RESEARCH AND DEVELOPMENT (R&D) AND FIRM VALUE: AN EMPIRICAL STUDY FROM NON FINANCIAL SECTOR FIRM IN THE ERA OF MODERN TECHNOLOGY

Edi Pranyoto*[1], Susanti[2], Rubi Maulana Muis[3]

[1,2,3,4,] Institut Informatika dan Bisnis Darmajaya
[1]edipranyoto@darmajaya.ac.id, [2]susanti@darmajaya.ac.id

Abstract

The purpose of this study was to determine the positive influence of Research and Development (R&D) on firm value. The results show that R&D does not have a significant effect on firm value, while Corporate Social Responsibility (CSR) and type of industry have a significant impact on firm value. R&D activities are activities that will be the company's investment in the long run. R&D activities create a competitive advantage for companies by creating new products that are difficult for competitors to emulate in the era of modern technological development. Companies that carry out R&D activities in the era of modern technology can be considered to have made long-term strategic investment companies that are used to increase firm value. Investors did not invest because R&D is a strategic investment in the long term of the company that is used to increase the value of the company, while technology is developing very rapidly.

Keywords: Research and Development, firm value, modern technology

1. INTRODUCTION

The main purpose of the establishment of the company is to get profits by maximizing the resources owned. If the company can utilize its resources, it is likely that the company will get a large profit, so that it can affect the value of the company in the eyes of investors and investors. The value of the company is very important because with high firm value will be followed by high shareholder prosperity. Increasing firm value will affect shareholder value if the increase is marked by a high rate of return on investment to shareholders.
Firm value can be seen from the development of the company's stock price in the

stock market (Pasaribu & Sulasmiyati, 2016). The high stock price has a positive impact on the value of the company. Good firm value is a positive prospect of the company in the future. (Welley & Untu, 2015) states that the value of a company is the market value of a company's stock that reflects the owner's wealth, the higher the stock price indicates the higher the owner's wealth. Investors will choose to invest in companies with maximum firm value because the maximum firm value can provide maximum prosperity for shareholders if the share price increases. The following is the company's joint stock price on the Indonesia Stock Exchange in 2001-2019

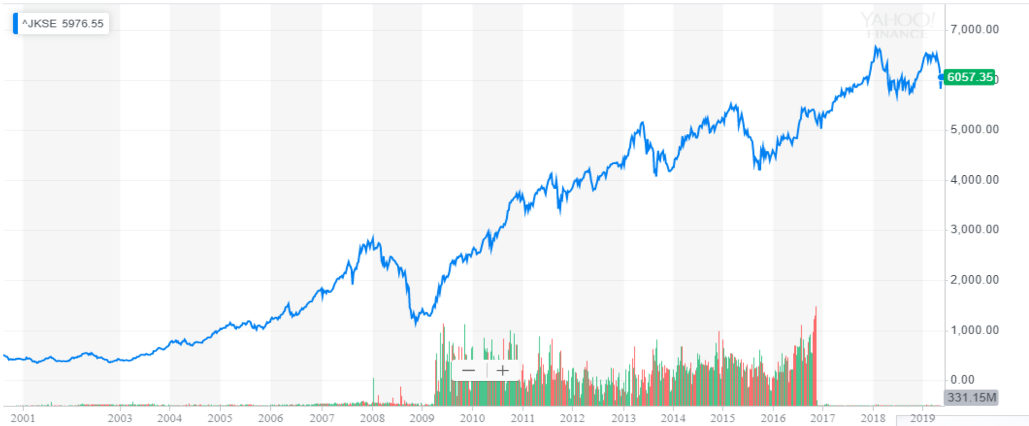

Figure 1. Development of the Composite Stock Price Index on the Indonesia Stock Exchange 2001-2019

Based on Figure 1, it can be seen that the Composite Stock Price Index from 2001 - 2019 experienced a significant increase. In 2001, IHSG only reached 900 points, while in 2019 it reached 6,057.35 points, even nearly 7,000 points. There was an increase in share price of 673,039 percent during 2001 to 2019. This means that investing in the capital market is an opportunity to get wealth. The higher the stock price, the higher the value of the company. High firm value can provide maximum shareholder prosperity if the share price increases. (Hariyanto & Lestari, 2015) stated that fluctuations in share prices that occur in the Capital Market can be a reference / consideration for investors in investing. High firm value will provide more benefits for investors, because in addition to getting dividends they also get capital gains from the company (Putra & Lestari, 2016). The value of a company that experiences an increase is an achievement, which means that the welfare of investors increases (Diyani & Rahayu, 2019).

