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PENERBIT: PROGRAM STUDI ILMU EKONOMI DAN STUDI PEMBANGUNAN FAKULTAS EKONOMI DAN BISNIS UNIVERSITAS MUHAMMADIYAH MAKASSAR

The Influence of Interest Rates and Exchange Rates on Investment in Indonesia

Andi Hakib, Belinda Girly Sonia and Kahar
Universitas Muhammadiyah Makassar[12]
Universitas Syekh Yusuf Al Makassari Gowa[3]
email: andihakib@unismuh.ac.id

Keywords:

Interest Rate, Exchange Rate, Investment, Monetary Policy, Indonesia

Abstract

This study aims to analyze the influence of interest rates and exchange rates on investment in Indonesia. A quantitative research approach was employed, utilizing secondary data in the form of time series obtained from the Central Statistics Agency (BPS) and Bank Indonesia for analysis. The data were processed using multiple linear regression analysis, complemented by classical assumption tests and hypothesis testing. Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS) version 22. The findings of the study reveal that interest rates have a significant negative effect on investment in Indonesia. This indicates that rising interest rates tend to discourage investment, as the cost of capital becomes more expensive, thereby reducing incentives for both domestic and foreign investors. On the other hand, the exchange rate has a significant positive effect on investment, implying that an appreciation of the domestic currency correlates with increased investment levels. A stronger currency may reduce the cost of imported capital goods and materials, thereby supporting investment growth. These results emphasize the critical role of effective monetary policy in regulating interest rates and maintaining exchange rate stability to foster a conducive investment climate. Policymakers are advised to consider the dynamics between macroeconomic indicators and investment flows in designing sustainable economic strategies. Overall, the study contributes to a deeper understanding of macroeconomic determinants influencing investment behavior in developing economies such as Indonesia.

1. Introduction

Indonesia, as one of the developing countries, recognizes the importance of economic development in achieving national welfare. This national development encompasses various aspects of life such as politics, social affairs, culture, economy, and national security, with the ultimate goal of creating a just and prosperous society. However, in the process of economic development, Indonesia faces several challenges, one of which is the need for a large amount of funding. Domestic funds alone are not sufficient to support development, as domestic savings are still inadequate to meet the required investment (Dewi & Cahyono, 2016).

In addition to efforts to explore domestic financing sources, the government also invites foreign funding. Foreign funding can come in the form of foreign loans and foreign direct investment. However, if a country continuously relies on foreign loans, it may result in a long-term debt burden, eventually straining the national budget due to obligations to repay both principal and interest. According to the Harrod-Domar model, certain conditions must be met for an economy to achieve steady long-term growth, including the necessity of investment (Dewi & Cahyono, 2016).

The entry of foreign companies as investors in Indonesia is intended to complement sectors and industries that cannot yet be fully developed by national private enterprises, either due to limitations in technology, management, or capital. Foreign capital is also expected to stimulate the domestic business climate, directly or indirectly, and can be utilized to access international marketing networks through their global connections. Consequently, foreign investment is expected to accelerate Indonesia's economic development (Kustina et al., 2018).

Nevertheless, investment in Indonesia does not always have a positive impact on economic growth. It can also have negative consequences, such as when foreign-owned companies operate under management policies that align with foreign corporate interests. These companies tend to maximize their profits and repatriate them to their home countries, which can result in losses for Indonesia. The success or failure of foreign investment in contributing to national economic development can be assessed through national income and per capita income derived from such investments. The profits generated can support development initiatives, including infrastructure improvements. The capital for infrastructure development comes from tax revenues, which are sourced from dividends and bond interest received by foreign investors—either through direct investments or portfolio investments such as corporate shares, bonds, and government securities (Destina Paningrum, 2022).

High interest rates can hinder investment in the real sector. However, they may also encourage more household savings. Therefore, interest rate fluctuations must be well controlled to continue stimulating investment and production activities without discouraging savings or triggering capital flight (Mahendra, 2016). According to Karim (2015), low interest rates reduce borrowing costs and stimulate both investment and economic activity, which in turn boosts stock prices (Jessica et al., 2021).

The exchange rate is the value of one currency in relation to another and has the potential to affect a country's economy, including its investment climate (Marsuni, 2024). As a rapidly developing country open to the global market, Indonesia's exchange rate policy significantly impacts investment. Exchange rate fluctuations can affect the competitiveness of domestic products, the cost of imports, and export profits, all of which influence investment decisions by both domestic and foreign investors.

Investment is defined as the act of placing capital in various economic (productive) activities with the expectation of gaining future benefits. Investment can generally be categorized into two types: financial investment and non-financial investment. Financial investments include ownership of financial instruments such as cash, savings, deposits, equity participation, securities, and bonds. Meanwhile, non-financial investments are realized in the form of physical (real) capital, including inventories. However, financial investments can eventually be transformed into real investments (Hasanah, 2018).

According to Puspopranoto (2012), the price at which a country's currency is exchanged with another currency is referred to as the exchange rate. The relationship between domestic exchange rates and domestic investment is positive. A strengthening of the domestic currency can increase investment enthusiasm. This is supported by Madura (2009), who asserts that foreign investment is closely related to the strength of a country's currency—investors tend to invest in countries with strong currencies. Wiagustini (2014) further explains that exchange rates can influence capital investment, depending on the investor's objectives (Sarah & Nuraeni, 2016).

