The influence of *corporate social responsibility* and Profitability to company value (empirical study on listed automotive companies On the Indonesian stock exchange 2015-2019)

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Abstract – The purpose of this study was to determine (1) The effect of corporate social responsibility on company value on automotive companies listed on the Indonesia Stock Exchange (2) Effect of profitability (ROE) on company value on automotive companies listed on the Indonesia Stock Exchange (3) Effect of profitability (ROA) to the value of the company in automotive companies listed on the Indonesia Stock Exchange. The sample in this study amounted to 48 (forty eight). The data analysis tool uses the help of Software Eviews 10.0.

The calculation results show that (1) CSR is proven to have no significant effect on company value (PBV) on automotive companies listed on the Indonesia Stock Exchange (2) Profitability (ROE) is proven to have a significant effect on company value (PBV) on automotive companies listed on the Indonesia Stock Exchange and (3) Profitability (ROA) is proven to have a significant influence on the value of the company (PBV) on automotive companies listed on the Indonesia Stock Exchange.

Keywords: CSR, Profitability, Company Value

I. Introduction

Corporate social responsibility (CSR) is a method taken by companies to build a company's image and good name in the eyes of the community. So, corporate social responsibility (CSR) is a series of activities to improve the welfare of the community which has an important component for the company's long-term existence, because it shows the true face of the business to the wider community, especially local communities around their business locations.

There are various interpretations of CSR in terms of the activities or behavior of a company, but what is most widely accepted today is the opinion that what is called CSR is one that exceeds profit. Companies cannot build a prosperous society, without a profitable business. However, on the other hand, it also cannot grow a competitive economy in the company.

Profitability as a reference in measuring the amount of profit is very important to find out whether the company is running its business efficiently. The efficiency of a new business can be found after comparing the profits obtained with the assets or capital that generate these profits. Pandia (2016: 64) argues that the profitability ratio is a measuring tool used in measuring the effectiveness of a company to earn profits.

Profitability is the company's ability to earn profits in relation to sales, total assets and own capital (Lukviarman, 2016: 33). The profitability of a company is one of the bases for assessing the condition of a company, for that we need an analysis tool to be able to assess it. The analytical tool in question is financial ratios. In measuring this profitability, the financial ratio used is the profitability

ratio. Profitability ratios are used to measure management effectiveness based on the returns obtained from sales and investment.

A company, in order to carry out its operational activities, must be in a profitable state. Without profit, it will be difficult for companies to attract outside capital. Companies that have a high level of profitability will attract investors to their shares. Thus, profitability can affect firm value.

Firm value is the investor's perception of the company's success rate in managing its resources at the end of the current year which is reflected in the company's stock price (Fahmi, 2015: 118). The higher the stock price, the higher the company value, on the other hand, the lower the stock price, the lower the company value or the less good company performance. Firm value is measured by *price to book value* (PBV), which is a ratio that measures the value of the company by comparing the share price per share.

A high company shows good company performance. One of them is the view of the company's value for creditors. For creditors, the value of the company is related to the liquidity of the company, that is, the company is considered capable or not of repaying loans given by creditors. If the implied company value is not good, investors will value the company low.

Apart from financial factors, social factors must also be a concern in implementing the company's operational activities. The CSR program implemented by the company will have a financial impact on the company's development, for example increasing production, increasing profits, and so on. Companies that have implemented CSR programs and have received support from the community can certainly run their business smoothly so as to achieve the profit desired by companies in Indonesia, there are many companies, one of which is a company engaged in the automotive sector. An automotive company is a type of company whose main activity is designing, developing, producing and marketing motorized vehicles and their components.

II LITERATURE REVIEW

2.1. Review of Previous Research Results

The first research by Ganang Radityo Primady and Sugeng Wahyudi (2015), Diponegoro Journal Of Management Volume 4, Number 3, Diponegoro University, entitled "The Effect of Corporate Social Responsibility and Profitability on Company Value". The purpose of this study is to examine the influence of Corporate Social Responsibility and Profitability on firm value. This study was taken because there were differences in the results of previous studies between studies and other studies that caused inconsistencies. This study uses secondary data. The sampling technique uses purposive sampling technique taken from ICMD and the annual reports of the Indonesia Stock Exchange including 32 companies that meet the research criteria during the 2011-2013 period. The analysis method used by multiple regression models. By using multiple regression analysis, it can be seen that corporate social responsibility has no effect on firm value, profitability which is proxied by ROA has a significant positive effect, while ROE does not affect firm value. R-square value 15.2%.

The second research by Putu Elia Meilinda Murnita and I Made Pande Dwiana Putra (2018), ISSN: 2302-8556 E-Journal of Accounting at Udayana University Vol.23.2 University of Udayana Bali, entitled "The Effect of *Corporate Social Responsibility* on Company Value". This study aims to examine the effect of *corporate social responsibility* on firm value in manufacturing companies. This research was conducted at manufacturing companies listed on the IDX in 2014-2016. The sample of this research is 22 companies for 3 consecutive years, so that the total sample is 66 samples with the method of determining the sample using *purposive sampling method*. The data analysis technique used is simple linear regression analysis to test the hypothesis. The results of this study indicate that the *corporate social responsibility* variable has a positive effect on firm value.

The third research by Rendi Siswanto and Budi Yanti (2018), Journal of Management and Entrepreneurship, Volume 9, Number 3, E-ISSN 2615-3300, Padang University, entitled "The Effect of Corporate Social Responsibility (CSR) on Company Value in Construction Companies Listed on the Indonesia Stock Exchange (IDX) ". The purpose of this study was to determine the effect of corporate social responsibility (CSR) on firm value in construction companies listed on the Indonesia Stock Exchange (BEI). The research method used is quantitative. The variables in this study are Corporate Social Responsibility (X) and Company Value (Y). The sampling technique used was total sampling where the number of samples was the same as the population, the data collection method used was simple linear regression, t test, F test and determinant coefficient (R2). The results

of the test carried out partially and simultaneously with the *Corporate Social Responsibility* (CSR) variable, there is a negative and significant effect on company value at construction companies listed on the Indonesia Stock Exchange (IDX) because the significant value is <0.05. Meanwhile, the coefficient of determination is in the adjusted R2 value of 19.3%, the remaining 80.7% is explained by other variables not discussed in this study.

The fourth research by Dea Putri Ayu and AA Gede Suarjaya (2017), E-Journal of Management of Udayana University, Vol. 6, No. 2, ISSN: 2302-8912 Universtas Udayana Bali, with the title "The Effect of Profitability on Firm Value in Mining Companies". The purpose of this study was to analyze the effect of profitability on firm value. The population studied is mining companies listed on the Indonesia Stock Exchange (BEI) in 2010-2014. The sampling technique used saturated sampling technique and obtained a sample of 24 companies with a total of 120 observations. This research uses *non-participant observation* method which is taken from annual report data and company financial reports. The analysis technique used is regression analysis. The results of this study indicate that profitability has a significant positive effect on firm value.

The fifth research by Ghifari Luthfan Pratama, Dini Wahjoe Hapsari and Muhammad Muslih (2016), ISSN: 2355-9357 e-Proceeding of Management: Vol.3, No.3, Telkom University, entitled "The Effect of Corporate Social Responsibility on Company Value (Empirical Study on Telecommunication Sub-Sector Listed on Indonesia Stock Exchange 2010-2014) ". This study aims to obtain empirical evidence regarding the effect of disclosure of corporate social responsibility on firm value. Data collection is done by documenting data sourced from financial reports, annual reports, and ongoing reports published through the Indonesia Stock Exchange. Based on the sample collection using purposive sampling technique, it was found that the number of samples from this study were 6 companies listed on the Indonesia Stock Exchange, the Telecommunications sub-sector in 2010-2014. Based on the test results using Eviews 8.0 software. Based on the test results, the results show that the CSR disclosure variable has a negative effect on firm value. Based on the results of the study, an increase in CSR disclosure will have an effect on company value because the higher CSR disclosure carried out will have an effect on the higher CSR burden of the company so that it will reduce company profits, then it will reduce investors' interest in buying company shares so that it will result in a decrease in company value.

The sixth research by Ahmad A. Abubakar (PhD), Grace Yunusa Simon Moses and Muhammad D. Ahmad (2017), Research Journal of Finance and Accounting www.iiste.org, ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) Vol.8, No.20, Nigeria Police Academy, with the title "Impact of Corporate Social Responsibility on Profitability of Quoted Food and Beverages Companies in Nigeria". This study examines the impact of Corporate Social Responsibility on the profitability of food and beverages cited by companies in Nigeria from 2006 to 2015. The study population consisted of seventeen (17) cited foood and beverage companies listed on the Nigerian stock exchange which were sampled based on twelve (12) data availability. This research was conducted using secondary data collected from annual reports and accounts from sample companies. The data collected were analyzed using multiple regression techniques. The denpendent variable is profitability as measured by profit after tax, while the independent variable is corporate social responsibility measured by using the amount spent on corporate social responsibility activities. The research results reveal that corporate social responsibility has a significant positive impact on profitability with value. 0.007 and R2 0.3704. This study recommends that companies should initiate corporate social responsibility because it has a positive correlation with company profitability. The government must come up with clear responsibility issues and must ensure full implementation. This is because CSR activities help in improving people's living standards and company activities affect the lives of the host community.

