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GOLD, OIL PRICES, EXCHANGE RATES, DOW JONES, AND INFLATION ON FUTURE JAKARTA COMPOSITE INDEX

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ABSTRACT

This study aims to determine the effect of world gold price, world oil price, rupiah–dollar exchange rate, dow Jones index, and inflation in predicting the composite stock price index for 2017 – 2021. The analytical methods used are SPSS software and SmartPLS software. The result of this study showed that the dow Jones Index significantly affects the composite stock price index. World gold price, world oil price, rupiah–dollar exchange rate, and inflation were insignificant in explaining the composite stock price index. The coefficient of determination is 64,7%. It shows that 64,7% variation of the dependent variable can be explained by the variation of five independent variables in this research, while the rest of 32,6% explained by the other variables that are not scrutinized in this study.

Keywords: *World Gold Price; World Oil Price; Rupiah – Dollar Exchange Rate; Dow Jones Index; Inflation; Composite Stock Price Index*

EMAS, HARGA MINYAK, NILAI TUKAR, DOW JONES, DAN INFLASI PADA INDEKS HARGA SAHAM GABUNGAN MASA DEPAN

ABSTRAK

Tujuan dari penelitian ini adalah untuk mengetahui pengaruh harga emas dunia, harga minyak dunia, nilai tukar rupiah – dollar, indeks dow jones, dan inflasi dalam memprediksi indeks harga saham gabungan periode 2017 – 2021. Metode analisis yang digunakan adalah aplikasi SPSS dan aplikasi SmartPLS. Hasil dari penelitian ini menunjukkan bahwa indeks dow jones berpengaruh signifikan terhadap indeks harga saham gabungan. Harga emas dunia, harga minyak dunia, nilai tukar rupiah – dollar, dan inflasi tidak signifikan dalam menjelaskan indeks harga saham gabungan. Nilai koefisien determinasi sebesar 64,7%. Hal ini menunjukkan bahwa 64,7% variasi variabel dependen dapat dijelaskan oleh variasi kelima variabel independen dalam penelitian ini, sedangkan sisanya sebesar 32,6% dijelaskan oleh variabel – variabel lain yang tidak diteliti dalam penelitian ini.

Kata Kunci: Harga Emas Dunia; Harga Minyak Dunia; Nilai Tukar Rupiah – Dollar; Indeks Dow Jones; Indeks Harga Saham Gabungan

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INTRODUCTION

Research Background

Gross Domestic Product (GDP) signifies the monetary worth (Kumalasari & Endiana, 2023) of all goods and services produced within a country during a particular year. It is the valuation of final goods and services at market prices, generated by an economy over a certain period using production resources found within the country (Silitonga, 2021).

Indonesia's GDP growth from 2017 to 2021 exhibited an overall upward trend, despite a dip in 2020. This upward trajectory in GDP growth correlates with the rising trend in the Jakarta Composite Index (IHSG). Theoretically, an increase in GDP enhances consumer purchasing power for company products, boosting company profitability. Higher profitability can increase investor confidence, leading to a rise in stock prices.

The Composite Stock Price Index evaluates the collective performance of all stocks listed on the Indonesia Stock Exchange. This index is crucial for investors, as it encompasses all companies listed on the main board and uses historical data (Chandra et al., 2018; Nyoto et al., 2023; Renaldo & Murwaningsari, 2023) to track stock price movements over a certain period. The index is updated daily based on the closing prices. By analyzing the Composite Stock Price Index, investors can gauge market conditions—whether they are active, sluggish, or stable. This movement serves as a vital reference for investors deciding to sell, buy, or hold their shares.

Between 2017 and 2021, the JCI experienced fluctuations. In 2018, the JCI declined by 2.54%, influenced by domestic factors such as stagnant economic growth at 5%, rupiah depreciation, trade balance deficits, and foreign sentiments like the trade war and the U.S. Fed Fund Rate (FFR) increase. In 2020, the Jakarta Composite Index (JCI) experienced a substantial decline of 5.09% attributed to the impacts of the COVID-19 pandemic, the oil price conflict between Russia and Saudi Arabia, and the Federal Reserve's decision to reduce interest rates by 50 basis points to a range of 1.00-1.25%, which was considered insufficient to spur global economic growth. Key factors affecting the JCI include gold prices, world oil prices, the rupiah exchange rate, the Dow Jones index, and inflation.

Firstly, the World Gold Price, according to Basit (2020), has a positive yet insignificant impact on the JCI. Nurhasanah et al. (2021) found a negative and insignificant effect, while Istamar et al. (2019) and Darmawan et al. (2022) reported a positive impact. Conversely, Mahendra et al. (2022) identified a negative effect. Secondly, the World Oil Price, based on Basit (2020), positively affects the JCI. Nurhasanah et al. (2021) and Istamar et al. (2019) found a positive and insignificant effect, whereas Mahendra et al. (2022) noted a negative impact, and Dewi (2020) reported a negative and insignificant effect.

Thirdly, the Rupiah-Dollar Exchange Rate, as per Nurhasanah et al. (2021), Istamar et al. (2019), and Hanoeboen (2017), has a positive impact on the JCI. However, Darmawan et al. (2022) and Dewi (2020) identified a negative impact. Fourthly, the Dow Jones Index, according to Simamora (2021), Anggraini et al. (2019), Andriansyah et al. (2022), and Roofica et al. (2021), positively influences the IHSG. Chandrawinata et al. (2022) found a positive but insignificant effect. Lastly, Inflation, as per Nurhasanah et al. (2021), Hanoeboen (2017), and Dewi (2020), has a negative and insignificant impact on the IHSG. Silaen et al. (2019) and Darmawan et al. (2022) noted a negative impact.

This study is distinct because it uses the Future Composite Stock Price Index variable, avoiding time bias caused by time zone differences between Indonesia, the U.S., Saudi Arabia, and Europe. To address this, the present values of independent variables and future values of the dependent variable are used.

LITERATURE REVIEW

Capital Asset Pricing Model (CAPM)

The Capital Asset Pricing Model (CAPM) was first developed by Sharpe, Lintner, and Mossin in the mid-1960s and continues to be employed for estimating the expected return of a stock. The use of CAPM can help investors, especially in calculating the risk and return of selected securities. According to Chen (2017), it is defined as the disclosure of asset returns as a function of risk, which in turn is usually expressed as volatility or beta (Renaldo et al., 2022).

Contagion Effect

(Sari & Purwohandoko, 2019), the contagion effect or modern domino theory is an effect that arises due to changes in the economic conditions of a country that have an impact on other countries, both regional and non-regional. The effects have a relative tendency and of course, the impact is not the same for each country, depending on the relationship and cooperation in the economic sector of the country.

