Determinants of Capital Structure and Impact Capital Structure on Firm Value

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Abstract: Some theories explain the differences of capital structure for any company. As a result, it is important to review capital structure to increase firm value, especially manufacturing companies in Indonesian Stock Exchange (IDX), which is mostly labor intensive. The purpose of this study was to analyze the influence of CEO ability, profitability, NDTS, cash flow and CEO ownership on capital structure (LTDE and LTDA), and the impact of capital structure (LTDE and LTDA) on firm value. The study was conducted at manufacturing companies in IDX. Observation period are 2006-2010. CEO ability and CEO ownership determines capital structure (LTDE), while profitability and cash flow NDTS does not affect. Furthermore, CEO ability, profitability, NDTS and CEO ownership determines capital structure (LTDA), but cash flow does not affect. Capital structure (LTDE and LTDA) determines firm value. Enterprise value is more determined by companies that use the overall assets in operational activities compared to companies that only rely their own capital. This research uses pecking order, trade-off and asymmetric information theory.

Keywords: CEO ability, CEO ownership, capital structure, corporate value.

I. Introduction

Capital structure decisions have a strategic role for owner welfare and company survival. Many theories have emerged to explain the difference in capital decisions for any company. Capital structure theory [20], assuming no taxes, reveals that capital structure decision does not affect firm value. Assets value is determined by operating cash flow rather than capital structure. Furthermore, [21] examines this concept by considering tax, stating the firm value was affected by capital structure. If company uses debt, firm value will increase. Firm value that using debt equal to firm value that do not use debt plus tax protection. The implication was the higher debt used, the higher firm value. This is because the return shareholders are paid from after-tax income, while the return to debt holder is paid from pre-tax income. Thus, the debt usage resulting after-tax income for shareholders become larger than if company does not use debt. However, the use of higher debt can lead to financial difficulties.

Therefore, funding decisions should be carried out effectively and efficiently to improve shareholders or owners welfare. Shareholders welfare are shown from increasing firm value or share price, as a reflection of funding decisions [30]. High firm value indicates owner high level welfare. Firm value, other than stock prices measure, can also be measured by using a dividend yield [14]. Average stock prices of manufacturing companies in Indonesia Stock Exchange (IDX) in 2005-2009 show an increase. The average share price in 2005 are Rp. 4,997,-, up to Rp. 7,077, - in 2007, dropped to Rp. 6,667, - in 2008, and increased to Rp. 14,279, - in 2009. The growth rate of average stock price from 2005 to 2009 is 32.05% per year. The dividend yield has increased too. 2005 showed the average value of 4.12%, increasing to 11.19% in 2008 and dropped to 2.54% in 2009. Overall, the average dividend yield grew by 33.37% per year (data compiled from Indonesian Capital Market Directory 2010).

The phenomenon of increasing corporate value, indicated by an increase in stock prices in manufacturing companies on Indonesia Stock Exchange, occurred in company's capital structure. They generally more likely to use their own capital than debt, especially in 2009. The total debt was Rp. 2,111,080 million compared from its own capital by Rp.2.420.036 million (data processed from the Indonesian Capital Market Directory 2010). This condition is contrary to theory [21] which states that additional debt usage will increase firm value because of tax savings from interest expense of corporate debt. How do managers give a positive signal to show company performance in the form of high debt portion of capital structure. Investors can distinguish the company performance by looking at capital structure and investor will provide a high value on companies with large debt portion [25]. The manufacturing industry in Indonesia is still too much use debt. Therefore, the use of debt lead to lower firm value [29]. Additional usage will reduce the company debt value. Company debt that exceeded the optimal limit will cause financial distress and agency costs greater than tax savings from interest payments on debt [27].

This study analyzes and explains the influence of CEO ability, profitability, non-debt tax shield (NDTS), cash flow and CEO ownership on capital structure, proxied by long-term debt to equity (LTDE) and long-term debt to total assets (LTDA) as independent variable, then influence capital structure (LTDE and LTDA) on firm value. The reason the separation of capital structure (LTDE and LTDA) as the independent variable is to analyze and explain the effect of a company capital structure based their own abilities or equity, as opposed to relying on overall assets to fund operational activities in increasing firm value.