The seventh research by Amidu P. Mansaray, Liu Yuanyuan and Sesay Brima (2017), International Journal of Economics and Financial Issues, ISSN: 2146-4138, Wuhan University of Technology, Wuhan, China, entitled "The Impact of Corporate Social Responsibility Disclosure on Financial Performance of Firms in Africa". In recent years, companies have been pressured by community shareholders to engage in corporate social responsibility (CSR). Many companies have responded to this pressure by implementing CSR activities in their operations, while others have opposed. Companies that oppose CSR have proposed a compromise between CSR and profitability. Consequently, this study evaluates the impact of CSR disclosure (CSRdisc) on the financial performance of companies in Africa for the short and long term. The 158 listed companies were selected from six African countries (South Africa, Kenya, Nigeria, Morocco, Egypt and

Mauritius) and grouped into six industries. We measure CSR in terms of the number of keywords (content analysis) which is referred to as a CSRdisc. We use based accounting to measure a firm's financial performance (return on assets [ROA] for the short term, and return on equity [ROE] for the long run). Multiple linear regression analysis was performed using panel data samples for the 11-year period (2005-2015). Our empirical results show that unlike sales and manufacturing, healthcare and pharmaceuticals and other industries, the CSR disc affects the company's short-term financial performance (ROA) negatively for the mining, investment and transportation industries. We propose that this negative impact constitutes an additional cost burden for the company. Thus, CSR does not generate economic benefits for companies in the short term in the industry. With respect to long-term financial performance (ROE), the majority of our results show positive but insignificant economic benefits for firms. Although there is a positive relationship between the CSR disc and the financial performance of some firms in the long run, the financial performance of companies in Africa does not depend significantly on their CSR practices but more on other factors, such as previous performance, leverage, volume of capital, and size. However, given the many benefits of CSR, it is recommended that companies continue to give priority to this practice.

The eighth research by Yasmeen Tarek (2019), International Journal of Economics and Finance; Vol. 11, No. 4; ISSN 1916-971X E-ISSN 1916-9728, MTI University, Cairo, with the title "The Impact of Financial Leverage and CSR on the Corporate Value: Egyptian Case". This study aims to analyze the effect of the company's capital structure and its disruption in corporate social responsibility activities on company value during the 2014 study 2017 to examine the effect of financial leverage and CSR on firm firm value by testing 17 companies listed in the C SR indicator on the Egyptian stock market through application of panel data analysis. After examining the effect of the two variables together, this study found that there was a significant effect of financial leverage on firm value when implementing CSR activities had no effect on firm values which meant there was a lack of investor awareness of the importance of implementing CSR activities in Egypt.

2.2. Theory Basis

2.2.1. Corporate Social Responsibility (CSR)

Corporate social responsibility or *corporate social responsibility* (CSR) is a mechanism for an organization to voluntarily integrate social and environmental concerns into their operations and their interaction with stakeholders, which exceed the responsibility of the organization in the field of law (Darwin, 2016: 5).

CSR is the commitment of the business world to continue to act ethically, operate legally and contribute to economic improvement, along with improving the quality of life of employees and their families as well as improving the quality of the local community and society at large (Wibisono, 2017: 7).

2.2. 2. Items for disclosure of Corporate Social Responsibility

According to Wibisono (2017: 55), there are many standards that must be used as a foundation in the practice of social responsibility (*social responsibility*). *The Equator Principles* adopted by several countries formulate several principles, including:

- 1. Accountability's (AA1000)
- 2. Global Reporting Initiative (GRI)
- 3. Social Accountability International SA8000
- 4. ISO 14000 Environmental Management

2.2. 3 . Global Reporting Initiative (GRI)

The CSR disclosure standards developed in Indonesia refer to the standards set by the GRI (Global Reporting Initiative). The GRI standard was chosen because it focuses more on disclosure standards as a company's economic, social and environmental performance with the aim of improving the quality and utilization of sustainability reporting (www.globalreporting.org). The GRI-G4 provides a globally relevant framework to support a standardized approach to reporting, which promotes the level of transparency and consistency needed to make the information communicated be useful and trustworthy by markets and the public. The features in GRI-G4 make this manual easier to use, both for experienced reporters and for those new to sustainability reporting from any sector and are supported

by other GRI materials and services. (Source: www.globalreporting.org). The GRI-G4 also provides guidance on how to present sustainability disclosures in different formats: be it a standalone sustainability report, an integrated report, an annual report, a report that addresses specific international norms, or online reporting. The type of approach to measuring GRI-G4 is through the contents of the annual report with aspects of the social responsibility assessment issued by the GRI (Global Reporting Initiative) obtained from the website www.globalreporting.org. The GRI standard was chosen because it focuses more on the disclosure standards for various economic, social and environmental performance of the company with the aim of improving the quality and utilization of sustainability reporting. In the GRI-G4 standard (2016) performance indicators are divided into 3 main components, namely economic, environmental, and social including labor practices and work comfort, human rights, society, responsibility for products with a total performance indicator reaching 91 indicators. (www.globalreporting.org).

2.2.4.Profitability

Harahap (2016: 304) argues that profitability is describing the company's ability to earn profits through all existing capabilities and resources such as sales, cash, capital, number of employees, number of branches, and so on.

Kasmir (2016: 196) defines that the profitability ratio is a ratio to assess a company's ability to seek profit. This ratio also provides a measure of the level of management efficiency of a company. This is indicated by the profit generated from sales and investment income. The point is that the use of this ratio shows the efficiency of the company.

According to Fahmi (2015: 135) profitability is measuring the effectiveness of management as a whole which is shown by the size of the level of profits obtained in relation to loans and investments. The better the profitability ratio, the better it describes the company's high profitability.

Profitability can be defined as the company's ability to generate profits. Company profitability is a factor that makes management free and flexible to disclose social responsibility to shareholders (Darwis, 2015: 36).

The following are the ratios used to measure profitability as follows:

- 1. Return On Equity (ROE)
- 2. Return On Assets (ROA)

2.2.5 Company Value

Suffah and Riduwan (2016: 38) company value is the perception of investors towards the company, which is often associated with stock prices. Explain that one of the things that investors consider in investing is the company value in which the investor will invest. The share price is based on the request and supply of investors, so that the share price can be used as a proxy for company value. The share price is the price that occurs when the shares are traded on the capital market.

N use values the company represents the performance of the company associated with a company's stock price. If the stock price is high, the company value will also be higher.

Firm value can be measured through the value of the share price in the market, based on the formation of the company's share price in the market, which is a reflection of the public's assessment of the company's real financial performance (Harmono, 2016: 50).

The types of company value measurements according to Fahmi (2015: 138) are as follows:

- 1. Earning Per Share (EPS)
- 2. Price Earning Ratio (PER)
- 3. Price Book Value

2. 3. Influence Between Research Variables

1. The influence of corporate social responsibility on firm value

Corporate social responsibility is disclosed, among other things, in a report called *sustainability reporting*. CSR can be a sustainability if the program created by a company is truly a joint commitment of all elements in the company itself. Of course, without the commitment and enthusiastic support of the employees, these programs will become like penance programs for mere shareholders. By involving employees intensively, the value of these programs will give a very big meaning to the company.

The main goal of the company is to increase company value. The company's value will be guaranteed to grow in a sustainable manner if the company pays attention to economic, social and environmental dimensions because sustainability is a balance between economic, environmental and community interests. This dimension is contained in the implementation of *corporate social responsibility* by the company as a form of responsibility and concern for the environment around the company.

Sutopoyudo (2016: 90) shows that the majority of consumers will leave a product that has a bad image or is reported negatively. There are many benefits obtained by the company by implementing *corporate social responsibility*, among others, products are increasingly favored by consumers and companies are increasingly attractive to investors. The implementation of CSR will increase the value of the company as seen from the stock price and company profits as a result of investors investing in the company. Nurlela and Islahuddin (2015: 8) state that with good CSR practices, it is hoped that the company's value will be assessed properly by investors.

2. The effect of profitability on firm value

According to Gapensi (2015: 186), high company value will be followed by high prosperity for shareholders. The higher the share price, the higher the company value, the high company value is the desire of the company owners because with a high value it shows the prosperity of shareholders is also high. If it is associated with profitability, then every company that will try to maximize the value of the company is continuously seeking growth from its sales and income.

According to Sartono (2016: 122) profitability is the company's ability to earn profits in relation to sales, total assets and own capital. Thus, long-term investors will be very interested in this profitability analysis, for example for shareholders they will see the benefits that will actually be received in the form of dividends.

By looking at the definition above, a high profit or profit provides good company prospects so that it can trigger investors to participate in increasing stock demand. The better the company's profitability means that the company's future prospects are considered better in the eyes of investors. If the company's ability to generate profits increases, the share price will also increase (Husnan, 2015: 317). With the increase in share prices, the higher the company value.

2.4 Hypothesis Development

Based on the explanation above, the hypothesis is formulated as follows:

- H₁: It is suspected that *corporate social responsibility* has an effect on firm value
- H₂: Suspected profitability (ROE) effect on the value of the company
- H₃: It is suspected that profitability (ROA) affects firm value

2.5 Conceptual Framework

Based on the theoretical explanation above, the conceptual framework of this study is as follows:

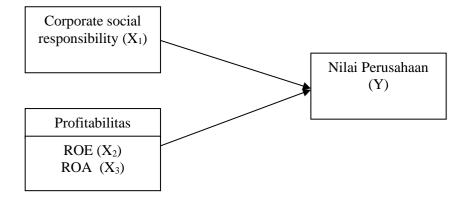


Figure 2.1. Research Conceptual Framework

III. RESEARCH METHOD

3.1. Research Strategy

This research is a causality study, namely a research design designed to examine the possibility of a causal relationship between variables (Sanusi, 2015: 77). The author intends to examine whether there is a causal effect between *corporate social responsiveness* and profitability that affects the company value of the company in automotive companies.

