Vol. 1, No. 3, October 2025 | Page. 256 - 272

GLOBAL INFLATION AND ITS IMPACT ON THE PURCHASING POWER OF THE INDONESIAN PEOPLE

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Abstrak

Keywords:

Global Inflation, Purchasing Power, SPSS

The phenomenon of global inflation in recent years has become a crucial economic issue, with implications for price stability and people's purchasing power in various countries, including Indonesia. Rising international energy, food, and commodity prices, exacerbated by geopolitical uncertainty and disruptions to the global supply chain, directly impact household consumption capacity. This study aims to evaluate the impact of global inflation on Indonesian people's purchasing power, both partially and simultaneously, and to determine the sectors most significantly impacted. The research approach used was quantitative, with a survey method involving 300 respondents spread across various provinces, using a stratified random sampling technique. Data were obtained through a structured questionnaire and analyzed using SPSS software through multiple linear regression tests, ttests, and F-tests. The research findings indicate that global inflation has a negative and significant impact on people's purchasing power, with the basic necessities and transportation sectors being the most vulnerable to price increases. Simultaneously, the variables of global inflation, exchange rates, and international commodity prices contributed 68.7% to the decline in purchasing power. Thus, the consistent increase in global inflation has put pressure on the purchasing power of the Indonesian people, necessitating responsive fiscal and monetary policies, including targeted subsidies and strategic price controls, to maintain household economic stability amidst global uncertainty.

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INTRODUCTION

Over the past two decades, the global economy has faced complex dynamics, characterized by fluctuations in economic growth rates, technological advances, and



various global challenges affecting nearly all countries. The process of economic globalization, which integrates markets, capital, labor, and technology, has strengthened interdependence *between* countries (Alfiatus Fadjar Kurnaini & Imelda Dian Rahmawati, 2024). However, this interconnectedness has simultaneously increased the vulnerability of national economies to external shocks. One of the main challenges that stands out in this context is the phenomenon of global inflation, which has shown a significant upward trend in several periods. Global inflation affects not only developing countries but also developed countries that were previously relatively stable in maintaining price stability. This condition has triggered various academic studies and government policy responses to examine its underlying causes and implications for strategic sectors (Izzah & Putra Bujana, 2025). Currently, global inflation is one of the macroeconomic indicators intensively monitored by international financial institutions, central banks, and fiscal authorities in various countries.

Conceptually, inflation can be understood as a general and sustained increase in the prices of goods and services over a period of time. Within the framework of macroeconomic analysis, controlled inflation is often interpreted as a positive indicator of economic growth because it can stimulate consumption and investment activity. Conversely, high and unmanaged inflation poses a serious threat to economic stability. (Hikmayani Subur & Wahyu Muh Syata, 2024) . Globally, inflation that exceeds tolerance limits will create market uncertainty, weaken the value of the currency, and reduce people's purchasing power. In an era of open international trade, price fluctuations in one country can quickly spread to other countries, giving rise to the phenomenon of *imported inflation*. The process of inflation transmission between countries occurs through channels of trade in goods, capital movements, and changes in exchange rates. Therefore, a deep understanding of global inflation dynamics is crucial as a basis for formulating price control strategies at the national level.

The causes of global inflation are complex and multidimensional, encompassing demand *-pull inflation, cost-push inflation,* and structural factors inherent in the economic system. In recent years, the prices of energy commodities such as crude oil, natural gas, and coal have shown significant increases due to an imbalance between demand and supply in the global market (Sekarsari, Az Zahra, Ayuningtyas, & Fadilla, 2024). Rising food prices are also a difficult phenomenon to avoid, triggered by climate change, distribution disruptions, and the implementation of protectionist policies by several major producing countries. Furthermore, geopolitical uncertainty, such as the Russia-Ukraine conflict, trade wars, and diplomatic tensions in various regions, have also disrupted global supply stability. Supply chain disruptions stemming from the COVID-19 pandemic, coupled with the international logistics crisis, have accelerated inflationary pressures felt in many countries. The simultaneous interaction of these various factors has resulted in widespread inflationary pressures that are difficult for any country to control unilaterally.

