Analysis of Manufacturing Industry Firm Value Listed on the Indonesian Stock Exchange

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The research’s intention is about testing and analysing the antecedent variables of value of the firm. This research objectives are manufacturing companies who listed on the Indonesia Stock Exchange (IDX) as population and by using purposive sampling techniques selected by 40 companies that are categorised as companies that experience financial distress as research samples. The variables analysed in this study are investment decisions, capital decisions, good corporate governance, financial risk management, financial distress as exogenous variables and value of the firm as endogenous variables. Data collected and analysed is secondary data which is collected by documentation method. The data collection process is carried out by downloading and collecting data needed on the statement of manufacturing company’s financial for 2014-2016 from the Indonesia Stock Exchange (IDX) and Bank Indonesia’s website. Then, they are calculating the indicators of each research variable. The next step is data analysis which consists of descriptive analysis and statistical analysis. Descriptive analysis is utilised to describe the results of the study, and statistical analysis is functioned to prove the research hypothesis. To prove the research hypothesis, WarpPLS statistical software is used. The results obtained from the study show that investment decisions have a negative effect on Financial Risk Management and Financial Distress, but it has a positive effect on the value of the firm. Funding decisions have a positive effect on Financial Distress and the value of the firm, but there is no effect on Financial Risk Management. Good Corporate Governance has a positive effect on Financial Distress and a negative effect on the value of the firm, but there is no effect significantly on Financial Risk Management. Financial Risk Management does not have an effect on Financial Distress but has an effect on the value of the firm. Financial Distress has no effect significantly on the value of the firm.
**Introduction**

Development of the manufacturing industry is one of the parameters of the country's national industrial developments. Nowadays, the manufacturing industry is increasing and developing (Widiasih and Karningsih, 2013). These developments will have an impact on all policies determined by the country. Likewise in Indonesia where the manufacturing industry sector is a company that absorbs a lot of labour, so that if manufacturing companies are not considered it will have an impact on the increasing number of unemployment that will directly affect Indonesia's economic growth.

Indonesia’s manufacturing industry development was down after the economic crisis in 1998, where the growth of the manufacturing sector was 21% below the 23.7% Gross Domestic Product (Basri, 2015). Data from the Central Bureau of Statistics shows the average growth of the manufacturing industry from 2011 to 2014 decreased significantly, starting in 2011-2014 where the average growth was 5.3 mean while in 2015 it was 3.9 (Statistik, 2015). Fluctuations in the development of IHGS on the IDX which showed that in 2014 it was 5,226.95 and it decreased in 2015 to be 4,593.01. This phenomenon shows that in recent years the development of manufacturing companies stills needs attention, especially for manufacturing companies that have gone public, because the declining development illustrates that value of the firm declined, then it will reduce public confidence in investing.

One of the objective functions of “going public” for companies is ensuring prosperity the owner or shareholder from increasing company value (Nugroho, 2018a).

Many variables affect the value of the firm, including corporate financial decisions that are internal factors and policies that can be intervened by companies which includes investment decisions, capital decisions, and financial risk management. Besides that, there are also external factors which are analysed as Good Corporate Governance whose policies cannot be intervened by the company. Some research about the value of the firm have been conducted by researchers (Emiraldi, 2007), (Ruan, Tian and Ma, 2011). The novelty of this research is describing the interrelationship some variables that influence of financial decisions and good corporate governance on value of the firm which has relation to financial risk management. It happened because the financial risk that occurs will have an impact on the development of the company, especially for companies that has experience of financial distress.
Literature Review

The development of the business carried out by the company depends on the financial decisions that the company must make. The financial decision is a decision that must be made by the company's management to develop the business with intention to maximise the company's value. Corporate finance is the financial sector which is related to the company's operations which consists of assets and liabilities and equity. The asset side is the investment decision of the company while the liability side is the company’s funding decision. The company has the ability to determine the optimal capital structure is a decision that will have an impact on the company's ability to generate profits due to its investments, utilising its fixed assets, use of capital, inventory and trade receivables. There are three factors that are considered to maximise the value of the firm, namely investment decisions, funding decisions and dividend decisions (Damodaran, 2014), (Horne, 2014).

A. Investment Decisions

Investment decisions must be taken by companies which are long-term decisions that must pay attention to various considerations from company management. This is can be done because in this decision will directly impact the survival of the company. In companies that go public status, capital or investment that is used comes from the community, so the determination of investment decisions is very important. Because it is related to the trust that was given by the community. If the company is not right in making the decision in its investment, then various types of investments will emerge the risks both internally and externally. According to (Skoglund and Chen, 2015), it was explained that to get a return can only be achieved if the company is brave enough to take risks, so risk management that occurs is the only preference. Risk management occurs also accompanied by responsibility to get bankable for the company. In addition, making an investment by the company always expects that the investment will provide a return in accordance with what was invested. Based on (Horne, 2014) this states that manufacturing companies whose current assets are usually the most of total assets and a higher level of assets will get ROI faster, but companies with smaller assets will disrupt their operational activities so that they will have difficulty in maintaining surgery. Therefore, it is important to consider the risks associated with financial problems.