The study was developed by integrating research aspects of outside the accounting database. It uses a CEO decision-making ability in capital structure to enhance firm value. Research [5] analyze the effect of CEO ability and CEO ownership on capital structure but have not connected to firm value. In this study the ability and the CEO ownership associated with firm value through a capital structure to analyze and explain the CEO and the CEO contribution ownership ability to influence the determination of capital structure to enhance firm value. Investments in profitability variable, and cash flow NDTS (operational cash flow) as part of an internal fund source was to determine the contribution the use of funds sources generated from operations, affect the determination of capital structure to enhance firm value. CEOs who have the ability to manage company and include capital in the form of shares, will more serious and improve profitability or internal funds, as a form of owner welfare, due CEO also have company share.

II. Theory and Hypothesis Development

Ability is an individual's capacity to do various tasks in a job [24]. A CEO perform tasks according to field expertise. He should have a certain ability. CEO ability reflected by tenure, namely number of years served as CEO for this time [5]. Tenure, when expressed as seniority and years of work experience, demonstrate a positive relationship with firm performance [24]. The CEO ability increase will affect significantly and negatively on capital structure. This is shown by a decrease in long-term debt [5]. That is, the higher CEO ability, the higher the ability to generate internal fund sources through retained earnings. This minimizes the use of long-term debt. Companies with more experienced CEOs get higher profits [16]. Therefore, the hypothesis are:

- H1.1: The higher CEO ability, the lower use of debt in capital structure that proxied by LTDE.
- H2.1: The higher CEO ability, the lower use of debt in capital structure that proxied by LTDA.

Profitable companies do not need to use more debt, because they could use retained earnings as a source of internal funds [6]. High profit firms use relatively little debt [3]. The results of previous studies finding show profitability negatively affect capital structure [5,23,1,8,17]. Therefore, the hypothesis are:

- H1.2: The higher the profitability, the lower use of debt in capital structure that proxied by LTDE.
- H2.2: The higher the profitability, the lower use of debt in capital structure that proxied by LTDA.

NDTS is tax benefit that charged on non-cash depreciation and amortization in income statement [32, 22]. NDTS is the substitution of tax benefit due to the debt financing [9]. The results of empirical studies find that NDTS negatively affect capital structure [10,12,15,26,8,33]. The larger depreciation, the greater tax savings. It is a source of internal funds, which can reduce the use of debt. Therefore, the hypothesis are:

- H1.3: The higher non-debt tax shield, the lower use of debt in capital structure that proxied by LTDE.
- H2.3: The higher non-debt tax shield, the lower use of debt in capital structure that proxied by LTDA.

Cash flow in this study is cash flow from operating activities to finance assets. Results showed cash flow negatively affect capital structure [13,4,18,33]. The higher cash flow from operating activities, the higher internal funds availability, thereby reducing the use of debt. Therefore, the hypothesis are:

- H1.4: The higher cash flow, the lower use of debt in capital structure that proxied by LTDE.
- H2.4: The higher cash flow, the lower use of debt in capital structure that proxied by LTDA.

Managerial ownership shows the shares owned by management. This is measured by the percentage of shares owned by management [22]. CEO ownership is part of the managerial ownership that showing CEO share ownership. This is measured by the ratio between CEO stock ownership and the number of company shares [5]. CEO ownership significantly and negatively related to capital structure, proxied by long-term debt to assets, short-term debt to assets [5]. Managers Ownership significantly and negatively affect capital structure [2, 18, 15, 22]. Managers Ownership does not affect capital structure, because there is not a clear separation between ownership and control in manufacturing companies in the Jakarta Stock Exchange [27]. Thus, the hypothesis are:

- H1.5: The higher CEO ownership, the lower use of debt in capital structure that proxied by LTDE.
- H2.5: The higher CEO ownership, the lower use of debt in capital structure that proxied by LTDA.

The use of debt will lead greater profits from tax utilization, as long as the balance between the cost of debt and tax benefits can be optimized. Capital structure theory explains that increase in debt, in addition to providing tax saving benefits, can also lead to financial distress. Companies with a higher debt will face a high risk of financial distress because of the interest they have to pay [28]. Company with good performance can signal as higher use of debt in capital structure and company with bad performance would not dare use because it increases the chances of bankruptcy [25]. Investors will give a higher value to company with a higher debt portion.

Trade-off theory explains that debt above optimum point level will cause greater present value of financial distress and agency costs than the present value of tax savings,. Addition of debt actually reduce firm value [21]. The findings of [19.11, 12.31, 7] showed a significant positive effect of capital structure on firm value. Trade-off theory will explains an optimal capital structure in the event a balance between the tax cost and agency costs with financial distress [21]. Thus, the hypothesis are:

- H3.1: The higher capital structure that proxied by LTDE, will further enhance firm value.
- H3.2: The higher capital structure that proxied by LTDA, will further enhance firm value.

