# *THE EFFECT OF GROWTH OPPORTUNITY, COMPANY SIZE AND NET WORKING CAPITAL TOWARDS CASH HOLDING IN COSUMER GOODS COMPANIES LISTED ON THE IDX (INDONESIA STOCK EXCHANGE) 2014-2018 PERIOD*

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***Abstract -*** *This study aims to examine the effect of growth opportunity, company size and net working capital on cash holding in consumer goods companies listed on the Indonesia Stock Exchange from 2014 to 2018. This study also examines the role of growth opportunity, company size and net working capital on cash. holding.*

*This study uses a descriptive quantitative approach, which is measured using a panel data-based method with version 10. Econometric Views (Eviews) Software program. The data collection technique uses the documentation method. The population in this study are all consumer goods companies listed on the Indonesia Stock Exchange in 2014-2018. This sample is 57 companies, so the amount of data obtained is 21 company data taken using purposive sampling method.*

*The results showed that growth opportunity partially affects cash holding, this is because growth opportunities in consumer goods companies are very likely, company size partially has no effect on cash holding because holding cash does not see the size of the company because the size of the company still holds cash. in that company and net working capital has no effect on cash holding because cash holding does not see the size of the net working capital owned by the company*

**Keywords:** ***growth opportunity, company size, net working capital, and cash holding***

***Abstrak–*** Penelitian ini bertujuan menguji pengaruh *growth opportunity,* ukuran perusahaan dan *net working capital* terhadap *cash holding* pada perusahaan *consumer goods* yang terdaftar di Bursa Efek Indonesia tahun 2014 sampai dengan tahun 2018. Penelitian ini juga menguji peran *growth opportunity*, ukuran perusahaan dan *net working capital* terhadap *cash holding*.

Penelitian ini menggunakan jenis penelitian deksriptif pendekatan kuantitatif, yang diukur dengan menggunakan metode berbasis data panel dengan program *Software Econometric Views* (Eviews) versi 10. Teknik pengumpulan data menggunakan metode dokumentasi. Populasi dalam penelitian ini adalah seluruh perusahaan *consumer goods* yang terdaftar di Bursa Efek Indonesia tahun 2014-2018. Sampel ini sebanyak 57 perusahaan, sehingga jumlah data yang diperoleh 21 data perusahaan yang diambil dengan menggunakan metode *purposive sampling.*

Hasil penelitian menunjukan *growth opportunity* secara parsial berpengaruh terhadap *cash holding*, hal ini dikarnakan peluang pertumbuhan diperusahaan *consumer goods* sangat lah berpeluang besar, ukuran perusahaan secara parsial tidak berpengaruh terhadap *cash*

*holding* karena memegang uang kas tidak melihat ukuran perusahaan karena besar kecilnya perusahaan tetap memegang uang kas diperusahaan tersebut dan *net working capital* tidak berpengaruh terhadap *cash holding* dikarenakan *cash holding* tidak melihat besar kecilnya *net working capital* yang dimiliki perusahaan.
**Kata Kunci: *growth opportunity*, ukuran perusahaan, *net working capital*, dan *cash holding***

# I. PRELIMINARY

Cash is a form of asset that can be used immediately to meet the company's operational needs. The existence of cash in a company is very important because without cash it will result in the company's activities unable to run. Therefore, the company must maintain the amount of cash to match its needs. Cash in the company needs the attention of the manager. This is because if the company keeps too little cash, it will be difficult for the company to meet its short-term needs

This causes the company to be seen as bad and illiquid, which in turn raises doubts from other parties in the company because of the bad image generated by the company. On the other hand, saving too much cash will also cause losses for the company because the company cannot achieve an optimal level of profitability, which is the profit that should be obtained by the company by utilizing too much stored cash to carry out business activities..

By paying attention to the results of previous studies that have resulted in different opinions, the researcher wants to conduct research by focusing on three factors that influence cash holding, namely Growth Opportunity, Company Size and Net Working Capital by extending the research period from previous studies. Based on the background description above, this research was conducted under the title "THE EFFECT OF GROWTH OPPORTUNITY, COMPANY SIZE AND NET WORKING CAPITAL ON CASH HOLDING IN CONSUMER GOODS COMPANIES LISTED ON THE IDX (INDONESIA STOCK EXCHANGE) FOR 2014-2018"

## 1.1. Formulation of the problem

Based on the description of the background of the problem that has been described above, then the formulation of the problem in this study are:

1. Is there an effect of Growth Opportunity on cash holding?
2. Is there an effect of Company Size on cash holding?
3. Is there an effect of Net working capital on cash holding?
4. Is there an effect of Growth Opportunity, Company Size, and Net Working Capital on cash holding?

## 1.2. Research purposes

The objectives of this study are:

1. This is to determine the effect of Growth Opportunity on cash holding
2. This is to determine the effect of company size on cash holding
3. This is to determine the effect of Net Working Capital on cash holding
4. To determine the effect of Growth Opportunity, Company Size, and Net Working Capital on cash holding

# II. LITERATURE REVIEW

## 2.1. *Cash Holding*

*Cash holding* is cash owned by the company that can be converted into cash quickly (Ogundipe, Ogundipe, & Ajao, 2012) in (Cahyati, Suhendro, & Masitoh, 2019: 3). So it can be interpreted that cash holding is one way for companies to manage cash. Cash is one of the easiest assets to liquidate or use to finance a company. Because the liquid cash

nature makes it one of the less profitable assets if only in the form of storage, it is different if the cash is used for investment it will be more profitable. However, if the amount of cash holding companies is too small, it can hamper the company's operations. So that the company must be able to provide the optimal amount of cash.

### 2.2. *Growth Opportunity* (Growth Opportunity)

Myers (1977) in (Marfuah & Zulhimi, 2014: 35)revealed that the company's growth opportunity is related to the level of leverage used by the company. Therefore, companies with high growth opportunities use liquid assets (such as cash) as insurance policies to reduce the possibility of financial distress and to take advantage of good investment opportunities when external financing is expensive. In accordance with the pecking order theory, high growth opportunities are expected to encourage companies to make policies by preferring to hold high cash in order to finance their investment opportunities.

### 2.3. Company Size

Brigham and Houston (2001: 50) in (Manoppo & Arie, 2016: 487)defines that firm size is the average total net sales for the year over several years. In this case the sales are greater than the variable costs and fixed costs, the amount of income before tax will be obtained. Conversely, if the sales are smaller than the variable costs and fixed costs, the company will suffer losses. If the company has large total assets, the management is more flexible in using the existing assets in the company. A large number of assets will reduce the value of the company from the perspective of the owner of the company. However, when viewed from the management side, the ease with which it controls the company will increase the value of the company (Suharli, 2006: 14).

### 2.4. *Net Working Capital* (Net Working Capital)

Ross et al. (2015) in(Simanjuntak & Wahyudi, 2017: 28)explained that net working capital is current assets and current liabilities that can generate positive working capital when current assets are greater than current liabilities. If the working capital in the company is getting bigger, the amount of cash held is also large because the amount of assets owned exceeds the debt owned by the company.

### 2.5. Influence Between Research Variables.

#### 2.5.1. The Effect of Growth Opportunity on Cash Holding

The high investment opportunities the company has indicates the company's ability to obtain returns that can be used as cash reserves. Companies with high growth opportunities will prefer to hold excess liquid assets (Saddour, 2006). Research The higher the opportunity to grow the company, the higher the amount of cash held by the company Opler et al. (1999). Research by Kim et al. (2011), Jinkar (2013) and William & Fauzi (2013) in(Liestyasih & Wiagustini, 2017: 3617) shows the influence between growth opportunity and cash holding.

