DETERMINANTS OF FINANCIAL PERFORMANCE OF PT PERTAMINA'S SUBHOLDINGS PERIOD 2018-2022
(Case Study: 6 Upstream and Gas Subholding Companies of PT Pertamina)

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ABSTRACT: This research analyzes the determinants of financial performance, based on profitability, of six PT Pertamina (Persero) subholding companies from 2018-2022. The study measures the impact of Capital Structure, Company Activity, World Crude Oil Prices, and Exchange Rates on performance, indicated by Return on Assets (ROA). Using purposive sampling and various data analysis techniques, the study finds that Capital Structure and World Crude Oil Prices do not significantly affect financial performance, while Company Activity positively influences it. Exchange Rates also do not show a significant positive effect. The study highlights the importance of efficient asset management for better financial performance and suggests that other factors, such as operational strategies and external conditions, may be more critical determinants.

1. INTRODUCTION

1.1. Introduction
Energy is a primary resource for humans and a vital factor in driving various components, especially economic aspects, making it a crucial variable in maintaining the stability of a society's economic life. Changes in energy variables caused by certain events can impact a country's economic status. Although energy is an essential resource for humanity, its availability is not always reliable. Price instability and energy scarcity can occur due to supply and demand fluctuations, as well as geopolitical turmoil (Sagala, 2000).

1.2. Background
Meeting domestic energy needs for oil and natural gas by PT Pertamina (Persero) through all its Subholdings is not solely realized from domestic production numbers due to high demand and consumption far exceeding the production capacity. According to the Statistical Review of World Energy 2022 released by British Petroleum (BP), Indonesia produced only 31.4 million tons of crude oil, while domestic consumption reached 69.7 million tons, approximately 2.2 times higher than production (Anonymous, 2022). This unmet demand for oil and gas has led to the justified policy of importing oil and gas. According to the Ministry of Energy and Mineral Resources' report for the first half of 2021, Indonesia imported 59,945,390 barrels of crude oil and 2,964,674 metric tons of LPG (Anonymous, 2021).

1.3. Research Problem
Between 2018 and 2022, several events impacted the global geopolitical and economic situation. The first was the COVID-19 pandemic, which began in Wuhan, China, in late December 2019. Developing economies, including Indonesia, were the most affected, suffering significant losses in national and individual incomes and worsening economic conditions that were previously unstable, according to a 2022 World Bank report. This global crisis led to inflation across various economic sectors (World Bank, 2022). Nasution et. al. (2020) detailed how the COVID-19 pandemic caused investors to lose confidence in the market, resulting in an overall market downturn.

The second event was the Russia-Ukraine conflict, starting on February 21, 2022, which triggered global economic instability. This instability was partly due to Gazprom, a major Russian energy company and key gas supplier to the EU, not renewing its gas transit contract with Ukraine since 2019 (Naumenko, n.d.). The resulting crisis in the EU's oil and gas sector led to global oil price and currency exchange rate instability, causing an energy crisis, supply-demand instability, and inflation in various countries (Liu, 2023). Dano (2022) noted that this conflict led to mild

inflation in Indonesian energy commodity prices. These phenomena affected the global oil and energy sector, as highlighted by research from Nurlia et. al. (2023), Prawiraatmadja (2020), Makki & Alqahtani (2023), Ali & Ali (2023), Narayan (2022), and Zhang et. al. (2024).

In addition to these events, PT Pertamina underwent restructuring, forming an oil and gas holding company starting with the creation of a gas subholding in 2018, followed by five more subholdings (upstream, commercial & trading, refining & petrochemical, PNRE, and shipping) from June 2020 to September 1, 2021. Post-reorganization, PT Pertamina's main priorities include portfolio management and business synergy within the Pertamina Group, accelerating new business development, and implementing national programs (Press, 2021).

1.4. Aim and Objectives
This research aims to:
1. Identify and analyze the impact of the capital structure of PT Pertamina's upstream and gas Subholdings on the profitability of PT Pertamina's Subholdings during the 2018-2022 period.
2. Identify and analyze the impact of the activities of PT Pertamina's upstream and gas Subholdings on the profitability of PT Pertamina's Subholdings during the 2018-2022 period.
3. Identify and analyze the impact of world crude oil prices on the profitability of PT Pertamina's Subholdings during the 2018-2022 period.
4. Identify and analyze the impact of exchange rates on the profitability of PT Pertamina's Subholdings during the 2018-2022 period.

1.5. Research Questions
1. Does the capital structure of the six Subholding companies affect the profitability of PT Pertamina (Persero) Subholdings during the 2018-2022 period?
2. Does the activity of the six Subholding companies affect the profitability of PT Pertamina (Persero) Subholdings during the 2018-2022 period?
3. Do world crude oil prices affect the profitability of PT Pertamina (Persero) Subholdings during the 2018-2022 period?
4. Do exchange rates affect the profitability of PT Pertamina (Persero) Subholdings during the 2018-2022 period?

