CHAPTER II

THEORETICAL BACKGROUND

2.1 Agency Theory

The Agency theory is a capital structure theory that created to reduce the conflict between the owner and the management which using the supervision mechanism (Atmaja, 2008) in IndrianiNastika A.M, SautmaRonni, and Mariana IngMalela (2014). Agency theory is the relation between principal and agent which base on Govindarajan (1995) in Ma’aruf (2006). The perspective of agency theory is fundamental that use to understand corporate governance and earning management issue. Agency theory makes an asymmetry relation between owner and the organizer, to avoid the asymmetric relationship the company need a concept which is Good Corporate Governance concept. The objective of the Good Corporate concept is to make the company better. Implementation of corporate governance base on agency theory, that agency theory can be explain by the relationship between management and owner, management as the agent is responsible to optimize the profit of the owner (principal).

The perspective of agency theory relationship is the fundamental that use to understand the relation between management and the owner (principal). In the other word the researcher concludes that the agency theory is the contract that involves manager and the owner (principal). The condition of company that report by manager is not appropriate with the real condition of company. This condition caused by the different of information from manager and shareholder. As the organizer, manager will be better understood about the company’s situation than
the shareholder. That situation usually knows as asymmetry information. The asymmetry information between management (agent) and owner (principal) can be given opportunity to manager to making profit management (Richardson, 1998) in Suryani (2010).

Eisenhardt (1989), in Ujiyanto and Pramuka (2007) explain that agency theory using three assumptions of the human characteristics. That is: (1) Human is commonly just thinking about his or her self (self interest), (2) Human has limitation to think about the future (bounded rationality), (3) Human is always avoid the risk (risk averse).

2.2 Agency Problem Theory

According to Paul M. Healy, Krishna G. Palepu (2001), The agency problem arises because savers that invest in a business venture typically do not intend to play an active role in its management that responsibility is delegated to the entrepreneur. Consequently, once savers have invested their funds in a business venture, the self-interested entrepreneur has an incentive to make decisions that expropriate savers’ funds.

Based on the research of John Armour, Henry Hansmann, ReinierKraakman (2009) corporate law performs two general functions: first, it establishes the structure of the corporate form as well as ancillary housekeeping rules necessary to support this structure; second, it attempts to control conflicts of interest among corporate constituencies, including those between corporate ‘insiders,’ such as controlling shareholders and top managers, and ‘outsiders,’ such as minority shareholders or creditors. These conflicts all have the character
of what economists refer to as ‘agency problems’ or ‘principal-agent’ problems. For readers unfamiliar with the jargon of economists, an ‘agency problem’—in the most general sense of the term—arises whenever the welfare of one party, termed the ‘principal’, depends upon actions taken by another party, termed the ‘agent.’ The problem lies in motivating the agent to act in the principal’s interest rather than simply in the agent’s own interest. Viewed in these broad terms, agency problems arise in a broad range of contexts that go well beyond those that would formally be classified as agency relationships by lawyers.

In particular, almost any contractual relationship, in which one party (the ‘agent’) promises performance to another (the ‘principal’), is potentially subject to an agency problem. The core of the difficulty is that, because the agent commonly has better information than does the principal about the relevant facts, the principal cannot easily assure himself that the agent’s performance is precisely what was promised. As a consequence, the agent has an incentive to act opportunistically, skimping on the quality of his performance, or even diverting to himself some of what was promised to the principal. This means, in turn, that the value of the agent’s performance to the principal will be reduced, either directly or because, to assure the quality of the agent’s performance, the principal must engage in costly monitoring of the agent. The greater the complexity of the tasks undertaken by the agent, and the greater the discretion the agent must be given, the larger these ‘agency costs’ are likely to be.

According John Armour, Henry Hansmann, Reinier Kraakman (2009) there are three the core problem that arise in business. The first involves the conflict between the firm’s owners and its hired managers. Here the owners are
the principals and the managers are the agents. The problem lies in assuring that the managers are responsive to the owners’ interests rather than pursuing their own personal interests. The second agency problem involves the conflict between, on one hand, owners who possess the majority or controlling interest in the firm and, on the other hand, the minority or no controlling owner. Here the no controlling owners can be thought of as the principals and the controlling owners as the agents, and the difficulty lies in assuring that the former are not expropriated by the latter. While this problem is most conspicuous in tensions between majority and minority shareholders, it appears whenever some subset of a firm’s owners can control decisions affecting the class of owners as a whole. Thus if minority shareholders enjoy veto rights in relation to particular decisions, it can give rise to a species of this second agency problem. Similar problems can arise between ordinary and preference shareholders, and between senior and junior creditors in bankruptcy (when creditors are the effective owners of the firm). The third agency problem involves the conflict between the firm itself—including, particularly, its owners—and the other parties with whom the firm contracts, such as creditors, employees, and customers. Here the difficulty lies in assuring that the firm, as agent, does not behave opportunistically toward these various other principals—such as by expropriating creditors, exploiting workers, or misleading consumers.
2.3 Asymmetric Information Theory