#### 2.5.2. Effect of Company Size on Cash Holding

The results of research conducted by Ferreira and Vilela (2004) found that company size has an effect on *cash holding*. The same thing was found by Bates (2009), Kim et al. (2011), Gill and Shah (2012), and D'Mello (2005). Based on the trade off theory, there is a relationship between company size and cash holding because the bigger a company is, the easier it is for the company to get external financing so that companies are more likely not to hold large amounts of cash or create cash reserves. (Kim et al., 2011) said that large companies are not like small companies which face limitations in funding

because large companies have access to good capital markets at lower costs. Therefore, the bigger a company,

### 2.5.3. The Effect of Net Working Capital on Cash Holding

In some special situations (for example during a crisis), current assets cannot be easily converted into cash. Therefore, company managers usually make cash reserves to maintain liquidity. This is very important because if it happens*economy shock*, cash and current assets can be a company savior from the threat of bankruptcy (Jinkar, 2013). The results of this study are in accordance with the findings of Jinkar (2013)) in(Marfuah and Zulhilmi, 2015: 40) who concluded that net working capital has a significant effect on the company's cash holding.

### 2.5.4. The Influence of Growth Opportunity, Company Size and Net Working Capital on Cash Holding

The importance of good management *growth opportunity,* Company size and net working capital have a strong influence on cash holding. Because this can be a determining factor for the cash holding policy that a company takes, because when a company needs funding to meet the needs of its operational activities, it requires proper financial management. One way to manage it is through cash holding.

Research conducted by Rebecca (2015: 14,15) suggests that the analysis of determinants of cash holding policy which is influenced by growth opportunity, company size, and net working capital simultaneously affects cash holding. Based on the research above, the temporary answer is growth opportunity, company size, and net working capital simultaneously affect cash holding.

## 2.6. Hypothesis Development

The hypothesis is a temporary answer to the problem in research which is arranged with wording questions. It is said to be temporary, because the answers given are not necessarily correct and must be proven to be true. Based on the theoretical phenomena and the latest research put forward previously, the research hypothesis is:

H1 : Growth opportunity affects cash holding
H2 : Company size affects cash holding
H3 : Net working capital affects cash holding
H4 : Growth opportunity, firm size and net working capital affect cash holding

### 2.7. Conpetual Research Framework

This study conducted an influence analysis *Growth Opportunity*, Company Size and Net Working Capital on cash holding. So that we can find out whether it can affect the level of the company's cash holding. The framework is described in the following figure.

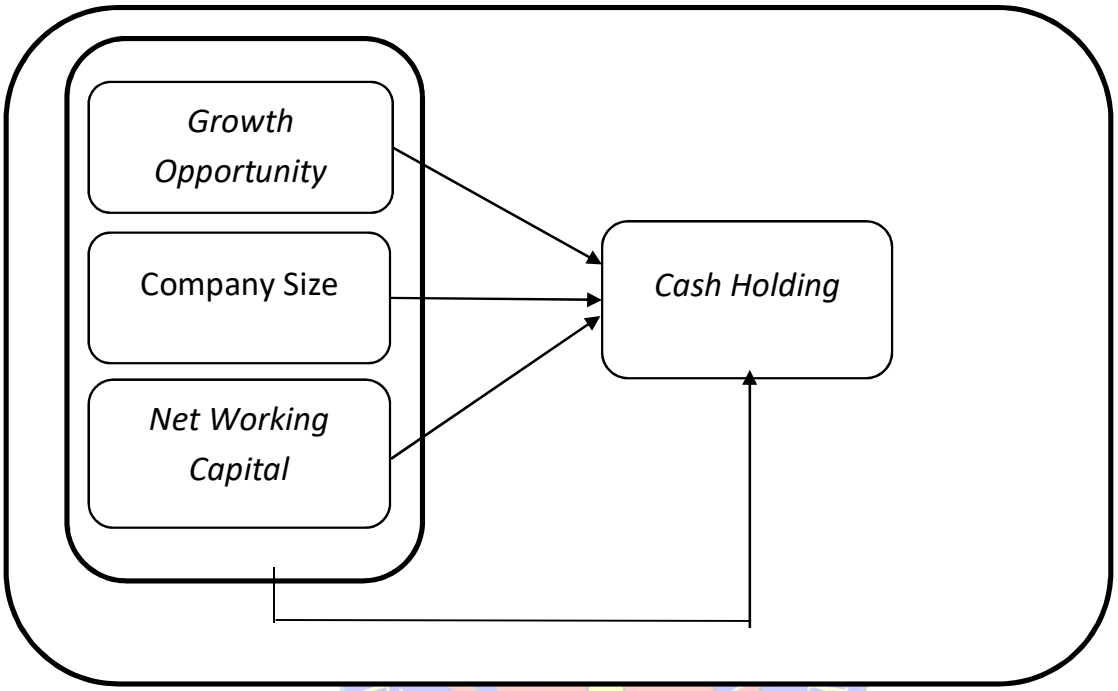



**Figure 2.1 Framework**

Based on Figure 2.1, it can be seen that the variable *growth opportunity* influence on cash holding, firm size variable affects cash holding and net working capital variable affects cash holding.

## III. RESEARCH METHOD

### 3.1. Research Strategy

The research strategy that will be used in this research is causality research. According to Sugiyoni (2017: 21) causal research is used to determine the causal relationship with one of the independent variables and affects the dependent variable. From the research strategy, the researcher can explain the effect of growth opportunity, company size and net working capital on cash holding

### 3.2. Population and Research Sample

The research population used in this study are consumer goods companies listed on the Indonesia Stock Exchange for the period 2014 to 2018. The independent variables in this study are growth opportunity, company size, and net working capital. With the dependent variable is cash hilding. The number of consumer goods companies listed on the Indonesia Stock Exchange (IDX) from 2014 to 2018 totaled 57 companies, 57 of these companies will be the population in the study.

**Table 3.1. List of Consumer Goods Companies Listed on the IDX (2014-2018)**

| NO | COMPANY CODE | COMPANY NAME |
|---|---|---|
| 1 | ADES | Akasha Wira International Tbk. |
| 2 | AISA | Tiga Pilar Sejahtera Food Tbk. |
| 3 | ALTO | Tri Banyan Tirta Tbk. |
| 4 | BTEK | Bumi Teknokultura Unggul Tbk. |
| 5 | BUDI | Budi Starch & Sweetener Tbk |
| 6 | CAMP | Campina Ice Cream Industry Tbk |
| 7 | CEKA | Wilmar Cahaya Indonesia Tbk. |
| 8 | CLEO | Sariguna Primatirta Tbk |
| 9 | COCO | Wahana Interfood Nusantara Tbk |
| 10 | DLTA | Delta Djakarta Tbk |
| 11 | DMND | Diamond Food Indonesia Tbk. |
| 12 | FOOD | Sentra Food Indonesia Tbk. |
| 13 | GOOD | Garudafood Putra Putri Jaya Tb |
| 14 | HOCKEY | Buyung Poetra Sembada Tbk |
| 15 | ICBP | Indofood CBP Sukses Makmur Tbk |
| 16 | IIKP | Inti Agri Resources Tbk |
| 17 | FISH | Era Mandiri Cemerlang Tbk. |
| 18 | INDF | Indofood Sukses Makmur Tbk |
| 19 | CHEESE | Mulia Boga Raya Tbk. |
| 20 | MGNA | Magna Investama Mandiri Tbk. |
| 21 | MLBI | Multi Bintang Indonesia Tbk. |
| 22 | MYOR | Mayora Indah Tbk |
| 23 | PANI | Pratama Abadi Nusa Industri Tb |
| 24 | PCAR | Prima Cakrawala Abadi Tbk |
| 25 | PSDN | Prasidha Aneka Niaga Tbk |
| 26 | BREAD | Nippon Indosari Corpindo Tbk. |
| 27 | SKBM | Sekar Bumi Tbk |
| 28 | SKLT | Sekar Laut Tbk. |
| 29 | STTP | Siantar Top Tbk. |
| 30 | TBLA | Tunas Baru Lampung Tbk. |
| 31 | ULTJ | Ultrajaya Milk Industry & Trading Co. Tbk. |
| 32 | GGRM | Gudang Garam Tbk. |
| 33 | HMSP | HM Sampoerna Tbk. |
| 34 | ITIC | Indonesian Tobacco Tbk. |
| 35 | RMBA | Bentoel Internasional Investama Tbk. |
| 36 | WIIM | Wismilak Inti Makmur Tbk |
| 37 | DVLA | Darya-Varia Laboratoria Tbk. |
| 38 | INAF | Indofarma (Persero) Tbk |
| 39 | KAEF | Kimia Farma (Persero) Tbk |
| 40 | KLBF | Kalbe Farma Tbk. |

