

## STOCK PRICE VALUATION ANALYSIS FOR INVESTMENT DECISION MAKING IN PT TELKOM BEFORE AND TIME COVID-19

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### ABSTRACT

Investors' decisions in terms of selling or buying shares, on average, are more concerned with the company's profit performance. This study was conducted to determine the intrinsic value of shares and the ratio of book value per share of TLKM for the period 2016-2020. The analytical tools used are the Dividend Discount Model (DDM), Price Earning Ratio (PER) and Price to Book Value (PBV). In this study using qualitative methods with secondary data, namely the financial statements of PT TLKM. The results of the study show that the intrinsic value of TLKM shares assessed using the DDM and PER approaches resulted in the same condition, namely overvalued in the pre-covid-19 period (2016-2019), except in 2018 in the undervalued category. Meanwhile, during the Covid-19 (2020) period, TLKM shares were in the undervalued category. The results of the research with PBV show the book value ratio per share > 1 from the period before and during the covid-19 period (2016-2020) this shows that TLKM shares are in the overvalued category, namely the stock price is still considered expensive. However, TLKM shares during the covid-19 period were still worth buying because the ratio of the book value per share was the smallest compared to the pre-covid-19 period. The right decision during the Covid-19 period was to buy TLKM shares. The novelty in this research is to analyze stock price valuation through intrinsic value and book value.

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## 1. INTRODUCTION

Investment is an effort to save capital or funds in the hope of getting a profit (return) in the future. Investments that are popular in banking are deposits. Bank Indonesia has set the maximum deposit interest rate at Commercial Banks (IDR) guaranteed by the Deposit Insurance Corporation (LPS) before the Covid-19 period at 6.00% but during the Covid-19 period until now, which is 29 May 2021, the deposit rate continues down to 4%. This has resulted in depositors starting to switch to investing in stocks in the hope of getting better returns in the future.

Hartono (2107) Shares are capital invested by investors in issuers that show participation in company ownership, so that they are entitled to claim rights to the company's assets and income which are called dividends. Efrizon (2019) The movement of stock prices up and down is influenced by supply and demand. Stock prices will increase when demand increases and when supply or supply is high, demand is low, the stock price will decrease.

During the COVID-19 pandemic, most stocks were in a bearish condition, where the stock market was continuously weakening, this was shown by the decline in the Global Stock

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Price Index (JCI). In this condition, the majority of investors tend to be pessimistic and cautious, even though stock prices are low. PT Telkom shares are one of the stocks that experienced bearish during the covid-19 pandemic. The following is the closing stock market price of PT Telkom before and during the Covid-19 period, which is presented in Table 1.

Table 1. Closing Stock Market Price (P)

EMITEN	Year				
	2016	2017	2018	2019	2020
TLKM	Rp 3.980	Rp 4.440	Rp 3.750	Rp 3.970	Rp 3.310

PT Telekomunikasi Indonesia (Persero) Tbk. is one of the state-owned service companies in the field of telecommunications services. In February 2020, the corona virus began to spread in Indonesia, resulting in people being urged to stay at home, so that the services of PT Telkom are very much needed by the community, such as the IndiHome Wi-fi network. This is quite a concern for investors where most companies in Indonesia have experienced a decline in income but PT Telkom has experienced an increase in income and it will be a concern for investors to assess the price of PT Telkom's shares to be considered to buy it.

The results of Ghazi's research (2018) show that the PER analysis of high stock prices, namely ADHI and PTPP, undervalued stock price conditions, namely TOTL, fair stock price conditions, namely WIKA, while using the PBV approach for the four companies in overvalued conditions. In contrast to Rizki's research (2018), the results show that the food and beverage sub-sector companies with the DDM approach are undervalued, namely DLTA and INDF and those that are overvalued are ICBC and MLBI shares. When using PER analysis, those that were overvalued were INDF, ICBC and MLBI stocks, which were correctly valued, namely DLTA shares. In the cigarette sub-sector with DDM analysis, the GGRM company makes investment decisions for investors, namely buying shares, while in HMSP and WIIM, namely selling or not buying shares. Through PER analysis on GGRM, the stock price is undervalued, while the correctly valued stock is HMSP and WIIM.