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Table 1.1 Domestic Investment Realization Data by Province (Billion Rupiah)

38 Provinsi	Realisasi Investasi Penanaman Modal Dalam Negeri Menurut Provinsi (Investasi) (Milyar Rupiah)							
	2016	2017	2018	2019	2020	2021	2022	2023
ACEH	2456,1	782,8	970	3606,9	8241,1	7904,7	4424,2	8883,3
SUMATERA UTARA	4864,2	11683,6	8371,8	19749	18189,5	18484,5	22789,2	21574
SUMATERA BARAT	3795,6	1517	2309,4	3026,6	3106,2	4183,7	2559,8	4488,2
RIAU	6613,7	10829,8	9056,4	26292,2	34117,8	24997,8	43062	48243,3
JAMBI	3884,4	3006,6	2876,5	4437,4	3511,7	6204,2	8882,7	8939
SUMATERA SELATAN	8534,1	8200,2	9519,8	16921,1	15824,5	16266,9	23526	25602,4
BENGKULU	949,1	296,5	4902,8	5458,1	5399,2	4923,5	6957,3	7218,7
LAMPUNG	6031,8	7014,8	12314,7	2428,9	7120,5	10513,2	5809,2	7625,8
KEP. BANGKA BELITUNG	2202	1734,7	3112,9	2915,2	1863,8	3877,4	6309	7961,4
KEP. RIAU	492,5	1398	4386	5656,4	14249	9768,7	4817,4	8856,6
DKI JAKARTA	12216,9	47262,3	49097,4	62094,8	42954,7	54708,2	89223,6	95202,1
JAWA BARAT	30360,2	38390,6	42278,2	49284,2	51400,5	59948,5	80808,3	88012,9
JAWA TENGAH	24070,4	19866	27474,9	18654,7	30606,1	31311,2	24992,3	32987,2
DI YOGYAKARTA	948,6	294,6	6131,7	6298,8	2683,4	2761,3	2275	5015,5
JAWA TIMUR	46331,6	45044,5	33333,1	45452,7	55660,6	52552,2	65355,9	74937,4
BANTEN	12426,3	15141,9	18637,6	20708,4	31145,7	25989,5	31283,9	37971,7
BALI	482,3	592,5	1548,8	7393,2	5432,7	6355,2	6002,1	6950,8
NUSA TENGGARA BARAT	1342,8	5413,5	4135,1	3519	6582,4	9090,5	11031,5	30766,2
NUSA TENGGARA TIMUR	822,2	1081,9	4246,1	3752,6	3028,5	3742,6	3459,3	3407,2
KALIMANTAN BARAT	9015,5	12380,9	6591,4	7699,1	9256,5	10773,4	9382,9	14892
KALIMANTAN TENGAH	8179,1	3037,8	13091,6	8591,9	3710	6359,8	6556,8	8779,5
KALIMANTAN SELATAN	6163	2981,9	9975,2	10061	4286,3	11003,9	12310,4	14909,4
KALIMANTAN TIMUR	6885,1	10980,2	25942	21952	25934	30297,4	39595,6	52171,7
KALIMANTAN UTARA	3345,7	853,3	1356,8	4400,9	2235,2	3792,5	7526,4	8199,1
SULAWESI UTARA	5069,6	1488,2	4320,1	8259,6	3005,6	3480	5042,1	7698,2
SULAWESI TENGAH	1081,2	1929,7	8488,9	4438,8	5261,3	3012,3	3758,6	4772,5
SULAWESI SELATAN	3334,6	1969,4	3275,9	5672,6	9142	12075,4	7528	11468,3
SULAWESI TENGGARA	1794,2	3148,7	1603,4	3827,1	2865,7	4334,2	7596	7734,6
GORONTALO	2202,5	888,4	2666,8	844,4	683,6	1004,3	1113,5	3960,1
SULAWESI BARAT	84,1	660,2	3144,2	1187,2	252,9	395,3	1313,3	2011,1
MALUKU	11,4	52,3	1013,5	283,2	474,8	2939,7	611	1904,5
MALUKU UTARA	8,8	1150,6	2276,3	682,7	662,1	2665,3	3414,9	6901
PAPUA BARAT	10,6	59,2	50,9	380,2	1925,4	635,6	2139,1	1261,9
PAPUA BARAT DAYA	-	-	-	-	-	-	-	1708,7
PAPUA	220,5	1217,9	104,6	567,7	2722,2	910,8	1311,8	1174,1
PAPUA SELATAN	-	-	-	-	-	-	-	152,5
PAPUA TENGAH	-	-	-	-	-	-	-	458,8
PAPUA PEGUNUNGAN	-	-	-	-	-	-	-	121,8
INDONESIA	216230,8	262350,5	329804,9	386498,4	413535,5	447063,6	552769	674923,4

Source: Central Bureau of Statistics, 2024

Based on Table 1.1 "Domestic Investment Realization Data by Province (in Billion Rupiah)," an overview is provided of domestic investment across 38 Indonesian provinces from 2016 to 2023. The data show that the highest level of investment was recorded in 2023, amounting to IDR 674.923 trillion, while the lowest occurred in 2016, totaling IDR 216.2308 trillion. Provinces such as DKI Jakarta, West Java, and East Java dominated in terms of the highest investment, while North Maluku, Maluku, and Central Papua recorded the lowest. This data provides a comprehensive understanding of investment distribution, reflecting consistent annual growth, the stability of Indonesia's economy, and increasing investor confidence.

The interest rate is the cost paid by borrowers for loans received and acts as a return for lenders on their investments. Interest rates are positively correlated with national income. When interest rates rise, investment levels tend to decrease. In economic theory, the demand curve for loanable funds slopes downward, while the supply curve slopes upward. Therefore, higher interest rates lead to lower investment. Investment plays a dual role in the economy and is a crucial factor influencing economic activity. The correlation between interest rates

and investment is evident, as interest rates are one of several determinants of investment. The higher the interest rate, the lower the public's willingness to invest (Siwi et al., 2019).

Interest rates, as the cost of borrowing, can be divided into nominal and real interest rates. Policies set by Bank Indonesia, as the central bank, affect various sectors of the economy. Thus, the impact of investment on a country's economy can be assessed through national income. Economic activity includes financial flows through banking, including savings, investment, and inflation—all significantly influenced by exchange rate fluctuations. Among domestic interest rates, the BI Rate is a key monetary instrument managed by Bank Indonesia. The investment demand function illustrates the relationship between the real interest rate and the amount of investment, which can be derived from the Marginal Efficiency of Capital (MEC) curve (Bank Indonesia, 2023).

Exchange rates are also a crucial consideration for investors. Fluctuations in exchange rates affect both investment demand and supply. The exchange rate represents how much of one currency is received (bought or exchanged) for another. The impact of exchange rates on investment depends on the investor's objectives (Sitorus, 2020). For investors targeting foreign markets, a strong local currency can reduce FDI inflows due to lower competitiveness and higher labor costs, which in turn reduce profits. Madura (2009) stated that one reason multinational companies are attracted to invest in a country is to minimize capital costs, especially in response to currency fluctuations. In such situations, companies tend to invest in countries with relatively weaker currencies, allowing them to repatriate profits when exchange rates are more favorable (Sari & Baskara, 2018).