An inaccuracy in deciding to invest in companies will lead to a variety of risks both internally and externally. Many various types of investments made by the company include cash, and securities that can be traded. Risks that need to be considered are risks related to costs or interest costs that must be worn by the company. So that, if the company has too much cost or interest costs to be worn, the company will have difficulty in meeting them. This shows that the investment decision will affect the company's financial distress. Based on (Aiyabei, 2002)
it has been defined financial distress is a condition where the company operates cash flow and is not achieving current obligations (such as trade debt or interest costs). Inaccuracy in investing will be reduced to the expected rate of return, in the future it will have an effect on the company's inability to meet its obligations and ultimately will reduce value of the firm.

Investment decision measurement can be done by some indicators and has been done by some researchers to an extent, such as:

a. Book Value of Gross Property, Plant, and Equipment to the Book Value of the Assets Ratio (PPE/BVA) which is reflected sum of fix asset that is owned by a company. According to (Kallapur and Trombley, 1999) it can be determined with comparing value of fix assets with value of total assets.

b. Market to Book Value of Equity Ratio (MVE/BVE), which is reflected by the market assess return of a company’s investment in the future from return that is hoped from its equity. It is also determined by comparing the amount of stock multiply with closing cost from total equity (Smith and Watts, 1992).

c. Capital Addition to Assets Book Value Ratio (CAP/BVA), which is reflected if there is an additional flow of productive assets and it is showed in the company’s potential growth. It is also determined by comparing the difference between value of fixed asset book and value of fixed assets (t-1) with total asset (Kallapur and Trombley, 1999).

d. Capital Addition to Assets Market Value Ratio (CAP/MVA) with fundamental rationale that a growing company has a higher level of investment activity (Kallapur and Trombley, 1999).

e. Price Earnig Ratio (PER), shows the comparison between closing price and earning per stock (Brigham and Houston, 2014)

B. Capital Decision

Capital decisions are defined as decisions that concern the composition of funding chosen by the company (Hasnawati, 2005). The capital decision is inseparable from the investment policy and set by the company that reflects the debt construction used by the company to fund its assets and reflects the company has capability to pay a short-term of debt which is guaranteed with current assets and cash position. Funding that was used by the company can come from its own capital and foreign capital implicit in the company's capital structure because it will reflect the exchange between risk and return with the use of capital which will provide a large profitability for the company.

According to (Brigham and Houston, 2014), to determine the capital structure will involve the exchange between risk and return with the usage of debt in a larger amount. It is also going to increase the risk borne by shareholders, but if it uses more debt in general way then it will increase the estimated return on equity. The impact of risk on capital decisions requires
management to determine the capital structure that produces the balance between risk and return that is maximise stock prices.

The consequence of capital decisions on the value of the firm such as research has been conducted by (Fenandar and Raharja, 2012) which shows that capital decisions have not been an important impact on a company’s value. Whereas the research conducted by (Hermuningsih, 2013) produced empirical facts that profitability, growth opportunity and capital structure variables have a positive and important effect on value of the firm.

The main points explained above are about capital decisions that are not optimal value then it will have an impact on the risks borne by the company and disrupt operational activities. It will also have an impact on the company's operations that are not smooth, so that the company's revenue will decrease and affect the company's inability to meet its obligations or financial distress, and will have a shock on the value of the firm.

The capital decision of measurement can be done by using some parameter below:

a. Book Debt to Equity Ratio (BDE) atau DER, shows the comparison between costing and funding by debt of equity (Brigham and Houston, 2014).

b. Book Debt to Asset Ratio (BDA), measures the percentage of fund which is related by creditor who finances the company’s asset (Brigham and Houston, 2014).

c. Long Term Debt Equity Ratio (LDE), shows the comparison between finance long-term claim which is used to fund long-term investment opportunities with long-term rate of return as well (Brigham and Gapenski, 1997).

d. Market Debt Equity Ratio (MDE), shows the comparison of value of debt book with market value of equity (Brigham and Gapenski, 1997).