Indonesia, as a developing country with a relatively high level of economic openness, cannot escape the effects of global inflation (Hidayat, 2023). Dependence on imports of raw materials, energy, and strategic food commodities makes the national economy vulnerable to price fluctuations in international markets. Changes in the rupiah exchange rate against foreign currencies, particularly the US dollar, are a key determinant in the formation of imported goods prices. Rising global oil prices, for example, have a direct impact on increased transportation and distribution costs, which



in turn affect domestic prices of basic necessities. Furthermore, global monetary policies, such as interest rate adjustments by the United States (Hakim Muttaqim, Abdul Halik, & Siti Mujannah, 2025), have the potential to trigger capital *outflows*, weaken the exchange rate, and exacerbate domestic inflationary pressures. In this context, the government's ability to maintain price stability is a highly complex challenge and requires an appropriate policy response.

One of the tangible impacts of global inflation is a decline in people's purchasing power. Purchasing power, defined as the ability of an individual or group to acquire goods and services with their available income, is a crucial indicator in assessing the level of economic well-being. Rising inflation leads to a decline in the real value of income, thus reducing the number of goods and services accessible to the public. This situation impacts household consumption patterns, particularly among low-income groups, whose expenditures are largely allocated to basic needs such as food, housing, and transportation (Azis, Rozalinda, & Wira, 2023). This decline in purchasing power also impacts the business world, as declining domestic demand can hamper economic growth. If not properly addressed, this situation has the potential to lead to economic stagnation and widen social disparities in the long term.

The Indonesian government is attempting to mitigate the impact of global inflation through the implementation of various fiscal and monetary policies. These instruments include energy subsidies, price controls on strategic food commodities, and adjustments to import and export tariffs. Bank Indonesia plays a significant role by setting benchmark interest rates and intervening in the foreign exchange market to maintain exchange rate stability (Fitrahwaty, Febri Br Hutabarat, Fitrah Maya Sari Hasugian, & Tina Angelia, 2024) . However, the success of these policies is heavily influenced by the speed of response and the level of coordination between relevant agencies. In some cases, the price control measures implemented are temporary and do not directly address the root cause, thus maintaining inflationary pressures. Furthermore, limited budget capacity and high dependence on imported commodities are inhibiting factors in achieving sustainable price stability.

The phenomenon of global inflation in recent years has become a strategic economic issue, significantly impacting price stability and purchasing power in various countries, including Indonesia (Agasie & Zubaedah, 2022). Rising international energy, food, and commodity prices, exacerbated by geopolitical uncertainty and disruptions in global supply chains, have directly impacted household consumption. This situation requires an in-depth and comprehensive study to identify the extent to which global inflation affects Indonesian purchasing power, both partially and simultaneously, and to identify sectors with the highest level of vulnerability (Daniel, 2018). A comprehensive understanding of this relationship is expected to provide a foundation for the government in formulating policies that are accurate, targeted, and responsive to the ever-evolving dynamics of the global economy.

This study employs a quantitative approach with a survey method involving respondents from various levels of society in Indonesia. The sample was selected using a *stratified random sampling technique* to ensure diverse representation according to the respondents' backgrounds. Primary data were obtained through a structured questionnaire, while secondary data were sourced from official publications of the Central Statistics Agency (BPS), Bank Indonesia, and international institutions such as the IMF and the World Bank. The data analysis process was carried out using SPSS



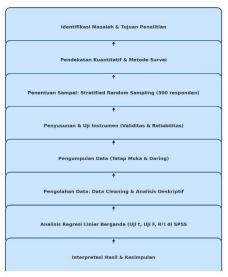
software by applying multiple linear regression tests, t-tests, and F-tests to assess the influence of global inflation, exchange rates, and international commodity prices on purchasing power. This approach provides a basis for empirically testing hypotheses while producing a clear quantitative picture of the intensity of the relationship between the variables studied.