The research method used is the quantitative method of causality. The research was conducted with a quantitative approach, which emphasizes the analysis of financial ratios in the form of percentages, then the data is processed using the Eviews software version 10.0 and then concludes from the results of the data processing it is hoped that it can answer the questions of this study.

The quantitative method is a method used to find knowledge that uses data in the form of numbers as a tool to analyze information about what you want to know (Kasiram, 2016: 149).

3.2 Population and Research Sample

3.2.1 Research population

The population is a group of people, events or something that has certain characteristics, while the sample is a part of the population that estimates population characteristics (Erlina and Mulyani, 2017: 73-74). The population of this study is 15 (fifteen) automotive companies, which are described in the following table:

Table 3.1

Research Population

Automotive and Component Sector Companies

No.	Code	Name
1	ASII	Astra International, Tbk
2	AUTO	Astra Otoparts, Tbk
3	BOLT	Garuda Metalindo, Tbk
4	BRAM	Indo Kordas, Tbk
5	GDYR	Goodyear Indonesia, Tbk
6	GJTL	Gajah Tunggal, Tbk
7	INDS	Indospring, Tbk
8	IMAS	Indomobil Sukses International, Tbk
9	LPIN	Multi Prima Sejahtera, Tbk
10	MASA	Multistrada Arah Sarana, Tbk
11	PRAS	Prima Alloy Steel Universal, Tbk
12	SMSM	Congratulations Perfect, Tbk
13	TRST	Trias Sentosa, Tbk
14	NIPS	Nipress, Tbk
15	TGKA	Tiga Raksa Satria, Tbk

Source: IDX website: www.idx.co.id

3.2.2. Sample

According to Sugiyono (2016: 15) the sample is an object under study and is considered to represent the entire population. The sample selection technique used was purposive sampling. According to Sugiyono (2016: 85) *purposive sampling* is a sample determination technique using special considerations so that it is appropriate to be a sample, where this technique is chosen based on the criteria possessed by the sample.

The criteria for sampling are as follows:

- 1. Automotive companies that are listed on the Indonesia Stock Exchange while publishing complete consecutive *annual reports* during the 2015-2018 period which can be accessed through the respective companies' websites or through the website www.idx.go.id.
- 2. Automotive companies provide complete information related to the corporate social responsiveness, profitability and company value variables used in this study.

Based on the sample criteria above, the authors set a research sample of 12 automotive companies for 4 years (12 x 4 = 48), as in the table below:

Table 3.2.
Research Samples
Automotive and Component Sector Companies in 2015-2018

No.	Company	Code
1	PT. Astra International, Tbk	ASII
2	PT. Astra Otoparts, Tbk	AUTO
3	PT. Indospring, Tbk	INDS
4	PT. Indomobil Sukses International, Tbk	IMAS
5	PT. Trias Sentosa, Tbk	TRST
6	PT. Garuda Metalindo, Tbk	BOLT
7	PT. Indo Kordsa, Tbk	BRAM
8	Goodyear Indonesia, Tbk	GDYR
9	Gajah Tunggal, Tbk	GJTL
10	Multi Prima Sejahtera, Tbk	LPIN
11	Multistrada Arah Sarana, Tbk	MASA
12	PT. Congratulations Perfect, Tbk	SMSM

Source: www.idx.co.id

So that the sample in the study amounted to 12 companies in the 2015-2018 period, so the total sample was 48.

3.3. Data and Data Collection Methods

3.3.1. Research data

The data used in this research is secondary data. Secondary data is a source of research data obtained through intermediary media in the form of books, notes, existing evidence, or archives, both published and not generally published. The data used in this study were obtained from the annual financial statements published by each manufacturing company listed on the Indonesia Stock Exchange which can then be accessed through the official website of the Indonesia Stock Exchange, namely (http://www.idx.co.id).

The period chosen by the researcher was 4 (four) years, namely 2015-2018, because in those years it was company data that had been published so that it made it easier to process data.

3.3.2. Method of collecting data

The methods used to collect data in this study are:

1. Literature review

In this method, researchers try to obtain as much information as possible from various sources of information to serve as a theoretical basis and reference in data processing, by reading, understanding, and reviewing various literatures such as books, journals, previous studies and other sources. related to the problem to be studied.

2. Documentation Method

This method is done by collecting, recording and reviewing secondary data in the form of annual financial reports of automotive companies listed on the Indonesia Stock Exchange which are sampled in this study and obtained through the official website of the Indonesia Stock Exchange, namely (http://www.idx.co.id).

3.4. Data Analysis Methods

The data analysis method used must be accurate because later it will be used to conduct research. The data analysis tool used is panel data regression analysis with descriptive statistical testing of the variables that have been determined using the *Econometric Views* (*EViews*) 10.0 program.

3.4.1. Descriptive Statistical Analysis

According to Muchson (2017: 25) descriptive statistics discuss ways of collecting, summarizing, presenting data so that information is easier to understand. The information that can be obtained with descriptive statistics includes data centering (*minimum* and *maximum*).

3.4.2. Classic assumption test

3.4.2.1. Data Normality Test

Data that is good and suitable for use in research are data that have a normal distribution. To perform the test data normality assumption was conducted by using a test Jarque Berra (JB), if the probability of JB count is greater than 0.05, then the data is normally distributed, but apabilla smaller than 0.05, then the data were not normally distributed (Ghozali, 2016: 160).

3.4.2.2. Multicollinearity

Multicollinearity test aims to test whether the regression model found a correlation between the independent variables. A good regression model should not have a correlation between the independent variables (multicollinearity does not occur). One way to detect multicollinearity is by looking at a tolerance value of 0.10 or equal to the *Inflation Variance Factor* (VIF) value, the regression model is free of multicollinearity if the tolerance value is> 0.10 and the VIF value is <10. (Priyatno, 2016: 28)

3.4.2.3. Autocorrelation

The autocorrelation test aims to test whether in the linear regression method there is a correlation between the confounding error in period t and the confounding error in period t-1 (previous). If there is a correlation, it is called an autocorrelation poblem.

3.4.2.3. Heteroscedasticity

Heteroscedasticity is a violation of the homoscedasticity assumption (all disturbances that appear in the regression equation are homoscedastic or have the same variance in each observation condition). Therefore, the consequence of the heteroscedasticity in the system of equations is that the estimate no longer has a minimum variance. The way to know the presence or absence of heteroscedasticity symptoms in this study is to test with white heteroscedasticity no cross term. If the significance of prob * R < 0.05 then the model contains heteroscedasticity, and if the significance of prob * R > 0.05 then the model does not contain heteroscedasticity.

3.4.3. Panel Data Regression Analysis

Panel data regression analysis is a combination of *time series* data and *cross section* data. According to Gujarati (2016: 40) the advantages of panel data are as follows:

- 1. Panel data is able to provide more data, so that the information provided is more complete and the resulting $degree\ of\ freedom\ (df)$ is also greater so that the estimates obtained are better.
- 2. Panel data can also reduce collinearity between variables
- 3. Able to test and study more complex behavioral models
- 4. By combining data from *time series* and *cross section*, it can solve the problems that arise from the problem of variable omission
- 5. anel data can also minimize bias that may be generated by individual aggregates, as more data is observed.
- 6. Panel data is capable of detecting effects that simply pure *time series* data and pure *cross section* data cannot.

3.4.4. Panel Data Regression Estimation Model

1. Common Effect Model (CEM)

Common Effect Model is a data model that only combines time series data and cross section data so it is the simplest data model. This model can also use the Ordinary Least Square (OLS) approach or is a least squares technique to estimate the panel data model.

2. Fixed Effect Model (FEM)

The Fixed Effect Model is a model used to estimate panel data where the disturbance variables may be interrelated over time and between individuals. This method assumes that the differences between individuals (cross section) can be seen from the differences in their intercept. This

model uses *dummy variable* techniques to estimate panel data and is often called the *Error Component Model Least Squares Dummy Variable* (LSDV) technique.

3. Random Effect Model (REM)

This model gives the specific effect of individual variables that are part of the *error-term*. For this reason, the *Random Effect Model* is also called an error component model. By using this model it can save the use of the *degree of freedom (df)* and not reduce the amount as in the *Fixed Effect Model*. This model also implies that the parameters make the estimation results more efficient. This model cannot use the OLS method to obtain efficient estimation results, so this model is more appropriate to use the *Generalized Least Square* (GLS).

3.4.5. Panel Data Regression Model Selection

In using the *EViews* program, there are several tests that can help researchers determine what method is efficient to use from the three equation models above, including: *Chow's* test and *Hausman* test.

1. Chow test

The *Chow* test or *Chow* test is a test to select the *Fixed Effect* model or the *Common Effect* model that is most appropriate to use in estimating panel data regression. Hypothesis testing criteria are as follows:

- a. If the *p* value $\geq \alpha$ (significance value = 0.05) then H_{0 is} accepted. So the most appropriate model for panel data regression is the *Common Effect Model* (CEM).
- b. If p value $\leq \alpha$ (significance value = 0.05) then H_{0 is} rejected. So the most appropriate model for panel data regression is the *Fixed Effect Model* (FEM).

