How the fuel prices, interest rates, and exchange rate affect inflation and economic growth

Judikson Lubis
Faculty of Economics and Business, Palangka Raya University

corresponding author
e-mail : judiksonlubis246@gmail.com
address : Palangka Raya, Central Kalimantan

ABSTRACT
The objective of this study is to examine the impact of fuel costs, interest rates, and exchange rates on both inflation and economic growth in the province of Central Kalimantan. The research use path analysis as the methodology. Path analysis is a technique employed to ascertain the direct and indirect association between the independent factors and the dependent variable while considering the presence of a mediating variable. The data utilized in this investigation is classified as secondary data. The data are sourced from publications by the Central Statistics Agency (BPS), Bank Indonesia (BI), and Pertamina. The research employed the Path Analysis methodology. The findings of this study suggest that fuel prices exert a direct, positive, and statistically significant impact on inflation. Interest rates exert a direct and substantial impact on inflation. The Exchange Rate has a direct and negligible impact on inflation. Fuel prices exert a direct and substantial impact on economic growth. Interest rates exert a direct and negligible impact on economic growth. The Exchange Rate exerts a direct and substantial adverse impact on Economic Growth. Inflation exerts a direct and substantial adverse impact on economic growth. Fuel prices have little direct impact on economic growth via inflation. Interest rates do not have a direct impact on economic growth by means of inflation. The exchange rate has an indirect impact on economic growth via influencing inflation.

Keywords: fuel prices, interest rates, exchange rates, inflation, economic growth

I. INTRODUCTION
The conflict between Russia and Ukraine exerts a profound influence on global markets. Russia is third globally in terms of oil production and exports, second in natural gas exports, and third in coal exports. Furthermore, Ukraine holds significant importance in the global market due to its status as the foremost exporter of sunflower oil, the fourth greatest exporter of corn, and the fifth largest exporter of wheat worldwide. These two nations play a crucial role as suppliers to countries with trade deficits, particularly in Southeast Asia, where over 37 percent of oil and gas imports are directed. The battle directly led to a surge in global oil prices, which had repercussions on Southeast Asia, especially Indonesia (Beatris & Zakiah, 2022).

Typically, inflation imposes various social costs or additional expenses on society. Inflation has a detrimental impact on income distribution. The burden of inflation will primarily fall on the low-income strata of society due to the reduction in their purchasing power. Conversely, persons belonging to the middle-class and upper-class categories, who own earnings above the average and substantial financial resources such savings accounts and deposits, have the ability to protect their wealth from the effects of inflation (Miar et al., 2022). This allows them to sustain a reasonably stable level of purchasing power. In addition, excessive inflation has a detrimental impact on economic growth, while low inflation has a
beneficial impact on economic growth (Jaravel, 2021).

Economic growth refers to the increase in economic activity within a nation’s economy, resulting in the production of goods and services that contribute to societal well-being. It encompasses the enhancement of human welfare while ensuring fairness and stability, as well as the augmentation of a country’s capacity to produce goods and services through the growth of production factors, both domestically and internationally. Both the amount and quality of goods produced overseas are significant (Jakob et al., 2020). Economic growth is quantified by the rise in output and income, specifically referring to the increase in national income as determined by the Gross Domestic Product value. The implementation of fiscal and monetary policies significantly influences the rate of economic growth (Tien, 2021). Economic growth is a crucial metric for measuring the economic progress of a nation. In order to attain economic expansion, it is imperative to secure financial sources that will incentivize the corporate sector. The banking sector has a significant role in determining the required capital for development in different business and industrial sectors (Hu & Yao, 2022).

High inflation rates exert a profound influence on domestic production levels and impede the manufacturing of commodities for export, so significantly affecting the stability of a country’s economy. Production drops due to the combination of exorbitant pricing and dwindling demand caused by soaring inflation rates. Due to inflation, there is an increase in both the pricing of essential items and labor wages, resulting in an increase in the selling price of regional goods. Not all materials will be sold out as a result of the decrease in people’s purchasing power, particularly among those with fixed incomes. While inflation may impede economic growth, it is not necessary to reduce it to zero percent. An inflation rate of 0 percent would lead to economic stagnation rather than advancement. Achieving and sustaining a consistently low inflation rate through policy measures will exert a substantial influence on economic activity.