| | | |
|---|---|---|
| 41 | BRAND | Merck Tbk |
| 42 | PEHA | Phapros Tbk. |
| 43 | PYFA | Pyridam Farma Tbk |
| 44 | SCPI | Merck Sharp Dohme Pharma Tbk. |
| 45 | SIDO | Sido Muncul Tbk's Herbal and Pharmaceutical Industry. |
| 46 | TSPC | Tempo Scan Pacific Tbk. |
| 47 | KINO | Kino Indonesia Tbk |
| 48 | KPAS | Cottonindo Ariesta Tbk. |
| 49 | MBTO | Martina Berto Tbk. |
| 50 | MRAT | Mustika Ratu Tbk. |
| 51 | TCID | Mandom Indonesia Tbk. |
| 52 | UNVR | Unilever Indonesia Tbk. |
| 53 | CINT | Chitose Internasional Tbk |
| 54 | KETCH | Kedaung Indah Can Tbk |
| 55 | LMPI | Langgeng Makmur Industri Tbk. |
| 56 | WOOD | Integra Indocabinet Tbk |
| 57 | HRTA | Hartadinata Abadi Tbk |

Some of the criteria that will be used in sample selection are as follows:

1. Consumer goods companies that have been listed on the Indonesia Stock Exchange (IDX) in 2014 - 2018.
2. A consumer goods company that publishes complete financial reports for the 2014-2018 period whose reporting ends every December 31 and has data or information in accordance with research needs.
3. Companies that present financial statements in rupiah currency.

**Table 3.2. Sample Selection Based on Research Criteria**

| No. | Sample Selection Criteria | amount |
|---|---|---|
| 1. | A consummer goods company that has been listed on the Indonesia Stock Exchange (IDX) in 2014 - 2018. | 57 |
| 2. | A consumer goods company that publishes complete financial reports for the 2014-2018 period whose reporting ends every December 31 and has data or information in accordance with research needs. | (36) |
| 3. | Consumer goods companies that present financial reports in rupiah currency. | (36) |
| 4. | Deduction of Chi Square | (21) |

| | | |
|---|---|---|
| 5. | Companies selected to be the research sample | (21) |
| | **Number of samples** | 21 |
| | **Amount of data (N)** | 105 |

***Source: Data processed, 2020***

### 3.3. Data Analysis Methods

The data analysis technique used in this research is quantitative analysis with statistical calculation techniques. Data analysis techniques include descriptive statistics, classic assumption tests which include normality, heteroscedasticity, autocorrelation, and multicollinearity tests which aim to check the accuracy of the model so that it is unbiased and efficient, model testing, panel data regression analysis, and hypothesis testing. Data analysis obtained in this study will use a statistical data processing program known as Software Eviews Version 10. The method used is as follows:

#### 3.3.1. Descriptive Statistical Analysis

Descriptive statistical method is a method that describes or describes a data to obtain the average value (*the mean*), standard deviation, variant, maximum, minimum, sum, range, and skewness (distribution skewness). The maximum value is the highest value for each tested variable. The minimum value is the lowest value for each tested variable. The mean (mean) is the average value of a group of data. Standard deviation is the value of the square root of the variance which is used to assess the average or expected.

#### 3.3.2. Classic assumption test

The classic assumption test must be done first to find out whether the data is suitable for analysis. The aim is to avoid biased estimates, because not all data can be applied regression. The classical assumption test used is the normality test, multicolonierity test, autocorrelation test, and heteroscedasticity test. In analyzing linear regression to avoid deviating classical assumptions, several tests are needed, including:

1. **Normality test**

This test aims to test whether in the multiple regression model, the independent and dependent variables will be normally distributed or not. In this research was carried out by methods*Jarque-Bera* (JB), it can be said that the data is normally distributed. If the statistical probability is equal to zero or close to zero, it can be said that the data is normally distributed using the Eviews program, the value of Jarque-Bera (JB) can be obtained.

2. **Multicollinearity Test**

Test *Multicollinearity*aims to test whether in the regression model that is formed there is a high or perfect correlation between the independent variables. Multicollinearity is a linear relationship between independent variables in multiple regression. A good regression model should not have a correlation between the independent variables. The method for detecting the presence or absence of multicollinearity problems can see the correlation matrix of the independent variables, if there is a correlation coefficient of more than 0.80 then there is multicollinearity.

3. **Heteroscedasticity Test**

This test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another. The way to predict the presence or absence of heteroscedasticity is by looking at the plot graph between the predicted value of the dependent variable (ZPRED) and its residual (SRESID). If there is a certain pattern, such as the dots that form a certain regular pattern (wavy, widened then narrowed), it indicates that heteroscedasticity has occurred. If there is no clear pattern, and the dots spread above and below the number 0 on the Y axis, then there will be no heteroscedasticity (Ghozali, 2013: 139).

4. **Autocorrelation Test**

The autocorrelation test aims to determine whether there is a correlation between members of a series of observational data sorted by time or space. The purpose of conducting an autocorrelation test is to detect autocorrelation, a statistical test can be done through a test*Durbin-Watson*(DW test). The basis for making decisions whether there is autocorrelation with the following conditions:

a. If the DW value is below -2 it means that there is positive autocorrelation.
b. If the DW value is between -2 to 2 it means that there is no autocorrelation.
c. If the DW value is above 2, it means that there is negative autocorrelation.

**3.3.3. Panel Data Regression Estimation Method**

Panel data regression model techniques can be done with three alternative approaches to processing methods, namely the Common Effect Model (CEM) or Pooled Least Square method, Fixed Effect Model (FEM), and Random Effect Model (REM) as follows:

1. Common Effect Model

According to Ghozali and Ratmono (2017: 223)revealed that this technique is the simplest technique, where the approach ignores the dimensions of time and space that are owned by panel data. The method used to estimate with this approach is the ordinary Ordinary Least Square (OLS) regression method. This model combines time series and cross section data which are then regressed in the Ordinary Least Square (OLS) method.

2. Fixed Effect Model

According to Ghozali and Ratmono (2017: 223)revealed that this approach assumes the coefficient (slope) is constant but the intercept varies between individuals. Even though the intercept is different for each company, each intercept does not change over time (time variant), but the coefficient (slope) of each independent variable is the same for each company and over time. This method also has a weakness, namely a reduced degree of freedom which ultimately reduces the efficiency of the parameters and the advantages of this method are that it can distinguish individual effects and time effects and this method does not need to use the assumption that the error component is not correlated with the independent variable.

3. Random Effect Model.

*Random Effect Model* (REM) is a panel data estimation model in which the error terms may be interrelated over time and between subjects (Widarjono, 2015). There is a difference with the fixed effect model, the specific effect of each individual is treated as part of the error component which is random (random) and does not correlate with the observed explanatory variables. The advantage of using this random effect model is to eliminate heteroscedasticity. This model is also known as the Error Component Model (ECM). The appropriate method to accommodate this REM model is the Generalized Least Square (GLS), assuming the error component is homoscedastic and there are no symptoms of cross-sectional correlation.(Basuki and Prawoto, 2017).

**3.3.4. Panel Data Regression Model Selection**

Software *Eviews* version 10 includes several tests which will help find out which method is the most efficient to use of the three models. The selection of a model to test the regression equation to be estimated can be used by three examiners, namely the Chow Test, the Hausman Test and the Langrange Multiplier Test which will be described as follows:

**3.3.4.1. F Statistical Test (Chow Test)**

The chow test is a test used to select the best approach between the CEM and FEM approach models in estimating panel data. (Basuki and Prawoto, 2017) basis for decision making as follows:

1. If the probability value (P-value) for the cross section F> 0.05 (significant value) then H0 is accepted, so the most appropriate model to use is the Common Effect Model (CEM).
2. If the probability value (P-value) for cross section F <0.05 (significant value), then H0 is rejected, so the most appropriate model to use is the Fixed Effect Model (FEM).

