# Determinants of Financial Performance on Firm Value in Index Lq 45 Companies

## Desmon Immanuel Paulus<sup>1</sup>\*, Munasiron Miftah<sup>2</sup>

<sup>1, 2</sup>Universitas Pembangunan Nasional Veteran Jakarta

Correspondin author: <u>desmon.immanuel@upnvj.ac.id</u>

### **Abstract**

This study aims to measure the effect of Liquidity (CR), Profitability (ROA) and Solvency (DER) on Firm Value (PBV) on the LQ 45 company index for the 2018 - 2020 period. The data used in this study were obtained from company annual report data that have been audited and published. In this study the population is companies listed on the Indonesia Stock Exchange (IDX). The sample is the LQ 45 company index listed on the IDX for the 2018 - 2020 observation period with a purposive sampling sampling technique so that a sample of 22 companies is obtained. This study analyzes the data using the panel data regression analysis method using the e-views version 12 software.

Keywords: Liquidity, Profitability, Solvency and Firm Value.

#### 1. Introduction

A company as an economic entity must have a clear goal. There are several things that state the purpose of the establishment of a company. The first objective is to achieve maximum profit. The second goal is to prosper the owner of the company or the shareholders. While the last company's goal is to maximize the value of the company which is reflected in its share price. The three goals of the company are actually not substantially different. It's just that the emphasis that each company wants to achieve is different from one another (Saputra, 2018).

Firm value is the view of shareholders or investors of the company being purchased which is often associated with stock prices. The value of the company can describe the situation in a company. Thus increasing the company's value as high as possible is important for a company in order to increase the prosperity of shareholders and achieve the company's goals (Anita & Yulianto, 2016).

The value of the company can be known through the company's ability to provide dividends. The greater the dividend given, the greater the value of the company. The ability of a company to pay dividends is closely related to the company's ability to generate profits. If the company generates high profits, the dividends given will be even greater and large dividends will increase the value of a company. Of the various indices on the Indonesia Stock Exchange (IDX), the LQ 45 index is trusted by potential investors in generating profits, especially over the past 20 years, especially in December, LO 45 has always managed to record a positive performance. (www.ajaib.co.id) in addition, because the companies in LQ 45 are selected companies that have large market capitalization, high liquidity and strong fundamentals. To find out the value of the LQ 45 index company, investors can also view it on the Indonesia Stock Exchange (IDX) website and see the share price. Financial performance is one of several ways that prospective shareholders look to determine their stock investment. To see the financial performance of a company, the company publishes financial reports so that prospective shareholders can find out the financial information contained in the financial statements. This financial information is also usually used by investors or analysts to calculate financial ratios so that they are the basis for considering stock investment decisions (Artini et al., 2012). However, in the LQ 45 index, the value of the company which is reflected in its share price from year to year experiences fluctuating movements. The following is the price of LQ 45 shares in 2016 - 2020:

Table 1. Price Data for IHSG and LQ 45

| Year | IHSG (Rp) | YTD Change (%) | LQ 45 (Rp) | YTD Change (%) |
|------|-----------|----------------|------------|----------------|
| 2016 | 5296      | 15,03          | 884        | 7,67           |
| 2017 | 6355      | 19,99          | 1079       | 22,05          |
| 2018 | 6194      | -2,54          | 982        | -8,95          |
| 2019 | 6299      | 1,7            | 1014       | 3,23           |
| 2020 | 5979      | -5,09          | 934        | -7,85          |

Source: www.idx.co.id

The value of the LQ 45 company, which is reflected in its share price, seen from 2016 to 2020, experienced a fluctuating trend, namely up and down, especially in 2018 and 2020, which fell quite significantly compared to the IDX. Why is it compared to the IDX because the IDX is a lead indicator or benchmark where the ups and downs of stock prices on the stock exchange are seen from the IDX price (<a href="www.ekonomi.kompas.com">www.ekonomi.kompas.com</a>). The cause of the decline in LQ 45 in 2018 was due to several issuers, namely: PT. Pembangunan Perumahan (PTPP), PT. Wijaya Karya (WIKA), PT. Waskita Karya (WIKA) and PT AKR Corporindo Tbk (AKRA). Of the four companies, the most influential company was PTPP's shares, which fell by 42.05%. PTPP received negative sentiment from the public due to the high increase in debt value because it was working on infrastructure projects. There is concern that the increase in expenses may affect the value of the company because it can increase the burden on financial performance and make the performance decrease. (<a href="www.cnbcindonesia.com">www.cnbcindonesia.com</a>).

In 2020, LQ 45 shares consisting of 45 companies with 31 companies recorded a decrease in net profit of 41.4% in aggregate year on year (yoy) although in the last quarter of 2020 the fourth quarter experienced a recovery but net profit throughout 2020 was more good compared to the first 9 months which fell to 42.2%. The decline also occurred on the income side, which fell 7.4% throughout 2020. This decline was better than the first 9 months, which fell by 16.7%. (www.investasi.kontan.co.id). It can be concluded that economic conditions, especially the capital market in 2020, are not going as well as in previous years. The main sentiment that triggered the gloomy capital market, including LQ 45, was the emergence of the COVID-19 virus. Issuers that have an impact, one of which is related to construction and cement, such as PT Wijaya Karya Tbk (WIKA), PT Indocement Tunggal Prakarsa Tbk (INTP), PT PP Persero Tbk (PTPP), PT Summarecon Agung Tbk (SMRA). The decline in the shares of the listed companies was due to the stalling of various projects with trillions of capital due to the implementation of Pembatasan Sosial Berskala Besar (PSBB) will be a problem for the company's financial performance, such as the company's sales & net profit will decrease, so that it will get negative sentiment from investors and the company's value will also be affected due to the decline in the company's performance. Thus financial performance has a significant influence in assessing the company. (www.cnbcindonesia.com).

