

## **The Effect of Exchange Rates, Profitability and Solvency on Stock Prices: Mediated Effect of Dividend Policy (Study on Registered Consumer Goods Companies on the Indonesian Stock Exchange)**



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**ABSTRACT:** The share price of consumer goods companies listed on the Indonesia Stock Exchange fluctuated, which caused investors to experience difficulties investing in the capital market. A dividend policy is a policy in making decisions to distribute profits as dividends or withhold profits for business development; This is difficult for many company managers to do. This study aims to test and prove empirically the effect of exchange rates, interest rates, profitability, and solvency on stock prices mediated by dividend policy. This study uses a quantitative approach with a sample of consumer goods companies listed on the Indonesia Stock Exchange. The number of observations is 14 companies, with a research period of 5 years (2016-2020). Sampling using a purposive sampling method. Analysis of research data using multiple linear regression methods and path analysis. The study results show that solvency does not significantly affect stock prices directly or through dividend policy. In contrast, profitability significantly affects stock prices directly and through dividend policy. The results of the same test also show that the exchange rate measured using exchange rate sensitivity has a significant effect on the share price of consumer goods companies.

**KEYWORDS:** Exchange Rate, Profitability, Solvency, Stock Price, Dividend Policy.

### **I. INTRODUCTION**

Investing a certain amount of money or buying valuable assets is one way to obtain several benefits. Many instruments are offered on the capital market; one of the instruments investors are interested in is stocks. Many factors affect a company's share price, both from the company's internal and the macro-economy of the country where the company was founded.

This study uses macroeconomic factors as measured by the sensitivity of the company's sales to changes in exchange rates. There are differences in the results of research conducted by one researcher with another; the exchange rate variable has a significant positive relationship to changes in stock prices. This research was conducted by Gagan (2010), Sarbapriya (2012), and Lentina and Purwanto (2018). Praphan and Subhash (2002) conducted six studies on an ASEAN scale, where this study had subjects from 5 countries, namely Indonesia, Malaysia, the Philippines, Singapore, and Thailand. Where the final results of these studies differ between countries, the exchange rate positively relates to changes in stock prices in Indonesia, Malaysia, and Thailand. However, the results of Praphan and Subhash's research (2002) state that the exchange rate harms changes in stock prices in Singapore and Thailand.

The fundamental variables in this study are represented by the ratio of profitability and solvency to stock prices which still give almost the same results, where the conclusion states that profitability has a significant negative relationship to changes in stock prices Abdullah (2014). Solvency has a significant positive relationship; Khalid (2011), Sarbapriya (2012), and Kyle (2013), in contrast to these results that Afzalur & Anisur (2007) and Khasif (2019) state that there is a positive but not significant relationship between solvency and change stock price. Different results were stated by Arshad (2019) that solvency has a negative relationship with changes in stock prices. So this research was conducted to analyze the effect of exchange rates, profitability, and solvency on stock prices mediated by dividend policy in Consumer Goods companies listed on the Indonesia Stock Exchange (IDX).

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## **II. LITERATURE REVIEW**

### **Effect of Exchange Rates on Stock Prices**

This study uses the sensitivity of the company's sales to changes in exchange rates. The results of research conducted by Praphan & Subhash (2002), Gagan (2010), Suselo, Djazuli & Indrawati (2015) Simbolon and Purwanto (2018) found that exchange rate variables have a negative effect on stock prices.

**H1** : Improved exchange rates will be able to increase stock prices

### **Effect of Profitability on Stock Prices**

In companies that provide a high level of profit for shareholders, the higher the desire of investors to buy shares from the company, the more ROE positively affects stock prices. The research results of Abdullah (2014), Suselo, Djazuli & Indrawati (2015), Liya (2016), Susanti (2016), Juanidi, Sulisty & Harjanto (2017), Lyman (2018), and Ulfah (2018) have stated that profitability has a positive relationship positive and significant to stock prices.