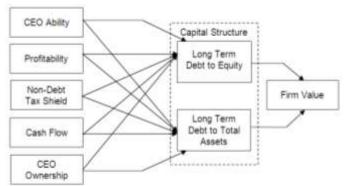


Figure 1: Research Conceptual Framework

III. Research Methods

This study uses a quantitative approach (positives) and supported by in-depth interviews. The study was conducted at a manufacturing company in Indonesia Stock Exchange (IDX). The study period is 2006 to 2010. The population is 160 companies. Due the number of population is known, the criteria for selecting companies are (1) company has been listed on the Stock Exchange since 2005, since the study period beginning in 2006 to 2010. (2) the financial statements of companies have no negative earnings and equity. (3) can be determined tenure of CEO or managing director and having ownership stake in the annual report and/or financial statements. The firms who meet the criteria are 20, so the number of observations is 100 observations (5 years x 20 companies). Thus, this study using census or a saturated sample. The type data is secondary and primary. Secondary data collection techniques was documentation pooled data, while the primary data is collected using in-depth interviews with some CEO to get in-depth explanation of related variables studied. The method of data analysis is Path Analysis with SPSS 17 for Windows and supported by qualitative information.

IV. Results and Data Analysis

4.1. Hypothesis Testing

Path analysis is used to estimate the causal relationship between variables. Regression analysis is used to address the effect between variables and testing hypothesis. Path coefficients are seen from standardized beta coefficients. Path coefficients tests conducted with positive allegation. The hypothesis would be supported if the value of t-calculation > t-table. For negative test, the hypothesis is supported if the value of t-calculation <t-table. Table 1: Results of Hypothesis Testing

Independent Variable	Dependent Variable	Beta Coefficient (β)	t-count	p- value	Description
CEO Ability (CEOA)	LTDE	-0.201	-1.988	0.047	Significant
Profitability (PRFT)	LTDE	-0.130	-1.307	0.194	Insignificant
Non-Debt Tax Shield (NDTS)	LTDE	-0.170	-1.687	0.095	Insignificant
Cash Flow (CF)	LTDE	0.027	0.275	0.784	Insignificant
CEO Ownership (CEOO)	LTDE	0.205	2.109	0.038	Significant
CEO Ability (CEOA)	LTDA	0.305	3.215	0.002	Significant
Profitability (PRFT)	LTDA	-0.230	-2.461	0.016	Significant

Non-Debt Tax Shield (NDTS)	LTDA	-0.268	-2.828	0.006	Significant
Cash Flow (CF)	LTDA	-0.106	-1.148	0.254	Insignificant
CEO Ownership (CEOO)	LTDA	-0.308	-3.382	0.001	Significant
Capital Structure (LTDE)	Firm value	0.223	2.333	0.022	Significant
Capital Structure (LTDA)	Firm value	0.277	2.897	0.005	Significant

The test results of path coefficients of CEO ability on capital structure that proxied by LTDE (β = -0.201, t-count = -1.988 <t-table = -1.984, P = 0.047 <0.05) is significant and supports H1.1. Path of profitability capital structure that proxied by LTDE (β = -0.130, t-count = -1.307> t-table = -1.984, P = 0.194 <0.05) are not significant and does not support H1.2. Non-debt tax shield (NDTS) test to capital structure that proxied by LTDE (β = -0.170, t-count = -1.687> t-table = -1.984, P = 0.095> 0.05) are not significant and do not support H1.3. Path of cash flow (CF) to capital structure that proxied by LTDE (β = 0.027, t-count = 0.275> t-table = -1.984, P = 0.784> 0.05) are not significant and does not support H1.4. Path coefficient test of CEO ownership on capital structure that proxied by LTDE (β = 0.205, t-count = 2.109> t-table = -1.984, P = 0.038 <0.05) were significant but did not support H1.5.