Understanding the influence of interest rates and exchange rates on domestic investment in Indonesia is essential because domestic investment is a key driver of national economic growth. It plays a vital role in enhancing production, creating jobs, increasing household income, and contributing positively to the country's economy as a whole (Manan & Aisyah, 2023).

Interest rates and exchange rates are direct determinants of domestic investment decisions. Low interest rates encourage companies and individuals to borrow and invest in various economic projects. Conversely, high interest rates reduce investment attractiveness due to higher borrowing costs, making projects less profitable. Additionally, fluctuations in exchange rates affect the competitiveness of domestic products and export profitability. A strengthening currency can increase domestic purchasing power by reducing import costs and making local products more affordable to foreign consumers. On the other hand, a weakening currency can make domestic products more expensive in international markets, reducing competitiveness and export profits (Sartika & Choiriyah, 2019). In light of this, the researcher is interested in exploring the topic: "The Effect of Interest Rates and Exchange Rates on Investment in Indonesia."

2. Literature Review

2.1. Investment Theory

Investment refers to the allocation of capital in the form of expenditures on capital goods and production equipment to enhance the capacity to produce goods and services within the economy. Investment or capital formation is a component of aggregate demand in macroeconomic activities (Bakti & Alie, 2018).

Economic theory defines investment as "expenditures to purchase capital goods and production equipment aimed at replacing and primarily adding capital goods in the economy, which will be used to produce goods and services in the future." Investment is the second component influencing the level of aggregate expenditure and is a crucial and primary factor in economic development, as recognized by many economists. It is even said

that there is no development without investment (Nujum & Rahman, 2019).

According to Keynes in "The General Theory of Employment, Interest, and Money," a country's economy is understood in three aspects: aggregate demand, investment, and government spending, with the support of government for full employment (Priyono & Candra, 2016). Keynes' view on investment fluctuations impacts economic activity and employment opportunities. Investment has the potential for profits, which are determined by interest rates (Kusnadi, 2017). Romansyah (2015) argues that stock investment is a favorable choice for individuals to grow their money, where stocks represent tradable securities (Asmara et al., 2022).

This activity involves trading stocks between investors and issuing companies. Profit is realized when the current selling price exceeds the purchase price, referred to as dividends or gains distributed to investors. Investments are monetary components that can influence the national economy. This theory emphasizes the profitability of investments both for investors and the country. Keynes also asserted that investments must ensure a return.

Keynes emphasized that an economy is not solely driven by aggregate demand and supply and full employment, but also by investment (Priyono & Zainuddin Ismail, 2017). He noted that savings and investment are determined by various factors, including interest rates derived from money demand and supply. At full employment, savings exceed investments by entrepreneurs. Investment must offer considerable returns or dividends to support business operations and the national economy. However, investing always carries risks, both minor and major. Thus, investors must consider these risks before making decisions (Asmara et al., 2022).

The commonly used economic formula for investment is: $Y = C + I + G + (X - M)$ Where: Y = National Income C = Household Consumption I = Investment in Physical Capital (e.g., machinery, buildings, equipment) G = Government Expenditure X = Exports of Goods and Services M = Imports of Goods and Services

This formula explains how national income or output is derived from consumption, investment, government spending, and net exports (exports minus imports). Investment (I) represents the aggregate expenditure on capital goods for use in production.

Investments can be classified as domestic (PMDN) and foreign (PMA) based on their sources. According to Law No. 6 of 1968, PMDN refers to the use of Indonesian wealth, including all rights and assets owned by the state, national private companies, or foreign individuals residing in Indonesia. Foreign investments can include portfolio investments or direct foreign investments (Juliannisa, 2020).

In theory, Foreign Direct Investment (FDI) positively impacts economic development or growth in the host country, both directly and indirectly. First, directly from the supply side: new company establishments increase output (GRDP), exports, and job opportunities. Higher exports increase foreign reserves and the ability to repay foreign debt and finance imports. Second, indirectly from the demand side: new factories raise domestic demand for raw materials and goods. Third, employment opportunities from new factories increase domestic spending, boosting demand in the local market. If this increased demand is met locally without increased imports, domestic output grows. However, if the demand is met through imports, the effect is null (Juliannisa, 2020).

2.2. Interest Rate Theory

Keynes views interest rates as the cost of using investment funds, determined by money demand and supply (Umam & Sutanto, 2013). Interest rates affect stock prices: when rates rise, investors may shift from stocks to bonds, lowering stock prices. Conversely, falling rates make investors retain their stocks. Interest rates also influence company profits: higher rates raise costs and lower profits. Thus,

interest rates guide investment decisions (Rosnawintang, 2018).

This aligns with Keynes' view: investment profits are influenced by interest rates. Stocks are tradable securities and a popular choice for investors. They are traded between investors and companies, and profits (dividends) are realized when the sale price exceeds the purchase price (Asmara et al., 2022).

Interest rates influence whether people spend, save, or invest. Changes in monetary conditions impact investment (Prasasti & Slamet, 2020). Excess income not used for consumption may be saved or lent. The cost of using money over time is another way to understand interest rates (Rokhim, 2014). According to Karl and Fair, interest is the annual payment on a loan, expressed as a percentage of the loan. It is the price of borrowing money. It represents the cost paid by borrowers to creditors (Hasoloan, 2014).

2.3. Types of Interest Rates

According to Keynes, interest rates result from money demand and supply. Interest rate fluctuations affect investment decisions, such as in securities trading. When rates rise, security prices drop, and vice versa. Thus, investors may profit or lose based on rate changes. Interest rates are divided into: a) Nominal Interest Rate: the stated rate in monetary terms, representing the return per rupiah invested (Raharjo, 2010). b) Real Interest Rate: the nominal rate adjusted for inflation, calculated as nominal rate minus inflation rate (Raharjo, 2010). For example, an 8% nominal rate and 3% inflation yield a 5% real rate.

