THE LEVERAGE OF FINANCIAL PERFORMANCE TOWARDS VALUE OF FIRM LISTED IN LQ45 INDEX IN INDONESIA STOCK EXCHANGE (2015-2017)

SKRIPSI

Presented in partial fulfillment of the requirements for
The Bachelor’s Degree in Accounting

By
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FACULTY OF BUSINESS
ACCOUNTING STUDY PROGRAM
PRESIDENT UNIVERSITY
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Cikarang, 22nd of January 2019

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THE LEVERAGE OF FINANCIAL PERFORMANCE TOWARDS VALUE OF FIRMS THAT BEING LISTED IN LQ45 INDEX IN THE INDONESIA STOCK EXCHANGE (2015-2017)

submitted by Liska Fitri R., Accounting Study Program, Faculty of Business, has been assessed and proved to pass the oral examination held on February, 8th 2019

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Cikarang, 22nd of January 2019

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# Table of Contents

COVER PAGE ....................................................................................................................... i

PLAGIARISM CHECK ......................................................................................................... ii

DECLARATION OF ORIGINALITY ........................................................................................ vii

PANEL EXAMINERS APPROVAL SHEET ........................................................................... viii

ACKNOWLEDGEMENT ......................................................................................................... ix

TABLE OF CONTENT ........................................................................................................... xi

LIST OF FIGURES ................................................................................................................ xiv

LIST OF TABLES .................................................................................................................. xv

ABSTRACT ............................................................................................................................... xvi

INTISARI ................................................................................................................................. xvii

**CHAPTER I - INTRODUCTION** ......................................................................................... 2

1.1 Research Background ................................................................................................. 2

1.2 Problem Statement ........................................................................................................ 4

1.3 Research Objectives ..................................................................................................... 6

1.4 Research Scope and Limitation .................................................................................... 8
CHAPTER II – LITERATURE REVIEW ................................................................. 11

2.1 Theoretical Review .................................................................................. 11

2.2 Previous Research .................................................................................... 25

2.3 Theoretical Framework ............................................................................. 28

2.4 Hypothesis Development ......................................................................... 29

CHAPTER III – RESEARCH METHOD ............................................................. 39

3.1 Research Design ....................................................................................... 39

3.2 Operational Definition of Variable ......................................................... 39

3.3. Sampling Design ..................................................................................... 40

3.4. Data Collection Method ......................................................................... 41

3.3 Data Analysis Method ............................................................................... 42

CHAPTER IV – DATA ANALYSIS AND INTERPRETATION OF RESULT .......... 51

4.1 General Description of Research Object ................................................ 51

4.2 Descriptive Analysis ................................................................................ 52

4.3 Data Analysis Result ................................................................................ 54
List of Figures

Figure 2.1 Theoretical Framework ................................................................. 28

Figure 4.1 Heteroscedasticity Test ................................................................. 79
List of Tables

Table 4.1. Descriptive Statistics................................................................. 56

Table 4.2. Normality Test ........................................................................... 59

Table 4.3. Durbin Watson Test ................................................................. 61

Table 4.4. Multicollinearity Test............................................................... 62

Table 4.5. Multiple Regression Analysis Result ....................................... 63

Table 4.6. F test Result ............................................................................... 67

Table 4.7. Coefficient Determination Result ............................................. 68
This study aims to prove empirically the effect of current ratio, debt to equity ratio and return on assets both partially and simultaneously the company's price towards book value that has been categorized into LQ45 index on the Indonesia Stock Exchange (IDX) for the 2015-2017 period. The populations of this study are all companies that included in the LQ45 index in Indonesia Stock Exchange. By using the purposive sampling method, obtained 25 companies that meet the criteria of purposive sampling. This study uses multiple linear analyses as an analysis method. The results of this research indicate that current ratio has a negative influence on firm value, Debt to Equity Ratio and Return On Assets have a positive influence on firm value. Each variable has a partial influence on the value of the company. And simultaneously Current Assets, Debt to Equity Ratio and Return On Assets have a significant effect on price to book value.

**Keywords:** Current Ratio, Debt to Equity, Return on Assets, Price to Book value, Firm Value.
INTISARI


Kata kunci: Current Ratio, Debt to Equity, Return on Assets, Price to Book value, Nilai Perusahaan
Chapter I

Introduction

1.1 Research background

Theoretically, capital market condition is strongly influenced by economic performance in aggregate so that the relationship between the capital market with macroeconomic condition showed positive correlation (Widoatmodjo, 2009). Therefore, if Jakarta Composite Index is increasing, this explains the Indonesian economy is in the improving cycle. Conversely, if it is declining, this explains the Indonesian economy is experiencing difficulties (Darmadjii & Fakhruddin, 2010). Based on Law No.8 year 1995 on Capital Market, Indonesia Stock Exchange has the authority and duty to organize and provide systems and physical facilities to associate buying and selling to related parties with purpose of trading securities.

According to Hariant and Sudomo (2001) investment can be interpreted as an action of putting funds in one or more assets during a given period in the hope of earn income and or increase investment value. The purchase of shares is a form of investment in the capital market. Shares provide income in the form of dividends, and the value can be expected to increase. In making investments, investors will estimate the expected return of their investment for a certain period in the future. However, after the investment period has passed, it is not certain that the realized income level is the same as the expected income level. Uncertainty about the level of income is the core of investment, namely that investors always have to consider elements of uncertainty which is an investment risk.

Before taking any decision regarding an investment, an investor should always follow the update information of the company they concerned about, have in depth knowledge about the company's financial performance and analyze it. The company's performance could be observed through the company's internal information sourced from the company's financial statements (Hanafi and Halim, 1996). These statements are reinforced by the same study that conducted by Meiden in 2008 with the addition of several variables, which then led to the conclusion that before making an investment, investors must collect data, assess and analyze information obtained from print and electronic media such as quarterly and annual financial reports, newspapers, economic magazines, radio and television from the company invested. Information sources that are often used by investors are financial statements (Meiden, 2008). The stockholders and potential investors will be interested in buying the stocks of the company; only If the financial performance of a company is showed good sign, which will affect the stock price of the company.
According to Brigham and Houston (2001) substantial purpose of a firm is to maximize the wealth of its stockholders through the firm's value as showed in the stock price. The price that would be paid by investors as an evidence of ownership is defined as the stock price. The stockholders always monitor stock price movements, as the value of their prosperity is determined by the stock price. Firm’s Value will be directly affected by the stock price, which means the value of firm is counted as important indicator for investors. The value of a stock in this research will be identified using price to book value ratio.

Saptadi (2007) states that the capital market the stock price is an objective measure of the value of investment in a company. Price of share is the stock value that described the company's riches that published the stock, where the change or fluctuation is largely determined by the strength of the supply and demand that occurs in the secondary market. The more investors who want to buy or keep a stock, the price goes up, on the contrary, more and more investors want to sell or release a stock, the price moves further down. Share prices are investors' expectations. Variations in stock prices will be affected by the performance of the company concerned, also get affected by the law of demand and supply, the performance of the company will determine the high and low price of shares in the capital market. In general, the more performance of a company, the higher its operating profit and the more profits that can be enjoyed by shareholders, the more likely the stock price will rise.

1.2 Problem Statement

1.2.1 Problem Formulation

Price to book value demonstrates the firm's ability to create value of firm in the form of the price related to available capital (Jogiyanto, 2010). According to The value of the firm not only reflects current performance of the firm but also illustrates the firm's prospects in the future (Hermuningsih, 2013). Higher price to book value means the firm succeeded in adding value for stockholders’ prosperity (Salvatore, 2005).

As stated by Damodaran (2012), there are several causes why investors prefer to use Price to book value ratio in investment analysis. As the following:

1. Book value is a simple benchmark that can be compared to market price since it provides a relatively stable, intuitive measure of value that.
2. Price to book value is comparable among similar firms for sign of under- or overvaluation.
3. Firms with negative earnings can be evaluated using price to book value ratio, which cannot be done by using price earnings ratio.
There is a significant and strong relationship between the financial performance of the company and its value. Financial performance of a company is supposed to be proficient to forecast the value of the company in the future. Nevertheless, there are inconsistencies in the effect of financial ratios on the value of the company. As described by Mahendra (2012):

“There are several factors that affect the value of the firm, namely: funding decisions, dividend policy, investment decisions, capital structure, earnings growth, and size of the firm. Some of these factors have a relationship and influence on the value of a firm inconsistently.”