According to P.M. Healy, K.G. Palepu (2001) the information or “lemons” problem arises from information differences and conflicting incentives between entrepreneurs and savers. It can potentially lead to a breakdown in the functioning of the capital market. There is an example that can explain more deeply about the asymmetric information. For example, consider a situation where half the business ideas are “good” and the other half are “bad”. Both investors and entrepreneurs are rational and value investments conditional on their own information. If investors cannot distinguish between the two types of business ideas, entrepreneurs with “bad” ideas will try to claim that their ideas are as valuable as the “good” ideas. Realizing this possibility, investors will value both good and bad ideas at an average level. Therefore, if the lemons problem is not fully resolved, the capital market will rationally undervalue some good ideas and overvalue some bad ideas relative to the information available to entrepreneurs.

There are several well-known solutions to the lemons problem. Optimal contracts between entrepreneurs and investors will provide incentives for full disclosure of private information, thus mitigating the misevaluation problem. Another potential solution to the information asymmetry problem is regulation that requires managers to fully disclose their private information. Finally, because of the lemons problem, there is a demand for information intermediaries, such as financial analysts and rating agencies, who engage in private information production to uncover managers’ superior information.
2.4 Theory of Capital Structure

In term of making financial decision principally based on two of main aspect, that are the decisions that related to fund allocation and the decisions that related to fund raising that report on the firm’s financial report. Allocating the fund often related with process choosing of assets that will execute by the firm, meanwhile liquidation of fund is related to policy of determining the capital structure.

The relation between capital structure and firm value is one of the important things among financial managers in a firm. There are many of arguments that argue about the understanding of capital structure. According to Riyanto (2001) capital structure is comparison or the balance between foreign capital (long-term) and individual capital. According to Sartono (2001) capital structure is the balance of amount of short-term debt which is permanent, long-term debt, preferred stock and the usual stock. Generally the objective of capital structure is gaining the low level of cost of capital and will be created the maximum firm value.

The theory of capital structure is explaining the effect of composition change in capital on firm value. Capital structure can defined as level of financing long-term debt, preferred stock, and stock equity. There are many modern theories of capital structure, consist of: (Brigham and Houston, 2006)
2.4.1 Modigliani-Miller (MM) Theory

The first theory that exists in capital structure is the Modigliani-Miller theory (MM Theory). Modigliani-Miller theory argue that capital structure is not relevant and not influence the firm value.

The first serious discussion and analysis of capital structure emerged during the 1950s with Modigliani and Miller (1958) in Bizer and Eliza (2015) Nobel Prize winning paper “The cost of capital, corporation finance and the theory of investment”. In this landmark study the two authors formulate five key assumptions, which characterize an ideal capital market:

1) absence of frictions in capital markets (no taxes, transaction and bankruptcy costs);
2) All investors share homogeneous expectations regarding the expected return on
3) Investment (insiders and outsiders have access to the same information);
4) atomistic competition (the market is consisted of many small firms, which do not have
5) the power to affect prices through trading or any other activity);
6) no agency costs (companies have fixed and known investment program which
7) maximizes shareholder value);
8) Fixed financing decisions.

Based on the assumption that appear on above, MM theory make two proportion that known as proportion without taxes.
Proportion 1:
The first proportion is the firm that has debt is same with the firm that not has debt. The implication from the first proportion is the capital structure is not relevant, the change of capital structure is not influence the firm value and weighted average cost of capital (WACC).

Proportion 2:
The second proportion is the cost of share capital will increase if the firm doing a debt that sourced from external of firm. Risk of the equity depend on business risk and financial risk.