1.6. Rationale
This study uses ROA as a measure of profitability because it serves as a standard for determining whether investments generate the expected profits. These investments essentially equate to the company's assets that have been allocated (Fahmi, 2012). Regarding the factors influencing profitability, several overlapping variables are identified based on observations from various studies. Naja & Natsir (2023), Hasbiah (2022), Sike et. al. (2023), and Olang (2017) observed the influence of capital structure on profitability. Hasbiah (2022), Grediani et. al. (2022), and Widyaningrum & Hendrawan (2022) observed the influence of activity ratios on profitability. Salim (n.d.), Satoto (2023), Nabilah (2018), and Bilal et. al. (2021) observed the influence of world oil prices on profitability. Purba et. al. (2023) and Azmi et. al. (2022) observed that exchange rates influence profitability.

2. LITERATURE REVIEW

2.1. Introduction
This chapter examines the literature on the impact of all observed variables (capital structure, activity, crude oil price, and exchange rate) on company profitability, focusing on identifying the existing theories that imply and support all probabilities occurred in the observation.

2.2. Theories Related to the Research
2.2.1. Signaling Theory
According to Spence (2002), signaling theory fundamentally addresses the issue of asymmetric information between two parties. This theory is broadly applicable across various disciplines, from anthropology to zoology (Bird & Smith, 2005). Connelly et. al (2011) illustrates Spence's signaling theory as follows:

Note: t = time.
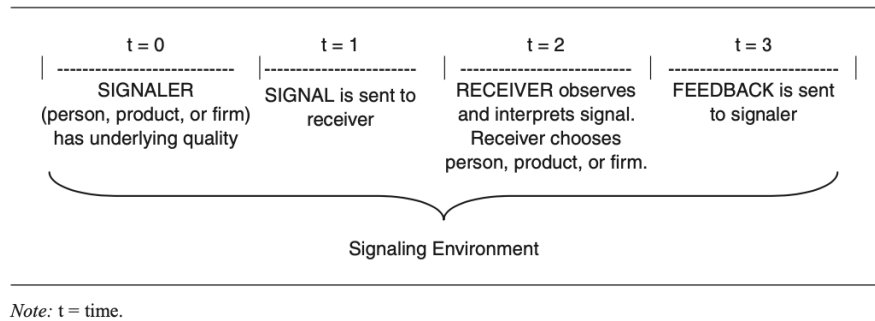
Figure 1: Signaling Timeline According to Spence (Connelly et. al., 2011)

Based on the above illustration, Spence outlines four stages of signaling. The first stage involves the signaler, which can be an individual, product, or company, presenting a qualification object—in a business context, this could be financial statements that serve as a benchmark for evaluating the signaler's business performance quality. The second stage is the process where the "signal" is sent to the receiver, with the "signal" contextually equating to financial statements and the receiver equating to stakeholders, investors, observers, or other business information users. The third stage occurs when the receiver receives the "signal" from the signaler, observes it, and interprets the obtained "signal." The fourth and final stage involves feedback being sent back to the signaler, which could take the form of business decisions, investments, or other responses that are positive, negative, or neutral for the signaler.

Signaling theory fundamentally provides a unique, practical, and empirically testable perspective on issues regarding social selection in conditions of imperfect or incomplete information.

2.2.2.   Capital Structure Theory: Traditional
In general, a business can achieve its ideal capital structure by selecting the most appropriate mix of debt. According to this theory, a company's optimal capital structure is revealed when its value is at its highest and the cost of capital, particularly the weighted average cost, is at its minimum (Demirgüneş, 2017). The theory also assumes that if a business continues to acquire debt from other sources, its value will eventually stabilize and then gradually decline (Abdul Hadi et. al., 2017).

Essentially, this theory can be explained in three distinct stages (Afrasiabishani et. al., 2012). In summary, the traditional theory of capital structure outlines three stages in achieving an optimal mix of debt and equity. Initially, as a company takes on more debt, the cost of equity remains relatively stable or increases slightly, while the overall cost of capital decreases, enhancing the company's value. In the next stage, the cost of equity starts to rise more quickly, but the overall cost of capital reaches its minimum, indicating the optimal capital structure. Finally, if the company continues to increase its debt, the cost of equity rises significantly, causing the weighted average cost of capital to increase and the company's value to decline. Therefore, the optimal capital structure is achieved at the point where the company's overall value is maximized, and its cost of capital is minimized.
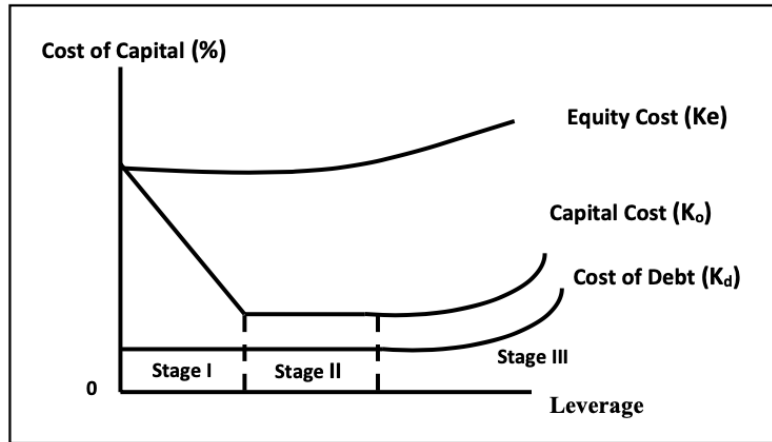
Figure 2: Traditional Capital Structure Theory and Its Stages (Afrasiabishani et. al., 2012)

