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Leverage, Profitability and Firm Value: The Moderating Effect of Dividend Policy

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Abstract

Most investors experience failure in their investments. So it is necessary to provide positive or negative signals to investors to obtain more accurate information regarding the risks they will face and the percentage of profits they will obtain. If the company can provide positive signals to investors, it will create a sense of satisfaction and trust in the company so that the value of the company will increase. This research uses quantitative methods. This research aims to ascertain whether company value is influenced by leverage and profitability by introducing dividend policy as a moderating factor. The population used is the LQ45 Company listed on the BEI in 2018-2022. The Purposive Sampling Method is a sample selection method in this research using certain criteria. This research data analysis approach uses SPSS 25 software for moderation testing and multiple linear regression analysis. Based on the research findings, corporate value can be affected by profitability and leverage, and it can be generally moderated by dividend policy.

Keywords: Leverage, Profitability, Dividend Policy, Firm Value

1. Introduction

Most investors experience failure in investing. This could happen as a result of investors' ignorance of clear investing information and their lack of awareness of illicit investments. So it is necessary to minimize risks by providing clear and accurate information from the company to investors to provide signals regarding the investment that will be made. (Anthony, 2015)

A publicly traded company's shares should have a high resale value to attract investors and help them decide whether to invest in the business. If the price of a share increases, then the distribution of profits to investors also increases. Investors will receive returns in the form of distributions and investments made if the company's financial performance is good. so this shows that the company has a higher company value (Goh et al., 2024).

Creditors can also “hold” financing after a breach of the agreement to extract surplus from the borrower through amendment fees and increased interest charges. Conversely, other hypotheses suggest creditor action might boost a company's value, so benefiting shareholders through value limitation, reducing managerial behavior, and influencing turnaround after poor performance (Nini, Smith, and Sufi, 2014) and (DeAngelo & Masulis, 1980) stated that a balance of profits and costs will produce optimal leverage.

Company value is determined by profitability, and profitable businesses are motivated to obtain 1SO 14001 certification, which is a sign of environmental efficiency that these environmentally conscious investors require (Nosakhare Peter Osazuwa Ayoib Che-Ahmad, 2016).

2. Literature Review

2.1 Signaling Theory

(Brigham & Houston, 2014) Signals are how company management informs investors of management's assessment of the company's prospects. Reducing the information gap between investors and companies is the goal of this signal transmission. This study applies signal theory to explain how independent variables influence the dependent variable in the presence of moderating variables.

2.2 Firm Value

Company value is an indicator used to assess how successful the company is as a whole. This shows how important a business is about resources, income, room for growth, and other relevant aspects (Susila et al., 2019). (Modigliani and Miller, 1958) proposed the theory of capital structure irrelevance, which states that assuming perfect capital markets, the choice of bonds or shares makes no difference to the value of the company; in other words, capital structure does not influence company value. In perfect capital markets, a firm's worth is decided by its ability to produce value, independent of whether the capital used comes from internal or external sources, and there are no corporate taxes or transaction costs where information asymmetry is not an issue.

2.3 Dividend Policy

A dividend policy is a tool used by companies to decide how much profit will be distributed to investors as new capital to maintain the business. The dividend policy should represent the company's method for managing profit distribution to shareholders (Wicaksono et al., 2020).

When dividends are paid to investors as a sign of strong business success or when investors have a choice of certain dividends, this can have an impact on company value (Istiono & Santoso, 2021). It can be concluded that dividend policy has an impact on business share prices in some of these scenarios.

2.4 Leverage

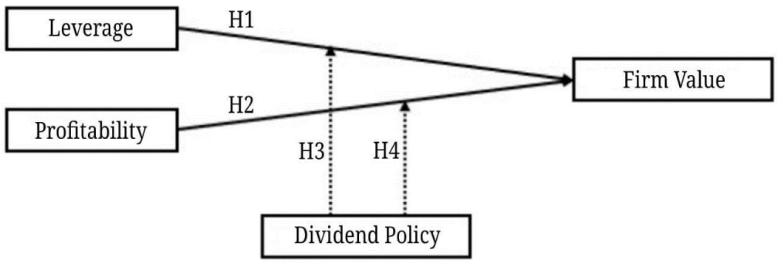
Leverage is a measurement to assess the level of capacity of a company in using its obligations in developing its capital. This ratio helps determine how dependent a company is on commitments to provide funding for its operations (Salma et al., 2020). This can provide an overview of the financial risks faced by the company due to the use of liabilities.

