
The Modelling of Stock Price Based on Dividend Policy, Intellectual Capital, Sales Growth, and Capital Structure

Kenny Ardillah

Institut Teknologi dan Bisnis Kalbis
120617@lecturer.kalbis.ac.id

Icha Juana

Institut Teknologi dan Bisnis Kalbis
2017103462@student.kalbis.ac.id

Abstract

This research was aimed to know the influences of dividend policy, intellectual capital, sales growth and capital structure on stock prices. The population in this study were all mining companies listed on the Indonesia Stock Exchange in 2015 – 2019. The number of research samples obtained was 38 companies with purposive sampling technique and the number of observations of research data obtained was 190. This study used the multiple linear regression method with a fixed effects approach model. The results show that dividend policy has no influence on stock prices, intellectual capital has no influence on stock prices, sales growth has no influence on stock prices, and capital structure has a negative and significant effect on stock prices. The results of this study can provide insight to the companies, so that it can more effectively manage its capital structure.

Keywords: Stock Price, Dividend Policy, Intellectual Capital, Sales Growth, Capital Structure.

Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh kebijakan dividen, modal intelektual, pertumbuhan penjualan dan struktur modal terhadap harga saham. Populasi dalam penelitian ini adalah seluruh perusahaan pertambangan yang terdaftar di Bursa Efek Indonesia tahun 2015 – 2019. Jumlah sampel penelitian yang diperoleh adalah 38 perusahaan dengan teknik purposive sampling dan jumlah observasi data penelitian yang diperoleh adalah 190. Penelitian ini menggunakan regresi linier dengan model pendekatan fixed effect. Hasil penelitian menunjukkan bahwa kebijakan dividen tidak berpengaruh terhadap harga saham, modal intelektual tidak berpengaruh terhadap harga saham, pertumbuhan penjualan tidak berpengaruh terhadap harga saham, dan struktur modal berpengaruh negatif dan signifikan terhadap harga saham. Hasil penelitian ini dapat memberikan wawasan kepada perusahaan, sehingga dapat lebih efektif dalam mengelola struktur modalnya.

Kata Kunci: Harga Saham, Kebijakan Dividen, Intellectual Capital, Pertumbuhan Penjualan, Struktur Modal .

1. Introduction

According to Latifah & Suryani (2019), currently many people are aware of the importance of investing and investing that is quite profitable and promising, one of which is stock investment. Dividends and capital gains are the results obtained from the profits of investing in shares (Halim, 2018). According to Oktaviani & Agustin (2017) in this increasingly sophisticated era, all companies are competing to expand their market. Market expansion is also one of the supporting factors for the company's growth both in the short and long term. However, this investment activity in the capital market when compared to other countries is still a relatively new activity for the people of Indonesia.

According to Bakhri (2018), although the capital market in Indonesia is currently more than 25 years old, the number of shareholders in the Indonesian capital market has not shown a significant increase. Based on data from the Indonesian Central Securities Depository (KSEI), the number of shareholders in the Indonesian capital market as of March 2018 has reached 1.21 million single investor identification (SID), up 36 percent from the 2016 realization of 894,116 SID. The total population of Indonesia, which is 258 million people, when compared to the number of investors is relatively small despite experiencing double-digit growth. If Indonesia is compared to neighboring countries, Indonesia is also inferior to Malaysia and Singapore which have 2.49 investors and 1.5 million investors. Most investors are from Java with a portion of 75.59 percent. Followed by Sumatra 13.50 percent, Kalimantan 4.13 percent, and Sulawesi 2.62 percent. Then, the portion from Bali, NTT and NTB was 2.62 percent. Meanwhile, Maluku and Papua are 1 percent. The majority of Indonesian capital market investors come from those with an undergraduate education, which is 52.8 percent. Meanwhile, investors with high school education contributed 29 percent. Meanwhile, for S2 only contributed 6.3 percent.

According to Oktaviani (2018), the price formed from the results of supply and demand activities in the market is called the stock price. Changes in share prices depend on the general offeror (issuer) and stockbrokers as the requester. Stock prices that tend to increase have the impact of capital gains, or it can be said as a company condition that has promising long-term prospects and will attract investors to buy shares of the company. Conversely, a company's stock price that tends to decline can result in capital loss, and this can illustrate the lack of confidence on the part of shareholders in the ability of a company's long-term job prospects if the demand for shares decreases. According to Clarensia, et al. (2016), there are several factors that can affect stock prices, both from internal and external to the company itself. The company's internal factors include dividend policy, company growth, financial ratios, firm size and debt ratio.

Fitri & Purnamasari (2018) states that dividend policy is a company's decision related to the proportion of the use of profits to be distributed to investors in the form of dividends or retained earnings for investment financing in the future. Cash dividends are used because it is the most common form and is paid by companies to shareholders (Sugeng, 2017). Dividends are company profits that are distributed by the company to shareholders. The proportion of dividends distributed to shareholders depends on the profits obtained by the company and the company policies implemented (Erri & Dwi, 2018). Dividends distributed to shareholders in each company also vary, depending on economic conditions, culture, and other factors (Istianti, 2018).