The hypothesis used in the *Chow* Test is as follows:

H₀= Common Effect Model (CEM)

 $H_1 = Fixed \ Effect \ Model \ (FEM)$

2. Hausman Test

The Hausman test or Hausman test is a test to select the Fixed Effect model or the Random Effect model that is most appropriate to use in estimating panel data regression.

- a. If the *p* value $\geq \alpha$ (significance value = 0.05) then H_{0 is} accepted. So the most appropriate model for panel data regression is the *Random Effect Model* (REM).
- b. If p value $\leq \alpha$ (significance value = 0.05) then H $_{0}$ is rejected. So the most appropriate model for panel data regression is the *Fixed Effect Model* (FEM).

The hypothesis used in the *Hausman* Test is as follows:

H₀= Random Effect Model (REM)

 $H_1 = Fixed \ Effect \ Model \ (FEM)$

3.4.6. Statistical test t

According to Ghozali (2016: 98), the t statistical test aims to show how far the influence of one independent variable individually is in explaining the variation of the dependent variable. The way to do the t test is by looking at the level of significance at the 5% degree of confidence. The decision to accept or reject the hypothesis is made with the following criteria:

- 1. If the probability> 0.05 means that H $_{0 \text{ is}}$ accepted and H $_{1 \text{ is}}$ rejected, it can be explained that one of the independent variables does not significantly affect the dependent variable.
- 2. If the probability ≤ 0.05 means that H $_{0}$ is rejected and H $_{1}$ is accepted, it can be explained that one of the independent variables significantly affects the dependent variable.

3.4.6.1. The coefficient of determination (\mathbb{R}^2)

According Ghozali (2016: 97) the coefficient of determination (R 2) can measure the ability of a regression model in implementing the dependent variable variation. Coefficient of determination is between zero and one, or can be written $0 < R^2 < 1$. If the value of R 2 is smaller than 0 or close to 0, it means the ability of independent variables in explaining the variation of the dependent variable are very limited and tend to be weak. If the value of R 2 is closer to 1, meaning that the ability of independent variables in explaining the variation of dependent variables tend to be strong because it can provide almost all the information needed to predict the variation of the dependent variable. The formula for the coefficient of determination is as follows:

 $KD = R^2 \times 100\%$

Information:

KD = coefficient of determination R = Coefficient of Correlation

IV. RESULTS AND DISCUSSION

4.1. CSR

The following is the CSR data for 12 (twelve) automotive companies during 2015-2018, which are summarized in Table 4.1:

Table 4.1. Automotive Company CSR Data years 2015-2018

No	Perusahaan	Kode	Tahun	Xij	nį	CSRDIj
			2015	3	91	3,30%
1	PT. Astra International,	A CIT	2016	3	91	3,30%
1	Tbk	ASII	2017	25	91	27,47%
			2018	25	91	27,47%
			2015	22	91	24,18%
	DT A COL CTIL	A LITTO	2016	22	91	24,18%
2	PT. Astra Otoparts, Tbk	AUTO	2017	52	91	57,14%
		\wedge	2018	52	91	57,14%
			2015	4	91	4,40%
2	DT Indonesia Title	INDC	2016	4	91	4,40%
3	PT. Indospring, Tbk	INDS	2017	4	91	4,40%
		-/	2018	4	91	4,40%
			2015	15	91	16,48%
4	PT. Indomobil Sukses	IMAS	2016	15	91	16,48%
4	International, Tbk		2017	8	91	8,79%
		117	2018	8	91	8,79%
			2015	4	91	4,40%
5	DT Tries Contoss This	TRST	2016	4 0	91	4,40%
3	PT. Trias Sentosa, Tbk	IKSI	2017	3	91	3,30%
			2018	3	91	3,30%
			2015	6	91	6,59%
6	PT. Garuda Metalindo,	DOLT	2016	6	91	6,59%
6	Tbk	BOLT	2017	6	91	6,59%
	T	AT D. C.	2018	A 4/	91	4,40%
	1	$N \cup O \cap N$	2015	28	91	30,77%
7	DT Indo Vondoo This	BRAM	2016	28	91	30,77%
/	PT. Indo Kordsa, Tbk	DKAM	2017	49	91	53,85%
			2018	49	91	53,85%
			2015	4	91	4,40%
8	Goodyear Indonesia, Tbk	GDYR	2016	2	91	2,20%
0	Goodyear fildoffesia, Tok	ODIK	2017	22	91	24,18%
			2018	22	91	24,18%
			2015	20	91	21,98%
9	Gajah Tunggal, Tbk	GJTL	2016	26	91	28,57%
	Jajan Tanggai, Tok	UJIL	2017	26	91	28,57%
			2018	26	91	28,57%
			2015	4	91	4,40%
10	Multi Prima Sejahtera,	LPIN	2016	4	91	4,40%
10	Tbk	Lint	2017	4	91	4,40%
			2018	4	91	4,40%
			2015	32	91	35,16%
11	Multistrada Arah Sarana,	MASA	2016	32	91	35,16%
11	Tbk	1,17,107,1	2017	32	91	35,16%
			2018	32	91	35,16%
			2015	4	91	4,40%
12	PT. Selamat Sempurna,	SMSM	2016	4	91	4,40%
12	Tbk	51,151,1	2017	4	91	4,40%
			2018	4	91	4,40%

Source: Processed data (20 20)

Based on table 4.1 that overall the lowest corporate social responsibility (CSR) practice is at PT. Goodyer Indonesia, Tbk in 2016 amounted to 2.20% which was disclosed and published, while the implementation of the highest corporate social responsibility was at PT. Astra Otoparts, Tbk, namely in 2017-2018 amounted to 57.14% disclosed and published.

4.1.1. ROE

Next is the data of profitability (ROE) by 12 (twelve) automotive companies during the years 2015 to 2018, which are summarized in Table 4. 2:

Table 4.2. Automotive Company ROE Data years 2015-2018

No	Perusahaan	Kode	Tahun	Laba bersih	Total Ekuitas	ROE
			2015	15.613.000.000.000	126.533.000.000.000	12,34%
	PT. Astra	A CIT	2016	18.302.000.000.000	139.906.000.000.000	13,08%
1	International,	ASII	2017	23.165.000.000.000	156.329.000.000.000	14,82%
	Tbk		2018	27.372.000.000.000	174.363.000.000.000	15,70%
			2015	322.701.000.000	10.143.426.000.000	3,18%
2	PT. Astra	ALITO	2016	483.421.000.000	10.536.558.000.000	4,59%
2	Otoparts, Tbk	AUTO	2017	547.781.000.000	10.759.076.000.000	5,09%
			2018	680.801.000.000	11.263.635.000.000	6,04%
	DT		2015	1.933.819.152	1.919.039.000.000	0,10%
3	PT.	INDS	2016	49.556.367.334	2.068.064.000.000	2,40%
3	Indospring, Tbk	INDS	2017	113.639.539.901	2.144.819.000.000	5,30%
	1 UK		2018	110.687.00 <mark>0.</mark> 000	2.194.232.000.000	5,04%
	PT. Indomobil	E	2015	(22.489.430.531)	6.697.000.000.000	-0,34%
4	Sukses	IMAS	2016	(312.881.005.784)	6.709.000.000.000	-4,66%
4	International,	IMAS	2017	(64.296.811.100)	9.281.000.000.000	-0,69%
	Tbk	0	2018	98.774.620.340	10.324.000.000.000	0,96%
			2015	25.314.103.403	1.956.920.690.054	1,29%
5	PT. Trias	TRST	2016	33.794.866.940	1.932.355.184.014	1,75%
3	Sentosa, Tbk		2017	38.199.681.742	1.975.569.497.486	1,93%
			2018	63.193.899.099	2.237.384.616.122	2,82%
	PT. Garuda		2015	97.680.310.772	760.529.199.078	12,84%
6	Metalindo,	BOLT	2016	111.662.785.832	961.648.686.584	11,61%
0	Tbk		2017	93.225.253.756	720.676.693.568	12,94%
	1 UK		2018	75.738.099.614	738.035.474.182	10,26%
			2015	173.452.894.770	2.523.571.508.895	6,87%
7	PT. Indo	BRAM	2016	299.617.183.752	2.656.897.117.400	11,28%
,	Kordsa, Tbk	DIXAM	2017	332.846.274.996	2.940.855.607.992	11,32%
			2018	280.599.061.050	3.191.060.500.128	8,79%
			2015	(1.530.941.510)	765.375.252.215	-0,20%
8	Goodyear	GDYR	2016	22.251.695.500	756.143.804.764	2,94%
8	Indonesia, Tbk	ODIK	2017	(12.114.811.272)	725.869.636.404	-1,67%
			2018	7.317.336.186	787.677.023.268	0,93%
			2015	(313.326.000.000)	5.394.142.000.000	-5,81%
9	Gajah	GJTL	2016	626.561.000.000	5.848.177.000.000	10,71%
9	Tunggal, Tbk	OJIL	2017	45.028.000.000	5.689.466.000.000	0,79%
			2018	(74.557.000.000)	5.875.830.000.000	-1,27%
			2015	(17.664.476.558)	116.490.714.202	-15,16%
10	Multi Prima	LPIN	2016	(64.895.693.813)	51.595.020.389	- 125,78%
	Sejahtera, Tbk		2017	191.977.703.453	231.461.832.583	82,94%
			2018	32.755.830.588	273.570.407.671	11,97%
11	Multistrada	MASA	2015	(374.119.958.560)	4.765.503.911.530	-7,85%

	i	ī	i			•
	Arah Sarana,		2016	(90.050.880.124)	4.893.345.830.232	-1,84%
	Tbk		2017	(109.349.349.192)	4.565.595.497.784	-2,40%
			2018	(259.332.916.095)	4.603.465.863.279	-5,63%
			2015	461.307.000.000	1.440.248.000.000	32,03%
12	12 PT. Selamat Sempurna, Tbk SN	SMSM	2016	502.192.000.000	1.580.055.000.000	31,78%
12		SMSM	2017	555.388.000.000	1.828.184.000.000	30,38%
			2018	633.550.000.000	2.150.277.000.000	29,46%

Source: Processed data (20 20)

Based on table 4.2 that the lowest profitability (ROE) is at PT. Multi Prima Sejahtera, Tbk in 2016 amounted to -125.78%, while the highest profitability (ROE) was at PT. Multi Prima Sejahtera, Tbk, namely in 2017 amounted to 82.94%.