2.2.3. Total Assets Turnover as Company Activity Indicator

Total Assets Turnover (TATO) measures how effectively an organization uses its assets to generate revenue. It is calculated by comparing a company's total assets with its sales. A high TATO value indicates efficient asset utilization, suggesting that the company can generate net income while maintaining minimal asset levels. Conversely, a low TATO value reflects inefficient asset use, implying that the business needs to utilize its assets better to boost sales. According to Syamsudin in Azizah (2018), TATO helps to assess the overall turnover speed of assets over a specific period.

TATO is a crucial metric for investors and business leaders when evaluating a company's financial health. It reveals how well a company converts its assets into revenue, with a higher TATO indicating greater efficiency. By analyzing TATO, stakeholders can assess performance and identify ways to enhance efficiency and profitability. Rosyamsi (2019) supports this by explaining that a higher TATO ratio signifies better asset turnover and revenue generation. This ratio serves as a valuable tool for understanding and improving the speed at which assets are turned into profits.

2.2.4. Definition of Crude Oil

Crude oil is a volatile liquid mixture of hydrocarbons, primarily composed of hydrogen and carbon. It also contains small amounts of nitrogen, sulfur, and oxygen, forming complex molecular structures that are sometimes hard to identify. Despite this variation, nearly all crude oil consists of 82 to 87 percent carbon by weight and 12 to 15 percent hydrogen by weight (Britannica, 2023).

According to the US Environmental Protection Agency, the characteristics of underground crude oil flow include: (1) small amounts of hydrocarbons in a gaseous state in underground reservoirs that turn liquid at atmospheric conditions after extraction and are mixed with crude oil without separate measurement; (2) small amounts of non-hydrocarbons, such as sulfur and various metals; (3) liquid hydrocarbons from tar sands, oil sands, gilsonite, and oil shale; (4) petroleum products received or produced at a refinery and subsequently added to crude oil inventory or reservoirs by the same refinery owner or operator (US Environmental Protection Agency, n.d.).

2.2.5. Definition of Exchange Rate

The price of one unit of foreign currency in domestic currency, or the price of domestic currency against foreign currency, is known as the exchange rate. The price of one US dollar in Rupiah (Rp) is referred to as the Rupiah exchange rate (NT), or alternatively, the price of one Rupiah in terms of one USD (Simorangkir & Suseno, n.d.). Although the exchange rate traditionally did not always represent currency value and could be used to compare prices—historically, the value of gold was often used to indicate prices—today, the exchange rate is primarily seen as the currency value. According to the Kamus Besar Bahasa Indonesia (KBBI), the exchange rate is defined as the value of a country's currency expressed in the currency of another country (Risman, 2021).

2.3. Chapter Summary

The study explored several factors influencing the profitability of PT Pertamina's Subholdings from 2018 to 2022, focusing on signaling theory, the impact of capital structure, company activities, crude oil prices, and exchange rates. Signaling theory, as outlined by Spence (2002), explains the communication of information in conditions of asymmetry, relevant across various disciplines. This theory is applied in business through financial statements as signals to stakeholders, with the interpretation of these signals affecting business decisions. The study analyzed the capital structure of PT Pertamina's Subholdings, highlighting how a balanced mix of debt and equity can maximize returns and minimize risks, as suggested by Naja & Natsir (2023) and Hasbiah (2022). However, excessive debt can negatively impact profitability due to increased financial risks, as noted by Machdar (2018) and Quang & Xin (2014).

The study also examined the Total Assets Turnover (TATO) ratio, an indicator of asset utilization efficiency. High TATO values suggest effective asset use in generating revenue, which is crucial for improving profitability, as highlighted by Rosyamsi (2019). Conversely, low TATO values indicate inefficiency, emphasizing the need for better asset management. Crude oil prices, a critical factor for PT Pertamina, showed a significant impact on profitability, with fluctuations influenced by global events like the COVID-19 pandemic and the Russia-Ukraine conflict. Research by Rizal et al. and Kaligis & Soejono (2020) indicated that rising oil prices could negatively impact profitability due to increased costs. In contrast, other studies suggested that higher oil prices could boost profitability for oil and gas companies.