The test results of CEO ability on capital structure that proxied by LTDA (β = 0.305, t-count = 3.215> t-table = -1.984, P = 0.002 <0.05) is significant but does not support H2.1. The test result of profitability on capital structure that proxied by LTDA (β = -0.230, t-count = -2.461 <t-table = -1.984, P = 0.016 <0.05) is significant and supports H2.2. Path of non-debt tax shield (NDTS) on capital structure that proxied by LTDA (β = -0.268, t-count = -2.828 <t-table = -1.984, P = 0.006 <0.05) is significant and supports H2.3 . Path of cash flow (CF) on capital structure that proxied by LTDA (β = -0.106, t-count = -1.148> t-table = -1.984, P = 0.254> 0.05) were not significant and does not support H2.4 . The test of CEO ownership on capital structure that proxied by LTDA (β = -0.308, t-count = -3.382 <t-table = -1.984, P = 0.001 <0.05) is significant and supports H2.5. The test results capital structure that proxied by LTDE on firm value (β = 0.223, t-count = 2.333> t-table = 1.984, P = 0.022 <0.05) were significant. The path of capital structure that proxied LTDA on firm value (β = 0.277, t-count = 2.897> t-table = 1.984, P = 0.005 <0.05) is significant. Thus, H3.1 and H3.2 support.

V. Discussion and Conclusion

5.1. Determinants of Capital Structure (LTDE)

CEO ability is reflected by the number of years in CEO positions. This could explain the variation capital structure changes that proxied by LTDE. The increase in CEO ability could encourage an increase profit from company operating activities. This is due to the increased experience and knowledge during his tenure. Increased profits will increase internal funds on their own capital, so the use of debt in company capital structure is low. During 2006-2010, the average CEO tenure is 15.89 years (15 years 11 months), the growth rate of 4.41% per year. Average capital structure (LTDE) is 38.54%, decreasing 5.89% per year. This implies that longer the CEO duration, further higher CEO ability to manage company. DS informant stating that:

"... Period of employment or tenure will build field expertise. So if the expertise increase then the performance would increase ... because other people also recognize the expertise ... expertise he used for something useful, so its performance is definitely improved ... "

Profitability is not able to explain the variation in capital structure changes for manufacturing companies listed on Indonesia Stock Exchange. Increased profitability does not affect capital structure (LTDE) in companies that rely their ability of their own capital in shaping capital structure. It is appropriate for 2006-2010 empirical fact that average profitability reaching 9.67%, the growth rate of 2.00% per year. The ratio of long term debt to equity (LTDE) for the same period averaged 38.54%, with a tendency to decrease 5.89% per year. Low profitability levels are not able to support the availability of equity capital through retained earnings. That is, capital structure (LTDE) is not determined by profitability, but rather is determined by funds from the debt. For example, by extending the re-use of short-term debt to reduce the burden of higher interest when using long-term debt. Empirical data show that growth of short-term debt was higher, on average 25.97% per year, compared to average equity 11.68% growth per year, and long-term debt 25.05% per year. In addition, company generate all earnings in cash and do not have to wait maturity to be able to turn into cash. BS informant suggested that:

"... actually, to company's management, the key word is not profitability but the availability of cash. So the availability of cash is more important than profits ... ".

NDTS not determine changes in capital structure (LTDE). Low financial resources from non-cash depreciation (average NDTS reached 3.58% with a tendency to decrease 4.88% per year) is only a small part of company's internal financial resources. This does not significantly increase internal funding sources to substitute the use of long-term debt that companies rely more on their own capital in capital structure.

Depreciation rates tend to decline each year. It could reduce the availability of internal funds of capital itself. It does not simply provide a source of funds to finance new investment depreciation in anticipation the technology development. Interview with Mr. DS said that:

"Depreciation new investment should be directed to ... anticipate changes in future technology... depreciation invested immediately to a technology change..."

Companies depreciation should be used to make new investments by considering technology changes. This can be done so that products produced by company in accordance with consumers tastes as a result of technological progress. Companies that do not respond to technological developments will make product that market demand. Consumers will switch to other products that have technological development.

Cash flow does not determine capital structure (LTDE). Low cash flow from operating activities as part of internal fund sources do not become substitutes for use of long-term debt. Thus, company needs to use alternative funding from other sources, primarily using debt to finance its operations. The results of interview with Mr. BWS stated that:

"... Why cash flow is important, since money is company blood, you may claim a lot profit, but if there is no blood you will die too..."

Cash flow as a source of corporate funds meant like blood in the human body. If not enough blood available, then our bodies become weak and even cause death. Even so, companies need adequate funding to support their life in order to survive. Company should have sufficient funds to fund all operational activities in order to increase the owner welfare. Alternative funding to use is extend the re-use of short-term debt to minimize higher interest expense when using long-term debt.