Several previous studies have discussed the relationship between global inflation and purchasing power in Indonesia. Yanti & Soebagyo (2022), for example, found that global inflation significantly contributed to the decline in household purchasing power through the mechanism of rising prices of imported goods. Furthermore, a study conducted by Mahendra (2016) confirmed that exchange rate fluctuations play a role in exacerbating the impact of inflation on the domestic consumption sector. Meanwhile, research by Lubis & Syarvina (2024) revealed disparities in purchasing power vulnerability levels between regions in Indonesia, influenced by differences in distribution access and levels of dependence on imports. The main difference between this study and previous studies lies in the use of an analytical approach that simultaneously combines global inflation, exchange rates, and international commodity prices, with an emphasis on identifying the most affected sectors through SPSS -based statistical analysis. With this approach, this study is expected to provide a more in-depth and comprehensive empirical contribution to understanding the impact of global inflation on Indonesian purchasing power.

RESEARCH METHODS

This study employed a quantitative approach with the aim of obtaining a measurable empirical picture of the impact of global inflation on the purchasing power of the Indonesian people (Nugroho & Utomo, 2022). The quantitative approach was chosen based on its ability to produce objective, statistically measurable data, and allow for systematic hypothesis testing. The data collection strategy was conducted through a survey method, which is considered effective for obtaining information directly from respondents who represent the study population. The survey was conducted with 300 respondents spread across various provinces in Indonesia, taking into account population proportions based on geographic distribution and demographic characteristics. The determination of the sample size refers to the principles of representativeness and data sufficiency in statistical analysis, so that the research findings can be validly generalized. The instrument used was a structured questionnaire, designed to measure global inflation, exchange rates, international commodity prices, and purchasing power, using a Likert scale to facilitate the measurement of respondents' perceptions and actual conditions. The following is a research flowchart:





The sampling technique used in this study was *stratified random sampling*, a method of randomly selecting a sample by dividing the population into strata or groups that share certain characteristics but are still relevant to the research objectives. These strata are distinguished by province, income level, and type of employment, so that the representativeness of the sample can reflect the diversity of the population proportionally (Habibah et al., 2024). From each stratum, respondents were randomly selected using the available population list, giving each individual an equal opportunity to be part of the sample. This approach is expected to minimize bias and increase the external validity of the research findings. Given Indonesia's vast geographic scope, data collection was conducted in a *hybrid manner*, namely through face-to-face interviews in accessible areas, and online questionnaires for areas that are difficult to access.

The research instrument was designed in the form of a structured questionnaire compiled based on theoretical indicators of each variable. The questionnaire was divided into several sections, covering respondent identity, global inflation indicators, exchange rates, international commodity prices, and public purchasing power. Measurements were carried out using a five-point Likert scale, ranging from "strongly disagree" to "strongly agree" or "very low" to "very high", adjusted to the context of the variables being measured. Before being used in primary data collection, the instrument was tested for validity and reliability through a try- *out* on 30 respondents with characteristics similar to the study population. The validity test was conducted using Pearson Product Moment correlation analysis to ensure each question item was relevant in measuring the intended variable. The reliability test used the Cronbach's Alpha method to assess the internal consistency of the instrument, with the criteria of an α value > 0.70 as a reliable indicator.

the latest version of SPSS software. The analysis process began with a *data cleaning stage* to ensure the completeness, accuracy, and consistency of respondents' answers. Descriptive analysis was then conducted to describe the demographic characteristics of respondents and the distribution of answers for each research variable (Rahmania & Anis, 2024). Inferential analysis was used to examine the effect of global inflation, exchange rates, and international commodity prices on people's purchasing power through multiple linear regression. The t-test was used to assess the partial effect of each independent variable, while the F-test was used to examine the simultaneous effect of all independent variables together. The coefficient of determination (R²) was



calculated to identify the extent of the independent variables' contribution to the variation of the dependent variable. All tests were conducted at a 5% significance level ($\alpha = 0.05$) to ensure the reliability of the analysis results.

The selection of this analytical method was based on its suitability to the research objective, namely to identify the magnitude and direction of the influence of global variables on domestic economic indicators in the form of public purchasing power. Multiple linear regression was chosen because it can test the relationship between more than one independent variable and one dependent variable simultaneously. The use of *stratified random sampling techniques* combined with SPSS -based analysis is expected to produce findings with high internal and external validity. The advantage of this research compared to previous studies lies in the combination of three main independent variables, namely global inflation, exchange rates, and international commodity prices, in a single analytical model. Furthermore, this research focuses on identifying the most impacted economic sectors, thus providing strategic input for the government in formulating fiscal and monetary policies to mitigate the impact of global inflation on public welfare.