According to Kurnia (2019), intellectual capital is described as knowledge in the process of forming intellectual property and experience that can be used to generate wealth and a competitive advantage. Intellectual capital is a valuable resource and the company's capabilities are based on science (Perdana, 2019). An organization or company that does not pay attention to intellectual property will become an organization or company that does not develop. Especially, on individual intellectual abilities which if developed properly will have a positive effect on the firm performance. According to Dutrianda & Pangaribuan (2020), if a company discloses intellectual capital information highly, it will tend to be of high value and attractive to shareholders and prospective shareholders, because they are shareholders interested in the report of a company that discloses complete information. Intellectual capital has several elements, including Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE) and Capital Employed Efficiency (CEE) (Perdana, 2019).

According to Hayati et al (2019), the company's activities to measure how much the company can maintain its sales level within a certain time is referred to as sales growth. The higher the level of sales volume made by the company, it can increase the company's profit level which can affect the stock price of a company (Suripto, 2016). The optimal capital structure can optimize the balance between risk and return so as to maximize share prices (Lailia & Suhermin, 2017). According to Pratiwi (2019), capital structure is one of the important things in a company because whether or not the capital structure can affect the company's financial position, especially the very large debt that will cause a burden on the company. Debt to Equity Ratio is a ratio contained in the capital structure which shows the percentage of funds provided by shareholders to lenders (Darsono, 2005). According to Menon (2016), the debt equity ratio can describe the relationship between the amount of debt provided by creditors and the amount of capital provided by the company.

In general, companies that have high sales growth rates usually require more investment in various elements of assets, both current assets and non-current assets (Clarensia et al., 2016). According to Hayati et al (2019), sales growth is one way to measure how big the company is in maintaining the profit from the sale of goods or services within a certain period of time based on economic developments. According to Kesuma (2009), stock prices can be influenced by sales growth because sales growth is an indicator of an increase in the number of company sales from time to time. According to Bailia et al (2016), company growth that affects share prices can be a signal of good company development that provides a positive response to its shareholders.

Several studies related to dividend policy, intellectual capital, sales growth, and capital structure on stock prices have been carried out by many researchers. Clarensia et al (2016), Lailia & Suhermin (2017), Fitri & Purnamasari (2018), and Istanti (2018) in their research prove that dividend policy has a positive and significant effect on stock prices. On the other hand, according to Latifah & Suryani (2020), dividend policy has no effect on stock prices. Kusufiah et al (2017), Kurnia (2019), and Dutrianda & Pangaribuan (2020), in their research prove that intellectual capital significantly influences stock prices. On the other hand, Ermawati et al (2018) in proving the influence of intellectual capital on stock prices found that intellectual capital proxied by Structural Capital Value Added (STVA) directly has a negative and insignificant effect on stock prices.

Suripto (2019) and Yunita & Mayliza (2019) in their research prove that sales growth has a positive and significant effect on stock prices. On the other hand, Clarensia et al (2016) and Hayati et al (2019) stated that sales growth had no effect on stock prices. Lailia & Suhermin (2017) and Wehantouw et al (2017) in their research also prove that capital structure has a significant positive effect on stock prices. In addition, the results of Hendi's research (2019) show that capital structure has a negative effect on stock prices. The opposite result is shown by Pratiwi (2019) and Hanafi & Handayani (2019) which state that capital structure has no effect on stock prices.

If it is seen from the differences obtained in the results of previous studies, the inconsistency in the results of the study makes the authors interested in researching related to stock prices. Researchers chose mining companies listed on the IDX as the research population because mining companies have different industrial characteristics and characteristics from other industries. The mining sector is one of the pillars for the development of a country because its main business is a provider of energy resources. Based on the background of the problem described, this study aims to determine the effect of

dividend policy, intellectual capital, sales growth, and capital structure on stock prices in mining companies listed on the Indonesia Stock Exchange in the period 2015 – 2019 .

2. Theoretical Framework and Hypothesis Development (If Any)

Agency Theory

According to Scott (1997), agency theory explains the design of the right contract to equalize the interests between the principal and the agent in matters relating to conflicts of interest. Jensen and Meckling (1976) state that an agency relationship can appear as a contract in which one or more people (the principal) and another party, namely the agent (management), where the principal expects the agent to perform some services and delegate some decision-making authority for the benefit of the principal. The agency relationship that occurs can lead to a conflict of interest from the principal and the agent, namely the agent who prioritizes his personal interests to maximize utility compared to the interests of the principal (Kholmi, 2011). The application of agency theory can also be realized by the existence of a work contract relationship which contains matters relating to the proportion of rights and obligations of each party while prioritizing the overall benefit (Arifin, 2005).