Companies can use capital from internal and external sources to finance their operations. While external funds may come from the issuance of bonds and equity, internal funds may come from depreciation and profit retention (Tanjung et al., 2021). Thus, the company's share price increases with the amount of liabilities. However, this will reduce the value of the company due to the additional liabilities, even though the benefits of using fewer liabilities will outweigh the costs.

2.5 Profitability

The ability of a business to make money from operations within a certain period is known as profitability (Dwiastuti et al., 2019). In financial analysis, this indicator is very important to determine the level of efficiency and financial performance of the company. In addition, the indicators mentioned above serve to evaluate a company's net profit concerning other measures, including earnings, assets, equity, and investments (Astakoni et al., 2020).

The durability and success rate of a business in generating more profit than it spends is another indicator of profitability. Increased profitability makes it possible to attract more investors. As a result, the more investors who join, the greater the interest in shares, which can increase the price. Thus, the value of the company will be maximized by the increase in share prices.



Future 1. Conceptual Framework
Source: Data Processed by author (2023)

2.6 Hypothesis

According to (Chen and Chen, 2011), (Anisa et al., 2021) and (Goh et al., 2024), company value is significantly negatively influenced by leverage. By signal theory, if the level of liabilities increases, the company's risk also increases. This is a negative signal for investors before making a financial investment in the company.

H1: Effect of Leverage on Company Value

According to (Chen and Chen, 2011), (Sari, 2020) and (Jihadi et al., 2021), company value is significantly positively influenced by profitability. By signal theory, if the resulting level of profitability ratio increases, it indicates that the company's performance and prospects have good long-term results. Investing in businesses that offer high returns on investment is driven by these signals.

H2: Effect of Profitability on Company Value

According to (Goh et al., 2024) and (Maduma & Naibaho, 2022), A dividend policy is unable to mitigate the effect of leverage on the value of the company. Based on signal theory, dividend policy must provide investors with strong information to make investments based on the company's dividend management policy. Therefore, to maintain cash flow in the future, companies must also increase the use of liabilities.

H3: The Role of Dividend Policy Moderates the Effect of Leverage on Firm Value

According to (Goh et al., 2024), dividend policy can reduce the impact of profitability on company value, while (Nurhayati et al., 2020) states the opposite. Based on signal theory, investors are more interested in positive signals from the company, the result of an increase in dividend payments due to increased company profits will then send a positive signal to investors.

H4: The role of dividend policy in moderating the influence of profitability on company value

3. Materials and Methods

3.1 Materials

This research is quantitative, that is, it is possible to determine whether the presence of a moderating variable can increase or reduce the influence of the variable Samples are selected using a sampling technique that involves a process of eliminating samples that do not meet previously determined standards. Obtaining techniques by utilizing secondary data from company annual reports and financial reports.

Table 1. Purposive Sampling

Information	Total Sample
1. LQ45 index companies listed on the IDX for the 2018-2022 period.	45
2. Companies that are not listed on the IDX for the 2018-2022 period.	2
3. Companies that do not use the Rupiah currency.	11
4. Companies that do not distribute dividends for the 2018-2022 period.	9
5. Companies that do not make a profit for the 2018-2022 period.	1
6. Total company sample	22
Total research sample (n research period)	110

Source: Index LQ45 (2023)

3.2 Methods

The study uses double regression analysis and moderation tests using SPSS 25 software. Before evaluating the hypothesis, the classical assumption tests are multicollinearity tests, normality tests, autocorrelation tests, and heterocadastasis tests.