Fuel Oil (BBM) is a crucial commodity for all economic activity. The issue of fuel scarcity has emerged as a prominent concern that has garnered much attention in recent times. The current surge in gasoline prices has had various repercussions and has begun to escalate the production expenses of commodities manufactured using fuel oil. Consequently, the price of these commodities will escalate, perhaps leading to an increase in the overall cost of goods (inflation). Every nation will modify its policies to maintain competitiveness in selling its manufactured products in the global market in response to probable cost escalations caused by rising fuel costs. Hence, cost-push inflation typically leads to upward price movements (Zain et al., n.d.).

The price dynamics of an item are significantly influenced by its price on the global market, the exchange rate between the rupiah and the dollar, and the foreign trade policies of each country. Consumer-level costs are expected to rise while global prices are projected to decline. Low global prices relative to domestic prices typically stimulate the importation of food, resulting in a decrease in prices for consumers (Gong et al., 2020). The globalization of commerce has led to an increased openness of the international economy, making it highly probable for foreign factors to contribute to inflation. An illustration of the appreciation or depreciation of global currency exchange rates. The majority of nations lack the ability to regulate these external variables. Put simply, Indonesia’s utilization of an open economy means that fluctuations in currency exchange rates can influence inflation.

II. LITERATURE REVIEW

Economic growth refers to the augmentation of economic activity, leading to a rise in the production of products and services by society, as well as an improvement in the standard of living for its residents. Economic growth is a macroeconomic concern in the long run. Typically, an augmentation in production variables does not necessarily result in a commensurate augmentation in the output of goods and services. Nevertheless, it is important to note that this is not consistently true; frequently, the prospective enhancement in productivity surpasses the actual augmentation in production. Consequently, the pace of economic growth is not meeting its optimal speed (Simanungkalit, 2020).
Many methodologies for computing GDP figures, including (Ballarin et al., 2023):

1. The expenditure technique involves aggregating all the expenses incurred by economic agents inside a country during a specific time frame. The mathematical equation for GDP is as follows:
   \[ \text{GDP} = \text{Consumption (C)} + \text{Investment (I)} + \text{Government spending (G)} + \text{Net exports (X - M)} \]

   - **C** represents consumer expenditure.
   - **I** stands for Investment.
   - **G** represents government expenditure.
   - **(X-M)** represents the net expenditure by foreign countries, which is calculated by subtracting imports from exports.

2. The income approach refers to the remuneration received by the components of production involved in the production process within a specific country and time period. Production factor compensation encompasses salaries, wages, land rent, earnings, and interest on capital and profits, prior to the deduction of income tax and other direct taxes.
   \[ \text{GDP} = s/w + r + i + p \]

3. The Production Approach refers to the aggregate value of completed goods and services generated by different economic entities. It represents the additional value of goods and services created by various production units inside a country’s borders over a specific timeframe.

   Gross Domestic Product (GDP) is the aggregate value added by all economic entities within a nation over a specific timeframe. The input value must align with the value of final goods and services generated through manufacturing (Mankiw, 2022).

   Perspective, inflation refers to a pervasive and ongoing phenomenon characterized by a consistent rise in prices (Yuniarti & Rosadi, 2021). Comprehend inflation, it is crucial to underline (Meilianna, 2020):
   1. Prices have an inclination to increase, indicating that while the price level at a given time may fluctuate, it demonstrates an overall upward trajectory.
   2. The price level exhibits a continuous upward trend, occurring gradually over multiple time intervals rather than all at once. Inflation cannot be attributed to holiday price rises or other occasional price hikes.
   3. The mentioned price range pertains to the average range of prices, rather than the range of prices for individual or specific commodities. Inflation cannot be deemed to transpire solely with the augmentation of a single category of items.

   The annual interest payments on loans are determined by calculating a percentage of the whole loan amount (Wunder et al., 2020). This is done by dividing the annual interest paid by the full loan amount, interest rates refer to the expenses associated with borrowing money. The interest rate is expressed as a percentage of the principle for each unit of time. Interest is the metric used to quantify the expenses incurred by debtors and owed to creditors for the utilization of resources (Gunawan & Bawono, 2021). Interest rates can be categorized into nominal interest rates and real interest rates. The nominal interest rate refers to the ratio of borrowed funds to the amount that has been repaid. Real interest rates, however, prioritize the ratio of the buying power of borrowed money to the amount repaid. The real interest rate is the disparity between the nominal interest rate and the inflation rate.

