



Investigation of Firm Value in Transportation Sector: The Impact of Covid 19 in Indonesia

Lilik Andriyani, Veni Soraya Dewi¹, and Catur Dewi Larasati

Department of Economics and Business, Universitas Muhammadiyah Magelang, Magelang,
Indonesia
veni@unimma.ac.id

Abstract. This study aims to empirically examine the effect of investment decisions, funding decisions, dividend policy, profitability, and interest rate on firm value. The independent variables on this have a look at are investment decisions, funding decisions, dividend policy, profitability, and interest rates. The dependent variable in this look at is firm value. The pattern used in this observe were transportation zone businesses indexed at the Indonesia stock change for the length 2018 to 2020. The range of samples on this examine become 36 of the 12 companies. Determination of the sample acquired by way of the use of purposive sampling. hypothesis trying out become performed the use of regression evaluation. Hypothesis testing was carried out using regression analysis. The results of this study indicate that Investment Decisions, Funding Decisions, Dividend Policy, Profitability, and Interest Rates have a positive effect on Firm Value. Profitability no longer established, and interest rate has a negative. This study implies that not all businesses may have an excessive price even though different elements increase, including profitability. In transportation agencies, traders are greater concerned with how the business enterprise can prosper its shareholders in order that the price of return is faster.

Keywords: Investment Decisions, Funding Decisions, Dividend Policy, Profitability, and Interest Rates.

1 Introduction

In March 2020, the WHO (World Health Organization) declared a pandemic of the COVID 19 virus, as well as a new challenge for the world economy. During the COVID-19 pandemic, the company's value continued to decline. In the last three years, 2018-2020, the economic share of transportation sector companies has decreased. Prior to the COVID-19 pandemic in Indonesia, in 2019, PT Garuda Indonesia experienced a surge in net profit. The soaring net profit is in line with the increase in Garuda's revenue, which in the third quarter of 2019 posted US\$3.5 billion or around Rp49 trillion. That number rose 9% from the end of September 2018 of 3.2 billion US dollars [1]. PT Garuda Indonesia (Persero) Tbk (GIAA) has again reported a loss in financial performance throughout 2020. This is based on the financial statements published in the IDX disclosure, Monday (19/7/2021). Based on financial reports as of December 31, 2020, airlines reported a net loss of US \$ 2.44 billion in 2020, or approximately IDR 35.38 trillion (assuming an exchange rate of IDR 14,500 per US \$) [2].

© The Author(s) 2024

Z. B. Pambuko et al. (eds.), *Proceedings of the 4th Borobudur International Symposium on Humanities and Social Science 2022 (BIS-HSS 2022)*, Advances in Social Science, Education and Humanities Research 778,
https://doi.org/10.2991/978-2-38476-118-0_155

A comparison of the value of companies in the transportation sector before and during the COVID-19, as measured by the PBV ratio for 2018-2020, is shown in Figure 1.

Price to Book Value (PBV)

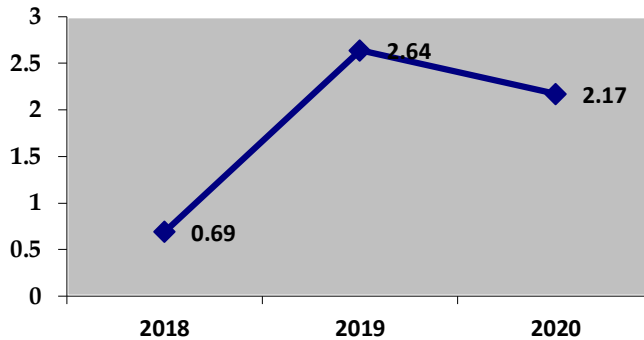


Fig. 1. Figure 1. PBV ratio of the Transportation Sector listed on the Indonesia Stock Exchange between 2018 and 2020 (Source: statistic IDX, 2021)

Figure 1 shows the average company value as proxied by PBV of the Transportation Sector for the period 2018-2020. In Fig 1 it can be seen that in 2018 the average PBV was 0.69, in 2019 it increased by 2.64, then in 2020 it decreased again by 2.17. The value of the company, in this case measured by PBV, is a very important aspect to be kept in good condition which can affect the company's sustainability in the future.