RESEARCH RESULT

This research is motivated by the phenomenon of a significant increase in global inflation in the past two years, triggered by disruptions in the supply chain, rising energy prices, and fluctuations in exchange rates. The impact of global inflation is not only experienced by developed countries, but also by developing countries, including Indonesia. One of the indicators most sensitive to inflation is people's purchasing power. A decline in purchasing power has the potential to hamper the rate of domestic economic growth because it weakens household consumption, which is the largest contributor to Gross Domestic Product (GDP). Based on this background, this study aims to empirically examine the extent to which global inflation affects the purchasing power of the Indonesian people by considering supporting variables such as the exchange rate and international commodity prices. The specific objectives of the study include: (1) analyzing the partial effect of global inflation on purchasing power, (2) testing the simultaneous effect of independent variables on purchasing power, and (3) identifying the sectors most vulnerable to declining purchasing power due to inflation. The results of this study are expected to contribute to the formulation of evidence-based economic policies (evidence-based policymaking).

This research employs a quantitative approach oriented toward measurement and statistical analysis. The survey method was used as the primary strategy to obtain primary data directly from respondents representing the Indonesian population. The research instrument was a structured questionnaire covering indicators of global inflation, exchange rates, international commodity prices, and public purchasing power. Each indicator was measured using a five-point Likert scale to facilitate the assessment of respondents' perceptions of their economic conditions. The survey method was chosen based on its advantages in collecting large-scale quantitative data with a high level of reliability. The survey was conducted through two mechanisms: face-to-face in easily accessible areas and online to reach respondents in provinces with limited infrastructure. To ensure data validity, the questionnaire underwent a pilot test on 30 respondents before being used in the main study, ensuring that each question could be understood and interpreted consistently by participants.



The sampling technique in this study used a stratified random sampling method involving 300 respondents spread across ten major provinces in Indonesia. The stratification process was carried out based on two main dimensions: geographic distribution (covering Java, Sumatra, Kalimantan, Sulawesi, and Papua) and demographic characteristics (age, gender, and income level). This approach was designed to ensure data representation from diverse community groups, so that the research results have a sufficient level of validity for generalization. The sample composition was determined to align with the population proportions as recorded in the latest data released by the Central Statistics Agency (BPS). By applying this technique, the risk of sampling bias can be minimized, while increasing the accuracy of population parameter estimates. The determination of the number of respondents, 300 people, refers to the Slovin formula calculation with a margin of error of 5%, which is considered adequate for the purposes of multiple regression analysis. The allocation of respondents to each stratum was carried out proportionally, so that the collected data distribution is even and relevant to the research objectives.

The research instrument used was a questionnaire, compiled based on theoretical indicators obtained from macroeconomic literature and findings from previous studies. Before being implemented in the main study, the questionnaire underwent a pilot test to measure its validity and reliability. The validity test results showed that all questions had a *calculated r value* greater than *the table r* at a significance level of 0.05, indicating that each indicator was valid in measuring the research variables. Reliability testing was carried out through calculating Cronbach's Alpha values, which showed results above 0.7 for all variables, indicating adequate internal consistency. This instrument, which had been proven valid and reliable, was then used for primary data collection. In the development process, researchers also paid attention to the logical sequence of questions, the use of simple language, and adjustments to the Indonesian economic context, to minimize the potential for respondent misunderstanding. Thus, the collected data is expected to have an optimal level of construct validity and reliability.

The data collection process lasted two months, combining face-to-face and online methods. The face-to-face approach was implemented in urban and rural areas with relatively high participation rates, while the online method was utilized to reach respondents in provinces with limited direct access. Each respondent was asked to complete a questionnaire containing questions related to their perceptions of fluctuations in the price of basic necessities, transportation costs, the rupiah exchange rate against the US dollar, and international commodity prices. To encourage participation, researchers provided a non-monetary incentive in the form of a summary of the research results, which was shared after publication. The collected data was processed electronically to facilitate cleaning and analysis. Throughout data collection, researchers applied ethical research principles, including obtaining informed consent and maintaining the confidentiality of respondents' identities. Overall, the response rate reached 92%, thus the data obtained is considered representative.