   The rupiah exchange rate, often known as the rupiah’s value in relation to other currencies, is the comparison of its price against them. The foreign exchange rate, often known as the exchange rate, is the ratio that determines the value of one currency in relation to another currency (Carissa & Khoirudin, 2020). It is crucial for facilitating international trade between countries that have their own distinct national currencies. The exchange rate refers to the price at which a foreign currency is valued in relation to the domestic currency. Put simply, an exchange rate is the price of converting one currency into another currency. The rupiah is commonly compared to the dollar in terms of exchange rate due to the dollar’s reputation as a currency with relatively stable economic conditions (Angelina & Nugraha, 2020).

### III. METHODS

The research methodology employed in this study is quantitative research. The specifications for quantitative research methodologies are systematic, planned, and well stated from the outset to the
creation of the research design. The collection of data involved the use of research tools, and the subsequent data analysis was conducted using quantitative and statistical methods. The purpose of this analysis was to test the hypotheses that had been formulated (Hodge, 2020).

The research utilizes secondary data in the form of a 31-year time series, namely spanning from 1991 to 2022. The data sources utilized for this research comprise publications from the Indonesian Central Statistics Agency, Bank Indonesia, Central Kalimantan Central Statistics Agency, and Pertamina Indonesia. The data was collected from intermediate sources, specifically the official websites of the Central Statistics Agency (www.bps.go.id) and Bank Indonesia (www.bi.go.id), as well as the Pertamina Indonesia website and relevant journals in the field of development economics.

The independent variable, also known as the stimulus, predictor, or antecedent variable, is a variable that is not influenced by other variables and is used to predict or explain the outcome of an experiment or study. The independent variables considered in this research include Fuel price (X1) refers to the monetary value charged for fuel oil, which is the amount paid by consumers for the fuel oil. The fuel price data utilized in this study comprises annual fuel price data denominated in rupiah (Rp). The interest rate (X2) is a fee for borrowing money that must be repaid within a specified period. The data utilized in this research pertains to yearly interest rates, expressed as a percentage (%). The exchange rate (X3) represents the value of one country's currency in relation to another country's currency, or the value of a country's currency when stated in terms of another country's currency. The data utilized in this study consists of annual exchange rates for the Indonesian currency, known as the rupiah (Rp).

Intervening factors are theoretical variables that have an indirect impact on the relationship between independent and dependent variables (Sugiyono, 2017). These variables cannot be directly observed or assessed. The intervening variable in this study is inflation (Y1). The measurement of inflation in this study is expressed in percentage units (%). Dependent variables, often known as output variables, are criteria or consequences. In Indonesian, it is commonly known as a dependent variable. The dependent variable is a variable that is influenced by or is a consequence of the presence of the independent variable. The term "dependent variable" refers to the variable of interest in this context, which is Economic Growth (Y2). The metric employed to measure economic growth is expressed as a percentage (%).

Data gathering strategies can be used across several contexts and diverse sources using various methodologies (Sugiyono, 2017). As the research solely relies on secondary data, the data gathering method involves doing library research on papers or statistical records from previously published yearly reports by relevant official institutions. The research employs Path Analysis as the methodology to address the problems/hypotheses. Analysis as a method for quantifying the extent of influence between variables in a causal hypothesis. It is also employed to assess the adequacy of the proposed model. Path analysis is a statistical technique used to analyze the causal links that arise in multiple linear regression models, particularly when exogenous variables exert both direct and indirect effects on endogenous variables.

Analysis employs regression analysis to determine causal linkages between variables that have been discovered based on theory. This is an expansion of the study of multiple linear regression. This study use the SPSS version 25 software for data manipulation and analysis (Shakirani & Ghozali, 2021).

IV. RESULTS AND DISCUSSION

Based on the findings of the path analysis depicted in Figure 4.7 above, several conclusions can be inferred:

1. The immediate impact of the path coefficient for the fuel price variable (X1) on inflation (Y1). The hypothesis in this research can be considered important if the significance value (P-Value) is less than 0.05. The coefficient value is 0.528, and the significance value (P-Value) is 0.001, which is less than 0.05. This indicates that the null hypothesis (H0) is rejected, and the alternative hypothesis (Ha) is accepted. Therefore, it may be inferred that there is a notable correlation between fuel
costs (X1) and inflation (Y1). The idea regarding the direct and substantial impact of fuel costs on inflation has been confirmed.