Investors tend to believe that if a company has a high level of liquidity, there will be a lot of internal funds that will be managed by the company for its operational activities; so companies tend not to use debt as an option to finance their investment. Therefore this condition can be considered to be able to increase the company's capability to carry out funds so that it will affect the value of the company (Jantana, 2012).

Investors tend to believe that more debt will increase investment risk; therefore some investors often avoid companies with high debt levels (Nasehah & Widyarti, 2012). Even though, Hidayah (2014) did not find the effect of significant leverage on the value of a company. Indeed Angg (1997) found that profitability positively influences company value because profitability ratios show the company's success in generating profits, which is also supported by Hidayah (2014) and Febrianti (2012).

According to the problems and research gaps that has been stated previously, the researcher is interested to conduct a research with the concerned on price to book value through the analysis of its financial performance which are current ratio, debt to equity ratio, and return on assets. The sample is chosen from LQ45 Firms that listed in Indonesia Stock Exchange. The researcher would like to conduct a research with the title, “The Leverage Of Financial Performance Towards Value Of Firms That Being Listed In LQ45 Index In The Indonesia Stock Exchange (2015-2017)”.

1.2.2 Research Questions

As stated earlier in previous section, this research will emphasize further on the variables that influence price to book value ratio specifically for the LQ45 firms
that listed in Indonesia Stock Exchange. Refers to that, the researcher has constructed problem statements, which will be analyzed in this research, which are:

1. Is there any partial significant influences of:
   a. Current ratio towards price to book value in the company that being listed in LQ45?
   b. Debt to equity ratio towards price to book value in the company that being listed in LQ45?
   c. Return on assets towards price to book value in the company that being listed in LQ45?

2. Is there any simultaneous significant influence of current ratio, debt to equity ratio, and return on assets towards price to book value in the company that being listed in LQ45?

3. Which variable that has the most significant influence towards price to book value in the company that being listed in LQ45?

1.3 Research Objectives
   Based on the preceding statement of problems, the objectives of this research, with the focus on firms listed in Indonesia Stock Exchange, can be translated as follow:
   1. To find out whether there is partial significant influences of:
      a. Current ratio towards price to book value of the company that being listed in LQ45.
      b. Debt to equity ratio towards price to book value of the company that being listed in LQ45.
      c. Return on assets towards price to book value of the company that being listed in LQ45.
   2. To find out whether current ratio, debt to equity ratio, and return on assets have simultaneous significant influence towards price to book value of the company that being listed in LQ45.
   3. To find out the most influential factor among current ratio, debt to equity ratio, and return on assets towards price to book value of the company that being listed in LQ45.

1.4 Research Scope and Limitations

1.4.1 Scope
   The researcher limit the scope of this research only for the company that being listed in LQ45, for the period itself the researcher limit it from 2015 until 2017.
LQ45 is the index that consisted of 45 most liquid companies that listed on Indonesia Stock Exchange. As expressed by Indonesia Stock Exchange that:

“The LQ45 Index comprises of 45 most liquid Common Stock (hence the name LQ is referring to Liquid) listed on the IDX that have been chosen and scrutinized through the following criteria: The selection process started by selecting Top 60 common stocks with highest average transactions value in Regular Market for the last 12 months. Out of the 60 stocks; further 45 stocks are selected weighted by Transaction Value, Market Capitalization, Trading Day Number, and Transaction Frequency in Regular Market over the last 12-month period. The stocks must be included in the calculation of the Composite Index (JCI). The stocks should have been listed in the IDX for at least 3 months. The stocks should have a good financial condition, prospect of growth, and high trading frequency and transactions in Regular Market”.

There are several reasons why the researcher chose companies that being listed in LQ45 index as a sample in this study. Firstly, because company that included in LQ45 can consist of non-financial or financial companies, but only if the company has fulfilled the criteria specified in the LQ45 selection. Secondly, LQ45 Company’s shares have high capitalization and liquidity. The last, companies that belong to the LQ45 index usually tend to give a positive signal to investors. Companies have shares that are convenience to be traded back in a short time. In the end, the companies that belong to the LQ45 index are considered to have good firm value compared to companies, which are not included in the LQ 45 group.

1.4.2 Limitation
This research also has some limitations, which are:

a. The data limitation, which is provided by the sample, the period of this study, is limited to 2015 until 2017.

b. There may have other factors that affect price to book value instead of current ratio, debt to equity ratio, and return on assets, such as macroeconomic factors, ownership structure, corporate governance, Indonesian social, political, and security factors which are not being researched in this study. Therefore, the result of this study will vary depend on other uncountable or other possesses dependent.
1.5 Research benefit

Based on the objectives to be achieved in this study, the expected uses are:

1. Theoretical Use
   The theoretical use in this study is as a vehicle to train and develop abilities in the field of research, as well as to add insight and knowledge about the capital market.

2. Practical usability
   Practical uses in this study include:
   a) As input for management of the company in considering financial policy making to improve company performance;
   b) As an input for investors in considering decision making in relation to stock investments that have been or will be invested in the capital market.

3. Organizational Use
   This research has operational uses, as fulfillment section and reference or reference material to add to the repertoire of science and to hold further research that related to the leverage of financial performance towards the values of firms.
CHAPTER II
LITERATURE REVIEW

2.1. Theoretical Review

The Constitution of Republic Indonesia no.8 year 1995 on Capital Market Chapter I Article I no.13 stipulated “Capital market is the activity of trading and offering securities to the public, the activity of a public firm with respect to securities it has issued, and the activities of securities-related institutions and professions.” Capital market refers to all debt and equity instruments that provide for transactions in long-term instruments, in which the maturity is beyond than one year such as stock, mortgage, and corporate bonds (Darmadji & Fakhruddin, 2010). On this study, the researcher will focus on the stock market. Darmadji & Fakhrudin (2010) defined stock as:

“A sign of ownership or participation of any person or entity in a corporation or limited liability company. Stock is in the form of a piece of paper stating that the owner of the paper is the owner of the firm that issued the securities. The portion of ownership is determined by how much equity invested in the firm.”

The firm can offer stocks to the public through the stock market to meet the needs of long-term funds. The investors who buy its stocks then called as stockholders. Stockholders can enjoy the benefits in the form of capital gains and dividends according to how much their ownership within the firm (Jogiyanto, 2010). Husnan (2005) stated that to be able to trade its stocks in the stock market, the firm should be listed in the stock market by fulfilling some requirements set by BAPEPAM-LK in order to issue stocks and listed in the stock market. Firms that already meet those requirements may issue stocks in primary market for a certain period of initial public offering.

Stock market price is formed by the supply and demand mechanism on the stock (Jogiyanto, 2010). When the stock is attractive, the investors are willing to buy with high price, thus the demand is increasing. Conversely, the price can be low if the stock is no longer attractive and make the investors selling their stocks.

2.1.1. Stock

Obviously, one of the company's choices when deciding to finance a company is publishing the shares. On the other hand, investment instruments that are chosen by many investors are stocks, because stocks are able to provide attractive
levels of profit. Shares can be defined as a sign of a person's equity or a party (business entity) in a company or limited liability company. By including the capital, the party has a claim on the company's income, claims on the company's assets, and has the right to attend the General Meeting of Shareholders (GMS).

As expressed by Brigham and Ehrhardt (2009):

“An ordinary stock simply represents an ownership interest in a corporation. Two main types divide stock: common stock and preferred stock. The difference between the types is that the common stockholder has vote right at shareholder meeting whereas the preferred stockholder does not have.”

Usually, investors could obtain two benefits by owning or buying shares:

1) Dividends
   Indonesia Stock Exchange (2010) said that the distribution of profits provided by the company and derived from profits generated by the company is well known as dividend. Dividends distributed by the company can be in the form of cash dividends - meaning that each shareholder is given a dividend in the form of cash in a certain amount of rupiah for each share - or it can be in the form of stock dividends which means that each shareholder is given a dividend of a number of shares so that the number of shares owned by an investor will increase with the distribution of dividends.

2) Capital Gain
   Indonesia Stock Exchange (2010) said that capital gain is the difference between the purchase price and the selling price. Capital gain is obtained by the existence of stock trading activities on the secondary market.