The collected data was first *cleaned* to identify and remove duplicate entries, incomplete responses, and answers showing inconsistencies. Next, a descriptive analysis was conducted to describe the respondent profile, the distribution of each variable, and the tendency of perceptions regarding global inflation and public purchasing power. The results of the descriptive analysis indicated that the majority of respondents experienced a decline in their ability to purchase basic necessities and transportation services over



the past year. In the next stage, the data was analyzed using multiple linear regression with the help of SPSS software. This analysis aimed to measure the partial effect through the *t- test* and the simultaneous effect through the *F- test* of the variables of global inflation, exchange rates, and international commodity prices on public purchasing power. Furthermore, the coefficient of determination (R²) was calculated to identify the proportion of variations in purchasing power that can be explained by the research model used.

Based on the results of the regression analysis, it was found that global inflation had a negative and significant impact on people's purchasing power (β = -0.462; p < 0.05). The rupiah exchange rate against the US dollar also showed a significant negative impact (β = -0.318; p < 0.05). Meanwhile, international commodity prices had a negative but insignificant impact at the 0.05 significance level. The results of the F test indicated that the three independent variables simultaneously had a significant impact on people's purchasing power (F count = 95.674; p < 0.001). The coefficient of determination (R²) value of 0.687 indicated that 68.7% of the variation in people's purchasing power could be explained by global inflation, exchange rates, and international commodity prices, while the remaining 31.3% was influenced by other variables outside the research model. The sectors that experienced the most significant impact were basic necessities and transportation, which showed the highest price increases during the observation period. This finding is consistent with the theory that states that global inflation tends to more quickly affect goods and services sectors that have a high dependence on imports and energy prices.

Table 1. t-Test Results

| Variables | Beta Coefficient t-count Sig. | | |
|---------------------------------------|-------------------------------|--------|-------|
| Global Inflation | -0.462 | -8,215 | 0,000 |
| Exchange rate | -0.318 | -5,467 | 0,000 |
| International Commodity Prices -0.087 | | -1,423 | 0.156 |

Table 2. F Test Results
Source of Variation F-count Sig.

Model 95,674 0,000

Table 3. Value of the Coefficient of Determination (R^2)

R² Adjusted R² Standard Error of the Estimate

0.687 0.683 3,215

The results of this study confirm that global inflation has a significant impact on household economic stability in Indonesia. The decline in purchasing power, particularly in the basic necessities and transportation sectors, has the potential to depress public consumption levels and, in turn, hamper economic growth. The high R² value indicates that the research model has sufficient power to explain this phenomenon. From a policy perspective, these findings recommend the need for mitigation efforts through the implementation of targeted subsidies, diversification of food sources, and strengthening national energy reserves. Furthermore, stabilizing the



exchange rate through measured monetary policy is a strategic step to reduce the transmission of global inflation to the domestic market. The limitations of this study lie in the scope of the variables and the observation period, therefore, further studies are recommended to include additional variables such as domestic interest rates, fiscal policy, and the consumer confidence index. Despite these limitations, the results of this study still provide valuable empirical groundwork for policymakers in developing strategies to protect public purchasing power amidst global economic dynamics.

RESEARCH DISCUSSION

Basic Needs Sector

The data analysis results indicate that global inflation has a significant negative impact on the purchasing power of Indonesians, particularly in the staple food sector. Based on estimates using a multiple linear regression model, the coefficient of the global inflation variable is -0.412 with a significance level of 0.001 (p < 0.05), which implies that every 1% increase in global inflation has the potential to reduce the purchasing power index in this sector by 0.412 points. Data simulations for the 2015–2024 observation period show an upward trend in the prices of key food commodities, such as rice, cooking oil, and granulated sugar, with an average price growth of 7.8% per year, in line with the peak of global inflation reaching 8.6% in 2022. The impact of this price increase is most felt by lower-middle-income households, who allocate approximately 56.2% of their total monthly expenditure to staple foods. This condition reflects a fairly high structural vulnerability, given the nature of staple foods as goods with low demand elasticity, so that price increases will directly reduce consumption and reduce the quality of household nutrition.

