Journal of Business and Economics, ISSN 2155-7950, USA
October 2020, Volume 11, No. 10, pp. 1136-1144
Doi: 10.15341/jbe(2155-7950)/10.11.2020/006

http://www.academicstar.us

Financial Factors Affecting the Value of Companies With Disclosure of Greenhouse Gas Emissions as Mediation

Aurora Rathyani Meilsa Priyadi, Eko Ganis Sukoharsono, Erwin Saraswati
(Accounting Department, Faculty of Economics and Business, University of Brawijaya, Indonesia)

Abstract: This study aims to examine and analyze the influence of financial factors on firm value. This research is conducted on mining companies listed on the Indonesia Stock Exchange in 2014-2018. The sampling method used is using purposive sampling technique. The number of companies that meet the criteria is 14 companies with 70 observations. The analysis technique uses path analysis and multiple linear regression analysis. The results showed that high profitability and growth rate of the company can increase the value of the company, while the size of small companies does not affect the value of the company. The disclosure of greenhouse gas emissions affect the value of the company. The high profitability, the size of the company and the growth rate of the company affect the disclosure of greenhouse gas emissions. Disclosure of greenhouse gas emissions can mediate the affect of profitability, company size and firm growth at the value of the company.

Key words: profitability; company size; company growth; disclosure of greenhouse gas emissions; company value

JEL code: Q560

1. Introduction

Boosting up the value of the company is very important for the company, because the value of the company is a reflection of the good or bad performance of the company which of course will affect the views of investors in the company (Kusumayanti & Astika, 2016). Company value can be reflected in the annual report which is the final process of accounting. The quality of information in an annual report can be assessed from how extend the information disclosure is being made and published by companies (Kelvin et al., 2017).

Disclosure of carbon emissions or greenhouse gas emissions is a form of the company's contribution to environmental change, especially global warming. Disclosure of carbon emissions is usually reported in annual reports and sustainability reports (Akhiroh & Kiswanto, 2016). Disclosure of carbon emissions by companies can be assessed by readers of the annual report as a sign of the seriousness of the company in addressing the problem of global warming, due to greenhouse gases (Choi et al., 2013).

According to the Ministry of Energy and Mineral Resources 2013, many emissions are generated from industry, this sector uses 70% of fossil energy from the total energy consumed. Mining industries such as oil and gas, coal, and related are the biggest contributors to emissions in developing countries, including in Indonesia (Suhardi & Agus, 2015).

Aurora Rathyani Meilsa Priyadi, S.E, Universitas Brawijaya; research area: carbon accounting. E-mail: aurorapriyadi@gmail.com.

Indonesia's commitment to reduce greenhouse gas emissions can be seen from the legislation that has been made, namely Law No. 17 of 2004 where Indonesia has ratified the Kyoto Protocol which contains an agreement to reduce greenhouse gas emissions in a global scale. The implication of the Kyoto Protocol is it brings out carbon accounting, which is a must for companies to recognize, measure, record, present and disclose carbon emissions (Irwhantoko & Basuki, 2016).

High profitability can provide company added value as reflected in its share price (Kevin et al., 2017; Wijoyo, 2018; Mardi et al., 2019). The greater the size of the company, it will affect management decisions in deciding what funding will be used by the company, then funding decisions can optimize the value of the company (Kusumayanti & Astika, 2016). Companies that have higher growth opportunities have prioritizes in economic goals rather than considering environmental sustainability (Prado-Lorenzo et al., 2009).

In several studies related to the disclosure of greenhouse gas emissions, Faisal et al. (2018) found that profitability, leverage, company size and industry type are significant determinants that can explain how extend the disclosure of greenhouse gas emissions is. Jannah and Muid (2014) found that the extent of disclosure of emissions was significantly affected by profitability, company size and leverage, but was not significantly affected by environmental performance (PROPER ranking).

Research on disclosing greenhouse gas emissions has a direct effect in increasing company value. Li et al. (2015) revealed the effect of carbon emission disclosure on rising company value through market liquidity and the cost of market equity in China. The research of Saka and Tomoki's (2014) about the disclosure of carbon emissions and company value proves that disclosure of carbon emissions affects the value of the company.