Exchange rates also played a crucial role, with varying impacts on profitability. Research by Salim (n.d.) and Purba et al. (2023) showed that exchange rate fluctuations could either positively or negatively affect financial performance, depending on how well companies manage these changes. The study concluded that maintaining an optimal capital structure, efficiently utilizing assets, and managing external factors like oil prices and exchange rates are vital for enhancing the profitability of PT Pertamina's Subholdings. The theoretical framework and empirical analysis provided insights into the complex interactions between these variables, underscoring the importance of strategic financial management in achieving business success.

3. METHODOLOGY

3.1. Introduction

This research will measure the significance of factors influencing the profitability of PT Pertamina (Persero) Subholdings by examining the Capital Structure of the Subholdings, Subholding Activities, World Crude Oil Prices, and Exchange Rates. The necessary data will be collected from the period 2018-2022.

3.2. Research Approach and Design

This research is classified as a quantitative explanatory research, focusing on examining relationships between variables and testing formulated hypotheses. It employs an associative approach to determine the influence between two or more factors (Sugiyono, 2016). Hypothesis testing will use statistical methods to support the verification aspect of the research, aiming to evaluate the validity of the formulated hypotheses. This method is considered causal as it is useful for examining the correlation between one variable and another.

3.3. Data Collection Methods

Statements regarding specific characteristics, conditions, and actions serve as methods for data collection. To achieve the research objectives, data is gathered by processing financial data from official sources. This research utilizes data from annual financial reports and supporting company documents, analyzed from 2018 to 2022, which are released online by the companies under study. The findings will then be compared with previous research focused on similar topics and the theories that support the research variables.

3.4. Sampling

6 Subholdings that were used as research objects were obtained after conducting purposive sampling on all Subholding companies and affiliates of the PT Pertamina group totaling 42 companies, selected after meeting the requirements for the availability of financial reports for the period 2018-2022, not acquired or merged, and are upstream and gas Subholdings. After the samples were obtained, the test was based on the data listed in the financial reports of each subholding for the period 2018-2022.

3.5. Data Analysis
This study presents data analysis using SPSS 22, with test stages in the form of descriptive statistical tests, classical assumption tests (normality, autocorrelation, heteroscedasticity, multicollinearity), multiple linear regression, determinant coefficient tests, partial significance tests, and simultaneous significance tests. Testing is carried out to see the level of influence of determinant variables on profitability.

3.6. Research Limitations
1. The study was conducted only on 6 (six) upstream and gas Subholding companies of PT Pertamina that released complete financial reports according to the research period, where other companies under the same Subholding did not release complete financial reports for the required years (2018-2022).
2. This study only examines the Subholding capital structure, Subholding activities, world crude oil prices, and currency exchange rates on the performance of Subholding companies.

4. FINDING AND ANALYSIS

4.1. Introduction
This chapter discusses about what the research observed and how the data from the subjects was analyzed, considering the hypotheses that are set up as the basis of this research. This study investigates the impacts or the influences of the observed company's capital structure, activity, world crude oil price, and exchange rates to the financial performance.

4.2. Hypotheses
4.2.1. The Impact of Subholding Companies' Capital Structure on the Performance of PT Pertamina (Persero) Subholding Companies
Research by Naja & Natsir (2023), Hasbiah (2022) and Sike et. al. (2023) found that capital structure significantly enhances business outcomes. Companies can maximize Return on Equity (ROE) and Return on Assets (ROA) by maintaining a balanced capital structure that includes both debt and equity. This allows them to fully leverage financial opportunities. Companies are better able to manage risk and capitalize on profitable investment opportunities when their capital structure is robust. Conversely, Machdar (2018), Quang & Xin (2014), Hertina et. al. (2021), and Dey et. al. (2018) found that capital structure can negatively impact company performance. High levels of debt can negatively affect profitability due to increased financial risk and interest burdens. Furthermore, businesses with substantial debt may find it harder to respond quickly to market changes or financial crises. This leads us to the following hypothesis:

H_1: The capital structure of Subholdings (X_1) has a positive and significant impact on the performance of PT Pertamina's Subholding Companies (Y_1).

4.2.2. The Impact of Subholding Companies' Activities on the Performance of PT Pertamina (Persero) Subholding Companies
This study will use Total Assets Turnover (TATO) as an indicator of company performance, considering that TATO measures how well an organization utilizes its resources (sales, inventory, receivables, etc.) or how efficiently it can carry out daily operations (Idris et. al., 2022). Hasbiah (2022), Grediani et. al. (2022), and Widyaningrum & Hendrawan (2022) found that company activities have a significant positive impact on financial performance. Based on this description, the following hypothesis can be formulated:

H_2: The activities of Subholdings (X_2) have a positive and significant impact on the performance of PT Pertamina's Subholding Companies (Y_1).

4.2.3. The Impact of World Crude Oil Prices on the Performance of PT Pertamina (Persero) Subholding Companies
Rizal et. al. (n.d.), Kaligis & Soejono (2020), and Ardiman (2019) found that rising world crude oil prices have a significant negative impact on company performance. When world oil prices increase, company profits tend to decrease. This finding suggests that companies facing increased costs due to higher crude oil prices may struggle to maintain profitability, as the additional costs are not offset by increased product prices. These studies conclude that companies may face challenges in managing costs and maintaining stable financial performance when world crude oil prices rise.