**C. Good Corporate Governance (GCG)**

The Forum of Corporate Governance in Indonesia / FCGI (2001) states that GCG is a set of government’s regulations that has relationship between shareholders, managers, creditors, government, employees, other internal and external stakeholders. The aim of GCG is to generate an added value for stakeholders. According to the Organisation for Economic Corporation and Development (OECD), corporate governance is a structure for setting company goals, suggestions for achieving these goals and determining oversight of company performance. The mechanism of corporate governance has aim to design an added value for all parties concerned, so that there is no conflict between the agent and the principal which has an impact on reducing agency costs (Bodroastuti, 2009). The board of directors is one of the most important mechanisms in corporate governance, where its existence determines company performance (Triwahyuningtias and Muharam, 2012).
Based on agency theory, corporate governance mechanisms can create added value for all parties concerned, so there is no conflict between the agent and the principal or to reduce agency problems which in the long run can lead to bankruptcy indications.

GCG implementation is not enough to only ensure that the management process runs efficiently, but that GCG is carried out to ensure that management runs well. There are two things that are indicated in this concept. First, the concern of the right of shareholders to access information correctly and in a timely manner. Second, the company's agreement to make disclosure accurately, timely, and transparent to all information on company performance, ownership, and stakeholders (Kaihatu, 2006).

Various results of studies conducted by various national and international independent research institutions, shows a low understanding of the importance and strategic application of GCG principles by business practitioners in Indonesia, due to the strong organisational culture that also influences the implementation of GCG in Indonesia.

Corporate governance mechanisms are directed to guarantee and oversee the running of governance systems in an organisation (Walsh and J.P.Seward, 1990). The mechanism of good corporate governance can be proxied by five variables according to research (Black, Kim and Jang, 2006), namely shareholder rights, board of directors, independent directors (outside), audit committee and internal auditor, and disclosure investors.

The explanation about five variables is shown below:

1. Shareholder Rights. Investors as owners of capital, have some rights and responsibilities for the company in accordance with the laws and regulations and the articles of association of the company. One of the rights and responsibilities of shareholders is to attend the GMS (General Meeting of Shareholders).
2. Board of Directors. CEO and chairman of the board of commissioners should be different people.
3. Independent Commissioners (Outside Directors). Appointed in the board of commissioners as an independent oversight mechanism for the board's process to reduce agency conflict and improve performance (Cravens and Wallace, 2001). According to (Black, Kim and Jang, 2006) said that at least the company has 50% independent commissioners. Companies have one or more foreign directors, independent commissioners should not receive pension salaries, can get advice from experts outside the company. The company holds a special meeting for outside directors, and at least an independent commissioner attends 75% of the meeting. But in Indonesia, based on the Jakarta Stock Exchange (IDX) Stock Listing Regulations Number I-A concerning General Provisions for Registering Equity Securities on the Exchange that came into issue
The number of Independent Commissioners in the composition of the Board of Commissioners must be proportional to the shares owned by non-controlling shareholders. It provides the number of Independent Commissioners must represent at least 30% of total number of Commissioners in the Board of Commissioners.

4. Audit Committee and Internal Audit (Audit Committee and Internal Auditor). An audit committee is a committee formed by the Board of Commissioners in order to guidance its duties and roles. Audit Committee members who come from the Company's Board of Commissioners act as Chairman of the Audit Committee. The committee is responsible to the commissioner, but internal audit is responsible to the director.

5. Disclosure for investors (Disclosure to Investors). Disclosures for investors can encourage investors and creditors' confidence in determining investment policies taken. In disclosures for investors, it is also usually seen from the activities for relations to investors, the implementation of GCG that is not in accord with the company's internal management, the risk that has to be faced by the company is that it will has a negative shock on the value of the firm. The more uncontrolled the implementation of GCG, the greater the risk that occurs and this will affect the development of the company. On the other hand, the application of GCG will also have an impact on the company's ability to meet obligations to investors, this is because in the application of GCG may involve several people with an interest in the development of the company. If the implementation of GCG can be controlled properly, it is expected that the company will fulfil its obligations.

6. Managerial ownership is assumed to reduce of agency problems that is arising in a company that if it occurs continuously can cause financial distress in the company. Short and Keasey (1999) state that there is a non-linear relationship of ownership.

7. According to (Emrinaldi, 2007), concluded that an increasing of managerial ownership will be able to drive down the potential for financial difficulties. This will be able to unite the interests of shareholders and managers so as to reduce the potential for financial difficulties.

Measurements of Good Corporate Governance that have been conducted by several researchers, are:

1. According to (Black, Kim and Jang, 2006), use the rights of shareholders (Shareholder Rights), the board of directors (Board of Directors), independent commissioners (Outside Directors), audit committee and internal audit (Audit Committee and Internal Auditor), and disclosure for investors (Disclosure to Investors).
2. According to (Daily and Dalton, 1994) use the relationship of two aspects of governance structure namely the composition of directors and the leadership structure of directors,
3. According to (Emrinaldi, 2007) uses the size of the board of directors.
4. As reported by (Wardhani, 2006), usage the size of the board of directors, independence of directors, turnover of directors, and the structure of company ownership.