Having defined the ideal capital market setting, Modigliani and Miller derive the capital structure irrelevance proposition, stating that the market value of any firm is unaffected by the amount of leverage employed in financing its assets (Modigliani and Miller, 1958) in Bizer and Eliza (2015). Even though the assumptions presented by the two authors are not observable in the real world, their paper contributes to a greater understanding of corporate financing decisions (Frank and Goyal, 2008). Modigliani and Miller’s work sparked further research which aimed to test departures from the ideal capital market assumptions. Frank and Goyal (2008) summarizes that when certain conditions, such as: “taxation, transaction costs, bankruptcy costs, agency conflicts, adverse selection, lack of seperability between financing and operations, time varying financial market opportunities, and investor clientele effects”, are taken into consideration, Modigliani-Miller theorem becomes inapplicable. The studies of these departures, however, have resulted in the formulation of many capital structure theories, with the two most notable being the trade-off and pecking order theories.
Theory of Modigliani-Miller is one of controversial theory in capital structure. The implication of this theory is to use debt higher and higher. In fact there is no firm that has the debt very big because can create possibility become bankrupt. This is the background of the MM theory that firm should use a big amount of debt, because this theory is ignore the bankruptcy cost.

2.4.2 Trade-off Theory

In the trade of theory, firm will create debt until a certain level of debt, where the tax shield from the addition debt is same with the financial distress. Financial distress is bankruptcy cost or reorganization cost, and the agency cost will be decrease because of the decreasing of credibility of firm.

The static trade-off theory was developed by Myers in 1977. Myers (1977) in Bizer and Eliza (2015) suggests that the optimal capital structure does exist. A value-maximizing firm will find an optimal capital structure by trading off benefits and costs of debt financing. Firms will borrow up to the point that equates marginal costs and benefits of each additional unit of financing. Benefits of debt refer to tax advantages and the reduced agency costs of free cash flow. Whereas, costs of debt refer to bankruptcy costs and the increased agency costs that arise when the firm creditworthiness is in doubt. Therefore, it values the company as the value of the firm is unlevered plus the present value of the tax advantages minus the present value of bankruptcy and agency costs.

Trade-off theory is the theory that explains and describe that the optimal capital structure exist if the financing using debt and the bankruptcy cost is balanced. Trade-off theory shows that firm value with the debt or leverage will increase if using the high debt. However the value will be decrease in certain time.
In that time, the level of debt is the optimal level. (hanafi, 2004) in KholiqMahfud, 2009).

2.4.3 Pecking Order Theory

Pecking Order Theory stated that the firm that has the high profitability is the firm that has the small number of debt, because the firm that has the high profitability has a big capital sources in internal of firm.

The pecking order theory proposed by Myers (1984) and Myers and Majluf (1984) in Bizer and Eliza (2015), suggests that there is a hierarchy of firm preferences with regard to the financing of their investments and that there is no well-defined target debt ratio. It is so because of the existence of the asymmetric information problem between the firm and likely finance providers. Firms finance their needs, initially by using internally generated funds (that is, undistributed earnings, where there is no existence of information asymmetry), next by less risky debt if additional funds are needed and lastly by risky external equity issue to cover any remaining capital requirements. The order of preferences reflects relative costs of finance to vary between the different sources of finance.

2.5 The Determinant of Capital Structure

2.5.1 Tangibility of Assets

As Booth et al. (2001) in B.Prahalatan (2007) state: “The more tangible the firm’s assets, the greater its ability to issue secured debt.” A firm with large amount of fixed asset can borrow at relatively lower rate of interest by providing the security of these assets to creditors. Having the incentive of getting debt at lower interest rate, a firm with higher percentage of fixed asset is expected to
borrow more as compared to a firm whose cost of borrowing is higher because of having less fixed assets. Thus a positive relationship between tangibility of assets and leverage is expected.

2.5.2 Profitability

There are conflicting theoretical predictions on the effects of profitability on leverage. Following the pecking-order theory, profitable firms, which have access to retained profits, can use these for firm financing rather than accessing outside sources. Jensen (1986) in B.Prahalatan (2007) predicts a positive relationship between profitability and financial leverage if the market for corporate control is effective because debt reduces the free cash flow generated by profitability. From the Trade-off theory point of view more profitable firms are exposed to lower risks of bankruptcy and have greater incentive to employ debt to exploit interest tax shields.

2.5.3 Firm Size

Generally, the pecking order theory is construed to predict a negative relation between size and leverage. The main explanation is that large companies are associated with lesser adverse selection problem and could access equity markets more easily in comparison to small firms (Myers, 1984) in BiserGeorgiev and Eliza Mitreva (2015). The trade-off theory, on the other hand, predicts a positive correlation between firm size and debt level. Overall, large companies are typically better diversified and enjoy more stable earnings, which enable them to maintain higher debt ratios without increasing financial distress costs (Ogden, Jen and O'Connor, 2003) in BiserGeorgiev and Eliza Mitreva(2015). Furthermore,
such companies are less likely to go bankrupt due to their low volatility and information asymmetry.

