in Acaravci (2015). Under the agency cost theory, Williamson (1988) in Chen (2013) argued that debt can be seen as a disciplining device for managers to ensure they maximize profit for shareholders rather than go on an excessive pursuit of firm growth. La Rocca et al. (2009) in Vo (2017) argue that more profitable firms are more likely to borrow more in order to benefit from the tax shield.

H2: Profitability has a significant effect on capital structure.

2.3 Tangibility and Capital Structure

Most of the empirical researches confirm that the tangibility of assets affect the firms' capital structure. Based on the agency cost theory created by Jensen and Meckling (1976) in Lim (2012) there is a positive relationship between the fraction of tangible assets and capital structure. An enterprise with a high proportion of fixed assets is expected to be associated with high ability to repay their liabilities, thus more opportunities to raise that financing. Both the agency theory and trade – off theory suggest that tangible assets are important and positively determine capital structure. On the one hand, because tangible assets can be used as collateral, a high fraction of tangible assets allows the firm to obtain external finance easily resulting in a high leverage (Titman and Wessels, 1988: Sbeti and Moosa, 2012) in Vo (2017). Moreover, the tangibility of the firm's assets is closely associated with agency cost of debt and the cost of financial funds (Myers, 1977; Booth et al., 2001) in Vo (2017). Jensen and Meckling (1976) in Vo (2017) affirm that if firms do not have collaterals for their debt, moral hazard and hence agency costs of debt increase. Tangible assets are more valuable on the market than intangible assets in the case of bankruptcy, and so bondholders will demand lower risk premiums. Tangible assets can also mitigate concerns over insider resource expropriation. Moreover, the use of collateral plays a more important role in countries where creditor protection is relatively weak, and it is commonly accepted that emerging countries are in this weak creditor protection group (La Porta et al., 1998) in Vo (2017). Myers (1984) stated that firms holding tangible assets – in – place of having active second – hand markets will borrow less than firms holding specialized, intangible assets or valuable growth opportunities.

H3: Tangibility has a significant effect on capital structure.

2.4 Liquidity and Capital Structure

Liquidity ratios may have a mixed impact on the capital structure decision. On the one hand, a negative relation between capital structure and liquidity is expected because if firms are having more debt, they would have the associated higher liabilities and lower remaining current assets (Ozkan, 2001) in Vo (2017). Moreover, the agency theory suggests that when the agency costs of liquidity are high, outside creditors tend to reduce the debt financing limit available to firms (Myers and Rajan, 1998) in Vo (2017). If firms follow the financing hierarchy of the pecking order theory for their capital structure decision, it results in a negative link between liquidity and financial leverage (Sbeti and Moosa, 2012) in Vo (2017).

Liquidity has a significants effect on leverage but the former can have a positive or negative effect on the capital structure decision; thus, the net effect is unknown (Mouamer, 2011) in Ghasemi and Razak (2016). Moreover, liquidity has a significant effect on conservative debt policy when the company has ample liquid assets; hence, conservative policies are necessary to ignore potential risks. Overall, there is no universal theory for choosing between debt and equity. In other words, there are some helpful conditional theories (Akinlo, 2011) in Ghasemi and Razak (2016). Submitter and Anderson (2002) in Ghasemi and Razak (2016) also demonstrated the positive relationship between liquid assets and long – term debt characteristics of capital structure with holding liquid asset as a precautionary solution. They also showed a negative relation between liquid assets and short – term borrowings of the firm, assuming the substitute financing role for them in situation of lack of cash. Anderson and Carverhill (2007) in Ghasemi and Razak (2016) find that higher levels of long – term debt will result in more reduction in the optimal use of short – term debt and higher levels of liquid asset holding. Sarlija and Harc (2012) in Ghasemi and Razak (2016) also find that there were statistically significant correlations between leverage ratios and liquidity ratios. Moreover, there were statistically significant correlations between the structure of current assets and leverage ratios.

H4: Liquidity has a significant effect on capital structure

3 METHODS

The population of this research is sub-sector automotive and component companies that have been listed in Indonesia Stock Exchange from 2013 until 2017. This research uses purposive sampling to determine its samples. This research uses 11 companies and 55 data for sample. It is analysed by using multiple regression analysis. This table below shows the list of the company selected:

Table 1: Research Samples.