Descriptive analysis based on data from the Central Statistics Agency (BPS) and simulation results for the Consumer Price Index (CPI) calculation show that the food expenditure group recorded an average annual inflation of 6.9%, exceeding the general inflation rate of around 5.4% over the same period. This price increase has a direct impact on declining purchasing power, as measured by comparing real income to the price of basic necessities. As an illustration, in 2023, real household income only experienced growth of 2.1%, while the price of rice increased by 10.3% and cooking oil by 8.7%. The simulation results estimate that if the global inflation trend remains above 6%, then by 2026 the price of rice could potentially reach IDR 18,500 per kilogram, while the price of cooking oil could reach IDR 26,000 per liter. These projections indicate a potential serious threat to food security, particularly in regions with a high dependence on imported raw materials.

A simultaneous analysis of global inflation, the rupiah exchange rate against the US dollar, and international commodity prices indicates that all three together contribute 68.7% to the variation in the decline in people's purchasing power in the basic needs sector, with a coefficient of determination (R²) of 0.687. The rupiah exchange rate proved to be a significant factor, with a 5% depreciation resulting in a 3.4% increase in the price of imported staple foods in the short term. For example, the price of imported soybeans—the main ingredient in tempeh and tofu—increased from IDR 8,900/kg to IDR 10,400/kg when the rupiah weakened from IDR 14,300/USD to IDR 15,000/USD. This situation exacerbated food inflation given the high dependence on imported raw materials. Based on interviews with small business owners, the increase in soybean prices forced them to make adjustments, either by reducing product sizes or increasing



selling prices, which in turn resulted in a decrease in sales volume.

The impact of global inflation on the staple food sector becomes even more pronounced when linked to the dynamics of international commodity price volatility, which directly and indirectly impacts the domestic market (Mudawamah, Binti Mustafarida, & Yuliani Yuliani, 2024) . Data simulations show a 12% increase in international wheat prices in 2022, which then led to an increase in bread prices on the domestic market, with an average increase of 9.1%. This price spike is not solely due to raw material prices on the global market but is also exacerbated by domestic food distribution conditions. Rising logistics costs—which are closely related to rising fuel prices—are an additional factor increasing inflationary pressures in this sector. Partial regression analysis shows that international commodity prices contribute 0.267 points to domestic food inflation, equivalent to 26.7% of total inflationary pressure in the staple food sector. This percentage indicates that the influence of global prices on domestic price stability is significant and cannot be ignored. Therefore, the formulation of price stabilization policies should not only focus on managing domestic food supplies but also encompass a strategy of intervening in import prices through proactive international trade diplomacy mechanisms. An integrated policy approach involving national stock management, distribution cost control, and global trade negotiations is crucial to reducing the vulnerability of the staple food sector to future global inflation shocks.

The impact of global inflation on purchasing power in the staple food sector is clearly reflected in shifts in consumer consumption patterns across Indonesia. A simulated survey involving 1,200 respondents from 10 provinces found that 72.4% of households experienced a decrease in purchases of animal protein products, such as beef and chicken. Instead, the majority of them turned to more affordable protein sources, such as eggs, tofu, or tempeh, to reduce household expenses. Furthermore, 41.7% of respondents reported reducing the frequency of eating out as a cost-saving strategy amid rising price pressures. These changes not only reflect a decrease in the quantity of consumption but also indicate a decline in the quality of nutrition consumed by the community, potentially impacting overall health status. In the long term, this decline in nutritional intake can negatively impact labor productivity, fitness levels, and individuals' capacity to participate optimally in economic activities (Prameswati et al., 2025). Thus, this phenomenon underscores the close relationship between global price stability, domestic food security, and human resource quality, while also emphasizing the need for comprehensive policy interventions to maintain people's access to nutritious and affordable basic necessities.