Arbitrage Pricing Theory (APT)

Arbitrage Pricing Theory (APT) is an asset valuation model introduced by Ross in 1976 to explore the relationship between return (Renaldo, Suhardjo, et al., 2021) and risk. Like the Capital Asset Pricing Model (CAPM), APT is an equilibrium model. However, the two differ in their foundational concepts: CAPM is

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grounded in the creation of an efficient portfolio, while APT is based on the law of one price. This law posits that two assets with identical characteristics should have the same price. If this condition is not met, investors can exploit arbitrage opportunities (gaining profit without risk) by purchasing undervalued assets and selling them at higher prices. According to Gusni & Riantani (2017), APT is an alternative to CAPM for evaluating financial assets. Ross's model arose from the idea that in a competitive financial market, arbitrage will ensure that two assets with similar characteristics (such as risk) yield the same expected return.

Multifactor Model

The multifactor model, often referred to as the Three-Factor Model, was formulated by Fama and French in 1976. It integrates aspects of both the Capital Asset Pricing Model (CAPM) and the Arbitrage Pricing Theory (APT) to provide a more comprehensive framework for understanding stock valuations. According to Fama and French, while the stock beta, which measures market risk, does not fully account for stock returns when examined in isolation, the size of the firm and the book-to-market equity ratio (BE/ME ratio) are significant factors that can explain stock returns.

Capital Market Integration

According to Walewangko et al. (2018), market integration refers to a state where stock prices in different global capital markets exhibit strong correlations. This allows capital markets worldwide to establish an international price for their shares, offering investors around the world unrestricted access and eliminating any barriers to ownership. (Robitanyo, 2021) defines capital market integration as a relationship between one capital market and another that mutually influences their stock returns, where the stronger relationship between capital market returns can eliminate the benefits of stock diversification. When capital market integration occurs, differences in location do not prevent assets with the same risk from producing the same results.

The Law of One Price

The law of one price suggests that identical commodities should have the same price across different countries when expressed in the same currency. This principle underscores the impact of market arbitrage and trade on pricing consistency for identical goods across various markets, counteracting imperfections in market efficiency (Pangestuti & Riantiarno, 2021). It assumes frictionless markets, where transaction costs, transportation expenses, legal barriers, exchange rate fluctuations, and price manipulation are absent (Renaldo, Andi, et al., 2021). This theory implies that arbitrage opportunities prompt traders to buy goods in cheaper markets and sell them in more expensive ones, ultimately equalizing prices across different locations through market forces (Pangestuti & Riantiarno, 2021).

Purchasing Power Parity

Gustav Cassel introduced the theory of purchasing power parity (PPP) in 1918, a significant theory in international finance concerning the link between inflation and exchange rates (Tamonsang & Arochman, 2020). PPP asserts that exchange rates will adjust to equalize the purchasing power of consumers between two countries over time, reflecting differences in inflation rates. This theory directly connects currency exchange rate fluctuations to disparities in inflation rates across nations. Moreover, PPP underscores the challenge of balancing domestic price stability with exchange rate stability.

Composite Stock Price Index (IHSG)

According to the IDX team (https://idx.co.id/), a stock index is a statistical measure that reflects the collective price movements of a selection of stocks based on specific criteria and methodologies, which are periodically reviewed. The stock index serves as an indicator of the overall performance of the capital market over a defined period. For analyzing stock returns (Lumbantoruan et al., 2021), using stock indices is preferred over individual stock prices to mitigate biases arising from corporate actions. Stock indices are classified into three types: individual stock price indices, sectoral indices, and composite stock price indices. The Composite Stock Price Index (IHSG), released by the stock exchange, is computed continuously throughout trading hours and updated as necessary. The IHSG fluctuates in response to daily changes in market prices. Additionally, adjustments in the number of outstanding shares due to new issuances and various corporate events such as stock splits, dividends, and conversions also influence fluctuations in the IHSG.

Gold Price

Gold is a non-renewable natural resource with a limited global supply, which contributes to its stable and increasing price trend over the years (Setiyono et al., 2022). As a precious metal, gold is highly sought after for both investment and everyday use. It is the most widely accepted valuable commodity globally, second only to the foreign currencies of the G-7 countries (the group of seven economically strong nations: the United States, Japan, Germany, the United Kingdom, Italy, Canada, and France). The price of gold often follows the value

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increase of these G-7 currencies (Suyono et al., 2020). Gold is frequently referred to as a "safe haven" because it is considered a low-risk asset during times of global economic uncertainty or geopolitical turmoil. Its rarity, high demand, and intrinsic value make gold a preferred choice for preserving wealth in unstable economic conditions.

World Oil Prices

Crude oil is a vital global resource used extensively in energy production, including Liquefied Petroleum Gas (LPG), gasoline, diesel, lubricants, and other products. The current global price of crude oil is determined by its spot price per barrel, typically benchmarked against either West Texas Intermediate (WTI) traded on the New York Mercantile Exchange (NYMEX) or Brent traded on the Intercontinental Exchange (ICE) (Andriyani and Budiman, 2021). WTI crude oil is renowned for its high quality, characterized by its light density and low sulfur content, making it particularly suitable as a fuel. These quality attributes underscore why light crude oil prices serve as a standard in global oil trading (Basit, 2020).

Rupiah – Dollar Exchange Rate

According to Sartika (2017), foreign exchange rates, or forex rates, denote the price or value at which one country's currency is traded for another country's currency. The exchange rate also signifies the amount of domestic currency needed to purchase one unit of foreign currency. Sartika (2017) explains that when the price of the US dollar decreases, demand for the currency typically increases. Conversely, when the price of the US dollar rises, its supply tends to increase while demand decreases. Factors influencing exchange rates in a country include changes in consumer preferences, fluctuations in prices of imported and exported goods, overall price levels (inflation), shifts in interest rates and investment returns, and the economic growth of a country (Eddy et al., 2023).

Dow Jones Index

Roofica & Pertiwi (2021) describe the Dow Jones index as a crucial stock index in the United States, serving as a principal measure for evaluating the performance of the nation's capital market. This index mirrors the performance of the U.S. industrial sector within its financial markets. Consisting of 30 prominent multinational companies, the Dow Jones Index is famously recognized as the oldest index in the United States. It functions as an indicator of the nation's economic health and market dynamics.

Inflation

According to Tambunan & Aminda (2021), inflation is the sustained increase in prices influenced by market dynamics, including heightened public consumption and increased liquidity, which can lead to speculation and irregular distribution of goods. Devi (2021) adds that inflation, while varying in its manifestations, fundamentally entails a general and continuous rise in prices across most goods, not just isolated instances affecting one or two items. Increases due to seasonal factors or one-time events without lasting effects are not classified as inflationary. Persistent inflation is concerning for investors because it raises a company's income and production costs. If production costs rise more than the selling price of goods, it can reduce company profits and prompt investors to divest their shares.