2. The direct impact of the path coefficient of the Interest Rate variable (X2) on Inflation (Y1). The hypothesis in this research can be considered important if the significance value (P-Value) is less than 0.05. The coefficient value is determined to be 1.115, while the significance value (P-Value) is found to be 0.000, which is less than the threshold of 0.05. This indicates that the null hypothesis (H0) is rejected, and the alternative hypothesis (Ha) is accepted. Therefore, it can be inferred that there is a notable impact of Interest Rates (X2) on Inflation (Y1). The idea regarding the direct and considerable impact of interest rates (X2) on inflation has been confirmed.

3. The path coefficient of the Exchange Rate variable (X3) has a direct influence on Inflation (Y1). The hypothesis in this research can be considered influential if the significance value (P-Value) is less than 0.05. In this case, the coefficient value is -0.141 and the significance value (P-Value) is 0.271, which is greater than 0.05. Therefore, the null hypothesis (H0) is accepted and the alternative hypothesis (Ha) is rejected. Therefore, it can be inferred that the Exchange Rate (X3) does not have a substantial impact on Inflation (Y1). The notion regarding the direct and substantial impact of the exchange rate on inflation remains unproven.

4. The direct impact of the path coefficient for the fuel price variable (X1) on economic growth (Y2). The hypothesis in this research can be considered important if the significance value (P-Value) is less than 0.05. The coefficient value is 0.588 and the significance value (P-Value) is 0.033, which is less than 0.05. This indicates that the null hypothesis (H0) is rejected and the alternative hypothesis (Ha) is accepted. Therefore, it may be inferred that fluctuations in gasoline prices (X1) exert a substantial impact on the rate of economic growth (Y2). The theory asserting that fuel costs exert a direct and substantial impact on economic growth (Y2) has been validated.

5. The direct impact of the path coefficient of the Interest Rate variable (X2) on Economic Growth (Y2). The hypothesis in this research can be considered important if the significance value (P-Value) is less than 0.05. The coefficient value is -0.088, and the significance value (P-Value) is 0.755, which is more than 0.05. This indicates that the null hypothesis (H0) is accepted, while the alternative hypothesis (Ha) is rejected. Therefore, it may be inferred that there is no substantial impact of Interest Rates (X2) on Economic Growth (Y2). The concept that interest rates (X2) directly and significantly impact economic growth (Y2) remains unproven.

6. The path coefficient of the Exchange Rate variable (X3) has a direct influence on Economic Growth (Y2). The hypothesis in this research can be considered important if the significance value (P-Value) is less than 0.05. The coefficient value is -0.663, indicating a negative relationship. The significance value (P-Value) is 0.003, which is less than the significance level of 0.05. Therefore, the null hypothesis (H0) is rejected, and the alternative hypothesis (Ha) is accepted. Hence, it may be inferred that the Exchange Rate (X3) exerts a substantial impact on Economic Growth (Y2). The hypothesis asserting that the Exchange Rate has a direct and substantial impact on Economic Growth (Y2) has been validated.

7. The direct impact of the path coefficient of the Inflation variable (Y1) on Economic Growth (Y2). The hypothesis in this research can be considered important if the significance value (P-Value) is less than 0.05. The coefficient value is -0.476, indicating a negative relationship. The significance value (P-Value) is 0.036, which is less than the threshold of 0.05. Therefore, the null hypothesis (H0) is rejected, and the alternative hypothesis (Ha) is accepted. Hence, it may be inferred that Inflation (Y1) exerts a substantial impact on Economic Growth (Y2). The theory asserting that inflation (Y1) has a direct and substantial impact on economic growth (Y2) has been validated.

8. The indirect effect of the variable route coefficient for Fuel Prices (X1) on Economic Growth (Y2) through Inflation (Y1) may be calculated by multiplying the coefficient X1 on Y1 with the coefficient value of Y1 on Y2, which is 0.528. According to the calculation findings, the direct influence value is 0.588 and the indirect influence value is -0.251. This indicates that the direct influence is bigger.
than the indirect influence. The notion suggesting that gasoline costs have an indirect impact on economic growth via inflation remains unverified.

9. The indirect effect of the route coefficient of the variable representing Interest Rate (X2) on Economic Growth (Y2) through Inflation (Y1) is calculated by multiplying the coefficient of The calculation results indicate that the direct influence value is -0.088, while the indirect influence is -0.530. This implies that the direct influence value is smaller than the indirect influence. The hypothesis asserting that interest rates exert an indirect influence on economic growth via inflation has been validated.