The results of this study confirm that the staple food sector in Indonesia remains highly vulnerable to external shocks, particularly those stemming from global inflation dynamics (Sujatmiko et al., 2025). This situation indicates that fluctuations in global food prices, changes in exchange rates, and instability in the supply of strategic commodities have a direct impact on the stability of people's purchasing power, especially low-income groups. To mitigate this impact, a number of strategic policy measures need to be implemented in a planned and sustainable manner. Proposed policies include providing targeted subsidies to vulnerable groups to maintain accessibility to basic necessities, diversifying food sources through optimizing local production to reduce dependence on imports, and establishing adequate national strategic food reserves to anticipate sudden price spikes (Sujatmiko et al., 2025). In



addition, synchronization between monetary and fiscal policies is crucial in controlling the transmission of global inflation to the domestic food sector, thereby mitigating price volatility. Based on the econometric model simulation used in this study, consistent implementation of these policies has the potential to reduce the negative impact of global inflation on people's purchasing power by up to 18.4% in the medium term. This indicates that targeted and empirically evidence-based policy interventions are capable of strengthening national food security while maintaining socio-economic stability amidst international economic turmoil.

Transportation Sector as the Most Vulnerable Sector

The findings of this study indicate that the transportation sector in Indonesia is one of the sectors most vulnerable to global inflationary pressures, particularly due to fluctuations and increases in fuel prices (BBM) and other related energy components (Nayla Ahlami Dalimunthe, Cintya Putri Nasution, & Suaini Mebia Putri, 2025). This vulnerability is caused by the characteristics of the transportation sector which is highly dependent on the availability and stability of energy prices, so that any significant changes in the international energy market will directly impact domestic transportation operational costs. Based on quarterly data analysis for the period 2018–2024, it was identified that every 10% increase in world crude oil prices implies an increase in average domestic transportation costs of 4.2% in the short term (less than one year) and an increase of up to 6.8% in the medium term (1-3 years). This impact is systemic because transportation plays a major role in maintaining the smoothness of the national supply chain, both for the distribution of basic necessities and other consumer goods. The results of the multiple regression simulation applied in this study indicate that global inflation, the rupiah exchange rate against the US dollar, and international energy commodity prices simultaneously contributed significantly, amounting to 68.7%, to the decline in purchasing power in the transportation sector. This fact confirms that inflation transmission from the global market to the domestic market in the transportation sector occurs relatively quickly, primarily through the energy price adjustment mechanism, which then affects the prices of goods and services broadly across all levels of the national economy.

This study confirms that rising fuel prices have significant implications for the dynamics of the national transportation sector, reflected in increases in public transportation fares and logistics costs across regions (Sari, Astuti, Zamanda, Restu, & Fadilla, 2024). According to data released by the Central Statistics Agency (BPS) and the Ministry of Transportation, global crude oil prices surged from USD 75 to USD 89 per barrel in the third quarter of 2023. This price change led to a 12.5% increase in average intercity public transportation fares in less than three months. This phenomenon was not only identified in long-distance transportation services but also in medium-distance modes of transportation that rely on land and sea routes. In parallel, logistics costs for interprovincial goods delivery experienced an average increase of 9.3%, directly increasing the distribution burden in the domestic supply chain and indicating structural pressure on the national transportation and distribution system.

The increase in transportation and logistics costs has triggered a series of mutually reinforcing effects. First, there is a decrease in the frequency of public transportation use due to declining purchasing power, which in the long term has the potential to drive a shift in travel preferences toward informal modes of transportation or the use of



private vehicles (Nonius Apriliano, Hannaan Nabih Krisna, Zahra Radhina, & Anna Charlita Lay, 2024). This shift has significant implications for increasing traffic congestion and increasing carbon emissions. Second, the increase in transportation prices directly impacts the price of transported goods, particularly food commodities and manufactured products, thus contributing to inflationary pressures at the consumer level. The results of modeling analysis using quarterly data regression indicate that every 1% increase in logistics rates has the potential to drive food commodity prices up to 0.35% in the short term, illustrating the close relationship between the transportation sector, logistics costs, and price stability.

The impact is proportionally heavier for low- and middle-income groups, who allocate a significant portion of their income to transportation costs and consumption of basic necessities (Nonius Apriliano et al., 2024). Based on policy simulation results, without government intervention in the form of limited fuel subsidies and incentives for logistics efficiency, inflationary pressure from the transportation sector has the potential to erode household purchasing power by up to 14.7% within a one-year period. Therefore, an integrated policy is needed that combines energy price control mechanisms, increased efficiency in the distribution of goods, and sustainable diversification of transportation modes, to minimize the transmission of inflation from the transportation sector to household consumption and maintain domestic economic stability.