Based on the explanation of the theory that has been described above, the research framework is made as follows:

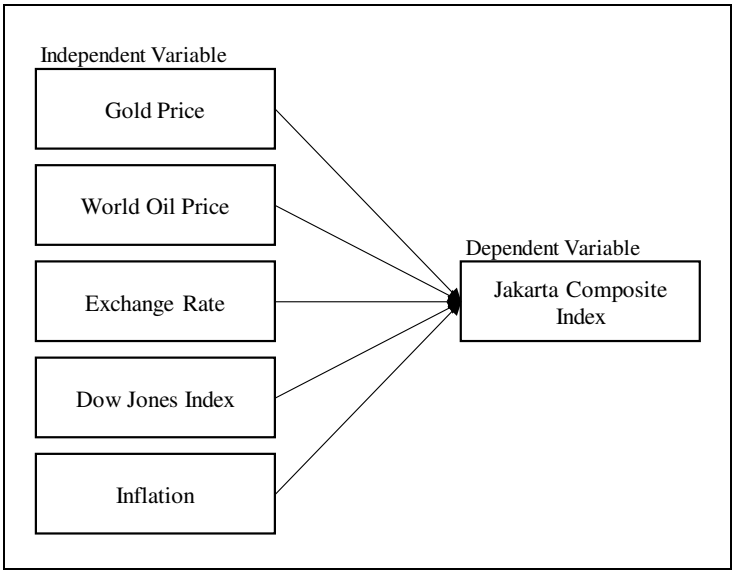

Figure 1. Research Framework

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Hypothesis Developent

The Influence of World Gold Prices on the Composite Stock Price Index

Gold is a crucial commodity that influences stock prices due to its perceived safety and potential for high returns. Investors often turn to gold as a low-risk alternative investment, diverting funds away from the capital market when gold prices rise (Ndruru, 2023). Studies on the impact of world gold prices on stock indices show varied results: Basit (2020) finds a positive yet insignificant relationship with the Composite Stock Price Index, while Nurhasanah et al. (2021) suggest a negative but insignificant effect. Istamar et al. (2019) and Darmawan et al. (2022) indicate a positive impact on the Composite Stock Price Index, contrasting with Mahendra et al. (2022), who report a negative effect on the JCI. These findings underscore the complex nature of how gold prices can influence stock market dynamics in different countries. Based on this explanation, the hypothesis can be described as follows:

H1: World Gold Prices have a positive effect on the JCI

The Effect of World Oil Prices on the JCI

Changes in global oil prices can impact a country's capital market, like the Indonesia Stock Exchange, which encompasses various sectors. Typically, higher oil prices correlate with an uptick in Indonesia's composite stock price index, as noted by Basit (2020). Yet, research diverges on the connection between world oil prices and the Jakarta Composite Index (JCI). While some studies show a meaningful positive relationship, others find it positive but negligible, or even negative. This diversity of results underscores the intricate ways in which oil price fluctuations affect stock market dynamics in Indonesia. Based on this explanation, the hypothesis can be described as follows:

H2: World Oil Prices have a positive effect on the JCI

The Effect of the Rupiah-Dollar Exchange Rate on the JCI

The currency exchange rate, or exchange rate, plays a significant role in influencing stock price volatility. It determines whether goods from other countries are cheaper or more expensive compared to domestically sold goods, impacting the export-import trade of goods and services. These currency movements affect issuer companies, thereby influencing activities in the capital market and the composite stock price index on the Indonesia Stock Exchange. Studies by Nurhasanah et al. (2021), Istamar et al. (2019), and Hanoeboen (2017) indicate a positive effect of the exchange rate on the IHSG (Indonesia Stock Exchange Composite Index). Conversely, research by Darmawan et al. (2022) and Dewi (2020) suggest a negative impact of the exchange rate on the IHSG. These findings highlight the dual nature of how exchange rate fluctuations can impact stock market performance in Indonesia, reflecting the complexities of global economic interactions on local market dynamics. Based on this explanation, the hypothesis can be described as follows:

H3: The Rupiah - Dollar Exchange Rate has a positive effect on the IHSG

The Effect of the Dow Jones Index on the JCI

The Dow Jones Index, a prominent U.S. stock index, serves as the primary gauge of the American capital market's performance. It reflects the performance of leading companies in various industries that operate globally. Known as the oldest index in the United States, the Dow Jones Index provides insights into the economic health and performance of the country. Studies by Simamora (2021), Anggraini et al. (2019), Andriansyah et al. (2022), and Roofica et al. (2021) indicate a positive impact of the Dow Jones Index on the JCI (Jakarta Composite Index). Chandrawinata et al. (2022) suggest a positive yet insignificant effect of the Dow Jones Index on the JCI. These findings underscore the influence of U.S. market dynamics on Indonesian stock market performance, highlighting both direct and nuanced relationships between these indices. Based on the explanation, the hypothesis can be described as follows:

H4: The Dow Jones Index has a positive effect on the JCI

The Effect of Inflation on the JCI

Inflation reflects how prices evolve and is closely tied to market dynamics influenced by several factors. High public consumption and increased market liquidity often lead to speculation and irregular distribution of product materials (Tambunan & Aminda, 2021). During periods of high inflation, investors typically adopt a wait-and-see approach, monitoring government policies aimed at addressing inflation before making investment decisions. This cautious approach can lead to declines in stock prices in the capital market, resulting in a decrease in the composite stock price index (Aini et al., 2019). Research by Nurhasanah, Puri, and Wilis (2021), Hanoeboen (2017), and Dewi (2020) indicates that inflation has a negative and insignificant effect on the JCI (Jakarta Composite Index). Similarly, Silaen et al. (2019) and Darmawan et al. (2022) find that inflation negatively impacts the JCI. These findings underscore the adverse impact of inflation on stock market performance in Indonesia, highlighting its role as a critical factor influencing investor behavior and market dynamics. Based on this explanation, the hypothesis can be described as follows:

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H5: Inflation has a negative effect on the JCI

RESEARCH METHODOLOGY

Place and Time of Research

The study analyzed monthly data on world oil prices, gold prices, exchange rates, the Dow Jones index, inflation, and the JCI spanning from 2017 to 2021. The research was conducted between September 2021 and January 2023.

Population and Sample

The study's population and sample comprise monthly data on world gold prices, world oil prices, the rupiah-dollar exchange rate, the Dow Jones index, inflation, and the JCI from 2017 to 2021.