Stock Price

According to Putri (2015), stock prices are the value of share certificates that describe the wealth of a company that issues the shares whose fluctuations are largely determined by the forces of supply and demand that occur in the capital market. If a demand for shares in the capital market increases, the share price will also increase, and vice versa if the stock price experiences an excess supply, the stock price will tend to decrease (Sunardi, 2019). The stock price can be quantified by using closing price (Purnama et al., 2020). The closing share price is the share price that occurs on the Indonesia Stock Exchange at the end of the year or the period concerned (Tandelilin, 2010).

Dividend Policy

According to Deitiana (2011), dividends are the distribution of company profits whose size has been determined in the General Meeting of Shareholders (GMS) to shareholders proportionally according to the number of shares owned by each shareholder. Septariani (2017) explains that dividend policy is a decision to determine how much of the profit share will be given to shareholders and the profit that the company will hold back for reinvestment. The greater the amounts of dividends paid to shareholders, the less retained earnings will slow down the company's growth. Related to dividend policy, Zuliarni (2012) revealed that dividend

policy is used to compare cash dividends divided by profits earned by the company which will be distributed to shareholders with total profits.

Intellectual Capital

Organization for Economic Cooperation and Development (1999) reveals that intellectual capital is part of the economic value of two categories of intangible assets, namely organizational (structural) capital and human capital. According to Tandelilin (2010), one of the approaches used to measure and value these intangible assets is intellectual capital which is the focus of attention in various fields, including management, information technology, sociology, and accounting. According to Moehariono (2012), intellectual capital is a knowledge and ability possessed by a social collectivity, such as an intellectual community organization, or professional practice. Disclosure of intellectual capital is a rare resource owned by a company because intellectual capital cannot be imitated by the company and only the company owns it (Ferdiansyah & Faisal, 2020). Kurnia (2019) explains VAIC™ (Value Added Intellectual Coefficient) is a procedure to analyze and is designed with the aim of enabling management, shareholders and other relevant stakeholders to effectively monitor and evaluate the efficiency of Value Added (VA) with the amounts of resources of each company and each component of the main resources.

Sales Growth

One of the considerations of shareholders when investing in a company can be determined based on sales growth. Sari (2017) explains that sales growth is an increase or decrease in sales every year for a company measured as a percentage of sales. The percentage of sales is a method of designing company finances, in which all account values contained in the company's financial statements can change depending on the prediction of the company's sales level (Suripto, 2019). Companies that have high sales growth rates will easily meet their financial obligations if the company is in debt or buys assets with debt. Measurement of sales growth can be done by comparing the company's sales in year t after deducting sales in the previous period against company sales in the previous period (Clarensia et al., 2016).

Capital Structure

According to Linanda & Afriyenis (2018), capital structure is a mix or comparison between long-term debt and own capital used by the company to finance its assets. The capital structure significantly affects the burden and availability of capital so that it affects the company's performance. Meanwhile, a less than optimal capital structure affects performance and increases the risk of business failure. According to Kristianti (2018), the selection of

good and appropriate sources of corporate funding is the main key in optimizing the company's capital structure. Debt and capital are the two main components of funding sources, while creditors and shareholders are the two main categories of corporate investors.

Sulindawati et al (2017) explain several factors that are considered in making decisions about capital structure, namely long-term viability, management conservatism, supervision, asset structure, business risk, growth rate, taxes, and reserve borrowing capacity. Firmana et al. (2017) explained that capital structure can be measured using the debt to equity ratio. According to Darsono (2005), debt to equity ratio is a ratio that shows the percentage of funds provided by shareholders to lenders. The formula for finding the debt to equity ratio is the comparison between total debt and total equity below (Horne & Macowicz, 2009).

The Effect of Dividend Policy on Stock Prices

According to Ariyani et al (2018), dividend policy is an inseparable part of decision-making policies regarding corporate funding. Dividend policy is one of the internal factors to assess stock prices. One of the factors that can affect the perception of investors in the capital market in investing is dividend policy, although in investing in stocks investors will gain or lose (Istanti, 2018). Determination of the portion of profits distributed according to the Dividend Payout Ratio (DPR) means that the larger the portion of dividends distributed, the greater the level of Dividend Payout Ratio (DPR) and vice versa. If the portion of retained earnings is larger, the DPR will be lower and the company's prospects in the future can be seen (Fitri & Purnamasari, 2018). A company that tends to decline in recent years if left unchecked can disrupt the company's growth in the future. Investors will also tend not to be interested in the declining stock price of a company because stock prices can be influenced by dividend policy which can provide information about the level of profitability in a company (Horne, et al., 2005).

