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UNRAVELING THE DYNAMICS: EXPLORING THE VARIED FACTORS IMPACTING STOCK PRICES OF MINING SECTOR FAMILY BUSINESS COMPANIES LISTED ON IDX FROM 2020 TO 2022

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ABSTRACT

Stock are one of the ways to raise capital for a company. Stock prices are influenced by many factors. This research aims to find out the effect of the solvency ratio, firm size, inflation, gross domestic product on the dependent variable, stock price, through the mediating variable,the profitability ratio. The object of this research is mining sector companies managed by families and registered on the IDX in 2020 - 2022. Samples were taken using a purposive sampling technique where the total sample was 81 from 27 companies. This research use the path model with the SmartPLS 4 application. The results of this research are that the solvency ratio has a significant negative effect on stock price and profitability ratio, firm size has a significant positive effect on stock price and profitability ratio, inflation has an insignificant negative effect on stock price and positive insignificant effect on profitability ratio, gross domestic product has an insignificant negative effect on stock price but has an insignificant positive effect on profitability ratio, profitability ratio has a significant positive effect on stock price, the solvency ratio has a significant negative effect on stock price with mediation profitability ratio, firm size has a significant positive effect on stock price with the mediation of the profitability ratio, inflation and gross domestic product have an insignificant positive effect on stock price with the mediation of the profitability ratio.

Keywords: *Solvency Ratio, Firm Size, Inflation, Gross Domestic Bruto, Stock Prices*

1. INTRODUCTION

Stocks are valuable documents that serve as evidence that an individual owns a portion of the capital in a company. The purpose of a company issuing stocks is to increase the amount of capital available to the company. Stocks are considered an essential source to fulfill the company's needs for expansion and diversification [1]. The value of a company can be assessed through the stock price. Investors are naturally more interested in companies with a high corporate value [2]. Many factors influence stock prices, including internal and external factors. On the internal factors, investors can conduct fundamental analysis by examining the company's financial reports published annually. External factors include, for example, the economic conditions of a country.

The economies of Indonesia and the world were significantly impacted by the invasion carried out by Russia against Ukraine in February 2022. This is because Russia is the world's third-largest producer of crude oil and the second-largest producer of natural gas. Therefore, other countries began seeking alternative energy sources such as coal. Not only did the price of coal increase, but other mining commodities also experienced price hikes due to increased demand from other countries as a result of this war.

Additionally, the Russia-Ukraine War has led to ongoing inflation. Indonesia's economy, which had just recovered from the COVID-19 pandemic in 2020 to 2021, now has to confront the inflationary effects of this war. With the end of the COVID-19 pandemic and the

beginning of the war between Russia and Ukraine, it can be concluded that the performance of companies, especially in the mining sector, will experience significant impacts. These impacts will be reflected in the annual reports published by the companies each year.

Based on a survey conducted by Price Waterhouse Cooper (2014), the results indicate that more than 95% of family-owned businesses are capable of contributing up to 25% to Indonesia's national income. This is the reason why this research chooses to sample family-owned companies in the mining sector.

Research [2] shows that the Debt to Equity Ratio has a significant positive influence on stock prices. Research [3] states that the Debt to Equity Ratio has a positive but not significant influence. Conflicting results from research [4] states that the Debt to Equity Ratio has a negative influence on share prices.

Research [2] states that firm size has a significant negative influence on share prices. On the other hand, researchers [5] that firm size has a significant positive influence on share prices.
Research [6] states that inflation has a significant negative influence on stock prices. Study [7] states that inflation does not have a significant effect on stock prices. Study [8] states that inflation has no effect on stock prices.

Study [7] states that gross domestic product does not have a significant effect on stock prices. This is contrary to research from [9] and [5] which states that gross domestic product has a positive influence on stock prices.

Research [10] states that Return On Assets has a positive influence on share prices. This is contrary to research by [3] which states that Return On Assets has a negative but not significant influence on share prices. Research from [11] support the research from [3] which states that Return On Assets does not have a positive and insignificant influence on share prices.