Companies listed on the IDX including the LQ45 index certainly want the value of their companies to have good prospects and attract investors to buy shares of these companies. Companies that have gone public certainly want to show investors that their company is one of the right alternative investment choices. Therefore, effective financial performance is very important for the survival and growth of the company (Attari & Raza, 2012).

If you look at the previously researched journals or literature related to financial performance represented by liquidity, profitability and solvency on firm value, a gap arises between one study and another. As research written by Rompas (2016), states that liquidity has an effect. While the research conducted by Rahmawati et al., (2021) states the opposite, that is liquidity has no effect on firm value.

For profitability according to research Dunanti et al., (2017) The results of this study state that profitability has an effect on firm value. However, research conducted by Gunadi et al., (2020) state that profitability has no effect on firm value.

Another aspect is solvency, according to research conducted by Hertina et al., (2021) said that solvency has an effect on firm value. However, the research conducted by Erlina, (2018) states that solvency has no effect on firm value.

After the problem to be studied is determined and so that the problem can be answered carefully, the problem to be studied needs to be formulated. The following is the formulation of the problem:

- a. Does liquidity affect firm value in LQ 45 companies?
- b. Does profitability affect firm value in LQ 45 companies 5?
- c. Does solvability affect firm value in LQ 45 companies?

Sesuai dengan perumusan masalah diatas, maka tujuan yang ingin dicapai dalam melakukan penelitian ini adalah:

- a. To analyze the effect of liquidity on firm value.
- b. To analyze the effect of profitability on firm value.
- c. To analyze the effect of solvability on firm value.

#### 2. Literature Review

## 2.1 Signalling Theory

Signal theory is a signal or signs regarding the company's performance over a period in conveying information to investors, the information published can be in the form of healthy or not the company. Brigham & Houston (2011) Signal theory provides an explanation of management's view of the company's growth in the future. These signals can be in various forms, both those that can be observed directly or those that must be studied first to be able to find out. Whatever the type and form of the signal given, all of them aim to inform something in the hope that investors as external parties or the market will change their views on the company.

#### 2.2 Firm Value

According to Husnan (2014) The price or value that potential investors are able to pay when the company is sold is called company value. Corporate value is defined as the view of a shareholder to the company when a company has gone public or opened a public offering of shares to the public including the public.

The representation of the company's ability that can have an impact on the view of shareholders of the company is called company value. Wijaya & Sedana, (2015) state that if the company's stock price is high, the company's value will also be high. If the value of the company where the investor invests is higher, the investor will benefit. Stock prices are not the only indicator that can describe or estimate the value of the company. According (Hery, 2016), the ratio used to estimate the value of a company is the market valuation ratio or market size ratio. The ratios are:

#### a. Price Earning Ratio (PER)

*Price Earning Ratio* is a ratio that compares the stock price of a company with the profits or profits generated by the company. By knowing the PER value of a company, investors can find out whether the company's stock price is fair or not.

## b. Price to Book Value Ratio (PBV)

*Price to Book Value* is a ratio that describes the comparison between price or stock price with book value or book value. By knowing the PBV of a company, investors can find out that the company's stock price is included in the expensive (overvalued) or cheap (undervalued) category. Of course, investors will feel helped by this PBV.

### c. Earning Per Share (EPS)

Earning Per Share shows the amount of the company's net profit that is ready to be given to all investors or company shareholders based on the number of shares owned. If the EPS value is

increasing every year, the company is getting healthier because the company's profits are increasing and it can be said that the company is growing.

#### d. Tobin's Q

Tobin's Q is one alternative that can be used to measure the value of the company because Tobin's Q compares the market value of the stock with the book value of the company's equity.

#### 2.3 Financial Statement

Financial statements are information that describes the financial condition of a company, where the information can be used as a description of the financial performance of a company. Financial reports are needed to measure the results of the company's operations and development from time to time and to find out how far the company has achieved its goals. Financial statements are the result of an accounting process that can be used as a tool to communicate financial data with interested parties, so that financial statements play a broad role and have a position that influences decision making. Financial statements are needed by those who invest their capital so they need information about the extent of the company's profitability and potential dividends because with this information shareholders can decide to keep their shares, sell or even buy them (Hidayat, 2018).

### 2.4 Liquidity

According to (Masyitah E & Kahar H, 2018) The ability of a company to pay obligations or short-term debt at maturity that the company has using current assets available in the company is the definition of liquidity.

The value of the company with the liquidity ratio has a close relationship, meaning that investors will usually trust liquid companies. This happens because investors believe that liquid companies are companies that can fulfill their obligations before maturity or on time. (Hanie & Saifi, 2018).

To find out how much a company's ability to fulfill its obligations before maturity is needed, a method or method is needed to measure it. Below are the ratios that can be used as a measure of liquidity (Ikatan Akuntan Indonesia, 2019):

#### a. Current Ratio

Current Ratio is a ratio that compares the total current assets of an entity with the current liabilities of the entity. The purpose of this ratio is to determine the ability of the company to meet its obligations. The greater the value of the current ratio, the company is a liquid company, which means the greater the company's ability to cover its obligations.

