



**The Effect of Leverage, Business Risk, and Investment Decisions  
on Company Value with Dividend Policy as a Moderating  
Variable in Coal Companies Listed on the Indonesia Stock  
Exchange in 2020-2022**

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ARTICLE INFO	ABSTRACT
<p>Accepted: 27 July 2024 Revised: 28 July 2024 Approved: 01 October 2024</p> <p>Keywords: Leverage, Business Risk, Investment Decisions, Dividend Policy, Company Value</p>	<p>This study investigates the influence of leverage, business risk, and investment decisions on company value, with dividend policy acting as a moderating variable, focusing on coal companies listed on the Indonesia Stock Exchange from 2020 to 2022. Using quantitative secondary data sourced from annual financial reports, the research reveals that leverage and business risk negatively and significantly affect company value, while investment decisions have a positive but insignificant impact. The moderating effect of dividend policy varies: it significantly strengthens the impact of business risk on company value but does not moderate the effects of leverage or investment decisions. These findings highlight the importance of strategic financial management in improving company value, particularly in the volatile coal industry. Implications include the need for prudent funding decisions, careful investor evaluations, and the optimization of dividend policies to enhance corporate sustainability.</p>

**INTRODUCTION**

The development of the economy in Indonesia cannot be separated from the contribution of the capital market in Indonesia. The more advanced and developed the capital market in Indonesia, the more the economy will be pushed forward and developed. This is because the capital market is a means of business funding or a means for companies to obtain funds from investors. If the company has obtained capital, it can operate on a broader scale. It ultimately will increase the company's income and the prosperity of the broader community due to the absorption of labor carried out by the company.

The tight competition in the business world and the rapid progress of the business world are also supported by an unpredictable economic situation, causing

many companies to think about how to survive these challenges. Efforts can be made by implementing various strategic policies to increase the efficiency and effectiveness of the company. Of course, this requires quite a large amount of capital for the company to obtain and allocate the capital best.

In 2020, coal production decreased to 565.69 million tons. Moreover, in 2021 to 2022, coal production increased again to reach 685.8 million tons in 2022. From the graph, it can also be seen that the trendline of coal production has increased. This is because the government is currently aggressively encouraging the coal mining industry to carry out downstream in order to create added value, especially since the enactment of Law Number 3 of 2020 concerning Amendments to Law Number 4 of 2009 concerning Mineral and Coal Mining (Law No. 3/2020) and Law No. 11 of 2020 concerning Job Creation.

This downstream activity is a step by the state to optimize mining results to utilize raw materials in advanced products with higher added value (Illahi, 2022). In the explanation of Article 102 of Law No. 3/2020, Coal streaming consists of Coal Development and Coal Utilization. Coal Development consists of Coal upgrading, Coal briquette, Coke making (coking), Coal liquefaction, Coal gasification, underground coal gasification, and Coal-water mixture (coal slurry/coal water mixture). Meanwhile, Coal Utilization includes the construction of a mine mouth power plant.

In 2016, Indonesia signed the Paris Agreement, organized by the United Nations Framework Convention on Climate Change (UNFCCC). In this agreement, 196 countries agreed to reduce the global average temperature by two °C or at least 1.5 °C. Indonesia has committed to reducing emissions by 29% on a business-as-usual basis by 2030, which can be increased to 41% with international cooperation. So, with the Paris Agreement and the intensive campaign for the transition to green energy, in the future, the consumption of coal in Indonesia's export destination countries is feared to decrease even more, even though its contribution to Indonesian coal sales is substantial, which is more than 70% of total national production. Therefore, the government is currently very active in encouraging coal downstream efforts as a pre-emptive step so that the coal industry can be sustainable and its benefits (economic value) are maintained for the national economy.

Several coal-producing companies have started coal downstream projects. One of them is PT Bukit Asam Tbk, which is currently constructing a gasification plant to convert coal into DME to replace LPG raw materials, most of which are still imported, with a production capacity of 1.4 million tons of DME per year, in addition PT Bukit Asam Tbk also plans to build a 2x620 MW Mine Mouth PLTU in Muara Enim which is one of the largest Mine Mouth PLTUs in Indonesia. In addition, there is also PT Adaro Energy Tbk, which is initiating a methanol plant project to convert coal into methanol with a capacity of 660,000 tons per year.

Company value, also known as market value or market capitalization, is the total value of a company's outstanding shares of stock. It is the investor's opinion of a company, often associated with stock prices. High stock prices will increase the value of the company. Stock prices are the prices that arise when stocks are traded on the capital market. Of course, the company's value increases by adding shares to

provide as many assets as possible. The higher the company's stock price, the greater the shareholders' wealth.