Previous recent studies related to firm value have been carried out. Oktavia & Kalsum use the investment decision variables, funding decisions, dividend policy and profitability to have a positive effect on firm value [3]. Oktavia & Kalsum stated that funding decisions, investment decisions, dividend policies and profitability have a positive with firm value. Jesilia & Purwaningsih stated that investment decisions have a positive effect on firm value [4]. While funding decisions and dividend policy have a negative effect on firm value. We found that profitability, investment decisions, and dividend policies have a positive impact on firm value [5]. Although the funding decision has a negative impact on the value of the firm. Funding and profitability decisions have a positive [6]. While investment decisions, Interest rates have a positive [7]. The results of these studies were carried out from various company sectors, but the results obtained were not consistent. The Firm value in the transportation sector during the last three years has decreased. The transportation sector is one of the corporate sectors affected by the COVID-19 pandemic. The biggest losses in the transportation sector are felt by airlines, because the total number of domestic and international passengers has decreased.

The purpose of this study is to investigate and analyze formalized issues, funding decisions, investment decisions, dividend policies, profitability, and interest rates that affect the value of firm in the transport sector from 2018 to 2020.

2 Method

This study uses transport companies listed on the Indonesia Stock Exchange that publish consecutive financial statements from 2018 to 2020 as a sample. The data analysis method used is multiple linear regression, the following equation:

$$FV = \alpha + \beta_1ID + \beta_2FD + \beta_3DP + \beta_4P + \beta_5IR + e$$

Information:

- FV = Firm Value
- α = Constant Number
- $\beta_1 \dots \beta_5$ = Regression Coefficient
- ID = Investment Decision
- FD = Funding Decision
- DP = Dividend Policy
- P = Profitability
- IR = Interest Rate
- e = Error

3 Result and Discussion

A sample of 12 companies was obtained with an observation period of three years, so the total final sample in the study was 36 companies.

3.1 Multiple Linear Regression Analysis

More than one linear regression analysis was used to see the effect of the unbiased variable with the dependent variable. to see the cost of the coefficient of more than one linear regression evaluation is provided in Table 1.

From Table 1, the following equation is obtained:

$$FV = 0,466 + 1,387 ID + 0,354 FD + 0,950 DP + 0,074 P - 36,698 IR + e$$

Table 1. Multiple Linear Regression Test Result

		Coefficients ^a					
		Unstandardized Coefficients		Standardized Coefficients			
Model		B	Std. Error	Beta	t	Sig.	
1	(Constant)	,466	,883		,528	,602	
	ID	1,387	,207	,537	6,695	,000	
	FD	,354	,152	,149	2,326	,027	
	DP	,950	,204	,468	4,659	,000	
	P	,074	,185	,015	,400	,692	
	IR	-36,698	16,924	-,149	-2,168	,038	

a. Dependent Variable: FV

Source: SPSS data processing, 2022

3.2 Hypotesis Test

Coefficient of Determination Test (R2)

In the calculation of the coefficient of determination test (R2), adjusted R square is 0.960 meaning that the ability of the variables of Investment Decision (ID), Funding Decision (FD), Dividend Policy (DP), Profitability (P), and Interest Rate (IR) explains that Firm Value variable is 96%% while the remaining 4% (100% - 96%) is explained by other factors outside the research model.

F Statistic Test (Goodness of Fit)

To see whether the model used is good or not, it is presented in Table 2.