2.4. Exchange Rate Theory

The exchange rate is the amount of domestic currency needed to acquire one unit of foreign currency. It is crucial in financial decisions, translating prices across nations into a common currency (Nainggolan, 2019). If a country's currency depreciates, its exports become cheaper and imports costlier. Appreciation has the opposite effect (Jananuraga, 2016).

Puspopranoto (2012) defines exchange rate as the price of one currency in terms of another. A stronger domestic currency boosts investment appeal. Madura (2009) notes that foreign investment is linked to currency strength. Wiagustini (2014) adds that investment effects depend on investor goals (Batubara et al., 2022). A detailed definition of exchange rate is the value comparison between two currencies, known as appreciation (strengthening) or depreciation (weakening). Indonesia adopted a floating exchange rate system on August 14, 1997. Since then, the rupiah has significantly depreciated. Exchange rate changes may be government-controlled under a managed float (Muchlas & Alamsyah, 2015).

Exchange rate volatility affects investment both on the demand and supply sides (Juliannisa, 2020). Exchange rates in foreign transactions have four types: a) Selling Rate: the rate a bank sets to sell a foreign currency. b) Middle Rate: the average between the selling and buying rates. c) Buying Rate: the rate a bank sets to purchase a foreign currency. d) Flat Rate: the rate used in banknote and traveler cheque transactions, inclusive of promotions and fees (Sari & Baskara, 2018). Currency appreciation means a currency gains value, enabling it to buy more foreign currency. Depreciation means the currency weakens, buying less foreign currency.

2.5. History of Exchange Rate Policy

Development in Indonesia Since the 1970s, Indonesia has implemented three exchange rate systems:

1. Fixed Exchange Rate (1970–1978): Under Law No. 32 of 1964, Indonesia adopted a fixed rate of IDR 250/USD. Other currencies were calculated based on this rate, with Bank Indonesia actively intervening in the forex market.
2. Managed Floating Rate (1978–1997): Based on a currency basket, the government allowed exchange rates to move within a

band and intervened only when rates breached set limits. The system included a devaluation in 1978.

3. Floating Exchange Rate (August 14, 1997–present): As the rupiah weakened in mid-1997, Indonesia abolished the intervention band and adopted a free-floating exchange rate system to conserve foreign reserves and strengthen domestic monetary policy (Bramana, 2017).

3. Research Methods

3.1 Type of Research

According to Sugiyono (2018), quantitative research is a method based on the philosophy of positivism, used to examine specific populations or samples. Data collection uses research instruments, and data analysis is quantitative/statistical, aiming to describe and test predetermined hypotheses (Balaka, 2022). Based on the above explanation, the researcher applies a **quantitative research method** because the data processed is ratio data (in numerical form), and it is intended to confirm and answer the research problem formulation, namely the independent variables of **interest rate (X1)** and **exchange rate (X2)**, and the dependent variable, **investment (Y)**.

3.2. Types and Sources of Data

1. **Type of Data**
   This study uses **secondary data** in the form of quarterly quantitative figures from 2016 to 2023. Secondary data is data obtained from government-issued reports presented in various forms, including research reports, journals, and institutional archives.
2. **Data Sources**
   The data was obtained from **Badan Pusat Statistik (BPS)**, **Bank Indonesia**, and other relevant institutions, including online data sources related to the research.

3.3. Data Analysis Methods

To obtain results aligned with the research objectives, appropriate data analysis methods are necessary. The analysis methods used in this study are as follows:

1. **Multiple Linear Regression Analysis**
   The multiple linear regression equation model explains the relationship between a dependent/response variable (Y) and two or more independent/predictor variables (X). The goal is to predict the value of the dependent variable when the independent variable values are known, and to determine the direction of the relationship between them.
   The general form of the multiple regression equation is:

$$\mathbf{Y = a + b_1X_1 + b_2X_2 + e} \quad (1)$$

Where:

- **Y** = Investment (in Rupiah)
- $\mathbf{X_1}$ = Interest Rate (in percent)
- $\mathbf{X_2}$ = Exchange Rate (in Rupiah)
- **a** = Constant
- $\mathbf{b_1}$, $\mathbf{b_2}$ = Regression Coefficients
- **e** = Error term (10%)

2. **Classical Assumption Tests**
   These tests are conducted to avoid bias in the research and to assess the feasibility of the data. The classical assumption tests include:

   a) Autocorrelation Test
   This test checks whether the model contains autocorrelation. It is determined by the Durbin-Watson statistic or the Breusch-Godfrey test using the Lagrange Multiplier (LM) test by comparing the probability value of R-squared with α = 5% or 0.05.
   Decision rules:
   - If Prob (Obs*R^2) > 0.05 → No autocorrelation
   - If Prob (Obs*R^2) < 0.05 → Autocorrelation is present

   b) Heteroscedasticity Test
   This test checks whether the residual variance is unequal across observations, indicating heteroscedasticity. The White test is used.
   Decision rules:
   - If Prob (Obs*R^2) > 0.05 → No heteroscedasticity

- If Prob (Obs*R^2) < 0.05 → Heteroscedasticity is present

c) Multicollinearity Test

This test analyzes the correlation coefficient (r) between independent variables. If |r| > 0.8 (in absolute value), multicollinearity is suspected.

d) Normality Test

Normality deviation is identified using the **Jarque-Bera** test (a type of goodness-of-fit test), which measures whether skewness and kurtosis match a normal distribution. Hypotheses:

- **H_0**: The error term is normally distributed
- **H_1**: The error term is not normally distributed

3. **Statistical Tests**

a) Coefficient of Determination (R^2)

R^2 measures how well the model explains the variation in the dependent variable. An R^2 value close to 1 indicates a high explanatory power, while a value near 0 suggests a low explanatory power.

b) Simultaneous Regression Coefficient Test (F-Test)

The F-test checks whether all independent variables in the model jointly influence the dependent variable.
If F_calculated > F_table → All independent variables significantly influence the dependent variable.

c) Individual Regression Coefficient Test (t-Test)

The t-test determines the extent to which each independent variable explains the dependent variable individually (partially). Decision rules:

- If **Sig. > 0.05** → Hypothesis is rejected → Independent variable has no significant effect
- If **Sig. < 0.05** → Hypothesis is accepted → Independent variable has a significant effect