One of the coal companies that experienced a significant decline in stock prices from 2021-2022 is Harum Energy Tbk; in 2021, its stock price was 10,325, and in 2022, it decreased to 1,620. Harum Energy Tbk experienced a decline of 8,705, or around 85%. The coal company that also experienced a decline in shares was PT. Dian Swastatika Sentosa Tbk. In 2021, its stock price was 49,000; in 2022, it was 39,800—a decrease of 9,200 or around 19%.

## **LITERATURE REVIEW**

### **Signaling Theory**

According to (Novitasari, 2018), Signal theory discusses how signals of management success or failure (agent) should be conveyed to the owner (principal). Signal theory discusses the company's motivation to provide information to external parties (Sutopo et al., 2018). Signaling theory is the importance of information issued by the company for investment decisions of parties outside the company. Information is essential for investors and business actors because it presents information, notes, or descriptions of past, current, and future conditions for a company's survival and how the market affects it. Investors in the capital market need complete, relevant, accurate, and timely information as an analytical tool for making investment decisions.

### **Company Value**

According to Widi et al. (2021), Company Value is the expected future profit value recalculated with the correct interest rate. Every company listed on the Indonesia Stock Exchange (IDX) wants the stock price sold to have high price potential and attract investors to buy it. This is because the higher the stock price, the higher the company's value. High company value will make the market believe not only in the company's current performance but also in the company's prospects.

### **Leverage**

Leverage or Solvency is how much capital can cover or overcome the company's total debt in order to be able to drive the company's operational activities (Putri et al., 2020). It is solvent if the company can overcome or pay its total debt. However, it is considered insolvent if the company cannot overcome its debt.

### **Business Risk**

Business risk is related to the type of business chosen based on the economic conditions faced. Risk is related to the possibility of undesirable or unexpected harmful consequences; the possibility already shows the uncertainty that can cause risk growth. Risk identification is carried out so the company can manage the risks. Risk is measured from the company's perspective and divided into business and financial risks (Rokhmawati, 2016). High business risk will reduce the company's ability to obtain loans because the company will not be able to bear the fixed debt burden. So, companies with high business risk must use smaller debt than

companies with low business risk because the higher the business risk, the use of large debt will make it difficult for the company to repay its debt.

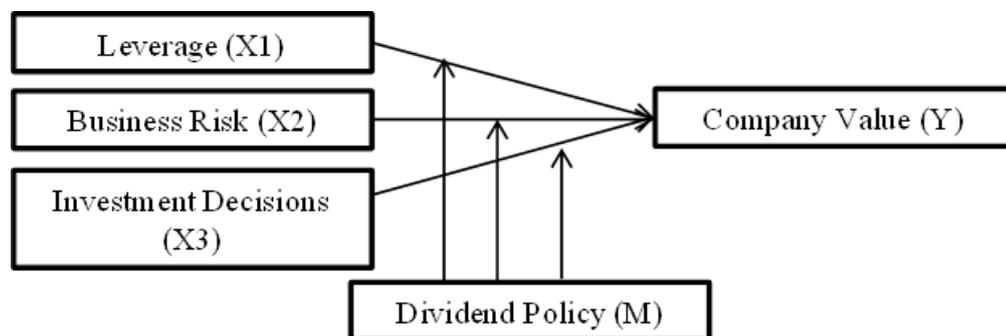
### Investment Decisions

Pandelaki et al. (2023) stated that an investment is an investment of funds made by a company into an asset with the hope of obtaining income in the future. In terms of period, investment is divided into three types: short-term, medium-term, and long-term. Meanwhile, regarding the type of assets, investment is divided into tangible and non-real assets (financial assets).

### Dividend Policy

Dividend policy is one of the company's problems because it determines the distribution of profits and reinvestment of investors. Dividend policy determines whether the company's profits at the end of the year are distributed to shareholders in the form of dividends or retained to increase future investment financing capital. This dividend policy will later affect the company's value. Shareholders prefer profits obtained from capital gains. Capital gains can be obtained in a relatively short time compared to waiting for a relatively long dividend distribution so that the distribution of dividends to shareholders can provide a low company value in the eyes of shareholders (Maidefison et al., 2019; Wijayanti, 2020)

### Research Model and Hypothesis



H1: Leverage has a negative and significant effect on Company Value

H2: Business Risk has a negative and significant effect on Company Value

H3: Investment decisions have a positive and significant effect on Company Value

H4: Dividend policy significantly moderates the effect of Leverage on Firm Value

H5: Dividend policy significantly moderates the effect of Business Risk on Firm Value

H6: Dividend policy significantly moderates the influence of Investment Decisions on Firm Value

### METHOD

This study's data type is quantitative because the data is in numbers. Based on how to obtain it, it is secondary data because the data is taken indirectly, namely through intermediary media (recorded by other parties), so this data is taken through the Indonesia Stock Exchange (IDX). The data sources used in this study

were obtained through annual reports and financial reports on manufacturing companies published by the Indonesia Stock Exchange (IDX) through the website [www.idx.co.id](http://www.idx.co.id) and the websites of each company in 2020 - 2022.