5. According to (Nurhayati and Medyawati, 2012), using managerial ownership and measuring of share ownership by managers, directors and commissioners with the number of shares outstanding.

**D. Financial Risk Management**

Risk management is a systematic approach in managing uncertainty related to threats (Hanafi, 2014). Risks arise with the company's activities to achieve the company's strategic objectives. Companies need to manage these risks to minimise the impact of risks and achieve strategic objectives. This is very necessary because the company of the interests of the various parties in the development of the company. In addition, investors like financial managers who are able to identify and manage risks. According to (Saunders and Cornett, 2014), the company's main goal is to benefit the owner. But this condition requires costs and will face risks that must be faced by the company. Some of these risks include:

1. Interest rate risk, it can be because of a mismatch between assets and liabilities.
2. Credit risk, it arises because the company is unable to repay loans and securities owned by the company.
3. Liquidity risk, it occurs because the company is unable to sell assets quickly due to market price volatility.
4. Foreign exchange risk, the risk due to switch in exchange rates that can affect the value of an asset and the obligations of companies that use non-domestic currencies.
5. Country or sovereign risk, the risk due to payments from foreign borrowers that can be disrupted due to restrictions, interventions, or interference from foreign governments.
6. Market risk, it has been arising from changes in interest rates, exchange rates, and other prices.
7. Off-balance sheet risk, the risk that is arising as a result of activities related to the balance sheet.
8. Technology risk, it arises when a company invests in technology but there are no savings.
9. Operational risk, it interferes with the technology audit support system.
10. Insolvency risk, whenever the company is not allowed to have enough capital to cover the decline in the value of assets suddenly.

Based on (Hanafi, 2014) says there are two types of risk (a) genuine risk and (b) speculative risk. Genuine risk is the risk that there is a possibility of loss but there is no possibility of profit. Speculative risk is the risk that we expect losses and profits to occur. Speculative risk types are risks that arise in business ventures, which include (Hanafi, 2014):

1. Market Risk, it occurs due to price movements or market price volatility.
2. Credit risk, it caused by the failure of the counter party to fulfil its obligations to the company.
3. Liquidity Risk, risk of not being able to meet cash needs, risk of not being able to sell quickly because of instability and / or market disruption.
4. Operational Risk, the risk of operational activities not running smoothly and resulting in losses, system failures, human errors, controls and procedures that are lacking.

The financial condition that is always expected by the company is a well-being condition that is able to be seen from the development of the value of the firm. In an effort to enhance the value of the firm, every management must be faced with various kinds of risks. It can happen because the higher expected value of the firm, the higher the risk faced, then the company must always analyse the risks that are likely to arise in the business. Controlling risk needs to be done because it can rise the value of the firm. If the company can control the risk well so the company will face a minor risk so the value of the firm will increase. If risk control is not good, the company will face a large risk and this condition will cause problems for the company, or the company will experience a decline in business that will eventually go bankrupt and the company cannot fulfil its obligations. This condition causes the company to experience financial distress.

The explanation above shows that financial problems will not be separated from risk problems and this is a problem that is always faced by all companies. Many types of risks that arise in each company, but what happens to manufacturing companies that play a very important role is the operational financial risk that is determined by the liquidity ratio.

Some risk management measurements used in research include:
1. Using systematic risk in measuring the risks faced by the company (Sudiyatno and Puspitasari, 2010).
2. Enterprise risk management indicators are measured in six dimensions, namely planning, control environment, risk assessment, control activities, information and communication, and monitoring (COSO 2004) (Sudaryono, 2012).
3. Risk management indicators are determined from interest rate risk, credit risk, liquidity risk, foreign exchange risk, country or sovereign risk, market risk, off-balance sheet risk, technology operational risk and insolvency risk (Saunders and Cornett, 2014)
4. Risk management indicators are determined from Market Risk, Credit Risk, Liquidity Risk and Operational Risk (Hanafi, 2014).
5. For Go Public manufacturing companies determined based on the company's financial risk as measured by liquidity ratios (Current ratio, Quick Ratio or Acid Test Ratio) (Annual Report (CALK))
E. Financial Distress

According to (Platt and Platt, 2002), financial distress is defined as the stage of weakening in financial conditions that occurs before bankruptcy or liquidation, which is reflected in the company's inability. On the other hand, it can be named as the unavailability of a fund to pay its obligations. Based on (Whitaker, 1999), a company is said to be in financial distress or financial difficulties if the company has a negative net profit for several years. According to (Ross, Westerfield and Jordan, 2006), financial distress occurs when a company cannot accomplish its legal agreement, especially in the case of debt payments and is threatened with bankruptcy.