Study [2] states that the Debt to Equity Ratio has a significant negative influence on Return On Assets while research [12] Debt to Equity Ratio has no effect on Return On Assets.
Research [2] and [13] states that firm size has a positive influence on Return On Assets while research [14] states that firm size has an insignificant influence on Return On Assets.

Study [15] stated that inflation has a significant positive influence on Return On Assets which is supported by research [16] states that inflation has a positive influence on Return On Assets. On the other hand, research [13] states that inflation has a significant negative influence on Return On Assets.

Research [16] and research [13] have something in common, namely stating that GDP has a significant positive influence on Return On Assets, but research [17] states that gross domestic product has a negative influence on Return On Assets.

Because previous research produced a wide range of results, route model analysis was used in this study to conduct more research utilizing the same variables. This study's focus is on family-run mining business that were listed on IDX between 2020 and 2022. Through the use of profitability ratios as a mediator, this study seeks to determine the effects of solvency ratios, firm size, inflation, and gross domestic product on stock prices.

Signaling Theory is a theory that explains the reasons why the sending party (company) with information about its conditions is motivated to provide financial report information to external parties (investors, issuers, or the government) [18]. This theory was first introduced by Spence in 1973. Information provides two types of signals: positive signals and negative signals. [19] If it is a positive signal (good news), investors will respond positively and show interest in investing; conversely, if it is a negative signal (bad news), investors' interest in investing in the company diminishes.

Arbitrage Pricing Theory is one of the valuation techniques used to determine the overall stock price using the concept of arbitrage. The concept of arbitrage involves making a profit without risk by exploiting opportunities in the price differences of the same asset or securities[20]. Investors can sell an asset (stock) at a relatively high price and then buy it again when the price is relatively low. This theory was proposed by Stephen Ross in 1976. The Arbitrage Pricing Theory also states that the return on an asset is influenced by the macroeconomic conditions of a country, such as inflation, interest rates, exchange rates, GDP, and oil prices [21]

In a journal written by (Harms, 2014), one definition of a family business, as expressed by Donnelley, is if the company has been closely identified with at least two generations of a family and if this relationship has a reciprocal influence on the company's policies as well as the family's interests and goals.

Stock price is the price of a stock in the capital market at a particular time, determined by market participants and influenced by the demand and supply of stocks in the capital market [22]. [2] states that the stock price is the current price of the stock listed/traded on the stock exchange, determined by market participants and by the demand and supply of the respective stock in the capital market. The stock price of a company reflects the company's value for investors, so a high stock price attracts investors to invest in the company.

From the explanations above, it can be concluded that the stock price is the value/price per share listed on the stock exchange, determined by market participants and by supply and demand, where the stock price indicates the company's value, performance, and financial health.

Solvency ratios are ratios used to determine a company's ability to pay its obligations if the company is liquidated [23]. In the book by Hanafi and Halim (2016), it is stated that solvency ratios measure a company's ability to meet its long-term obligations. A company with total debts greater than its equity is an insolvent company. Companies with high debt have high risk.

Based on the above explanations, it can be concluded that solvency ratios are ratios used to determine a company's ability to pay its obligations.

Firm size is defined as the magnitude of a company that can be seen or measured by the magnitude of total assets, investments, capital turnover, production tools, number of employees, business network coverage, market dominance, production output, value-added, and the amount of taxes paid[24]. According to Article 1 of Law No. 20 of 2008, the official classification in Indonesia according to the Law is divided into 4 categories: micro, small, medium, and large enterprises. Microenterprises have a net worth of up to 50 million rupiahs and do not include land and buildings used for business or have annual sales of up to 300

million rupiahs. Small enterprises have a net worth between 50 million to 500 million rupiahs, excluding land and buildings used for commercial purposes, or have annual sales between 300 million rupiahs and 2.5 billion rupiahs. Medium enterprises have a net worth between 500 million rupiahs to a maximum of 10 billion rupiahs, excluding land and commercial buildings, or have annual sales of more than 2.5 billion rupiahs to a maximum of 500 billion rupiahs. Large enterprises are productive economic activities carried out by business entities with a net worth or annual sales greater than medium enterprises, including national or privately-owned businesses, joint ventures, and foreign businesses conducting economic activities in Indonesia.