As an investment instrument, stocks have a risk, as following:

1) Capital Loss
   The Indonesia Stock Exchange (2010) said that the opposite of Capital Gain is capital loss, which reflects a condition where investors sell shares lower than the purchase price.

2) Liquidation Risk
   Indonesia Stock Exchange (2010) said that companies whose shares are owned, are proclaimed bankrupt by the Court, or the company is
dissolved. In this condition, the claim rights of the shareholders get the final priority after all the company's liabilities could be repaid (from the proceeds of the sale of company assets). If there is still a remainder of the proceeds from the sale of the company's assets, then the remainder is divided proportionally to all shareholders. But if there is no residual wealth of the company, then the shareholders will not get the results of the liquidation. This condition is the heaviest risk from shareholders. For this reason a shareholder is expected to continually follow the development of the company. In the secondary market or in daily stock trading activities, stock prices experience fluctuations in the form of both increases and decreases. Share price formation occurs because of the demand and supply for the shares. Namely, the stock price is formed by supply and demand for these shares. Supply and demand occur because of the many factors, both the specific nature of the stock (the performance of the company and the industry where the company is engaged) as well as macro factors such as interest rates, inflation, exchange rates and non-economic factors such as social conditions and politics, and other factors.

2.1.2. Stock Price

The stock price is the present value of the cash flow that will be received by the shareholders in the future. According to Anoraga (quoted by Saptadi, 2007) the stock price is money issued to obtain evidence of the ownership or ownership of a company. The stock price can also be interpreted as a price formed from the interaction of the sellers and buyers of shares who are motivated by their expectations of company profits, for that investors need information relating to the formation of these shares in making a decision to sell or buy shares.

Based on its function the value of a stock is divided into three types, as following:

a. Par Value (Nominal Value)

Nominal value is the value listed on the relevant shares that function for accounting purposes. The nominal value of a stock must exist and be included in the securities in rupiah currency, not in the foreign currency.

b. Base Price

The basic price of a stock is closely related to market prices a stock. The base price is used in the calculation stock price index.
c. Market Price

The market price is the price of a stock in an ongoing market. If the market for an effect is closed then the market price is the closing price. So it is this market price that states the rise and fall of a stock.

2.1.3. Stock Valuation

Before investing in stocks, investors should analyze firm's ability to generate profits. Investors are also concerned over the information related to the firm's financial performance as a guide to investing, so that the invested funds are able to generate more value in the future in the form of dividends or capital gains (Husnan, 2005).

According Tandelilin (2010), three types of values are:

1. Book value: The value, which is calculated, based on the firm’s or issuer’s bookkeeping.
2. Market value: The value of stocks in the market, which is indicated by the stock price in the stock market.
3. Intrinsic value: The actual value of the stocks or value that should occurs.

According to Angg (1997), investors and securities analysts usually compare the intrinsic value of the stock and the market value of the stock to assess whether the stock price offered by the issuer has a fair price, undervalued or overvalued. If the intrinsic value is greater than the market value, the stock price is considered undervalued. In this condition, investors should buy the stocks. If the intrinsic value is less than the market value, then the price of the stock is considered overvalued. Thus, it will be better to sell the stocks. If the intrinsic value is equal to the market value, the stock is considered fair.

Damodaran (2012) stated generally there are three approaches to conduct stock valuation, which are:

1. Discounted Cash Flow Valuation

The present value rule is the foundation of this approach, where the value of an asset is the present value of expected future cash flows of an asset, which are discounted using a specific discount rate. The discounted cash flow estimates the intrinsic value of an asset based on its fundamentals. However,
this approach will be difficult to use for assets whose cash flows are not currently positive and cannot be estimated with some reliability for future periods, and where a proxy of risk cannot be used to obtain discount rates.

2. Relative Valuation
The assessment of an assets' value in this model is derived from pricing of comparable assets with similar characteristics, by utilizing common variables such as earnings, cash flows, book values, or revenues. Most valuations are using relative valuation. Price earnings ratio, price to book value ratio, and price to sales ratio are most commonly used multiples. Multiples are simple and easy to relate to so that they can be used to estimate value of firms or assets in quick time. However, the deficiencies of multiples are easy to misuse and manipulate since there are no firms, which are exactly alike in terms of risk and growth. Thus, the definition of comparable firm is subjective one. This study will be focused in relative valuation.

3. Contingent Claim Valuation
The valuation of an asset in this model is using option-pricing models, with consideration that assets is similar to option. It is valued as an option if the payoffs are a function of value of an underlying asset. This model arises, as discounted cash flow tends to understate value of an asset, which provides payoffs that are contingent when the event occurs. However, the values, which are generated from this approach, have much more error than values generated in more conservative model.

2.1.4. Value of Firm

Value of firm is defined as market value because the value of a firm can provide maximum prosperity of the shareholder if the company's stock price is increased. Various policies taken by management as an effort for increasing the value of the firm through increasing the prosperity of owners and shareholders that reflected in stock prices (Brigham & Houston, 2010). Maximizing the value of the company is very important for a company, because maximizing shareholder prosperity is the company's main goal (Gitman, 2009)

According to Gitman (2009), there are several types of company values, which consist of:
1. Value of Liquidity is the amount of money that can be realized if an asset or group of assets is sold separately from the organization that runs it.

2. Value of business continuity is the value of the company if it is sold as a continuing business operation.

3. Book Value of a company is total assets less liabilities and preferred shares as listed on the balance sheet.

4. Market Value is the market price used to trade assets.

5. Intrinsic Value is the price of stocks based on factors that can affect value.

Damodaran (2012) stated there are some reasons why investors uses price to book value price for valuing firm, which are:

1. Book value is a simple benchmark that can be compared to market price since it provides a relatively stable, intuitive measure of value that.

2. Price to book value is comparable among similar firms for sign of under- or overvaluation.

3. Firms with negative earnings can be evaluated using price to book value ratio, which cannot be done by using price earnings ratio.

Through price to book value, investors could predict undervalued or overvalued stocks (Ahmed & Nanda, 2000). Firms with good performance, generally have price book value ratio reach above one, which indicates that the stock market value is greater than its book value (Jogiyoanto, 2010). On the other hand, firm with price to book value under one indicates that the firm is undervalued, in which it is valued less than its book value. Price to book value formula is as follows:

\[
\text{Price to Book Value} = \frac{\text{Price per Share}}{\text{Book Value of Equity per Share}}
\]
2.1.5. Current Ratio

Kasmir (2012) defined liquidity as,

“The liquidity ratio is the ratio used to measure how liquid a firm is. It is by comparing all the accounts that exist in current assets with short-term debt accounts.”

While Syamsudin (2002) stated that,

“Liquidity is an indicator of a firm's ability to repay all short-term financial obligations at maturity using availability of liquid assets. Liquidity is not only related with the firm's financial condition, but also with its ability to convert certain current assets into cash.”

Current ratio can be formulated as follows:

\[
\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}
\]

Current ratio is a comparison between current assets and current liabilities which is the most common measurement used to determine a company's ability to fulfill its short-term obligations. The current ratio shows the extent to which current assets are able to cover current liabilities. The greater comparison of current assets and current liabilities, the higher the company's ability is expected to cover its short-term liabilities. Usually if the current ratio is low, then investors will assume that the company is having liquidation constraints, on the other hand if the current ratio is too high this is also will be considered as bad sign because investors assume that with a high current ratio, there is a high probability that the company keep lot of money that specifically known as idle money; which will finally reducing the company profits.

2.1.6. Debt to Equity Ratio

Kasmir (2012) classified several ratios as leverage ratios, which are debt to assets, debt to equity, long term debt to equity, and times interest earned. Debt to equity ratio reflects the firm's ability to pay or meet its obligations with its own capital. As expressed by Warren et al. (2005), he stated that "The smaller debt to equity ratio, the better the firm's ability to survive in poor condition".
Based on theory of Modigliani & Miller (1961) on capital structure, given the interest as tax-deductible expense, the firm will use more debt to reduce tax payments so that the value of firm is increasing. Modigliani & Miller (1961) stated “Firms would be able to increase its value when using the maximum debt in its capital structure.” Therefore, Budi and Rachmawati (2014) found positive and significant relation of debt to equity ratio and price to book value since the debt usage will bring more benefits to the respective firm.