10. The indirect impact of the route coefficient of the Exchange Rate variable (X3) on Economic Growth (Y2) through Inflation (Y1) may be calculated by multiplying the coefficient X3 on Y1 with the coefficient value of Y1 on Y2, which is (-0.141) x (-0.476) = 0.067. The calculation results indicate that the direct impact value is -0.663, while the indirect influence is 0.067. This implies that the direct influence value is bigger than the indirect influence. The notion suggesting that the exchange rate indirectly impacts economic growth via inflation has not been substantiated.

Discussion

The Impact of Fuel Prices on Inflation in Central Kalimantan Province

The findings of this study indicate that gasoline costs exert a direct and substantial impact on inflation in Central Kalimantan Province. The findings of this study corroborate the first theory. Consequently, any fluctuation in fuel prices will prompt producers and distributors to adjust the prices of their commodities accordingly. The rise in gasoline prices will lead to an increase in production costs for producers and distributors, which in turn affects the prices of the commodities they sell (Kilian & Zhou, 2022). Consequently, it will lead to an augmentation in the selling price of the manufactured goods.

Central Kalimantan is a province in Indonesia. The establishment of fuel prices in Indonesia adheres to current legislation. The fuel rates are decided by the government and are implemented accordingly. In Indonesia, fuel costs exhibit an upward trend over time, particularly following reductions in fuel subsidies due to the escalation of global crude oil prices (Arintoko et al., 2023). The current practice in Indonesia, including Central Kalimantan, is to adjust fuel rates based on the swings in global crude oil prices. There is a positive correlation between the price of crude oil and fuel costs. When the price of crude oil increases, it is highly probable that fuel prices will also increase. Conversely, if the price of crude oil decreases, it is feasible that fuel prices would also decrease. Rising fuel prices will affect the distribution process. For the distribution process to occur, fuel expenses are necessary. In the event that fuel costs rise, it is reasonable to expect that the goods delivered to consumers may double in price. If the price of an item rises without a corresponding increase in income, it is inevitable that people’s purchasing power will diminish. The subsequent consequence is that in the event of an increase in fuel prices, inflation becomes inevitable.

The Impact of Interest Rates on Inflation in Central Kalimantan Province

The findings of this study indicate that interest rates exert a direct and substantial impact on inflation in Central Kalimantan Province. Thus, our data corroborates the second idea. Consequently, any fluctuation in loan rates will have an impact on manufacturers and entrepreneurs (Jefry & Djazuli, 2020). This occurs due to the impact of rising interest rates on the company’s production expenses, leading to a reduction in supply and an increase in the prices of its goods, ultimately causing inflation. In contrast, a decrease in interest rates will result in a reduction in the company’s manufacturing expenses. As the supply of commodities increases, their prices will decrease, leading to a decrease in inflation as well. Elevated interest rates will incentivize investors to allocate their capital to banks instead of directing them into production or industrial sectors that entail a higher degree of risk. Therefore, interest rate strategies can be utilized to regulate the inflation rate (Katmas & Indarningsih, 2022). When investors opt to deposit their funds in banks rather than investing them in the production sector, it will
impact the limited availability of commodities in specific regions (Ompusunggu et al., 2023). The supply of commodities will decrease as demand increases, leading to inflation.

Impact of Exchange Rates on Inflation in Central Kalimantan Province

The findings of this study indicate that the exchange rate has a direct but negligible impact on inflation in Central Kalimantan Province. The research findings do not corroborate the third theory. Depreciation of the exchange rate leads to an increase in the price of manufactured items, prompting individuals to decrease their consumption of imported goods and instead opt for locally produced goods (Kuncoro, 2020). A higher exchange rate will stimulate export activity, leading to an increase in both the supply and demand for goods. This will provide price stability for items in specific regions.

When the value of the rupiah depreciates, the cost of imported items will increase, leading to a higher expenditure on imported raw materials. The drop in production can be attributed to the increase in the price of imported raw materials (Jihadi et al., 2021). Consequently, there will be a decrease in the production of goods, leading to an increase in the overall price of domestic goods and inflation. From a supply standpoint, a devaluation of the currency rate will lead to imported items being significantly more expensive than domestic goods. Consequently, there will be a surge in the demand for local products from both domestic and international markets. Consequently, this results in escalating prices and heightened inflation.