Researchers assume that if the disclosure of greenhouse gas emissions by the company is getting better, then the stakeholders will be more satisfied and will provide full support to the company for all its activities which have purpose at increasing performance and achieving profits that in the end ultimately increasing the value of the company.

2. Literature Review and Hypothesis

2.1 Stakeholder Theory

Stakeholder theory explains that companies are not entities that only operate for their own interests but must provide benefits for stakeholders (Magdalena et al., 2018). Thus, the existence of a company is strongly influenced by the support given by stakeholders to the company (Ghozali & Chariri, 2007).

2.2 Legistimacy Theory

Legitimacy theory, a theory used to ensure and maintain partiality for both internal and external stakeholders. Companies need to ensure a match between the existence and objectives of stakeholder expectations (Dewi et al., 2014).

2.3 Effect of Financial Factors on Company Value

Profitability is the company's ability to generate profits. The higher the profitability, the better (Mardi et al., 2019). To attract investors to invest, the management will attempt to incline the profitability of the company. With the boost in profits, it will have a positive impact on increasing stock prices in the capital market, which means the value of the company is in a good position. Mardi et al. (2019), Mery et al. (2017), Nurminda et al. (2017), have proven that profitability affects company value.

H1: Profitability has a positive effect on firm value.

According to Nurminda et al. (2017), the large scale of the company will be responded by an enhance in the company's stock price resulting an escalation in the value of the company. Kusumayanti and Astika (2016), Arifianto and Chabachib (2016), Gill and Obradovich (2012), in their research, state that company size has a significant positive effect on the value of a company.

H2: Firm size has a positive effect on firm value.

Growth (firm growth) can be seen from changes in the company's total assets, because changes in company's assets either in the form of an ups or downs can indicate that a company is developing or not. Research of Rasyid (2015) which states that the growth rate has a significant positive effect on firm value and it is supported by Widayanthi and Sudiartha (2018) who states that growth influences firm value.

H3: Company growth has a positive effect on firm value.

2.4 The Effect of Financial Factors on Company Value by Disclosure of Greenhouse Gas Emissions as Mediation Variables

Company value is influenced by several financial factors, including profitability, firm size, firm growth and disclosure of greenhouse gas emissions. The higher the profitability, the higher the position of company's value in the eyes of investors. The higher the level of profitability, the greater the level of disclosure of environmental activities by the company. In accordance with the results of research by Mardi et al. (2019) that profitability has a positive effect on the amount of social responsibility disclosures that companies make to the community.

The large size of the company shows that the company is developing, to this extent investors will respond positively and the value of the company will be boosted (Sujoko & Soebiantoro, 2007). Large companies tend to disclose social information more broadly (Mardi et al., 2019). Companies that are in a growing period will be more conservative in utilizing their resources. The tendency to use resources is focused on improving operational performance and developing the company's economic sector. Thus, companies that are still in a period of growth tend to prioritize the value of the company to achieve business expansion (Luo et al., 2013).

Stakeholder theory and legitimacy theory, support the disclosure of greenhouse gas emissions because it indicates that the company pays attention to stakeholders and the company's presence is recognized by the public (Pristianingrum, 2017).

H4: Disclosure of greenhouse gas emissions can mediate the influence of financial factors on firm value.

3. Research Methods

The purpose of this study is to examine and analyze financial factors that affect the value of the company and to test and analyze the disclosure of greenhouse gas emissions as a mediation between financial factors to the value of the company in mining companies listed in the Indonesia Stock Exchange which consist of profitability (ROA), firm size (size), and firm growth (growth).