3.2.1. Operational Definition and Measurement of Variables

Table 2. Operational Variables

Variables	Measurements	References
Leverage (X1)	DER = Total Liabilities / Total Equity	(Abdullah et al., 2022)
Profitability (X2)	ROE = Earning After Tax / Total Equity	(Ermaini et al., 2021)
Firm Value (Y)	PBV = Stock Price / Book Value Per Share	(Tarmadi et al., 2019)
Dividend Policy (M)	DPR = Dividend Per Share / Earning Per Share	(Dragotă et al., 2019)

Source: Data Processed by author (2023)

3.2.2 MRA Equation Model

Each variable in the model is analyzed using the Moderated Regression Analysis (MRA) technique. Here is the MRA equation model:

$$Firm\,Value = a + b_1\,DER + b_2\,ROE + b_3\,DER \times DPR + b_4\,ROE \times DPR + \varepsilon$$

4. Results and Discussion

4.1. Results

4.1.1. Descriptive Statistics Test

Table 3. Descriptive Statistics Test

	N	Minimum	Maximum	Mean	Std. Deviation
Firm Value	110	0.63	60.67	5.04	10.00
Leverage	110	0.15	6.91	1.94	2.02
Profitability	110	0.01	1.45	0.21	0.25
Dividend Policy	110	0.03	2.07	0.54	0.35
Valid N (listwise)	110				

Source: Data processed with SPSS 25 (2024)

- The company value variable (PBV) shows the smallest and largest values of 0.63 and 60.67. Meanwhile, the average value and standard deviation are 5.04 and 10.00
- The Leverage (DER) variable shows the smallest and largest values of 0.15 and 6.91. Meanwhile, the average value and standard deviation are 1.94 and 2.02
- The Profitability Variable (ROE) shows the smallest and largest values of 0.01 and 1.45. Meanwhile, the average value and standard deviation are 0.21 and 0.25
- The Dividend Policy (DPR) variable shows the smallest and largest values of 0.03 and 2.07. Meanwhile, the average value and standard deviation are 0.54 and 0.35.

4.1.2. Classical Assumption Tests

Multicollinearity Test

Table 4. Multicollinearity Test

Model	Collinearity Statistik	
	tolerance	VIF
DER	0.961	1.040
ROE	0.974	1.027
DPR	0.955	1.047

Source: Data processed with SPSS 25 (2024)

The data shows that there are no signs of multicollinearity if tolerance > 0.100 and VIF < 10.00. The tolerance level (> 0.100) and VIF (< 10.00) of these results indicate that there is no multicollinearity in the data.

Normality test

Table 5. Normality Test

N	110
Asymp. Sig. (2-tailed)	0.200[c.d]

Source: Data processed with SPSS 25 (2024)

If the value of Asymp. Sig. (2-tailed) > 0.05, it is concluded that the data is normally distributed. Asymp value. Sig. (2-tailed) shows a value of 0.200 < 0.05. So it can be concluded that the data is normally distributed.

Autocorrelation Test (Run Test)

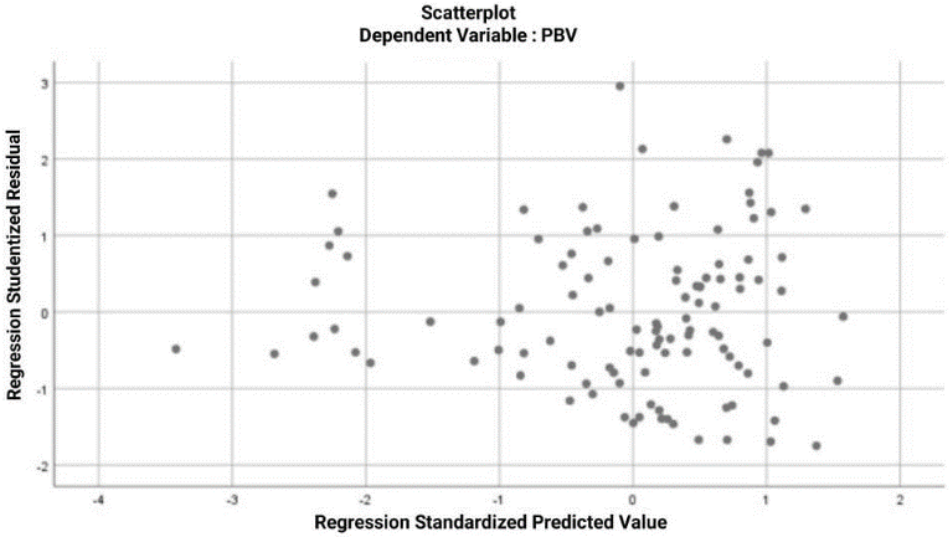
Table 6. Run Test

	Unstandardized Residual
Asymp. Sig. (2-tailed)	.630

Source: Data processed with SPSS 25 (2024)

If the value of Asymp. Sig. (2-tailed) > 0.05, it is concluded that the data does not have autocorrelation symptoms. Asymp value. Sig. (2-tailed) shows a value of 0.630 (< 0.05), so it can be concluded that the data does not have autocorrelation symptoms.