2.5.4 Investment Opportunity

When firms are in the growth stage they avoid debt because they do not want to offer lenders the possibility of interfering in their institutional decisions. Therefore, companies with significant future perspectives choose to retain more profit in order to reduce the cost of capital (Barclay and Smith Jr., 1996; Pandey, 2001) in SoranaVatayu (2012). Since 1977 in SoranaVatayu (2012), Myers assumed a positive relationship between investment opportunities and firm value, but he added that highly leveraged companies are not able to undertake investments due to the agency conflict caused. Shih and Fan (2009) in SoranaVatayu (2012) gave another explanation for the direct correlation between growth opportunities and company value considering that investors are willing to pay higher prices for shares when companies have profitable investment opportunities. Moreover, the more capital a company owns the more investments it can undertake. This assumption confirms the previous described by Titman and Wessels (1988) in SoranaVatayu (2012) who confirmed an indirect correlation between investment opportunities and long-term debt. However, the short-term debt is widely used in financing new investments. The trade-off theory suggests that capital structure in companies with important growth prospects includes a small proportion of liabilities because managers are rewarded when the cost of financial leverage is at minimum and no agency conflict exists to affect future growth (Drobetz and Fix, 2003) in SoranaVatayu (2012). However, the pecking order theory assumes high leverage for companies with investment opportunities:
when firms have high growth potential, they demand more capital and thus debt is preferred as external finance (Chen, 2004) in SoranaVatayu (2012).

2.5.4 Tax Shield

Rajan and Zingales (1995) in SoranaVatayu (2012) tried to demonstrate the great impact taxes have on corporate debt. It is widely known that the interest of debt is a deductible expense, offering the major benefit in issuing debt, as it raises the amount of after-tax income. Although this tax-based hypothesis was long debated and some studies included tax benefits among the factors with significant impact on financing option (Lim, 2012) in SoranaVatayu (2012) whilst other did not find any evidence to support it (Titman and Wessels, 1988; Chen, 2004) in SoranaVatayu (2012).

According to trade-off theory, companies prefer debt mainly because this provides a non-debt tax shield. With this tax advantage, the more higher the tax rate is, the more funds will borrow businesses. In conclusion, taxation has a direct impact on debt maturity and financial leverage, but it is more significant in large companies that small ones.

Debt is not the only one tax-free, non-cash expenses being also tax-deductible. Hence, when firms have to deal with agency problems, additional debt as supplementary financing is never a good choice. But tax allows deductions from the before-tax income, such as depreciation on tangible and intangible assets (Teker, 2009) in SoranaVatayu (2012).
2.6 Theory of Firm Value

The main objective of firm is maximizing profit, especially for the firm’s share holder, realized with increasing the market value in the price of stock. As practice that objective is affect by the financial decision (Tika, 2012).

Firm value is one of indicator that can use by the investor to the firm, often related to the stock price. Firm value that created through the indicator of stock market is influence by the investment opportunity.

There are many of indicators that can use to measure the firm value, which is:

2.6.1 Tobin’s Q

Tobin’s Q is a market performance measure. Tobin’s Q has been used as a major indicator of firms’ performance. Even Tobin’s Q, as agreed by many researchers, is a noisy signal (R.Zeitun and G.G.Tian, 2007).

According to the concept, Q ratio is more goof than the ratio of market value toward ratio of book value. In practice the Q ratio is difficult to count accurately because estimating the substitution cost is not something easy to work (Margaretha, 2014).

\[ Tobin'Q = \frac{EMV-D}{EMB-D} \]

Where:

Q : Firm Value
EMV : Equity Market Value
EMB : Equity Book Value
D  : Book Value
2.6.2 Price to Book Value (PBV)

The other main component that must be considered in order to analyze the firm value is Price to Book Value (PBV) which this variable in one of that considered by investor to determining their investment. If the firm is good, commonly the ratio is more that one (>1), show that the market value is higher than the book value. The higher of Price to book Value is the higher value of firm in investor perspective.

The higher of Price to book Value will create believe of market that firm will good in future. These things also become a desire of the owner of firm because the higher firm values indicate the higher prosperity of shareholder. According to (Brigham and Houston, 2006), the firm value can formulate as:

\[
PBV = \frac{\text{Market price per share}}{\text{Book value per share}}
\]

In this research, the Price to Book Value is using as the dependent as the proxy of firm value because according to research Novi Rehulina (2015) price to book value is mostly use as the indicator to determine a investment. In other hand, there are many benefit of Price to Book value whereas book value is a simply and stable indicator that can be compare with the market price. The second benefit of Price to Book value is price to book value can compare between the same characteristic of company to show whether a investment is cheap or expensive.