The hypothesis used is:
H0: Common Effect Model (CEM)
H1: Fixed Effect Model (FEM)

**3.4.4.2. Hausman Test**

The Hausman Test aims to determine whether the model used is the Fixed Effect Model (FEM) or the Random Effect Model (REM) (Ghozali and Ratmono, 2017). From the results of this test, it can be seen whether*fixed effect model* could be better than random effects model. This test follows the chi-square distribution of degrees of freedom (k = 4) with the following criteria:

1. If the probability value (P-value) for the random cross section> 0.05 (significant value) then H0 is accepted, so the most appropriate model to use is the Random Effect Model (REM).
2. If the probability value (P-value) for random cross section <0.05 (significant value) then H0 is rejected, so the correct model to use is the Fixed Effect Model (FEM).

The hypothesis used is:
H0: Random Effect Model (REM)
H1: Fixed Effect Model (FEM)

**3.4.4.3. Langrange Multiplier Test**

Lagrange Multiplier test was conducted to test data analysis using *random effect*or the common effect is more appropriate. This test is carried out with the data processing program Eviews 10. The Random Effect Model was developed by Breusch-food which is used to test the significance based on the residual value of the OLS method extract. There are criteria performed by the Lagrange Multiplier test(Basuki and Prawoto, 2017) that is:

1. If the Breusch-food cross section value> 0.05 (significant value) then H0 is accepted, so the most appropriate model to use is the Common Effect Model (CEM).
2. If the Breusch-food cross section value <0.05 (significant value) then H0 is rejected, so the appropriate model to use is the Random Effect Model (REM).
   The hypothesis used is:
   H0: Common Effect Random (CEM)
   H1: Random Effect Model (REM)

**3.4. Panel Data Regression**

The analysis used in this study is a multiple regression analysis model using hypothesis testing. Modern interpretation of regression is a study of the dependence of one dependent variable (dependent) with one or more independent (free / explanatory) variables, with the aim of estimating and or predicting the average of the dependent variable based on the known value of the independent variable.

To determine the effect, it can be made in a multiple regression equation. The multiple regression model equation in this study is as follows:

**Yit = a + b1X1 + b2X2 + b3X3 + e**

Information :
Yit = *Cash Holding*
a = constant coefficient
b = regression coefficient
X1 = *Growth Opportunity*

X2 = Company Size
X3 = *Net Working Capital*

### 3.5. Hypothesis testing

#### 3.5.1. Simultaneous Signification Test (F Statistical Test)

According to Ghozali (2013: 38), the F statistical test shows whether all the independent variables included in the model have a joint influence on the dependent / dependent variable.

1. If the probability F-statistic is ≤ 0.05 then H0 is rejected and H1 is accepted, which means that the independent variables jointly affect the dependent variables.
2. If F-statistic ≥ 0.05 then H0 is rejected and H1 is accepted, which means that the independent variables jointly affect the dependent variables.

#### 3.5.2. Individual Parameter Signification Test (t Statistical Test)

The t statistical test basically shows how far the influence of one explanatory / independent variable individually in explaining the variation in the dependent variable.

1. If the probability t is less than 0.05, then H1 is accepted and Ho is rejected.
2. If it is greater than 0.05 then Ho is accepted and H1 is rejected.

#### 3.5.3. Determination Coefficient Test (*Adjusted* R2)

The coefficient of determination ($R^2$) is used to measure the ability of the dependent variables. The coefficient of determination (R2) is zero and one. The small value of R2 means that the dependent variables' ability to explain the dependent is very limited. If the coefficient of determination is zero, then the independent variable has no effect on the dependent variable. If the coefficient of determination approaches the number one, then the independent variable has a perfect effect on the dependent variable.

## IV. RESULTS AND DISCUSSION

### 4.1. Description of Research Object

In this chapter, an analysis of the effect of growth opportunity, firm size and net working capital on cash holding. This study uses a sample of 57 mining companies in the Indonesia Stock Exchange 2014-2018. The method used in this research is purposive sampling. So that the amount of data obtained is 21 data. The following are the names of the companies selected to be research objects:

**Table 4.1. Sample Company Name Data**

| NO | COMPANY CODE | COMPANY NAME |
|---|---|---|
| 1 | ADES | Akasha Wira International Tbk. |
| 2 | AISA | Tiga Pilar Sejahtera Food Tbk. |
| 3 | ALTO | Tri Banyan Tirta Tbk. |
| 4 | BTEK | Bumi Teknokultura Unggul Tbk. |
| 5 | BUDI | Budi Starch & Sweetener Tbk |
| 6 | CAMP | Campina Ice Cream Industry Tbk |
| 7 | CEKA | Wilmar Cahaya Indonesia Tbk. |
| 8 | CLEO | Sariguna Primatirta Tbk |
| 9 | COCO | Wahana Interfood Nusantara Tbk |
| 10 | DLTA | Delta Djakarta Tbk |
| 11 | DMND | Diamond Food Indonesia Tbk. |

| | | |
|---|---|---|
| 12 | FOOD | Sentra Food Indonesia Tbk. |
| 13 | GOOD | Garudafood Putra Putri Jaya Tb |
| 14 | HOCKEY | Buyung Poetra Sembada Tbk |
| 15 | ICBP | Indofood CBP Sukses Makmur Tbk |
| 16 | IIKP | Inti Agri Resources Tbk |
| 17 | FISH | Era Mandiri Cemerlang Tbk. |
| 18 | INDF | Indofood Sukses Makmur Tbk |
| 19 | CHEESE | Mulia Boga Raya Tbk. |
| 20 | MGNA | Magna Investama Mandiri Tbk. |
| 21 | MLBI | Multi Bintang Indonesia Tbk. |
| 22 | MYOR | Mayora Indah Tbk |
| 23 | PANI | Pratama Abadi Nusa Industri Tb |
| 24 | PCAR | Prima Cakrawala Abadi Tbk |
| 25 | PSDN | Prasidha Aneka Niaga Tbk |
| 26 | BREAD | Nippon Indosari Corpindo Tbk. |
| 27 | SKBM | Sekar Bumi Tbk |
| 28 | SKLT | Sekar Laut Tbk. |
| 29 | STTP | Siantar Top Tbk. |
| 30 | TBLA | Tunas Baru Lampung Tbk. |
| 31 | ULTJ | Ultrajaya Milk Industry & Trading Co. Tbk. |
| 32 | GGRM | Gudang Garam Tbk. |
| 33 | HMSP | HM Sampoerna Tbk. |
| 34 | ITIC | Indonesian Tobacco Tbk. |
| 35 | RMBA | Bentoel Internasional Investama Tbk. |
| 36 | WIIM | Wismilak Inti Makmur Tbk |
| 37 | DVLA | Darya-Varia Laboratoria Tbk. |
| 38 | INAF | Indofarma (Persero) Tbk |
| 39 | KAEF | Kimia Farma (Persero) Tbk |
| 40 | KLBF | Kalbe Farma Tbk. |
| 41 | BRAND | Merck Tbk |
| 42 | PEHA | Phapros Tbk. |
| 43 | PYFA | Pyridam Farma Tbk |
| 44 | SCPI | Merck Sharp Dohme Pharma Tbk. |
| 45 | SIDO | Sido Muncul Tbk's Herbal and Pharmaceutical Industry. |
| 46 | TSPC | Tempo Scan Pacific Tbk. |
| 47 | KINO | Kino Indonesia Tbk |
| 48 | KPAS | Cottonindo Ariesta Tbk. |
| 49 | MBTO | Martina Berto Tbk. |

| | | |
|---|---|---|
| 50 | MRAT | Mustika Ratu Tbk. |
| 51 | TCID | Mandom Indonesia Tbk. |
| 52 | UNVR | Unilever Indonesia Tbk. |
| 53 | CINT | Chitose Internasional Tbk |
| 54 | KETCH | Kedaung Indah Can Tbk |
| 55 | LMPI | Langgeng Makmur Industri Tbk. |
| 56 | WOOD | Integra Indocabinet Tbk |
| 57 | HRTA | Hartadinata Abadi Tbk |

Source: www.idx.co.id "has been reprocessed"

## 4.2. Description of Research Results

### 4.2.1. Descriptive statistics

Descriptive statistics are related to the process of collecting, presenting, and summarizing various data characteristics so that they can describe the character of the sample used in this study. Descriptive analysis of the data taken for this research is from 2014 to 2018, namely as much21 company data. The variable descriptions in the descriptive statistics used in this study include the minimum value, maximum value, mean, and standard deviation of one dependent variable, namely cash holding and three independent variables, namely*growth opportunity,* company size and net working capital.