Ha₁: Dividend policy has a positive effect on stock prices

The Effect of Intellectual Capital on Stock Prices

According to Sunardi (2019), intellectual capital is one of the driving factors that can generate value in a company. Value creation in this context is utilizing all the capabilities or potentials of the company, both in terms of employees (human capital), physical assets (physical capital), and structural capital. Good management of these three capabilities will result in added value for a company (called VAIC) which in turn will encourage the company's financial performance for the benefit of shareholders. According to Suparsa et al. (2017), the disclosure of intellectual capital in the company's annual

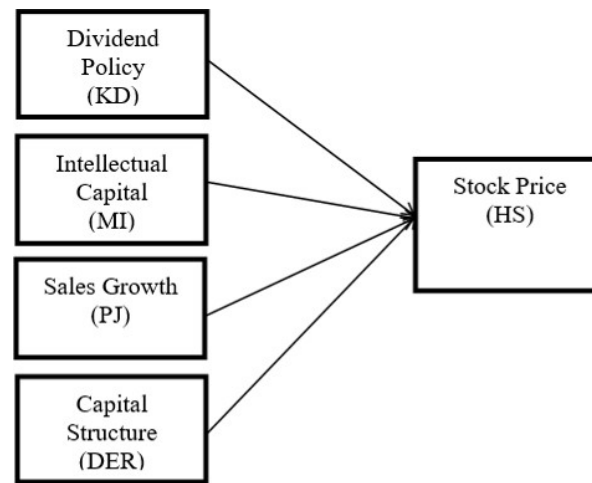


Figure 1. Conceptual Model

report can also be a good sign for investors and potential investors who will invest their capital because financial statements can reveal intellectual capital. Intellectual capital can be an added value for the company because the higher the level of disclosure of intellectual capital in the financial statements, the more credible or trustworthy a financial report will be and can increase stock prices in the capital market.

Ha₂: Intellectual capital has a positive effect on stock prices

The Effect of Sales Growth on Stock Prices

According to Hayati et al. (2019), sales growth is a company activity to measure how much the company can maintain the profit of selling its merchandise at a certain time in economic development. Sales is the total amount charged to buyers or customers for the purchase of merchandise sold by the company, including sales in cash and sales on credit (Hery, 2015). According to Suripto (2016), the higher the level of sales volume made by the company, the higher the company's profit level, this will affect the stock price of a company and the trust from investors helps the company to market its shares because there will be a number of requests for shares that can push prices up.

Ha₃: Sales growth has a positive effect on stock prices

The Effect of Capital Structure on Stock Prices

According to Linanda & Afriyeni (2018), capital structure is something related to the long-term spending ability of a company which can be measured by making a comparison between long-term debt and own capital. The capital structure is an important decision, because it can have a direct impact on the company's financial risk where if the company carries out large financing from debt, it will bear the burden of fixed installments. Install-

ment and interest expenses must also be paid by the company under any conditions, whether the company suffers a loss or profit (Ananda, 2018). According to Hanafi & Handayani (2019), a good company has an optimal capital structure that can meet the balance between risk and return so as to maximize the company's share price.

Ha₄: Capital structure has a negative effect to stock prices

There is a conceptual logic that connects the independent variable and the dependent variable (Ismail, 2018). Based on the background, theoretical basis and previous research that has been described, the main problem that will be studied by researchers is about how the stock price model is influenced by dividend policy, intellectual capital, sales growth, and capital structure.

3. Research Method

This research is a quantitative study using data collection techniques, namely documentation of secondary data in annual reports taken from banking companies listed on the Indonesia Stock Exchange for the 2015 - 2019 period which were obtained from the official website of the Indonesian stock exchange and the company's official website. The population in this study are all mining companies listed on the Indonesia Stock Exchange. The sampling technique used in this study is purposive sampling which aims to make the data used in the study produce representative data based on predetermined criteria. The scope of sampling in this study is all mining companies listed on the Indonesia Stock Exchange (IDX) in 2015-2019 totaling 52 companies as population and 38 companies as samples. Based on the criteria in determining the sample using purposive sampling technique, the research data obtained are shown in the table 1.

The dependent variable in this study is the stock price. The measurement of stock prices in this

Table 1. Determination of Research Sample

No	Criteria	Amount
1	Mining sector companies listed on the Indonesia Stock Exchange for the period 2015 – 2019	52
2	Mining sector companies that are not consistently listed and have been delisted on the Indonesia Stock Exchange (IDX) during the 2015–2019 period.	(13)
3	Companies that are in unaudited financial reporting and do not have a closing date of December 31.	(1)
The amounts of sample		38
The amounts of research data		190

study uses the annual closing price of each company. (Kurnia, 2019). The independent variables used in this study are dividend policy, intellectual capital, sales growth, and capital structure.

According to Marini & Dewi (2019), the dividend policy is used by the company to compare cash dividends divided by the company's net profit to be distributed to shareholders with the company's total profit. According to Jannah & Haridhi (2016), the dividend policy ratio is calculated using the Dividend Payout Ratio with the following formula.