Based on the theoretical background, trade-off theory is explain that the debt should be balance with the cost of bankruptcy, means that the optimal capital structure is the company that using a large amount of debt to cost the company.
the increase of debt is refers to increasing of the firm value. Variable that use as
the variable of capital structure is Debt to Equity Ratio (DER), Debt to Assets
Ratio (DAR), Tangibility, Interest Coverage Ratio (ICR), and Financial Leverage
Multiplier (FLM). The dependent variable is the Firm value that proxy as Price to
Book Value.

2.7 The Measurement of Capital Structure

2.7.1 Debt to Equity Ratio (DER)

The debt to Equity Ratio is financial, liquidity ratio that compare a
company’s total debt to total equity. The debt to Equity Ratio shows the
percentage of company financing that comes from creditors and investors. It
can be conclude that a higher debt to equity ratio indicates that more creditor
financing (bank loans) is used that investor financing (shareholder). Debt to
equity ratio is one of a measurement of capital structure. The researcher in this
research use debt to equity ratio as one of the measurement of capital structure
because the researcher want to identify the balancing of investor financing
(shareholder) and creditors financing (bank loans) affect the firm value.

2.7.2 Debt to Assets Ratio (DAR)

The debt to assets ratio is a leverage ratio used to determine how much
debt (a sum of long term and current portion of debt) a company has on its
balance sheet relative to total assets. This ratio examines the percent of the
company that is financed by debt. Most companies carry some form of debt on
its books. All things being equal, a higher debt to assets ratio is riskier for
equity investors; debt holders often have seniority over company assets during
bankruptcy. High of Debt to Assets Ratio ratios will also mean that the company will be forced to make more interest payments on its debt before net earnings are calculated.

2.7.3 Tangibility

As Booth et al. (2001) in B.Prahalatan (2007) state: “The more tangible the firm’s assets, the greater its ability to issue secured debt.” This variable is usually indicated to the shareholders permanent source of assets. That’s why this variable is important to use in this research to find the impact of capital structure on firm value.

2.7.4 Interest Coverage Ratio (ICR)

The interest coverage ratio (ICR) is a measure of a company's ability to meet its interest payments. Interest coverage ratio is equal to earnings before interest and taxes (EBIT) for a time period, often one year, divided by interest expenses for the same time period. The interest coverage ratio is a measure of the number of times a company could make the interest payments on its debt with its EBIT. It determines how easily a company can pay interest expenses on outstanding debt. Interest coverage ratio is also known as interest coverage, debt service ratio or debt service coverage ratio. The reason why this variable use in this research is because this indicator can explain clearly about the interest payment of the company. Automatically this indicator can clearly explain the impact of capital structure to the firm value.

2.7.5 Financial Leverage Multiplier (FLM)

The equity multiplier is a financial leverage ratio that measures the amount of a firm's assets that are financed by its shareholders by comparing total assets
with total shareholder's equity. In other words, the equity multiplier shows the percentage of assets that are financed or owed by the shareholders. Conversely, this ratio also shows the level of debt financing is used to acquire assets and maintain operations. Like all liquidity ratios and financial leverage ratios, the equity multiplier is an indication of company risk to creditors. Companies that rely too heavily on debt financing will have high debt service costs and will have to raise more cash flows in order to pay for their operations and obligations. Both creditors and investors use this ratio to measure how leveraged a company is. This indicator use in this research as a measurement of capital structure because of this indicator can show the percentage of assets that are financed or owed by the shareholders. This explanation will show the affection of capital structure to the firm value.

2.8 The Effect of Capital Structure on Firm Value

Capital structure that shows the comparison between external capitals in long term with the internal capital is the important aspect for each company because has the direct effect to the financial position of company. The company that has a large amount of assets disposed use the debt in the large amount compare to company that has a little amount of assets although the company that has a small number of debt have a good opportunity to grow because have small possibility having bankrupt. This explanation will be easy to understand because the company that just has goodwill however the company that not support with the sufficient assets is difficult to predict the performance.
Solisah and Taswan (2002) in Sri Hermuningsih (2013) show that debt policy is positively influence and significant to firm value. This result is quite same with the research of Modigliani and Miller, that using of taxes in company profit, so the using of debt in company can increase the firm value. Means’ that the firm value will be increase automatically, because of the increasing of debt use within company. This study will indicate that optimalize of capital structure able to achieve when the tax shield and cost responsibility is balance.