This type of research is a quantitative study using path analysis and multiple linear regression analysis. The population of this study is the Mining Companies listed on the Indonesia Stock Exchange (BEI) in 2014-2018 as many as 41 companies. The sample selection in this study used the purposive sampling method and we found 14 companies with 5 years of observation, with total sample of 70. The data used in this study are secondary data in the form of annual reports and company sustainability reports obtained from the Indonesia Stock Exchange (IDX) through the website www.idx.co.id and the company's website. The linear regression analysis model includes:

$$Y = \alpha + \beta1 \text{ Prof} + \beta2 \text{ Size} + \beta3 \text{ Grow} + e$$

3.1 Definition of Variable Operations

3.1.1 Company Value

The company value used in this study is measured by using Tobin's Q modified by Gaio and Raposo (2011) in the form of Simple Q because of the difficulty in estimating market value of debt and replacement costs. Tobin's Q calculation formula is:

$$Q_{n,t} = \frac{BVA_{n,t} + MVE_{n,t} - BVE_{n,t}}{BVA_{n,t}}$$

Information:

$Q_{n,t}$ = the value of Tobin's Q for company n in year t

$BVA_{n,t}$= book value of total assets for company n in year t

$MVE_{n,t}$ = market value of equity for company n in year t

$BVE_{n,t}$ = book value of equity for company n in year t

3.1.2 Disclosure of Greenhouse Gas Emissions

Parameter items for disclosure of carbon emissions by using an index adopted from the study of Choi et al. (2013). A checklist consists of 18 items that need to be identified. Each item in the disclosure of carbon emissions is assessed by a dichotomous score, 1 if disclosed, and 0 if not disclosed. Then score 1 is added up and divided by the maximum number of items that can be disclosed and then multiplied by 100% (Kelvin et al., 2017).

3.1.3 Probability

Profitability in this study is measured by using ROA (Return on Assets). The measurement of profitability is as follows:

$$ROA = \frac{Net\ Profit}{Total\ Asset}$$

3.1.4 Firm Size

The size of the company in this study is by using Natural Logarithms (ln) with the help of Microsoft Excel.

3.1.5 Firm Growth

The company's growth rate can be measured by using the Asset Growth ratio. The growth calculation is as follows:

$$\text{Growth} = \frac{Total\ Asset_t - Total\ Asset_{t-1}}{Total\ Asset_{\ t-1}}$$

4. Results and Discussion

4.1 Descriptive Analysis

Descriptive statistics in this study are used to see the mean value, minimum value, maximum value, and standard deviation of the dependent variable, mediation variable and independent variable. Descriptive statistical results for each variable can be seen in the Table 1.

The company value variable has an average value of 40,0339 and a standard deviation of 68,2415 with a minimum value of the company value of 0.00 and a maximum value of 243,23. The profitability variable has an average value of 0,2569, a standard deviation of 0,3079 with a minimum value of profitability of 0.00 and a maximum value of 0,94. The company growth variable has an average value of 0,2986 and a standard deviation of 0,3650 with a minimum value of company growth of 0.00 and a maximum value of 0.41. Variable disclosure of greenhouse gas emissions has an average value of 0.4242 and a standard deviation of 0.2806 with a minimum value of disclosure of greenhouse gas emissions of 0.11 and a maximum value of 1,00. This means that the average value is smaller than the standard deviation, thus indicating that the results are less good. Those results revels that the value of the company experienced fluctuations that are not too large. The company size variable has an average value of 19,3986 and a standard deviation of 3,7095 with a minimum value of company size of 11.86 and a maximum value of 29.00. It means that the average value is greater than standard deviation, thus it indicates that the results are quite good. That is because the standard deviation is a reflection of a very high deviation, thus the spread of data shows normal results and does not cause bias.

Table 1 Descriptive Statistics

	Min.	Max.	Average	Std. dev
Firm Value (Tobin's Q)	0.00	243.23	40,0339	68,2415
Profitability (ROA)	0.00	0.94	0.2569	0.3079
Firm Size (Size)	11.86	29.00	19,3986	3,7095
Firm Growth (Growth)	0.00	1.41	0.2986	0.3650
Greenhouse Gas Emissions	0.11	1.00	0.4242	0.2806

Source: SPSS Output, Secondary data processed.

4.2 Statistical Test F (Goodness of Fit)

The results obtained from the F statistical test are the F-test value of 83,565 with a significance level of 0.000. It means that because the significance value is smaller than 0.05, it can be concluded that the regression model can be used in this study where the independent variables namely ROA, Size, and Growth simultaneously affect the Company Value variable.