**Table 4.2. Descriptive statistics**

Sample: 2014-2018

| | CASH HOLDING | GROWTH OPPORTUNITY | COMPANY SIZE | NET WORKING CAPITAL |
|---|---|---|---|---|
| Mean | 0.074324 | 6.313419 | 0.223800 | 0.113943 |
| Median | 0.069000 | 6.186000 | 0.224000 | 0.067000 |
| Maximum | 0.389000 | 7,536000 | 0.710000 | 0.443000 |
| Minimum | -0.175000 | 4.986000 | -0.346000 | 0.000000 |
| Std. Dev. | 0.106647 | 0.620278 | 0.237086 | 0.118675 |
| Skewness | 0.485856 | 0.226090 | -0.242890 | 1.122552 |
| Kurtosis | 3.927253 | 2.241946 | 2.125315 | 3.209833 |
| Jarque-Bera | 7,892607 | 3.408613 | 4.379622 | 22,24480 |
| Probability | 0.019326 | 0.181899 | 0.111938 | 0.000015 |
| Sum | 7,804000 | 662,9090 | 23.49900 | 11.96400 |
| Sum Sq. Dev. | 1.182847 | 40.01343 | 5.845803 | 1.464702 |
| Observations | 105 | 105 | 105 | 105 |

Source: Eviews10 output "has been reprocessed"

**1. *Cash Holding***

*Cash Holding* to find out how much the company holds cash or cash in hand to be invested in investors (Cash Holding) in consumer goods companies 2014-2018. Based on

the results of descriptive statistics, it can be shown that the dependent variable (Y), namely Cash Holding, has a maximum value of 38.900%. Meanwhile, the minimum value is 6,900%. Cash Holding has an average value (mean) in consumer goods companies of 7.432% per year, then the standard deviation value for cash holding is10,665% per year. The standard deviation value that is relatively greater than the average (mean) indicates that the distribution of cash holding data is relatively poor.

**2. *Growth Opportunity***

*Growth opportunity*to measure the number of growth opportunities a company has in the future. Based on the results of these descriptive statistics, it can be shown that the independent variable (X1), namely growth opportunity, has a maximum value of 753.600% owned by consumer goods companies, this shows that the opportunities and opportunities for growth of a company are quite good, while the minimum value is 498,600 %, this means that consumer goods companies have a failure rate with minimal growth opportunities. Growth opportunity has an average value (mean) of631,342% per year, and the standard deviation value is 62,028% per year. The standard deviation value which is relatively smaller than the average value indicates that the distribution of Growth Opportunity data is relatively good.

**3. Company Size**

The size of the company is to measure the size of the company. Based on the results of descriptive statistics, it can be shown that the independent variable (X2), namely company size has a maximum value of71,000% owned by consumer goods companies, while the minimum value is 22,400%. The average (mean) value of the firm size variable in consumer goods companies is equal to22,380%. Then the standard deviation value is23,709% per annum, value standard deviation ones relatively larger when compared to the average value (mean), indicating that the distribution of company size data is relatively poor.

**4. *Net Working Capital***

*Net working capital*to measure the net working capital a company has. Based on the results of descriptive statistics, it can be shown that the independent variable (X3), namely Net working capital, has a maximum value of 44.300% owned by consumer goods companies. while the minimum value is 0%. The average (mean) value of the Net working capital variable was 11.394%. Then the standard deviation value is 11.868% per year, the standard deviation value is relatively greater than the average value (mean), indicating that the distribution of data on the Net Working Capital variable is relatively poor.

### 4.2.2. Classic assumption test

In accordance with the objectives of the research to be carried out, namely to find out how it is affected profitability, liquidity, asset structure, and company size on capital structure, then before data analysis and hypothesis testing is carried out, the assumptions in the regression analysis will be tested first, namely testing the classical assumptions which include: (1) Normality Test, (2) Multicollinearity Test, (3) Heteroscedasticity Test and (4) Correlation Test.

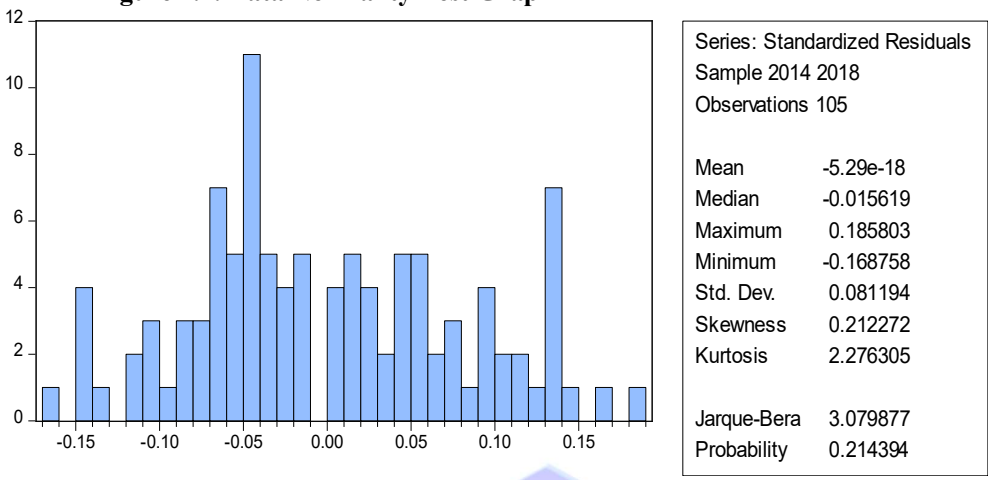
**1) Normality test**

The purpose of doing the normality test is to find out whether the variables in the model are normally distributed or not. A good regression model has a normal data distribution. In this test using the histogram graph method and the Jarque-Bera statistical test (JB test) as follows:

1. If the probability value is> 0.05 (greater than 5%), then the data can be said to be normally distributed.

2. If the probability value is <0.05 (less than 5%), it can be said that the data is not normally distributed.

**Figure 4.1. Data Normality Test Graph**




Source: Output Eviews 10

Based on Figure 4.3 the normality test above, it can be seen that the probability value is 0.214394 where the probability value is greater than 0.05 so that the data already has a normal distribution or is normally distributed.

**2) Heteroscedasticity**

Heteroscedasticity test aims to test whether in the regression model inequality occurs *variance* from the residuals of one observation to another. If the variance from one observation to another is the same, it is called homoscedasticity. And if the variance is different it is called heteroscedasticity. A good regression model is homoscedasticity or heteroscedasticity does not occur (Ghozali, 2013: 111). The results of the heteroscedasticity test regression are as follows:

**Table 4.3. Heteroscedasticity Test Results**

Panel Cross-section Heteroskedasticity LR Test
Null hypothesis: Residuals are homoskedastic
Equation: UNTITLED
Specification: CASH GRWT SIZE NWC

| | Value | df | Probability |
|---|---|---|---|
| Likelihood ratio | 65,06767 | 21 | 0.0000 |

LR test summary:

| | Value | df |
|---|---|---|
| Restricted LogL | 90.15401 | 101 |
| Unrestricted LogL | 122,6878 | 101 |

Source: Eviews Output

The hypothesis used is as follows:

H0 : $\beta 1 = 0$ (no heteroscedasticity problem)
H1 : $\beta 1 \neq 0$ (there is a heteroscedasticity problem)

Guidelines to be used in concluding the Glejser test:

a. If the probability value is> 0.05 then H1 is rejected, meaning that there is no heteroscedasticity problem from the company side.
b. If the probability value <0.05 then H1 is accepted, it means that there is a heteroscedasticity problem from the company side.