The trade off will be appear in between cost and the benefit in using debt like explain above. Whereas, the higher of debt will be make the higher of tax shield that gain, but the possibility of bankruptcy cost will be increase. Debt can use to lead and control the free cash flow that implement by management, so it can be avoid the useless investment.

When manager has conviction on the firm prospect in future and expect the stock price increase, so manager can use debt in large amount as a signal that can trust by the investor. The leverage policy can measure with the debt equity ratio (DER) and the firm value can measure with total assets that positively influence and significant to price to book value (Sujoko and Soebintoro, 2007) in Sri Hermuningsih (2013).

Prestiadi (2007) in Debbianita (2012) make a research about the effect of capital structure on firm value. The objective of this research is to know whether capital structure in company affects firm value and identify the fundamental factors that influence the capital structure. This research makes a research base on the data of listed company on IDX (Indonesia Stock Exchange) where the samples
that use is 129 company. The result of this research is Debt to Equity Ration proved significantly (in level 95%) and positively influences the firm value.

Chotimah (2007) in Debbianita (2012) do a research about the influence of the change of capital structure on firm value. This research is using secondary data of manufacturing company in year 2001-2005 that listed in IDX (Indonesia Stock Index). The sample is use purposive sampling, and the samples are 22 companies whereas the sample got with certain criteria that already listed. The result shows the coefficient of the change of capital structure is 1.157 and t-test is 2.185 where higher than t-table 2.085. Therefore the capital structure is significant and positively influences the firm value.

2.9 Previous Research

According to the research of Mathanika.T, Virginia Vinothini.A.G, Paviththira (2015) it is seen that the specification of two independent variable (Equity Ratio & Debt Ratio), that the ability to predict the firm value. (R²=0.490 and 0.057 respectively). In R² value of 0.490 which is in the table denotes that 49% of observed variability in EPS can be explained by the difference in the independent variables. In R² value of 0.057 which is denoting that 5.70 % of observed variability in EPS can explain by the difference in the independent variable. In this summary, that the value of the adjusted R² 3.0490 and 0.057, slightly less than the value of adjusted R². The first hypothesis is capital has an impact on firm value and the result is supported with the tools to test is Regression analysis. And the second analysis is capital structure and firm value is significantly correlated and the result is supported that got from correlation analysis.
According to Jahirul Hoque, Ashraf Hossain, Kabir Hossain (2014), the impact of capital structure policy on value of the firm has been depicted below both after examining the correlation and coefficient among the different independent and dependent variables by putting the total number of observations on SPSS program. This research is depicts that the correlation ($r$) between Firm value & Capital Structure, $r$ between Firm Value & Tangibility and $r$ between Firm Value & Financial Leverage Multiplier has been calculated as 0.570, -0.142, -0.041, -0.167, 0.780 and 0.777 respectively. Considering the significance level (two tailed), it is observed that $r$ between Firm Value & Capital Structure, $r$ between Firm Value & Tangibility and $r$ between Firm Value & Financial Leverage Multiplier have been significant at 0.01 level. At this phase, it is essential to measure the impact of the selected independent variables on the dependent variable. Considering the un-standardized coefficients values, the regression model may be estimated as follows:

Model: $VF = \beta_0 + \beta_1CS + \beta_2DER + \beta_3DR + \beta_4TNG + \beta_5ICR + \beta_6FLM + \ldots + e = 674.989 - 0.044CS - 19.915DER + 16.006DR + 0.042TNG + 45.966ICR + 1230 + 673FLM + \ldots + e$

From the regression summary output, it is observed that the coefficients of DR, ICR, TNG and FLM tend to have positive impacts on the value of the firm. On the other hand, the coefficients of Capital Structure and Debt to Equity Ratio tend to have negative impacts on value of the firm. Now it is important to determine whether independent variables’ responsiveness is statistically significant or not. This has been done by “t” statistics at 05 percent level of significant. From table-5, it is observed that Debt to Equity Ratio, Debt Ratio, Tangibility and Financial
Leverage Multiplier are statistically very significant as compared to other predicted variables. The coefficient of multiple determination here (R2) indicates that the regression model explains 79.1 percent of the variation on value of the firm. From the ANOVA table it is evident that the model is significant at 0.000 level. This signifies that value of the firm has been influenced to the extent of 79.1 percent by the independent variables name capital structure, debt-equity ratio, debt ratio, interest coverage ratio, tangible ratio and financial leverage multiplier.