4.1.2. ROA

Next is the data of profitability (ROA) by 12 (twelve) automotive companies during the years 2015 to 2018, which are summarized in Table 4.3:

Table 4.3.
Automotive Company ROA Data
years 2015-2018

No	Perusahaan	Kode	Tahun	Laba bersih ///	Total Aset	ROA
	PT. Astra		2015	15.613.000.000.000	245.435.000.000.000	6,36%
1	International,	ASII	2016	18.302.000.000.000	261.855.000.000.000	6,99%
1	Tbk	ASII	2017	23.165.000.000.000	295.646.000.000.000	7,84%
	1 UK		2018	27.372.000.000.000	344.711.000.000.000	7,94%
			2015	322.701.000.000	14.339.110.000.000	2,25%
2	PT. Astra	AUTO	2016	483.421.000.000	14.612.274.000.000	3,31%
2	Otoparts, Tbk	AUIU	2017	547.781.000 <mark>.000</mark>	14.762.309.000.000	3,71%
		E	2018	680.801.000.000	15.889.648.000.000	4,28%
	PT.		2015	1.933.819.152	2.553.928.346.219	0,08%
3	Indospring,	INDS	2016	49.556.367.334	2.477.272.502.538	2,00%
3	Tbk	INDS	2017	113.639.539.901	2.434.617.337.849	4,67%
	TUK		2018	110.687.000.000	2.482.338.000.000	4,46%
	PT. Indomobil		2015	(22.489.430.531)	24.860.957.839.497	-0,09%
4	Sukses	IMAS	2016	(312.881.005.784)	25.633.342.258.679	-1,22%
4	International,		2017	(64.296.811.100)	31.375.311.299.854	-0,20%
	Tbk		2018	98.774.620.340	40.955.996.273.862	0,24%
			2015	25.314.103.403	3.357.359.499.954	0,75%
5	PT. Trias	TRST	2016	33.794.866.940	3.290.596.224.286	1,03%
3	Sentosa, Tbk	1131	2017	38.199.681.742	3.332.905.936.010	1,15%
			2018	63.193.899.099	4.284.901.587.126	1,47%
	PT. Garuda		2015	97.680.310.772	918.617.353.270	10,63%
6	Metalindo,	BOLT	2016	111.662.785.832	1.206.089.567.283	9,26%
0	Tbk	BOLI	2017	93.225.253.756	1.188.798.795.362	7,84%
	TUK		2018	75.738.099.614	1.312.376.999.120	5,77%
			2015	173.452.894.770	4.025.858.610.490	4,31%
7	PT. Indo	BRAM	2016	299.617.183.752	3.977.868.810.820	7,53%
,	Kordsa, Tbk	DIVAM	2017	332.846.274.996	4.125.144.165.048	8,07%
			2018	280.599.061.050	4.292.168.660.658	6,54%
			2015	(1.530.941.510)	1.645.962.330.085	-0,09%
8	Goodyear	GDYR	2016	22.251.695.500	1.516.129.539.676	1,47%
O	Indonesia, Tbk	אועט	2017	(12.114.811.272)	1.676.776.348.800	-0,72%
			2018	7.317.336.186	1.824.842.851.236	0,40%

			2015	(313.326.000.000)	17.509.505.000.000	-1,79%
9	Gajah	GJTL	2016	626.561.000.000	18.697.779.000.000	3,35%
9	Tunggal, Tbk	GJIL	2017	45.028.000.000	18.191.176.000.000	0,25%
			2018	(74.557.000.000)	19.711.478.000.000	-0,38%
			2015	(17.664.476.558)	324.054.785.283	-5,45%
10	Multi Prima Sejahtera, Tbk	LPIN	2016	(64.895.693.813)	477.838.306.256	13,58%
			2017	191.977.703.453	268.116.498.330	71,60%
			2018	32.755.830.588	301.596.448.818	10,86%
	Multistus do	MACA	2015	(374.119.958.560)	8.255.331.324.415	-4,53%
11	Multistrada Arah Sarana,		2016	(90.050.880.124)	8.192.536.641.560	-1,10%
11	Tbk	MASA	2017	(109.349.349.192)	10.882.111.034.676	-1,00%
	1 UK		2018	(259.332.916.095)	9.316.518.040.791	-2,78%
			2015	461.307.000.000	2.220.108.000.000	20,78%
12	PT. Selamat	CMCM	2016	502.192.000.000	2.254.740.000.000	22,27%
12	Sempurna, Tbk	SMSM	2017	555.388.000.000	2.443.341.000.000	22,73%
			2018	633.550.000.000	2.801.203.000.000	22,62%

Source: Processed data (20 20)

Based on table 4.3, the lowest profitability (ROA) is at PT. Multi Prima Sejahtera, Tbk in 2016 amounted to -13.58%, while the highest profitability (ROA) was at PT. Multi Prima Sejahtera, Tbk, namely in 2017 amounted to 71.60%.

4.1.3. PBV

As for the data enterprise value (PBV) by 12 (twelve) automotive companies during the years 2015 to 2018, which are summarized in Table 4. 4:

Automotive Company PBV Data
years 2015-2018

N o	Perusahaa n	Kod e	Tahu n	Tota <mark>l Eku</mark> itas	Jumla <mark>h Sa</mark> ham yang Beredar	BV	Harga Saha m	PBV																																				
		ASII	2015	126.533.000.000	40.484.000.00 0	3.12	6.025	192,77 %																																				
1	PT. Astra Internatio		ASII	A CII	A CITY		A COTT	A CII	ΙΙΖΔ	A ÇII	A CII	A CIT	2016	139.906.000.000	40.484.000.00	3.45 6	8.125	235,11 %																										
1	nal, Tbk		2017	156.329.000.000	40.484.000.00	3.86	8.300	214,94 %																																				
					2018	174.363.000.000	40.484.000.00 0	4.30 7	8.225	190,97 %																																		
		T. Astra AUT O	2015	10.143.426.000. 000	4.820.000.000	2.10 4	1.610	76,50%																																				
2	PT. Astra		2016	10.536.558.000. 000	4.820.000.000	2.18 6	1.920	87,83%																																				
2	•		2017	10.759.076.000. 000	4.820.000.000	2.23	2.060	92,29%																																				
																	İ																							2018	11.263.635.000. 000	4.820.000.000	2.33	1.470
		PT. Indosprin g, Tbk	2015	1.919.039.000.0 00	656.000.000	2.92 5	3.360	114,86 %																																				
3			2016	2.068.064.000.0 00	656.000.000	3.15	820	26,01%																																				
	g, Tbk		2017	2.144.819.000.0 00	656.000.000	3.27	1.260	38,54%																																				
			2018	2.194.232.000.0	656.000.000	3.34	2.220	66,37%																																				