Perdana (2019) explained that intellectual capital is part of knowledge and insight about social collectivities, such as organizations, intellectual communities and professional practices. Intellectual capital basically represents valuable resources and capabilities that are based on knowledge. Companies or organizations that do not attach importance to their intellectual capital will not develop. The following are the steps for calculating intellectual capital.

1. Determine the Value-Added Capital Employed (VACA). The relationship between Value Added (VA) and capital employed (CE) is referred to as value added capital employed (VACA). This is an indicator that VA is created by one unit of physical capital. The formula for measuring VACA (Ulum, 2009) is as follows.

$$VACA = \frac{VA}{CA}$$

Description:

VA = Value Added

VA = OUT - IN

Output (OUT) = Total sales and other income.

Input (IN) = Expenses (other than employee expenses).

Value Added (VA) = Difference between output and input

2. Determine Value Added (VA). According to Ermawati et al (2018), Value Added (VA) can be calculated by the formula as follows.

$$VA = OP + EC + D + A$$

Description:

VA = Value Added

OP = Operating Profit

EC = Employee Costs

D = Depreciation

A = Amortization (Amortisasi)

3. Determine the Value-Added Human Capital (VAHC). Value-Added Human Capital (VAHC) shows how much VA can be generated with funds spent on labor. The relationship between VA and HC shows the ability of HC to create value in a company. Measurement of Value-Added Human Capital (VAHC) can be calculated by the following formula (Ulum, 2009).

$$VAHU = \frac{VA}{HC}$$

Description :

VA: Value-Added

HC: Human Capital (employee expense)

4. Determining Structural Capital Value Added (STVA). Structural Capital Value Added (STVA) shows the contribution of Structural Capital (SC) in value creation. Structural Capital Value Added (STVA) measures the amount of Structural Capital (SC) required to generate one rupiah of VA and is an indication of how successful Structural Capital (SC) is in value creation. Measurement of Structural Capital Value Added (STVA) can be calculated by the following formula (Ulum, 2009).

$$STVA = \frac{SC}{VA}$$

Description:

Structural Capital = VA – HC

VA: Value-Added

5. Determine the Value Added Intellectual Coefficient (VAIC). The final ratio of the Value Added Intellectual Coefficient (VAIC) calculation is based on the company's intellectual ability. The Value Added Intellectual Coefficient (VAIC) can be obtained by adding up all the previously calculated

culated coefficients with the following formula (Kurnia, 2019).

$$VAIC^{TM} = VACA + VAHU + STVA$$

According to Bailia et al (2016), sales growth can be interpreted as the rate of increase in the number of sales from year to year or from time to time. If the sales growth rate of a company increases every year, then the company has good prospects in the future. The company's growth rate as measured by sales growth will affect the stock price because the company's growth itself is a factor in the company's development and will have a positive impact on investors (Suripto, 2019). The sales growth measurement indicator used is by comparing the current year's sales with the previous year's sales and multiplying the previous sales by one hundred percent. The formula used to measure sales growth is as follows.

$$\text{Sales Growth} = \frac{st - st-1}{st-1} \times 100\%$$

Description:

St = Sales in year t

St-1 = sales in the previous period

According to Rodoni & Ali (2010), capital structure is the proportion of companies to meet the company's spending needs where the funds obtained for spending use a combination of sources originating from long-term funds consisting of two main sources, namely from within the company and outside the company. According to Marini & Dewi (2019), the Debt to Equity Ratio is a ratio that shows the percentage of funds provided by shareholders to lenders. Debt to Equity Ratio can be calculated by comparing total debt with total equity based on the following formula (Fahmi, 2016).

$$\text{Debt to Equity Ratio} = \frac{\text{Total Debt}}{\text{Total Equity}}$$

According to Ghozali (2018), descriptive statistics provide an overview of the observed data. The descriptive statistics in this study consist of the mean, maximum, minimum, and standard deviation. Classical assumption test is a requirement that must be met in research before performing multiple linear regression analysis. The classical assumption test in this study consisted of normality, multicollinearity, heteroscedasticity and autocorrelation tests.

Regression analysis in this study uses a panel data regression model. According to Widarjono (2013), there are three estimates of panel data re-

gression models, namely Fixed Effect (FE), Common Effect (CE) and Random Effect (RE). The estimation of the panel data regression model was carried out to select the most appropriate model for the research. There are three tests that can be used as a tool to select a panel data regression model based on the characteristics of the data possessed, namely the Chow test, Hausman test, and the Lagrange multiplier test. The hypothesis test in this study consisted of a partial significant test and a coefficient of determination test.

Multiple linear regression analysis was used to examine the effect of independent variables consisting of dividend policy, intellectual capital, sales growth, and capital structure on the dependent variable, namely firm value. This research model is formulated as follows:

$$HS_{it} = \alpha + \beta_1 KD_{it} + \beta_2 MI_{it} + \beta_3 PI_{it} + \beta_4 DER_{it} + \varepsilon$$

Description:

HS_{it} = Stock Price

= Constant

1, 2, 3, 4 = Beta atau Regression Coefficient

KD_{it} = Dividend Policy

MI_{it} = Intellectual Capital

PI_{it} = Sales Growth

DER_{it} = Capital Structure

ε = error

4. Result, Discussion, and Managerial Implication

Table 2 shows the minimum, maximum, mean and standard deviation of the 190 research samples with further interpretation of the descriptive results of each variable.