If a company goes bankrupt, then bankruptcy costs will arise due to being forced to sell assets below market prices, company liquidation costs, damage to fixed assets before they are sold and so on. Bankruptcy costs not only occur when the company is truly bankrupt, but also occur when the company is threatened with bankruptcy. This is because management tends to spend time to avoid bankruptcy rather than making good corporate decisions (indirect cost of financial distress) which is a large relative cost and is difficult to predict compared to the direct cost of bankruptcy.

Some opinions about signal indicator when a company is in financial distress, such as:

1. If the company has a negative net profit for two consecutive years or has a negative Earning Per Share (EPS) (Elloumi and Gueyié, 2001).
2. Interest coverage ratio (ratio between interest costs to operating income) is less than one (Claessens, Djankov and Lang, 1999).
3. Net operating income is negative and for more than one year, there is no dividend payment has been made (Almilia and Kristijadi, 2003).
4. Violation of debt covenants accompanied by write-off or reduction in dividend financing (Baldwin and Mason, 1983).
5. Interest coverage ratio, which is the division between EBIT plus tax and Interest expenses (Asquith, Gertner and Scharfstein, 1994).
6. The operating profit, net income the book value of equity has negative value, and also the company is merging (Whitaker, 1999).
7. There are indicators as signals of financial distress include: (a) dividend reduction, where dividends distributed continuously show a decrease, (b) Plant Closing, (c) Losses. Operating losses cause the company cannot pay dividends or increase its investment, (d) Layoffs, (e) CEO resignations, and (f) Plummeting stock prices (Aiyabei, 2002).
F. Value of the Firm

Value of the firm is the investor's viewpoint of the company, which often correlates with stock prices. Based on (Horne, 2014), the creation of corporate value is the maximisation of earnings after tax.

According to Nurlela in (Nugroho, 2018b), the value of the firm is able to provide ultimate shareholder prosperity if only the company's share cost rises. It can also happen when the investors hand over its management to professionals who are positioned as managers or commissioners.

Maximising profit (profit maximisation) is offered as the right destination for the company. The financial manager must be able to continue to show an increase of profits by issuing shares and using the results to invest. In addition, maximising EPS is not really an appropriate goal because it does not specify the specific time or period of the expected return of rate. Therefore the goal of maximising EPS is often seen as an improved version of the goal of maximising profit. According to Samuel in (Nurlela, 2008), enterprise value (EV) or also known as value of the firm is an important principal for investors, because it is an indicator for the market to assess the company as a whole. James Tobin developed a theory, called Tobin's Q Theory. The core of this theory is the way monetary policy affects the economy through its effect on equity valuations.

Investors in capital markets are very interested in information relating to company performance, because companies that have good performance are able to maximise profits. The welfare of shareholders is shown through the market price per share of the company, which is also be a reflection of investment and funding asset management decisions (Horne, 2014). In addition, efficient company operations will greatly affect the performance of the company and will ultimately affect public appreciation of companies (Sholihin and Ratmono, 2013).

For companies that are going public, the value of the firm will be reflected in the market price of its shares. The higher value of the firm, the more prosperous the owner is. Many factors can affect the value of the firm, both internal and external factors of the company. It is the responsibility of the financial manager to pay attention and analyse the development of value of the firm.

There are indicators to measure value of the firm:

a. Value of the firm is determined based on value of the firm that is measured by Tobin’Q. It is a ratio between value of the stock market and equity book value of the firm. The formula below:
\[(EMV+D)\]
\[Q = \frac{(EMV+D)}{(EBV + D)}\]

Whereas \(Q\) = value of the firm; \(D\) = book value of total debt; \(EMV\) = market value from equity; and \(EBV\) = book value from equity. \(EMV\) (Equity Market Value) is got from multiplying closing of stock’s price with total spreading of stock. \(EBV\) (Equity Book Value) is got from the difference between total asset and total liabilities.

b. Value of the firm is determined by Price Earning Ratio which is conducted with comparing current stock market prices with net earnings per share (Brigham and Houston, 2014).

c. Value of the firm \((VF)\) is determined by adding up total debt by equity capitalisation which is proxied by dividing net income after tax by the rate of return (Hoque, 2014).

Value of the firm is determined based on proxy for the market value of equity \(t+3\) month, which with a scale of \(BVE_{t+1}\). \(BVE\) is determined by using natural logarithm from book value equity firm (Wahab and Holland, 2012).