Contradictory to previous research, Salim (n.d.), Satoto (2023) and Nabilah (2018) found that rising world crude oil prices have a significant positive impact on company performance. When world oil prices rise, company performance also improves to counteract potential losses. These findings highlight that companies in the oil and gas industry often experience improved performance alongside rising crude oil prices. Based on this description, the following hypothesis can be formulated:

H_3: World crude oil prices (X_3) have a positive and significant impact on the performance of PT Pertamina's Subholding Companies (Y_1).

4.3.4. The Impact of Exchange Rates on the Performance of PT Pertamina (Persero) Subholding Companies

Salim (n.d.), Satoto (2023) and Kaligis & Soejono (2020) found that exchange rates have a significant negative impact on company performance. An increase in exchange rates can lead to a decrease in company profits. A decline in the domestic currency value can result in higher costs for imported raw materials, which in turn compresses profit margins and diminishes financial performance.

Conversely, Purba et. al. (2023) and Azmi et. al. (2022) found that exchange rates have a significant positive impact on company performance. An increase in exchange rates can lead to an improvement in performance to counteract potential losses. These findings support the argument that currency exchange rate fluctuations can positively influence company performance, especially when companies can leverage a stronger currency to reduce import costs and enhance profitability. Based on this description, the following hypothesis can be formulated:

H_4: Exchange rates (X_4) have a positive and significant impact on the performance of PT Pertamina's Subholding Companies (Y_1).

4.3. Descriptive Statistical Test

Table 1: Descriptive Statistical Test of Research Variables

Variable	Minimum	Maximum	Mean	Standard Deviation
Subholding Capital Structure (DER)	0.030	1.401	0.493	0.372156
Subholding Activity (TATO)	0.157	1.392	0.504	0.341224
World Crude Oil Price (ICE)	41.960	100.930	69.878	19.17896
Currency Exchange Rate (SPOT)	14.150	14.880	14.434	0.269144
Subholding Financial Performance (ROA)	-0.15575	3.100	0.412	0.904033

Based on the capital structure (Debt to Equity Ratio/DER) of PT Pertamina's six Subholding companies, the highest ratio is 1.401 and the lowest is 0.03, with an average DER of 0.493733 and a standard deviation of 0.372156 for the 2018-2022 period. A higher DER indicates that the company's debt and liabilities exceed its equity, imposing a heavy burden on the company and its creditors. Regarding activity (Total Assets Turnover/TATO), the highest TATO ratio is 1.392 and the lowest is 0.157, with an average TATO of 0.504333 and a standard deviation of 0.341224, where a high TATO indicates high asset utilization efficiency. Data on world crude oil prices from 2018 to 2022 show the highest price at $100.93 per barrel and the lowest at $41.96 per barrel, with an average of $69.878 per barrel and a standard deviation of $19.17896 per barrel, with the lowest price occurring in 2020 due to the COVID-19 pandemic and the highest in 2022 due to the Russia-Ukraine conflict. Observations of fluctuations in the US dollar and Indonesian rupiah exchange rates (SPOT) from 2018 to 2022 show the highest SPOT value at 14.88 in 2022 and the lowest at 14.15 in 2019, with an average of 14.434 and a standard deviation of 0.269144. Based on the Return on Assets (ROA) of PT Pertamina's Subholding, the highest ratio is 3.100 and the lowest is -0.155, with an average ROA of 0.412 and a standard deviation of 0.904033 for the 2018-2022 period. ROA measures how profitable a company's assets are and how well an organization converts its assets into profit, which is crucial for shareholders to assess business efficiency.

4.4. Normality Test

Table 2: Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		30
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.37389265
Most Extreme Differences	Absolute	.121
	Positive	.121
	Negative	-.087
Test Statistic		.121
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

d. This is a lower bound of the true significance.

Based on the results of the normality test using the Kolmogorov-Smirnov method explained above, the significance value of both models is 0.200, which is greater than 0.05, so it is concluded that the research data is normally distributed and the regression model is adequate.

4.5. Autocorrelation Test

Table 3: Autocorrelation Test

Durbin-Watson
1.598

The Durbin-Watson (dW) statistic value of 1.598 was obtained from the previously mentioned output table. Additionally, using the formula (k; N), we compare this value with the Durbin-Watson table values at a 5% significance level. In this study, there are a total of 30 samples (N) and 4 independent variables (k). The corresponding Durbin-Watson table values are distributed based on these numbers. We find that dL = 1.1426 and dU = 1.7386. The model's dW value of 1.598 is less than 4 - dL = 4 - 1.1426 = 2.574, but greater than dL (1.1426). Based on this reference, it is not possible to conclusively determine whether autocorrelation is present in the model.