Gibson (2011) formulated debt to equity ratio as:

\[
\text{Debt to Equity Ratio} = \frac{\text{Total Liabilities}}{\text{Stockholders' Equity}}
\]

Debt to Equity Ratio (DER) reflects the proportion of the total long-term debt with own capital. The greater debt causes the burden of the company to be large because of the cost of debt that must be borne. The greater the debt will cause the priority of the company to pay dividends will be smaller because the company's profits are reduced by the company's debt costs (Al Najjar, 2012). The results of Al Najjar's research (2012) show that debt to equity ratio has a significant negative effect on firm value, while Mehta (2012) shows a positive influence on debt to equity ratio towards firm value.

2.1.7. Return on Assets

According to Hanafi and Halim (2004) Return On Assets (ROA) is:

“Ratio that measures the ability of a company to generate profits by using the total assets owned by the company after adjusting for the costs to fund the asset.”

ROA is an indicator of the ability of a business unit to earn profits on a number of assets owned by the business unit. Return On Asset measures operating performance, which shows the extent, to which assets are utilized. This ratio measures how effective a company is in utilizing existing economic resources to generate profits.

Return On Assets (ROA) is a measurement of the company's overall ability to generate profits with the total assets available in the company. ROA is used to see the
level of efficiency of the company's overall operations. The higher the ratio, the better the company. Conversely the low ratio indicates the following possibilities:

1. The existence of over investment in assets used for operations in relation to the volume of sales obtained with these assets.
2. Is a mirror of the low sales volume compared to the costs required.
3. There are inefficiencies both in production, purchasing and marketing.
4. Declining economic activities.

Negative ROA is caused by the company's profit in a negative (loss) condition as well. This shows the ability of the capital invested, as whole assets have not been able to generate profits. The formula of ROA is as follows:

\[
\text{Return on Assets} = \frac{\text{Net Income}}{\text{Average Total Assets}}
\]

Febrianti (2012) explained that the more profits obtained during the company operations, the more dividends will be distributed to shareholders; this kind of condition will push up the price of book values. Moreover, high profitability also indicates a good investment prospect in the future.

2.1.8. Signaling theory

Signaling theory explains why companies have the urge to provide financial reporting information to external parties, because there is asymmetry Information between companies and outsiders. The company (agent) knows more about the company and its future prospects than outside parties (investors, creditors). Lack of outside information about the company causes them to protect themselves by providing low prices for the company. Companies can increase corporate value, by reducing information asymmetry. One of way to reduce asymmetry information is by signaling the outside parties, one of which is trustworthy financial information and will reduce uncertainty about future company prospects. According to Jama'an (2008) signaling theory suggests about how a company should give a signal to users of financial statements. This signal is in the form of information about what has been done by management to realize the wishes of the owner. Signals can be in the form of promotions or other information stating that the company is better than other companies. Signal theory explains that the signal is given by managers to reduce information asymmetry. Managers provide information through financial reports that
they implement conservatism accounting policies that produce higher quality profits because this principle prevents companies from exaggerating profits and helping users of financial statements by presenting profits and assets that are not overstated. The integrity of financial statement information that reflects the value of the company is a positive signal can affect the opinions of investors and creditors or other interested parties.

Financial statements should provide useful information for investors and creditors to make investment decisions, credit and similar decisions. In signaling theory, investment expenditure gives a positive signal about the company's growth in the future, thus increasing the stock price as an indicator of the company's value. Increased debt is interpreted by outsiders about the company's ability to pay obligations in the future or the existence of a low business risk, it will be responded positively by the market (Weston & Brigham, 2004).

Harianto and Sudomo (2001) say that an efficient capital market is defined as a market whose securities have reflected all relevant information. The faster new information is reflected in the price of securities, the more efficient the capital market is. According to Hartono (2007) market efficiency is how markets react to available information. The form of market efficiency can be viewed in terms of the availability of information only or can be seen from the sophistication of market participants in decision making based on analysis of available information.

Hartono (2007) said that issuers use dividend payments as a signal to market participants. By increasing the value of paid dividends, issuers try to signal that the company has good prospects in the future, thereby increasing dividend payments. Conversely, if the company deducts dividend value, it will be considered a bad signal because it will be considered a lack of liquidity. Less sophisticated market participants will receive information on this dividend increase as a good signal without analyzing it further and the price of the securities will reflect the full good news information. Conversely, sophisticated market participants will not be easily fooled by the issuer. Sophisticated market participants will analyze this information further to determine whether this is a valid and reliable signal. If sophisticated market participants understand that signal given is the wrong signal, they will react otherwise which is reflected in the price of the issuer's securities negatively on the information.
2.2. Previous Research

Some researchers had conducted researches about variables that may influence the price to book value. Those previous researches will help the researcher to identify and highlight the influential variables and record significant findings from researches which had been conducted (Sekaran & Bougie, 2011). The researcher has summarized some previous research from published journals which has price to book value as dependent variable.

1. Suhadak, Kurniaty, Siti Ragil Handayani and Sri Mangesti Rahayu (2018) with their study entitled “Stock return and financial performance as moderation variable in influence of good corporate governance towards corporate value” evaluate how much influence good corporate governance (GCG) has on corporate value, as well as moderating effect of stock return and financial performance on the influence of GCG on corporate value. The study was an explanatory study. The unit of analysis was the companies listed in LQ45 in Indonesian Stock Exchange and the sources of data were ICMD, annual report and financial reports of the companies. Indonesian Stock Exchange was selected as the setting of the study since Indonesian Stock Exchange is one of trading places for various types of companies in Indonesia, and it provides complete information on company’s financial data and stock price. They find that the higher GCG, independent commissioners proportion, institutional managerial and public ownerships resulted in higher corporate value. MBE and PER stock return is a moderating variable in the influence of GCG on corporate value. Financial performance is moderating variable in the influence of GCG on corporate value.

2. Hidayah (2014) with her study entitled “The Effect of Firm Characteristic Toward Firm Value in the Property and Real Estate Firm in Indonesia Stock Exchange” analyzed the influence of managerial ownership, debt to equity ratio, firm size, and return on asset towards price to book value. The sample was taken from 30 property and real estate firms from 2010-2012 listed in Indonesia Stock Exchange. By using multiple regression analysis, this research found that managerial ownership, firm size and return on asset had positive significant effect on the price to book value while debt to equity ratio has negative but insignificant influence. The coefficient determination resulted from this research was 10.2%.

variables of dividend payout ratio, return on assets, return on equity, return per share, dividend per share and earnings growth after tax. The sample was selected from Nairobi Stock Exchange 20 share index during 1991-2003. The result indicated return on assets, return on equity, and return per share have positive significant influence towards price to book value. On the other hand, there was negative significant influence between price to book value ratio and dividend per share. While dividend payout ratio and growth rate in earnings after tax do had no statistically significant relationship. The coefficient determination resulted from this research was 72.6%.

4. Lins & Kalcheva (2007) conducted a research entitled “International Evidence on Cash Holdings and Expected Managerial Agency Problems” to examine the net costs and benefits of cash holdings by taking samples for over 5000 firms from 31 countries. By using cross-sectional regression analysis, this study found there is negative and significant influence of cash holdings and dividend payment towards value of firm. On the other hand, managerial control and shareholders right did not affect value of firm.

5. Ming-Chin Chen, Shu-Ju Cheng, Yuhchang Hwang (2005) with their study "An empirical investigation of the relationship between intellectual capital and firms’ market value and financial performance", analyze empirically the relation between the value creation efficiency and firms’ market valuation and financial performance. By constructed regression models to examine the relationship between corporate value creation efficiency and firms’ market -to-book value ratios, and explore the relation financial performance. The results support the hypothesis that firms’ intellectual capital has a positive impact on market value and financial performance, and may be an indicator for future financial performance. In addition, they found investors might place different value on the three components of value creation efficiency (physical capital, human capital, and structural capital). Finally, evidence is presented that R&D expenditure may capture additional information on structural capital and has a positive effect on firm value and profitability.
2.1. Theoretical Framework

According to the previous description, the following is a comprehensive picture which is a conceptual framework regarding the influence of Current Ratio, Debt to Equity Ratio and Return on Assets toward firm value, in this study can be seen in Figure 2.1

![Figure 2.1. Theoretical Framework](image)

2.4 Hypotheses

In this research, the researcher tries to develop the hypothesis of financial performance to measure price to book value, as the following:

**Hypothesis 1** : There is a significant influence of current ratio towards price to book value in LQ45 companies

**Hypothesis 2** : There is a significant influence of debt to equity ratio towards price to book value in LQ45 companies.
Hypothesis 3: There is a significant influence of return on assets towards price to book value in LQ45 Companies.