Nevertheless, in Central Kalimantan Province, there is a relatively low public inclination towards consuming or utilizing imported commodities, as seen by the export and import data which indicates a higher volume of exports compared to imports (Zakiah et al., 2023). The findings of this study elucidate that the fluctuation of the rupiah exchange rate vis-à-vis the US dollar cannot serve as a reliable indicator for elevated inflation levels in Central Kalimantan Province. Inflation can also arise from excessive demand for specific goods and services when production is operating at maximum capacity. Keynes’s theory posits that inflation arises when individuals want to exceed their economic capacities and the competition for wealth among different societal groupings leads to a situation where demand surpasses supply.

The Impact of Fuel Prices on Economic Growth

The findings of this study indicate that fluctuations in gasoline costs exert a direct and substantial impact on the economic growth of Central Kalimantan Province. The findings of this investigation corroborate hypothesis four. Fuel prices typically result in a subsequent rise in the cost of products, sometimes referred to as inflation. Entrepreneurs consistently strive to augment their company’s output and therefore boost income when there is an increase in items (Rosnawintang et al., 2021). Fuel prices are determined by the interplay of global oil commodity supply and demand. The relationship between fuel prices and economic growth is positive and linear. Higher fuel prices contribute to an increase in economic growth. The reason for this is that Bank Indonesia raised interest rates in order to mitigate inflation, while also increasing government expenditure to stimulate economic growth. As a result, investor confidence was bolstered, leading to the resumption of capital inflows.

The Impact of Interest Rates on Economic Growth in Central Kalimantan Province

The findings of this study indicate that interest rates have a direct but little impact on the economic growth of Central Kalimantan Province. This research contradicts the fifth theory. Consequently, changes in interest rates will have little impact on economic growth. The short-term impact of interest rates on economic growth is contingent upon the occurrence of unexpected fluctuations in both variables. Such fluctuations can lead to shifts in economic growth (Maran, 2021). However, if both variables remain at average levels, the influence of interest rates on economic growth is negligible. Low interest rates in the near run do not have the ability to influence changes in economic growth. In addition, individuals endeavor to sustain their existence through engaging in consumption endeavors, so ensuring the augmentation of products and services production in accordance with the available natural resources, which serve as means of survival. Hence, fluctuations in interest rates will not exert any influence on economic growth as the demand for goods and services for public
consumption would persist, ensuring the continuous renewal of economic expansion.

**The Impact of the Exchange Rate on Economic Growth in Central Kalimantan Province**

The findings of this study indicate that the exchange rate exerts a direct and substantial impact on the economic growth of Central Kalimantan Province. The findings of this investigation corroborate the sixth hypothesis. Consequently, fluctuations in the currency rate have a direct impact on augmenting economic growth. The findings of this study demonstrate the adverse impact of the exchange rate on economic growth, which was precipitated by the global Covid-19 pandemic (Hardi & Maipita, 2021). Consequently, the economy of all nations had a downward trajectory, leading to negative or declining growth. The Covid-19 outbreak has compelled nations worldwide to halt international commerce operations or impose temporary restrictions on import–export activities. This circumstance has significantly influenced the Indonesian economy. The province of Central Kalimantan, known for its export activities involving natural resources, is undoubtedly experiencing significant impacts. As a result of the circumstances that occurred at that particular moment, the value of the Rupiah in relation to the dollar likewise decreased. This is the catalyst for the depreciation of the currency rate to adversely impact the economic growth in Central Kalimantan Province.

**The Impact of Inflation on Economic Growth in the Central Kalimantan Province**

The findings of this study indicate that inflation exerts a direct and substantial impact on the economic growth of Central Kalimantan Province. The findings of this investigation corroborate the seventh hypothesis. Hence, fluctuations in the inflation rate exert a significant influence on the trajectory of economic growth. A region's economic condition is indicated by a low and consistent inflation rate (Febrianti & Indriyati, 2020). This research establishes a clear relationship between inflation and economic growth in Central Kalimantan. The inflation data from 1993 to 2022 reveals a generally stable inflation rate, with the exception of 1998 when Indonesia experienced a monetary crisis, resulting in an inflation rate of 75.3%. Additionally, Central Kalimantan's current economic growth stands at -6.94%. Upon examining the inflation patterns in the cities of Palangka Raya and Sampit, it becomes evident that there is a rather consistent upward trend. Upon closer examination, the inflation pattern in the cities of Palangka Raya and Sampit between 1993 and 2022 has exhibited fluctuations. The significance of managing inflation lies in the recognition that elevated and volatile inflation adversely affects the socio-economic circumstances of the population in Central Kalimantan.