Table 2. Goodness of fit

		ANOVA ^a				
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	46,781	5	9,356	169,623	,000 ^b
	Residual	1,655	30	,055		
	Total	48,436	35			

a. Dependent Variable: FV

b. Predictors: (Constant), IR, P, FD, ID, DP

Calculation from Table 2, the F count has a value greater than F table ($169.42 > 2.36$) and the significance level value is smaller than the significant level ($0.000 < 0.05$), so the variables are Investment Decisions (ID), Funding Decisions (FD), Dividend Policy (DP), Profitability (P), and Interest Rate (IR) are able to explain the variable Firm Value (FV) well so that this research model can be said to be good and feasible to use.

t Test

A good way to understand the effect of the unbiased variable in explaining the version inside the structured variable, the t-take a look at is used, that is provided in Table 3.

Table 3. t Test Result

Variable	t table	t count	Sig.	Description
ID	1,387	6,695	,000	Accepted
FD	,354	2,326	,027	Accepted
DP	,950	4,659	,000	Accepted
P	,074	,400	,692	Not Accepted
IR	-36,698	-2,168	,038	Not Accepted

a. Dependent Variable: NP

1. Investment Decision (ID) on Firm Value

Investment decisions have a positive effect with firm value. Investment decisions are considered important, because achieving the company's goal in the form of increasing firm value is by maximizing the prosperity of shareholders through company

investment activities [8]. Companies that use their funds for investment activities both outside the company and within the company are expected to increase the company's income from income derived from the results of investments that have been made.

The increasing growth of the company and the growth in asset fee are anticipated to inspire investors' expectancies because investment opportunities with predicted returns may be performed. The proper investment selection could be capable of produce most efficient overall performance so as to provide a effective sign to traders with a purpose to increase inventory prices and organization value. Investment spending offers a high-quality sign to the agency's boom within the future, thereby growing inventory costs as a hallmark of organization fee [9]. Signal theory indicates that investment spending made with the aid of the organization offers a signal, specifically to buyers and lenders that the business enterprise will grow inside the future. company value is purely decided with the aid of investment selections [10].

The results of this research are consistent with the study conducted by [3][4][5] which state that investment decisions affect firm value. However, the results of this research aren't in line with [6][11][12][13] which stated that the decision investment does not affect the value of the company.

2. Funding Decisions (FD) on Firm Value

Funding decisions have a positive effect with firm value. The positive influence given by the funding decision shows that the funding decision made by the company is to use equity finance is more than debt finance, so profits are even greater.

An increase in debt also can be interpreted by using outsiders about the company's capacity to pay its responsibilities in the destiny or low commercial enterprise hazard, so that the addition of debt has given an effective sign [14]. If funding is funded through debt, the increase in firm value occurs due to the tax deductible effect, namely companies that have debt will pay interest on loans which can reduce taxable income, which can provide benefits to shareholders [15]. If the company's funding increases through retained earnings or the issuance of new shares, the company's financial risk will be smaller.

Signal Theory explains that organizations that boom debt can be seen as companies that accept as true with inside the corporation's possibilities in the destiny so that it is able to be a fine sign for investors and the cost of the organization. An increase in debt can also be interpreted via outsiders approximately the organization's capability to pay its responsibilities in the destiny or low business chance, so that extra debt will give a advantageous signal [3].

The results of this research are consistent with the study conducted by [3][6][11] which state that funding decisions affect firm value. However, the results of this research aren't in line with [4][5][12][13] which stated that funding decisions had no effect to the value of the company.

3. Dividend Policy (DP) on Firm Value

This study suggests that dividend policy has a fine effect on firm value. The coverage on dividend payments is a completely essential selection in a company. This coverage will contain events who have different pursuits, namely the primary party the shareholders and the second birthday party the organization itself [16].

The more the dividend distributed to shareholders, the performance of the provider or organization may be taken into consideration better and the fee of the employer will growth. Companies with high values are considered to be able to prosper shareholders through dividend distribution and can attract investors to invest [17].

According to Bahrun & Firmansyah based on signal theory, to reduce the information asymmetry among managers and investors, managers will provide information about free cash flow or free cash flow [15]. Information regarding free cash flow will be used for decision making by investors. High cash flow rates can add positive value to shareholders by giving shareholders a positive signal that the company is doing well.