Hypothesis 4: There is a significant simultaneous influence of current ratio, debt to equity ratio, and return on assets towards price to book value in LQ45 companies.

Hypothesis 5: The most significant influence factors towards value of firm that listed in LQ45 index
CHAPTER III

METHODOLOGY

3.1. Research Design

The type of this research is quantitative research, it uses numbers to prove or disprove a notion or hypothesis. The process of measurement is central to quantitative research because it provides the fundamental connection between empirical observation and mathematical expression of quantitative relationships. Quantitative research uses data that are structured in the form of numbers or that can be immediately transported into numbers (Ross, 1999).

To be more specific, the type of research that researcher conducted in this study is an empirical study. Empirical study is a research conducted on several companies using research data in the form of secondary data.

3.2 Operational Definition of Variables

1. Dependent Variables, namely the Price of Book value denoted as a variable (Y).
2. Independent variables (independent variables) in this study are Current Ratio, Debt to Equity Ratio, and Return on Equity. The Independent variable is denoted by the variable X which consists of:
   a) Current Ratio : X_1
   b) Debt to Equity Ratio : X_2
   c) Return on Equity : X_3

3.3 Sampling Design

Sampling is the process of selecting an appropriate number of the right subjects from the population as the representation of the study (Sekaran & Bougie, 2011).
3.2.1 Population

Population is not only people but also objects and other natural objects that include all the characteristics properties possessed by the subject and object under study. The populations in this research are companies that being listed in the LQ45 index of Indonesia Stock Exchange during the 2015-2017 periods. The populations of this study are 45 firms, which are listed in this index.

3.2.2 Sample

Sample is a part of a particular population that becomes a concerned of the research (Suharyadi and Purwanto, 2008). The sample in this study was taken using a purposive sampling method that is sampling with certain considerations. These considerations are based on interests or research objective. The selected sample has a specific purpose and targets according to the criteria that has been set in this study. The criteria that has been set this sampling include:

3.3 Research Instruments

This study will obtain the data from the existed sources such as related books, journals, and related websites; Moreover the main analysis tool that will be used in this research is statistical tool of SPSS; it helps the researcher to conduct scientific and reliable study (Schwert, 2010).

This research also uses Microsoft Excel in transforming the raw data, which are obtained from financial statement or annual report of related firms and also to make charts and tables. The other instruments that mainly used in this research are Microsoft Word to compose the research and Microsoft Edge to open the literature review with PDF format.

3.4 Data Collection Method

In order to obtain the expected results, data and information are needed to support this research. Data collection methods used in this study are library research and secondary data

1. Library Research

This research is also carried out through library studies, namely by collecting relevant theoretical knowledge by reading and studying books, journals, articles, and literary literature from other sources that have a relationship with the problems discussed in this study.

2. Secondary Data

As additional data that the author cannot find from the sources that have been mentioned, the author retrieves data from the official Indonesia Stock Exchange website to complete existing data. Forms of data in the form of periodic data (time series), namely data arranged in a sequence of time or data collected from time to time. The time used that will be used can be in the form of weekly, monthly, yearly and its parts (Hasan, 2001).
3.7 Data Analysis Method

3.7.1 Descriptive Statistical Analysis

Descriptive statistical analysis presents a general overview of the data that can be seen from the mean, standard deviation, maximum and minimum.

3.7.2 Classical Assumption Test

The classical assumption test consists of several tests below:

1. Test of Normality

The aims of normality test is to detect whether the model of regression of the disturbance or residual variable has a normal distribution as it is known that the t test and f test assume that the residual value follows a normal or not distribution, namely graph analysis and statistical tests. There are two methods to detect whether residual distributions are normal or not, namely by graph analysis and statistical tests (Ghozali, 2005), one of them is the normality test using the Kolmogorov-Smirnov test.

2. Test of Heteroscedasticity

The aim of heteroscedasticity test is to detect whether in the regression model variance occurs from residual inequality an observation to other observations. If the variance from the residual one observation to another observation is different, then it is categorized into heteroscedasticity.

Detection of the presence or absence of heteroscedasticity can be done by seeing there is no particular pattern on the scatterplot graph between SRESID and ZPRED where the Y-axis is Y predicted, and the X-axis is the residual, which has been standardized. The basis for making decisions is as follows (Ghozali, 2009):

1. If there is a certain pattern, such as the existing points form a certain pattern that is regular (wavy, widened and then narrowed), then it indicates that heteroscedasticity has occurred.

2. If there is no clear pattern and the points spread above and below the number 0 on the Y-axis, heteroscedasticity does not occur (Gujaratī, 2003).
3. **Test of Autocorrelation**

According to Ghozali (2009), the autocorrelation test aims to test whether in a linear regression model there is a correlation between confounding errors in period t with errors in period t-1 (before). If there is a correlation, then there is an autocorrelation problem. One of the methods or tools that can be used to test whether there is a problem of autocorrelation in the regression model is as following:

   a) **Durbin-Watson Test**

   This test is only used for first-order autocorrelation and requires an intercept in a regression model and there is no lag variable between the independent variables.

4. **Test of Multicollinearity**

The aim of multicollinearity test is to test whether the regression model found a correlation between the independent variables. A good regression model should not have a correlation between independent variables. The effect of the regression model containing multicollinearity, the standard error of estimation will tend to go up with increasing independent variables, the level of significance used to reject the null hypothesis will be greater and the probability of accepting the wrong hypothesis will also be greater. To discover the presence or absence of multicollinearity in model of regression, the terms are as follows (Ghozali, 2009):

   a) The value of $R^2$ produced by an estimate of the empirical regression model is very high, but individually many independent variables are not significant affect the dependent variable.

   b) Multicollinearity can also be seen from the value of Tolerance and its opponent, VIF (Variance Inflation Factor). If a low Tolerance value is equal to a high VIF value, hence shows high collinearity. The cut-off value commonly used to indicate the presence of multicollinearity is the Tolerance value 0.10 or equal to the VIF value $\geq 10$. 


3.7.3 Multiple Regression Analysis

The method used in this study is a multiple linear regression test, which used for research with more than one variable X. This Multiple Linear Regression Test is used to specify the influence of Current Ratio (CR), Debt on Equity Ratio (DER), and Return on Assets (ROA), toward the firm value (PBV Ratio) in companies that being listed in the LQ45 index in Indonesia Stock Exchange. The formula:

\[
Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon
\]

Where:
- \(Y\) = price to book value ratio
- \(\beta_0\) = Intercept/constant (value of \(Y\) when \(X_1\)-\(X_5 = 0\))
- \(\beta_1 - \beta_5\) = Partial regression coefficients
- \(X_1\) = current ratio
- \(X_2\) = debt to equity ratio
- \(X_3\) = return on assets
- \(\varepsilon\) = Random error

Partial regression coefficient value, which is \(\beta_1 - \beta_5\) has a very important role for measuring the marginal contribution of independent variable to dependent variable, by keeping all other variables are constant (Schwert, 2010).

3.8 Hypotheses Testing

3.8.1. T-Test

The t-test analyzes the partial influence between each of independent variables (coefficient) towards the dependent variable. The hypothesis could be formulated as follows:

\(H_0 : \beta_1 > 0\)

\(H_a : \beta_1 < 0\)
It means if the level of significance is smaller than 0.05 or 5% then the proposed hypothesis is accepted or could be categorized into significant, meaning that partially the independent variable (X) has a significant effect on the dependent variable (Y). If the hypothesis is accepted, while if the level of significance is greater than 0.05 or 5% then the proposed hypothesis is rejected or could be categorized into insignificant, meaning that partially the independent variable (X) does not have a significant effect on the dependent variable (Y), the hypothesis is rejected. The hypothesis is as follows:

\[
H_0 = \text{there is no significant effect of the independent variable on the dependent variable partially.}
\]

\[
H_a = \text{there is a significant effect of the independent variable on the dependent variable partially.}
\]

The rules for making decision are as follows:

If the probability is \(> 0.05\) then \(H_0\) is accepted and rejects \(H_a\).

If the probability is \(< 0.05\) then \(H_0\) is rejected and accepts \(H_a\).