**The Impact of Fuel Prices on Economic Growth via Inflation in Central Kalimantan Province**

The findings of this study indicate that fuel costs do not exert a substantial impact on economic growth via inflation in the Central Kalimantan Province. The findings of this investigation do not corroborate the eighth hypothesis. It is a well-established fact that fuel prices consistently rise on an annual basis, with occasional but infrequent reductions. The rate of fuel price escalation is rather moderate, and the magnitude of the increase is not excessively significant. The fluctuation of fuel costs has a direct impact on the inflation rate in Central Kalimantan Province. The economic growth of Central Kalimantan will be impacted by this inflation. In Central Kalimantan Province, inflation has exhibited year-to-year fluctuations and has not demonstrated a consistent trend over the past 30 years. Meanwhile, economic growth has also had year-to-year fluctuations, but has generally remained within the range of 5–7 percent, except for the years 1998 and 2020, which recorded negative figures. Bank Indonesia consistently raises interest rates in response to fuel price hikes to mitigate inflation. Additionally, it boosts government expenditure to stimulate economic growth, so instilling investor confidence and prompting the return of capital flows.

**The Impact of Interest Rates on Economic Growth in Central Kalimantan Province via Inflation**

The findings of this study indicate that interest rates exert a substantial impact on economic growth in Central Kalimantan Province by influencing inflation. The findings of this investigation corroborate the ninth hypothesis. Interest rates vary annually. Similar to the phenomenon of inflation occurring in Central Kalimantan Province. Interest rates exert a beneficial impact on inflation in Central Kalimantan Province. Inflation exerts a detrimental impact on the economic growth of Central
The research findings indicate that interest rates exert a substantial impact on economic growth in Central Kalimantan Province by influencing inflation. An escalation in interest rates will lead to a rise in inflation within Central Kalimantan Province, thereby exerting a detrimental impact on economic growth in the region. According to the findings of this study, inflation exerts a detrimental impact on the economic growth of Central Kalimantan Province. The Impact of Exchange Rates on Economic Growth via Inflation in Central Kalimantan Province

The findings of this study indicate that the exchange rate does not have a substantial impact on Economic Growth through Inflation in Central Kalimantan Province. The findings of this investigation do not corroborate the ninth hypothesis. The currency rate exhibits year-to-year fluctuations, although there is no significant depreciation or appreciation. The findings of this study indicate that the Exchange Rate has a negligible impact on Economic Growth via Inflation. Consequently, any fluctuations in the exchange rate, whether it be depreciation or appreciation, will have no impact on economic growth in terms of inflation.

When the value of the rupiah depreciates, the cost of imported items will increase, leading to a higher expenditure on imported raw materials. The decline in production can be attributed to the increase in the cost of imported raw materials. Consequently, there will be a reduction in the production of goods, leading to an increase in the overall price of domestic commodities and inflation. From a supply standpoint, a decrease in the exchange rate will lead to imported items becoming much more expensive compared to domestic goods. Consequently, there will be a surge in the demand for local products from both domestic and international markets. Consequently, this results in escalating prices and heightened inflation.

V. CONCLUSION

The objective of this study is to examine the correlation between fuel costs, interest rates, and exchange rates with inflation and economic growth in Central Kalimantan Province. The conclusions derived from this research are ascertained by the implementation of statistical testing analysis. Fuel prices exert a direct and substantial impact on inflation in Central Kalimantan Province. Interest rates exert a direct and substantial impact on inflation in Central Kalimantan Province. The exchange rate has a direct and negligible impact on inflation in Central Kalimantan Province. The correlation between fuel prices and Economic Growth in Central Kalimantan Province is both favorable and statistically significant. Interest rates have a direct and negligible impact on economic growth in Central Kalimantan Province. The currency rate has a direct and substantial impact on the economic growth of Central Kalimantan Province, resulting in negative consequences. Inflation exerts a direct and substantial adverse impact on the Economic Growth of Central Kalimantan Province. Fuel costs do not have an indirect impact on Economic Growth through Inflation in Central Kalimantan Province. Interest rates do not indirectly impact economic growth in Central Kalimantan Province through inflation. In Central Kalimantan Province, inflation is influenced by the exchange rate, which in turn has an indirect impact on economic growth.

BIBLIOGRAPHY