Type and Source of Data

The study employs quantitative data that can be analyzed using statistical methods, sourced from secondary sources. These sources include official websites such as IDX, Yahoo Finance, BPS, Investing.com, and GoldPrice.org. The data used are monthly figures on world gold prices, world oil prices, rupiah-dollar exchange rates, the Dow Jones index, inflation, and the IHSG spanning from 2017 to 2021.

Operational Definition of Variables

The following is the operational definition of each variable.

Table 1. Operational Variable

Source: Elaboration of several references, 2022

Variable	Formula	Scale
IHSG (Y)	$\text{IHSG}_t = \frac{\text{Nilai Pasar}_t}{\text{Nilai Dasar}} \text{x } 100$ Source: (Dewi & Suprajitno, 2021)	Rasio
World Oil Price (X1)	Closing oil price per month end Source: (Basit, 2020)	Rasio
Gold Price (X2)	Closing price of gold at the end of the month Source: (Aguston, 2019)	Rasio
Exchange Rate (X3)	$\text{Kurs} = \frac{\text{Kurs Tengah}_t - \text{Kurs Tengah}_{t-1}}{\text{Kurs Tengah}_{t-1}} \text{x } 100\%$ Source: (Puspita & Aji, 2018) $\text{Kurs Tengah} = \frac{\text{Kurs Jual} + \text{Kurs Beli}}{2}$ Source: (Clarensia, 2021)	Rasio
Dow Jones Index (X4)	$Dow\ Jones = \frac{\sum_{i=1}^{30} P}{\text{n} - \text{disesuaikan}}$ Source: (Roofica & Pertiwi, 2021	Rasio
Inflation (X5)	$\text{IHK} = \frac{\sum P_n . Q_0}{\sum P_0 . Q_0} \text{x } 100\%$ Source: (Saputro & Gustyana, 2020)	Rasio

Data Analysis Method

The data analysis approach employed in this study involves utilizing Multiple Linear Regression Analysis, facilitated by software tools such as SPSS and SmartPLS (Alfat, 2024).

Classical Assumption Test

Normality Test

The normality test employs the Kolmogorov-Smirnov test method to assess whether the data conforms to a normal distribution or not.

Multicollinearity Test

To ascertain the presence of strong correlations among independent variables in a multiple linear regression model, one examines tolerance and variance inflation factor (VIF).

Heteroscedasticity Test

To detect data included in heteroscedasticity using the Glesjer test.

Autocorrelation Test

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To see if the data residual correlates use the run test.

F-Test
The F test is conducted to determine the goodness of fit or accuracy of the regression model. This test is used to test the magnitude of the influence of independent variables on the dependent variable.

Multiple Regression Analysis
Multiple linear regression analysis is employed to assess how several independent variables collectively influence the dependent variable. The model utilizes a multiple linear equation to quantify this relationship.

$$Y = \propto + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \beta 5X5 + e$$

Y = JCI
α = Constant
β = Regression Coefficient
X1 = World Oil Price
X2 = Gold Price
X3 = Exchange Rate
X4 = Dow Jones Index
X5 = Inflation
e = error

Coefficient of Determination Test
The coefficient of determination (R^2) essentially measures how far the model's ability to explain the variation of the dependent variable.

Hypothesis Test
The hypothesis testing within the inner model is conducted using the bootstrapping method, where T-statistic tests are employed to assess the presence of causal relationships.

Sensitivity Test
The sensitivity test aims to determine whether the new indicator can yield improved measurement outcomes compared to existing methods.

RESULTS AND DISCUSSION

Descriptive Analysis of Variables

Table 2. Descriptive Analysis of Variables

		JCI	Gold Price	World Oil Price	Exchange Rate	Dow Jones Index	Inflation
N	Valid	60	60	60	60	60	60
	Missing	0	0	0	0	0	0
Mean		5,916.9607	1,500.0983	560.653	14,146.9395	26,782.8730	27.247
Median		5,985.5050	1,417.9000	551.350	14,187.7500	25,922.3400	29.900
Std. Deviation		50.257.404	25.288.370	1.272.353	58.225.539	4,297.89952	.89758
Range		2,066.70	776.10	64.73	3,068.96	16,474.21	3.05
Minimum		4,538.93	1,191.50	18.84	13,278.00	19,864.09	1.32
Maximum		6,605.63	1,967.60	83.57	16,346.96	36,338.30	4.37

Source: SPSS Processed Data, 2022

Based on Table 2, the data distribution is as follows: (1) The Gold Price variable (X1) spans from 1,191.50 to 1,967.60, with an average of 1,500.0983 and a standard deviation of 252.88370. (2) The World Oil Price variable (X2) ranges from 18.84 to 83.57, averaging 56.0653, with a standard deviation of 12.72353. (3) The IDR – Dollar Exchange Rate variable (X3) ranges from 13,278.00 to 16,346.96, with an average of 14,146.9395 and a standard deviation of 582.25539. (4) The Dow Jones Index variable (X4) ranges from 19,884.09 to 36,338.30, averaging 28,782.8730, with a standard deviation of 4,297.89952. (5) The Inflation variable (X5) ranges from 1.32 to 4.37, with an average of 2.7247 and a standard deviation of 0.89758.

Normality Test
The following are the results of the normality test with SPSS.

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Table 3. Results of the Normality Test with Kolmogorov Smirnov

		Unstandardized Residual
N		59
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	28.423.875.723
Most Extreme Differences	Absolute	.072
	Positive	.072
	Negative	-.072
Test Statistic		.072
Asymp. Sig. (2-tailed)		.200[c,d]

Source: SPSS Processed Data, 2023

Based on the One-Sample Kolmogorov-Smirnov Test table, a significance of 0.200 was obtained, which means it is greater than 0.05, so it can be concluded that the test data is normally distributed.

Multicollinearity Test

The following are the results of the multicollinearity test with SPSS.

Table 4. Multicollinearity Test Results

Variable	Tolerance	VIF	Information
Gold Price	0.970	10.278	There is multicollinearity
World Oil Price	0.206	4.859	There is no multicollinearity
Exchange Rate	0.624	1.602	There is no multicollinearity
Dow Jones Index	0.103	9.743	There is no multicollinearity
Inflation	0.129	7.732	There is no multicollinearity

Source: SPSS processed data, 2023

Based on the table provided, it is evident that the variables of world oil prices, IDR-Dollar exchange rates, Dow Jones Index, and Inflation show no signs of multicollinearity. However, the gold price variable exhibits multicollinearity, but it is justified for use due to the macroeconomic nature of the research where all variables are interconnected. This aligns with the contagion effect theory, which suggests that the price of gold is closely linked to inflation.

Autocorrelation Test

The following are the results of the autocorrelation test with SPSS.