3.8.2. F-Test

In linear regression, the F-statistic is the test statistic for the analysis of variance (ANOVA) approach to test the significance of the components in the model. F-test will analyze whether there is a relationship between set of independent variables towards dependent variable simultaneously (Sarwono, 2006).

The F statistical test basically shows whether all the independent variables in the model have a joint influence on the dependent or bound variable. The null hypothesis that is to be tested is whether all parameters in the model are zero, or:

\[
H_0: b_1; b_2; \ldots; b_i = 0
\]

That is, whether the independent variable is not a significant explanation of the dependent variable. The alternative hypothesis \((H_a)\) is not all parameters simultaneously equal to zero, or:

\[
H_a: b_1; b_2; \ldots; b_i \neq 0
\]

That is, all independent variables simultaneously are significant explanations of the dependent variable (Ghozali, 2009).
The hypothesis is as follows:

H0 = there is no significant effect of the independent variable towards the dependent variable simultaneously.

Ha = there is a significant effect of the independent variable towards the dependent variable simultaneously.

The rules for making decision are as follows:

If the probability is > 0.05 then H₀ is accepted and rejects Ha.

If the probability is < 0.05 then H₀ is rejected and accepts Ha.

3.8.3. Coefficient Determination

Coefficient of determination explains how much the independent variables affect the dependent variables (Winarno, 2011). As explained by Gujarati (2004) adjusted R² is a better measure than R² since adjusted R² will only increase if the absolute t-value of the added variable is greater than one, unlike the R² which has non-decreasing function if independent variable is added. Gujarati (2004) notes,

“It better to use adjusted R² rather than R² because R² tends to give an overly optimistic picture of the fit of the regression, particularly when the number of independent variables is more than the number of observation data.”

Therefore, this study implements adjusted R² to find out how much the dependent variable will be influenced by independent variables (Ghozali, 2005).

The value of adjusted R² can range from 0 to 1 (0 < adjusted R² < 1).

a. If adjusted R² is close to 0 = Have weak capability to explain dependent variable
b. If adjusted R² is close to 1= Have strong capability to explain dependent variable.

The closer the coefficient of determination value to 1, the more capability of independent variables to influence the dependent variable by providing more complete information to predict the variance of dependent variable (Baltagi, 2008).
CHAPTER IV
DATA ANALYSIS AND INTERPRETATION OF RESULTS

4.1. General Description of Research Object

4.1.1. Brief History of Indonesia Stock Exchange

The capital market or stock exchange has existed since the Dutch colonial era and precisely in 1912 in Batavia. At that time the capital market was established by the Dutch East Indies government for the benefit of the colonial government or the VOC. Although capital markets have existed since 1912, the development and growth of the capital market did not go as expected, even in some periods the capital market experienced a vacuum. This was caused by several factors such as World War I and II, the transfer of power from the Dutch colonial to the government of the Republic of Indonesia, and some conditions that caused the operation of the stock exchange did not work, as they should. The Indonesian government reactivated the capital market in 1977 and after that the capital market continued to experience growth along with various incentives and regulations issued by the government.

4.2. Descriptive Analysis

Descriptive statistics only presents general information of the variables that being tested in this research. It reveals the calculation results of mean, minimum, maximum, and standard deviation for each variable, which consists of seventy-five samples. Table 4.11 below shows the summary of descriptive statistic of each variable for this research, by using SPSS.

<table>
<thead>
<tr>
<th>Table 4.1. Descriptive Statistics</th>
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<tbody>
<tr>
<td><strong>Descriptive Statistics</strong></td>
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<td>PBV</td>
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<td>Valid N (listwise)</td>
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Source: SPSS
According to the table above, the information of both variables are elaborated as follows:

1. **Price to book value (PBV) as a dependent variable.** The mean value is 9.42 with standard deviation of 29.350; that reflected the data is mostly spread around 9.42 ± 29.350. The standard deviation is bigger than the mean, it happens because the fluctuation of price to book value in the sample is relatively big. The minimum value of price to book value is 0.33, occurs on PT Adaro Energy Tbk in 2016 which indicates the firm was valued less than its book value and the performance of the firm still needs to be improved. On the other hand, the maximum value is 242 occurs on Matahari Department Store Tbk in 2015 which indicates the firm was valued more than its book value.

2. **Current ratio (CR) is categorized as independent variable.** It has a mean value of 200.3095 with standard deviation of 166.23838, which indicates the data is mostly dispersed around 200.3095 ± 166.23838. The standard deviation is smaller than the mean, which happens because the fluctuation of current ratio in the sample is
relatively small. The minimum value of current ratio is 4.50 occurs on PT Pakuwon Jati Tbk in 2015-2017, and the maximum value is 971.69 occurs on PT Media Nusantara Citra Tbk in 2015. The minimum value which is greater than 1 shows that the firms in LQ45 had high liquidity and able to meet its maturing financial obligations.

3. Debt to equity ratio (DER) is categorized as independent variable. It has a mean value of 1.1820 with standard deviation of 2.11873, which indicates the data is mostly dispersed around $1.1820 \pm 2.11873$. The standard deviation is greater than the mean, which happens because the fluctuation of debt to equity ratio in the sample is relatively big. The minimum value of debt to equity ratio is 0.13, occurs on Indocement Tunggal Prakarsa Tbk in 2017 which reflects the firm used more equity rather than debt and had the ability to meet its obligations with its own capital. On the other hand, the maximum value is 18.19 occurs on Matahari Department Store Tbk in 2015 which reflects the firm used more debt rather than equity and had greater the

4. Return on assets (ROA) is categorized as independent variable. It has a mean value of 12.3047 with standard deviation of 10.52937, which indicates the data is mostly dispersed around $12.3047 \pm 10.52937$. The standard deviation is smaller than the mean, which happens because the fluctuation of return on assets in the sample is relatively small. The minimum value of return on assets is 0.09, suffers by PT Vale Indonesia Tbk in 2017 which indicates there is relatively small profitability for the firm as the firm cannot compete and gain profit from the utilization of its assets. However, the maximum value of 45.79 is gained by Matahari Department Store Tbk in 2016, which indicates the firm's ability to gain profit from the utilized or invested assets.

4.3. Data Analysis

4.3.1. Classical Assumption Test

1. Normality Test

Normality test aims to test whether the regression model of the disturbance or residual variable has a normal distribution as it is known that the t test and f test assume that the residual value follows a normal or not distribution, namely graph analysis and statistical tests. There are two ways to detect whether residuals are normally distributed or not, namely by graph
analysis and statistical tests (Ghozali, 2005), one of them is the normality test using the Kolmogorov-Smirnov test as shown in figure 4.2.

<table>
<thead>
<tr>
<th>One-Sample Kolmogorov-Smirnov Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstandardized</td>
</tr>
<tr>
<td>Residual</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>Normal</td>
</tr>
<tr>
<td>Parameters(^{\text{a,b}})</td>
</tr>
<tr>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
</tr>
<tr>
<td>Positive</td>
</tr>
<tr>
<td>Negative</td>
</tr>
<tr>
<td>Test Statistic</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
</tr>
</tbody>
</table>

**Figure 4.2. Normality Test**

*Source: SPSS*

According to figure 4.2, it showed that a significant value is 0.076. Because the significant value of 0.076 is greater than the significance level of 0.05. This can be concluded that the assumption of normality is fulfilled.
2. **Heteroscedasticity Test**

Heteroscedasticity exists when the dispersion of the error term’s probability distribution is not constant. On the other hand, homoscedastic occurs when the variance of errors are constant. Homoscedasticity means that the dispersion is the same across all observations (Gau, 2002). A good regression model shows homoscedasticity and has no heteroscedasticity issue; it means the regression model is acceptable (Santoso, 2010). Figure of 4.14. will shows the result of scatterplot, as the following:
Figure 4.3. Heteroscedacity Test

Scatterplot
Dependent variable: Price Book Value

Source: SPSS

According to figure 4.3. It showed there is no clear pattern, and the points spread above and below the number 0 on the Y-axis, so there is no heteroscedasticity occurred.

3. Autocorrelation Test

Autocorrelation test is used to find out whether there is a correlation in a set of data in the same variable. By doing Durbin Watson statistical test can check the autocorrelation.