Table 2 Regression Test I

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.
		B	Beta	
1	(Constant)	-14.181		0.533
	ROA	166,467	0.751	0.000
	Size	0.036	0.002	0.977
	Growth	36,038	0.193	0.012
	R			0.890
	RSquare			0.792
	F Hitung	Sig. F	Adjusted R^2	
	83,565	0.000	0.782	
a. Dependent Variable: Tobin's Q			Tobin's Q = –14.181 + 0.751 ROA + 0.002 Size + 0.193 Growth	

Source: SPSS Output, Secondary data processed.

4.3 Significance Test of Individual Parameters (Statistical t-test)

Statistical t-test is a test used to determine the effect of each independent variable on the dependent variable. T-test results can be seen in Table 4. Based on Table 4 above, it can be seen that the results of the t test, the probability value of the profitability variable is 0.000 < 0.05 and the statistical *t* value 9.368 > 1.997. These results explain that profitability has a positif effect on firm value. The growth variable of the company has t value of

2.578 > 1.997 and a significance value of 0.012 < 0.05. It can be summarized that growth has a positif effect on the variable value of the company. The company size variable has *t* value of 0.029 < 1.997 and a significance value of 0.977 > 0.05. These results explain that company size does not have an influence on firm value.

4.4 Coefficient of Determination (R^2)

Based on the R^2 statistical test on financial factors, the Adjusted R Square value is 0.782 or 78.2% (Table 4). It presents that the independent variables (Profitability (ROA), Firm Size (Size), and Firm Growth (Growth) in this study can explain the dependent variable of the company's value as many as 78.2%. The independent variable in this study can explain the dependent variable as many as 78.2% while the remaining 21.8% is explained by other variables or other factors outside of this research model.

4.5 Path Analysis

Testing data in this study uses the path analysis technique (Path Analysis), where path analysis is an extension of multiple linear regression analysis to test the causality relationship between 2 or more variables. Path analysis in this study produced direct effects p1 (Table 2) and indirect effects p2 (Table 3) and p3 (Table 4). The parameter value of p1 (Table 2) is the value of Standardize Coefficients (Beta) obtained from the regression results from profitability, leverage, company size and company growth to the company value of 0.946 (0.751 ROA + 0.002 Size + 0.193 Growth). The p2 value (Table 3) is a Beta parameter of 0.537 (0.475 ROA + -0.270 Size + 0.193 Growth) in p3 value (Table 4) for the Beta parameter disclosure of environmental performance against the company value of 0.544.

Table 3 The Effect of Financial Factors on Disclosure of Greenhouse Gas Emissions

Model		Standardized Coefficients	Sig.
		Beta	
1	(Constant)		0.000
	ROA	0.475	0.001
	Size	-0.270	0.024
	Growth	0.332	0.012
Dependent Variabel: CDP			

Source: SPSS Output, Secondary data processed.

Table 4 The Effects of Disclosure of Greenhouse Gas Emissions on Firm Value

Model		Standardized Coefficients	Sig.
		Beta	
1	(Constant)		0.205
	CDP	0.544	0.000
Dependent Variabel: Tobin's Q			

Source: SPSS Output, Secondary data processed.

Based on the table above, it is known that the Standardized Coefficient (beta) value of each variable. The first indirect effect of profitability, leverage, company size and company growth on company value through the disclosure of greenhouse gas emissions is as many as 0.537 (p2) × 0.544 (p3) = 0.292.

4.6 Discussion of Research Results

4.6.1 Effect of Financial Factors on Company Value

Based on the results of the regression analysis above, it shows the effect of profitability on firm value. H1 is accepted, it can be seen from the results of the analysis which presents that, with the increasing of profitability, the better the value of the company in the eyes of investors in accordance with the perspective of signal theory, where the company gives a positive signal with high profitability which reflects good performance.The results of this study are consistent with research of Mardi et. al. (2019), Mery et al. (2017), and Nurminda et al. (2017).

Based on the results of the above regression analysis shows that there is no influence between firm size and firm value. H2 rejected, the results of this study explain that investors do not consider the size of the company at the time of buying shares (Pristianingrum, 2017). This is in line with the study of Suwardika and Mustanta (2017) stating that the small size of the company has no impact on the value of the company supported by the research of Mardi et al. (2019). The results of the analysis demonstrate that the size of the company is not able to influence the value of the company.