4.6. Multicollinearity Test

Table 4: Multicollinearity Test

Collinearity Statistics	
Tolerance	VIF
.978	1.022
.960	1.042
.787	1.270
.802	1.247

To refer to the basis for decision-making in the multicollinearity test, we can examine the Tolerance and VIF values. The assumption that this model does not exhibit multicollinearity is supported by the collinearity statistics output table, which shows that all the calculated variables have VIF values less than 10 and Tolerance values greater than 0.010.

4.7. Heteroscedasticity Test

Table 5: Heteroscedasticity Test (Park Test)
Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	7.558	67.798		0.111	0.912
	LnX1	-0.824	0.576	-0.257	-1.431	0.165
	LnX2	1.603	0.838	0.346	1.913	0.067
	LnX3	0.931	1.708	0.101	0.545	0.590
	LnX4	-5.531	26.074	-0.039	-0.212	0.834

a. Dependent Variable: Lnei2

Based on the test results above, it can be seen that all test results (in the t column) display a number smaller than the t-table (2.05954), which means that heteroscedasticity does not occur.

4.8. Multiple Linear Regression Test

Table 6: Summary of Data Processing Results with Multiple Linear Regression

Model		Regression Coefficients	t_{count}	Sig.	Conclusion.
1	Constant	-0.980	-0.224	0.824	
1	DER	-0.224	-1.101	0.281	Insignificant
1	TATO	2.371	10.599	0.000	Significant
1	ICE	-0.001	-0.116	0.909	Insignificant
1	SPOT	0.024	0.077	0.940	Insignificant

Based on the resulting regression coefficient values, the regression equation of the model formed is as follows:

$$Y_1 = -0{,}980 - 0{,}224X_1 + 2{,}371X_2 - 0{,}001X_3 - 0{,}024X_4$$

Based on the equation, the following is the influence of each research factor on the profitability and performance of the company:
1. The constant (α) of -0.980 indicates that if the independent variables including Subholding Capital Structure (X_1), Subholding Activity (X_2), World Crude Oil Price (X_3), and Exchange Rate (X_4) are zero or there is no change, then the Subholding Company Performance (Y_1) is -0.980.
2. The regression coefficient of Subholding Capital Structure (X_1) of -0.224 indicates a negative influence of Subholding Capital Structure (X_1) on Subholding Company Performance (Y_1), meaning that every additional unit of the Subholding Capital Structure variable (X_1) will reduce Subholding Company Performance (Y_1) by 0.224.
3. The regression coefficient of Subholding Activity (X_2) of 2.371 indicates a positive influence of Subholding Activity (X_2) on the Performance of Subholding Companies (Y_1), meaning that every additional unit of the Subholding Activity variable (X_2) will increase the Performance of Subholding Companies (Y_1) by 2.371.
4. The regression coefficient of World Crude Oil Price (X_3) of -0.001 indicates a negative influence of World Crude Oil Price (X_3) on the Performance of Subholding Companies (Y_1), meaning that every increase in the World Crude Oil Price (X_3) will decrease the Performance of Subholding Companies (Y_1) by 0.001.
5. The regression coefficient of the Currency Exchange Rate (X_4) of 0.024 indicates a positive influence of the Currency Exchange Rate (X_4) on the Performance of Subholding Companies (Y_1), meaning that every increase in the Currency Exchange Rate variable (X_4) will increase the Performance of Subholding Companies (Y_1) by 0.024.

4.9. Simultaneous Significance Test (F Test)

Table 7: ANOVA Output Results for F Test

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.647	4	4.912	30.289	.000^b
	Residual	4.054	25	.162		
	Total	23.701	29			

a. Dependent Variable: ROA Subholding

b. Predictors: (Constant), SPOT - Kurs Mata Uang, TATO Subholding, DER Subholding, ICE - Hrg Minyak Mentah Dunia

In this context, since the calculated F (30.289) is much larger than the F table (2.74), it can be concluded that there is a significant simultaneous relationship between at least one independent variable and the dependent variable in the regression model. In other words, at least one of the independent variables makes a significant contribution to the variability of the dependent variable.

4.10.   Determinant Coefficient Test

Table 8: Results of Determinant Coefficient Test

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
					Change Statistics				
1	.910^a	.829	.802	.40269470	.829	30.289	4	25	.000

a. Predictors: (Constant), SPOT - Kurs Mata Uang, TATO Subholding, DER Subholding, ICE - Hrg Minyak Mentah Dunia

b. Dependent Variable: ROA Subholding

1. Subholding Capital Structure (X_1), Subholding Activity (X_2), World Crude Oil Price (X_3), and Currency Exchange Rate (X_4) all have a positive impact on Subholding Company Performance (Y_1), according to the R value of the model of 0.910, which is 91%. When the R value approaches 1, it means that the relationship between the two variables is strong.
2. The dependent variable is influenced by the independent factor in this study by 82.9%, according to the R Square value of 0.829.
3. The level of surplus parameters and the number of independent variables in the model are considered in the form of adjusted R-squared, which is called Adjusted R-squared. With an adjusted R-squared value of 0.802, we can see that the significant independent variables in our regression model cover about 80.2% of the variation of the dependent variable.