The results of Nugraha's research (2017) show that the PER approach analysis for PT Gudang Garam Tbk is in an undervalued condition, while the PBV and PSR approaches are in an overvalued condition. While at PT. HM Sampoerna Tbk's investment decision for investors is to sell shares. Through PER analysis for PT. Wisnilak Inti Makmur Tbk. stock conditions are overvalued, through the analysis of the PBV approach, the condition of the stock is overvalued, while through the analysis of the PSR approach, the condition of the stock is undervalued.

Meanwhile, the results of Hakmi's research (2017), namely PT. Semen Indonesia (Persero), Tbk (SMGR) was overvalued while the undervalued position was the shares of PT. Indocement Tunggal Prakasa, Tbk (INTP) and PT. Holcim Indonesia, Tbk (SMCB), means selling shares as a form of the right investment decision. Meanwhile, buying shares is the right decision for PT. Shares of Indocement Tunggal Prakasa, Tbk (INTP) and PT. Holcim Indonesia, Tbk (SMCB). Kurniaty's research (2016), namely the analysis of the DDM and PER approaches showed undervalued results, namely shares of BBNP, BBTN and BDMN. Stocks that are overvalued using the DDM and PER approach are BBKA, BBNI, BBRI and BMRI stocks.

Based on the previous research above, this research was conducted to see the options for investors in making the right investment decisions by analyzing the intrinsic value and book value per share of PT Telkom listed on the Indonesia Stock Exchange (IDX) in 2016-2020 calculated by Dividend Discount Model (DDM), Price Earning Ratio (PER) and Price to Book

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Value (PBV). This research can contribute that it can be used as a reference in making investment decisions on shares of PT Telkom and for further researchers it can provide references by comparing the three approaches used in making stock investment decisions.

Tandelilin (2017) argues that the Dividend Discount Model (DDM) is a stock present value approach, which is the discount of all future cash flows that will be obtained by investors. The cash flow used in stock valuation is the company's profit, for investors the profit is in the form of dividends. According to Hartono (2017), the Dividend Discount Model (PER) approach describes the relationship or comparison between stock prices and company profits (EPS) and shows the ratio of stock prices to earnings.

The intrinsic value of the stock will be known by using the Devidend Discount Model (DDM) and Price Earning Ratio (PER) approaches. If the market price is below its intrinsic value, it means that the stock is being sold at a low price (undervalued), because investors are paying more for the stock than they should. If the market price is above its intrinsic value, it means that the stock is sold at a high price (overvalued) Hartono (2017). Analysis with PBV assessment by paying attention to the PBV value when the PBV value is above one, meaning the book value is lower than the market price (overvalued), and when the PBV value is below one, it means the book value is higher than the stock price (undervalued) (Husnan, 2015) .

## 2. METHOD

The technique used is reference observation through text books, previous research journals relevant to the title of this study, and interviews for research needs. This research refers to a qualitative descriptive method in the form of an analytical method that discusses how to make the right investment decisions after knowing the intrinsic value and the price of the book value per share of PT Telkom before and after the Covid-19 period, namely 2016-2020. PT Telkom is a company engaged in the field of information and telecommunications.

The data source is obtained from the company's website <https://www.telkom.co.id>. and the Indonesia Stock Exchange <http://www.idx.co.id>, namely data on the financial statements of PT Telkom listed on the Indonesia Stock Exchange for 2016-2020. The data analysis technique of this research is the DDM, PER, and PBV approaches. The advantages in this study are to analyze stock price valuations through intrinsic value, namely the DDM and PER approaches, and perform analysis through book value per share, namely the PBV approach.