				00		5				
			2015	6.697.000.000.0	2.765.279.412	2.42	2 220	06.210/		
	PT.	r	2015	00	2.765.278.412	2	2.330	96,21%		
	Indomobil	73.6.4	2016	6.709.000.000.0	2.765.278.412	2.42	1.325	54,61%		
4	Sukses	IMA S		9.281.000.000.0		3.35		•		
	Internatio nal, Tbk	5	2017	00	2.765.278.412	6	840	25,03%		
			2018	10.324.000.000.	2.765.278.412	3.73	2.160	57,86%		
			2010	000 1.956.920.690.0		3		27,0070		
			2015	1.930.920.090.0	2.808.000.000	697	315	45,20%		
	PT. Trias		2016	1.932.355.184.0	2.808.000.000	688	300	43,59%		
5	Sentosa,	TRS	2010	14	2.000.000.000	000	300	73,3770		
	Tbk	Т	2017	1.975.569.497.4	2.808.000.000	704	374	53,16%		
			2018	2.237.384.616.1	2.808.000.000	797	400	50,20%		
				22				·		
	PT. Garuda	BOL	2015 2016	760.529.199.078 961.648.686.584	1.667.032.000 2.343.750.000	456 410	1.081 744	42,20% 55,15%		
6	Metalindo	T	2017	720.676.693.568	2.343.750.000	307	935	32,89%		
	, Tbk		2018	738.035.474.182	2.343.750.000	315	955	32,97%		
			2015	2.523.571.508.8	450.000.000	5.60	3.790	147,97		
		I BRA		95	130.000.000	5.00	2.770	%		
	PT. Indo		2016	2.656.897.117.4	450.000.000	5.90 4	6.135	96,24%		
7	Kordsa,		2017	2.94 <mark>0.855</mark> .607.9	150,000,000	6.53	6.197	105,46		
	IUK		2017	92	450.000.000	5	0.197	%		
			2018	3.191.060.500.1 28	450.000.000	7.09	5.608	126,45 %		
			2015		410,000,000	1.86	2.702			
			2015	765.375.252.215	410.000.000	7	2.703	69,06%		
	Goodyear	GD YR	CD	ear CD	2016	756.143.804.764	410.000.000	1.84	1.884	97,89%
8	Indonesia,					1.77		104,14		
	Tbk		2017	725.869.636.404	410.000.000	0	1.700	%		
			2018	787.677.023.268	410.000.000	1.92	1.910	100,58		
				5.394.142.000.0		1.54		288,25		
			2015	00	3.484.800.000	8	537	200,23 %		
	Gajah		2016	5.848.177.000.0	3.484.800.000	1.67	1.039	161,52		
9	Tunggal,	GJT	2010	00	3.464.800.000	8	1.039	%		
	Tbk	L	2017	5.689.466.000.0 00	3.484.800.000	1.63	680	240,10 %		
			2010	5.875.830.000.0	2 404 000 000	1.68	<i>(50</i>)	259,40		
			2018	00	3.484.800.000	6	650	%		
	Multi		2015	116.490.714.202	106.250.000	1.09	252	435,07		
						6		179,85		
10	Prima	LPI	2016	51.595.020.389	106.250.000	486	270	%		
10	Sejahtera,	era, N	2017	231.461.832.583	106.250.000	2.17	326	668,24		
	Tbk					2.57		1046,66		
			2018	273.570.407.671	106.250.000	2.57 5	246	1046,66		
11	Multistrad	MA	2015	4.765.503.911.5	9.182.946.945	519	390	133,06		

	a Arah	SA		30				%
	Sarana, Tbk		2016	4.893.345.830.2 32	9.182.946.945	533	280	190,31 %
			2017	4.565.595.497.7 84	9.182.946.945	497	280	177,56 %
			2018	4.603.465.863.2 79	9.182.946.945	501	720	69,63%
			2015	1.440.248.000.0 00	1.439.668.860	1.00	906	110,42 %
12	PT. Selamat	SMS	2016	1.580.055.000.0 00	1.439.668.860	1.09	853	128,67 %
12	Sempurna , Tbk	M	2017	1.828.184.000.0 00	1.439.668.860	1.27	1.164	109,09
			2018	2.150.277.000.0	1.439.668.860	1.49 4	1.347	110,88 %

Source: Processed data (20 20)

Based on table 4.4, the lowest company value (PBV) is at PT. Indomobil Sukses International, Tbk in 2017 amounted to 25.03%, while the highest corporate value acquisition (PBV) was at PT. Multi Prima Sejahtera, Tbk, namely in 2018 amounted to 1046.66%.

4.2. Descriptive statistics

Descriptive statistics provide an overview or description of data seen from the mean, standard deviation, maximum, minimum, sum of each variable (Ghozali, 201 6:82). The variables used include the CSR variable (X_1), ROE (X_2), ROA (X_3) on firm value (Y), then the results are obtained according to the following table:

CSR ROE ROA **PBV** -125.80% Minimum 2.20% -13.60% 25.00% Maximum 71.60% 57.10% 82.90% 1046.70% Mean 17.50% 5.10% 5.50% 148.80% Std. dev 16.28% 24.35% 12.05% 174.10% Observations 48 48 48 48

Table 4. 5. Descriptive Statistics Results

Source: Data processed (2020)

- 1. The output table 4.5 above shows the value of N or the amount of data to be studied totaling 48 samples. CSR has a mean value or the average of 17.50%, which means an average contribution of CSR to the company's value (PBV) of 17.50% with a maximum value of 57.10%. Minimum score 2.20%. With a standard deviation of 16.28%, which means that the maximum increase in the average CSR variable is +16.28%, while the maximum decrease in the average CSR variable is -16.28% or it can be said that the average deviation value of the CSR variable Automotive companies are 16.28%.
- 2. The output table 4.5 above shows the value of N or the amount of data to be studied totaling 48 samples. ROE has a mean value or the average of 5.10%, which means an average contribution ROE of the company's value (PBV) of 5.10% with a maximum value of 82.90%. Minimum value -125.80%. With a standard deviation of 16.28%, which means that the maximum increase in the average ROE variable is +24.35%, while the maximum decrease of the average ROE variable is -24.35% or it can be said that the average deviation value of the ROE variable in the Automotive Company is 24.35%.
- 3. The output table 4.5 above shows the value of N or the amount of data to be studied totaling 48 samples. ROA has a mean value or the average of 5.50%, which means an average contribution of ROA on firm value (PBV) of 5.50% with a maximum value of 71.60%. Minimum

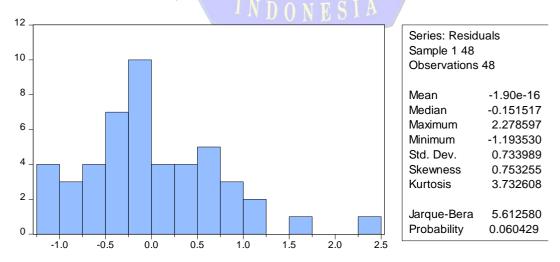
value -13.60 %. With a standard deviation of 12.05%, which means that the maximum increase in the average ROA variable is +12.05%, while the maximum decrease of the average ROA variable is -12.05% or it can be said that the average deviation value of the ROA variable in the Automotive Company is 12.05 %.

4. The output table 4.5 above shows the value of N or the amount of data to be studied totaling 48 samples. Firm value (PBV) has a mean or average value of 148.80% with a maximum value of 1046.70%. Minimum value of 25.00%. With a standard deviation of 174.10%, which means that the maximum increase in the mean of the variable firm value (PBV) is +174.10%, while the maximum decrease of the mean variable Firm value (PBV) is -174.10% or it can be it is said that the average deviation value of the firm value variable (PBV) in automotive companies is 174.10%.

4.3. Classic assumption test

4.3.1. Normality test

The normality test aims to determine the distribution of data in the variables used in the study. Data that is good and suitable for use in research are data that have a normal distribution. To test the data normality assumption, it is carried out using the Jarque Berra (JB) test, if the calculated probability of JB is greater than 0.05 then the data is normally distributed, but if the data is smaller than 0.05 then the data is not normally distributed.



Source: Processed data (20 20)

Figure 4. 1 . Normality Test Results

Based on the results above shows that the value of *probablity Jarque-Bera* of 0, 060 429, then 0.060429> 0.05, thus it can be concluded that the data used in this variable was normally distributed.

4.3.2. Multicollinearity Test

Multicollinearity test is used to test whether there is a relationship between independent variables. To detect a relationship between variables in this study by looking at the correlation coefficient between each variable, if the VIF is greater than 10 then there is multicollinearity in the regression model, but if the VIF acquisition for each variable is less than 10 then multicollinearity does not occur. in the regression model. The following multicollinearity test results will be presented in table 4.6:

Table 4.6. Multicollinearity Test Results

Variance Inflation Factors

Date: 07/03/20 Time: 00:11

Sample: 148

Included observations: 48

	Coefficient	Uncentered	Centered
Variable	Variance	VIF	VIF
С	0.157701	2.814402	NA
CSR	2.304288	2.324696	1.066615
ROE	2.417669	2.615755	2,505174
ROA	10,21530	3.134926	2,592368

Source: Processed data (20 20)

Based on table 4.6 above, it shows that the VIF acquisition is below the number 10, it can be stated that there is no multicollinearity problem in the prediction model, so it can be concluded that the variable data in this study does not have multicollinearity.

4.3.3. Autocorrelation Test

In detecting the presence of absence of autocorrelation problems, the Durbin-Watson test can be done, where the DW (d) value will be compared with the table value using a 5% significance value. If the value (d) is between the upper limit (du) and the number of independent variables minus the upper limit (k-du), or (du <d <k-du), it can be concluded that we cannot reject H0 which states that there is no positive or negative autocorrelation.

Table 4.7. Autocorrelation Test Results

Dependent Variable: Y Method: Least Squares Date: 07/03/20 Time: 00:14

Sample: 148

Included observations: 48

		The second secon		
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.086091	0.397116	2.734943	0.0090
CSR	0.221272	1.517988	0.145766	0.8848
ROE	-1.968037	1.554886	-1.265712	0.2123
ROA	8.492851	3.196138	2.657222	0.0109
R-squared	0.169257	Mean depe	ndent var	1.488475
Adjusted R-squared	0.112615	SD depend	ent var	1,740963
SE of regression	1.640006	Akaike info	criterion	3.906932
Sum squared resid	118.3433	Schwarz criterion		4.062866
Log likelihood	-89,76637	Hannan-Quinn criter.		3.965860
F-statistic	2.988209	Durbin-Watson stat		1.381193
Prob (F-statistic)	0.041126			

Source: Processed data (20 20)

Based on table 4.7 , durbin Watson at a significance level ($\alpha=5\%$), with the amount of data (n = 48) and the number of independent variables 3 (k = 3) obtained by Durbin Watson (dw) of 1.381193, then the Durbin Watson table will provide a value du = 1.474 and dL = 1.201. Therefore the value of dw = 1.381193 is greater than the limit d l = 1.201 and less than du, because the limit value d l <dw <du, it can be concluded that in the regression model in this study there is no decision on autocorrelation .