The value of the company is a reflection of the company itself because the value of the company is the investor's perception of the company's success rate that is often associated with stock prices. High stock prices can increase market confidence not only in the company's current performance but also in the company's future prospects. Maximizing firm value is very important for a company, because maximizing firm value means maximizing the company's main goals. Increasing the value of the company is an achievement in accordance with the wishes of its owners, because with the increase in the value of the company, the welfare of the owners will also increase, so in this case the measure of the success of the company's management can be seen from the company's ability to prosper its shareholders. For this reason, one of the goals of establishing a company is to have maximum corporate value, which can be reflected by its share price. Every company certainly wants a high firm value because it also indirectly shows prosperity for shareholders, so the shareholders will invest their capital in the company (Haruman, 2008).

Dewi, Yuniarta, AK, Atmadja, & SE, (2014) revealed that firm value can be measured using the Tobin's Q method. Tobin's Q is a ratio to measure the value of a company that was introduced by James Tobin in 1969. Tobin's Q ratio is considered to reflect the market value of a company by comparing the value the market of a company listed on the financial market with the company's asset replacement value. According to (Diyani & Rahayu, 2019), firm values are categorized into 3 types, namely: Tobin's Q <1 value (undervalued), Tobin's Q value = 1 (average), and Tobin's Q value> 1 (overvalued). The value of the company which is categorized as undervalued indicates that management fails to manage the investment, where the value of the company is smaller than the value of the asset. Firm value in the average category can be interpreted that the investment growth of the company is very slow or not potential, while overvalued firm value is a condition where the value of the company is greater than the value of the asset. This condition indicates that management has succeeded in managing investment, so that the company's investment growth is high. The reason to use Tobin's Q ratio is because this ratio is the ratio that can provide the best information in reflecting the value of the company because in its calculation this ratio involves all elements of the company's debt and capital stock, which includes not only ordinary shares and shareholders' equity, but all assets that are owned by the company.

According to (Ikhwandarti, Pratolo, & Suryanto, 2016), (RIZALDI, 2015), (Kinanti & Nuzula, 2017), and (Panggabean, 2018) there are a number of factors that can affect firm value, namely Research and Development (R&D), Corporate Social Responsibility (CSR), and Industry Type.Gleason & Klock (2006) and Kieso, Weygandt, & Warfield, (2013) explain that intangible assets that are statistically proven to have a role in increasing firm value are research and development (R&D) activities. Research and Development (R&D) activities are activities carried out by companies to create new products and processes, or to improve existing products, and find new knowledge that can be useful in the future. Research and Development (R&D) in companies is the spearhead of an industry in producing new products that are needed by the market.

(Zhu & Huang, 2012) provide a statement that the intensity of Research and Development (R&D) affects the value of the company. The results of this study support the signaling theory which states that the information released by the company is a signal to the company's external parties, especially for investors, namely financial statements. Financial statements contain information that is relevant and considered important by all users of financial statements (Nastiti & Gumanti, 2011). Companies that carry out Research and Development (R&D) activities can produce innovative products according to market needs and technological development compared to companies that do not carry out these activities. The results of this study indicate that the intensity of Research and Development (R&D) can improve company performance and Firm value. (Kinanti & Nuzula, 2017), state that along with developments, R&D is the work done to obtain new scientific knowledge, to develop and design products, or to apply newly acquired knowledge in making significant technical improvements. R&D activities are activities that will be the company's investment in the long run. R&D activities create competitive advantage for companies by creating new products that are difficult for competitors to imitate (Başgoze & Sayin, 2013). Companies that conduct R&D activities can be considered to have made long-term strategic investment companies that are used to increase firm value.

R&D activities are very important for profitability and to enhance innovation in creating competitive advantage. R&D activities have long been recognized because R&D is an innovation process in creating complex corporate values. R&D plays an important role in increasing firm value in the era of modern technological development. In particular, the development of modern technology makes companies face a very competitive and dynamic market environment. The company faces a market with modern technology that is characterized by short product life cycles and high production levels of new products that combine new generation technologies. In these markets, R&D efforts are the most important driving force behind successful innovation. R&D is very important for survival in this environment. The company's superior R&D capability not only utilizes its strong capabilities in product processes and innovation to dominate the market with modern technology, but also leads to competitive advantage for the company. R&D innovation efforts are the most important activities of companies with high development of modern technology; that is, R&D investment is one of the most important elements for scientific and technological progress. R&D efforts, including accelerating the launch of new products into the market and enhancing manufacturing capabilities, play a key role in helping companies maintain or improve their market competitiveness (Wang, Lu, Huang, & Lee, 2013).