**H2** : The higher the profitability will increase the stock price

### **The Effect of Solvency on Stock Prices**

A high DER ratio also shows a low proportion of own capital to finance assets (Santoso, 2008, Suselo, Djazuli & Indrawati, 2015). A high DER will affect investors' decision-making and then will result in changes to a company's stock price. The high value of DER will result in a decrease in the company's stock price. The results of research by Liya (2016), Junaidi, Sulisty & Harjanto (2017), and Mehmood, Ullah, and Ul Sabeeh (2019) obtained the result that solvency has a significant negative effect on stock prices.

**H3** : The higher the solvency, the lower the share price

### **Effect of Profitability on Dividend Policy**

In their research, Brunzell et al. (2014) stated that ROE as an explanatory variable statistically and significantly affects dividend policy. According to Bhattacharya, Chang, and Li (2018), many main factors have studied by previous researchers and explain dividend policy, namely profitability, growth, idiosyncratic risk, systematic risk, and the company's life cycle (Fama & French, 2001; Hoberg & Prabhala, 2009; Grullon 2006, Jabbouri (2016), Liya (2016), Junaidi, Sulisty & Harjanto (2017), Susanti (2016), Ulfah (2018) and Hadi and Rahayu (2019) found results in their research that profitability has a positive effect on dividend policy.

**H4** : The higher the profitability will increase the dividend policy

### **Effect of Solvency on Dividend Policy**

The higher the DER number, it is assumed that the company has a higher company liquidity risk. If the DER value is high, the interest expense borne by the company will also increase; this will reduce the company's profit and affect the dividend payout ratio. Bogna (2016), Jabbouri (2016), Liya (2016), and Junaidi, Sulisty & Harjanto (2017) state that solvency has a negative and significant effect on dividend policy.

**H5** : The higher the solvency will reduce the dividend policy

### **Effect of Dividend Policy on Stock Prices**

High dividends will be able to attract investors to invest in the company. The more demand for a company's stock, the more it will be able to increase the stock price of that company. Khalid (2011), Junaidi, Sulisty & Harjanto (2017), and Mehmood, Ullah, and Ul Sabeeh (2019) obtained the result that there is a positive relationship between dividend policy and stock prices.

**H6** : The higher the dividend policy, will increase the stock price

### **The Effect of Profitability on Stock Prices Mediated by Dividend Policy**

Investors like high ROE and high ROE have a positive correlation with high dividend payments; high dividend payments will attract investors to buy shares in the company, resulting in increased share prices in the capital market. Junaidi, Sulisty & Harjanto (2017) stated that the results of their research showed a positive direction with a significant mediation coefficient value meaning that there is a mediating effect between ROE on stock prices through dividend policy. Junaidi and Harjanto (2017) argue that dividend policy can mediate between profitability and stock prices.

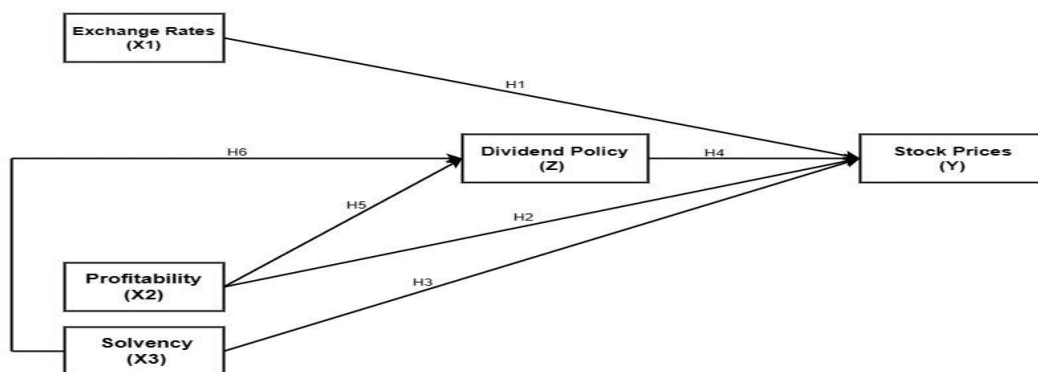
**H7** : Increased profitability mediated by dividend policy will increase stock prices