From the above explanations, it can be concluded that the size of a company is the magnitude of a company seen from its assets or its sales.

[16] states that inflation is a general increase in the prices of goods and services, which can impact a company's income and expenses. The definition of inflation from the Bank Indonesia website is a simple one: a continuous and general increase in prices. [25] explains that inflation is the rate at which the general prices of goods and services rise and, consequently, the value of a currency decreases. [19] also agree that inflation is a continuous or sustained process of increasing prices of goods and services, related to market mechanisms caused by various factors, such as continuous consumer demand or irregularities in the distribution of goods.

From the definitions provided by previous researchers, it can be concluded that inflation is a general and continuous increase in the prices of goods and services that can affect a company's income and expenses, as well as a decrease in the value of currency due to various factors such as excessive consumer demand or irregularities in the distribution of goods.

As reported by the Central Statistics Agency, Gross Domestic Product (GDP) is essentially the sum of the value added produced by all business units in a particular country, or the total value of final goods and services produced by all economic units. Gross Domestic Product is considered one of the most significant macroeconomic variables to represent profitability. [25] states that GDP is the most commonly used macroeconomic measurement to assess the impact of macroeconomic factors on profitability.

From the explanations above, it can be concluded that Gross Domestic Product is the market value of all goods and services produced by a country in a specific period, serving as an indicator to understand the economic condition of a country.

Profitability ratios are ratios used to determine a company's ability to generate profit at a certain level of sales, assets, and equity (Hanafi & Halim, 2016). This ratio serves as a benchmark for the effectiveness of a company's management and is used to evaluate the company's ability to generate profit. [26] states that profitability ratios are one of the essential elements for performance evaluation, showing the proportion of profit compared to asset investment, equity, or sales.

Based on the definition provided, it can be concluded that profitability ratios are a measure of a company's ability to use assets to generate profit for the company.

The solvency ratio can be measured by the Debt to Equity Ratio which can be seen in the company's financial reports. Solvency ratios measure a company's ability to pay company

obligations. The greater the Debt to Equity Ratio number, the higher the company's risk. This makes investors tend to be afraid to invest and makes share prices fall. This is in line with research from [4] which states that investors pay attention to the company's Debt to Equity Ratio as one of their investment decisions
H1 : Solvency ratios have a significant negative effect on stock prices

Large companies that have lots of assets tend to be trusted by investors. Investors see that the company can manage and use its assets to make a profit. This can increase investors' interest in buying company shares and feel safe in investing in the company so that share prices rise. This is in line with research [5] which states that firm size has a positive effect on share prices
H2 : Firm size has a significant positive effect on share prices

A high inflation rate gives a negative signal to investors. Inflation reduces company profits. If the increase in production costs is higher than the increase in the price of goods by the company, then the company's profitability will decrease. If the profits obtained by the company are small, this will result in investors being reluctant to invest their funds in the company so that share prices experience a decline. [23]
H3 : Inflation has a significant negative effect on stock prices

Gross domestic product is a reflection of a country's economic condition. If gross domestic product is high, the economic condition of a country is considered good and indicates good company profitability. This is in line with research from [5] and [9] who in his research said that gross domestic product has a positive effect on stock prices
H4: Gross domestic product has a significant positive effect on stock prices

The profitability ratio is measured using Return On Assets. This ratio shows how a company uses its assets to make a profit. The better a company manages its assets and makes a profit, the higher its Return On Assets will be. High profitability provides a positive signal to investors to buy company shares [3]
H5 : Profitability ratios have a significant positive effect on share prices

High levels of debt make companies use their profits to pay debts and interest expenses from loans they have. Fulfilling these obligations and paying interest expenses can reduce the company's profitability. This is in line with research from [2]
H6 : Solvency ratios have a significant negative effect on profitability ratios