4.11. Partial Significance Test (t-Test)

Table 9: Partial t-Test Reference Table

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.980	4.367		-.224	.824
	DER Subholding	-.224	.203	-.092	-1.101	.281
	TATO Subholding	2.371	.224	.895	10.599	.000
	ICE - Hrg Minyak Mentah Dunia	-.001	.004	-.011	-.116	.909
	SPOT - Kurs Mata Uang	.024	.310	.007	.077	.940

a. Dependent Variable: ROA Subholding

Partial t-Test Results:

1. The significance value (p-value) for Subholding Capital Structure (X_1) is 0.281, and the t_{count} is -1.101. Based on the test results, variable X_1 is not statistically significant to the dependent variable Y_1 at the significance level of $\alpha = 0.05$ and the t_{count} is smaller than the t_{table}. Therefore, there is not enough evidence to support the hypothesis that Subholding Capital Structure (X_1) has a significant positive relationship with Subholding Company Performance (Y_1).

2. The significance value (p-value) for Subholding Activity (X_2) is 0.000 and the t-count is 10.599. Variable X_2 is statistically significant with a very low p-value (0.000) and a t_{count} that is greater than the t_{table}. This shows that we have strong evidence to support the hypothesis that Subholding Activity (X_2) has a significant positive relationship with Subholding Company Performance (Y_1).

3. The significance value (p-value) for World Crude Oil Price (X_3) is 0.909 and the t_{count} is -0.116. Variable X_3 is not statistically significant to the dependent variable Y_1 at the significance level $\alpha = 0.05$ and the t_{count} is smaller than the t_{table}. Therefore, there is no sufficient evidence to support the hypothesis that World Crude Oil Price has a significant positive relationship with Subholding Company Performance (Y_1).

4. The significance value (p-value) for Currency Exchange Rate (X_4) is 0.940 and the t_{count} is 0.077. Variable X_4 is not statistically significant to the dependent variable Y_1 at the significance level $\alpha = 0.05$ and the t_{count} is smaller than the t_{table}. Therefore, there is no sufficient evidence to support the hypothesis that Currency Exchange Rate has a significant positive relationship with Subholding Company Performance (Y_1).

5. DISCUSSION

5.1. Introduction

This chapter discusses the observations from the research outcomes and analysis, considering its alignment with the previous relevant researches, and its implications to the current industry.

5.2. The Impact/Influence of Subholding Capital Structure on Company Performance

The significance value of the Subholding Capital Structure (X_1) is displayed at a point where >0.05, then H_1 is rejected. For the comparison of the t_{table} with the t_{count}, the t_{table} value is 2.05954. The t_{count} value of X_1 in the output table is -1.101, which is smaller than 2.05954, so the null hypothesis is accepted and the alternative hypothesis is rejected. Thus, it cannot be concluded that there is a significant positive effect of the Subholding Capital Structure (X_1) on the Performance of the Subholding Company (Y_1). Thus, H_1 is rejected. These results support several similar studies by Hertina, et al. (2021), Fauziah, et al. (2023), and Machdar (2018) which also found that Capital Structure has no significant effect on Company Performance.

The null hypothesis stating that the capital structure of PT Pertamina's Subholding has no positive influence on company performance is rejected. PT Pertamina's Subholding suggests that operational management strategies, effective marketing policies, and even external factors such as changes in regulatory policies affecting the energy industry and fluctuations in world crude oil prices may have a greater impact on company performance.

5.3. The Impact/Influence of Subholding Activities on Company Performance

The significance value of Subholding Activity (X_2) is displayed at a point where <0.05, then H_2 is accepted. For the comparison of t_{table} with t_{count}, the t_{table} value is 2.05954. The t_{count} value of X_2 in the output table is 10.599, which is greater than 2.05954, so the null hypothesis is rejected and the alternative hypothesis is accepted. Thus, it can be concluded that there is a significant positive effect of Subholding Activity (X_2) on Subholding Company Performance (Y_1). Thus, H_2 is accepted. This finding supports several similar studies such as Agustina, et al. (2022), Dey, et al. (2018) and Grediani, et al. (2022) which state that Activity has a positive and significant effect on Company Performance.

This finding shows that the Subholding company studied has succeeded in using its assets efficiently to generate revenue. This can encourage management to continue to pay attention to better asset management and utilization, and identify inefficient or less productive assets to be upgraded or replaced. The increase in Total Assets Turnover shows that the company can generate more revenue with the same amount of assets. This means that the company has found a way to increase sales or revenue without having to invest more in new assets.