Table 5. Autocorrelation Test Results

	Unstandardized Residual
Test Value[a]	.0000000
Cases < Test Value	28
Cases >= Test Value	31
Total Cases	59
Number of Runs	22
Z	-2.218
Asymp. Sig. (2-tailed)	.027

Source: SPSS Processed Data, 2023

Based on the output, the probability value is 0.027, which is smaller than 0.05, so it can be concluded that the residual data occurs non-randomly (systematically). Thus, autocorrelation occurs.

Heteroscedasticity Test

The following are the results of the heteroscedasticity test with SPSS.

Table 6. Heteroscedasticity Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	264.434	1.142.031		.232	.818
	Harga Emas	-.188	.311	-.257	-.604	.548
	Harga MInyak	-3.646	4.277	-.249	-.852	.398
	Nilai Tukar	.034	.053	.108	.643	.523
	Dow Jones Index	.003	.018	.076	.183	.856
	Inflasi	-48.680	75.766	-.237	-.643	.523

Source: SPSS Processed Data, 2023

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According to the results from the heteroscedasticity test in the table, it is evident that the significance value for each variable is above 0.05. This indicates that there is no heteroscedasticity present in any of the variables.

Based on the classical Assumption Test conducted, it indicates that the research model encounters issues with autocorrelation and multicollinearity tests. Therefore, the Smart PLS application is utilized as a solution to address these classical assumption challenges.

Convergent Validity Test

The following are the results of the convergent validity test with SmartPLS.

Table 7. Validity Test Results

Variable	Outer Loading	Critical Value	Information
Gold Price	1.000	0.7	Valid
World Oil Price	1.000	0.7	Valid
Exchange Rate	1.000	0.7	Valid
Dow Jones Index	1.000	0.7	Valid
Inflation	1.000	0.7	Valid
JCI	1.000	0.7	Valid

Source: SmartPLS Processed Data, 2023

From the results of data processing in the table, it can be seen that each outer loading value of each variable is greater than 0.7, meaning that each variable has a high level of validity.

F Test

The following are the results of the F-test with SPSS.

Table 8. F Test Results

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	9.821.811.618	5	1.964.362.324	22.218	.000[b]
	Residual	4.685.916.925	53	88.413.527		
	Total	14.507.728.542	58			

Source: SPSS Processed Data, 2023

Based on the results from the F test in the table, the computed F value of 22.218 exceeds the critical F value of 2.39 at a significance level of 0.000. The significance level obtained is smaller than α (0.05), indicating a significant collective influence of gold prices, oil prices, exchange rates, the Dow Jones index, and inflation on the JCI. This confirms the presence of a linear model. Next is the Determination Coefficient Test with SmartPLS.

Table 9. R Square Value

Coefficient Determination Test	R - Square	R – Square Adjusted
Future IHSG	0.677	0.647

Source: SmartPLS Processed Data, 2023

The regression table shows an adjusted R-squared value of 0.647, indicating that 64.7% of the variance in the IHSG Future is explained by the variables of gold price, oil price, exchange rate, Dow Jones index, and inflation. The remaining 35.3% variability is accounted for by other factors not covered in this study. A higher R-squared value nearing 1 suggests that changes in these independent variables closely correlate with changes in the dependent variable. Thus, fluctuations in gold price, oil price, exchange rate, Dow Jones index, and inflation are likely to lead to corresponding changes in the IHSG Future.

Regression Equation Analysis

The following are the results of the multiple linear regression equation analysis with SmartPLS.

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Table 10. Results of Regression Equation Analysis

	Original Sample (O)	*Sample Mean (M)*	*Standard Deviation (STDEV)*	*T Statistics (O/STDEV)*	*P value (1 - tailed)*
Gold Price –> Future IHSG	-1,151	-1,187	0,253	4,553	0,000
World Oil Price –> Future IHSG	-0,199	-0,216	0,157	1,266	0,103
Exchange Rate –> Future IHSG	-0,352	-0,353	0,084	4,161	0,000
Dow Jones Index –> Future IHSG	1,272	1,319	0,312	4,072	0,000
Inflation –> Future IHSG	-0,068	-0,059	0,226	0,301	0,382

Source: SmartPLS Processed Data, 2023

Based on the data provided in the table, the regression equation derived from the analysis is Y = −1.151 Gold Price – 0.199 Oil Price – 0.352 Exchange Rate + 1.272 Dow Jones – 0.068 Inflation. This equation can be interpreted as follows: (1) A one-unit increase in the Gold Price variable results in a decrease of 1.151 units in the IHSG Future. (2) A one-unit increase in the Oil Price variable leads to a decrease of 0.199 units in the IHSG Future. (3) A one-unit increase in the Exchange Rate variable causes a decrease of 0.352 units in the IHSG Future. (4) A one-unit decrease in the Dow Jones variable corresponds to an increase of 1.272 units in the IHSG Future. (5) A one-unit increase in the Inflation variable results in a decrease of 0.068 units in the IHSG

Hypothesis Testing

The following are the results of hypothesis testing with SmartPLS.

Table 11. Hypothesis Testing Results

Model Future IHSG	Original Sample (O)	T Statistics (O/STDEV)	P value (1 - tailed)	Hipotesis	Hasil
Dow Jones Index –> Future IHSG	1,272	4,072	0,000	+	Diterima
Gold Price –> Future IHSG	-1,151	4,553	0,000	+	Ditolak
World Oil Price –> Future IHSG	-0,199	1,266	0,103	+	Ditolak
Inflation –> Future IHSG	-0,068	0,301	0,382	-	Ditolak
Exchange Rate –> Future IHSG	-0,352	4,161	0,000	+	Ditolak

Source: SmartPLS Processed Data, 2023

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Based on the data presentation in the table, it can be seen that t table = number of samples - independent variables - 1; 0.05; t table = 60 - 5 - 1; 0.05; t table = 54; 0.05; t table = 1.674, then the results of the hypothesis testing are: (1) Dow Jones variable on IHSG Future, t count value 4.072> t table 1.674, with a P value of 0.000 <0.05. This shows that the Dow Jones variable has a significant positive effect on IHSG Future; (2) Gold Price variable on IHSG Future, t count value 4.553> t table 1.674, with a P value of 0.000 <0.05. This shows that the Gold Price variable has a negative and significant effect on IHSG Future; (3) Oil Price Variable on IHSG Future, t value 1.266 < t table 1.674, with P value 0.206 > 0.05. This shows that the Oil Price variable has a negative and insignificant effect on IHSG Future; (4) Inflation Variable on IHSG Future, t value 0.301 < t table 1.674, with P value 0.764 > 0.05. This shows that the Inflation variable has a negative and insignificant effect on IHSG Future; (5) Exchange Rate Variable on IHSG Future, t value 4.161 > t table 1.674, with P value 0.000 < 0.05. This shows that the Exchange Rate variable has a negative and significant effect on IHSG's Future.