The size of a company can be seen from the number of assets it owns. The bigger a company, the more assets it can use to generate profits. Research [2] explains that firm size has a significant positive effect on profitability ratios
H7 :Firm size has a significant positive effect on profitability ratios

Increasing inflation from year to year makes the price of goods more expensive, which results in people's purchasing power decreasing. This has an impact on the company's income and expenses. A decrease in public interest and needs will reduce company profitability. This is in line with research from [13] which states that inflation has a negative impact on profitability ratios.
H8: Inflation has a significant negative effect on profitability ratios

A high business cycle in a country can increase company profitability in general, whereas if the business cycle is low it will reduce company profitability in general. Low profitability will be a bad signal for investors. [15] stated that gross domestic product has a positive effect on profitability ratios
H9: Gross domestic product has a significant positive effect on profitability ratios

The company's ability to manage its obligations will increase the company's ability to gain profits. An increase in profits will increase the company's share price.
H10: The solvency ratio has a significant negative effect on stock prices, mediated by the profitability ratio

Large companies have more assets that can be used to achieve profitability. This is in line with research from [2] which states that profitability ratios have a significant positive influence in mediating the relationship between firm size and share prices.
H11: Firm size has a significant positive effect on share prices, mediated by profitability ratios

Inflation causes the prices of goods to increase. This can result in a decrease in the number of buyers. In addition, the raw material costs that the company needs to spend will increase. With reduced purchasing power and increased raw material costs incurred by the company, this can affect the company's income, which apart from affecting the company's profitability ratio, will also ultimately affect the company's share price. This is in line with research [6] which states that inflation has a negative effect on stock prices and [13] which states that inflation has a negative effect on profitability ratios.
H12: Inflation has a significant negative effect on stock prices, mediated by profitability ratios

The level of gross domestic product shows economic growth where economic growth reflects economic conditions and changes in a country. If the level of gross domestic product increases, it can be concluded that economic conditions are improving, company performance in the country is increasing, which refers to company profitability increasing, so this can influence share prices. This is in line with research [9] which states that gross domestic product has a positive effect on stock prices and [15] which states that gross domestic product has a positive effect on profitability
H13: Gross domestic product has a significant positive effect on stock prices, mediated by profitability ratios

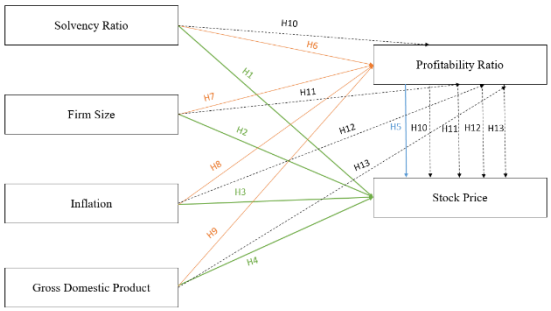

Figure 1. Conceptual Framework

3. RESEARCH METHOD

This research uses secondary data obtained from the company's official website and IDX. The company used is a family company in the mining sector in the period 2020 – 2022. Data is processed using the smartpls 4 application.

For solvability and profitability ratios, manual calculations are utilized by extracting figures from the financial statements found in the annual report. This is due to the difference between manual calculations and the ratio calculations already presented in the financial highlights of the company's annual report. In data processing, the stock price will be determined using the formula ln (stock price).

Table 1. Variable and Proxy

No	Variable	Proxy	Reference
1.	Stock Price (SP)	Closing stock price at the end of each year	[1]
2.	Solvency Ratio (sr)	Debt to Equity Ratio= $\frac{Total\ Liabilities}{Total\ Equity}$	[2]
3.	Firm Size (FZ)	Ln(Total Asset)	[2]
4.	Inflation (IF)	Annual Inflation Rate (December xxxx)	[25]
5.	Gross Domestic Bruto (GDP)	Annual Growth of GDP $\frac{GDP\ now\ -\ GDP\ past}{GDP\ past}$	[25]
6.	Profitability Ratio (PR)	Return On Asset = $\frac{Net\ Profit\ after\ Tax}{Total\ Assets}$	[10]