The criteria that must be met in this study are as follows:

1. All energy companies listed on the Indonesia Stock Exchange (IDX) during the 2020-2022.
2. Energy companies that publish annual reports consecutively for the 2020-2022 period.

### **Company Value**

Company value is the investor's perception of a company that is associated with the company's stock price; if the company's value is higher, the shareholders receive greater prosperity (Dolontelide & Wangkar, 2019). High stock prices also make the company's value high. That is also what the company owners want because high company value indicates that shareholder prosperity is also high.

$$PBV = \frac{\text{Price per share}}{\text{Book value per share}}$$

### **Leverage**

Solvency (leverage) is the extent to which a company's assets are financed by debt compared to its capital (Sutama & Lisa, 2018). Meanwhile, Weston and Brigham define financial leverage as the level of debt used as a source of company financing. From several definitions, according to experts, it can be concluded that leverage is the use of debt by a company as a source of financing to carry out company activities. Where to use it is the company must pay fixed costs.

$$DER = \frac{\text{Current Liabilities} + \text{Long-term Liabilities}}{\text{Equity}}$$

### **Business Risk**

Business risk is related to the type of business chosen based on the economic conditions faced. Risk is associated with the possibility of undesirable or unexpected harmful consequences; the possibility already indicates the existence of uncertainty that can cause risk growth. Risk identification is carried out so the company can manage the risks. Risk is measured from the company's perspective and divided into business and financial risks (Rokhmawati, 2016).

$$DOL = \frac{\text{Percentage change in EBIT}}{\text{Percentage change in Sales}}$$

### Investment Decisions

Investment decisions are one of the decisions that financial managers must take to allocate existing funds (from within and outside the company) to generate profits in the future (Fajaria, 2015). Investment decisions can be grouped into short-term investments, such as investments in cash, short-term securities, receivables, and inventory, or long-term investments in land, buildings, vehicles, machinery, production equipment, and other fixed assets (Rokhmawati, 2017). In this study, the Book Value of Grow Property, Plant, and equipment

$$\text{PPE/BVA} = \frac{\text{Book value of fixed assets}}{\text{Book value of total assets}}$$

### Dividend Policy

The policy of each dividend is to decide whether the profits that each company has generated can then be distributed to all shareholders in the form of retained dividends or the form of retained earnings in order to finance such as future investments; from this study, the proxy that has been used in measuring dividends is like the Dividend Payout Ratio (DPR), the reason for each researcher in using DPR from the proxy of each dividend policy is because from DPR itself can explain the rupiah that can be shown by the owner in the form of cash. Through DPR, investors can quickly determine the amount of each profit the company can provide to other people.

$$\text{DPR} = \frac{\text{Cash Dividend}}{\text{Net Profit}}$$

## RESULTS AND DISCUSSION

### Coefficient Determination Test

**Table 1** Coefficient Determination Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.499a	.249	.157	.00616

Table 1 shows that the coefficient of determination (Adjusted R Square) of 0.157 is the same as 15.7% of the dependent variable, which the independent variable can explain. In other words, Leverage, Business Risk, and Investment Decisions influence Company Value by 15.7%. In contrast, the rest is influenced by other variables outside the three independent variables included in the model.

### Simultaneous Test

**Tabel 2 F Test Result**

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.001	6	.000	2.710	.024 <sup>b</sup>
	Residual	.002	49	.000		
	Total	.002	55			

The table above shows that the significance value is 0.024, where the value is  $<0.05$ . So, it can be concluded that the independent variables (Leverage Decisions) together (simultaneously) affect the dependent variable (company value), with Company Value as a moderating variable.