The conclusion of this study is the independent variables namely capital structure (CS), debt to equity (DER) & debt to asset (DR), fixed assets to total assets(Tangibility), earnings before interest and taxes to interest charges (ICR), financial leverage multiplier (FLM) have influenced value of the firm (VF) to the extent of 79.1 percent significantly.

According to research of Sri Hermuningsih (2013), there are three independent variables that have directly influence to the firm value that are profitability, growth opportunity, and the capital structure. The result of the estimation model shows that profitability has direct influence that positive and significant to the firm value t – table = 2,945 and p = 0,001. The high profitability show the good performance of the company and making increasing of stock demand by investor. That respond can be make the stock price increase. The second variable is growth opportunity. The growth opportunity has direct influence positive and significant to the firm value. The result of t – table is 3,140 and p = 0,002. And the third variable is capital structure is also has direct influence that positive and significant to the firm value with the result (t – table =
4,138 and \( p = 0.000 \). This result shows that the effort of company to add the debt use to make signal to investor that the firm is good growth.

**Table 1**

<table>
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<tr>
<th>No</th>
<th>Year</th>
<th>Researcher</th>
<th>Title</th>
<th>Variable</th>
<th>Result</th>
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<tbody>
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<td>2015</td>
<td>Mathanika.T, Virginia Vinothini.A.G, Paviththira</td>
<td>“Impact of capital structure on firm value: evidence from listed manufacturing companies on colombo stock Exchange (CSE) in srilanka”</td>
<td>Independent variable : Equity ratio, and Debt Ratio</td>
<td>The research found that equity ratio, and debt ratio has significant impact on firm value.</td>
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<td></td>
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<td>Name of Journal: Proceeding of International Conference on Contemporary Management – 2015 (ICCM-2016), pp 24-35</td>
<td>Dependent Variable : Earning per share</td>
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<td>2.</td>
<td>2014</td>
<td>Jahirul Hoque, Ashraf Hossain, Kabir Hossain</td>
<td>“Impact Of Capital Structure Policy On Value Of The Firm – A Study On Some Selected Corporate Manufacturing Firms Under Dhaka Stock Exchange”</td>
<td>Independent variable : Capital structure, Debt to asset, Debt- equity, Tangibility Interest, coverage ratio, Financial leverage multiplier</td>
<td>This study has portrayed that the independent variables namely capital structure (CS), debt to equity (DER) &amp; debt to asset (DR), fixed assets to</td>
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<td>Year</td>
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<td>2014</td>
<td>Egoforum</td>
<td>Dependent Variable : Firm value (ROI) total assets(Tangibility), earnings before interest and taxes to interest charges(ICR), financial leverage multiplier(FLM) have influenced value of the firm(VF) as the dependent variable.</td>
<td>Name of the Journal: EGOFORUM Volume 3, Issue 2 (5), 2014</td>
<td>3. 2013 Sri Hermuningsih “The influence of Profitability, Growth opportunity, capital structure To firm value on listed company in Indonesia Stock Exchange (IDX)”</td>
<td>2013 Sri Hermuningsih “The influence of Profitability, Growth opportunity, capital structure To firm value on listed company in Indonesia Stock Exchange (IDX)”</td>
</tr>
<tr>
<td>2007</td>
<td>Sukojo &amp; Soebintoro</td>
<td>The variable of profitability, growth opportunity, and capital structure are positively, and significantly influence the firm value.</td>
<td>Name of journal: Buletin Ekonomi Moneter dan Perbankan, Oktober 2013</td>
<td>2007 Sukojo &amp; Soebintoro The influence of leverage policy on firm value</td>
<td>2007 Sukojo &amp; Soebintoro The influence of leverage policy on firm value</td>
</tr>
</tbody>
</table>
The effect of capital structure on firm value.

Independent Variable: Capital Structure
Dependent Variable: Value of Firm

The result of this research is Debt to Equity Ration proved significantly (in level 95%) and positively influences the firm value.

2.10 Hypotheses Development

1. The Influence of Debt to Equity Ratio on Firm Value

Debt to equity ratio (DER) is a ratio that using to value the debt form equity (Devianasari and Suryantini, 2015). Fransiska (2013) in Devianasari and Suryantini (2015) argue that debt to equity ratio able to explain and describe about the capital structure of company so can show the level of debt ratio that cannot pay and also because one of capital structure ratios that mirroring the ability of company to financing the business with the funds loan that provide by investors.