(Source: Ghozali, 2013)

4. Results and Discussion

4.1. Presentation of Research Data

a) The Development of Interest Rates in Indonesia

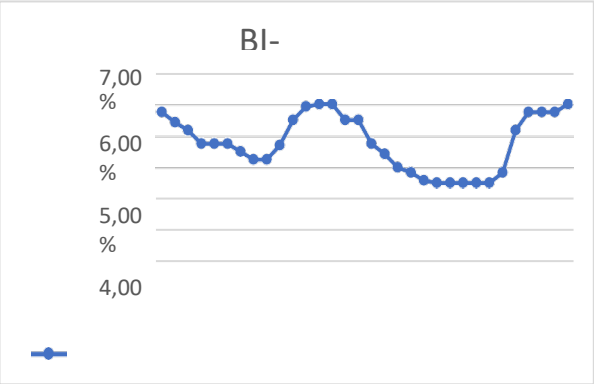
As of December 21, 2023, Bank Indonesia has adopted the term **BI-Rate** as its monetary policy interest rate, replacing **BI7DRR**, in order to strengthen monetary policy communication. This name change does not alter the meaning or objective of the BI-Rate as the stance of Bank Indonesia's monetary policy, and its operational implementation still refers to the Bank Indonesia 7-day reverse repo transaction (Bank Indonesia, 2023).

The **BI7DRR instrument** is a new benchmark interest rate that has a stronger correlation with money market rates. It is transactional in nature, meaning it is traded in the market, and it supports the deepening of the financial market, particularly through the use of repo instruments.

This enhancement is a common practice among central banks and is recognized as an international best practice in conducting monetary operations. Bank Indonesia continuously refines its monetary operations framework to strengthen the effectiveness of its policies in achieving the established inflation target. The use of the BI7DRR instrument as the new policy rate is based on its ability to quickly influence the money market, banking sector, and real sector.

Below is an illustration of the development of interest rates in Indonesia from 2016 to 2023:

Chart 4.1: BI-7 Day Reverse Repo Rate (%)



Source: processed data, 2024

Table 4.1 Research Interest Rate Data 2016-2023 (qoq)

Year	QUARTAL	BI-7Day-RR
2016	**I**	**5,75%**
	II	**5,42%**
	III	**5,17%**
	IV	**4,75%**
2017	**I**	**4,75%**
	II	**4,75%**
	III	**4,50%**
	IV	**4,25%**
2018	**I**	**4,25%**
	II	**4,69%**
	III	**5,50%**
	IV	**5,92%**
2019	**I**	**6,00%**
	II	**6,00%**
	III	**5,50%**
	IV	**5,50%**
2020	**I**	**4,75%**
	II	**4,42%**
	III	**4,00%**
	IV	**3,83%**
2021	**I**	**3,58%**
	II	**3,50%**
	III	**3,50%**
	IV	**3,50%**
2022	**I**	**3,50%**
	II	**3,50%**
	III	**3,83%**
	IV	**5,17%**
2023	**I**	**5,75%**
	II	**5,75%**
	III	**5,75%**
	IV	**6,00%**

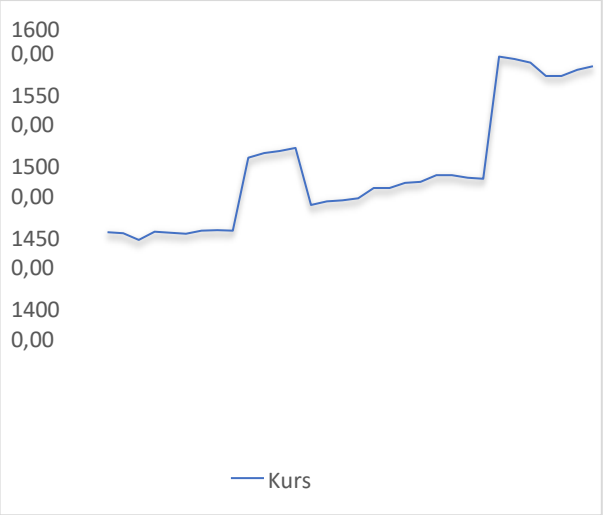
Source: Bank Indonesia, 2024 (processed data)

Data 4.1 above covers the BI 7 Days Repo Rate interest rate from 2016-2023 showing significant changes in Bank Indonesia's monetary policy. The highest interest rate was 6.00% in 2019 and the lowest interest rate was 3.5% in 2021. During this period, Bank Indonesia used several strategies in controlling interest rates to deal with inflation and economic growth. This data analysis provides valuable insight into Bank Indonesia's monetary policy over the past eight years, which is a very important policy.

b) Development of the Indonesian Exchange Rate

According to Mankiw, the exchange rate is the price agreed upon by residents of two countries to trade with each other. The rupiah exchange rate will strengthen if supported by stable economic conditions. With the encouragement of investor interest in Indonesia, it will result in a surplus in the trade balance and foreign exchange reserves will increase (Mildyanti & Triani, 2019). The following is data on the development of the exchange rate in Indonesia.

Chart 4.2 Research Exchange Rate Data 2016-2023



Source: processed data, 2024.

Table 4.2 Research Exchange Rate Data 2016-2023

Year	QUARTAL	Kurs Transaksi USD
2016	**I**	**13495,00**
	II	**13481,00**
	III	**13400,00**
	IV	**13502,00**
2017	**I**	**13490,00**
	II	**13477,00**
	III	**13511,00**
	IV	**13519,00**
2018	**I**	**13516,00**
	II	**14409,00**
	III	**14469,00**

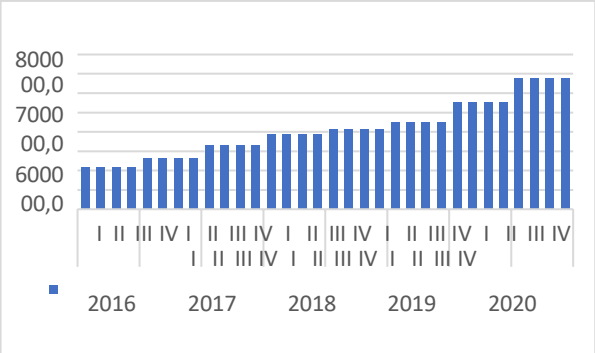
	IV	14490,00
2019	I	14529,00
	II	13831,50
	III	13875,28
	IV	13886,22
2020	I	13912,09
	II	14034,48
	III	14034,48
	IV	14098,16
2021	I	14113,08
	II	14197,66
	III	14193,68
	IV	14165,82
2022	I	14153,88
	II	15652,34
	III	15624,49
	IV	15580,70
2023	I	15416,00
	II	15414,00
	III	15489,00
	IV	15533,00

Source: Bank Indonesia, 2024 (processed data).