### b. Quick Ratio

In contrast to the current ratio, in measuring the liquidity of a company, the quick ratio does not need to compare current assets with current liabilities. Quick ratio or quick ratio is a ratio that measures a company's ability to pay short-term obligations or current liabilities with current assets without using inventory.

#### c. Cash Ratio

Cash Ratio is a ratio that compares cash plus securities with short-term debt. Assets that are equivalent to cash that can be cashed back in an easy way are the meaning of securities. Thus the cash ratio is a ratio to calculate the amount of cash and securities available to meet short-term debt.

#### 2.5 Profitability

Susilawati (2012) in his research stated that profitability is a ratio that can measure how capable a company is in gaining profits through capital, sales activities, number of employees, cash and various other resources.

Profitability is known as the ratio of management effectiveness that comes from investment and sales. High profitability indicates good prospects and performance so that investors will respond well to the signal by increasing stock prices followed by company value which also increases. (Zuhroh, 2019).

The company's ability to generate profits can be calculated with several types of profitability ratios below (Hery, 2016):

#### a. Gross Profit Margin (GPM)

Gross Profit Margin is a ratio that compares the gross profit obtained from the reduction between sales and Cost of Goods Sold (COGS) with sales. The purpose of this ratio is to assess a company's ability to earn gross profit. The company is indicated to experience a loss if the value of GPM is negative.

#### b. Return on Assets (ROA)

Return on Assets or sometimes called return on investment is a ratio that compares net income after tax with total assets or assets owned by the company. Calculate the company's effectiveness in creating a return on the company's assets (Ningsih & Sari, 2019). The greater the ROA value, the more effective the company in its operational activities in generating a return on the assets of the company.

#### c. Return On Equity (ROE)

Return on equity is a profitability ratio that compares profit after tax with own capital. Its purpose is to measure how effectively the company generates profits using its own capital.

### 2.6 Solvability

The total balance of debt or obligations that the company has is the definition of the leverage ratio, another name for the solvency ratio. Can also be defined as a ratio that compares the amount of debt consisting of short-term and long-term debt with the total equity or capital owned by the company. (Aryaningsih & Budiartha, 2014).

Solvency describes the ability of a company to pay its financial responsibilities both in short-term debt and long-term debt. Solvency can also be interpreted as a measure of how much the company is paid by debt. (Wiagustini, 2010). According to (Effendi, 2019), the company has the potential to have a risk of failure to meet the loan if the solvency value of the company is high.

After knowing the definition or understanding of solvency. Below are the ratios that are commonly used to calculate the size of a company's solvency:

#### a. Debt to Asset Ratio (DAR)

Debt to asset ratio is a ratio that compares total debt with total assets owned by the company. So the greater the value of this ratio, the greater the debt owned by the company. Debt to Asset Ratio (DAR) measures the extent to which the company's assets or assets are financed from the company's external funds or debt.

#### b. *Debt to Equity Ratio* (DER)

Not much different from the previous ratio. Debt to Equity Ratio (DER) compares the total debt with the total equity or capital owned by the company. Total equity and total debt consisting of short-term and long-term debt owned by the company must be proportional or balanced. If not, it can be indicated that the company has a lot of debt compared to the capital in carrying out its operational activities.

#### 2.7 The Effect of Liquidity on Firm Value

Firm value with liquidity has a close relationship, meaning that investors will usually trust liquid companies. This happens because investors believe that liquid companies are companies that can fulfill their obligations before maturity or on time. (Hanie & Saifi, 2018).

If you look at the financial statements of LQ 45 companies, they have short-term liabilities that tend to increase every year. Therefore, liquidity is needed here to analyze whether the company has enough current assets to cover these liabilities. Firm value with liquidity has a close relationship. Given that liquidity is the ability of a company to cover its short-term debt, it will affect investors' views because the greater the company's ability to fulfill its obligations, investors will be more interested in investing in the company. In accordance with the results of previous research conducted by Rompas (2016), Fajaria (2018) and Sukoco (2013).

 $\mathbf{H}_1$ : Liquidity affects the value of the company.

## The Effect of Profitability on Firm Value

One of the ratios that can affect the high and low value of the company is profitability because the general understanding of profitability itself is the ability of a company to generate profits or profits for the company within a certain period. According to (Sianturi, 2020), the ability of a company to carry out its operational activities in generating the amount of net profit that can be achieved.

According to (Gunadi et al., 2020) the thing that affects the value of the company so that it will make the value of the company increase is profitability because this ratio calculates the company's ability to generate profits. This situation will be a positive signal for investors because the larger the company generates profits, the greater the dividends that will be given by the company, followed by the increasing interest of investors to invest or invest in the company. This will make the value of the company increase, in line with research conducted by Rahmawati et al., (2021), Hasania et al., (2016), Dunanti et al., (2017).

**H<sub>2</sub>:** Profitability affects the value of the company.

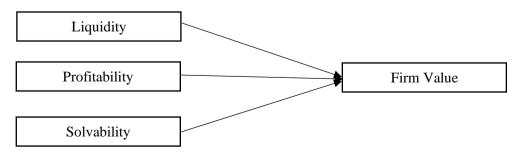
### The Effect of Solvability on Firm Value

(Mahulae, 2020) states that solvency shows the ability of a company to pay its short-term and long-term debts. A company generally has 2 sources of funding, namely internal and external. Internal funding sources are funds generated and formed by the company itself while external funding sources are funds that come from outside, for example debt. The size of the amount of debt owned by the company can affect the value of the company.