Heteroscedasticity Test (Scatterplot)



Fiture 2. Scatterplot graph
Source: Data processed with SPSS 25 (2024)

The results obtained show that there are points that are distributed randomly, no pattern is formed, and the distribution is in the coefficients of the variables X and Y. So it is concluded that the data does not have heteroscedasticity. Therefore, it is appropriate to use the multiple linear regression estimation results for additional analysis and interpretation.

4.1.3. Analysis of Multiple Linear Test

Table 7. Multiple Linear Analysis Test

Unstandardized Coefficients			
Model		**B**	**Std. Error**
1	(Constant)	2.818	.179
	DER	-.072	.029
	ROE	.901	.085

Source: Data processed with SPSS 25 (2024)

- It is assumed that if the independent variable is zero or stable, then the company value (PBV) is 2.818.
- The leverage coefficient is -0.072, which means that, under the assumption that all other independent variables are stable or equal to zero, the value of the firm decreases by -0.072 for each unit increase in variable leverage.
- The profitability coefficient is 0.901, which means, assuming all other independent variables are stable, the value of a company will grow by 0.901 for every unit profitability variable increases.

4.1.4. Hypothesis Test

Coefficient of Determination Test

Table 8. Coefficient of Determination Test

Model	R	R Square	Adjusted R Square
1	.723	.522	.513

Source: Data processed with SPSS 25 (2024)

There are fluctuations between the profitability and leverage variables, as shown by the determination coefficient value of 0.513, or 51.3%, in the table above. The fluctuation of this firm value variable can be considered as 51.3%, with additional factors outside the model influencing 48.7%.

Partial T Test and MRA

Table 9. T Test

Model		Unstandardized Coefficients B	Std. Error	T	sig
1	(Constant)	2.818	0.179	15.736	0.000
	DER	-0.072	0.029	-2.448	0.016
	ROE	0.901	0.085	10.629	0.000

Table 10. MRA Test

Model		Unstandardized Coefficients B	Std. Error	T	sig
1	(Constant)	3.254	0.192	16.954	0.000
	DER	-0.120	0.040	-3.010	0.003
	ROE	0.924	0.081	11.405	0.000
	DPR	1.060	0.282	3.758	0.000
	DER*DPR	-0.072	0.035	-2.083	0.040
	ROE*DPR	0.284	0.117	2.427	0.017

Source: Data processed with SPSS 25 (2024)

- Hypothesis Testing 1:
  Leverage has a calculated t value of -2.448 < 1.98238 and a significance value of 0.016 < 0.05. So leverage partially has a significant negative effect on company value.
- Hypothesis Testing 2:
  Profitability has a calculated t value of 10.629 > 1.98238 and a significance of 0.000 < 0.05. So partial profitability has a significant positive effect on company value.
- Hypothesis Testing 3:
  The interaction variable between leverage and dividend policy has a calculated t of -2.083 < 1.98238 and a significance value of 0.040 < 0.05. So dividend policy is significantly able to moderate leverage on company value.
- Hypothesis Testing 4
  The interaction variable between profitability and dividend policy has a calculated t of 2.427 > 1.98238 and a significance value of 0.017 < 0.05. So dividend policy is significantly able to moderate profitability on company value

4.2. Discussion and Implications

4.2.1. Leverage Has a Significant Negative Influence on Company Value

The results of the research data analysis show that the significance value is 0.016 < 0.05. So the first hypothesis is accepted. This research is in line with research by (Chen and Chen, 2011), (Anisa, 2022), and (Goh et al., 2024) which states that leverage has a significant negative effect on company value. It can be concluded that increasing debt can reduce company value. This is to signal the theory that the higher the level of debt in a company, the greater the risk it bears. This is a negative signal for investors to invest in this company.