Value of the Probability Likelihood ratio **0.0000 <0.05** Test results *Panel Cross-section Heteroskedasticity LR Test* heteroscedasticity occurs. When heteroscedasticity is detected, the symptom cure is immediately carried out using the White cross-section menu available in the Eviews application.

**Table 4.4. Heteroskidasticity Period Test**

Panel Period Heteroskedasticity LR Test
Null hypothesis: Residuals are homoskedastic
Equation: UNTITLED
Specification: CASH GRWT SIZE NWC

| | Value | df | Probability |
|---|---|---|---|
| Likelihood ratio | 13.48443 | 21 | 0.8907 |

LR test summary:

| | Value | df |
|---|---|---|
| Restricted LogL | 90.15401 | 101 |
| Unrestricted LogL | 96,89622 | 101 |

Source: Eviews Output

From the test results in the table above, based on the probability value for each independent variable, it has a probability value greater than 0.05. Value of the Probability Likelihood ratio 0.8907> 0.05 Test result *Panel Period Heteroskedasticity LR Test* heteroscedasticity does not occur. This is in accordance with the testing criteria that the results of the heteroscedasticity test have a probability value between variables that is greater than 0.05. So it can be concluded that heteroscedasticity does not occur.

**3. Multicollinearity Test**

The multicollinearity test aims to determine whether the regression model found a correlation between the independent variables. In this study, multicollinearity testing used Pearson Correlation. Pearson Correlation criteria for multicollinearity test is if the correlation coefficient value exceeds 0.8 to detect the presence or absence of multicollinearity. The multicollinearity test results are presented in the following table:

**Table 4.5. Multicollinearity Test Results**

| | GROWTH | SIZE | NWC |
|---|---|---|---|
| GROWTH | 1,000000 | -0.089963 | 0.320613 |
| SIZE | -0.089963 | 1,000000 | 0.417821 |
| NWC | 0.320613 | 0.417821 | 1,000000 |

Source: Eviews Output

Based on the test results shown in table 4.6, it is known that the coefficient value between variables is smaller than 0.8. This is in accordance with the test criteria that the results of the multicollinearity test have no correlation coefficient between variables that is more than 0.8. So it can be concluded that the data does not have multicollinearity problems.

**4. Autocorrelation Test**

**A. Autocorrelation test**

The autocorrelation test is conducted to determine whether there is a correlation between one confounding factor and another (non-autocorelation). To test whether

autocorrelation exists or not, the Durbin Watson test can be used. The following table presents the results of the autocorrelation test:

**Table 4.6**. Autocorrelation Test Results

Residual Cross-Section Dependence Test
Null hypothesis: No cross-section dependence (correlation) in residuals
Equation: Untitled
Periods included: 5
Cross-sections included: 21
Total panel observations: 105
Note: non-zero cross-section means detected in data
Cross-section means were removed during computation of correlations

| Test | Statistics | df | Prob. |
|---|---|---|---|
| Breusch-Pagan LM | 243,7015 | 210 | 0.0552 |
| LM scaled magnification | 1.644462 | | 0.1001 |
| CD zoom | 1.148832 | | 0.2506 |

Source: Output Eviews 10

A probability value that is smaller than 0.05 means that there is an autocorrelation problem. A probability value greater than 0.05 means that there is no autocorrelation problem.

Score *Probability Breusch-Pagan LM* 0.0552> 0.05 Test results *Lagrange Multiplier test* (LM) there is no autocorrelation.

### 4.3. Panel Data Regression Model

To select the most appropriate model to use in managing panel data, there are several tests that can be done, namely: (1) *Chow Test* (Common Effect vs Fixed Effect), (2) Hausman Test (Fixed Effect vs Random Effect), and (3) Lagrange Multiplier Test (Random Effect vs Common Effect). The following is a model selection application in this study:

#### 4.3.1. *Chow Test* (Common Effect vs Fixed Effect)

To find out which model is better in panel data testing, it can be done by adding dummy variables so that it can be seen that different interceptions can be tested with the Chow Test statistical test. This test is used to determine whether the panel data regression technique with the fixed effect method is better than the regression of the panel data model without dummy variables (common effect). The calculation results from the Chow Test are presented in the following table:

**Table 4.7. Chow Test Results**

Redundant Fixed Effects Tests
Equation: Untitled
Fixed effects cross-section test

| Effects Test | Statistics | df | Prob. |
|---|---|---|---|
| Cross-section F | 2.316338 | (20.81) | 0.0044 |
| Chi-square cross-section | 47.492287 | 20 | **0.0005** |

*Source: Output Eviews 10*

Based on this test, it shows that the Chi-square Cross-section Probability value is 0.0005 whose value is <0.05, then H1 is accepted and Ho is rejected with the hypothesis:

1. If the probability value (P-value) for Chi-square> 0.05 (significant value) then H0 is accepted, so the most appropriate model to use is the Common Effect Model (CEM).
2. If the probability value (P-value) for Chi-square <0.05 (significant value) then H0 is rejected, so the most appropriate model to use is the Fixed Effect Model (FEM).

H0: Common Effect Model (CEM)
H1: Fixed Effect Model (FEM)

So it can be concluded that the Fixed Effect Model is more appropriate than the Common Effect Model.

### 4.3.2. *Hausman Test* (Fixed Effect vs Random Effect)

Test *Hausman* used to compare between methods *Random Effect Model* (BRAKE) with Fixed Effect Model (FEM). The results of this test are to determine which method is better to use, with the following criteria:

1. If the probability value (P-value) for random cross section> 0.05 (value significant) then $H_0$ accepted, making it the most appropriate model used is *Random EffectModel* (BRAKE).
2. If the probability value (P-value) for the random cross section <0.05 (value significant) then $H_0$ rejected, so the exact model used is *Fixed Effect Model* (FEM).

The hypothesis used is:
H0: Random Effect Model (REM)
H1: Fixed Effect Model (FEM)

**Table 4.8. Hausman Test Results**

Correlated Random Effects - Hausman Test
Equation: Untitled
Cross-section random effects test

| Test Summary | Chi-Sq. Statistics | Chi-Sq. df | Prob. |
|---|---|---|---|
| Random cross-section | 1,932936 | 3 | **0.5864** |

Source: Output Eviews 10

In the calculations that have been done, it can be seen that the value *Probability random cross-section* shows a value of 0.5864 which means insignificant (α = 5%) and uses the Chi-Square distribution (Gujarati, 2012). So that the decisions taken on this Hausman Test are:obtained the probability value (P-value) of the cross section of0.5864 ≥ 0.05 then the hypothesis is H0 **accepted and H1 is rejected**.

Based on the results of the Hausman Test, it can be concluded that the Random Effect Model is more appropriate than the Fixed Effect Model.

### 4.3.3. Lagrange Multiplier test

Test *Lagrange Multiplier* used to compare between methods *Common Effect Model* (CEM) with the Random Effect Model (REM). The results of the test to determine which method is better to use, with the following criteria:

1. If the Breusch-pagan cross section value> 0.05 (significant value) then H0 is accepted, so the most appropriate model to use is the Common Effect Model (CEM).
2. If the Breusch-pagan cross section value ≤ 0.05 (significant value) then H0 is rejected, so the appropriate model to use is the Random Effect Model (REM).

The hypothesis used is:
H0: Common Effect Random (CEM)
H1: Random Effect Model (REM)

**Table 4.9. Test *Lagrange Multiplier***

Lagrange Multiplier Tests for Random Effects
Null hypotheses: No effects
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives

| | Hypothesis Test | | |
|---|---|---|---|
| | Cross-section | Time | Both |
| Breusch-Pagan | 7.192199 | 0.000225 | 7.192425 |
| | (0.0073) | (0.9880) | (0.0073) |

*Source: Output Eviews version 10*

Based on table 4.14 on the lagrange multiplier test results, the common effect vs random effect above, is obtained*Breusch-food cross section* equal to 0.0073≤ 0.05hence the hypothesis H1 **accepted and H0 is rejected**so that the model ***Random Effect Model*** (BRAKE) more precisely used.