Investors and companies make solvency as one of the important considerations because it relates to company debt (Effendi, 2018). There are advantages and disadvantages in the use of debt, in using debt, both short-term and long-term debt, the drawback is that the company must pay the debt before the due date because it will be a problem and even go bankrupt if the company is unable to pay its debts and pay interest as long as the debt is owed. has not been paid. But if the company is able to manage the use of debt optimally, it will be an advantage in the use of debt because the debt is used as capital to finance the company's operational activities so that it will generate profits. Another drawback is of course investors will discourage their desire to invest in companies that have a lot of debt because there are financial risks that will affect the value of the company. In line with research conducted by Fajaria (2018) Tahu & Susilo (2017) and Sukoco (2013).

H<sub>3</sub>: Solvency affects the value of the company.

#### Conceptual Framework



#### 3. Methods

#### 3.1 Operational Definition

#### 1. Firm Value (Y)

Company value is defined as the view of the public or shareholders to the company when a company has gone public or opened a public offering of shares to the public including the public. Price Book Value (PBV) is used to measure the value of the company by comparing the stock price (closing price) with the book value. The value of the company in this study is in decimal form.

### 2. Liquidity $(X_1)$

Liquidity is the ability of a company to pay obligations or short-term debt at maturity that the company has using available current assets. The liquidity measuring instrument used is the Current Ratio (CR) which compares current assets with current liabilities. Liquidity in this study is in decimal form.

## 3. Profitability (X<sub>2</sub>)

Profitability is the ability of a company in carrying out its operational activities to generate profits or profits from various sources owned by the company. Profitability in this study is represented by Return on Assets (ROA) which compares net income after tax with total assets. Profitability in this study is in decimal form.

#### 4. Solvabilitas (X<sub>3</sub>)

Solvency describes the ability of a company to pay its financial responsibilities both in short-term debt and long-term debt. Solvency can also be interpreted as a measure of how much the company is paid by debt. In this study solvency is represented by the Debt to Equity Ratio (DER) which compares total debt with total equity. The solvency in this research is in decimal form.

#### Variable Measurement

- 1. Dependent Variable
- a. Firm Value (Y)

To measure firm value, this study uses Price Book Value (PBV) as a measuring tool. The following is the formula for Price Book Value (PBV):

$$Price\ Book\ Value = \frac{Price}{Book\ Value}$$

- 2. Independent Variable
- a. Liquidity  $(X_1)$

Current Ratio (CR) is used in this study to calculate the size of a company's liquidity. The following is the formula for the Current Ratio (CR):

$$Current \ Ratio = \frac{Aset \ Lancar \ (Current \ Asset)}{Hutang \ Lancar \ (Current \ Liabilities)}$$

#### b. Profitabilitas $(X_2)$

This study uses Return on Assets (ROA) as a measuring tool to calculate the size of the company's profitability. The following is the Return on Assets (ROA) formula:

$$Return\ On\ Asset\ (ROA) = \frac{Earning\ After\ Tax}{Total\ Asset}$$

### c. Solvability (X<sub>3</sub>)

To measure the solvency of a company, this study uses the Debt to Equitty Ratio (DER) as a measuring tool. The following is the formula for the Debt to Equitty Ratio (DER):

$$Debt \ to \ Equity \ Ratio(DER) = \frac{Total \ Liabilities}{Total \ Equity}$$

#### 3.2 Population and Sample Research

Population is an area in which there is a collection of individuals or objects that have qualities and characteristics to be studied, studied and then drawn conclusions (Sugiyono, 2015, hlm. 117). The population in this study are companies listed on the Indonesia Stock Exchange with an observation period of 3 years from 2018 to 2020.

LQ 45 companies listed on the Indonesia Stock Exchange with an observation period of 3 years from 2018 to 2020 are the samples used in this study. This research uses Non-Probability Sampling technique. Non-Probability Sampling is a sample selection that does not support equal opportunities for each member or component of the population to make it a sample. This sample selection technique has several methods in it, one of which is purposive sampling. Purposive sampling is a method of selecting samples with certain parameters or considerations from members of the population. The criteria for selecting the sample of this research are:

- 1. LQ 45 index companies listed on the Indonesia Stock Exchange in 2018 2020
- 2. LQ 45 index companies listed on the Indonesia Stock Exchange (IDX) consecutively from 2018-2020.
- 3. LQ 45 index company that publishes financial statements in Rupiah (Rp) for the period 2018 2020. If it is in a foreign currency, there must be information on the exchange rate used.
- 4. LO 45 index companies that are not included in the banking sector.

### 4. Results and Discussion

#### 4.1 Description of Research Object

The research objects used in this study were 45 LQ 45 companies listed on the IDX and the sample in this study were 25 companies with an observation period of 3 years so that they had a total of 75 observations.

## **Descriptive Analysis**

Table 2. Descriptive Analysis Result

|                 | PBV      | CR       | ROA      | DER      |
|-----------------|----------|----------|----------|----------|
| Mean            | 229.1133 | 206.2835 | 8.927600 | 105.6753 |
| Std. Dev        | 229.1409 | 115.4964 | 9.058776 | 88.19816 |
| Min             | 36.96000 | 27.96000 | -5.72000 | 14.47000 |
| Max             | 1220.480 | 465.7700 | 46.66000 | 329.9100 |
| Total Observasi | 75       | 75       | 75       | 75       |

Source: Processed Data (Eviews 12)

The firm value variable, it can be seen that the average firm value of 25 LQ 45 companies measured using PBV from 2018 - 2020 is 229,1133%. The highest company value was achieved by PT Hanjaya Mandala Sampoerna Tbk (HMSP) with a value of 1220.48% in 2018 due to the high stock price in 2018 which was IDR 3710 compared to the following years, namely in 2019 IDR 2100 even in 2020 it touched IDR 1505. Meanwhile, the lowest company value was achieved by PT Media Nusantara Citra Tbk (MNCN) in 2018 at 39.96%. The average value of the firm is smaller than the standard deviation,

this indicates that there is a considerable gap/variation between the highest firm value and the lowest firm value.