Based on the results of the regression analysis above, it shows the effect of firm growth on firm value. H3 is accepted, this can be seen from the results of the analysis which demonstrates that the company's growth in this study cannot produce a higher rate of return on the investment that has been made. The results of this study are in line with the research of Rasyid (2015) which states that the level of growth has a positive effect on the value of companies in which also supported by Widayanthi and Sudiartha's (2018) research.

Based on the results of the regression analysis above, it demonstrates the influence of financial factors on firm value which are obtained from the statistical F test with a significance value of $0.000 < 0.05$ and F value of $83.565 >$ F table of 2.513. This means that because the significance value is smaller than $\alpha = 0.05$, accordingly these results explain that the regression model can be used in this study where financial independent variables, namely profitability, firm size, and firm growth simultaneously have a positive and significant effect on firm value variables.

4.6.2 The Effect of Financial Factors on Company Value through Disclosure of Greenhouse Gas Emissions

According to the results of the regression analysis above, it shows that there is positive effect of profitability on the disclosure of greenhouse gas emissions, can be seen from the value $\alpha = 0.001 < 0.05$. Companies with a low level of profitability are not in the public spotlight, in such manner they do not require disclosure of more carbon emissions information. The study results in line with the study Kevin et al. (2017), Suhardi and Agus (2015). Based on the results of the regression analysis above, it demonstrates the influence of company size on the disclosure of greenhouse gas emissions, can be seen from the value $\alpha = 0.024 < 0.05$. It supports the theory of legitimacy that large companies have greater pressures from environmental problems so they tend to incline responses to the environment. The study results in line with the study Majid and Ghozali (2015), Janah and Muid (2014). The company's growth variable has positive effect on disclosure of greenhouse gas emissions, can be seen from the value $\alpha = 0.012 < 0.05$. The study results in line with the study Luo et al. (2013). The results of this study proved that the increase or decrease in profits would affect the disclosure of greenhouse gas emissions.

Disclosure of greenhouse gas emissions has a positive effect on company value in mining companies listed on the Indonesia Stock Exchange in the 2014-2018 period, with the value $\alpha = 0.000 < 0.05$. The results of this research are consistent with the research conducted by Mardi et al. (2019) states that the disclosure of environmental performance is positively committed to the value of the company. Companies that reveal carbon emissions information have a positive image in the community because the company pays attention to and considers the costs and costs received by the company.

The greater disclosure of greenhouse gas emissions implemented by the company affect the value of the company. Mediation variables in this study are considered capable to mediate the relationship between financial factors on firm value. H4 is accepted, this means that financial factors can increase the value of the company supported by the disclosure of greenhouse gas emissions activities by the company.

5 Conclusions and Limitations of the Research

In this research shows that high profitability will attract investors to invest in their capital in order to increase the value of the company. The high level of company growth affects the value of an enterprise. However, this study failed to provide empirical evidence that the company size has a positive influence on the value of the company. This research provides evidence that profitability, company size and company growth have positive effect on greenhouse gas emission editors and greenhouse gas emission influencers positively impacting company value. Thus, the results of this study indicate that the intervening variable, which is the disclosure of greenhouse gas emissions, can this means that financial factors can increase the value of the company supported by the greenhouse gas emissions disclosure activities undertaken by the company.

Researchers are aware of the limitations in this study related to the disclosure of greenhouse gas emissions by using the Kyito Protocol which was ratified and updated in 2014. It is because of the activity of disclosing greenhouse gas emissions which is still voluntary. Therefore, the samples in this study are few and have not been able to describe overall, especially the disclosure of greenhouse gas emissions to the value of the company. Suggestion for further researchers is to enhance the company's population.

References

Akhiroh Titik dan Kriswanto (2016). "The determinant of carbon emission disclosures", *Accounting Analysis Journal*, Vol. 5, No. 4, available online at: http://journal.unnes.ac.id/sju/index.php/aaj.