**Research Method**

*A. Population and Sample*

Manufacturing companies who listed based on IDX data total in 2016 are 136 companies which consist of healthy companies and companies experiencing financial difficulties. Determination of the research sample is done by Non-Random Sampling as Purposive Sampling using several criteria. Some criteria was determined the research sampling are as follows:

a. Manufacturing companies who listed on the IDX before 2014.

b. The company has complete data as needed in the research during the study period starting in 2014-2016.

c. The company has a complete annual financial statement that ends December 31 to avoid the effect of partial time in calculating financial ratios.

d. Companies included in the Financial Distress category. Determination of the company’s categories including the Financial Distress group is done by analysing the growth of QRNOI and EPS with consideration, namely:

1. Quick Ratio Growth (QR). Measurement of financial distress with QR indicators is very important for the company's operations and sustainability with a score of 3.
2. Growth of Net Operating Income (NOI). Measurement of financial distress with NOI growth indicators is important both for companies, creditors and shareholders, with a score of 2.

3. Earning Per Share (EPS) growth. Measurement of financial distress using EPS is quite important for shareholders with a score of 1.

Furthermore, based on the FD criteria will be determined by determining the positive (+) and negative (-) signs of the growth of each criterion in each company whose value has been determined based on the score. Companies that experience growth (+) in all categories are given a score of "0", while companies whose growth (-) will be given a score according to predetermined criteria so that the total score for each company is known. Based on the total score obtained will be determined by the group of companies in FD conditions and non FD conditions with the provisions of 0 < total score < 6. Criteria for grouping companies can be done based on:

1. If the total score > 3 companies are grouped under FD conditions
2. If the total score ≤ 3 companies are grouped in non FD conditions

Table 1 is the result of calculation in determining financial distress criteria.

**Table 1: Determining of the company’s criteria for financial distress**

<table>
<thead>
<tr>
<th>Growth of QR</th>
<th>Score (3)</th>
<th>Growth of NOI</th>
<th>Score (2)</th>
<th>Growth of EPS</th>
<th>Score (1)</th>
<th>Total score</th>
<th>Describe</th>
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<tbody>
<tr>
<td>+/-</td>
<td>+</td>
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<td>+/- -</td>
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<tr>
<td>+/-</td>
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<td>3</td>
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</tbody>
</table>

The number of manufacturing companies that became the population in this research were 139 manufacturing companies consisting of three sectors, namely the Consumer Good Industry or food industry sector, Basic industry and Chemical or Basic Industry and Milliones Industry, Various Industries. Based on the predetermined criteria, there are 40 companies that fall into the financial distress category and are selected for analysis.

The limitation of this study is about financial fluctuations always occurring in manufacturing companies due to the company's financial data which is highly dependent on economic conditions and policies made by the government which are external fundamental factors and are beyond the company's control. So that the financial distress conditions in this study are not permanent, conditions in the manufacturing companies of the study period, but may be different from manufacturing companies outside the study period.
B. Definition of Concept and Operational

a. Concept Definition

1. Investment Decisions are management decisions in determining the right investment in the hope of a return or return in accordance with what was invested (Horne, 2014).
2. Capital Decisions are management decisions in determining the optimal capital structure so that it does not interfere with company operations (Brigham and Houston, 2014).
3. Good Corporate Governance (GCG) is a relationship of two aspects of governance structure, namely the composition and the leadership structure (Daily and Dalton, 1994).
4. Financial Risk Management / FRM is the amount of risk faced by companies by using company risk information contained in the company's financial statements (CALK Annual Report of Go Public manufacturing companies).
5. Financial Distress (FD) is a condition where a company faces financial difficulties. Financial distress occurs when a company cannot fulfil its obligations, especially in terms of debt repayment (Ross, Westerfield and Jordan, 2006), (Asquith, Gertner and Scharfstein, 1994).
6. Value of the firm is illustrated by the welfare of the owners who have wealth in the form of shares, the higher value will be reflected in the market price of the shares, then it will provide prosperity for the owner (Fama, 1998).

b. Operational Definition

1. Investment Decisions are determined with some of the following indicators:
   a. Book Value of Gross Property, Plant, and Equipment to the Book Value of the Assets Ratio (PPE/BVA)
   b. Market to Book Value of Equity Ratio (MVE/BVE)
   c. Market Value to Book Value of Assets Ratio (MVA/BVA)
   d. Capital Addition to Assets Book Value Ratio (CAP/BVA)
   e. Capital Addition to Assets Market Value Ratio (CAP/MVA)
2. Capital Decisions is determined with some indicators:
   a. Book Debt to Equity Ratio (BDE) or DER
   b. Book Debt to Asset Ratio (BDA)
   c. Long Term Debt Equity Ratio (LDE)
   d. Market Debt Equity Ratio (MDE)
3. Good Corporate Governance (GCG) was proxied by determining the value of management ownership.
4. Financial Risk Management is determined based on financial risk that is measured by a company’s liquidity ratio including Current ratio and Quick Ratio.
5. Financial Distress (FD) is measured with interest coverage ratio.
6. Value of the firm including per and value of the firm.
c. **Data Analysis Method**

In this study, descriptive analysis techniques and statistical analysis were used. Descriptive analysis is a function to describe the results of the study, while statistical analysis has an intention to prove the research hypothesis. In this case, SEM-PLS with the WarpPLS program were used.