The stock price shows a minimum value of 50,00000, a maximum value of 20,700 and a standard deviation of 3744,684. The stock price in this study uses the closing price or the end of the period (closing prices) which means that the average closing share price of mining companies is 1927,342. Dividend Policy (KD) shows a minimum value of 0.00000, a maximum value of 8.012100, and a standard deviation of 0.675727 (67.5%). The average value of the dividend policy of 0.219712 shows that every mining company in Indonesia provides a dividend policy of 21.9% which is still low from the portion of profits that the company gets which

Table 2. Descriptive Statistical Analysis Test Results

	HS	KD	MI	PJ	DER
Mean	1927.3	0.219	7.424	0.163	3.895
Maximum	20700	8.012	81.532	1.000	366.9
Minimum	50.000	0.000	0.000	0.000	0.000
Std. Dev.	3744.6	0.675	10.93	0.242	26.77

is distributed to investors in the form of dividends.

Intellectual Capital (MI) shows a minimum value of 0.00000, a maximum value of 81.53250, and a standard deviation of 10.93808. The average value of intellectual capital is 7.424647, which means that the average mining sector public company in Indonesia is 742.4%, which has provided complete and adequate information in the company's annual report on the intangible asset or intellectual capital account that can be used as material for consideration by investors. stakeholders in determining a decision that can be a factor in increasing stock prices.

Sales Growth (PJ) has a minimum value of 0.0000, a maximum value of 1.0000000, and a standard deviation of 0.242675 (24.6%). The average value of Sales Growth (PJ) is 0.1634465 which can be interpreted as the average sales growth rate of mining companies in Indonesia is 16.3%. Capital Structure (DER) has a minimum value of 0.0000, a maximum value of 366.9744 and a standard deviation of 26.77401. The average value of Capital Structure (DER) is 3.895385 where the Debt to Equity Ratio (DER) is a ratio that measures the extent to which the company is financed by debt. The average result of 389.53% shows that the average mining company in Indonesia bears the debt burden.

In this study, the classical assumption test used consisted of normality test, multicollinearity test and heteroscedasticity test. The normality test in this study uses the Jarque-Bera test which aims to see whether the research data used has been normally distributed or not. The statistical value of Jarque-Bera in this study is 1322,608 with a probability value of 0.000000 where the probability value of Jarque-Bera is less than 0.05 which can be concluded that the research data used in this study are not normally distributed. Gujarati (2004) states that research data with a number of observations above 100 does not require a normality test. For large amounts of data, this normality test can be ignored.

The multicollinearity test in this study was based on the Centered VIF value. If the Centered VIF value is less than 10, it means that there is no multicollinearity in the regression model. Based on the results of the multicollinearity test, the value of centered VIF on Dividend Policy (KD), Intellectual Capital (MI), Sales Growth (PJ), and Capital Structure (DER) is less than 10, it can be said that all of

these independent variables are free from multicollinearity symptoms. The heteroscedasticity test is based on the results of the Glejser test based on the analysis of the probability value of Obs*Rsquared. The heteroscedasticity test in this study shows the probability value of Obs*Rsquared is 0.1819. The probability value is greater than 0.05 which indicates that there is no heteroscedasticity problem in the research data.

In this study, a model feasibility test was also carried out to determine which model would be selected. There are 3 tests carried out, namely the Chow Test, Hausman Test and Lagrange Multiplier Test. The probability value of Chisquare Cross-section in the Chow test is $0.0000 < 0.05$, so it can be concluded that the correct model for panel data regression is fixed effect. The random cross-section probability value in the Hausman test is $0.0000 < 0.05$, so it can be concluded that the correct model for panel data regression is fixed effect. The probability value of the Breusch-Pagan Cross-section in the Lagrange Multiplier test is $0.0000 < 0.05$, so it can be concluded that the right model for panel data regression is random effect. From the three tests carried out, the panel data regression model was selected based on fixed effects and the Lagrange Multiplier test did not need to be carried out.

According to Ghozali (2018), the coefficient of determination (R^2) measures how far the model's ability to explain variations in the dependent variable is. The value of the coefficient of determination can be seen from the adjusted R-Squared value. The adjusted R-squared value obtained in this study was 0.841119. This result can be interpreted that 84.1% of stock price variation is influenced by dividend policy, intellectual capital, sales growth, and capital structure. While the remaining 15.9% of stock price variations are explained by other independent variables not included in this study.