CEO ownership determines an increase in capital structure (LTDE). The period 2006-2010 showed that average CEO ownership is 1.90% with a growth rate of 1.65% per year. That is, the total assets of company is funded by CEO ownership of 1.90%. The low CEO ownership is not significant to add company's own capital. It is, causing company to find alternative funding that the to finance its business loans. This same with interview results from Mr. DS who argued that:

"... If management also have stock, it means he put equity, then equity increases. If company's debt capacity was limited, the equity becomes good. But if debt is not a problem, then the equity increase is not good, because the cost of debt is lower than the cost of equity ... I better get a loan because the cost of debt is cheaper ... "

The results of interview above implies the increasing CEO ownership will increase company's own capital. If the ability to obtain debt is limited, the use of own capital is better. But if the use of debt is not the problem, then use of own capital is less profitable, because the cost of debt is lower than the cost of equity. Consequently, the increase in CEO ownership gets a negative response from capital market investors. Interview with Mr. CH who argued that:

"... Maybe, because we (CEO) stay in company, understand how much the profits, so we (the CEO) can be buy and sell ... we are considered to have better information than other shareholders, so it is considered not fair ... if the CEO have many share, it will respond negatively because the concern of naughty act... ".

The increase in CEO ownership could make them act as opportunist because there is asymmetry information. CEOs are considered to have more information about company than the other investors in capital market. As a result, CEO ownership does not respond rightly to company's signal outlook. To that end, company may use load in meeting the funds needs. It is inline with Mr. DS that:

"... for example, with CEO ownership, they can not make a capital structure change, but with their experience and ability... he had a networking and get a cheaper source of funding ... So basically, weather CEOs have a good networking or not ... "

5.2. Determinants of Capital Structure (LTDA)

CEO ability increased capital structure (LTDA). Longer CEO position will enhance the experience and ability in company management. With their experience and capabilities, the CEO will enhance his reputation. CEO of high reputation will get confidence to obtain loans. That is, the higher CEO ability, the higher confidence of lenders to give loans. It encourages companies to use long-term debt to fund its business. During 2006-2010, the average CEO tenure is over 15.89 years (15 years 11 months) with an average growth of 4.41% per year, while average capital structure (LTDA) average of 11.55% with downturn 1.72% per year. This implies that an increase in the ability of the CEO is less encouraging the increase of their own capital to finance its operations through retained earnings. Average levels of capital structure (LTDA) 11.55% implies that 11.55% of company's total assets financed with long term debt. This provides an opportunity for companies to increase the use of long-term debt. Thus, capital structure is determined by the CEO from their ability to get a loan from other cheaper funds sources. The analysis showed long CEO tenure does not guarantee high ability in

improving company's internal funds sources through retained earnings. The results of an interview with Mr. CB stated that:

"... CEO tenure do not have value added if he does not make many ideas or positive decisions to increase profits, ... such as efficiency and make innovation or creativity in company ... someday maybe he will be replaced."

The statement implies that although CEO tenure was long, but if he does not have a significant contribution to increasing company profits, his tenure was not much role to increase its own capital from retained earnings. If the condition persists, company's dependence on debt funding will bigger.

The findings of this study show the higher CEO ability, the higher long-term debt usage in capital structure (LTDA). The high long-term debt is more determined by the CEO ability. It has good relations with those who have a good personal relationship. Interview with Mr. DS suggested:

"... for example, if there is no other way, his ability and experience can not make a capital structure change, but with his experience and ability... he has networking then he get a cheaper source of funding ..."

The results of interview above implies that skills and experience of CEO creates good networking and can obtain cheaper funds sources . The need for more funds as determined because the company was reliable and has a good reputation, supported by the CEO networking with parties who have a special relationship, so get cheaper funds.

Profitability can explain variations in capital structure changes (LTDA). On company capital structure composition with assets used for its business, then the additional income from operating activities could determine capital structure (LTDA). That is, the higher profitability, the higher internal funding through retained earnings, thus increasing equity in capital structure. Increasing equity would reduce the use of long-term debt in capital structure. During the 2006-2010 period, average profitability reached 9.67% with a growth rate of 2.00% per year. While the ratio of long-term debt to total assets (LTDA) for the same period averaged 11.55% with decreasing 1.72% per year. Thus, the increase in profitability was followed by a decrease in company's capital structure. Higher profitability imply higher availability of internal funds come from retained earnings. To finance investment the company can easily meet the funding needs from their own abilities. Interview with Mr. CH show that:

"... If the money in company do not be shared... if company has prospects, why it should inhibited from the financial aspect ... company can move forward because of two things, money and people, while the technique or technology can be bought ..."