Based on (Kinanti & Nuzula, 2017) that the intensity of R&D has a significant effect on the value of the company, so that companies should conduct R&D activities, so that the company is able to continue to innovate. Research and Development (R&D) increases the value of the company which will also have an impact to attract potential investors to the company. Investment in R&D will benefit the company in the long run. The next factor that influences the value of the company according to (Rustiarini, 2011) is the disclosure of social responsibility. Disclosure of corporate social responsibility is a process of communicating the social and environmental impacts of a company's economic activities on society. The concept of CSR involves the responsibility of a joint partnership between companies, governments, institutions, community resources, and the local community. Companies that have good environmental and social performance will be actively responded by investors through an increase in share prices. If a company has poor environmental and social performance, investors will doubt and can be seen through a decline in share prices, so it can be concluded that CSR affects the value of the company.

(Heinkel, Kraus, & Zechner, 2001) states that companies must consider CSR as a profitable long-term strategy, not as an adverse activity. In addition, the more forms of corporate responsibility for the environment, the value of the company will increase. (Putri & Raharja, 2013) stated that the broader or greater the disclosure of Corporate Social Responsibility, the greater the value of the company because investors are interested in investing in companies with high levels of social responsibility disclosure. This expression is supported by (RIZALDI, 2015), which states that corporate social responsibility can be used as a new marketing tool for companies if it is implemented. To implement CSR means the company will incur a number of costs. These costs will eventually become a burden that reduces revenue so that the company's profit level will drop. However, by implementing CSR, the company's image will get better so that customer loyalty is higher and increase revenue for the company itself. Therefore, CSR plays an important role in increasing firm value. Panggabean (2018), revealed that Corporate Social Responsibility (CSR) is a form of corporate responsibility to improve social and environmental problems that occur as a result of company operational activities, therefore CSR plays an important role in increasing firm value.

Research conducted by (Rustiarini, 2010) and (Rosiana, Juliarsa, & Sari, 2013) shows that Corporate Social Responsibility has a positive effect on firm value. But based on research (Dian & Lidyah, 2014) and (Cecilia & Torong, 2015), and (Panggabean, 2018) that CSR has no effect on firm value. This happens because of the information asymmetry between management and external parties. Disclosure of CSR of a company may not increase the value of the company and companies that do not disclose CSR does not necessarily have a low corporate value.
The next factor that can affect firm value is industry type. (Ikhwandarti et al., 2016) stated that the type of industry influences firm value. Industry type is a factor that potentially influences the practice of corporate social information disclosure. Customer-oriented companies are expected to have greater attention in showing their social responsibility to the community in order to improve the company's image and increase sales.

According to (Ikhwandarti et al., 2016), the type of industry influences political visibility and will spur the disclosure of pressures and social criticisms, so that there is a positive relationship between industry classification and disclosure of social information. A high-profile company will have a better firm value compared to a low-profile company. This means that companies that have a high profile will tend to have more ability to achieve company goals, namely to maximize or increase the value of the company compared to companies that have low-profile.

This research can contribute theoretically to the firm value literature. This research is expected to contribute to the baseline firm value model by using company-specific characteristics that are broader than the firm value determinant model.
The purpose of this research is to determine the determinants of firm value. The remainder of this paper is organized as follows. Section 2 highlights literature

review. Section 3 highlight about samples, and methodology. Section 4 presents our empirical results as well as descriptive statistics. Section 5 concludes.

2. LITERATURE REVIEW

Signalling Theory

The theory that can be used on firm value is Signaling Theory. Signaling Theory means a signal given by company management to investors as a clue about the company's prospects (Brigham & Houston, 2001). One of the information that must be disclosed by the company is information about corporate social responsibility or CSR. This information can be contained in an annual report or a separate company social report. The company made CSR disclosures in the hope that it could improve the company's reputation and value (Rustiarini, 2010). In simple terms this theory explains that the broader the company discloses information about its company activities, the easier it is for the recipient of the information to determine investment decisions. But signal theory is also meant as an announcement that is published in order to give a signal for investors to make investment decisions (Jogiyanto, 2013). Signal theory states that companies that have good quality will intentionally give signals to the market, so that the market can distinguish the quality of these companies with other companies. This signal can be in the form of promotion or other information, one of which is information about the disclosure of R&D, CSR, and Industry Type activities, thereby hoping to increase firm value.