Based on the data in table 4.2, the exchange rate picture in 2016-2023 tends to fluctuate quarterly, in the second quarter of 2022 the exchange rate strengthened to 15,562.34/USD, while it weakened in the third quarter of 2016, namely to 13,400.00/USD.

c) Development of Indonesian Investment

Investment is an expenditure made by investors that is expected to provide benefits in the future. Investment data used in this study is the value of PMDN investment realization by province expressed in billions of rupiah.



Source: Processed Data, 2024.

Table 4.3 Research Investment Data 2019-2023

Year	QUARTAL	Realization of Capital Investment Domestic by Province (investment) (Billions of Rupiah)
2016	I	216230,8
	II	216230,8
	III	216230,8
	IV	216230,8
2017	I	262350,5
	II	262350,5
	III	262350,5
	IV	262350,5
2018	I	328604,9
	II	328604,9
	III	328604,9
	IV	328604,9
2019	I	386498,4
	II	386498,4
	III	386498,4
	IV	386498,4
2020	I	413535,5
	II	413535,5
	III	413535,5
	IV	413535,5
2021	I	447063,6
	II	447063,6
	III	447063,6
	IV	447063,6
2022	I	552769,0
	II	552769,0
	III	552769,0
	IV	552769,0
2023	I	674923,4
	II	674923,4
	III	674923,4
	IV	674923,4

Source: Central Bureau of Statistics, 2024 (processed data, Eviews 2010).

Domestic investment data by province from 2016 to 2023 reflects the dynamics of the Indonesian economy. From these data, it can be seen that investment shows a positive trend, with a marked increase from year to year. In 2016, investment was stable at around 216,230.8 billion Rupiah per quarter, while in 2023, there was a significant increase to 674,923.4 billion Rupiah per quarter,

indicating extraordinary growth from period to period. This fluctuation indicates the growing confidence of investors in Indonesia's economic prospects, as well as the increasing stability of investment.

Throughout 2022 to the first quarter of 2023, the processing industry sector such as the basic metal industry, metal goods, non-machinery and equipment consistently ranked at the top of the largest investment contributor sectors in Indonesia. This shows that the government's policy strategy that focuses on downstreaming is consistently able to support the realization of the largest investment in Indonesia.

Significant changes in investment from year to year show that Indonesia is becoming an increasingly attractive investment destination for business people. This data provides a positive signal about the investment prospects in Indonesia, and shows that government policies and adequate economic conditions have supported sustainable investment growth. With this, the hope for continued stable economic growth in the future is increasing, and Indonesia is expected to remain one of the attractive markets for local and international investors.

4.2. Research Data Analysis

a) Multiple Linear Regression Analysis

Multiple linear regression is used to examine the effect of two or more predictor variables on a single response variable or to determine whether there is a functional relationship between two or more independent variables (X) and a dependent variable (Y). In this study, multiple linear regression is employed to identify the influence of interest rates and exchange rates on investment in Indonesia. Based on the data for interest rates, exchange rates, and investment, the estimated results of the multiple regression are as follows:

Table 4.4 Results of Multiple Linear Regression Test

Model	Unstandardized Coefficients	Standardized Coefficients	t		Sig.
(Constant)	-1900036.890	121283.454		-15.666	.000
Interest Rate	-17273.950	7158.196	-0.118	-2.413	.022
Exchange Rate	167.741	8.448	0.973	19.856	.000

Dependent Variable: Investment Source: SPSS 22 Output

The data related to the research variables were processed using SPSS version 22. The estimated model results can be seen in Table 4.4. The general regression equation used in this study is: Y = a + b1X1 + b2X2 + e
The resulting equation: Y = -1900036.890 - 17273.950X1 + 167.741X2 + e
Explanation:

1. The constant value is -1900036.890.
2. Interest Rate (X1) has a negative relationship with Investment (Y), indicating that every increase in the interest rate will be followed by a decrease in investment, assuming the exchange rate is constant. The quantitative impact is -17273.950 units.
3. Exchange Rate (X2) has a positive relationship with Investment (Y), indicating that every increase in the exchange rate will be followed by an increase in investment, assuming the interest rate is constant. The quantitative impact is 167.741 units.

b) Classical Assumption Tests

1. Autocorrelation Test This test checks whether there is a correlation between error terms across time periods. The decision criteria are:
   - If d < dL or d > 4-dL: autocorrelation exists.
   - If dU < d < 4-dU: no autocorrelation.

- If dL < dU or 4-dU < d < 4-dL: no conclusion.

Table 4.5 Autocorrelation Test Results

Model	R	R Square	Adjusted R Square	Std. Error of Estimate	Durbin-Watson
1	.855	.731	.712	19913.44281	1.689

Source: SPSS 22 Output

Durbin-Watson value of 1.689 is between dU = 1.573 and 4 - dU = 2.426, meaning no autocorrelation problem is found.

2. Heteroscedasticity Test Using the Glejser test, the decision criteria are:
   - If sig. value > 0.05: no heteroscedasticity.
   - If sig. value < 0.05: heteroscedasticity exists.
   -

Table 4.6 Heteroscedasticity Test Results

Variable	Sig.
Interest Rate	.804
Exchange Rate	.516

Source: SPSS 22 Output

Both values are greater than 0.05, indicating no heteroscedasticity.

3. Multicollinearity Test Decision criteria:
   - Tolerance > 0.10 and VIF < 10: no multicollinearity.

Table 4.7 Multicollinearity Test Results

Variable	Tolerance	VIF
Interest Rate	.985	1.016
Exchange Rate	.985	1.016

Source: SPSS 22 Output

Results show no multicollinearity exists.