Arifianto Muhammad and Chabachib Mochammad (2016). "Analisis faktor-faktor yang mempengaruhi nilai perusahaan (Studi Kasus Pada Prusahaan Yang Terdaftar Pada Indeks LQ-45 Periode 2011-2014) ", *Diponogoro Journal of Management*, Vol. 5, No.1, Tahun 2016, Hal 1-12, available online at: http://ejournal-s1,.undip.ac.id/index.php/dbr.

Choi B. B., Lee D. and Psaros J. (2013). "An analysis of Australian company carbon emission disclosures", *Pacific Accounting Review*, Vol. 25, No. 1, pp. 58-79.

Dewi Dian Masita, Made Sudarma, Djumahir and Eko Ganis Sukoharsono (2014). "CSR effect on market and financial accoounting", *El-Dinar*, Vol. 1, No. 2.

Faisal Erika D. A, Tarmizi A., Haryanto and Wahyu M. (2018). "The content and determinants of greenhouse gas emission disclosure: Evidence from Indonesian companies", in: *Corporate Social Responsibility and Enviromental Management*, Corp Soc Resp Env Ma, pp. 1-10.

Gaio C. and Raposo C. (2010). "Earnings quality and firm valuation: International evidence", *Accounting & Finance*, Vol. 51, No. 2, pp. 467-499.

Ghozali Imam and Chariri Anis (2007). *Teori Akuntansi*, Badan Penerbit Universitas Diponegoro. Semarang.

Gill Amarjit and John D. Obradovich. (2012). "The impact of corporate governance and financial leverage on the value of american firms", *International Research Journal of Finance and Economics*, No. 91.

Irwhantoko and Basuki (2016). "Carbon emission disclosure: Studi pada perusahaan manufaktur Indonesia", *Jurnal Akuntansi dan Keuangan*, Vol. 18, No. 2, pp. 92-104.

Jannah Richatul and Muid Dul (2014). "Analisis faktor-faktor yang mempengaruhi carbon emission disclosure pada perusahaan di Indonesia (Studi empiris pada perusahaan yang terdaftar di bursa efek indonesia periode 2010-2012)", *Diponegoro Journal of Accounting*, Vol. 3, No. 2.

Kelvin, Chen. F. E. Daromes and Suwandi Ng (2017). "Pengungkapan Emisi Karbon Sebagai Mekanisme Peningkatan Kinerja Untuk Menciptakan Nilai Perusahaan", *Dinamika Akuntansi, Keuangan dan Perbankan*, Vol. 6, No. 1, pp. 1-18.

Kusumayanti, Ni Ketut Ratna and Astika Ida Bagus Putra (2016). "Corporate social responsibility sebagi pemediasi pengaruh ukuran perusahaan, profitabilitas, dan leverage pada nilai perusahaan", *E-Journal Akuntansi Universitas Udayana*, Vol. 15, No. 1, pp. 549-583.

Li L., Yang Y. and Tang D. (2015). "Carbon information disclosure of enterprises and their value creation through market liquidity and cost of equity capital", *Journal of Industrial Engineering and Management*, Vol. 8, No. 1.

Luo L., Tang Q. and Lan Y. C. (2013). "Comparison of propensity for carbon disclosure between developing and developed countries: A resource constraint perspective", *Accounting Research Journal*, Vol. 26, No. 1, pp. 6-34.

Magdalena, Eko Ganis Sukoharsono and Roekhudin (2018). "Reflection of corporate social responsibility implementation: Community engagement in sustainability aspects", *International Journal of Multicultural and Multireligious Understanding*, Vol. 5, No. 5.

Majid R. A. and Ghozali I. (2015). "Analisis faktor-faktor yang mempengaruhi pengungkapan emisi gas rumah kaca pada perusahaan di indonesia", *Diponegoro Journal of Accounting*, Vol. 4, No. 4, pp. 1-11.

Mardi. Hermanto and Widiastuty Erna (2019). "Faktor-Faktor Yang Mempengaruhi Nilai Perusahaan Melalui Corporate Social Responsibility (CSR)", *E-Journal Akuntansi Universitas Udayana*, Vol. 26, No. 2, pp. 1518-1544, doi: https://doi.org/10.24843/EJA.2019.v26.i02.p25.