Stakeholders Theory

Stakeholder theory is a theory which states that companies are not entities that only operate for their own interests, but must provide benefits to all of its stakeholders (shareholders, creditors, consumers, government, society, and other parties) (Chariri & Nugroho, 2009). According to (Muchlish, 2010) stakeholders are people or groups of people who can influence or be influenced by various decisions, policies and operations of the company. For stakeholders, this can eliminate the company's legitimacy. Stakeholder Theory is very underlying in the practice of Corporate Social Responsibility (CSR) because the information in CSR contains disclosure of corporate social responsibility aims to show the public the social activities carried out by the company and its influence on society because stakeholders are each group or individual who can influence or influenced the general purpose of an organization. CSR is considered as a company's concern in the welfare of the community and environmental sustainability. In addition, the company carries out CSR activities to fulfill obligations to its stakeholders. The relationship between theory and corporate value is to hope that all information about social and environmental responsibility given by the company regarding the company's performance to stakeholders is able to influence decision making. This theory says that profits or profits from the company will increase along with corporate social responsibility towards its stakeholders. Then the company by carrying out social responsibility to stakeholders, the market will give a positive appreciation because of the rising stock price of the company. This increase will cause the company's value to also increase.

Hypothesis Development

R&D activities are activities that will be the company's investment in the long run. R&D activities create competitive advantage for companies by creating new products that are difficult for competitors to imitate (Başgoze & Sayin, 2013). Companies that conduct R&D activities can be considered to have made long-term strategic investment companies that are used to increase firm value. Based on (Kinanti & Nuzula, 2017) that the intensity of R&D has a significant effect on the value of the company, so that companies should conduct R&D activities, so that the company is able to continue to innovate. R&D increases the value of the company which will also have an impact to attract potential investors to the company. Investment in R&D will benefit the company in the long run. Companies that carry out Research and Development (R&D) activities can produce innovative products according to market needs and technological development compared to companies that do not carry out these activities. The results of this study indicate that the intensity of Research and Development (R&D) can improve company performance and Firm value.

H1: Research and Development influences Firm Value.

CSR is defined as a program or social action that appears outside the company's interests (McWilliams & Siegel, 2000). CSR carried out by companies can reduce social risks and can benefit the company in the long run. By disclosing social responsibility, the company hopes to get social legitimacy and maximizing financial measures in the long run. Not only that, disclosure of corporate social responsibility is also expected to improve the company's image and increase sales. Companies that carry out social responsibility expect to get a positive response by market participants (Sayekti & Wondabio, 2007). The positive market appreciation and reaction creates a good market performance for the company which results in high stock prices and the company easily attracts new funds. This enables the company to develop and create appropriate market conditions, thereby increasing the company's market performance, which in turn will create high firm value and sustainable growth (Saputra, 2012).

H2: Corporate Social Responsibility (SCR) influences on Firm Value.

Industry type is a factor that potentially influences the practice of corporate social information disclosure. Customer-oriented companies are expected to have greater attention in showing their social responsibility to the community in order to improve the company's image and increase sales. According to (Ikhwandarti et al., 2016), the type of industry influences political visibility and will spur the disclosure of pressures and social criticisms, so that there is a positive relationship between industry classification and disclosure of social information. A high-profile company will have a better firm value compared to a low-profile company. Industry type influences firm value. This means that companies that have a high profile will tend to have more ability to achieve company goals, namely to maximize or increase the value of the company compared to companies that have a low profile.

H3: Industry Type influences on FirmValue.

3. RESEARCH METHOD

Data and Sample

This study uses data from non-financial companies listed on the Indonesia Stock Exchange in 2014-2018, amounting to 392 companies.

Methodology and Variable Explanations

The econometric goal in this study is to estimate the coefficient β by using the basic model Yi, t = a0 + ß1Xi, t + ei. The coefficient ß is estimated using panel data regression analysis. Table 1 presents a statistical testing model.

$$\mathbf{FV_{it} = \alpha + \beta_1 RD_{1it} + \beta_2 CSR_{2it} + \beta_3 TP_{3it} + e} \quad \text{...}\mathbf{(1)}$$

where i, and t refer to the company that do research and development.