3. RESULTS AND DISCUSSIONS

Table 2. Statistic descriptive

Name	Mean	Min	Max	Std. deviation
SP	6.401	3.912	10.800	1.789
SR	2.083	0.097	24.849	4.082
FZ	28.984	22.350	32.323	2.218
IF	0.030	0.017	0.055	0.018
GDP	0.023	-0.021	0.053	0.032
PR	0.078	-0.260	0.593	0.165

The stock price has a mean of 6.401 and a standard deviation of 1.789. The minimum value of the stock price is 3.912, and the maximum value is 10.800. Solvency ratio, measured using the Debt to Equity Ratio, has a mean of 2.083 and a standard deviation of 4.082. The minimum value is 0.097, and the maximum value is 24.849. Firm size has a mean of 28.984 and a standard deviation of 2.218 The minimum value for firm size is 22.350 and the maximum value is 32.323. Inflation has a mean of 0.030 and a standard deviation of 0.018. The minimum inflation value is 0.017 in the year 2020, and the maximum value is 0.055 in the year 2022. Gross Domestic Product (GDP) has a mean of 0.023 and a standard deviation of 0.032. The minimum GDP value is -0.021 in the year 2020, and the maximum value is 0.053 in the year 2022. Profitability ratio, measured by Return on Asset, has a mean of 0.078 and a standard deviation of 0.165. The minimum value is -0.260, and the maximum value is 0.593.
Path Model

Table 3. outer loading

	SP	SR	FZ	IF	GDP	PR
SP	1.000					
SR		1.000				
FZ			1.000			
IF				1.000		
GDP					1.000	
PR						1.000

From the outer loadings table, the results of all variables are 1. This shows that the results of the outer loadings of all variables are significant because they are greater than the standard value of 0.708.

Table 4. Cronbrach's Alpha dan Composite Reliability

	cronbrach's alpha	composite reliability (rho_c)	composite reliability (rho_a)
SP	1.000	1.000	1.000
SR	1.000	1.000	1.000
FZ	1.000	1.000	1.000
IF	1.000	1.000	1.000
GDP	1.000	1.000	1.000
PR	1.000	1.000	1.000

The results of Cronbach's alpha and composite reliability of all variables are 1. This shows that all variables have high reliability so they can be used for research.

Table 5. AVE

	Average Variance Extracted (AVE)
SP	1.000
SR	1.000
FZ	1.000
IF	1.000
GDP	1.000
PR	1.000

In the AVE table, the value of all variables is 1. This shows that the average construct explains more than half of the variance of the indicators because it exceeds the standard value of 0.50

Tabel 6. VIF

	VIF
SP	1.000
SR	1.000
FZ	1.000
IF	1.000
GDP	1.000
PR	1.000

In the table above, the VIF value of all variables is 1. This shows that there is no multicollinearity in the regression model between one independent variable and other independent variables.

The critical value limit used in one-tailed tests is 1.65 with a significance level of 5%. If the T-statistic is smaller than 1.65 and the P-Value is greater than 5%, it means that the independent variable influences it insignificantly and vice versa.

Table 7. Direct Effect

	Original sample (O)	T-statistics	P values
SR (X1) -> SP	-0.145	1.792	0.037
FZ (X2) -> SP	0.171	1.922	0.027
IF (X3) -> SP	-0.004	0.029	0.488
GDP (X4) -> SP	-0.095	0.697	0.243
PR (M) -> SP	0.523	6.769	0.000
SR (X1) ->PR	-0.248	4.880	0.000
FZ (X2) -> PR (M)	0.175	2.257	0.012
IF (X3) -> PR (M)	0.017	0.103	0.459
GDP (X4) -> PR (M)	0.172	1.570	0.058

Solvency ratio has significant negative impact on stock prices. Therefore hypothesis 1 is accepted. The larger the Debt to Equity Ratio, the higher the company's risk. This serves as a signal and makes investors hesitant to invest in the company, causing the stock prices to decline. This research is supported by [4] who state that the Debt to Equity Ratio has a significant negative impact on investor reactions measured through stock prices.