NDTS able to explain the decline in capital structure (LTDA). Depreciation is part of the internal funds sources that can be used to finance assets, as a substitution for the use of debt by company. During the 2006-2010 period, average NDTS reached 3.58%. While average capital structure (LTDA) for the same period is 11.55%. That is, capital structure (LTDA) is determined by the depreciation of 3.58%. Depreciation become source of funds where you can add to their own capital to fund company's assets. The composition of company's capital structure more rely on total assets in normal business condition. The addition of non-cash funding from depreciation could determine capital structure (LTDA). Interview with Mr. CB, which states that:

"... The non-cash funds source that used to invest will increase company capital, especially for the rejuvenation of fixed assets owned, by replacing assets that are not reliable anymore with more reliable".

Additional depreciation will increase company's internal financial resources, as a substitute of long-term debt usage. Sources of funding should be used to fund the depreciation of company assets, replacing the fixed assets economical with more productive one. A more productive asset will increase production capacity and sales and increase its income. The revenue generated could be used to finance company's depreciation expense that would be a source of non-cash fund. The availability of non-cash fund for depreciation will increase the availability of internal funds, thereby expanding company's own capital.

Cash flow is not able to explain the variation the changes in capital structure (LTDA). The results of this study indicate that number of long-term debt composition is not determined by cash flow from company operating activities. Operating cash flow was low, as part of funds source that used to finance the entire asset, not a substitute for the use of long-term debt in company capital structure. During the period 2006-2010, the average cash flow reached 6.13%, the growth rate of 37.31%. The average ratio of long-term debt to total assets (LTDA) reached 11.55%, with a tendency to decrease 1.72% per year. This suggests the growth in cash flow can improve company's internal financial resources, but does not specify the decrease of company's capital structure. Company with a low cash flow needs debt to meet fund need. The results of an interview with Mr. BWS show that:

"... Why cash flow is important, because money is company blood, you may claim a lot profit, but if there is No. blood you will die too right there ..."

The results of interview above implies that cash flow generated from company operating activities should be available rightly, to ensure the funds availability to finance assets. Cash flow is interpreted like blood in the human body. If there is not enough blood, it will cause your body to become weak and even cause death. Even so with company, requires adequate funding in order to survive.

CEO ownership can explain the increase in capital structure (LTDA). CEO ownership is part of company's own capital. CEO ownership increase will increase the amount of own capital thereby reducing capital structure. The average CEO stock ownership reaches 1.90% from total shares outstanding, by 1.65% per year growth. Average capital structure (LTDA) over past five years reached 11.55%, decreasing 1.72 per year. Thus, the decline in capital structure is determined by the CEO stock ownership 1.90%. Interview with Mr. DS, which suggests that:

"... If management also have shares, it means he put equity, then the equity increased".

CEOs are the ones who are considered to have more company information than others. That is, there is information asymmetry between CEO and investors in capital market. If the management company wants to maximize current stockholder value, there is a tendency company will has good prospects. Management will not issue new shares but use retained earnings in order company prospect enjoyed by current stockholders. But if the prospect of corporate is unfavorable, management will issue new shares to raise funds. This will benefit current stockholders because their responsibilities reduced. The problem is the investors know that trends, so they see the new shares offer as bad news signal and firm value tends to fall when the new shares issued. This prompted company to issue bonds or debt rather than issuing new shares.

5.3. The impact of capital structure (LTDE and LTDA) on Firm Value

Capital structure, measured by LTDE and LTDA, can explain the changes variation of firm value, measured by Tobin's Q. This shows, the bigger long-term debt in capital structure (LTDE and LTDA), the higher firm value. The firm value higher due to tax savings if using higher long-term debt than agency costs. These conditions indicate capital structure of manufacturing company in Indonesia capital market has not reached optimum point yet.

The findings confirmed that firm value is determined by company that using more overall assets (LTDA) in financing operational activities than if only rely on their own capital (LTDE). During the 2006-2010 period, average value of capital structure (LTDE) is 38.54% and average capital structure (LTDA) is 11.55%. Average firm value that proxied by Tobin's Q over the same is 80.45% with 4.41% growth per year. That is, companies more rely on their own capital and overall assets to finance its operational activities to enhance firm value. Average levels of capital structure (LTDE) of 38.54% still allow company to increase the use of long-term debt. But it is possible for a company that promotes overall assets to fund operational activities. Capital structure (LTDA) average 11.55% indicates, the number of long-term debt composition is still relatively low compared to capital structure (LTDE). This shows high proportion of total assets is security, not long-term debt. Thus, company that prioritizing its overall assets for funding is more likely to increase the long-term debt in capital structure due it enhance firm value. The results of an interview with Mr. DS who argued:

"... If company debt increases, the firm value also increases. But there is a limit, the limit is bankruptcy variable, the bankruptcy threat if its debt is 100%, there is shock, then he can go bankrupt ... like my cement companies get safe rate with MUDI three times per EBIDA. Therefore, if debt rise, the firm value's will go up, but there is a threat, that we must sought debt structure per equity that optimal... now use debt or equity as capital. If the debt is still safe, then use debt first, cost of debt was cheap, so first we need a debt financing, to the extent that its structure is still strong ... now there's a question ... My new factory built with full cash, internal cash, why not with debt, I do not borrow ...its cost of money ... I had the money I put in deposits, it will get a return of 6%, but if I borrow debt, I had to pay 10%, then I don't want to do that ... I use it, because cash already exists, unless net more money, the debt is first priority ".

Capital structure of manufacturing companies in Indonesia Stock Exchange has not reached the optimum point, because of the increased long-term debt usage will increases firm value. CEO positions longer tenure will improve its ability to manage company. His capabilities will enhance its his reputation as a CEO and have a good networking with owners of the funds, so he can obtain a loan at a cheaper cost. To that end, if company requires additional funds, it prioritize the use of long-term debt because it can increase the firm value. However, companies should avoid the use of optimal debt limit because it can decrease the firm value. The decline in firm value due to financial distress and agency costs are greater than the benefits of a tax saving from debt.

5.4. Limitations and future studies

CEO Ability is a variable outside of accounting database that proxied by CEO tenure. The CEO tenure is measured by the number of years served as CEO of same company. This has low ability to describe CEO

comprehensively. This is because the study did not perform CEO tenure exploration from CEO previous positions, which better reflects the CEO ability to implemented his experience in company sample.

Future studies can explore the CEOs tenure from previous companies, because it can reflect the true CEO ability. CEO ability will create a networking to obtain cheaper loans. Subsequent research could also examine the impact of networking on capital structure decision-making to increase the firm value, especially from a qualitative aspect.