Overall, determining the operational definitions of the variables used in this study are as follows:

Table 1. Variable Definitions for Estimating Tax Avoidance

Variable Name	Symbols and Formulas
Firm Value	$Tobin's\ Q = \frac{(EMV + D)}{(EBV + D)}$ EMV is obtained from the multiplication of the closing price at the end of the year (closing price) with the number of shares outstanding at the end of the year while EBV is obtained from the company's total assets and D's total liabilities or total liabilities. According to Herianyah, et.al (2017) firm values are categorized into 3 types, namely: Tobin's Q <1 (undervalued) value fails, Tobin's Q = 1 (average) value is slow, and Tobin's Q> 1 (overvalued) value is good.
Research and Development	$R\&D\ Intensity = \frac{Total\ R\&D}{Total\ Sales} \times 100\%$
Corporate Social Responsibility	$CSRIj = \frac{\sum X_{ij}}{nj}$
Type of Industry	Industry type is measured using a dummy variable that is given a score of 1 if the company is included in the high profile industry and a score of 0 if the company is included in the low profile industry (Sembiring, 2006).

4. FINDINGS AND DISCUSSION

Descriptive Analysis

This study looked at the characteristics of the issuer for 5 years. The number of listed companies was 392. The research variables used to estimate firm value are prepared by integrating the variables used in previous research. A description of the research variables to estimate firm value is presented in table 2 below.

Table 2. Description of Overall Study Sample Variables for Estimating Firm Value

Variable	Min	Max	Mean	Stad. Deviasi
Firm Value	0,268	5,853	1,250	0,973
Research and Development	0,000	0,085	0,008	0,019
Corporate Social Responsibility	0,013	0,013	0,199	0,081
Type of Industry	0,000	1,000	0,560	0,499

This table presents statistical description information (Mean, median, maximum, minimum, and standard deviation) of research variables from 1960 company years (observation). These variables are: Firm Value = (EMV +D) / (EBV + D), Research and Development = (total R&D/Total Sales) x 100%.Corporate Social Responsibility = total items disclosed / total items. Type of Industry = Industry type is measured using a dummy variable that is given a score of 1 if the company is included in the high profile industry and a score of 0 if the company is included in the low profile industry.

Table 2 shows that the minimum value on the variable Firm value is known to be 0.268 in the IGAR company in 2014 and for the maximum value of 5.853 in the KLBF company in 2014. While the mean value of 1.24966 and standard deviation of 0.972658. From the descriptive statistics table above it can be seen that the minimum value on the Research and Development variable is known to be 0,000 in EPMT and SPMT companies in 2014 and for a maximum value of 0.085 in UNVR companies in 2014. While the mean value is 0.00812 and the standard deviation of 0.019334. The minimum value on the variable Corporate Social Responsibility is known to be 0.013 in LION companies in 2017 and for the maximum value of 0.423 in UNVR companies in 2016. While the average value (mean) is 0.19952 and the standard deviation of 0.081137 . The mean value on the Industrial Type variable is 0.56 and the standard deviation is 0.499.

Baseline Regressions

This study uses a regression estimation approach to predict firm value in 2014-2018. Regression estimation uses panel data that observes issuers throughout the study period. The estimation results of the panel regression model are presented in table 3.

Table 3. Summary of Regression Model Estimation Results
Dependent Variable: Firm Value

Estimator	Model I	
	Coef	t-Stat
C	0,188	2,186
Research and Development	0,081	0,179
Corporate Social Responsibility	0,963	2,691**
Type of Industry	0,191	3,079**
R-squared	0,186	

This table presents statistical description information (Mean, median, maximum, minimum, and standard deviation) of research variables from 1960 company years (observation). These variables are: Firm Value = (EMV +D) / (EBV + D), Research and Development = (total R&D/Total Sales) x 100%.Corporate Social Responsibility = total items disclosed / total items. Type of Industry = Industry type is measured using a dummy variable that is given a score of 1 if the company is included in the high profile industry and a score of 0 if the company is included in the low profile industry. Value t -statistic heteroscedasticity robust white (1980) is presented in the column after the coefficient, *** = significant at the 1% level, ** = significant at the 5% level, and * = significant at the 10% level.

Based on table 3 it can be seen that the Research and Development (RD &) variable has no effect on Firm value. The Research and Development variable has a significance value of 0.858> 0.05, so there is no significant influence of Research and Development (RD &) on Firm value. Corporate Social Responsibility (CSR) has a significance value of 0.009 <0.05, so it can be concluded that Corporate Social Responsibility has a significant effect on Firm value. Industrial type variable has a significance value of 0.003 <0.05, so there is a significant influence between Industry Type on Firm value.