5.4. The Impact/Influence of World Crude Oil Prices on Company Performance

The significance value of World Crude Oil Price (X_3) is displayed at a point where >0.05, then H_3 is rejected. For the comparison of t_{table} with t_{count}, the t_{table} value is 2.05954. The t_{count} value of X_3 in the output table is -0.116, which is smaller than 2.05954, so the null hypothesis is accepted and the alternative hypothesis is rejected. Thus, it cannot be concluded that there is a significant positive effect of World Crude Oil Price (X_3) on Subholding Company Performance (Y_1). Thus, H_3 is rejected. This finding supports the research of Indriastuti & Ruslim (2020) and Agusti, et al. (2022) which also found that the increase in world crude oil prices had no significant effect on company performance.

The rejection of the hypothesis that world crude oil prices do not have a significant positive effect on the performance of PT Pertamina's Subholding companies shows implications that include a deeper understanding of the complexity of crude oil market dynamics and the company's response to it. Although world crude oil prices are a significant external factor for energy companies, the results of this study indicate that this variable is not significant in predicting or explaining variations in the company's performance in the context of the regression model used. Other factors such as internal management, operational policies, or changes in global market conditions and regulations may have a greater impact on company performance.

5.5. The Impact/Influence of Exchange Rates on Company Performance

The significance value of the Currency Exchange Rate (X_4) is displayed at a point where >0.05, then H_4 is rejected. For the comparison of the t_{table} with the t_{count}, the t_{table} value is 2.05954. The t_{count} value of X_4 in the output table is 0.077, which is smaller than 2.05954, so the null hypothesis is accepted and the alternative hypothesis is rejected. Thus, it cannot be concluded that there is a significant positive effect of the Currency Exchange Rate (X_4) on the Performance of Subholding Companies (Y_1). Thus, H_4 is rejected. The results of this study are in accordance with the research of Putri (n.d.), Pradesyah (2016), Sanjoyo (2020), and Dwita & Rahmidani (2012) which found that the Currency Exchange Rate does not have a positive and significant effect on Company Performance.

The rejection of the hypothesis that the exchange rate has a significant positive effect on the performance of PT Pertamina's Subholdings highlights the complexity in assessing the influence of the exchange rate variable on the performance of companies in the energy context such as PT Pertamina. Although intuitively currency appreciation can improve company performance by reducing import costs or affecting the value of international assets, the results of this study indicate that other factors may be more influential in determining the performance of these companies.

6. CONCLUSION

6.1. Conclusion

This study aims to analyze the influence of Subholding capital structure, Subholding activities, world crude oil prices, and currency exchange rates on the performance of PT Pertamina's Subholding companies. Based on statistical testing, several findings can be concluded as follows:

1. The Subholding Capital Structure variable does not have a significant positive effect on the Performance of Subholding Companies.
2. The Subholding Activity variable has a significant positive effect on the Performance of Subholding Companies.

3. The World Crude Oil Price variable does not have a significant positive effect on the Performance of Subholding Companies.
4. The Currency Exchange Rate variable does not have a significant positive effect on the Performance of Subholding Companies.

6.2. Recommendation

Several recommendations emerge from the analysis and discussion studies presented in this study, including:

1. Companies or publishers should strengthen and align their financial ratios. Since a company's financial report is only one way to find out its health, this can attract investors because it has a positive impact on the company's financial condition.
2. For investors who will invest their funds, it is recommended to consider the condition of the Total Assets Turnover ratio in making their decisions, because this ratio has a significant positive influence on company performance.
3. For further researchers, it is recommended to use other variables in examining the influence of variables on company performance, for example, company size, liquidity, inflation, money supply, and stock price. Meanwhile, the financial database needs to be increased and detailed periodically, so that the results of the research test of the company's performance determinant factors can be more accurate. For example, the database used is a quarterly database from the oil and gas Subholding company PT Pertamina with a larger number, so that the research results can be more representative.

6.3. Practical Implications

The observations gathered from this research have several important implications that are considerably useful for future practices:

1. **Optimizing Capital Structure and Asset Utilization:** Subholdings should aim to maintain an optimal mix of debt and equity to minimize the cost of capital and maximize company value. Additionally, improving asset management practices to enhance the Total Assets Turnover (TATO) ratio is crucial. This involves better inventory management, streamlining operations, and investing in productivity-enhancing technologies.
2. **Strategic Management of Crude Oil Price and Foreign Exchange Risks:** Develop strategies to mitigate the risks associated with crude oil price volatility, such as hedging, diversifying the product portfolio, or investing in alternative energy sources. Similarly, manage foreign exchange risks through financial derivatives, diversified currency portfolios, and natural hedging to balance costs and revenues in the same currency.
3. **Data-Driven Decision Making and Benchmarking:** Establish robust data collection and analysis processes using comprehensive financial data from official sources. Regularly compare performance with industry standards and best practices to identify improvement areas and drive effective business strategies.
4. **Enhanced Transparency and Investor Relations:** Improve the quality of financial reporting and provide clear, accessible information to stakeholders to enhance investor confidence. Transparent communication of financial performance supported by accurate data can foster better investor relations.

These key points can help subholdings of PT Pertamina (Persero) improve financial performance, manage risks effectively, and achieve sustainable growth.

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