References

- [1] Akhtar Shumi and Oliver Barry, 2009. Determinants of Capital Structure for Japanese Multinational and Domestic Corporations, International Review of Finance, 9 (1–2). p.1–26
- [2] Andi Nirwana, 2009. Pengaruh Struktur Kepemilikan dan Keputusan Keuangan terhadap Nilai Perusahaan (Studi pada Perusahaan Manufaktur yang Listing di Bursa Efek Indonesia), Disertasi, Program Pascasarjana Fakultas Ekonomi Universitas Brawijaya, Malang
- [3] Atmaja, Lukas S. 2008. Teori Dan Praktek, Manajemen Keuangan, Penerbit ANDI Yogyakarta.
- [4] Benardi K. Jemmi, 2007. Analisis Pengaruh Cash flow dan Kebijakan Pecking Order Terhadap Leverage dan Investasi serta Dampaknya terhadap Nilai Perusahaan. Disertasi, Program Pascasarjana Fakultas Ekonomi Universitas Brawijaya, Malang.
- [5] Bhagat Sanjai, Bolton Brian and Ajay Subramanian, 2010. Manager Characteristics and Capital Structure: Theory and Evidence, Journal of Financial dan Quantitative Analysis.
- [6] Brigham E.F. and Houston J.F., 2006. Dasar-Dasar Manajemen Keuangan, Jilid 1 Edisi 10, Penerbit Salemba Empat, Jakarta.
- [7] D'Mello,R and J. Farhat, 2004. A. Comparative Analysis Of Proxies For Target Capital Structure.
- [8] Datta Debabrata and Agarwal Babita, 2008. Determinants of Capital Structure of Indian Corporate Sector in the Period of Bull Run 2003-2007, An Econometric Study, p.1-17
- [9] DeAngelo, H. and R.W. Masulis, 1980. Optimal Capital structure Under Corporate and Personal Taxation, *Journal Of Financial Economics*. 8:p.3-29
- [10] Deesomsak Ratapom, Krianah Paudyal and Gioia Pescetto, 2004. The Determinants of Capital Structure: Evidence From the Asia Pacific Region. Journal of Multinational Financial Management. 14: p.387-405
- [11] Djumahir, 2005. Pengaruh Variabel-Variabel Tax Shield dan Non tex shield Terhadap Modal dan Nilai Perusahaan (Studi pada Perusahaan Go-Public di Bursa Efek Jakarta), Disertasi, Program Pascasarjana Fakultas Ekonomi Universitas Brawijaya, Malang.
- [12] Fattouh Bassam, Pasquale Scaramozzino, Laurence Harris, 2005. Capital Structure in South Korea: A Quantile Regression Approach. Journal of Development Economics, 76: p.231-250
- [13] Frank, Murray Z. and Fidhan K Goyal. 2003. Capital Structure Decisions. Journal of Financial Economic. p.1-20
- [14] Hamington, Diana R. and Brent D. Wilson, 1989. Corporate Financial Analysis, Third Edition, Homewood, Ilionis, Dow Jones-Irwin.
- [15] Huang Guihai, Frank M. Song, 2006. The Determinants of Capital Structure: Evidence from China. China Economics Review. 17:14-36
- [16] Huang and Sheng, 2010. CEO Characteristic, Corporate Decisions and Firm Value Evidence from corporate refocusing. SSRN: http://ssrn.com.
- [17] Jiraporn, Pamsit, and Xixin Liu, 2008, Capital Staggered Board and Firm Value, Financial Analyst Journal, 64 (1):49-60
- [18] Kim H.Yong, Rhim C.Jong and Friesner L.Daniel, 2007. Interrelationships among Capital Structure, Dividends, and Ownership: Evidence from South Korea, *The Multinational Business Review*, 15 (3), p.25-42
- [19] Masdar Mas'ud, 2008. Faktor-Faktor Penentu Struktur Modal Serta Dampaknya Terhadap Nilai Perusahaan (Studi pada Perusahaan Manufaktur yang terdaftar di Bursa Efek Indonesia dan bursa Efek malysia), Disertasi, Program Pascasarjana Fakultas Ekonomi Universitas Brawijaya, Malang.
- [20] Modigliani, Franco and Merton H. Miller, 1958. The Cost of Capital, Corporation Finance and The Theory of Investment, American Economic Review. 48: 261-275
- [21] Modigliani, Franco and Merton H. Miller, 1963. Corporate Income Taxes and The Cost of Capital: A Correction, *American Economic Review*. Volume 36, Issue 1, 116-119
- [22] Moh'd M.A, Perry L.G, and Rimbey James .N., 1998. The Impact of Ownership Structure and Corporate Debt Policy: Time-Series Cross-Sectional Analysis, *The Financial Review.* 33:p.35-98
- [23] Parlak Deniz, 2010. Determinants of Capital Structure Policies of Turkish Manufacturing Firms, *The Business Review*, 14 (2). p.147-153
- [24] Robbins Stephen P. dan Timothy A. Judge, 2007. Perilaku Organisasi, Ediai 12, Buku 1, Salembah Empat, Jakarta.
- [25] Ross Stephen A. 1977. The Determinan Financial Structure. The Incentive Signaling Approach. *The Bell Journal of Ecconomic.* 8 (1):23-40
- [26] Shah Attaullah and Khan Safiullah, 2007. Determinants of Capital Structure: Evidence from Pakistani Panel Data, *International Review of Business Research*, 3 (4),p.265-282
- [27] Sudarma Made, 2004. Pengaruh Struktur Kepemilikan Saharn, Faktor Intern dan Faktor Ekstern Terhadap Struktur Modal dan Nilai Perusahaan (Studi pada Industri yang Go-Public di Bursa Efek Jakarta), Disertasi, Program Pascasarjana Universitas Brawijaya, Malang.
- [28] Sugiarto, 2009. Struktur Modal, Struktur Kepemilikan, Permasalahan Keagenan dan Informasi Asimetri, Cetakan Pertama, Ediai Pertama, Graha Ilmu, Yogyakarta.
- [29] Sujono, 2010. Determinan Struktur Modal, Inovasi dan Nilai Perusahaan (Studi pada Industri Manufaktur di Bursa Efek Indonesia), Disertasi, Program Pascasarjana Fakultas Ekonomi Universitas Brawijaya, Malang.
- [30] Sutrisno, 2005. Manajemen Keuangan, Teori dan Aplikasi, Cetakan Keempat, Penerbit EKONISIA, Fakultas Ekonomi UII, Yogyakarta.
- [31] Titmen, Sheridan and Sergey Tsyplakov. 2005. A Dynamic Model of Optimal Capital Structure. The Journal of Finance.
- [32] Titmen, Sheridan and Wessels Roberto, 1988. The Determinan Capital Structure Choice, The Journal of Finance, 43 (1): p.1-19
- [33] Yu D. Darwin and Aquino Q. Rodolfo, 2009. Testing Capital Structure Models on Philippine Listed Firms, Applied Economics, 41, p.1973–1990