4. Normality Test Using Kolmogorov-Smirnov: Table 4.8 Normality Test Result Sig. (2-tailed) = 0.070 > 0.05, indicating normally distributed error terms.

c) Hypothesis Testing

1. Coefficient of Determination (R2) Table 4.9 Coefficient of Determination

Model	R Square
1	.773

This means 77.3% of the variation in investment is influenced by the independent variables, with the remaining 22.7% affected by other variables.

2. F-Test Table 4.10 F-Test Results

Model	Sum Squares	d	Mean Square	F	Sig
Regression	489,802,758,19.850	2	244,901,379,09.925	197.135	.000
Residual	36,026,793,37.861	2	1,242,303,219892		
Total	525,829,551,56.711	3			

Since the calculated F value (197.135) > F table (3.33) and sig. = .000 < .05, both interest rate and exchange rate have a significant simultaneous effect on investment.

3. t-Test Table 4.11 t-Test Results

Variable	t	Sig.
Interest Rate	-2.413	.022
Exchange Rate	19.856	.000

Interest Rate (X1) has a significant negative effect on Investment (Y) with sig. < 0.05. Exchange Rate (X2) has a significant positive effect on Investment (Y) with sig. < 0.05.

4.3. Discussion

1. Effect of Interest Rate (X1) on Investment (Y) According to Keynesian theory, there is a negative relationship between interest rates and investment. Higher interest rates discourage investment, and lower rates encourage it. This study confirms that relationship, with a t-value of -2.413 and a regression coefficient of -17273.950 (sig. = .022).
2. Effect of Exchange Rate (X2) on Investment (Y) Exchange rate appreciation increases domestic investment attractiveness. This study confirms a positive relationship between exchange rate and investment with

a t-value of 19.856 and a regression coefficient of 167.741 (sig. = .000).

3. Simultaneous Effect of Interest Rate and Exchange Rate on Investment F-test result of 197.135 with sig. = .000 < .05 shows that both variables significantly influence investment in Indonesia.

5. Closing

5.1 Conclusion

Based on the results and discussion presented previously, the conclusions are as follows:

1. Based on the analysis conducted, it is found that the interest rate has a negative and significant effect on investment in Indonesia during the period 2016–2023. Theoretically, there is an inverse relationship between interest rates and investment. Interest rates influence capital costs and inflation expectations, which in turn affect investment decisions. When interest rates rise, investment tends to decline because individuals prefer to save funds in banks or reduce borrowing due to higher loan costs. Conversely, when interest rates decrease, investment tends to increase as individuals become more inclined to invest in stocks or business capital.
2. The exchange rate has a positive and significant effect on investment in Indonesia during the period 2016–2023. This indicates that investment decisions tend to increase in line with an appreciation in the exchange rate. On the other hand, investment tends to decrease when the exchange rate depreciates. Therefore, the result dismisses the notion of an inverse relationship between investment and exchange rates. Instead, it shows that both are mutually reinforcing—exchange rate fluctuations influence investment activity, and vice versa.

Bibliography

Asmara, T. C., Desmintari, D., & Juliannisa, I. A. (2022). Faktor–Faktor Yang Mempengaruhi Indeks Harga Saham Gabungan. *Jurnal Indonesia Sosial Sains*, *3*(05), 822–834.

Badan Pusat Statistik Indonesia. (2024). STATISTIK INDONESIA 2024 Statistical Yearbook Of Indonesia 2024. In *Statistik Indonesia 2024* (Vols. 52, 2024). Https://Www.Bps.Go.Id/Publication/2020/04/29/E9011b3155d45d70823c141f/Statistik-Indonesia-2020.Html

Bakti, U., & Alie, M. S. (2018). Pengaruh Inflasi Dan Suku Bunga Terhadap Investasi Di Provinsi Lampung Periode 1980-2015. *Jurnal Ekonomi*, *20*(3), 275–285.

Balaka, M. Y. (2022). *Metodologi Penelitian Kuantitatif*.

Bank Indonesia. (2023). *Laporan Kelembagaan Bank Indonesia TRIWULAN IV 2023*.

Batubara, A. A., Aliyah, C., Harahap, A. H., & Izza, S. N. (2022). Analisis Pengaruh Kurs Dan Inflasi Terhadap Investasi Di Sumatera Utara Periode 2001-2020. *Niagawan*, *11*(3), 274.

Bramana, S. M. (2017). Analisis Pengaruh Inflasi, Suku Bunga, Dan Nilai Tukar (Kurs) Terhadap Indeks Harga Saham LQ45 Yang Listing Di Bursa Efek Indonesia (BEI). *KOLEGIAL*, *5*(2), 211–224.

Destina Paningrum, S. E. (2022). *Buku Referensi Investasi Pasar Modal*. Lembaga Chakra Brahmana Lentera.

Dewi, Tania Melinda. Cahyono, H. (2016). Pengaruh Pertumbuhan Ekonomi, BI Rate, Dan Inflasi Terhadap Investasi Asing Langsung Di Indonesia. *Jurnal Pendidikan Ekonomi (JUPE)*, *4*(3).

Fyanda, D. A., Ula, M., & Asrianda, A. (2017). Implementasi Fuzzy Time Series Pada Peramalan Penjualan Tabung Gas Lpg Di Ud. Samudera Lpg Lhokseumawe. *Sisfo: Jurnal Ilmiah Sistem Informasi*, *1*(1).

Ghozali, I. (2013). Aplikasi Analisis Dengan Program SPSS. *Semarang: Badan Penerbit Universitas Diponegoro*.

Hasanah, E. U. (2018). *Pengantar Ilmu Ekonomi Makro*. Hasoloan, J. (2014). *Ekonomi Moneter*. Deepublish.

Jananuraga, G. W. (2016). *Analisis Kebijakan Devaluasi Yuan Dan Cadangan Devisa Sebagai Faktor-Faktor Penyebab Depresiasi Nilai Tukar Rupiah Terhadap Dolar Amerika Serikat Pada Tahun 2015*. Universitas Widyatama.