For the liquidity variable, it is known that the average liquidity proxied by the current ratio of 25 LQ 45 companies from 2018 - 2020 is 206.2835%. The highest liquidity was achieved by PT Kalbe Farma Tbk (KLBF) at 465.77% in 2018. The lowest liquidity value was held by PT Jasa Marga Tbk (JSMR) at 27.96% in 2019. The standard deviation value was 115 ,4964% smaller than the mean, this indicates a lack of data variance.

Profitability variable, the average profitability proxied by Return on Assets (ROA) of 25 LQ 45 companies in 2018 - 2020 which can be seen in table 2 is 8.927600%. The company that achieved the highest profitability was PT Unilever Indonesia Tbk (UNVR) which was 46.66% in 2018. While the lowest profitability was recorded by PT XL Axiata Tbk (EXCL) which was -5.72% in 2018. The value the average profitability is smaller than the standard deviation, this indicates that there is a considerable gap/variation between the highest firm value and the lowest firm value.

The solvency variable, the average solvency value proxied by the Debt to Equity Ratio (DER) of 25 LQ 45 companies in 2018 - 2020 is 105.6753%. The highest solvency was achieved by the company PT Jasa Marga Tbk (JSMR) in 2019, which was 329.91%. The lowest solvency was obtained by PT Vale Indonesia Tbk (INCO) which was 14.47% in 2019. The standard deviation of solvency was 88.19816% which means it is smaller than the average value.

### **4.2 Model Feasibility Test**

Before analyzing the data, a test was first conducted to choose which model was the best and which would be used between the Common Effect Model, Fixed Effect Model, and Random Effect Model. Researchers conducted 3 model tests, namely the Chow test, Hausmann test, and the Lagrange Multiplier test.

1. Chow Test (Common Effect Model and Fixed Effect Model)

Table 3. Chow Test Result

| Redundant Fixed Effect Test     |            |         |        |
|---------------------------------|------------|---------|--------|
| Equation: Untitled              |            |         |        |
| Test cross-section fixed effect | ets        |         |        |
| Effect Test                     | Statistics | d.f.    | Prob.  |
| Cross-section F                 | 4.278316   | (24.47) | 0.0000 |
| Cross-section Chi-square        | 86.876199  | 24      | 0.0000 |

Source: Processed Data (Eviews 12)

Based on the results of the Chow test in Table 3 above, it can be concluded that  $H_0$  is rejected and  $H_1$  is accepted because the Chi-square Cross-section probability value is 0.0000 < 0.05. Thus, the best model for this research between the Common Effect Model and the Fixed Effect Model is the Fixed Effect Model.

#### 2. Hausmann Test (Fixed Effect Model and Random Effect Model)

Table 4. Hausmann Test Result

Correlated Random Effects - Hausmann Test

Equation: Untitled

Test cross-section random effects

Test Summary Chi-Sq. Statistics Chi-Sq. d.f. Prob.

Cross-section Random 3.004330 3 0.3910

Source: Processed Data (Eviews 12)

Based on the Hausmann test results in table 4 above, it can be concluded that  $H_0$  is accepted and  $H_1$  is rejected because the Cross-section Random value is 0.3910 > 0.05. Thus, the best model to be used in this study between the Fixed Effect Model and the Random Effect Model is the Random Effect Model.

3. Lagrange Multiplier Test (Common Effect Model dan Random Effect Model)

Table 5. Lagrange Multiplier Test Result

| Lagrange Multiplier Tests for Random Effects Null Hypotheses: No Effects |               |                      |          |  |  |
|--|---------------|----------------------|----------|--|--|
|  | Cross Section | Test Hypothesis Time | Both     |  |  |
| Breusch-Pagan  | 18.25565      | 1.546738             | 19.80239 |  |  |
|  | (0.0000)      | (0.2136)             | (0.0000) |  |  |

Source: Processed Data (Eviews 12)

Based on the results of the Lagrange Multiplier test in table 5 above, it can be concluded that  $H_0$  is rejected and  $H_1$  is accepted because the Breusch-Pagan Cross-Section probability value is 0.0000 < 0.05. Thus the best model to be used in this study between the Common Effect Model and the Random Effect Model is the Random Effect Model.

### 4.3 Panel Data Regression Model Used

Table 6. Random Effect Model

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| С        | 5.071431    | 89.27465   | 0.056807    | 0.9549 |
| CR       | 0.143025    | 0.261218   | 0.547531    | 0.5857 |
| ROA      | 17.66134    | 2.514447   | 7.023946    | 0.0000 |
| DER      | 0.348850    | 0.351161   | 0.993418    | 0.3239 |

Source: Processed Data (Eviews 12)

Based on panel data regression testing using the Random Effect Model in table 6 above, the regression equation model is as follows:

$$PBV = 5.071431 + 0.143025 (CR) + 17.66134 (ROA) + 0.348850 (DER)$$

Based on the panel data regression equation above, it can be interpreted in this study as follows:

- 1. If you look at the results and equations of the regression model above, the constant value is 5.071431. This indicates that if the value of all the independent variables, namely liquidity (CR), profitability (ROA) and solvency (DER) is constant or totals 0 then the value of the firm value is 5.071431.
- 2. Liquidity (CR) has a coefficient value of 0.143025. This means that if the CR value increases by 1 and the value of the other variables remains or does not change, the value of the firm value (PBV) will increase by 0.143025.
- 3. The coefficient of profitability (ROA) is 17.66134. Indicates that if the ROA value increases by 1 and the value of the other variables remains or does not change, the value of the firm value (PBV) will increase by 17.66134.
- 4. Solvency (DER) has a coefficient value of 0.348850. The point is that if the DER value has increased by 1 and the value of the other variables remains or does not change, then the value of the firm value (PBV) increases by 0.348850.