Firm size has a significant positive impact on stock prices. Therefore hypothesis 2 is accepted. Investors consider the size of a company as an investment consideration. This is also because larger companies are perceived as more stable and safer from the risk of bankruptcy, attracting investor interest. High investor interest tends to increase the company's stock prices. The findings of this research align with the study by [5] which states that firm size has a positive influence on stock prices.

Inflation has a insignificant negative impact on stock prices. Therefore hypothesis 3 is rejected. High inflation rates lead to currency depreciation, affecting reduced purchasing power, profitability, and investment returns. Such inflation rates convey negative signals to investors as they have the potential to diminish company profits. This is consistent with the findings of [9] which state that inflation has a negative impact on stock prices.

Gross Domestic Product (GDP) has a insignificant negative impact on stock prices. Therefore hypothesis 4 is rejected. The increase or decrease in gross domestic product (GDP) does not significantly affect stock prices. This is because an increase in GDP does not necessarily indicate an increase in the profitability of a company. Investors also tend to consider the risks and performance of a company when choosing to invest in it.This finding contrasts with the findings of [9] and [5] which state that the Gross Domestic Product has a positive influence on stock prices.

Profitability ratio has a significant positive impact on stock prices. Therefore hypothesis 5 is accepted. The ability of a company to generate good profits using its existing assets will be

an indication of how efficiently the company can operate. With continuously increasing profits, it is likely that the company's overall value will rise, and there is a possibility that the trading value of its stocks will also increase as many individuals seek to benefit by owning a portion of the company's shares. This aligns with signaling theory, where if a company reports high profits in its financial statements, it serves as a positive signal for investors to start investing in the company. This is consistent with the research by [10] which states that profitability ratios measured by Return On Assets have a positive impact on stock prices.

The solvency ratio has a significant negative impact on the profitability ratio. Therefore hypothesis 6 is accepted. Unexpected debt or other unplanned obligations can have adverse effects on a company's profitability. High levels of debt force a company to use its profits to pay off debts and interest charges from loans. Debt burdens will be high when a company borrows at high bank interest rates. Meeting these obligations and paying interest charges can reduce income, resulting in a smaller profitability ratio. This is in line with the research conducted by [2].

Firm size has a significant positive impact on the profitability ratio. Therefore hypothesis 7 is accepted. A large company size has many assets that can be used to generate profitability. Investors believe that the company's ability to manage and utilize its assets will contribute to profit results. This belief can increase investors' interest in buying shares in the company and provide a sense of security in making an investment, which in the end can result in an increase in share prices. This research is in accordance with research from [2] which explains that firm size has a significant positive effect on profitability ratios.

Inflation has a insignificant positive impact on the profitability ratio. Therefore hypothesis 8 is rejected. With inflation, commodity prices tend to increase. As commodity prices increase, there is also an increase in the prices of goods/services produced by the company. This price increase will affect the company's nominal profits. This finding is in line with research from [15] which states that inflation has a positive effect on profitability ratios.

Gross Domestic Product (GDP) has a insignificant positive impact on the profitability ratio. Therefore hypothesis 9 is rejected. High gross domestic product is an indication of good market conditions today. This means that if gross domestic product increases, the profitability ratio will increase. With good economic conditions, demand for a company's goods increases, contributing to increased sales and ultimately, achieving higher profitability [16]. This is supported by research by [13] which states that gross domestic product has a significant positive influence on the productivity ratio.

Table 8. Indirect Effect

	Original sample (O)	T statistics	P values
SR -> PR -> SP	-0.130	4.050	0.000
FZ -> PR -> SP	0.092	2.085	0.019
IF -> PR -> SP	0.009	0.103	0.459
GDP -> PR -> SP	0.090	1.500	0.067

The results above indicate a significant negative influence of profitability ratio in mediating the relationship between solvency ratio and stock prices. Therefore hypothesis 10 is accepted. Companies that have high debt will reduce the company's profitability. Low profitability will be a signal for investors to withdraw their investment funds so that share prices fall. This is in line with research from [2].