Jessica, J., Michelle, M., & Lilia, W. (2021). Pengaruh Tingkat Suku Bunga, Nilai Tukar, Inflasi Dan Return On Assets (ROA) Terhadap Harga Saham Pada Sub- Sektor Perbankan Di Bursa Efek Indonesia Tahun 2016-2019. *Jurnal Ilmiah Universitas Batanghari Jambi*, *21*(1), 317–326.

Jufrida, F., Syechalad, M. N., & Nasir, M. (2016). Analisis Pengaruh Investasi Asing Langsung (FDI) Dan Investasi Dalam Negeri Terhadap Pertumbuhan Ekonomi Indonesia. *Jurnal Perspektif Ekonomi Darussalam (Darussalam Journal Of Economic Perspec*, *2*(1), 54–68.

Juliannisa, I. A. (2020). Pengaruh Kurs Terhadap Investasi Di Indonesia Tahun 1987- 2018. *Bisman-Jurnal Bisnis & Manajemen*, *5*(01), 120–124.

Kustina, L., Anwar, S., & Kaniawati, F. (2018). Investasi Asing: Pertumbuhan Ekonomi Dan BI Rate: Foreign Investment: Economic Growth And BI Rate. *Jurnal Investasi*, *4*(2), 14.

Marsuni, N. S. (2024). The Challenges Of The Sharia Economy And Businesses In Facing The Coronavirus Endemic And Circular Economy In Indonesia. *LAA MAISYIR: Jurnal Ekonomi Islam*, 275-291.

Mahendra, A. (2016). Analisis Pengaruh Jumlah Uang Beredar, Suku Bunga Sbi Dan Nilai Tukar Terhadap Inflasi Di Indonesia. *Jurnal Riset Akuntansi & Keuangan*, 1–12.

Manan, S. A., & Aisyah, S. (2023). Pengaruh Produk Domestik Bruto, Tingkat Suku Bunga, Inflasi, Dan Pertumbuhan Ekonomi Terhadap Foreign Direct Investment Di Asean. *Ekonomis: Journal Of Economics And Business*, *7*(1), 159–163.

Marsuni, N. S., & Rismawati, R. (2018). Analysis Of Income And Costs Of Business Activity Development At The Business Development Center (P2B) Of Makassar State Islamic University. *Jurnal Ekonomi Balance*, *14*(1), 129-136.

Mildyanti, R., & Triani, M. (2019). Analisis Faktor-Faktor Yang Mempengaruhi Cadangan Devisa (Studi Kasus Di Indonesia Dan China). *Jurnal Kajian Ekonomi Dan Pembangunan*, *1*(1), 165–176.

Muchlas, Z., & Alamsyah, A. R. (2015). Faktor-Faktor Yang Mempengaruhi Kurs Rupiah Terhadap Dolar Amerika Pasca Krisis (2000-2010). *Jurnal Jibeka*, *9*(1), 76–86.

Nainggolan, P. A. (2019). *Analisis Pengaruh Jumlah Uang Beredar, Suku Bunga Dan Nilai Tukar Terhadap Inflasi Di Indonesia Tahun 2003-2017*.

Nujum, S., & Rahman, Z. (2019). Pengaruh Investasi Dan Inflasi Terhadap Pertumbuhan Ekonomi Di Kota Makassar. *Jurnal Economic Resource*, *2*(1), 21–33.

Prasasti, K. B., & Slamet, E. J. (2020). Pengaruh Jumlah Uang Beredar TerhadapInflasi Dan Suku Bunga, Serta Terhadap Investasi Dan Pertumbuhan Ekonomi Di Indonesia. *Jurnal Ekonomi Dan Bisnis Airlangga*, *30*(1).

Priyono, & Candra, T. (2016). Esensi Ekonomi Makro. In *Journal Of Chemical Information And Modeling* (Issue March). Https://Doi.Org/10.13140/RG.2.1.4271.0166

Priyono Dan Zainuddin Ismail. (2017). *Teori Ekonomi*.

Raharjo, S. (2010). Pengaruh Inflasi, Nilai Kurs Rupiah, Dan Tingkat Suku Bunga Terhadap Harga Saham Di Bursa Efek Indonesia. *Probank*, *1*(3), 161972.

Rokhim, M. (2014). Analisis Pengaruh Tingkat Inflasi, Nilai Kurs, Suku Bunga Terhadap Indeks Harga Saham Gabungan (IHSG) Pada Masa Stimulus Amerika Serikat Quantitatife Easing (QE) Tahun 2008-2014. *Jurusan S1 Akuntansi Fakultas Ekonomi Universitas Negeri Surabaya*.

Sarah, S., & Nuraeni, N. (2016). PENGARUH TINGKAT SUKU BUNGA BANK INDONESIA DAN NILAI TUKAR MATA UANG TERHADAP INDEKS SAHAM SYARIAH INDONESIA PERIODE 2011–2015. *Jurnal Indonesia Membangun*,*15*(1), 1–13.

Sari, G. A. A. R. M., & Baskara, I. G. K. (2018). *Pengaruh Pertumbuhan Ekonomi, Suku Bunga, Dan Nilai Tukar Terhadap Investasi Asing Langsung Di Indonesia*. Udayana University.

Sartika, U. D., & Choiriyah, C. (2019). Pengaruh Inflasi, Suku Bunga, Nilai Tukar, Dan Produk Domestik Bruto Terhadap Nilai Perusahaan. *Jurnal Ilmu Manajemen*, *8*(2), 75–89.

Sitorus, D. (2020). *ANALISIS PENGARUH NILAI TUKAR, PRODUK DOMESTIK BRUTO, INFLASI, DAN SUKU BUNGA TERHADAP PENANAMAN MODAL DALAM NEGERI (PMDN) DI INDONESIA PERIODE 2000-2018*.

Siwi, J. A., Rumate, V. A., & Niode, A. O. (2019). Analisis Pengaruh Tingkat Suku Bunga Terhadap Permintaan Kredit Pada Bank Umum Di Indonesia Tahun 2011- 2017. *Jurnal Berkala Ilmiah Efisiensi*, *19*(01).

Umam, K., & Sutanto, H. (2013). Pasar Modal Syariah. *Bandung: Pustaka Setia*.