Further Investigation

Based on research that has been done it can be said that Research and Development has no significant effect on Firm value. Increasing economic development causes business competition between companies in Indonesia to increase. Activities are needed to create or develop existing products, so that they can become an advantage and differentiation strategy of the company with other companies. The company must continue to innovate to be able to develop its products in line with technological developments. The main innovation activities can be carried out by research & development (R&D) (Park, Shin, & Kim, 2010). However, R&D activities are activities that will be the company's investment in the long run. R&D activities create competitive advantage for companies by creating new products that are difficult for competitors to imitate (Başgoze & Sayin, 2013). Companies that conduct R&D activities can be considered to have made long-term strategic investment companies that are used to increase firm value. This causes investors to hesitate to invest because to get profitable results must wait for the long term because R&D is a strategic investment in the long term of the company that is used to increase the value of the company.

R&D activities are very important for profitability and to enhance innovation in creating competitive advantage. R&D activities have long been recognized because R&D is an innovation process in creating complex corporate values. R&D plays an important role in increasing firm value in the era of modern technological development. In particular, the development of modern technology makes companies face a very competitive and dynamic market environment. The company faces a market with modern technology that is characterized by short product life cycles and high production levels of new products that combine new generation technologies. In these markets, R&D efforts are the most important driving force behind successful innovation. R&D is very important for survival in this environment. The company's superior R&D capability not only utilizes its strong capabilities in product processes and innovation to dominate the market with modern technology, but also leads to competitive advantage for the company. R&D innovation efforts are the most important activities of companies with high development of modern technology; that is, R&D investment is one of the most important elements for scientific and technological progress. R&D efforts, including accelerating the launch of new products into the market and enhancing manufacturing capabilities, play a key role in helping companies maintain or improve their market competitiveness (Wang et al., 2013). This study is not in line with (Sekar & Dyaram, 2017) which states that R&D affects the value of the company, because every time there is an increase in the intensity of R&D, the value of the company will also increase.

Based on research that has been tested it can be said that Corporate Social Responsibility (CSR) has a significant effect on Firm value. It means that the more CSR disclosures made by the company, the more influence the increase in firm value. The results of this study provide the sense that investors pay attention to social responsibility reports as a material consideration in investment decision making. If investors see the company has a good social and environmental performance, there will be trust from investors so that it is responded positively through an increase in the company's share price. The number of CSR disclosures affects the rise or fall of the company's value. Companies that disclose social responsibility information have a positive image in the community and especially in the business environment. This means that companies that can maintain their existence will also increase the value of the company.

This research supports stakeholder theory which means that a company is not an entity that only operates for its own interests but must provide benefits to its stakeholders. Thus, the existence of a company is strongly influenced by the support given by stakeholders to the company (Chariri & Nugroho, 2009). If the company can maximize the benefits received by stakeholders, there will be satisfaction for stakeholders that will increase the value of the company. This study is in line with (RIZALDI, 2015) study which states that CSR has a significant effect on firm value, which means that the size of CSR practices affects the increase in firm value. and this study is not in line with (Agustine, 2014) which states that CSR has no effect on firm value, because CSR is an unreal measure in influencing investment.

Based on the research that has been done it can be said that the Industrial Type has a significant effect on Firm value. One characteristic difference of concern is the type of industry, namely high profile and low profile industries. Companies that are categorized as high profile industries are companies that have a high level of sensitivity to the environment, a high level of political risk, or a strong level of competition (Pratiwi, Yudiaatmaja, & Suwendra, 2016). High profile industries are believed to disclose more social responsibility than low profile industries. The companies classified in the high profile industry generally have characteristics such as having a large workforce and in the process of producing residues, such as waste and pollution (Zuhroh & Sukmawati, 2003)

Means that the presence of industry groups affect the increase in firm value. The results of this study give the meaning that investors pay attention to the high level of sensitivity generated by the company as one of the considerations in making investment decisions, there will be trust from investors so that the response is positive through an increase in the company's share price. In addition, companies in the high profile category are generally companies that receive public scrutiny because the company's operational activities have the potential and are likely to be related to the interests of the wider community so that it affects the rise or fall of the company's value. Companies that disclose high sensitivity information have a positive image in the community and especially in the business environment. This means that companies that can maintain their existence will also increase the value of the company.

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5. CONCLUSION

This study was designed to examine the effect of research & development (R&D) on firm value. Based on the results of data processing, it is known that Research and Development (R&D) does not significantly influence Firm value, but Corporate Social Responsibility (CSR) and Industry Type significantly influence Firm value. Based on the results of the study, Corporate Social Resposibility (CSR) and Industry Type affect Firm value. Thus, companies must be able to maintain social disclosure or corporate social responsibility in order to stay afloat in the business world and make it much ogled by investors through stock prices or firm value. It is expected that for investors who will invest their funds in a company to pay attention to Corporate Social Responsibility (CSR) and Industry Type, this is due to the company's social responsibility disclosure, the company will have a good image from the public regarding the company's attention to social conditions and the environment and the impact the company will have on the sustainability of the company's business. For further research, it is expected to be able to add other independent variables that can affect the value of the company, such as good corporate governance, business risk, probability, leverage, and company size, which are thought to influence the firm's value. Besides that it adds controling and moderating variables.