#### T Test (Parsial)

Table 7. T Test

| Variable | Coefficient | Std. Error | t-Statistic | Prob.  |
|----------|-------------|------------|-------------|--------|
| C        | 5.071431    | 89.27465   | 0.056807    | 0.9549 |
| CR       | 0.143025    | 0.261218   | 0.547531    | 0.5857 |
| ROA      | 17.66134    | 2.514447   | 7.023946    | 0.0000 |
| DER      | 0.348850    | 0.351161   | 0.993418    | 0.3239 |

Sumber: Data Diolah (Eviews 12)

Based on the results of processing the data attached in table 7 above using the E-views 12 application, the following explains the influence between the independent variable and the dependent variable:

## a. The Effect of Liquidity on Firm Value

Based on the results of the data processing in the t-test table above, it is known that the significance value of liquidity represented by CR is greater than 0.05, namely 0.5857 > 0.05. As for the coefficient value is 0.143025 and the value of  $t_{statistic} < t_{table}$  is 0.547531 < 1.993943 then  $H_0$  is accepted and  $H_a$  is rejected. Thus, it means that liquidity has no effect and is not significant on firm value so that the first hypothesis is rejected.

## b. The Effect of Profitability on Firm Value

Based on the results of the data processing in the t-test table above, it is known that the significance value of profitability represented by ROA is smaller than 0.05, i.e. 0.0000 < 0.05. Meanwhile, the ROA coefficient value is 17.66134 and the  $t_{statistic} > t_{table}$  is 7,023946 > 1,993943 so  $H_0$  is rejected and  $H_a$  is accepted. Thus, the meaning is that profitability has a positive and significant effect on firm value so that the second hypothesis is accepted.

### c. The Effect of Solvability on Firm Value

Based on the results of the analysis in the t-test table, it is known that the significance value of solvency represented by DER is greater than 0.05, namely 0.3239 > 0.05. Meanwhile, the DER coefficient value is 0.348850 and the  $t_{statistic} < t_{table}$  is 0.993418 < 1.993943. Thus, it means that solvency has no effect and is not significant on firm value so that the third hypothesis is rejected.

### **Coefficient of Determination Test (R<sup>2</sup>)**

Table 8. Coefficient of Determination Test (R<sup>2</sup>)

| Root MSE           | 99,79616 | R-squared          | 0,416967 |
|--------------------|----------|--------------------|----------|
| Mean dependent var | 105,6202 | Adjusted R-squared | 0,392332 |
| S.D. dependent var | 131,5776 | S.E. of regression | 102,5688 |
| Sum square resid   | 746945,4 | F-statistic        | 16,92567 |
| Durbin-Watson stat | 2,111547 | Prob(F-statistic)  | 0,000000 |

Source: Processed Data (Eviews 12)

Based on the results of table 8 above, it is known that based on the results of the coefficient of determination (R<sup>2</sup>) the value of the adjusted R-squared is 0.392332 or 39.23%. The meaning of this value is that the independent variables, namely liquidity (CR), profitability (ROA) and solvency (DER) 39.23% are able to explain or influence the dependent variable, namely firm value (PBV). While the remaining 60.77% is influenced by other variables that are not examined or explained in this study.

#### 4.4 Discussion

#### The Effect of Liquidity on Firm Value

Based on the results of the hypothesis test, namely the t test, it is known that the liquidity variable measured using the current ratio has a value of  $t_{\text{statistic}} < t_{\text{table}}$  which is 0.547531 < 1.993943 then  $H_0$  is

accepted and  $H_a$  is rejected. The significance value of liquidity is greater than the 0.05 significance level, which is 0.5857 > 0.05. So, the first hypothesis ( $H_1$ ) in this study was rejected. Liquidity has no effect on firm value. It can give the view that investors do not pay too much attention to the number of current assets followed by the high current ratio available to the company. Because the higher the current ratio does not mean the company can be said to be healthy but indicates that there is an excess of current assets that are not used as well as possible in the company and will be buried. (Regita et al., 2021). In addition, to calculate the current ratio, current assets and current debt are needed, it is known that the time period of current debt is fast so investors do not pay too much attention to this factor in investing because current debt is difficult to predict caused by a period of less than 1 year.

## The Effect of Profitability on Firm Value

Based on the results of the t test, it shows that the profitability variable proxied by ROA (Return On Assets) has a value of  $t_{statistic} > t_{table}$  which is 7,023946 > 1,993943 then the probability significance is smaller than the significance level, which is 0.0000 < 0.05 and has a positive coefficient of 17.66134. The statement concludes that profitability has a significant and significant effect on firm value and is positively correlated. So that the second hypothesis ( $H_2$ ) in this study is accepted. The ROA value that has increased indicates that the company is able to manage all the assets in its company well so that it produces increased profits. This situation will be a positive signal for investors because the larger the company generates profits, the greater the dividends that will be given by the company, followed by increasing investor interest in investing or investing their shares in the company.