**Discussion**

1. Analysis of groupings of companies that listed into the FD category.
Based on the analysis of FD grouping companies that are determined on the criteria that have been described, then of the 139 manufacturing companies listed on the Indonesia Stock Exchange in the 2014-2016 period as many as 40 companies consist of Consumer Good Industry / Food industry as many as 15 companies (37.5%), Basic industry & Chemical / Basic Industries as many as 19 companies (47.5%) and Milliones Industry / Various Industries as many as 6 companies (15%)

2. Analysis Results
Research conceptual framework as presented in the following figure:

**Figure 1. Research conceptual framework**

Based on the conceptual framework and the results of analysis using PLS Warp obtained the following results:

a. The results of descriptive statistical analysis obtained the following results:
From Table 2, it can be observed that the highest average investment decision of manufacturing companies is the CAP / BVA indicator of 2.82% and the minimum value of the CAP / MVA indicator of -0.005%. The highest average capital decision is the 1.785% MDE indicator and the minimum average is the 0.49% BDA indicator. The highest average FRM is the CR indicator 2.606% and VF has the highest average value on the firm value variable.

b. Correlation
Correlation analysis is performed to determine the strength of the relationship between research variables. Pearson coefficient and p value between variables as in Table 2 and Table 2 below:

### Table 2: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>PPE/BVA</th>
<th>MVE/BVE</th>
<th>MVA/BVA</th>
<th>CAP/BVA</th>
<th>CAP/MVA</th>
<th>DER</th>
<th>BDA</th>
<th>LDE</th>
<th>MDE</th>
<th>ICR</th>
<th>GCG</th>
<th>QR</th>
<th>CR</th>
<th>Value_F</th>
<th>PER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>0.445</td>
<td>1.653</td>
<td>1.279</td>
<td>2.82</td>
<td>-0.005</td>
<td>1.008</td>
<td>0.487</td>
<td>0.199</td>
<td>1.785</td>
<td>3.997</td>
<td>0.781</td>
<td>1.738</td>
<td>2.696</td>
<td>2589339</td>
<td>25.05</td>
</tr>
<tr>
<td><strong>(SD)</strong></td>
<td>0.208</td>
<td>2.605</td>
<td>1.653</td>
<td>18.244</td>
<td>2.159</td>
<td>1.489</td>
<td>0.224</td>
<td>0.192</td>
<td>3.027</td>
<td>50.32</td>
<td>0.518</td>
<td>4.491</td>
<td>4.652</td>
<td>9235802</td>
<td>86.63</td>
</tr>
<tr>
<td><strong>(Min)</strong></td>
<td>0.059</td>
<td>-0.698</td>
<td>-7.043</td>
<td>-8.953</td>
<td>-18.3</td>
<td>-8.6</td>
<td>0.1</td>
<td>0.017</td>
<td>-0.02</td>
<td>-340</td>
<td>0.462</td>
<td>-5.629</td>
<td>0.345</td>
<td>13999.6</td>
<td>-103</td>
</tr>
<tr>
<td><strong>(Max)</strong></td>
<td>0.989</td>
<td>20.382</td>
<td>9.264</td>
<td>150.993</td>
<td>14.426</td>
<td>5.869</td>
<td>1.571</td>
<td>1.043</td>
<td>19.151</td>
<td>47.462</td>
<td>49.484</td>
<td>6160968</td>
<td>777.2</td>
<td>89840.2</td>
<td>95.00</td>
</tr>
<tr>
<td><strong>(Median)</strong></td>
<td>0.427</td>
<td>0.821</td>
<td>0.951</td>
<td>0.017</td>
<td>0.009</td>
<td>0.855</td>
<td>0.472</td>
<td>0.129</td>
<td>0.492</td>
<td>1.495</td>
<td>0.833</td>
<td>0.992</td>
<td>1.602</td>
<td>813985</td>
<td>13.3</td>
</tr>
<tr>
<td><strong>(Mode)</strong></td>
<td>0.432</td>
<td>-0.698</td>
<td>-7.043</td>
<td>-8.953</td>
<td>-18.3</td>
<td>-8.6</td>
<td>0.1</td>
<td>0.017</td>
<td>0.012</td>
<td>0.294</td>
<td>0.48</td>
<td>-5.629</td>
<td>0.345</td>
<td>13999.6</td>
<td>-102</td>
</tr>
<tr>
<td><strong>Skewness</strong></td>
<td>0.338</td>
<td>4.283</td>
<td>0.256</td>
<td>6.658</td>
<td>-2.787</td>
<td>-1.91</td>
<td>1.392</td>
<td>1.599</td>
<td>2.783</td>
<td>-3.97</td>
<td>-0.6</td>
<td>8.97</td>
<td>8.737</td>
<td>4.762</td>
<td>6.318</td>
</tr>
<tr>
<td><strong>Exc. k</strong></td>
<td>-0.8</td>
<td>25.221</td>
<td>9.865</td>
<td>44.964</td>
<td>59.541</td>
<td>15.9</td>
<td>4.576</td>
<td>2.645</td>
<td>9.241</td>
<td>24.41</td>
<td>-0.95</td>
<td>88.342</td>
<td>84.606</td>
<td>23.361</td>
<td>48.21</td>
</tr>
</tbody>
</table>
Figure 2 below is the analysis results of interrelationship between the research variables.