REFERENCES

Agustine, I. (2014). Pengaruh corporate social responsibility terhadap nilai perusahaan. *Finesta, 2*(1), 42-47.

Başgoze, P., & Sayin, H. C. (2013). The effect of R&D expenditure (investments) on firm value: Case of Istanbul stock exchange. *Journal of Business, Economics, 2*, 3.

Brigham, E. F., & Houston, J. F. (2001). Manajemen Keuangan. Buku 1 edisi 8. *Jakarta: Erlangga*.

Cecilia, S. R., & Torong, M. Z. B. (2015). Analisis Pengaruh Corporate Social Responsibility, Profitabilitas dan Ukuran Perusahaan Terhadap Nilai Perusahaan pada Perusahaan Perkebunan yang Go Public di Indonesia, Malaysia, dan Singapura. *Medan: Simposium Nasional Akuntansi XVIII*.

Chariri, A., & Nugroho, F. A. (2009). Retorika Dalam Pelaporan Corporate Social Responsibility: Analisis Semiotikatas Sustainability Reporting Pt Aneka Tambang Tbk.

Dewi, P. Y. S., Yuniarta, G. A., AK, S., Atmadja, A. T., & SE, A. (2014). Pengaruh Struktur Modal, Pertumbuhan Perusahaan Dan Profitabilitas Terhadap Nilai Perusahaan Pada Perusahaan LQ 45 Di BEI Periode 2008-2012. *JIMAT (Jurnal Ilmiah Mahasiswa Akuntansi) Undiksha, 2*(1).

Dian, F., & Lidyah, R. (2014). Pengaruh corporate social responsibility, kepemilikan manajerial dan kepemilikan institusi terhadap nilai perusahaan tambang batu bara yang terdaftar di BEI.

Diyani, L. A., & Rahayu, S. N. (2019). Nilai Perusahaan Ditinjau dari Struktur Kepemilikan, Kebijakan Utang, dan Kebijakan Dividen. *Jurnal Bisnis dan Komunikasi, ISSN: 2356, 4385*.

Gleason, K. I., & Klock, M. (2006). Intangible capital in the pharmaceutical and chemical industry. *The Quarterly Review of Economics and Finance, 46*(2), 300-314.

Hariyanto, M. S., & Lestari, P. V. (2015). Pengaruh Struktur Kepemilikan, IOS, Dan ROE Terhadap Nilai Perusahaan Pada Perusahaan Food And Beverage. E-Jurnal Manajemen Unud, Vol. 4, No. 4. In: ISSN.

Haruman, T. (2008). Pengaruh Struktur Kepemilikan Terhadap Keputusan Keuangan Dan Nilai Perusahaan Survey pada Perusahaan Manufaktur di PT. Bursa Efek Indonesia.

Heinkel, R., Kraus, A., & Zechner, J. (2001). The effect of green investment on corporate behavior. *Journal of financial and quantitative analysis, 36*(4), 431-449.

Ikhwandarti, F., Pratolo, S., & Suryanto, R. (2016). Pengaruh Karakteristik Perusahaan Terhadap Nilai Perusahaan Dan Pengungkapan Informasi Sosial Sebagai Variabel Intervening. *Journal of Accounting and Investment, 11*(1), 1-15.

Jogiyanto, H. (2013). Portfolio Theory and Investment Analysis. *BPFE Yogyakarta, Edisi Kedelapan, Yogyakarta*.

Kieso, D. E., Weygandt, J. J., & Warfield, T. D. (2013). *Intermediate Accounting, 2014 FASB Update*: Wiley Global Education.

Kinanti, S. A., & Nuzula, N. F. (2017). Pengaruh Intensitas R&d terhadap Nilai Perusahaan dengan Variabel Kontrol Umur dan Ukuran Perusahaan (Studi pada Perusahaan Manufaktur yang Tercatat di Bursa Efek Indonesia Periode 2012-2016). *Jurnal Administrasi Bisnis, 50*(2), 162-170.

McWilliams, A., & Siegel, D. (2000). Corporate social responsibility and financial performance: correlation or misspecification? *Strategic management journal, 21*(5), 603-609.