Based on the results of the model feasibility test, the following are the results of multiple regression analysis based on panel regression using the fixed effect which are shown in table 3.

$$HS_{it} = 1782.076 - 298.3831 KD_{it} + 31.05124 MI_{it} + 594.0768 PJ_{it} - 29.99203 DER_{it} + e$$

Based on the results of multiple linear regression analysis, dividend policy (KD) has a coefficient value of -298.3831 with a probability value of 0.1809. The coefficient value obtained in the dividend policy is negative. The probability value on dividend policy is greater than the probability level

Table 3. Hypothesis Test Results

Variable	Coefficient	Prob.
Constant	1782.076	0.0000
Dividend Policy	-298.3831	
Intellectual Capital	31.05124	0.0742
Sales Growth	594.0768	0.2570
Capital Structure	-29.99203	0.0000

of 0.05. These results indicate that Ha1 is rejected, which means that dividend policy has a negative and insignificant effect on stock prices. Intellectual capital (MI) has a coefficient value of 31.05124 with a probability value of 0.0742. The coefficient value obtained on intellectual capital is positive. The probability value obtained on intellectual capital is greater than the probability level of 0.05. These results indicate that Ha2 is rejected, which means that intellectual capital has a positive and insignificant effect on stock prices.

Sales growth (PJ) has a coefficient value of 594.0768 with a probability value of 0.2570. The coefficient value obtained on sales growth is positive. The probability value obtained on sales growth is greater than the probability level of 0.05. These results indicate that Ha3 is rejected, which means that sales growth has a positive and insignificant effect on stock prices. The capital structure (DER) has a coefficient value of -29.9203 with a probability value of 0.0000. The coefficient value obtained by the capital structure is negative. The probability value obtained in the capital structure is smaller than the probability level of 0.05. These results indicate that Ha4 is accepted, which means that the capital structure has a negative and significant effect on stock prices.

The Effect of Dividend Policy on Stock Prices

Based on the results of the research described previously, it is known that dividend policy has no effect on stock prices. This is evidenced by the coefficient value of -298.3831 with a probability value of 0.1809 which is greater than the probability level of 0.05. Dividend policy has a negative correlation, which means that an increase in dividend distribution will cause a decrease in stock prices. The results of this study are in line with the research of Latifah & Suryani (2020) which states that dividend policy has no effect on stock prices. However, the results of this study are not in line with research conducted by Lailia and Suhermin (2017), Clarensia et al (2016), and Istanti (2018) which state that dividend policy has a significant effect on stock prices. How often the company distributes dividends or how small the dividend distribution does not affect stock prices. Another possibility is that dividend policy does not affect stock prices because the data in this sample are many companies that rarely or do not distribute dividends. The distribution of cash dividends disclosed in the financial statements published by the company is not the main thing that is seen and considered by shareholders for investment decisions, because not entirely the profits obtained by the company are allocated for dividends. However, the profits obtained by the company can be allocated for business expansion and development by investing in the purchase of fixed assets, long-term investments, and others.

The Effect of Intellectual Capital on Stock Prices

Based on the results of the research described previously, it is known that intellectual capital has no effect on stock prices. This is evidenced by the coefficient value of 31.05124 with a probability value of 0.0742 which is greater than the probability level of 0.05. The results of this study are in line with research by Ermawati et al (2018) which states that intellectual capital has no effect on stock prices because the disclosure of intellectual capital provides its own challenges for accountants to be able to identify, measure and disclose it into the company's financial statements. According to Ferdiansyah & Ferdian (2020), disclosure of intellectual capital is a rare resource owned by a company and is only owned by one company because disclosure of intellectual capital cannot be imitated by other companies. However, the results of this study are not in line with the results of Kurnia (2019), Kusufiah et al (2017) and Dutrianda & Pangaribuan (2020) which state that intellectual capital has a significant effect on stock prices.

Disclosure of intellectual capital elements in a company's financial statements will not add value to the price of outstanding shares if mining companies in Indonesia have not used their tangible and intangible assets effectively and efficiently. Companies need to create more appropriate policies to allocate these resources. Intellectual capital reporting in the company's annual report is not included as an element in the statement of financial position, although intellectual capital is more identified with intangible assets because the elements that make up intellectual capital are difficult to quantify.

The Effect of Sales Growth on Stock Prices

Based on the results of the research described previously, it is known that sales growth has no effect on stock prices. This is evidenced by the coefficient value of 594.0768 with a probability value of 0.2570 which is smaller than a significance value of 0.05. That is, the increasing sales growth of a company will not affect the company's stock price. The results of this study are in line with Clarensia et al (2016) and Hayati et al (2019) which state that sales growth has no significant effect on stock prices. This is because sales growth measures how well a company maintains its overall economic condition and a company's sales growth can affect a company's ability to maintain profits in funding opportunities that exist in the future. However, this research is not in line with the results of Supto (2019), Yunita and Mayliza (2019) which state that sales growth has a significant effect on stock prices.