4.2.2. Profitability has a significant positive influence on company value

The results of this research data analysis show that the significance value is 0.000 < 0.05. So the second hypothesis is accepted. This research is in line with research by (Chen and Chen, 2011), (Sari, 2020), and (Jihadi et al., 2021) which states that profitability has a significant positive influence on company value. It can be concluded that increasing profitability can increase company value. This condition shows that the company's earnings are taken into account when determining its worth. If the corporation generates a high profit, this is according to the bottom signal idea. then it will encourage investors to put money into particular businesses. (Chen and Chen, 2011),

believe that if a company makes a profit, then the company can finance new projects from internal cash flow rather than having to finance new projects from external cash flow. They prove that high profitability can increase company value.

4.2.3. The effect of Leverage on Company Value can be moderated by Dividend Policy

The research results show a significance value of 0.040 <0.05. So the third hypothesis is accepted. According to (Goh et al., 2024) and (Maduma & Naibaho, 2022) Dividend policy cannot reduce the impact of leverage on company value. This research contradicts their findings. We conclude that the existence of a dividend policy can influence the relationship between leverage and firm value. This is consistent with signal theory, which states that dividend policy can signal investors to be more considerate when deciding which investments to make considering the dividend management policy implemented by the company.

4.2.4. The effect of Profitability on Company Value can be moderated by Dividend Policy

The results of this research data analysis show that the significance value is 0.017 < 0.05. So the fourth hypothesis is accepted. This research is in line with (Goh et al., 2024), stating that the influence of profitability on company value can be moderated by dividend policy, but is not in line with research (Nurhayati et al., 2020) which states the opposite. It can be concluded that the existence of a dividend policy can have an impact on the relationship between profitability and company value. This is consistent with signaling theory, which describes how strong corporate profits can signal to investors that they will also produce large dividend distributions.

5. Conclusion

In LQ45 companies listed on the BEI in 2018–2022, this study illustrates the function of dividend policy as a moderating variable on leverage and profitability on company value. The findings of the research obtained indicate that: a) Leverage has a significant negative effect on company value; b) Profitability has a significant positive effect on company value; c) Dividend Policy can Moderate Leverage on Company Value; and d) Dividend Policy can Moderate Profitability on Company Value

References

Abdullah, Rachma, N., & Marlinah, A. (2022). Pengaruh Kinerja Keuangan Terhadap Harga Saham Perusahaan Pertambangan Yang Terdaftar Di Bursa Efek Indonesia. *Nobel Management Review*, *3*(4), 579–593. https://doi.org/10.37476/nmar.v3i4.3486

Anisa, N., Hermuningsih, S., & Maulida, A. (2021). Pengaruh Ukuran Perusahaan, Leverage, Kebijakan Dividen dan Profitabilitas terhadap Nilai Perusahaan Studi pada Perusahaan Manufaktur Sektor Food And Beverages. *Al-Kharaj : Jurnal Ekonomi, Keuangan & Bisnis Syariah*, *4*(3), 626–640. https://doi.org/10.47467/alkharaj.v4i3.708

Anthony, R. (2015). *Money Master The Game*. Phoenix Publishing Project.

Astakoni, I. M. P., Wardita, I. W., & Ni Putu Nursiani. (2020). Ukuran Perusahaan Dan Profitabilitas Sebagai Determinan Nilai Perusahaan Manufaktur Dengan Struktur Modal Sebagai Variabel Mediasi. *KRISNA: Kumpulan Riset Akuntansi*, *12*(1), 190–196.

Brigham, E. F., & Houston, J. F. (2014). *Dasar-Dasar Manajemen Keuangan* (Edisi 11). Salemba Empat Jakarta.

Chen, L.-J., & Chen, S.-Y. (2011). The influence of profitability on firm value with capital structure as the mediator and firm size and industry as moderators. Investment Management and Financial Innovations, 8(3), 121-129.

DeAngelo, H. & Masulis, R.W. (1980). Optimal Capital Structure under Corporate and personal

Dragotă, V., Daniel, T. P., & Hanaan, Y. (2019). Dividend Payout Ratio Follows a Tweedie Distribution: International Evidence. *Economics*, *13*(1), 1–34. https://doi.org/10.5018/economics-ejournal.ja.2019-45

Dwiastuti, Shafarina, D., & Dillak, V. J. (2019). Pengaruh Ukuran Perusahaan, Kebijakan Hutang, Dan Profitabilitas Terhadap Nilai Perusahaan. *ASET (Akuntansi Riset)*, *11*(1), 137–46. https://doi.org/10.17509/jaset.v11i1.16841

Ermaini, S. A. I., Sari, M. I., & Hafizdi, A, H. (2021). *No Titl*. Samudera Biru.