4.3.4. Heteroscedasticity Test

Heteroscedasticity is a violation of the homoscedasticity assumption (all disturbances that appear in the regression equation are homoscedastic or have the same variance in each observation condition). Therefore, the consequence of the heteroscedasticity in the system of equations is that the estimate no longer has a minimum variance. The way to know the presence or absence of heteroscedasticity symptoms in this study is to test with white heteroscedasticity no cross term. If the significance of prob * R < 0.05 then the model contains heteroscedasticity, and if the significance of prob * R > 0.05 then the model does not contain heteroscedasticity.

Table 4.8. Heteroscedasticity Testing Results Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.354350	Prob. F (3.44)	0.7862
Obs * R-squared	1.132333	Prob. Chi-Square (3)	0.7693
Scaled explained SS	9.088526	Prob. Chi-Square (3)	0.0281

Source: Processed data (20 20)

Table 4.8 shows the p $_{\text{value}}$ indicated by the prob chi square value (3) at obs * r squared, which is equal to 0.7693. because the p $_{\text{value}}$ is 0.7693> 0.05 then accept Ho, which means that the regression model is homoscedastic or there is no problem with the assumption of non-heteroscedasticity (no data deviation).

4.4. Statistical Analysis of Data

In this study, the author will investigate automotive companies listed on the Indonesia Stock Exchange in 2015-2018. The analysis will use an econometric methodology (panel data regression method) to analyze the dependent variable and the independent variable using the Eviews 10.0 program. Prior to carrying out regression analysis, several tests will be conducted to determine the appropriate type of panel data regression for this study.

4.4.1. Chow test

The Chow test is a statistical test that aims to choose whether it is more appropriate to use a fixed effect or random effect model.

Table 4.9. Chow test

Redundant Fixed Effects Tests

Equation: Untitled

Fixed effects cross-section test

Effects Test	Statistics	df	Prob.
	14 125120	(11.22)	0.0000
Cross-section F	14.125139	(11.33)	0.0000
Chi-square cross-section	83.612889	11	0.0000
Chi-square cross-section	83.612889	11	

Source: Data processed (2020)

Based on table 4.9, it appears that prob. The chi-square for the Chow test estimate is 0.0000. Because the prob value. chi-square is 0.0000, then 0.0000 < 0.05, thus it can be concluded that the model used in this study is a fixed effect model.

4.4.2. Hausman test

The Hausman test is used to determine whether the regression model uses a fixed effect or random effect model approach.

Table 4.10. Hausman Test

Correlated Random Effects - Hausman Test

Equation: Untitled

Cross-section random effects test

Test Summary	Chi- Sq. Statistics	Chi-Sq. df	Prob.
Random cross-section	45.636678	3	0.0000

Source: Data processed (2020)

Based on table 4.10, it appears that prob. The chi-square for the Hausman test estimate is 0.0000. Because the prob value, chi-square of 0.0001. Thus, the cross section value is 0.0000 <0.05, it can be concluded that the approach in this study uses a fixed effect.

4.4.3. Panel Data Regression (fixed effect approach)

To see the effect of CSR, Profitability (ROE and ROA) on Firm Value (PBV), estimate the panel with the following equation:

Table 4.11. Panel Data Regression

Dependent Variable: Y Method: Least Squares Panel Date: 07/03/20 Time: 00:01

Sample: 2015 2018 Periods included: 4

Cross-sections included: 12

Total panel (balanced) observations: 48

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	1.586246	0.298625	5.311825	0.0000
CSR	-0.119223	1.515246	-0.078683	0.9378

1.017209

2.284566

Source: Data processed (2020)

ROE

ROA

Based on the table above, a panel data regression model equation can be formulated which explains the effect of CSR, Profitability (ROE and ROA) on company value in automotive companies listed on the Indonesia Stock Exchange in 2015-2018, namely:

5.120412

-2.732868

0.0000

0.0100

 $PBV = 1.586246 - 0.119223_{CSR} + 5.208528_{ROE} - 6.243416_{ROA} + \epsilon$

5.208528

-6.243416

4.4.4. Hypothesis testing (t-Test)

Given that the sig value of the provision is 0.05, the results of the hypothesis test (t-test) are as follows L.

- 1.Based on table 4.11, the results show that CSR does not have a significant effect on firm value (PBV), this can be seen from the acquisition of a probability of 0.9378, then with a CSR value that is above the 5% error rate (0.9378> 0, 05), so the hypothesis is rejected. Thus, the acquisition of CSR is not proven to affect the increase in firm value (PBV) in automotive companies listed on the Indonesia Stock Exchange .
- 2.Based on table 4.11, the results show that profitability (ROE) has a significant effect on firm value (PBV), this can be seen from the acquisition of a probability of 0.0000, then with the acquisition of profitability (ROE) which is below the error rate of 5% (0, 0000 < 0.05). Thus, the acquisition of profitability (ROE) is proven to be able to increase firm value (PBV) in automotive companies listed on the Indonesia Stock Exchange .
- 3.Based on table 4.11, the results show that profitability (ROA) has a significant effect on firm value (PBV), this can be seen from the acquisition of a probability of 0.0100, then with the acquisition of profitability (ROA) which is below the error rate of 5% (0, 0100 < 0.05). Thus, the acquisition of profitability (ROA) is proven to be able to increase firm value (PBV) in automotive companies listed on the Indonesia Stock Exchange .

4.4.5. Coefficient of Determination (Ajusted R square)

The coefficient of determination is used to see the magnitude of the influence of the independent variables (CSR and profitability) together on firm value. If the simultaneous test is used to test the overall hypothesis, the coefficient of determination is used to calculate the magnitude of the influence between variables. The magnitude of this influence ranges from 0 to 1 or 0% to 100% of the interval. The table below shows the results of the calculation of the coefficient of determination.

Table 4.12. Coefficient of Determination (Adjusted R square)

Cross-section fixed (dummy variables) R-squared 0.854470 Mean dependent var 1.488475 Adjusted R-squared 0.792729 SD dependent var 1,740963 SE of regression 0.792608 Akaike info criterion 2.623330 $3.208\overline{081}$ Sum squared resid 20,73150 Schwarz criterion -47.95993 Hannan-Quinn criter. 2.844308 Log likelihood F-statistic 13.83976 **Durbin-Watson stat** 1,848680 Prob (F-statistic) 0.000000

Effects Specification

Source: Data processed (2020)

Based on table 4.12, the Adjusted R $_{\text{squared}}$ value is 0.792729. This shows that the contribution of CSR, Profitability (ROE and ROA) to firm value (PBV) in automotive companies listed on the Indonesia Stock Exchange in 2015-2018 is 79.27% while the remaining 20.73% is the contribution of other variables besides variables. independently researched.

4.5. Discussion

4.5.1. The Effect of CSR on Firm Value

The results of this study indicate that partially, CSR does not have a significant effect on firm value (PBV), this can be seen from the acquisition of a probability of 0.9378, then the CSR value is above 5% error rate (0.9378>0, 05). Thus, it is not proven that the size of the CSR revenue cannot lead to the rise and fall of company value (PBV) in automotive companies listed on the Indonesia Stock Exchange .

Which means that the increase in company value is not seen from the amount of CSR revenue or the amount of CSR implementation carried out by the company, in other words the change in company value is not caused by the large amount of CSR implementation carried out by automotive companies. This means that overall there is still a lack of awareness among investors and shareholders about the importance of implementing CSR activities in the companies they run.

4.5.2. Effect of Profitability (ROE) on Firm Value

The results of this study indicate that profitability (ROE) has a significant effect on firm value (PBV), this can be seen from the acquisition of a probability of 0.0000, then with the acquisition of profitability (ROE) which is below the error rate of 5% (0, 0000 <0.05) 95% confidence. Thus, the size of the acquisition of profitability (ROE) can lead to fluctuations in company value (PBV) in automotive companies listed on the Indonesia Stock Exchange.

This is in accordance with the theory put forward by Husnan (2015: 317) that the better the company's profitability means that the company's future prospects are considered to be better in the eyes of investors. If the company's ability to generate profits increases, the share price will also increase (Husnan, 2015: 317). With the increase in share prices, the higher the value of the company, so that the increase in profit margins will increase the company's ability to generate internal funds; thereby, promoting sustainable growth. Investors will be interested in investing and the stock price of a company will increase, from the increase in stock prices will also increase the value of a company.

4.5.3. Effect of Profitability (ROA) on Firm Value

The results of this study indicate that profitability (ROA) has a significant effect on firm value (PBV), this can be seen from the acquisition of a probability of 0.01000, then with the acquisition of profitability (ROA), which is below the error rate of 5% (0, 0.100 < 0.05) with a confidence level of 95%. Thus, the size of the acquisition of profitability (ROA) can lead to fluctuations in company value (PBV) in automotive companies listed on the Indonesia Stock Exchange .

This is in accordance with the theory put forward by Husnan (2015: 317) that the better the company's profitability means that the company's future prospects are considered to be better in the eyes of investors. If the company's ability to generate profits increases, the share price will also increase (Husnan, 2015: 317). With the increase in share prices, the higher the value of the company, so that the increase in profit margins will increase the company's ability to generate internal funds; thereby, promoting sustainable growth. Investors will be interested in investing and the stock price of a company will increase, from the increase in stock prices will also increase the value of a company.