# The Effect of Exchange Rates, Profitability and Solvency on Stock Prices: Mediated Effect of Dividend Policy (Study on Registered Consumer Goods Companies on the Indonesian Stock Exchange)

## The Effect of Solvency on Stock Prices Mediated by Dividend Policy

Investors do not like small dividends; this makes investors dislike the company's shares and will make the decision to sell these shares. The more investors who release/sell shares in the capital market will decrease the company's stock price. Junaidi, Sulisty & Harjanto (2017) stated that the results of their research showed a negative direction with a significant mediation coefficient value meaning that there was a mediating effect between DER on stock prices through dividend policy. Junaidi and Harjanto (2017) argue that dividend policy can mediate between solvency and stock prices.

**H8** : Increased solvency mediated by dividend policy will increase stock prices



**Figure 1. Research Model**  
Source: Authors, 2023

### III. RESEARCH METHODS

This study examines the effect of exchange rate, profitability, and solvency variables on stock prices mediated by dividend policy. All data in this study will be analyzed using multiple linear regression and Path Analysis.

#### Population and Sample

Sampling in this study used the Non-Probability sampling technique, which was purposive sampling, namely the technique of taking samples from the population based on specific considerations or criteria.

#### Measurement

Data is collected based on predetermined criteria, including consumer goods companies listed on the Indonesia Stock Exchange and issuing consistent and complete financial reports for the period ending December 31 for the 2016-2020 period, consumer goods companies that experienced profits in 2016 to 2020, and Consumer goods companies that distribute dividends consistently during the 2016-2020 period.

### IV. RESULT AND DISCUSSION

**Table 1. Multiple Linear Regression Calculation Results**

Variabel	Regression Coefficient	t-count	Sig.
Constant	-24,451		
Exchange rate	77,418	2,270	0,026

Source: Data processed by researchers, 2023

The results of the t-test for the exchange rate variable (X1) on stock prices (Y) show a t-count value of 2.270 and a significance value of 0.026 < 0.05, so it can conclude: "the exchange rate has a significant positive effect on stock prices."

**Table 2. Model 1 Equation Test Results (Direct Effect)**

**The Effect of Exchange Rates, Profitability and Solvency on Stock Prices: Mediated Effect of Dividend Policy (Study on Registered Consumer Goods Companies on the Indonesian Stock Exchange)**

Independent Variable	Standardized Beta	t-count	Sig,
Profitability (ROE)	0,680	3,855	0,000
Solvability (DER)	-0,392	-2,222	0,030
R Square (R2)	0,198		
Dependent Variable	Dividend Policy (DER)		

Source: Data processed by researchers, 2023

The results of path analysis of model equation 1 obtained a standardized beta value of the profitability variable of 0.680 with a significance value of 0.000 < 0.05, meaning that profitability has a significant positive effect on dividend policy. The standardized beta value of the solvency variable is -0.392, with a significance value of 0.030 < 0.05, meaning that solvency significantly negatively affects dividend policy.

**Table 3. Model 2 Equation Test Results (Indirect Effect)**

Independent Variable	Standardized Beta	t-count	Sig,
Profitability (ROE)	0,727	6,027	0,000
Solvability (DER)	0,138	1,222	0,222
Dividend Policy (DPR)	-0,016	-0,215	0,831
R Square (R2)	0,679		
Dependent Variable	Stock price		

Source: Data processed by researchers, 2023

The path equation model 2 analysis obtained a standardized beta value of the profitability variable of 0.727 with a significance value of 0.000 < 0.05, meaning that profitability has a significant positive effect on stock prices. The standardized beta value of the solvency variable is 0.138, with a significance value of 0.222 > 0.05, meaning that solvency has no significant effect on stock prices. The standardized beta value of the dividend policy variable is -0.016 with a significance value of 0.831 > 0.05, meaning that dividend policy has no significant effect on stock prices.