The increase in sales growth is not necessarily followed by an increase in the company's net profit. This is presumably due to an increase in the cost of goods sold, operating costs, and taxes and interest

that must be paid by the company which will reduce the company's net profit even though sales are increasing. This makes the increase in sales growth is not always accompanied by an increase in stock prices. The higher the sales growth rate can make the company require high working capital and investment capital as well. The increasing sales growth is not directly proportional to the net profit obtained by the company. An increase in sales of a company will increase profits but an increase in profit in its allocation does not make the increased profit distributed as dividends. This result makes shareholders not really consider sales growth to analyze stock prices in mining companies that do not pay dividends on average.

The Effect of Capital Structure on Stock Prices

Based on the results of the research described previously, capital structure has a negative effect on stock prices. This is evidenced by the coefficient value -29.9203 with a probability value of 0.0000 which is smaller than the probability level of 0.05. The capital structure has a negative correlation coefficient, which means the higher the Debt to Equity Ratio (DER) of a company, the lower the stock price. The results of this study are in line with Hendi's research (2019) which states that capital structure has a negative and significant effect on stock prices and according to Lailia (2017) a company with a high level of debt will affect the size of the company's profit and describe the company's ability to meet all of its obligations indicated by some part of its own capital which is used to pay all its obligations. However, this study is not in line with the results of research according to Pratiwi (2019) and Hanafi & Handayani (2019) which state that capital structure has no significant effect on stock prices.

The higher the level of debt owned by the company, it will cause a decrease in the stock price of a company because the use of a company's capital structure utilizes a lot of debt which will pose a risk to the company. The risk that can arise from the increasing interest costs of liabilities is business risk where interest costs from liabilities can reduce company profits. The decline in company profits will cause investor demand for these shares to decrease which in turn will cause the stock price to fall. The higher the Debt to Equity Ratio (DER), the higher the company's relationship with external parties, which results in reduced shareholder rights. The higher the Debt to Equity Ratio (DER) affects the interest of shareholders in companies where shareholders are more interested in buying shares of companies that do not bear too many interest-bearing obligations. The higher the DER level, the lower the interest of shareholders to invest in the company because shareholders tend to avoid companies that have a high DER value. This means that shareholders pay attention to how much capital is financed by the company itself to generate and in-

crease the net profit earned by the company compared to the previous period.

5. Conclusion, Suggestion, and Limitation

This study aims to determine the effect of dividend policy, intellectual capital, sales growth and capital structure on stock prices. The population used in this study are mining companies listed on the Indonesia Stock Exchange during 2015 – 2019. Based on the results of testing and discussion of the analysis in the previous chapter, the following conclusions can be obtained. Dividend policy measured using the Dividend Payout Ratio (DPR) has no effect on stock prices. The results of this study are in line with Latifah & Suryani (2020) which states that the decrease or increase in dividend payments is not always the cause of the fluctuations in stock prices but can depend on the level of profits obtained by the company or the profits generated from the company's assets.

Intellectual capital as measured by VAICTM (Value Added Intellectual Coefficient) has no effect on stock prices. The results of this study are in line with Ermawati et al (2018) which states that intellectual capital disclosure has its own challenges in its disclosure, where each company has different intellectual capital. Sales growth has no effect on stock prices. The results of this study are in line with Clarensia et al (2016) and Hayati et al (2019) which state that sales growth can measure how well the company maintains its overall economic condition. The capital structure as measured by the Debt to Equity Ratio (DER) has a negative effect on stock prices. The results of this study are in line with Hendi's research (2019) which states that the higher the level of debt owned by the company, the lower the stock price.

Based on the conclusions that have been described, the following are the implications of the research that aims to increase insight for academics or further researchers, companies, governments and investors. For academics, this research can be used as a reference to increase knowledge about the effect of dividend policy, intellectual capital, sales growth and capital structure on stock prices. For companies, this research can enable the company to consider various other factors other than those discussed in this study that can affect the company's business continuity. Based on the results of this study, capital structure has a negative effect on stock prices which can be interpreted if the debt level is higher then the stock price will decrease. The results of this study can provide insight to the company so that it can more effectively manage its capital structure. For investors, the results of this study can make investors understand that capital structure can affect the stock price of a company, so investors must be more careful before investing and pay attention to the components that exist in the company so as not to get wrong information

related to investment decision making.

The scope of the research is limited to the mining sector listed on the Indonesia Stock Exchange. Further research is expected to replace the mining sector with other sectors listed on the Indonesia Stock Exchange. The period used is only 2015 – 2019 so that researchers have not been able to analyze the effect of stock prices in the long term. Further researchers are advised to extend the research period to more than five years in order to be able to analyze stock prices in a longer time. The independent variables used in this study consist of dividend policy, intellectual capital, sales growth and capital structure, even though there are several other factors that can influence stock prices. Further research can use other independent variables that are estimated to have a significant influence on stock prices such as firm size, leverage, and profitability.

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