The results of this research are consistent with the study conducted by [3][13][11] which state that dividend policy affects firm value. However, the results of this research aren't in line with [4][12][18] It states that the dividend policy does not affect with firm value.

4. Profitability (P) on Firm Value

Profitability has no effect on firm value. The company has the option of using the profits earned into retained earnings and not distributed to shareholders. Investors should continue to consider the information generated from profitability as retained earnings and dividend payments may not be tracked by the company [19].

According to Pasaribu & Tobing the lower the profitability obtained, the lower the firm value. High profitability will provide an illustration of correct corporation possibilities in order that it may trigger traders to participate in increasing demand for stocks [20]. Conversely, if profitability is low, it will lessen the call for shares which will reason the price of the organization to fall.

Profitability in signal concept is positively associated with firm value. The higher the go back to shareholders will increase the cost of the corporation. however, in this study it's far contrary to the idea because the earnings acquired by means of the business enterprise aren't solid from year to year and tend to fluctuate in order that traders aren't sure of the outcomes with a view to be acquired with the aid of the employer in the destiny.

The results of this research are line with Kolamban [21] and Robiyanto [22] which stated that profitability had no effect on firm value. However, The results of this research are not consistent with the study conducted by [3][6][23][5][17] which stated that profitability had a positive effect.

5. Interest Rate (IR) on Firm Value

Interest rates have a negative effect on firm value. One of the things that must be considered by investors in the value of the firm is the interest rate. According to Tandelin said that high interest rates will affect the current (present value), so that existing investment opportunities will not attract returns [24]. This can make investors reduce their investment which will cause the stock price to fall so that the value of the company also decreases. Rising interest rates make the borrowing costs paid by companies also increase. This reduces the value of the firm because investors are reluctant to invest.

According to Simatupang & Janrosl based on signal theory, high interest quotes are a bad sign to inventory fees. Growing interest quotes will affect ability investors' requirements for investing in a stock [25]. Rising interest quotes can also reason Investors withdraw their investment in stocks and switch to investing in the form of savings or time deposits. Interest rates have a huge impact on stock costs. better interest rates amplify the economic system, boost interest fees, and thereby decrease corporate profits, and cause buyers to promote shares.

The results of this research are consistent with the study conducted by [7][26][27] which state that interest rates have a positive effect. However, the results of this research aren't in line with Hutahaean & Bu'ulolo [28] and Simatupang & Janrosl [25] which states that interest rates have no effect on firm value.

4 Conclusion

The purpose of this study is that multiple variables such as investment decisions, financing decisions, dividend policies, profitability and interest rates give firm value to the transport sector of Indonesia Stock Exchange (IDX) listed companies from 2018 to 2020. The impact is to be investigated in 12 sample. The method used in this study is a multiple linear regression analysis method. Based on the results of the analysis conducted, it can be concluded that investment decisions, financing decisions and dividend policies have a positive impact on the value of the company. However, profitability is not affected, and interest rates have a negative impact on corporate value. This study implies that not all companies will have a high value even though other factors increase, such as profitability. In transportation companies, investors are more concerned with how the company can prosper its shareholders so that the rate of return is faster.