Capital structure shows the source of financing that use by company in order to fulfill the financing need. Debt composition within a company is relative in one company to the others company, according to the trade off theory that there is optimal debt composition for one company, firm value will be increase, if the company using the debt because of the company has tax deductible means that there is tax shield (Suteja and Manihuruk, 2009).
With the good planning in term of determine the capital structure, hopefully company able to encourage the increasing of firm value in order to face the business competition (Bukit, 2012 in Devianasari and Suryantini, 2015). This argument is proper with the theory of determining decision which is signal theory, that if manager has a conviction that the prospect of good company, and because want to the increasing of stock price, that managers will to communicate that thing to the investors. Managers able use more of debt, that in the next use as a signal that more believable. This case because the firm that increase debt can view as a firm that optimist to the firm prospect in the future. Hopefully the investors will be catch that signal, whereas signal that indicate the company have a prospect in the future (Mardiyatidkk.,2012 in Devianasari and Suryantini, 2015). According to the explanation on above the hypothesis is:

**H1 : There is a positive impact of Debt to Equity Ratio on firm value.**

2. **The Influence of Debt to Assets Ratio on Firm Value**

The increase in debt can be interpreted by parties outside the company as the company’s ability to pay obligation in the future ir the company has a low business risk. It will then be responded positively by the market. Increase in funding through debt is also one alternative to reduce agency costs. Debt can make managers can control to reduce inefficient actions and performance
of the company to be more effective so that investors’ assessment of the company will increase (Wongso, 2013).

Jansen (1986) in Mayasari et al (2015) argue the presence of debt, it can be used to control the use of free cash flow excessively by management to avoid wasted investment, thereby enhancing the value of company. The use of debt will also increase costs for companies in the form of bankruptcy cost if the company is unable to pay its debt. So in determining the debt policy, companies should consider better because the use of this debt will have an impact on the value of company. According to the explanation on above the hypothesis is:

**H2 : There is a positive impact of Debt to Asset Ratio on firm value.**

### 3. The Influence of Tangibility on Firm Value

According to Joni and Lina (2010) in Wimelda in Marlinah (2013) that tangibility is the important variable in financing decision of company because fixed assets provide a guarantee for creditor. The creditor will give a loan to the company if the creditor get a security that show by the high of fixed assets whereas if the company unable to fulfill the payment for the debt, it will be covered by the fixed assets.

The existence of guarantee to the company responsibilities so the investors consider that the company is not have the high risk so the investors will interesting to buy the stock. The increasing of demand on stock will increase the value of firm. The research result of Jahirul Hoque, Ashraf
Hossain, Kabir Hossain (2014) shows that tangibility has positive influence on firm value. According to the explanation on above the hypothesis is:

**H3 : There is a positive impact of Tangibility on Firm Value**

4. **The Influence of Interest Coverage Ratio on Firm Value**

   Eliotis et al. (2007) in Satuti (2011) argue that interest coverage ratio as the Earning before Interest and Taxes divided by the amount of interest. This ratio is the determining of capital structure. Harris and Raviv (1990) in Satuti (2011) argue that the higher of interest coverage ratios show that the low of debt ratio.

   The lower of debt ratio show that the risk of company is low. The lower of risk making the investors will attract to share and growth their capital to the company. The increasing of stock demand will increase the stock price and automatically will increase the firm value. According to the explanation on above the hypothesis is:

   **H4: There is a positive impact of Interest Coverage Ratio on firm value**

5. **The Influence of Financial Leverage Multiplier on Firm Value**

   Capital structure problems is an important issue for any company due to the good and bad capital structure will have a direct effect on the financial company. A wrong decision on capital structure can lead to financial difficulties and can eventually lead to bankruptcy. The management company
should set its capital structure in an appropriate manner so that maximum enterprise value (Satuti, 2011).

One measurement of capital structure is Financial Leverage Multiplier. Financial Leverage multiplier is the ratio between the total assets of the share capital (Hoque et al, 2015). The result of research by Jahirul Hoque, Ashraf Hossain, Kabir Hossain (2014) show that Financial Leverage Multiplier positively influence the firm value. According to the explanation on above the hypothesis is:

**H5: There is a positive impact of Financial Leverage Multiplier on firm value**

### 2.11 Research Framework

Based on this research study the following conceptualization model is formulated:

![Research Framework Diagram](image)

**Figure 1**

**Research Framework**

**Independent Variable**
- Debt to Equity Ratio
- Debt to Assets Ratio
- Tangibility
- Interest Coverage Ratio
- Financial Leverage Multiplier

**Dependent Variable**
- FIRM VALUE (Price to Book Value)