Sensitivity Test

The following are the results of the sensitivity test with SmartPLS.

Table 12. Sensitivity Test Results

Model Future IHSG	Original Sample (O)	T Statistics (O/STDEV)	P value (1 - tailed)	Hipotesis	Hasil
Dow Jones Index –> Future IHSG	1,288	4,439	0,000	+	Diterima
Gold Pirce –> Future IHSG	-0,979	3,769	0,000	+	Ditolak
World Oil Price –> Future IHSG	-0,083	0,578	0,282	+	Ditolak
Inflation –> Future IHSG	0,109	0,506	0,306	-	Ditolak
Exchange Rate –> Future IHSG	-0,354	4,448	0,000	+	Ditolak

Source: SmartPLS Processed Data, 2023

Based on the data presentation in the table, it can be seen that t table = number of samples - independent variables - 1; 0.05; t table = 60 - 5 - 1; 0.05; t table = 54; 0.05; t table = 1.674, then the results of the sensitivity test are: (1) Dow Jones variable on IHSG, t count value 4.439> t table 1.674, with a P value of 0.000 <0.05. This shows that the Dow Jones variable has a significant positive effect on IHSG; (2) Gold Price variable on IHSG, t count value 3.769> t table 1.674, with a P value of 0.000 <0.05. This shows that the Gold Price variable has a negative and significant effect on IHSG; (3) Oil Price Variable on IHSG, t value 0.578 < t table 1.674, with P value 0.563 > 0.05. This shows that the Oil Price variable has a negative and insignificant effect on IHSG; (4) Inflation Variable on IHSG, t value 0.506 < t table 1.674, with P value 0.613 > 0.05. This shows that the Inflation variable has a negative and insignificant effect on IHSG; (5) Exchange Rate Variable on IHSG, t value 4.448 > t table 1.674, with P value 0.000 < 0.05. This shows that the Exchange Rate variable has a negative and significant effect on IHSG.

Determination Coefficient Test (R2) Sensitivity Test

The following are the results of the determination coefficient test of the sensitivity test with SmartPLS.

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Table 13. Results of the Determination Coefficient Test for Sensitivity Test

Coefficient Determination Test	R - Square	R – Square Adjusted
JCI	0,775	0,754

Source: SmartPLS Processed Data, 2023

The results from the regression analysis reveal an adjusted R-squared value of 0.754, suggesting that 75.4% of the variability in the JCI can be accounted for by the variables including gold price, oil price, exchange rate, Dow Jones index, and inflation. The remaining 24.6% of the variability is attributable to factors not examined in this study. A higher R-squared value nearing 1 indicates that changes in the independent variables are closely associated with changes in the dependent variable. Therefore, fluctuations in gold price, oil price, exchange rate, Dow Jones index, and inflation are likely influential in driving increases in the JCI.

Discussion

The Effect of World Gold Prices on JCI Futures

The study findings indicate that the World Gold Price variable has a significant negative impact on the JCI Future. This was observed across the years 2017 to 2021, where fluctuations in gold prices did not correspond to similar movements in the JCI, which exhibited a general upward trend despite occasional declines such as in 2020. The study suggests that gold prices do not significantly influence JCI movements, as investors often view gold as an alternative investment rather than directly impacting stock market dynamics. This finding aligns with prior research (Anggriana & Paramita, 2020), which similarly concluded a negative relationship between gold prices and the JCI. It contrasts with earlier studies (Istamar & Rusmiajati, 2019) that suggested a positive relationship, indicating discrepancies in findings. Overall, despite gold's importance in global economics, its price fluctuations do not appear to contagiously affect the JCI due to investor preferences for high-risk, high-return stocks over gold.

The Effect of World Oil Prices on the Future of JCI

The study findings indicate that the World Oil Price variable has a significant negative effect on the Future of JCI. This relationship is attributed to the impact of global oil price movements on domestic fuel prices in Indonesia. When world oil prices rise, the government may need to adjust fuel subsidies, potentially leading to increased domestic fuel prices. This, in turn, can create adverse economic conditions characterized by higher inflation and reduced consumer demand for goods, ultimately resulting in decreased stock prices of companies listed on the JCI and a decline in the index itself. These findings are consistent with earlier research (Hanoeboen, 2017), which similarly concluded that World Oil Prices negatively affect the JCI, albeit insignificantly. They contrast with other studies (Basit, 2020) that suggested a positive and significant relationship between world oil prices and the IHSG, indicating variations in research outcomes. Despite the theoretical importance of oil prices in global economics, the study suggests that their impact on the JCI does not conform strictly to contagion effects, as investor reactions and economic dynamics within Indonesia play crucial roles in shaping market responses to oil price fluctuations.

The Effect of the Rupiah-Dollar Exchange Rate on the IHSG Future

The study findings reveal that the Rupiah-Dollar Exchange Rate variable significantly impacts the Future of IHSG negatively. This relationship stems from the observation that a depreciation of the rupiah tends to coincide with a decline in the IHSG. Rupiah depreciation slows down the Indonesian economy, influenced by external factors such as weakened export performance and deficits in the balance of payments. This depreciation occurs when fundamental economic indicators falter, leading to pressure on the rupiah against the strengthening dollar, resulting in a relative decline in the rupiah's value. These results align with earlier research (Dewi, 2020), which similarly concluded that the Rupiah-Dollar Exchange Rate negatively affects the IHSG. They contrast with findings from other studies (Hanoeboen, 2017) that suggested a positive and significant relationship between the Rupiah-Dollar Exchange Rate and the IHSG, indicating divergent outcomes across different research endeavors. The study's results are consistent with economic theories such as the law of one price and purchasing power parity, which posit that as exchange rates rise, the value of the IHSG tends to fall.

The study findings indicate that the Dow Jones Index variable significantly and positively affects the Future of IHSG. According to the results, an increase in the Dow Jones Index correlates with a subsequent increase in the IHSG, and vice versa. Indonesia, as a developing country, experiences economic influences from the United States, given that the Dow Jones Index represents the largest and oldest stock index in the U.S., a global economic superpower. The bilateral relations between Indonesia and the U.S., including trade interactions, further impact Indonesia's economy. These findings are consistent with previous research (Simamora, 2021) that similarly concluded the Dow Jones Index has a positive and significant effect on the IHSG. They contrast with other studies (Chandrawinata, et al., 2022) which found a positive but insignificant relationship between the Dow Jones Index and the IHSG, highlighting differing conclusions in the literature. The

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study's results align with the multifactor theory, suggesting that as the Dow Jones Index increases, so does the IHSG, reflecting the interconnectedness between Indonesia's economy and developments in the U.S.