## The Effect of Solvability on Firm Value

Based on the results of the hypothesis test, namely the t test, it is known that the solvency variable calculated using the Debt to Equity Ratio (DER) has a value of  $t_{statistic} < t_{table}$  which is 0,993418 < 1,993943 then  $H_0$  is accepted and  $H_a$  is rejected. The significance value of solvency is greater than the 0.05 significance level, which is 0.3239 > 0.05. So, the third hypothesis ( $H_3$ ) in this study was rejected. Solvency has no effect on firm value.

Because the probability is greater than 0.05, it is not declared significant. If it is not significant, it means that it is impossible to predict that if solvency increases, the value of the company will increase. This means that an increase in solvency does not guarantee an increase in firm value and conversely that an increase in solvency does not reduce firm value. So that investors do not take the solvency factor into consideration in making a decision that if solvency increases, the value of the company will increase or decrease as well, investors are actually more interested in seeing how the company's ability to generate maximum profit. This indicates that if the solvency value changes, either up or down, it will not necessarily change the value of the company. According to Effendi, (2019) the company has the potential to have a risk of failure to meet the loan if the solvency value of the company is high. This could happen because the solvency (DER) will increase if the total debt owned by the company is greater than its capital so that there is a possibility that the company will not be able to pay off the debt and will affect investors' views. But solvency in this study has no effect on firm value.

## 5. Conclusion & Suggestion

#### Conclusion

After analyzing and testing the hypothesis using panel data regression, the following conclusions can be drawn:

- 1. Liquidity variable which is calculated using Current Ratio (CR) after being tested and analyzed, it is concluded that liquidity has no effect on firm value.
- 2. Profitability variables are calculated using Return On Assets (ROA) after being tested and analyzed, it is concluded that profitability has an positive effect and is significant on firm value.
- 3. The solvency variable which is calculated using the Debt to Equity Ratio (DER) after being tested and analyzed, it is concluded that solvency has no effect on firm value.

## **Suggestion**

Based on the results of previous research, analysis and discussion, the following are theoretical and practical suggestions that can be given:

#### a. Theoretically

For further researchers who will examine the same topic as this study, it is better to add other variables that may affect firm value such as firm size, dividend policy, activity and external factors such as inflation. Further researchers are also advised to extend the observation period and increase the number of samples studied.

#### b. Practically

#### 1) For Company

Companies should need to improve their financial performance and external factors that can affect the value of the company so that many investors will be interested in investing in the company. This research is also expected to be used as a calculation and consideration for the company in terms of making decisions to increase the value of the company in the future.

#### 2) For Investor

It is hoped that investors who want to invest in the LQ 45 index company should look at and consider the profitability factor or the company's ability to generate profits because according to the results in this study it can affect the firm value of the LQ 45 index company.

#### REFERENCES

- Anita, A., & Yulianto, A. (2016). Pengaruh Kepemilikan Manajerial Dan Kebijakan Dividen Terhadap Nilai Perusahaan. *Management Analysis Journal*.
- Artini, L., Suarja, A., & Dj, A. (2012). Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan Pada Perusahaan Manufaktur Di Bursa Efek Indonesia. *Jurnal Manajemen, Strategi Bisnis, Dan Kewirausahaan*, 1–15.
- Aryaningsih, N. N. D., & Budiartha, I. K. (2014). Pengaruh Total Aset, Tingkat Solvabilitas dan Opini Audit Pada Audit Delay. *Jurnal Akuntansi Universitas Udayana*, 7(3), 2302–8556.
- Attari, M. A., & Raza, K. (2012). The optimal relationship of cash conversion cycle with firm size and profitability. *International Journal of Academic Research in Business and Social Sciences*, 2(4), 189–203.
- Brigham, E. F., & Houston, J. F. (2011). Dasar-dasar Manajemen Keuangan (11th ed.). Salemba Empat.
- Dunanti, I., Lie, D., Efendi, E., & Irawan, A. (2017). Pengaruh Likuiditas Dan Profitabilitas Terhadap Nilai Perusahaan Pada Perusahaan Sub Sektor Property Dan Real Estate Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Manajemen*, *3*(2), 48–55.
- Effendi, B. (2018). Profitabilitas, Solvabilitas dan Audit Delay Pada Perusahaan Consumer Goods yang Terdaftar Di BEI. *OWNER: Riset & Jurnal Akuntansi*, 2(2), 1–9.
- Effendi, B. (2019). Komite Audit, Profitabilitas, Solvabilitas, dan Ketepatan Waktu Pelaporan