## 3. RESULT AND DISCUSSION

Comparison of Stock Market Price and Company Intrinsic Value of PT Telkom with Dividend Discount Model (DDM).The results of data processing using the DDM approach showed that PT Telkom's shares in 2016, 2017, and 2019 were overvalued (expensive stock prices), while in 2018 and 2020 the stock values were undervalued (stock prices tended to be cheap). The calculation results are presented in Table 1. Share Market Price and Intrinsic Value of PT Telkom with Dividend Discount Model (DDM).

**Table 1. Share Market Price and Company Intrinsic Value of PT Telkom with Dividend Discount Model (DDM)**

Year	Issuer	Market price (Rp)	DDM	
			Intrinsic Value	Stock Valuation

(Rp)				
2016	TLKM	3.980	3.362	overvalued
2017	TLKM	4.440	4.271	overvalued
2018	TLKM	3.750	4.542	undervalued
2019	TLKM	3.970	3.911	overvalued
2020	TLKM	3.310	4.165	undervalued

### Comparison of Stock Market Price and Company Intrinsic Value of PT Telkom with Price Earning Ratio (PER)

The results of data processing using the PER approach showed that PT Telkom's shares in 2016, 2017, and 2019 were in overvalued condition (expensive stock prices), while in 2018 and 2020 the stock value was undervalued (stock prices tended to be cheap). The calculation results are presented in Table 2. Market Price of Shares and Company Intrinsic Value of PT Telkom with Price Earning Ratio (PER).

**Table 2. Market Price of Shares and Intrinsic Value of PT Telkom with Price Earning Ratio (PER)**

Year	Issuer	Market price (Rp)	PER	
			Intrinsic Value (Rp)	Stock Valuation
2016	TLKM	3.980	3.362	overvalued
2017	TLKM	4.440	4.271	overvalued
2018	TLKM	3.750	4.542	undervalued
2019	TLKM	3.970	3.911	overvalued
2020	TLKM	3.310	4.165	undervalued

### Comparison of Stock Market Price and Company Intrinsic Value of PT Telkom with Price Book Value (PBV)

The results of data processing using the PER approach show that PT Telkom's shares in 2016 to 2020 are in an overvalued condition (expensive stock prices). The calculation results are presented in Table 3. Share Market Price and Company Intrinsic Value of PT Telkom with Price Book Value (PBV).

**Table 3. Stock Market Price and Company Intrinsic Value of PT Telkom with Price Book Value (PBV)**

Year	Emiten	Market price	PBV
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			PBV Nilai value	Stock Valuation
2016	TLKM	3980	4,67	overvalued
2017	TLKM	4440	4,74	overvalued
2018	TLKM	3750	3,76	overvalued
2019	TLKM	3970	3,95	overvalued
2020	TLKM	3310	3,20	overvalued

#### Investment Decisions with Intrinsic Value Analysis of PT Telkom's Shares in 2016-2020

After analyzing the intrinsic value of the company's shares of PT Telkom (TLKM) in 2016-2020 with the Dividend Discount Model (DDM) and Price Earning Ratio (PER) analysis approach, the condition of the shares of PT Telkom (TLKM) in the period before Covid-19 intrinsic value lower than the stock market price and included in the overvalued category except in 2018 and 2010 it was in the undervalued category, especially during the Covid-19 period, namely in 2020 the stock market price of PT Telkom (TLKM) was cheap, it is recommended for investors investors and potential investors to buy shares of PT Telkom (TLKM) because although the market price of PT Telkom (TLKM) shares has decreased from the year before the Covid-19 period, the intrinsic value of PT Telkom shares has increased. The calculation results are presented in Table 4. and Table 5. Investment Decisions After Knowing the Intrinsic Value of PT Telkom's Shares in 2016-2020 with the Dividend Discount Model (DDM) and Price Earning Ratio (PER).