References

1. K. co. Kompas.com, "Kuartal III 2019, Laba Bersih Garuda Indonesia Melonjak jadi Rp 1,7 Triliun," *kompas*. 2019.
2. Kompas.com, "Garuda Indonesia Rugi Rp 35,38 Triliun pada 2020," 2021.
3. Y. Oktavia and U. Kalsum, "Pengaruh Keputusan Investasi, Keputusan Pendanaan, Kebijakan Dividen Dan Profitabilitas Terhadap Nilai Perusahaan Sektor ...," *J. Sustain. Bussiness ...*, vol. 11, no. 1, pp. 39–52, 2021, doi: 10.32502/jimn.v11i1.3137.
4. J. Jesilia and S. Purwaningsih, "Pengaruh Keputusan Investasi, Keputusan Pendanaan, Dan Kebijakan Dividen Terhadap Nilai Perusahaan Konsumsi Yang Terdaftar Di Bursa Efek Indonesia Periode 2016-2018," *War. Dharmawangsa*, vol. 15, no. 1, pp. 157–165, 2021, doi: 10.46576/wdw.v15i1.1057.
5. N. P. R. Wartaningsih, N. L. G. N. Novitasari, and N. L. P. Widhiastuti, "Pengaruh Keputusan Investasi, Keputusan Pendanaan, Dan Kebijakan Dividen Terhadap Nilai Perusahaan Konsumsi Yang Terdaftar Di Bursa Efek Indonesia Periode 2016-2018," *War. Dharmawangsa*, vol. 15, no. 1, pp. 157–165, 2021, doi: 10.46576/wdw.v15i1.1057.
6. S. A. Ainuna, D. Syam, and I. Arsianti, "Pengaruh Keputusan Investasi, Keputusan Pendanaan, dan Profitabilitas Terhadap Nilai Perusahaan (Pada Perusahaan Consumer Goods Industri yang Terdaftar di BEI Periode Tahun 2018)," vol. 16, no. 2, pp. 87–96, 2020.

7. I. Y. Pradana, "Effect Of Leverage , Growth, Firm Size, Dividen Policy, and Interest Rate On Company Value," vol. 2, no. 3, pp. 288–300, 2021.
8. A. Afzal and A. Rohman, "Pengaruh Keputusan Investasi, Keputusan Pendanaan, dan Kebijakan Dividen Terhadap Nilai Perusahaan," vol. 1, no. 1998, pp. 1–9, 2012.
9. U. Wahyudi and H. P. Pawestri, "Implikasi Struktur Kepemilikan Terhadap Nilai Perusahaan: Dengan Keputusan Keuangan Sebagai Variabel Intervening," pp. 23–26, 2006.
10. B. E. F. Fama, "The Effects of a Firm ' s Investment and Financing Decisions on the Welfare of its Security Holders," vol. 68, no. 3, pp. 272–284, 1978.
11. R. A. Pahlevi, L. N. Sulistiyowati, and D. C. Ari, "Pengaruh Keputusan Investasi, Kebijakan Dividen, dan Keputusan Pendanaan Terhadap Nilai Perusahaan Sektor Food and Beverage BEI Tahun 2003-Tahun 2019," *Lab. Penelit. dan Pengemb. FARMAKA Trop. Fak. Farm. Univ. Mualawarman, Samarinda, Kalimantan Timur*, no. April, pp. 5–24, 2021.
12. F. Amaliyah and E. Herwiyanti, "Pengaruh Keputusan Investasi, Ukuran Perusahaan, Keputusan Pendanaan dan Kebijakan Dividen Terhadap Nilai Perusahaan Sektor Pertambangan," *J. Penelitian Ekon. dan Bisnis*, vol. 5, no. 1, pp. 39–51, 2020, doi: 10.33633/jpeb.v5i1.2783.
13. G. Nurvianda, Y. Yuliani, and R. Ghasarma, "Pengaruh Keputusan Investasi, Keputusan Pendanaan, Dan Kebijakan Dividen Terhadap Nilai Perusahaan," *J. Kaji. Akunt. dan Audit.*, vol. 16, no. 3, 2018, doi: 10.37301/jkaa.v0i0.5122.
14. E. F. Bringham and J. F. Houston, *Manajemen Keuangan*. Jakarta: Erlangga, 2001.
15. M. F. Bahrn and A. Firmansyah, "Pengaruh Keputusan Pendanaan , Keputusan Investasi , Kebijakan Dividen , Dan Arus Kas Bebas Terhadap Nilai Perusahaan," vol. 8, no. 3, 2020.
16. D. Sukirni, "Kepemilikan Manajerial, Kepemilikan Institusional, Kebijakan Dividen dan Kebijakan Hutang Analisis terhadap Nilai Perusahaan," vol. 1, no. 2, 2012.
17. D. A. Rochmaniyati and V. S. Dewi, "Apakah Pengaruh Kinerja Keuangan dan Kinerja Lingkungan Berpengaruh Terhadap Nilai Perusahaan? (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2014-2017)," *Pros. 2nd Bus. Econ. Conf. Util. Mod. Technol.*, vol. 2, pp. 157–169, 2019.
18. A. Fitriani, A. Fauji, and A. C. Kusuma, "Pengaruh Return On Assets (ROA) dan Kebijakan Dividen Terhadap Nilai Perusahaan (Studi Pada Perusahaan Keuangan Subsektor Perbankan yang Terdaftar di Bursa Efek Indonesia Periode 2016-2020)," pp. 349–359, 2020.
19. G. R. Bhimantara and A. Dinarjito, "Pengaruh Profitabilitas terhadap Nilai Perusahaan dengan Moderasi Pengungkapan Elemen-Element Integrated Reporting," pp. 996–1009, 2021.
20. D. Pasaribu and D. N. L. Tobing, "Analisis Pengaruh Struktur Modal, Profitabilitas, Kebijakan Dividen, dan Ukuran Perusahaan Terhadap Nilai Perusahaan Pada Perusahaan Farmasi yang Terdaftar di Bursa Efek Indonesia," vol. 1, pp. 32–44, 2017.
21. D. V. Kolamban, S. Murni, and D. N. Baramuli, "Analisis Pengaruh Leverage, Profitabilitas dan Ukuran Perusahaan Terhadap Nilai Perusahaan Pada Industri Perbankan yang Terdaftar di BEI," *J. EMBA J. Ris. Ekon. Manajemen, Bisnis dan Akunt.*, vol. 8, no. 3, pp. 174–183, 2020, doi: 10.35794/emba.v8i3.29862.
22. R. Robiyanto, I. Nafiah, H. Harijono, and K. Inggarwati, "Pengaruh Profitabilitas Terhadap Nilai Perusahaan Perhotelan Dan Pariwisata Dengan Struktur Modal Sebagai Variabel Intervening," *J. Ilm. Bisnis dan Ekon. Asia*, vol. 14, no. 1, pp. 46–57, 2020, doi: 10.32812/jibeka.v14i1.153.
23. N. P. D. N. Sari, I. D. M. Endiana, and P. D. Kumalasari, "Pengaruh Profitabilitas, Ukuran Perusahaan, dan Good Corporate Governance Terhadap Nilai Perusahaan Pada

- Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia Tahun 2017-2019,” vol. 3, no. 2, p. 6, 2021.
24. E. Tandelin, *Portofolio dan Investasi Teori dan Aplikasi*, Pertama. Yogyakarta: Kanisius, 2010.
 25. H. Simatupang and V. S. E. Janros, “Pengaruh Keputusan Investasi, Keputusan Pendanaan, dan Tingkat Suku Bunga Terhadap Nilai Perusahaan Pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia,” 2017.
 26. D. Wulandari and I. Hidayat, “Pengaruh Struktur Modal, Ukuran Perusahaan, Dan Tingkat Suku Bunga Terhadap Nilai Perusahaan Pada Perusahaan Property Dan Real Estate Di Bursa Efek Indonesia (Bei),” vol. 21, no. 1, pp. 1–9, 2020.
 27. V. Noviyanti, R. M. Mardani, and B. Wahono, “Pengaruh Keputusan Investasi, Keputusan Pendanaan, dan Tingkat Suku Bunga Terhadap Nilai Perusahaan Pada Perusahaan Manufaktur Sub Sektor Makanan dan Minuman Tahun 2014-2017,” pp. 115–126, 2017.
 28. T. F. Hutahaean and E. K. Bu’ulolo, “Pengaruh Struktur Modal, Tingkat Suku Bunga, Dan Ukuran Perusahaan Terhadap Nilai Perusahaan,” *J. Aktual*, vol. 17, no. 1, p. 66, 2020, doi: 10.47232/aktual.v17i1.34.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