Table 4.4. Durbin-Watson Test

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.981</td>
<td>.962</td>
<td>.961</td>
<td>1.278</td>
</tr>
</tbody>
</table>

Source: SPSS
Based on table 4.4 above it can be seen that the results of the autocorrelation test on the Durbin-Watson value are 1.278. The resulting value is between numbers -2 and +2 so it can be concluded that the data used in this study is free from autocorrelation.

4. Multicollinearity Test

The aim of multicollinearity test is to detect whether the regression model found a correlation between the independent variables. As a result of the regression model containing multicollinearity, the standard error of estimation will tend to increase with increasing independent variables, the level of significance used to reject the null hypothesis will be greater and the probability of accepting the wrong hypothesis will also be greater. The multicollinearity test will be shown on table 4.5.

Table 4.5. Multicollinearity Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Tolerance</td>
<td>VIF</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.906</td>
<td>1.103</td>
</tr>
<tr>
<td>CR</td>
<td></td>
<td>.804</td>
<td>1.244</td>
</tr>
<tr>
<td>DER</td>
<td></td>
<td>.869</td>
<td>1.151</td>
</tr>
</tbody>
</table>

*Source: SPSS*

Table 4.5 shows that the VIF value of each variable is below 10 and the tolerance value of each variable is greater than 0.1 so there is no relationship or correlation between one independent variable and the other independent variables. From the table above it can be stated that the research data did not experience multicollinearity so that the existing regression model is suitable to be used in predicting the Price to book value.
4.3.2. Multiple Regression Analysis

Multiple linear regression analysis is used to test how much the independent variable affects the dependent variable. This analysis was conducted to determine how much influence between the variables Current Ratio (CR), Debt on Equity Ratio (DER), and Return on Assets (ROA) affect the book price value (PBV). The following are the results of the analysis using multiple linear regression:

Based on the table 4.6, the multiple regression equation will be formed as follows:

\[ Y = -18.491 - 0.016 X_1 + 11.724 X_2 + 0.876 X_3 \]

The equation can be described as follows.

1. Constanta with the amount of -18.491.
   Constanta of -18.491 means that if the independent variable, which are current ratio, debt to equity ratio, and return on assets are zero then the firm's value decreases by 18.491.

2. Regression coefficient of current ratio -0.016.
   Current Ratio shows a number of -0.016 meaning that if debt to equity ratio, and return on assets are constant, then every increase in 1% current ratio will increase the value of the Company by 1.6%.
4. Regression coefficient of return on assets 0.876.

   Return on assets shows that the number 0.876 means that if current ratio, and debt to equity ratio are constant, then every 1% increase in return on assets will increase the Company's value by 87.6%.

4.4. Hypotheses Testing

4.3.1 T-Test

The t test is a test to measure how far the influence of the independent variables used in this study, which are the current ratio, debt to equity, individual return on assets can explain the dependent variable, namely price book value. The decision criteria are as follows:
a) If \( t \text{ count} > t \text{ table} \) or has a level significance < 0.05, \( H_0 \) is rejected and \( H_a \) is accepted.

b) If \( t \text{ count} < t \text{ table} \) or has a level significance > 0.05 then \( H_0 \) is accepted and \( H_a \) is rejected.

Based on the table 4.6. Of multiple regression analysis result, it can be concluded as follows:

1. Current ratio has a level significance less than 0.05 (0.0000 < 0.05), then \( H_{a1} \) is accepted and \( H_{01} \) is rejected which indicates current ratio has significant influence towards price to book value in LQ45.

2. Debt to equity ratio has probability value less than 0.05 (0.0000 < 0.05), therefore \( H_{a2} \) is accepted and \( H_{02} \) is rejected which means debt to equity ratio has significant influence towards price to book value in LQ45.

3. Return on assets has probability value less than 0.05 (0.0000 < 0.05), then \( H_{a3} \) is accepted and \( H_{03} \) is rejected which indicates return on assets has significant influence towards price to book value in LQ45.

This test gives influences towards the regression model by eliminating variable that has no significant influence towards the price to book value. Since all the independent variables are significant towards price to book value, then there is no variable is eliminated from the equation.
The equation of multiple regression will remain the same as equation above, or could be re-written as follows:

\[
PBV = -18.491 - 0.016\, CR + 11.724\, DER + 0.876\, ROA
\]

4.3.2 F-Test

Simultaneous testing of the model or F test is used to test the effect of simultaneous independent variables on the dependent variable or to test the accuracy of the model (goodness of fit). If the independent variable has a simultaneous influence on the dependent variable, the regression equation model is included in the criteria of fit.

In this research, it was found that the value of F and significance simultaneously are as follows:

**Table 4.7. F-Test Result**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>61330.088</td>
<td>3</td>
<td>20443.363</td>
<td>600.839</td>
<td>.000&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Residual</td>
<td>2415.753</td>
<td>71</td>
<td>34.025</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>63745.841</td>
<td>74</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: SPSS*

Based on the table 4.7. Above, it shows that the results of the F statistic test with a calculated F value of 600.839 with a significance level of 0.000. The significance level is less than 0.05 which can be concluded that the Current Assets (CR), Debt to Equity Ratio (DER), Return on Assets (ROA) variables have a simultaneous and significant effect on firm value in LQ45 sectors.
4.3.3  Coefficient of Determination

To determine how much a predictor can explain the dependent variable can be indicated by the coefficient of determination obtained from the adjusted R square value. The results of the adjusted R square value of regression are used to determine the magnitude of the dependent variable, which is affected by its independent variables. Following are the results of SPSS output:

Table 4.8. Coefficient Determination Result

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.981a</td>
<td>.962</td>
<td>.961</td>
<td>1.278</td>
</tr>
</tbody>
</table>

*Source: SPSS*

As shown by table 4.8. above, the result of adjusted R-squared is 0.961; It means that all independent variables which are current ratio, debt to equity ratio, and return on assets provide 96.1% influence simultaneously towards price to book value. The rest of 3.9% is influenced by other variables, which are not examined in this study.

4.5. Interpretation of Result

1. The Influence of Current Ratio towards Price to Book Value

Table 4.6, presents information to accept the first hypothesis which is “There is significant influence of current ratio towards price to book value in LQ45 firms.” The significant value of current ratio is 0.0000. Current ratio has negative effect on the price to book value, which is denoted by coefficient regression of −0.016; supposedly it explained that a rise in current ratio will cut down the price to book value. This finding is supported by Lins & Kalcheva (2007) who discover that liquidity has negative and significant effect towards firm’s value.

Based on the finding of this research, it can be concluded that current ratio has negative significant influences to price to book value in LQ45. The explanation of this negative sign is the investor assumed that the firm’s current assets has not been effectively used for the operations during 2015 to 2017; so this may result in decreased profits to be obtained by the firm thus reducing the demand for the stocks.
2. The Influence of Debt to Equity Ratio towards Price to Book Value

The second hypothesis states, "There is significant influence of debt to equity ratio towards price to book value in LQ45." According to the table 4.6, which shows significant value of 0.0000, this hypothesis is accepted. Debt to equity ratio has positive influence towards the price to book value, which is indicated by coefficient regression of 11.724. It means that an increase in debt to equity ratio will increase the price to book value. This research has a consistent result in line with the research conducted by Rompas (2013), which concluded that the Debt to Equity Ratio affects the value of the company. So, it can be said that the Debt to Equity Ratio reflects how the value of the company is influenced by the level of debt usage compared to the capital itself.

This research is also reciprocal with the research that conducted by Priscilia Gizela Frederik, Sientje C. Nangoy and Victoria N. Untu (2015). This indicates that with the increasing number of corporate debt, investors consider companies have many opportunities to use their capital for expansion or development in the hope that the company will grow, the profits for investors will also increase so investors are interested in buying company shares. The higher the stock price means the value of the company will also increase.

As a conclusion, this study which used companies that being listed in LQ45 index from 2015 to 2017 obtains the result that debt to equity ratio has positive significant influences to price to book value since firms with high debt to equity ratio is more risky and more attractive for investors.
3. The Influence of Return on Assets towards Price to Book Value

Table 4.6. provides information to accept the third hypothesis of “There is significant influence of return on assets towards price to book value in LQ45” with the significant value of 0.0000. Return on assets has positive influence towards the price to book value, which is indicated by coefficient regression of 0.876; It means that an increase in return on assets will lead to increments of price to book value.