**Table 4. Investment Decisions After Knowing the Intrinsic Value of PT Telkom's Shares 2016-2020 with Dividend Discount Model (DDM)**

Year	Issuer	Market price (Rp)	Intrinsic Value (Rp)	DDM Stock Valuation	Decision	
					Investors	Prospective Investors
2016	TLKM	3.980	3.362	overvalued	Sell	Not Buying
2017	TLKM	4.440	4.271	overvalued	Sell	Not Buying
2018	TLKM	3.750	4.542	undervalued	Buy	Buy

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2019	TLKM	3.970	3.911	overvalued	Sell	Not Buying
2020	TLKM	3.310	4.165	undervalued	Buy	Buy

**Table 5. Investment Decisions After Knowing the Intrinsic Value of PT Telkom's Shares 2016-2020 with Price Earning Ratio (PER)**

Year	Issuer	Market price (Rp)	Intrinsic Value (Rp)	PER		
				Stock Valuation	Investors	Prospective Investors
2016	TLKM	3.980	3.362	overvalued	Sell	Not Buying
2017	TLKM	4.440	4.271	overvalued	Sell	Not Buying
2018	TLKM	3.750	4.542	undervalued	Buy	Buy
2019	TLKM	3.970	3.911	overvalued	Sell	Not Buying
2020	TLKM	3.310	4.165	undervalued	Buy	Buy

#### Investment Decision by Analysis of Book Value Per Share of PT Telkom Company 2016-2020

After analyzing the ratio of the book value per share on the company's shares of PT Telkom (TLKM) in 2016-2020 with the Price to Book Value (PBV) approach, the condition of PT Telkom (TLKM) shares in the period before and during the Covid-19 period was still entering in the overvalued category, because the ratio of book value per share is still  $>1$ , then the shares of PT Telkom (TLKM) are still in expensive condition. However, the company PT Telkom shows that it is in good condition so that the market has greater confidence in the company's prospects, so PT Telkom (TLKM) shares are still worth buying because the ratio of the book value per share is the smallest compared to the period before Covid-19. Table 6. Investment Decisions After Knowing the Book Value per Share of PT Telkom Company 2016-2020 with Price Book Value (PBV).

**Table 6. Investment Decisions After Knowing the Book Value per Share of PT Telkom in 2016-2020 with Price Book Value (PBV)**

Year	Issuer	Market price (Rp)	PBV			
			PBV value	Stock Valuation	Decision	
					Investors	Prospective Investors
2016	TLKM	3.980	4,67	overvalued	Sell	Not Buying
2017	TLKM	4.440	4,74	overvalued	Sell	Not Buying
2018	TLKM	3.750	3,76	overvalued	Sell	Not Buying
2019	TLKM	3.970	3,95	overvalued	Sell	Not Buying
2020	TLKM	3.310	3,20	overvalued	Sell	Not Buying

#### 4.CONCLUSION

Investment decisions after knowing the intrinsic value of the company's shares of PT Telkom (TLKM) in 2016-2020 with the Dividend Discount Model (DDM) and Price Earning Ratio (PER) analysis approach, the condition of the shares of PT Telkom (TLKM) in the period before Covid-19 the value intrinsically lower than the stock market price and included in the overvalued category except in 2018 it was included in the undervalued category, but during the Covid-19 period, namely in 2020 investors and potential investors it is time to make a decision to buy because the stock market price of the company PT Telkom (TLKM) ) is cheap because the stock market price is higher than its intrinsic value and is included in the undervalued category. The investment decision after knowing the ratio of the book value per share on the shares of the company PT Telkom (TLKM) in 2016-2020 with the Price to Book Value (PBV) approach, the condition of the shares of PT Telkom (TLKM) in the period before and during the Covid-19 period. in the overvalued category because the ratio of book value per share is  $>1$ , then the shares of PT Telkom (TLKM) are still considered expensive. However, during the Covid-19 (2020) period, it was still worth buying because the ratio of the book value per share was the smallest compared to the period before Covid-19. Based on the results of this study, several recommendations for further researchers are to use quantitative methods, increase the time of the research period, use technical analysis and also pay attention to conditions from within and from outside the company that will be targeted to invest in shares so that it is appropriate in determining stock investment decisions.

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