Effect of Inflation on the Future of IHSG

The study findings indicate that the Inflation variable has a statistically insignificant and negative effect on the Future of IHSG. This result suggests that high inflation levels can diminish the purchasing power of money and potentially reduce real income for investors. Conversely, a decrease in inflation could signal positively to investors, indicating improved purchasing power and potentially higher real income from investments. These findings are consistent with previous research (Hanoeboen, 2017), which similarly concluded that Inflation has a negative and insignificant impact on the IHSG. However, they differ from other studies (Darmawan, et al., 2022) that found Inflation to have a negative and significant effect on the IHSG, highlighting varied conclusions within the literature.

CONCLUSION

Based on the research findings, the following conclusions can be drawn: (1) World Gold Prices negatively and significantly impact IHSG Futures; (2) World Oil Prices have a negative and insignificant influence on IHSG Futures; (3) The Rupiah-Dollar Exchange Rate exhibits a negative and significant effect on IHSG Futures; (4) The Dow Jones Index shows a positive and significant impact on IHSG Futures; (5) Inflation has a negative and insignificant influence on IHSG Futures. However, this study has several limitations: (1) The adjusted R-squared of the IHSG future model is lower compared to the regular IHSG model; (2) The use of monthly data limits the detailed understanding of variable movements; (3) Other independent variables not included in this study could potentially affect IHSG movements; (4) The study's timeframe of 5 years may not capture long-term tendencies adequately. Suggestions for future research include: (1) Encouraging the government to enhance domestic investor interest in the capital market to foster economic growth indicators; (2) Advising investors to monitor factors like Inflation and the Rupiah-Dollar Exchange Rate, where high inflation signals caution for investments, and Rupiah depreciation indicates potential economic slowdown; (3) Future researchers are encouraged to use more recent years and longer intervals (daily or monthly time series) to provide a comprehensive understanding of IHSG influencing factors. Additionally, exploring emerging areas such as the digital economy, green economy, or blue economy could enrich understanding (Junaedi et al., 2024; Nyoto et al., 2024; Renaldo et al., 2024; Chandra et al., 2024).

REFERENCES

Ainanur, Y. R., & Pertiwi, T. K. (2021). Indeks Dow Jones, Nikkei225, Inflasi Dan Volume Perdagangan: Analisis Pengaruh Terhadap Ihsg. *Ecobisma (Jurnal Ekonomi, Bisnis Dan Manajemen)*, *8*(2), 113–132. https://doi.org/10.36987/ecobi.v8i2.2166

Alfat, F. F. (2024). Factors that Influence the Learning Achievement of Students Majoring in Accounting at the Institut Teknologi dan Bisnis Master Pekanbaru. Reflection: Education and Pedagogical Insights, 1(4), 128–157. https://doi.org/https://doi.org/10.61230/reflection.v1i4.60

Aminda, N. T. R. S. (2021). Pengaruh Inflasi, Suku Bunga dan Kurs Terhadap Indeks Harga Saham Gabungan (IHSG). *Prosiding Seminar Nasional & Call for Paper STIE AAS*, *September*, 189–200.

Anggraini, F. N., & Nurhadi. (2019). Indeks Dow Jones Industrial Average (DJIA), Indeks Shanghai Stock Exchange (SSE), Kurs USD/IDR Dan BI Rate Berpengaruh Terhadap Indeks Harga Saham Gabungan (IHSG) Di Bursa Efek Indonesia (BEI) Periode 2015-2018. *Jurnal Bisnis Indonesia*, *10*(1), 57–69.

BASIT, A. (2020). Pengaruh Harga Emas Dan Minyak Dunia Terhadap Indeks Harga Saham Gabungan (IHSG) Periode 2016-2019. *Jurnal Aplikasi Akuntansi*, *5*(1), 42–51. https://doi.org/10.29303/jaa.v5i1.89

Chandrawinata, V., & Handoyo, S. E. (2022). *Pengaruh Suku Bunga, Indeks Dow Jones, dan Indeks Hang Seng Terhadap Pergerakan IHSG di BEI* (pp. 637–646).

Chandra, T., Renaldo, N., Chandra, S., & Ng, M. (2024). Blue Management Accounting: Water Footprint, Cost, Efficiency, and Internal Control at WKP Corporation Headquarters. *Journal of Environmental Accounting and Management, 12*(2), 185–200. https://doi.org/10.5890/JEAM.2024.06.006

Chandra, T., Renaldo, N., & Putra, L. C. (2018). Stock Market Reaction towards SPECT Events using CAPM Adjusted Return. Opción, *Año 34*(Especial No.15), 338–374.

Darmawan, S., Shani, M., & Haq, S. (2022). *Jurnal Riset Ekonomi dan Bisnis Analysis of the influence of macroeconomics, global stock indices, world*. *15*(2), 95–107.

Dewi, I. P. (2020). *PENGARUH INFLASI, KURS, DAN HARGA MINYAK DUNIA TERHADAP INDEKS HARGA SAHAM GABUNGAN DI BURSA EFEK INDONESIA*. *17*.

Duta andriansyah, fazhar sumantri. (2016). Pengaruh Volume Transaksi Saham, Indeks Dow Jones dan Uang Beredar Terhadap Indeks Harga Saham Gabungan (IHSG) Bursa Efek Indonesia (BEI) Tahun 2018-2020. *Jurnal Ilmiah Wahana Pendidikan*, *15*(2), 1–23.

Eddy, P., Sudarno, Renaldo, N., Hutahuruk, M. B., & Prayetno, M. P. (2023). The Effect of Farmers' Exchange

ISSN 2527-8223

Rates on Rice Prices in 2017-2019. *Luxury: Landscape of Business Administration, 1*(2), 102–110. https://firstcierapublisher.com/index.php/luxury/article/view/33

Hanoeboen, B. R. (2017). Inflasi Dan Suku Bunga Sbi Terhadap Indeks Harga Saham. *Ekonomi*, *XI*(1), 1–6.

Istamar, Sarfiah, S. N., & Rusmijati. (2019). *ANALISIS PENGARUH HARGA MINYAK DUNIA, HARGA EMAS, DAN NILAI KURS RUPIAH TERHADAP INDEKS HARGA SAHAM GABUNGAN DI BURSA EFEK INDONESIA TAHUN 1998-2018*. *1*, 338–347.