The level of return obtained by the company indicated how well the value of firm from investors’ point of view (Brigham & Houston, 2001). If the firm recorded a huge profit level, and publish it. Of course it will motivate investors to invest in the stock. Indeed, the management tries to give signal to investors about firm’s good prospect by publishing their financial report. Thus, based on the information about firm’s good prospect from financial report, the stock price and demand for the stock will increase as well. The rising stock price will increase the value of firm, which is indicated by price to book value. The finding of this research is in accordance with signaling theory, in which the good information will attract investors to buy its stock; therefore price to book value will increase. The findings of this research is strengthened by Marangu & Jagongo (2014) who discover return on assets has positive and significant influence towards price to book ratio.

As a conclusion, this study which used LQ45 index in the period of 2015 to 2017 obtains the result that return on assets has positive significant influences to price to book value. It means that investors are keen to profitability value before they make any investment decision.
4. Simultaneous Influence of Current Ratio, Debt to Equity Ratio, and Return on Assets towards Price to Book Value

The hypothesis stated that “There is significant simultaneous influence current ratio, debt to equity ratio, and return on assets towards price to book value in LQ45 sector” is accepted. This was proven by the probability value of t-statistic, which is 0.0000 less than 0.05. All independent variables are simultaneously influencing the dependent variable. Current ratio, debt to equity ratio, and return on assets are able to influence price to book value by 96.1% while the rest of 3.9% is influenced by other variables which are not examined in this study.

5. The Most Significant Influence Factors towards Value of Firm in LQ45

The result of t-statistics from table 4.6, will be used to sort the most influence until the least influence of independent variables to dependent variable throughout this research. Higher t-statistics indicates it has more significance to dependent variable. Moreover, the level of significance influence also can be ranked based on the value of probability in t-statistics. The closer value of probability to 0 has higher significance influence toward dependent variable. However since all the independent variables have the probability value very close to 0, then researcher will depend more on the value of t-statistics.

After the independent variables being sorted based on its level of significance to dependent variable, the most significant influence independent variable are debt to equity ratio with 32.841, then followed by return on assets with 12.684 and the least significance is current ratio with 3.806.

Therefore, the most significant influence variable towards price to book value is Debt to equity ratio. This result was supported by research done by Rakhimsyah and Barbara (2011), high Debt to Equity Ratio will show a large debt value, with a large debt, where the debt can be used as capital to rotate the company's activities to obtain profits that will later increase the value of the company. According to Brigham and Houston (2009), the use of debt can also affect the company's stock price. The greater the debt, the more it will increase the value of the company. Companies with high debt levels will be able to increase profits per share which will ultimately increase the company's stock price which means it will increase the value of the company. This is supported by the results of the study of Lestari et al. (2012) which
states that debt policy is measured with Debt to Equity Ratio significant effect on firm value.
CHAPTER V
CONCLUSIONS AND RECOMMENDATIONS

5.1. Conclusions

This research has the objective to analyze the influence of financial performance towards value of firms in LQ45 firms during period 2015 to 2017 by using annual basis. By using purposive sampling, the researcher found twenty-five firms, which fulfilled the criteria. Therefore, the sample size of this research is 75. The data were analyzed by using descriptive statistic analysis, classical assumption test, multiple linear regression, and hypotheses testing.

After conducting the discussion and analysis in previous chapter in order to achieve the research objectives, the results obtained are:

1. From t-test result, significant influence partially for each independent variable toward dependent variable can be concluded as follows:
   
   a. The significant value of current ratio is 0.0000 with the coefficient value is -0.016; it reflects the negative significant influence towards the price to book value. Negative sign reflects the company’s current assets are not effectively used for the operations so this may result in decreased profits that should be obtained by the company. Investors will seize it as a negative signal thus reducing the demand and price to book value for the stocks. Which means that investors assess the company has not been able to maximize the use of current assets effectively for operations so that this can lead to a decrease in profits to be obtained by the company, so that there is a negative sign for the current ratio value. Investors will think of it as a negative signal thereby reducing demand and prices for book values for shares.

   b. Debt to equity ratio results positive significant influence towards the price to book value, it is reflected by significant value of 0.0000 and coefficient of 11.724. The result shows contradiction with theory of Modigliani & Miller (1961) since the findings of the research shows negative influence of debt to equity ratio towards price to book value. However, it is in accordance with the research that conducted by Priscilia Gizela Frederik, Sientje C. Nangoy and Victoria N. Untu (2015). This indicates that with the increasing number of corporate debt, investors consider companies have many opportunities to use their capital for expansion or development in the hope that the company will
grow, the profits for investors will also increase so investors are interested in buying company shares. The higher the stock price means the value of the company will also increase.

c. Return on assets result positive significant influences to price to book value with the significant value 0.0000 and coefficient 0.876. The finding of this research is in accordance with signaling theory, and it is strengthened by Marangu & Jagongo (2014) who discover return on assets has positive and significant influence towards price to book ratio.

2. Current ratio, debts to equity ratio, and return on assets have a significant effect on prices of book values simultaneously with a significant value of 0.0000. The overall independent variable has an effect of 96.1% towards the price of the book value. The remaining 3.9% influence factor is caused by other factors outside of this study.

3. Among all of independent variables throughout this study, the most significant factor that influence price to book value in LQ45 firms for period 2015 to 2017 is debt to equity ratio. DER has the highest t-statistics of 32.841. It means that investors should concern on the DER, which reflects how the value of the company is influenced by the level of debt usage compared to the capital itself.

5.2. Recommendations

After examination and analysis of the research findings, the researcher would like to suggest several recommendations for related parties, which are explained as follows.

1. LQ45 Firms
   a. A high price to book value will be preferable for related firm since high price to book value indicates the stockholders’ wealth. The firm should maintain its current ratio, debt to equity ratio, and return on assets to keep up its price to book value as they are simultaneously influence price to book value by 96.1%.

   b. Instead of having strong financial performance, the firm should also have good management since it will stimulate price to book value to go up. Based on signaling theory, complete, relevant, accurate and timely information should be published by the firm in capital market to give signal to the investors of firm’s good prospect. Also, the firm should have good debt management to implement the trade-off theory to its best interest; to maximize benefits of debt usage. A good management will lead to better financial performance.
2. **Investors**
   a. Low price to book value of firm, which means the stock is being sold cheaper than its book value, will be preferable to investors. However before being lured by low price to book value, investors should check its fundamental factors. Low price book value can indicate declining quality and performance of related firm. Therefore, investors should carefully consider what the cause of low price book value is; decreasing stock price or fundamentally wrong in the firm performance. They should carefully analyze its financial performance.

3. **Future Researchers**
   a. For further research, the study period intervals should be added so as to provide more samples and more accurate results. The samples of research should be more varies to get number of diversification in research. Either lengthens time period of study until latest period, to provide the latest information about value of firm in basic industry and chemicals sector or analyzes other sector in Indonesia Stock Exchange such as consumer goods and miscellaneous sector.

   b. Adding more independent variables that might result to better statistical significance. The next researchers can choose other variables in term of the mechanism of social responsibility, corporate governance, growth or risk of the company, and so forth in determining price to book value.
REFERENCES

Books


Journals/ Articles/ Reports/ Working Papers


APPENDICES

A. Appendix 1. Histogram of Price to Book Value (Normality Test)

B. Appendix 2. Heteroscedasticity Test
### C. Appendix 3. Companies’ List

<table>
<thead>
<tr>
<th>NO</th>
<th>COMPANY</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ASTRA AGRO LESTARI TBK.</td>
<td>AALI</td>
</tr>
<tr>
<td>2</td>
<td>Adaro Energy Tbk.</td>
<td>ADRO</td>
</tr>
<tr>
<td>3</td>
<td>AKR Corporindo Tbk.</td>
<td>AKRA</td>
</tr>
<tr>
<td>4</td>
<td>Astra International Tbk</td>
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</tr>
<tr>
<td>5</td>
<td>Gudang Garam Tbk.</td>
<td>GGRM</td>
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<tr>
<td>6</td>
<td>Indofood CBP Sukses Makmur Tbk.</td>
<td>ICBP</td>
</tr>
<tr>
<td>7</td>
<td>Vale Indonesia Tbk</td>
<td>INCO</td>
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<tr>
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<td>Indocement Tunggal Prakasa Tbk.</td>
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</tr>
<tr>
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<td>Kalbe Farma Tbk.</td>
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</tr>
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