**4.3.4. Random Effect Model (REM)**

*Random Effect Model* accommodated via error. The panel data regression estimation method in the Random Effect Model uses the Generalized Least Square (GLS) method. The following is the output from panel data regression with the Random Effect Model:

**Table 4.10. Results of Random Effect Model Data Regression**

Dependent Variable: CASH
Method: Panel EGLS (Cross-section random effects)
Time: 14:18
Sample: 2014 2018
Periods included: 5
Cross-sections included: 21
Total panel (balanced) observations: 105
Swamy and Arora estimator of component variances

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | -0.167414 | 0.157122 | -1.065507 | 0.2892 |
| GRWTH | 0.038435 | 0.024934 | 1.541449 | 0.1263 |
| SIZE | -0.038679 | 0.061700 | -0.626883 | 0.5322 |
| NWC | 0.067924 | 0.120029 | 0.565895 | 0.5727 |

| | Effects Specification | |
|---|---|---|
| | SD | Rho |
| Random cross-section | 0.052432 | 0.2407 |
| Idiosyncratic random | 0.093113 | 0.7593 |

| | Weighted Statistics | | |
|---|---|---|---|
| Root MSE | 0.090838 | R-squared | 0.038466 |
| Mean dependent var | 0.046223 | Adjusted R-squared | 0.009905 |

| | | | |
|---|---|---|---|
| SD dependent var | 0.093082 | SE of regression | 0.092619 |
| Sum squared resid | 0.866413 | F-statistic | 1.346826 |
| Durbin-Watson stat | 2.232587 | Prob (F-statistic) | 0.263499 |
| | Unweighted Statistics | | |
| R-squared | 0.063450 | Mean dependent var | 0.074324 |
| Sum squared resid | 1.107796 | Durbin-Watson stat | 1.746118 |

*Source: Output Eviews version 10*

In the table above it can be seen that the test *t-stat* there are two variables that show significance (α = 5%). The adjusted R2 value is 0.009905. The probability value of the f-stat of 0.263499 means that the model is not significant. As well as the Durbin-Watson stat value of 2.232587 which is close to the range of number 2.

**4.3.5. Conclusion of Model Selection**

Based on the three tests that have been done, namely test *chow*, the Hausman test and the Langrange multiplier test. So it can be concluded that the panel data regression estimation method used is as follows:

**Table 4.11. Test Conclusion Results**

| No. | Method | Testing | Result |
|---|---|---|---|
| 1 | *Chow Test* | CEM vs FEM | ***Fixed Effect Model*** |
| 2 | *Hausman Test* | REM vs FEM | ***Random Effect Model*** |
| 3 | *Lagrange Multiplier Test* | CEM vs REM | ***Random Effect Model*** |

The table above shows that there are 2 tests that produce the Random Effect Model, namely the Hausman Test and the Lagrange Multiplier test. Therefore, based on these results it can be concluded that the Random Effect (REM) is used to analyze further data in this study.

**4.4. Panel Data Regression Analysis**

Based on the panel data regression model approach with Eviews (Common Effect Model, Fixed Effect Model, and Random Effect Model) and the tests that have been done (Chow Test, Hausman Test, and Lagrange Multiplier Test) show that the regression model is more appropriate to use in research. this is the Random Effect (REM). The results of panel data regression and t test are presented in the following table:

**Table 4.12. Panel Data Regression and t Test**

Dependent Variable: CASH
Method: Panel EGLS (Cross-section random effects)
Time: 14:21
Sample: 2014 2018
Periods included: 5
Cross-sections included: 21
Total panel (balanced) observations: 105
Swamy and Arora estimator of component variances
White cross-section standard errors & covariance (df corrected)

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | -0.167414 | 0.108640 | -1.541002 | 0.1264 |
| GRWTH | 0.038435 | 0.013863 | 2.772460 | 0.0066 |
| SIZE | -0.038679 | 0.059986 | -0.644796 | 0.5205 |

| | | | | |
|---|---|---|---|---|
| NWC | 0.067924 | 0.081654 | 0.831850 | 0.4075 |
| | Effects Specification | | | |
| | | | SD | Rho |
| Random cross-section | | | 0.052432 | 0.2407 |
| Idiosyncratic random | | | 0.093113 | 0.7593 |
| | Weighted Statistics | | | |
| Root MSE | 0.090838 | R-squared | | 0.038466 |
| Mean dependent var | 0.046223 | Adjusted R-squared | | 0.009905 |
| SD dependent var | 0.093082 | SE of regression | | 0.092619 |
| Sum squared resid | 0.866413 | F-statistic | | 1.346826 |
| Durbin-Watson stat | 2.232587 | Prob (F-statistic) | | 0.263499 |
| | Unweighted Statistics | | | |
| R-squared | 0.063450 | Mean dependent var | | 0.074324 |
| Sum squared resid | 1.107796 | Durbin-Watson stat | | 1.746118 |

*Source: Output Eviews 10*

Based on the regression results above, a regression line equation can be obtained as follows:

**CH = -0.167414 + 0.038435 GRWTHit + (-0.038679) SIZEit + 0.067924 NWCit**

The above equation can be interpreted as follows:

The above equation can be interpreted as follows:

1. The α constant of -0.167414 states that if the variable X is constant, then the cash holding variable is -0.167414.
2. The GRWT regression coefficient of 0.038435 states that each variable is added *Growth Opportunity* by 1% will increase the variable *Cash Holding* of 0.038435 with the assumption that the other independent variables are constant.
3. The SIZE regression coefficient of -0.038679 states that each additional variable Company Size by 1% will decrease the variable *Cash Holding* of -0.038679 with the assumption that the other independent variables are constant.
4. The NWC regression coefficient of 0.067924states that every addition to the Net Working Capital variable by 1% will increase the variable *Cash Holding* amounting to 0.067924assuming the other independent variables are constant.

## 4.5. Hypothesis testing

This Hypothesis Test consists of a test partial (t test) and determination coefficient test (adjusted R2) with estimates for linear regression of panel data using the Random Effect Model (REM) as follows:

### 4.5.1. Partial Test (t test)

This test is used to show how far the influence of one independent variable individually in explaining the variation in the dependent variable. Based on Table 4:16 testing, the results obtained are as follows:

**4.13. T test results**

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | -0.167414 | 0.108640 | -1.541002 | 0.1264 |
| GRWTH | 0.038435 | 0.013863 | 2.772460 | 0.0066 |
| SIZE | -0.038679 | 0.059986 | -0.644796 | 0.5205 |
| NWC | 0.067924 | 0.081654 | 0.831850 | 0.4075 |

1. The first hypothesis (H1) which states that Growth Opportunity (GRTW) affects cash holding, has a significance value of0.0066 <0.05 with a t-statistic value of 2.772460, thus H1 which states "Partially there is an effect of Growth Opportunity on Cash Holding" is accepted. The effect is positive, which means that if Growth Opportunity goes up, Cash Holding will increase.
2. The second hypothesis (H2) which states that Company Size (SIZE) affects Cash Holding, has a significant value of 0.5205> 0.05 with a t-statistic value of -0.644796, thus H2 is rejected. This means that company size has no effect on cash holding.
3. Hypothesis three (H3) which states that Net Working Capital (NWC) affects Cash Holding, has a significance value of 0.4075> 0.05 with a t-statistic value of 0.831850, thus H3 is rejected. This means that Net Working Capital has no effect on Cash Holding.