Junaedi, A. T., Renaldo, N., Yovita, I., Veronica, K., & Jahrizal. (2024). Digital Culture Revolution in Improving Firm Performance in Indonesia. *Journal of System and Management Sciences, 14*(1), 452–470. https://doi.org/10.33168/JSMS.2024.0126

Kumalasari, P. D., & Endiana, I. D. M. (2023). Do Financial Performance Determine Firm Value? Evidence from Food and Beverage Companies in 2018-2021. *Nexus Synergy: A Business Perspective, 1*(1), 14–20. https://firstcierapublisher.com/index.php/nexus/article/view/9

Lumbantoruan, M. R., Panjaitan, H. P., & Chandra, T. (2021). The Influence of COVID-19 Events to Vaccination on Abnormal Return and Trading Volume Activity in IDX30 Companies. *Journal of Applied Business and Technology, 2*(3), 183–193.

Mahardhika, M., & Arintowati, D. (2021). Jurnal Nusantara Aplikasi Manajemen Bisnis. *Jurnal Nusantara Aplikasi Manajemen Bisnis*, *6*(2), 138–148.

Mahendra, A., Amalia, M. M., & Leon, H. (2022). Analisis Pengaruh Suku Bunga, Harga Minyak Dunia, Harga Emas Dunia Terhadap Indeks Harga Saham Gabungan Dengan Inflasi Sebagai Variabel Moderating Di Indonesia. *Owner*, *6*(1), 1069–1082. https://doi.org/10.33395/owner.v6i1.725

Ming Chen, J. (2019). Baryonic Beta Dynamics: An Econophysical Model of Systematic Risk. *Estudios de Economía Aplicada*, *36*(1), 263. https://doi.org/10.25115/eea.v36i1.2529

Ndruru, A. (2023). Analysis of the Effect of Financial Performance on Stock Returns in Manufacturing Companies (Basic Industry & Chemical Sector, Cement Sub-Sector Listed on the IDX for the 2018 - 2020 Period). *Interconnection: An Economic Perspective Horizon, 1*(3), 125–142. https://firstcierapublisher.com/index.php/interconnection/article/view/51

Nyoto, R. L. V., Nyoto, & Renaldo, N. (2024). Information Technology Advancements for A Digital Economy. *Informatica and Digital Insight Journal, 1*(1), 1–7. https://doi.org/https://doi.org/10.61230/informatica.v1i1.67

Nyoto, Renaldo, N., & Effendi, I. (2023). SWOT Analysis of Economic Impact Development of Potential Kuantan Singingi Pacu Jalur Tourism Development. *The Seybold Report, 18*(02), 1342–1349. https://doi.org/10.17605/OSF.IO/T58CF

Purnama, I., Putra, R., Syahputra, H., Yani, F., & Eddy, P. (2024). The Influence of The Value of Oil and Gas Exports and Imports on The Country's Foreign Exchange from 2010-2017. *Luxury: Landscape of Business Administration, 2*(1), 59–70. https://doi.org/https://doi.org/10.61230/luxury.v2i1.68

Renaldo, N., Andi, Nur, N. M., Junaedi, A. T., & Panjaitan, H. P. (2021). Determinants of Firm Value for Wholesale Sub-sector Companies in 2016-2019 with Behavioral Accounting Approach. *Journal of Applied Business and Technology, 2*(1), 1–12. https://doi.org/https://doi.org/10.35145/jabt.v2i1.55

Renaldo, N., & Murwaningsari, E. (2023). Does Gender Diversity Moderate the Determinant of Future Firm Value? *Review of Economics and Finance, 21*, 680–689. https://doi.org/https://doi.org/10.55365/1923.x2023.21.72

Renaldo, N., Murwaningsari, E., & Augustine, Y. (2024). Examining the Moderating Effect of a Novel Green Strategy Model on Innovation , Information Systems and Business Performance. *Journal of System and Management Sciences, 14*(12). https://doi.org/10.33168/JSMS.2024.12xx

Renaldo, N., Suhardjo, Putri, I. Y., Juventia, J., & Nur, N. M. (2021). Penilaian Harga Saham Hijau Perusahaan Sektor Industri Barang Konsumsi Tahun 2015-2019. *Procuratio: Jurnal Ilmiah Manajemen, 9*(3), 283–298.

Renaldo, N., Suharti, Suyono, & Suhardjo. (2022). *Manajemen Laba Teori dan Pembuktian* (T. Chandra & Priyono (eds.)). CV. Literasi Nusantara Abadi.

Robiyanto, & Fajar Hartanto, A. (2018). Contagion Effect Dan Integrasi Pasar Modal Di Kawasan Asia, Eropa Dan Amerika. *Jurnal Organisasi Dan Manajemen*, *14*(1), 1–9. https://doi.org/10.33830/jom.v14i1.138.2018

Sari, D. N., & Purwohandoko. (2019). Dampak Pengaruh Bursa Saham Global, Harga Emas Dunia, Dan Variabel Makroekonomi Terhadap Indeks Harga Saham Gabungan Periode 2009-2018. *Jurnal Ilmu Manajemen*, *7*(3), 772–783.

Sartika, U. (2017). Dunia Dan Harga Emas Dunia Terhadap Ihsg Dan Jii Di Bursa. *Jurnal Manajemen Dan Akuntansi*, *2*(2), 285–294.

Setiyono, T. A., Ghassani, H., & ... (2022). Determinan Covid-19 Terhadap Harga Emas. *Jurnal Stie …*, *1*, 107–116. http://jurnal3.stiesemarang.ac.id/index.php/jurnal/article/view/592

ISSN 2527-8223

Silitonga, D. (2021). *Dikson Silitonga: "Pengaruh Inflasi terhadap Produk Domestik Bruto (PDB) Indonesia pada ..." 112*. *24*(1).

Simamora, S. C. (2021). Pengaruh Data Vaksinasi, Indeks Dow Jones Dan Nilai Tukar Terhadap Indeks Harga Saham Gabungan (IHSG) Di Bursa Efek Indonesia Periode Triwulan Satu Tahun 2021. *Jurnal Ilmiah M-Progress*, *11*(2), 146–155. https://journal.universitassuryadarma.ac.id/index.php/ilmiahm-progress/article/view/696

Suyono, Sudarno, Suhardjo, Sari, Y., & Purnama, I. (2020). The influence of price to book value on capital structure and profitability of health and pharmaceutical companies in Indonesia. *Journal of Applied Business and Technology, 1*(3), 181–187.

Tamonsang, M., & Arochman, M. (2020). Analisis Penerapan Model Purchasing Power Parity Untuk Memprediksi Nilai Tukar Rupiah Terhadap US Dollar. *Journal GeoEkonomi*, *11*(2), 157–163.

Walewangko, E., Saerang, I. S., Maramis, J. B., Bisnis, E., & Manajemen, J. (2018). Analisis Integrasi Saham Bursa Efek Indonesia Dan Beberapa Bursa Efek Negara Asean Periode Januari 2016 Â Juni 2017. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, *6*(4), 3923–3932. https://doi.org/10.35794/emba.v6i4.21917