No	Ticker	Company
1	ASII	Astra Internasional
2	AUTO	Astra Otoparts
3	GJTL	Gajah Tunggal
4	GDYR	Goodyear Indonesia
5	BRAM	Indo Kordsa
6	IMAS	Indomobil Sukses International
7	INDS	Indospring
8	LPIN	Multi Prima Sejahtera
9	MASA	Multistrada Arah Sarana
10	NIPS	Nipress
11	PRAS	Prima Alloy Steel Universal

The dependent variable in this study is capital structure, which is how the company funds its operating activities using debt. This dependent variable is measured using a ratio scale. This method of measurement refers to the research conducted by Acaravci (2015) by dividing total debt to total equity. The equation for base model may follows as:

$$\text{Debt equity ratio} = \alpha + \beta 1\text{institutional ownership} + \beta 2\text{profitability} + \beta 3\text{tangibility} + \beta 4\text{liquidity} + \varepsilon$$

Institutional ownership (INST) is used to see whether there are shares owned by institutions during this research period. This variable measurement is measured by the proportion of shares held by institutions in the form of percentages (%). This method of measurement refers to research conducted by Chen, et al., (2014).

Profitability (PROF) is the company's ability to generate profits in the future. This variable is measured using a ratio scale. Profitability is formulated by dividing the operating income with total asset (Rajan and Zingales, 1995) in Vo (2017).

The ratio fixed assets over total assets will be the indicator of tangibility (TANG) in this paper. The measurement is the same as Rajan and Zingales (1995) in Lim (2012).

In this study, liquidity (LIQ) is calculated as the ratio of current assets to current liabilities at year end (Vo, 2017).

4 RESULTS

This table below is the sample's descriptive statistics.

Table 2: Descriptive Statistics.

	der	inst	prof	tang	liq
N Valid	55	55	55	55	55
Mean	1.243	0.6376	0.2034	0.5676	1.5816
Std. Deviation	1.236	0.2023	2.2136	0.0971	0.9360
Minimum	0.13	0.259	-10.91	0.3215	0.5228
Maximum	8.26	0.9417	7.84	0.7511	5.1662

The result of the statistical test can be seen in hypothesis result shown in table 3 below:

Table 3: Hypothesis Result.

Model	B	t	Sig.
(Constant)	3.269	2.754	0.008
INST	-0.238	-0.300	0.765
PROF	-0.112	-1.553	0.127
TANG	-1.740	-1.054	0.297
LIQ	-0.546	-3.199	0.002
Adjusted R-Square	0.137		
F-Statistic	3.139 (0.022)		

Table 3 shows that institutional ownership has no effect on capital structure. This results is not consistent with Chen, et al. (2014) and Lim (2012). More or less, the institutional ownership has no effect on firms' capital structure. Profitability has no effect on capital structure. Most of the companies are big companies, so the finance of their operation are not based on the capital structure. This result is not consistent with Chen, et al. (2014) and Lim (2013). Tangibility has no effect on capital structure. The firms' capital structure do not depend on the size of assets because the assets itself can generate profit to the company. This result is not consistent with Chen, et al. (2014) and Lim (2013). Liquidity has a negative effect (-0.546) on capital structure. This result is consistent with Vo (2017). It means that company with higher liquidity tend to borrow less debt in the automotive and component companies, because the companies still have enough cash to cover their short-term obligation. On the other hand, the firms' working capital turnover is in a good condition. This result is also consistent with the value 0.137 of adjusted R-Square which means the capital structure can be explained by the independent variable (13.7%) and the remaining 86,3% is explained by other factors not included in the model.

5 CONCLUSIONS

The result of this research shows that institutional ownership, profitability, and tangibility have no effect on firms' capital structure. On the other hand, liquidity has a significant effect on firms' capital structure. Generally, in the models, firm specific variables have significant influences on firms' capital structure. From the hypothesis result in Table 2, we do not find evidence that institutional ownership and tangibility have a significantly effect on capital structure as described by Jensen and Meckling (1976) in agency cost theory, nor the damage from overwhelming of debt financing. In fact, Indonesia is in the first place of automotive exporting country in ASEAN from 2013 until 2017. This is also the reason for companies for using their profitability without depending on debt. Finally, we found that the effect of liquidity on firm's capital structure is explained through increased liquidity that reduces firm's debt.

6 SUGGESTION AND LIMITATION

This research has some limitations which are: using only the five years period of 2013-2017, consisting only of automotive and component companies listed in IDX, and using only four independent variables. We do suggest to add an additional period of the research, using more samples not only in Indonesia but also in ASEAN countries, and further research may add other variables such as free cash flow, growth opportunities, and dividend payout ratio to see more briefly what factors can affect the firms' capital structure, so the companies can consider some factors to focus on regarding the firms' financing.

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