Muchlish, R. M. (2010). Kepemilikan Manajemen, Kepemilikan Institusi, Leverage dan Corporate Social Responsibility. *Simposium Nasional Akuntansi*, 26-28.

Nastiti, A. S., & Gumanti, T. A. (2011). Kualitas Audit dan Manajemen Laba pada Initial Public Offer-ings di Indonesia. *Simposium Nasional Akuntansi XIV Aceh. Universitas Syiah Kuala Banda Aceh*.

Panggabean, M. R. (2018). Pengaruh Corporate Social Responsibility, Ukuran Perusahaan, Struktur Modal Dan Tax Avoidance Terhadap Nilai Perusahaan. *Kajian Bisnis STIE Widya Wiwaha, 26*(1), 82-94.

Park, Y., Shin, J., & Kim, T. (2010). Firm size, age, industrial networking, and growth: A case of the Korean manufacturing industry. *Small Business Economics, 35*(2), 153-168.

Pasaribu, M. Y., & Sulasmiyati, S. (2016). Pengaruh Struktur Modal, Struktur Kepemilikan Dan Profitabilitas Terhadap Nilai Perusahaan Pada Perusahaan Sektor Industri Dasar Dan Kimia Yang Terdaftar Di Bei Tahun 2011-2014. *Jurnal administrasi bisnis, 35*(1), 154-164.

Pratiwi, N. P. Y., Yudiaatmaja, F., & Suwendra, I. W. (2016). Pengaruh struktur modal dan ukuran perusahaan terhadap nilai perusahaan. *Jurnal jurusan manajemen, 4*(1).

Putra, A. N. D. A., & Lestari, P. V. (2016). Pengaruh Kebijakan Dividen, Likuiditas, Profitabilitas dan Ukuran Perusahaan Terhadap Nilai Perusahaan. *E-Jurnal Manajemen, 5*(7).

Putri, H. C. M., & Raharja, S. (2013). Pengaruh Corporate Social Responsibility Terhadap Nilai Perusahaan Dengan Kepemilikan Manajerial Sebagai Variabel Moderating. *Diponegoro Journal of Accounting*, 361-375.

RIZALDI, A. (2015). *PENGARUH CORPORATE SOCIAL RESPONSIBILITY (CSR) TERHADAP NILAI PERUSAHAAN DENGANPROFITABILITAS SEBAGAI VARIABEL MODERATING.* STIE PERBANAS SURABAYA,

Rosiana, G. A. M. E., Juliarsa, G., & Sari, M. M. R. (2013). Pengaruh pengungkapan CSR terhadap nilai perusahaan dengan profitabilitas sebagai variabel pemoderasi. *E-Jurnal Akuntansi*, 723-728.

Rustiarini, N. W. (2010). Pengaruh Corporate Governance pada Hubungan Corporate Social Responsibility dan Nilai Perusahaan. *Simposium Nasional Akuntansi XIII. AKPM_12*, 1-24.

Rustiarini, N. W. (2011). Pengaruh struktur kepemilikan saham pada pengungkapan corporate social responsibility. *Jurnal Ilmiah Akuntansi dan Bisnis*.

Saputra, M. (2012). Pengaruh Corporate Governance Terhadap Nilai Perusahaan di Bursa Efek Indonesia, Jakarta. *Journal of Indonesian Applied Economics, 4*(1).

Sayekti, Y., & Wondabio, L. S. (2007). Pengaruh CSR disclosure terhadap earning response coefficient. *Simposium Nasional Akuntansi X*, 1-35.

Sekar, S., & Dyaram, L. (2017). What drives employees to participate in corporate volunteering programs? *Social Responsibility Journal, 13*(4), 661-677.

Wang, C.-H., Lu, Y.-H., Huang, C.-W., & Lee, J.-Y. (2013). R&D, productivity, and market value: An empirical study from high-technology firms. *Omega, 41*(1), 143-155.

Welley, M., & Untu, V. (2015). Faktor-Faktor Yang Mempengaruhi Nilai Perusahaan Di Sektor Pertanian Pada Bursa Efek Indonesia Tahun 2010-2013. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi, 3*(1).

Zhu, Z., & Huang, F. (2012). The effect of R&D investment on firms' financial performance: Evidence from the Chinese listed IT firms. *Modern Economy, 3*(08), 915.

Zuhroh, D., & Sukmawati, I. P. P. H. (2003). Analisis pengaruh luas pengungkapan sosial dalam laporan tahunan perusahaan terhadap reaksi investor. *Simposium Nasional Akuntansi VI*, 1314-1326.