- Keuangan Perusahaan Manufaktur-Sektor Logam. *Business Innovation and Entrepreneurship Journal*, 1(3), 149–157. https://doi.org/10.35899/biej.v1i3.67
- Erlina, N. (2018). Pengaruh Likuiditas, Solvabilitas, Profitabilitas Terhadap Nilai Perusahaan Pertambangan Di Bursa Efek Indonesia. *Jurnal Manajemen Kompeten*, 1(1), 13. https://doi.org/10.51877/mnjm.v1i1.17
- Fajaria, A. Z. (2018). The Effect of Profitability, Liquidity, Leverage and Firm Growth of Firm Value with its Dividend Policy as a Moderating Variable. *International Journal of Managerial Studies and Research*, 6(10), 55–69. https://doi.org/10.20431/2349-0349.0610005
- Gunadi, I. G. N. B., Putra, I. G. C., & Yuliastuti, I. A. N. (2020). The Effects of Profitabilitas and Activity Ratio Toward Firms Value With Stock Price as Intervening Variables. *International Journal of Accounting & Finance in Asia Pasific*, 3(1), 56–65. https://doi.org/10.32535/jjafap.v3i1.736
- Hanie, U. P., & Saifi, M. (2018). Pengaruh Rasio Likuiditas Dan Rasio Leverage Terhadap Harga Saham. *Jurnal Administrasi Bisnis*, 58(1), 95–102.
- Hasania, Z., Murni, S., & Mandagie, Y. (2016). Pengaruh Current Ratio, Ukuran Perusahaan Struktur Modal, Dan Roe Terhadap Nilai Perusahaan Farmasi Yang Terdaftar Di Bursa Efek Indonesia Periode 2011 Â 2014. *Jurnal Berkala Ilmiah Efisiensi*, 16(3), 133–144.
- Hertina, D., Pardede, D. R. P., & Yesenia, D. (2021). Company Value Impact of Liquidity, Solvability and Profitability. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(4), 782–788. https://doi.org/10.17762/turcomat.v12i4.563
- Hery. (2016). Analisis Laporan Keuangan (Integrated). PT. Grasindo.
- Hidayat, W. W. (2018). *Dasar Dasar Analisa Laporan Keuangan* (F. Fabri (ed.); Pertama). Uwais Inspirasi Indonesia.
- Husnan, S. (2014). *Manajemen Keuangan, Teori dan Penerapan (Keputusan Jangka Panjang)* (4th ed.). BPFE.
- Ikatan Akuntan Indonesia. (2019). Modul Level Dasar (CAFB) Manajemen Keuangan (1st ed.). IAI.
- Mahulae, D. Y. D. (2020). *Analisis Pengaruh Efisiensi Modal Kerja, Likuiditas Dan Solvabilitas Terhadap Profitabilitas*. 2. https://ojs.stindomedan.ac.id/index.php/JMA/article/view/43/37
- Masyitah E & Kahar H. (2018). Analisis Kinerja Keuangan Menggunakan Rasio Likuiditas Dan Profitabilitas. *Jurnal Akuntansi Dan Keuangan Kontemporer*, 14(1), 46.
- Ningsih, S., & Sari, S. P. (2019). Analysis Of The Effect Of Liquidity Ratios, Solvability Ratios And Profitability Ratios On Firm Value In Go Public Companies In The Automotive And Component Sectors. *International Journal of Economics, Business and Accounting Research (IJEBAR)*, 3.
- Rahmawati, M., Siswantini, T., & Fadila, A. (2021). Determinan Nilai Perusahaan Sektor Aneka Industri Di Bursa Efek Indonesia. *Konferensi Riset Nasional Ekonomi, Manajemen, Dan Akuntansi (KORELASI)*, 2(1), 648–661. https://conference.upnvj.ac.id/index.php/korelasi/article/view/1115
- Regita, S., Jubaedah, & Hidayati, S. (2021). Analisis Nilai Perusahaan Sektor Pariwisata Yang Terdaftar Di Bursa Efek Indonesia (BEI). 2.
- Rompas, G. P. (2016). Likuiditas, Solvabilitas dan Rentabilitas Terhadap Nilai Perusahaan BUMN Yang Terdaftar Di BEI. *Jurnal EMBA*, *1*(3), 252–262.
- Saputra, W. S. (2018). Pengaruh Corporate Governance, Corporate Social Responsibility Dan Intellectual Capital Terhadap Nilai Perusahaan. *National Conference of Creative Industry*, *September*, 5–6. https://doi.org/10.30813/ncci.v0i0.1313
- Sianturi, M. W. E. (2020). Pengaruh Kinerja Keuangan Terhadap Nilai Perusahaan Manufaktur Sektor

- Industri Barang Konsumsi di BEI. EJournal Administrasi Bisnis, 8(4), 280–289.
- Sugiyono. (2015). Metode Penelitian Pendekatan Kuantitatif, Kualitatif, Dan R&D. Alfabeta.
- Sukoco, H. (2013). Analisis Pengaruh Debt to Equity Ratio, Profitabilitas, Firm Size, dan Likuiditas Terhadap Nilai Perusahaan Melalui Mediasi Dividend Payout Ratio (Studi Pada Industri Manufaktur Di Bursa Efek Indonesia Periode Tahun 2009-2011). *Jurnal Bisnis Strategi*, 22.
- Susilawati, C. D. K. (2012). Analisis Perbandingan Pengaruh Likuiditas , Solvabilitas , dan Profitabilitas Terhadap Harga Saham pada Perusahaan LQ 45. *Jurnal Akuntansi*, 4(2), 165–174. http://majour.maranatha.edu/
- Tahu, G. P., & Susilo, D. D. B. (2017). Effect of Liquidity, Leverage and Profitability to The Firm Value (Dividend Policy as Moderating Variable) in Manufacturing Company of Indonesia Stock Exchange. *Research Journal of Finance and Accounting*, 8(18), 89–98.
- Wiagustini, N. L. P. (2010). Dasar-dasar Manajemen Keuangan. Udayana Unibersity Press.
- Wijaya, B., & Sedana, I. (2015). Pengaruh Profitabilitas Terhadap Nilai Perusahaan (Kebijakan Dividen Dan Kesempatan Investasi Sebagai Variabel Mediasi). *E-Jurnal Manajemen Universitas Udayana*, 4(12), 253308.