**Table 4: Summary of Model Parameter Estimation Results**

Variable	Beta	P value	R2	Information
H1 Exchange Rate → Stock Price	0,322	0,026	0,278	Significant
H2 Profitability → Stock Price	0,727	0,000	0,198	Significant
H3 Solvability → Stock Price	0,138	0,226		Not significant
H4 Profitability → Dividend Policy	0,680	0,000	0,279	Significant
H5 Solvability → Dividend Policy	-0,392	0,030		Significant
H6 Dividend Policy → Stock Price	-0,016	0,831		Not significant
H7 Profitability → Dividend Policy → Stock Price	0,716	0,000		Significant
H8 Solvability → Dividend Policy → Stock Price	0,144	0,187		Not significant

Source: Data processed by researchers, 2023

**DISCUSSION**

**Effect of Exchange Rates on Stock Prices**

## **The Effect of Exchange Rates, Profitability and Solvency on Stock Prices: Mediated Effect of Dividend Policy (Study on Registered Consumer Goods Companies on the Indonesian Stock Exchange)**

The results of the study show that the exchange rate has a significant effect on stock prices. Suppose there is an appreciation in the rupiah exchange rate against the USD. In that case, the amount of import spending can reduce production costs and increase company profits, and in the end, share prices also increase. Madura (2015: 86), exchange rate changes influence stock prices. The difference in the direction of the relationship between the exchange rate (exchange rate) and stock prices, theoretically using the traditional approach and the portfolio balance model. The traditional approach says that the relationship between exchange rates and stock prices is favorable, where exchange rate changes affect a company's competitiveness. The exchange rate is an effect of fluctuations in exchange rates (exchange rates) that affect the company's income and operational costs, which in turn causes changes in its share price (Khairunnida, 2017, p. 210). These results reinforce the research findings of Nurlina (2017), Aizsa (2020), and Pramesti et al. (2020), which concluded that the exchange rate had a significant positive effect on stock prices.

### **Effect of Profitability on Stock Prices**

The results showed that profitability has a significant effect on stock prices. The greater the company in generating profits, it will affect the high stock prices in the capital market. Profitability in this study is measured using Return On Equity (ROE). The company's ability to generate profits will be a positive signal for investors. The higher the level of profit the company generates, the more interested investors will be in investing their capital, which will increase the company's stock price (Rahmani et al., 2020, p. 36). This statement supports the signaling theory, stating that companies with high profitability can give investors a sound signal (good news). These results strengthen the research findings of Rahmani et al. (2020), Mardianti and Dewi (2021), and Sholichah et al. (2021), which concluded that profitability has a significant positive effect on stock prices.

### **The Effect of Solvency on Stock Prices**

The results showed that solvency does not affect stock prices. (Van Horne and Wachovic, 2012) Solvency is a tool to compare funds provided by the owner or their capital with funds borrowed from creditors or capital sourced from debt. (Brigham and Houston, 2011) also argues that solvency is a ratio that measures how much a company uses funding through its debt. Low solvency indicates the company's low ability to meet long-term obligations. Companies with low solvency tend to be avoided by investors, which will result in a decrease in the company's stock price. These results reinforce the research findings of Herawati and Putra (2018), Hertina et al. (2021), and Rinofah et al. (2022), who concluded that solvency does not affect stock prices.

### **The Effect of Profitability on Dividend Policy**

The results show that profitability influences dividend policy. The higher the profit of a company, the greater the dividend distributed to shareholders. The results of this study follow the agency theory put forward by Jensen and Meckling (1976) in Hariyanti and Pangestuti (2021:5). The signal theory states that dividends are a signal regarding management's prospects for obtaining profits in the future because investors can view profitability as the primary aspect for assessing a company's performance in obtaining returns in the form of dividends, or it can be interpreted that the higher the company's profitability, the company can determine the distribution dividends, and therefore if the company earns a high profit then the company can increase the distribution of dividends, This result strengthens the research findings of Hamid et al. (2016), Sugiastuti et al. (2018), and Barna and Pertiwi (2021), who concluded that profitability has a significant positive effect on dividend policy.