**Figure 2. Analysis Result**

The result of path coefficients and *p value* describes as following table.

<table>
<thead>
<tr>
<th>Table 3: Path Coefficients Research’s Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Path coefficients</strong></td>
</tr>
<tr>
<td>**</td>
</tr>
<tr>
<td>IVSMDC</td>
</tr>
<tr>
<td>CPTLDC</td>
</tr>
<tr>
<td>FD</td>
</tr>
<tr>
<td>GCG</td>
</tr>
<tr>
<td>FRM</td>
</tr>
<tr>
<td>VF</td>
</tr>
</tbody>
</table>
As result of analysis using 0.05, the investment decision has a negative effect on Financial Risk Management (p = < 0.01), Financial Distress (p = 0.006) and but has a positive effect on value of the firm (p = < 0.001).

This condition indicates that the higher the investment value, the investment decision becomes less precise because the less operational funds that can be used by the company, so the risk determined by CR and QR is small. Inaccurate investment decisions will cause the risk faced by the company is higher which causes the higher inability of company in meeting its short-term obligations, so that FD conditions will occur, but it should be noted that with the courage of the company in investing will increase public trust in the company or higher value of the firm.

Capital decisions have a positive effect on Financial Distress (p = < 0.001) and Company Value (p = 0.011), but it has no significant effect on Financial Risk Management (p = 0.163). This condition indicates that based on the theory that the determination of capital structure will involve risk and return. The use of debt in larger amounts will have an impact on the company's incompetence to achieve its agreement (FD), but it should be noted that with the accuracy of the company in determining the optimal capital structure it will increase the company's operations and this will increase public trust in the company or a higher company value. Based on (Brigham and Houston, 2014) states that is using more debt in general, then it will increase the estimated return on equity. The use of a lot of debt will have an impact on the return on capital so that the value of the company will go down which causes the average CR trend to decrease, because part of the capital is used to meet the inventory so that the QR increases. QR increase makes the company has non-current assets which is it is going to guarantee the company's improvement. Therefore the company's financial risk is low.
Good Corporate Governance has a positive effect on Financial Distress (p = 0.03) and a significant negative effect on Company Value (p = 0.04), but, there is no significant effect on Financial Risk Management (p = 0.101). This condition indicates that the amount of share ownership owned by managerial will increase the company's inability due to policy interventions carried out by management, thus creating public disbelief that causes a weakening in the value of the company.

Financial Risk Management have no significant effect on Financial Distress (p = 0.2), but it has a significant positive effect on Value of the Firm and FD also have not a significant effect on Value of the Firm. The condition of FD is a condition where the company has an inability to fulfil its short-term obligations, so that any existing risks will not have an impact on FD and also will not have an impact on the value of the firm because the financial risk does not depend on managerial policy.

Conclusion

Companies that experience Financial Distress conditions need attention, because if the situation is sustainable then the company will experience bankruptcy. This study analyses several factors that need to be considered to increase the value of the firm if company experiences Financial Distress. Results of analysis show that financial decisions in this study were analysed through investment decisions and funding decisions as well as governance (GCG) made by management that can influence the value of the company. The efforts for increasing the value of the firm need to pay attention to certain risks and must be faced by the company in making investments and determining the capital structure to be determined. In addition, this increases the value of the firm, it is necessary to have good governance in the sense that the level of share ownership by management needs to be considered because it will lead to high interventions for company policy so that the conditions of FD are getting higher. All companies want sustainability even though the company is in an FD condition, therefore it is necessary to do further analysis on strategies for the sustainability of companies that experience FD so that the company are able to survive.
REFERENCES