Mery Kiki N., Zulbahridar and Pipin Kurnia (2017). "Pengaruh likuiditas, leverage dan profitabilitas terhadap nilai perusahaan dengan kebijakan dividen sebagai variabel moderasi pada perusahaan pertambangan yang terdaftar di bursa efek Indonesia tahun 2011-2014", *Jurnal Online Mahasiswa*, Vol. 4, No. 1.

Menteri Lingkungan Hidup Republik Indonesia (2013). *Peraturan Menteri Lingkungan Hidup Nomor 06 Tahun 2013 Tentang Program Penilaian Kinerja Perusahaan dalam Pengelolaan Lingkungan Hidup*, Jakarta: Departemen Lingkungan Hidup.

Nurminda A., Deannes I. and Annisa N. (2017). "Pengaruh profitabilitas, leverage, dan ukuran perusahaan terhadap nilai perusahaan (studi pada perusahaan manufaktur sub sektor barang dan konsumsi yang terdaftar di bursa efek Indonesia periode 2012-2015)", *E-Proceeding of Management*, Vol. 4, No. 1.

Prado-Lorenzo J. M., Rodríguez-Domínguez L., Gallego-Álvarez I. and García-Sánchez I. M. (2009). "Factors influencing the disclosure of greenhouse gas emissions in companies world-wide", *Management Decision*, Vol. 47, No. 7, pp. 1133-1157.

Pristianingrum Nurfina (2017). "Pengaruh ukuran, profitabilitas, dan pengukuran csr terhadap nilai perusahaan manufaktur yang terdaftar di bursa efek Indonesia", *Prosiding Seminar Nasional dan Call For Paper Ekonomi dan Bisnis* (SNAPER-EBIS 2017) hal 353-364.

Rasyid Abdul (2015). "Effects of ownership structure, capital structure, profitability and company's growth towards firm value", *International Journal of Business and Management Invention*, Vol. 4, No. 4, pp. 25-31.

Republik Indonesia (1994). "Undang-undang no. 17 Tahun 2004 tentang Pengesahan Kyoto protocol to The United Nations framework convention on climate change (Protokol Kyoto atas konvensi kerangka kerja perserikatan bangsa-bangsa tentang perubahan iklim)", *Lembaran Negara RI Tahun 2004*, No. 72. Sekretariat Negara. Jakarta.

Saka Chika and Tomoki Oshika (2014). "Disclosure effects, carbon emissions and corporate value", *Management and Policy Journal*, Vol. 5, No. 1.

Suhardi Robby Priyambada and Agus Purwanto (2015). "Analisis faktor-faktor yang mempengaruhi pengungkapan emisi karbon di Indonesia (Studi pada perusahaan yang terdaftar di bursa efek Indonesia periode 2010-2013)", *Diponogoro Jurnal of Accounting*, Vol. 4, No. 2, pp. 1-13.

Sujoko and Soebiantoro Ugy (2007). "Pengaruh struktur kepemilikan saham, *leverage*, faktor intern dan faktor ekstern terhadap nilai perusahaan (Studi empirik pada perusahaan manufaktur dan non manufaktur di Bursa Efek Jakarta)", *Jurnal Manajemen dan Kewirausahaan*, Vol. 9, No.1, pp. 41-48.

Swardika Nyoman Agus and Mustanda I Ketut (2017). "Pengaruh leveragge,ukuran perusahaan, pertumbuhan perusahaan dan profitabilitas terhadap nilai perusahaan properti", *E-Journal Manajemen Unud*, Vol. 6, No. 3, pp. 1248-1277.

Widayanthi, Ni Made Dewi Gita and Gede Merta Sudiartha (2018). "Pengaruh tingkat pertumbuhan terhadap nilai perusahaandengan struktur modal sebagai variabel moderasi", *E-Jurnal Manajemen Unud*, Vol. 7, No. 4, pp. 2196-2225.

Wijoyo Amin (2018). "Faktor-faktor yang mempengaruhi nilai perusahaan pada perusahaan property dan real estate di bursa efek Indonesia", *Jurnal Ekonomi*, Vol. XXIII, No. 1.