### **The Effect of Solvency on Dividend Policy**

The projected solvency through DER in this study significantly negatively affects dividend policy. The negative effect of DER on dividend policy shows the trade-off theory of Modigliani and Miller (1963) The debt ratio can see how far the company is financed by debt or external parties with the company's ability as described by capital. These results reinforce the findings of Pratiwi et al. (2016); Karjono (2019) concluded that DER has a significant negative effect on dividend policy.

### **The Effect of Dividend Policy on Stock Prices**

The study results show that dividend policy does not affect stock prices. Dividend policy harms stock prices, meaning that any increase in dividend policy will be able to reduce share prices in the stock market. In this study, the average movement of dividend policy and stock prices does not show a negative growth direction to each other; this is due to the effect of buying and selling activities on the stock market from some investors who expect capital gains in investing. (Baskin, 1989) a tax differential theory suggests that dividends tend to be taxed higher than capital gains. Therefore, investors prefer capital gains to dividend payout ratios. These results reinforce the research findings of Putri and Djumahir (2012), Mariana (2016), and Levina and Dermawan (2019), who concluded that dividend policy does not affect stock prices.

### **The Effect of Profitability on Stock Prices Mediated by Dividend Policy**

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The results showed that the dividend policy proxied by DPR mediated the effect of profitability proxied by ROE on stock prices. Based on the signaling theory, with an increase in dividends, the market will react positively and tend to interpret that the company has good prospects in the future, and with increased dividend payments to shareholders, investors predict that the profits already earned by the company will continue. Moreover, it improved, and as a result, many investors bought the company's shares, thereby increasing the share price. These results strengthen the research findings of Mardianti and Dewi (2021); Sholichah et al. (2021), who concluded that dividend policy mediates the relationship between profitability and stock prices.

### **The Effect of Solvency on Stock Prices Mediated by Dividend Policy**

The negative effect between solvency and dividend policy shows that a company's lower solvency value will increase the dividend policy ratio and vice versa. If the solvency value increases, this will result in a decrease in dividend policy. The decrease in dividend policy is due to the financing of debt payments and interest expenses, which are the company's obligations. Fulfilling long-term obligations is prioritized by the company rather than dividend distribution policies.

This result strengthens the research findings of Bulutoding et al. (2018), Sholichah et al. (2021), and Zakaria (2021), who concluded that dividend policy does not mediate the relationship between solvency and stock prices.

## **CONCLUSIONS**

Based on the results and discussion, the conclusions of this study are as follows:

1. Based on the research results, the exchange rate has a significant effect on stock prices. Suppose there is an appreciation of the rupiah exchange rate against the USD. In that case, the amount of import spending can reduce production costs and increase company profits, and in the end, share prices will also increase.
2. Profitability has a significant effect on stock prices. The hypothesis in this study is accepted. That means that the greater the company generates profits, the higher the stock price in the capital market. Profitability in this study is measured using Return On Equity (ROE).
3. Solvability has no significant effect on stock prices. Solvency is a tool to measure the comparison of funds provided by the owner or own capital with funds borrowed from creditors or capital sourced from debt.
4. Profitability has a significant effect on dividend policy. The higher the profit of a company, the greater the dividend distributed to shareholders.
5. As measured using the debt-to-equity ratio (DER), solvability affects dividend policy. A high DER ratio indicates a low proportion of own capital to finance assets and will impact the company's dividend policy.
6. The dividend policy does not affect stock prices. The higher the level of dividends a company pays, the lower the interest of investors to invest in the company.
7. Dividend policy proxied by DPR mediates the effect of profitability proxied by ROE on stock prices. That means that the higher the value of the company's profitability will cause an increase in the percentage of dividend distribution; with an increase in dividends, the stock price also increases with the increasing demand in the market for the company's shares.
8. The negative effect between solvency and dividend policy shows that a lower solvency value of a company will increase the dividend policy ratio.

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