Based on the results of the t test above, partially only 1 variable whose hypothesis is accepted (which has an effect) is influence *growth opportunity*against cash holding. But if viewed simultaneously all independent variables have no effect on the dependent variable. This is evidenced by the following (simultaneous) f test results:

**4.14. Results of the F Test Analysis**

Dependent Variable: CASH
Method: Panel EGLS (Cross-section random effects)
Time: 14:21
Sample: 2014 2018
Periods included: 5
Cross-sections included: 21
Total panel (balanced) observations: 105
Swamy and Arora estimator of component variances

| | | | |
|---|---|---|---|
| Root MSE | 0.090838 | R-squared | 0.038466 |
| Mean dependent var | 0.046223 | Adjusted R-squared | 0.009905 |
| SD dependent var | 0.093082 | SE of regression | 0.092619 |
| Sum squared resid | 0.866413 | F-statistic | **1.346826** |
| Durbin-Watson stat | 2.232587 | Prob (F-statistic) | **0.263499** |

*Source: Output Eviews version 10.0*

The fourth hypothesis ($H_4$) that state *growth opportunity,* firm size and net working capital simultaneously affect cash holding, it is rejected, it can be seen from the value of Fcount less than Ftable or equal to (1.346826 ≤ 2.69) with a p-value F-statistic greater than 0.05 or equal to (0.263499> 0.05) which indicates that *growth opportunity,* Company size and net working capital simultaneously have no effect on cash holding

**4.5.2. Determination Coefficient Test *Adjusted* (R2)**

Testing the coefficient of determination (R2) is a number that shows the degree of ability of the independent variable in the function concerned. The value of R2 is between

zero and one (0 <R <1). If the value is close to number one, then the model is good. The following table 4:16 presents the results of the coefficient of determination (R2):

**Table 4.15.Determination Coefficient Test (R2)**

Dependent Variable: CASH
Method: Panel EGLS (Cross-section random effects)
Time: 14:21
Sample: 2014 2018
Periods included: 5
Cross-sections included: 21
Total panel (balanced) observations: 105
Swamy and Arora estimator of component variances
White cross-section standard errors & covariance (df corrected)

| | | | |
|---|---|---|---|
| Root MSE | 0.090838 | R-squared | 0.038466 |
| Mean dependent var | 0.046223 | Adjusted R-squared | **0.009905** |
| SD dependent var | 0.093082 | SE of regression | 0.092619 |
| Sum squared resid | 0.866413 | F-statistic | 1.346826 |
| Durbin-Watson stat | 2.232587 | Prob (F-statistic) | 0.263499 |

Source: Output Eviews 10

The coefficient of determination in this study is indicated by the Adjusted R-Square value. The coefficient of determination test is used to measure how much the model's ability to explain the variation in the dependent variable. The coefficient of determination is between zero and one ($0 \leq R2 \leq 1$). Based on table 4.16, the coefficient of determination seen from adjusted R2 is of 0.009905 or 0.9905%, which means that all independent variables are able to explain the variation of the dependent variable by 0.9905%. Meanwhile, 99.1% (100% - 0.9905%) Cash Holding is explained by other independent variables which are not examined in this research model.

**4.6. Speakersn**

**4.6.1. Analysis of the Influence of Growth Opportunity on Cash Holding**

The test results in this study indicate that Growth Opportunity has an effect on Cash Holding. This is indicated with a significance value of 0.0066 <0.05, with a t-statistic value of 2.772460, which means that growth opportunity has an effect on cash holding. This is consistent with what Saputri (2019) and Kuswardono (2019) say that growth opportunity affects cash holding. The test results show that growth opportunity affects cash holding, if there is an increase in the growth opportunity variable, it will increase the value of cash holding.

This research is different from research conducted by Wulandari (2019) and Setiawan (2019) which state that growth opportunity does not affect the company's cash holding. These results indicate that the increase or decrease in total assets will not affect the determination of the company's cash holding level.

**4.6.2. Company Size Analysis (*SIZE*) Against Cash Holding**

The test results in this study indicate that Company size (size) has no effect on cash holding. This is evidenced by the significance value of 0.5205> 0.05 with a t-statistic value of -0.644796, meaning that company size has no effect on cash holding. This is consistent with Simanjuntak (2017), and Wahyudi (2017) who say that company size has no effect on cash holding.

This research is different from the research conducted by Afif(2016) and Prasetiono (2016) who say that the size of the company (size) affects cash holding. This shows that large companies are more diversified in their operational business and are more difficult to experience financial distress because they typically have better performance than small companies so they have more cash for their investment management.

#### 4.6.3. Influence Analysis *Net Working Capital* (NWC) Against Cash Holding

The test results in this study indicate that Net Working Capital (NWC) has no effect on cash holding. This is prompted with a significance value of 0.4075> 0.05 with a t-statistic value of 0.831850, meaning that Net Working Capital has no effect on cash holding. This is consistent with what Liadi and Suryanawa (2018) say that net working capital has no effect on cash holding.

This research is different from the research conducted by Marfuah and Zulhilmi (2014) which states that net working capital (NWC) affects cash holding. This means that the level of net working capital will affect the company's high cash holding. This is possible because current assets other than cash cannot be a substitute for cash at any time.

#### 4.6.4. Analysis of the Influence of Growth Opportunity, Company Size and Net Working Capital on Cash Holding

The test results in this study indicate that growth opportunity, company size and net working capital simultaneously have no effect on cash holding. This is indicated by the value of Fcount less than Ftable or equal to (1.346826 ≤ 2.69) with a significance value of the p-value F-statistic is greater than 0.05 or equal to (0.263499> 0.05), meaning growth opportunity, firm size. and net working capital has no influence on cash holding.

This study is different from research conducted by Jinkar (2015) which states that growth opportunity, company size and net working capital affect cash holding.

## V. CONCLUSIONS AND SUGGESTIONS

### 5.1. Conclusion

This study aims to determine the effect of Growth Opportunity, Company Size and Net Working Capital on Cash Holding in Consumers Goods companies. Based on the results of the analysis and interpretation of the results of the research conducted, the following conclusions can be drawn:

1. The growth opportunity variable affects cash holding in consumer goods companies, this shows that companies that have growth opportunities associated with future investment that the company will take, need funds to take these investment opportunities and based on the pecking order theory, the company will hold back profits. he held back to take the investment opportunity. Therefore, the higher the growth opportunity, the higher the company's cash holding.
2. The firm size variable has no effect on cash holding in consumer goods companies, this shows that company size has no effect on cash holding. This shows that holding cash does not see the size of the company because large or small companies still hold cash in the company to meet their operational needs.
3. The variable net working capital has no effect on cash holding in consumer goods companies, there is no influence between net working capital on cash holding because cash holding companies do not see the size of net working capital but cash holding must be available in the company.
4. Variable *growth opportunity,* Company size and net working capital have no effect on cash holding at consumer goods companies simultaneously because cash holding companies do not see the height and low growth of the growth opportunity, company size and net working capital are clear where each company must have cash reserves because in case of unexpected things under special circumstances (for example during a crisis) the company does not experience difficulties in fulfilling its operational activities.

### 5.2. Suggestion

Based on the above conclusions, the authors provide the following suggestions:

1. It is better if companies see the importance or not of cash holding, need to pay attention to the growth opportunity factor For companies that have large cash balances it is advisable to transfer some of the cash balances into short-term

investments, this is because the opportunity cost of having large cash balances is the loss of the opportunity to earn interest income from these cash balances. If a company that has a large cash balance makes a decision to move part of its cash balance to invest in the short term, the company will get additional income from the interest generated by the short-term investment.

2. It is better if consumer goods companies keep trying to see the size of the company's growth opportunity, this is so that the income opportunities owned by large companies can at least generate maximum income by the company.
3. For this study, company size and net working capital variables have no effect on cash holding. Therefore, the next researcher can add other independent variables that may affect a company's cash holding, such as leverage, cash flow, cash conversion.

### 5.3. Research and Development Limitations of Further Research

In this study, there are several limitations and can be used as guidelines for future researchers, including:

#### 5.3.1. Limitations

1. The period used in this study initially using 2019 data cannot be used because in the year this research was taking place, the Covid-19 pandemic was occurring which resulted in the delay in reporting the company's financial report data, so it is recommended that further researchers who are interested in studying the same problem should conduct research on the more recent period, namely until the period of 2019.

#### 5.3.2. Further Research Development

1. For further researchers, they can look for other sectors whose financial report data is more complete.
2. In this study, only using a sample of Consumers Goods companies in Indonesia, it is hoped that further researchers can examine using a sample of other companies listed on the Indonesia Stock Exchange.

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