There is a significant positive influence of profitability ratio in mediating the relationship between firm size and stock prices. Therefore hypothesis 11 is accepted Large companies have a large number of assets that can be utilized for profit. Apart from that, large companies are also considered more efficient in managing production costs to make them cheaper. Apart from the total asset value, firm size can also be measured from operational activities, sales volume and number of shares outstanding. Large companies that achieve high sales with low production costs can increase company profitability. The high profitability of a company is an indicator for investors to invest their capital in the company. This is in line with research from [25] which states that firm size has a positive effect on profitability ratios and research by [5] which states that firm size has a positive effect on share prices

There is an insignificant positive influence of profitability ratio in mediating the relationship between inflation and stock prices. Therefore hypothesis 12 is rejected. The company's anticipation in facing inflation is also important so that the company's profitability is maintained. This finding is in line with [17] who stated that inflation has a positive influence on profitability but is inversely proportional to research by [8] which states that inflation has no effect on stock prices.

There is an insignificant positive influence of profitability ratio in mediating the relationship between Gross Domestic Product (GDP) and stock prices. Therefore hypothesis 13 is rejected. This explains that gross domestic product as an indicator for assessing the country's economy from various sectors is one of the considerations for investors. Good gross domestic product figures mean that companies in a country are in a favorable situation so that investors can choose to invest in the desired sector. Gross domestic product contributes to company profits but is not significant, so the effect on share prices is not significant. These findings are in line with [9] which states gross domestic product has a positive effect on stock prices and [13] which states gross domestic product has a positive effect on profitability ratios.

Table 9. Total Effect

Hypothesis	Path coef
SR (X1) -> SP	-0.275
FZ (X2) -> SP	0.262
IF (X3) -> SP	0.005
GDP (X4) -> SP	-0.005
PR (M) -> SP	0.523
SR (X1) ->PR	-0.248
FZ (X2) -> PR (M)	0.175
IF (X3) -> PR (M)	0.017
GDP (X4) -> PR (M)	0.172

The results of the Path Coefficient Test based on the table above are presented to produce the equation:
Y = -0.275 X1 + 0.262 X2 + 0.005 X3 -0.005 X4 + 0.523M + e
M = -0.248 X1 + 0.175 X2 + 0.017 X3 + 0.172 X4 + e Keterangan
X1 = *Solvency Ratio*
X2 = *Firm Size*
X3 = *Inflation*
X4 = Gross Domestic Bruto
M = *Profitability Ratio*
Y = *Stock Price*
e = *Error*

Table 10. Coefficient Determination (R^2)

	R-square	R-square adjusted
SP	0.371	0.329
PR	0.144	0.099

Based on the table above, it is shown that the R^2 for stock prices is 0.329, which can be concluded that the independent variables in this study explain only 32.9% of the stock price variable. The remaining 67.1% is explained by other variables not used in this study. As for the profitability ratio, it has an R^2 of 0.099, which implies that the independent variables in this study explain only 9.9% of the profitability ratio variable. The remaining 90.1% is explained by other variables not included in the study.

Table 11. F^2 Effect Size

	SP	PR
SR	0.030	0.069
FZ	0.044	0.036
IF	0.000	0.000
GDP	0.007	0.017
PR	0.373	

The F^2 Effect Size test results indicate that the solvency ratio has a small effect on stock prices and profitability ratios, firm size has a small effect on stock prices and profitability ratios, inflation has a small effect on stock prices and profitability ratios, Gross Domestic Product (GDP) has a small effect on stock prices and profitability ratios, and profitability ratio has a large effect on stock prices.

Table 5.11 Predictive Relevance Q^2

	Q^2predict
SP	0.054
PR	0.073

From the Predictive Relevance Q^2 table, it is shown that the Q^2 value is greater than 0, indicating that the model used in this study has predictive relevance.