V. CONCLUSIONS AND SUGGESTIONS

5.1 Simpulses

Based on the research results that have been discussed in the previous chapter, the researchers gave the following conclusions:

- 1. CSR is proven to have no significant effect on firm value (PBV) in automotive companies listed on the Indonesia Stock Exchange . Thus that the lack of awareness of investors and shareholders about the importance of implementing CSR activities in companies, especially in Automotive companies.
- 2. Profitability (ROE) is proven to have a significant effect on firm value (PBV) in automotive companies listed on the Indonesia Stock Exchange. Thus, the higher the level of profitability, the company's ability to generate internal funds and will promote sustainable growth. Investors will be attracted to invest and the stock price of a company will increase. An increase in stock prices will cause the value of a company to increase as well.
- 3. Profitability (ROA) is proven to have a significant effect on firm value (PBV) in automotive companies listed on the Indonesia Stock Exchange. Thus, the higher the level of profitability, the company's ability to generate internal funds and will promote sustainable growth. Investors will be

attracted to invest and the stock price of a company will increase. An increase in stock prices will cause the value of a company to increase as well.

5.2. Suggestion

The suggestions in this study are as follows:

- 1. For further research, external factors that are thought to be able to influence firm value should also be added as variables. The reason is that external factors are factors that cannot be avoided and controlled by the company, so it is better if research is carried out to determine the relationship between external factors and firm value.
- 2. For further research, if company data can be obtained over a long period of time, it is best to expand the sample coverage used in the study by adding to the research period of the last ten years. Although most of the data stock was only limited to the last 3 or 4 years, so the authors experienced problems or limitations.

5.3. Research limitations

The limitations of this research, of course, have several limitations, namely as follows:

- 1. This research only examines automotive companies in the period 2015 to 2019 due to limitations in data collection through the website on the Indonesia Stock Exchange.
- 2. Most of the CSR implementation disclosed in the company's financial statements is not on target with CSR which is included in the GRI indicator. For example, in the financial report, it is stated that there is social assistance in the Indonesian Red Cross, but in theory indicators are not found that are in line with the CSR report, so it will appear that many CSRs are not disclosed because they are not exactly what is desired in CSR theory. And there are still companies that only list globally, for example CSR that is carried out by companies related to the environment, economy, education is not explained in detail, so that data collection is limited to what is disclosed.

REFERENCES

- Ahmad A. Abubakar (PhD), Grace Yunusa Simon Moses and Muhammad D. Ahmad. 2017. Impact of Corporate Social Responsibility on Profitability of Quoted Food and Beverages Companies in Nigeria. Research Journal of Finance and Accounting www.iiste.org, ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online) Vol. 8, No. 20, Nigeria Police Academy.
- Amidu P. Mansaray, Liu Yuanyuan and Sesay Brima. 2017. The Impact of Corporate Social Responsibility Disclosure on Financial Performance of Firms in Africa. International Journal of Economics and Financial Issues, ISSN: 2146-4138, Wuhan University of Technology, Wuhan, China.
- Dea Putri Ayu and AA Gede Suarjaya. 2017. The Effect of Profitability on Firm Value in Mining Companies. E-Journal of Management of Udayana University, Vol. 6, No. 2, ISSN: 2302-8912 Universtas Udayana Bali.
- Darwin, Ali. 2016. Application of Sustainabilty Reporting in Indonesia, Accounting V National Convention . Advanced Professional Program. Yogyakarta.
- Darwis, Herman. 2015. *Corporate Governance towards Company Performance*. Journal of Finance and Banking, Vol. 13, No 13, Seprember 2009, pp. 418-430.
- Erlina, Mulyani. 2017. Business Research Methodology: For Accounting and Management, First Edition USU Press, Medan.
- Ernawati and Widyawati. 2015. *The Effect of Profitability*, *Leverage and Company Size on Firm Value*. Journal of Accounting Science & Research Vol. 4 No. 4
- Fahmi, Irham. 2015. Financial Performance Analysis . Bandung: Alfabeta
- Ganang Radityo Primady and Sugeng Wahyudi. 2015. The Influence of Corporate Social Responsibility and Profitability on Company Value. Diponegoro Journal Of Management Volume 4, Number 3, Diponegoro University
- Ghifari Luthfan Pratama, Dini Wahjoe Hapsari and Muhammad Muslih. 2016. The Influence of *Corporate Social Responsibility on* Company Value (Empirical Study of the Telecommunications Sub-Sector Listed on the Indonesia Stock Exchange 2010-2014). ISSN: 2355-9357 e-Proceeding of Management: Vol. 3, No.3, Telkom University
- Ghozali, Imam. 2016. *Multivariate Analysis Application with SPSS Program*. Semarang: Diponegoro University Research Board.
- Gapensi. 2015. Intermediate Financial Management. 7th Edition. SeaHarbour Drive: The Dryden Press
- Gujarati, Damodar. 2004. *Basic Econometrics (Basic Econometrics)*. Translation of Sumarno Zain. Jakarta: Erlangga Publisher.
- Harmono. 2016. Financial Management Based on the Balanced Scorecard (Theory, Case, and Business Research Approaches). Bumi Aksara, Jakarta
- Harahap, Sofyan Syafri. 2016. Critical Analysis of Financial Statements. Issue 1-10. Jakarta: Rajawali Press.
- Hackston, David and Markus J. Milne. 2016. Some Determinants of Social and Environmental Disclosure in New Zealand Companies. Accounting, Auditing and Accountability Journal. Vol. 9, No. 1, p. 77-108
- Husnan, Suad. 2015. *Basics of Financial Management*. Sixth Edition First Printing. Yogyakarta: UPP STIM YPKN.
- Johnson and Johnson. 2016. Disclosure Of Corporate Social Performance. Preger. New York. "Environmental Disclosure in the Annual Report: Extending the Applicationability and Predictive Power of Legitimacy Theory". Accounting Auditing & Accountability Journal. Vol. 15. No.3. pp.334-371.
- Cashmere. 2016. Financial Statement Analysis. Issues 1-8. Jakarta: Rajawali Press
- Lukviarman, Niki. 2016. Basic Fundamentals of Financial Management . Andalas University Press, Padang
- Kasiram, Moh. 2016. Research Methodology . Malang: UIN-Malang Press.
- Munawir, S. 2015. Financial Statement Analysis, Fourth Edition, Liberty Publisher Yogyakarta.
- Muchson, M. 2017. Descriptive Statistics . Bogor: Guepedia
- Muchson, M. 2017. Descriptive Statistics . Bogor: Guepedia
- Pandia, Frianto. 2016. Fund Management and Bank Health . Jakarta: Rineka Cipta Publisher
- Priyatno, Duwi. 2016. Learn Data Analysis Tools and How to Process them with SPSS which is practical and easy to understand for beginners and intermediate levels . Yogyakarta: Gava Media

- Putu Elia Meilinda Murnita and I Made Pande Dwiana Putra. 2018. The Influence of *Corporate Social Responsibility* on Company Value. ISSN: 2302-8556 E-Journal of Accounting at Udayana University Vol.23.2 Udayana University Bali.
- Rendi Siswanto and Budi Yanti. 2018. The Influence of *Corporate Social Responsibility* (CSR) on Company Value in Construction Companies Listed on the Indonesia Stock Exchange (IDX). Journal of Management and Entrepreneurship, Volume 9, Number 3, E-ISSN 2615-3300, Padang University.

Riyanto Bambang. 2016. Spending Basics . Issue 4, Yogyakarta: BPFE

- Ross, USA, RW Westerfield., And BD Jordan. 2016. *Fundamentals of Corporate Finance*, 9 th Ed. New York: Mc Graw-Hill.
- Solihin, Ismail. 2016. Corporate Social Responsibility from Charity to Sustainability . Jakarta: Four Salemba.
- Sayekti, Y. and LS Wondabio. 2016. *The Effect of CSR Disclosure on the Earning Response Coefficient*. X. Makassar National Accounting Symposium, 26-28 July
- Suffah, Roviqotus and Akhmad Riduwan. 2016. The Effect of Profitability, Leverage, Company Size and Dividend Policy on Firm Value. Journal of accounting science and research volume 5 number 2, February.
- Sartono, Agus. 2016. Financial Management Theory and Applications. Yogyakarta: BPFE.
- Septiyuliana, Maya. 2016. The influence of intellectual capital and disclosure of intellectual capital on the value of the company conducting the initial public offering. 18th National Accounting Symposium, University of North Sumatra, Medan 16-19 September
- Sutopoyudo. 2016. The Effect of the *Implementation of Corporate Social Responsibility (CSR)* on Company *Profitability*. [On line]. Available: http://sutopoyudo.wordpress.com/2009/09/21/pentuk-penerapancorporate-social-responsibility-csr-terhadap-profitabilityper company/[Desember.
- Sartono, Agus. 2016. Financial Management: Theory and Application . Fourth Edition. Yogyakarta: BPFE

Sanusi, Anwar. 2015. Business Research Methodology. Jakarta: Four Salemba

Sugiyono. 2016. Quantitative Research Methods Qualitative and R & D. Bandung: Alfabeta.

Wibisono, Yusuf. 2017. Dissecting the Concept & Application of CSR (Corporate Social Responsibility). PT Gramedia, Jakarta.

www.globalreporting.org

www.idx.co.id

Yasmeen Tarek. 2019. The Impact of Financial Leverage and CSR on the Corporate Value: Egyptian Case. International Journal of Economics and Finance; Vol. 11, No. 4; ISSN 1916-971X E-ISSN 1916-9728, MTI University, Cairo.

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