Goh, T. S., Simanjuntak, A., & Henry. (2024). Pengaruh Profitabilitas dan Leverage terhadap Nilai Perusahaan dengan Kebijakan Dividen sebagai Variabel Moderasi pada Perusahaan Konstruksi yang Terdaftar di Bursa Efek Indonesia. *Jurnal Ekonomi & Ekonomi Syariah*, *7*(1). https://doi.org/https://doi.org/ 10.36778/jesya.v7i1.1379

Istiono, & Santoso, R. (2021). "Kebijakan Dividen Dan Nilai Perusahaan (Studi Kasus Di Indonesia). *Media Mahardhika*, *19*(2), 372–379. https://doi.org/10.29062/mahardika.v19i2.261

Jihadi, M., Vilantika, E., Hashemi, S. M., Arifin, Z., Bachtiar, Y., & Sholichah, F. (2021). The Effect of Liquidity, Leverage, and Profitability on Firm Value: Empirical Evidence from Indonesia. *Journal of Asian Finance, Economics and Business*, *8*(3), 423–431. https://doi.org/10.13106/jafeb.2021.vol8.no3.0423

Maduma, T., & Naibaho, E. A. B. (2022). Pengaruh Tax Avoidance, Leverage dan Profitabilitas Terhadap Nilai Perusahaan dengan Kebijakan Dividen sebagai Variabel Moderasi. *Akuntansi Dan Pajak*, *23*(1).

Modigliani, F. & Miller M.H. (1958). The cost of capital, corporation finance and the theory of investment, American Economic, 48 (3), pp. 261-297.

Nini, G., D. Smith, and A. Sufi. 2012. The Review of Financial Studies / v 25 n 6

Nurhayati, I., Kartika, A., & Agustin, I. (2020). Pengaruh Struktur Modal Dan Profitabilitas Terhadap Nilai Perusahaan Dengan Kebijakan Dividen Sebagai Variabel Moderasi Pada Perusahaan Manufaktur Tahun 2016-2018. *Dinamika Akuntansi, Keuangan Dan Perbankan*, *9*(2), 133–144.

Salma, Nur, & Riska, T. J. (2020). Pengaruh Rasio Leverage, Likuiditas, Profitabilitas Terhadap Kualitas Laba Perusahaan Makanan Minuman BEI. *Competitive*, *14*(2), 107–115. https://doi.org/10.36618/competitive.v14i2.622

Sari, I. A. G. D. M. (2020). Profitability and liquidity on firm value and capital structure as intervening variable. *International Research Journal of Management, IT and Social Sciences*, *7*(1), 116–127. https://doi.org/10.21744/irjmis.v7n1.828

Susila, Made Pradnya, & Gine Das Prena. (2019). Pengaruh Keputusan Pendanaan, Kebijakan Deviden, Profitabilitas Dan Corporate Social Responsibility Terhadap Nilai Perusahaan. *Jurnal Akuntansi : Kajian Ilmiah Akuntansi (JAK)*, *6*(1), 80. https://doi.org/10.30656/jak.v6i1.941

Tanjung, Y. S., Widyastuti, T., & Rachbini, W. (2021). Pengaruh Struktur Modal, Likuiditas, Kebijakan Dividen dan Kebijakan Hutang Terhadap Nilai Perusahaan dengan Profitabilitas sebagai Variabel Moderating pada Jakarta Islamic Index Periode 2016-2020. *Garuda*, *1*(4), 85–100.

Tarmadi, P., Kezia, A., & Liongicasia, M. (2019). Pengaruh Gcg, Csr, Profitabilitas Dan Ukuran Perusahaan Terhadap Nilai Perusahaan. *Wahana Akuntansi*, *14*(2), 156–169. https://doi.org/10.21009/wahana.14024

Wicaksono, Ready, & Mispiyanti. (2020). "Analisis Pengaruh Profitabilitas Dan Kebijakan Dividen Terhadap Nilai Perusahaan Dengan Struktur Modal Sebagai Variabel Mediasi. *Riset Dan Jurnal Akuntansi*, *4*(2). https://doi.org/10.33395/owner.v4n2.237