4. CONCLUSIONS AND SUGGESTIONS

This study aims to determine the influence of independent variables, namely solvency ratio, firm size, inflation, and Gross Domestic Product (GDP), on the dependent variable, which is stock prices, with the mediating variable being profitability ratio. Solvency ratio is measured by debt to equity ratio, firm size is measured by ln(total assets), inflation is measured by annual inflation rate, Gross Domestic Product is measured by annual growth, profitability ratio is measured by return on asset, and stock prices are measured by closing stock prices on December 30.

The population in this study consists of family companies in the mining sector listed on the Indonesia Stock Exchange (IDX) from 2020 to 2022. The sample size used in this study is 81 samples from 27 companies.

Based on the results, solvency ratio has a significant negative impact on stock prices. The greater the Debt to Equity Ratio number, the higher the company's risk. This is a signal and makes investors tend to be afraid to invest in the company and makes share prices fall.

Based on the result, firm size has a significant positive impact on stock prices. Investors make firm size a consideration for investing. Larger companies are perceived as more stable and safer from the risk of bankruptcy,

Based on the results, inflation has an insignificant negative impact on stock prices. High inflation is a negative signal for investors due to the decline in people's purchasing power which will affect company profitability.

Based on the results, gross domestic product has insignificant negative impact on stock prices. This is because an increase in GDP does not necessarily indicate an increase in the profitability of a company. Investors also tend to consider the risks and performance of a company when choosing to invest in it.

Based on the results, the profitability ratio has a significant positive impact on stock prices.
Companies that generate high profitability and report high profits in annual reports will be a good signal for investors to start investing in that company.
Based on the results, the solvency ratio has a significant negative impact on the profitability ratio. High levels of debt make companies use their profits to pay debts and interest expenses from loans they have. This can reduce income where small income will of course result in a small profitability ratio.

Based on the results, firm size has a significant positive impact on profitability ratios. Large companies have a large number of assets and are able to manage production costs more efficiently so that the company can gain company profitability.

Based on the results, inflation has an insignificant positive impact on the profitability ratio. An increase in the selling price of goods will increase nominal profits.

Based on the results, gross domestic product has an insignificant positive impact on the profitability ratio. Gross domestic product reflects economic conditions and changes in a country. This means that if gross domestic product increases, the profitability ratio will increase.

Based on the results, shows that there is a significant negative influence of profitability ratios in mediating the relationship between solvency ratios and stock prices. Companies that have high debt will reduce the company's profitability. Low profitability will be a signal for investors to withdraw their investment funds so that share prices fall.

Based on the results, it show that there is a significant positive influence of profitability ratios in mediating the relationship between firm size and share prices. Investors see the ability of large companies to manage their assets to increase profitability so that the company's profitability is high and becomes a good signal for investors.

Based on the results, it show that there is an insignificant positive influence of the profitability ratio in mediating the relationship between inflation and stock prices. The company's anticipation of rising inflation means that the company's profitability is not disrupted. Even if the company can adjust the price between the price of raw materials and the price of the product sold, the company's profitability will increase.

Based on the results, it show that there is an insignificant positive effect of the profitability ratio in mediating the relationship between gross domestic product and stock prices. Good gross domestic product figures mean that companies in a country are in a favorable situation so that investors can choose to invest in the desired sector.

This research certainly has limitations. This limitation can still be improved and developed. Limitations in this research are: This research only focuses on conditions in those 3 years. This research only uses 4 independent variables, namely solvency ratio, firm size, inflation and gross domestic product and each variable is only measured with 1 indicator.

Suggestions for future research include expanding the sample objects, varying the research period to five or even ten years, and using different proxies (measurements) in the research.
For example, solvency ratio could be measured using Debt to Asset Ratio (DAR), profitability ratio could be measured using Return on Equity (ROE), and inflation could be measured using the Consumer Price Index. Additionally, future researchers may consider adding indicators to a single variable.

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