### Partial Test

**Tabel 3. T-t Test Results**

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.106	6.375		.330	.742
	Leverage (X1)	-.271	.119	-.429	-2.277	.027
	Business Risks (X2)	-.006	.002	-.774	-2.688	.010
	Investment Decision (X3)	.623	.923	.089	.675	.503
	Dividend Policy (Z) * X1	.038	.035	.324	1.098	.277
	Dividend Policy (Z) * X2	.031	.010	.888	3.098	.003
	Dividend Policy (Z) * X3	.173	1.083	.036	.159	.874

### Leverage on Company Value

The results of this study indicate that Leverage has a negative and significant effect on Company Value. This result means that the company value will decrease

when Leverage increases. This result aligns with the assumption that using greater Leverage can increase the burden and risk the company must bear. Companies with large debts have a high risk of repaying their debts. High leverage will affect company value because companies with high debts will cause the interest burden to be paid by the company to be high. The greater the debt owned, the smaller the company's priority to pay dividends because the profits obtained by the company will be used to cover the debt owned

### **Business Risk on Company Value**

The results of this study indicate that Business Risk has a significant negative effect on Company Value. This means that Company Value will decrease when a company's Business Risk increases. Based on the theory used in this study is in line with signal theory: the higher the business risk, the higher the company's risk because companies that have high risks give a negative signal to investors to invest in the company (Ridoan et al., 2023). According to Ginting (2020), business risk is one of the risks a company faces when running operations where it is likely unable to fund its operational activities. If a company has an increasing business risk, investors will be more careful about investing in the company.

### **Investment Decisions on Company Value**

This study shows that Investment Decisions have a positive and insignificant effect on Company Value. The results of this study reflect that investors do not consider investment decisions when investing their capital. The results of this study indicate that the larger or smaller the investment decision is, the less significant the effect on company value. The ineffectiveness of investment decisions on company value is caused by the sample company's inability to create a suitable investment, so the company's assets will produce suboptimal performance, thus providing a weak signal to investors. The weak signal from investors will make stock prices unable to increase company value. Increasing investment will not impact the company's future profits, so the company's value will not increase. In addition, this is also caused by the higher investment made by management, reducing the funds that should be distributed to investors so that investor interest in companies that make investment decisions decreases. The uncertainty factor in the future also causes the ineffectiveness of investment decisions; this uncertainty is in the form of changes in technology, socio-economic conditions, and government policies. Thus, investment decisions proxied by PPE/BVA do not affect company value.

### **Leverage on Firm Value with Dividend Policy as a Moderating Variable**

This study shows that the Leverage variable measured by DER moderated by Dividend Policy has a positive and insignificant effect on Company Value. The signal theory explains that the existence of a dividend policy can provide a good signal as shareholders desire. With that, the opportunity for managers to make investments using company cash is reduced. Companies need to increase the use of debt to maintain cash flow in the future. The addition of corporate debt can be used to

control the company's cash flow because companies that issue debt require repayment of interest and principal using company cash so that it can avoid waste and excessive investment by managers.

### **Business Risk on Firm Value with Dividend Policy as a Moderating Variable**

This study shows that the Business Risk variable moderated by Dividend Policy positively and significantly affects Company Value. The results of this study indicate that the company's policy of distributing dividends or not because of retained earnings impacts the influence of business risk on company value. Dividends are one element that strongly influences strengthening/weakening company value. This is because investors tend to prefer certainty when investing. Due to the uncertainty factor in investing in stocks, investors tend to prefer companies that distribute high dividends and are willing to pay a high price for the shares. Companies that have high dividend distributions certainly have high business risks. With the belief that dividends will be distributed, it will increase the company's value in the eyes of investors. So, dividend policy is in the spotlight for investors and can affect company value.

### **CONCLUSIONS**

Based on the research and analysis results that have been conducted, the conclusions in this study are as follows: Leverage variable has a negative and significant effect on Company Value in coal companies listed on the IDX. The business Risk variable negatively and significantly affects the Company Value of coal companies listed on the IDX. The investment decision variable has a negative but insignificant effect on the Company Values of coal companies listed on the IDX. The dividend Policy moderation variable cannot moderate the effect of Leverage on the Company Values of coal companies listed on the IDX. The dividend Policy moderation variable can moderate the effect of Business Risk on the Company Values of coal companies listed on the IDX. The dividend Policy moderation variable cannot moderate the effect of Investment Decisions on the Company Values of coal companies listed on the IDX.

### **IMPLICATIONS AND LIMITATIONS**

Based on the research results and matters related to the limitations of this research, the following suggestions can be given:

1. For Academics, Add research objects outside of coal companies.
  - a. Using other measurements (debt to equity ratio, profit growth, Tobin's Q, NCEI) in measuring Company Value.
2. For Companies  
Companies should be more careful when using funds to avoid relying too much on creditors. Companies must also maintain a good image for the company's sustainability; this good image will increase its value.
3. For Investors  
Investors should be more careful and wiser when investing, especially in coal companies. It is better to review it again, especially by paying attention to financial reports before investing.

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