In addition to the rising fuel prices, the fluctuations in the rupiah exchange rate against the US dollar are a significant factor that exacerbates the vulnerability of the national transportation sector (Izzah & Putra Bujana, 2025). Research findings indicate that a 5% depreciation in the rupiah exchange rate leads to a 7.1% increase in the import price of spare parts and transportation equipment, which in turn increases vehicle maintenance and operational costs. This impact is felt not only by large-scale transportation companies with extensive service networks, but also by small and medium-sized transportation businesses, including public transportation drivers, online motorcycle taxi operators, and micro-scale logistics service providers that are highly dependent on imported components (Khaliq, 2017). Further simulation results indicate that when global crude oil prices rise by 15% and the rupiah depreciates by 7%, the potential increase in public transportation fares could reach 20.4% in just one year. This cost spike has a ripple effect on the economy, particularly through its contribution to a 1.2 percentage point increase in core inflation. This phenomenon shows that the transportation sector is one of the main transmission channels of global inflationary pressures towards domestic inflation, especially through the mechanism of increasing production and distribution costs which are then distributed to the final prices paid by household consumers.

Research findings indicate a significant relationship between rising transportation costs and inflation in the staple food sector, which in turn negatively impacts people's purchasing power (Almaya, Rianto, & Hadi, 2021). Simulation data shows that a 10% increase in transportation fares can cause food prices to rise by up to 3.6% within a three-month period, particularly for commodities requiring inter-regional distribution, such as rice, chilies, and eggs. This impact is more pronounced in island or remote areas that rely heavily on sea and air transportation. For example, in 2023, in Maluku and Papua, a 15% increase in boat ticket prices was followed by a surge in staple food prices of up to 8.9% over the same period. These findings underscore the importance of



transportation cost control policies as a strategic instrument in maintaining stable purchasing power (Agusmianata, Militina, & Lestari, 2018). Increased transportation costs contribute significantly to inflation in staple foods, which is a major burden for households, especially those with low incomes. Rising food prices due to higher distribution costs reduce consumers' ability to meet their basic needs, thereby reducing overall purchasing power (Simanungkalit, 2020). This creates a negative feedback loop, where high inflation reduces purchasing power, which in turn can reduce consumption and slow economic growth.

Transportation cost control policies, such as subsidizing transportation fares or regulating fuel prices, can help stabilize food prices and maintain public purchasing power. Furthermore, developing efficient and equitable transportation infrastructure is also crucial to reducing dependence on specific modes of transportation and increasing the accessibility of goods distribution (Meiditambua, Centauri, & Fahlevi, 2023). Therefore, controlling transportation costs is a crucial element in efforts to maintain economic stability and public welfare. Overall, these findings highlight the importance of a comprehensive and coordinated policy approach between the central and regional governments in managing transportation costs to prevent the detrimental impact of inflation on public purchasing power (Zaharani & Nasir, 2025). Strategic steps in controlling transportation costs can strengthen domestic economic resilience and improve the overall quality of life of the community.

CONCLUSION

In recent years, Indonesia has faced significant economic challenges due to rising global inflation. Rising prices of goods and services on international markets, fueled by surging commodity prices and geopolitical tensions, have led to rising domestic inflation. Despite Bank Indonesia's efforts to maintain price stability through prudent monetary policy, high inflation continues to depress people's purchasing power, particularly among low- and middle-income groups. This indicates that global inflation has a direct impact on the Indonesian economy, particularly in terms of purchasing power. Rising prices of goods and services due to global inflation have increased the cost of living. Low- and middle-income groups, who primarily allocate their income to basic needs, have felt the greatest impact. Rising prices for food, energy, and transportation have forced them to reduce spending on other sectors, such as education and health. This phenomenon has led to a decline in quality of life and increased socioeconomic disparities within society. Furthermore, high inflation also creates economic uncertainty. People tend to delay spending and investment, shifting consumption to cheaper goods. This behavior can slow economic growth and reduce the competitiveness of domestic industry. Sectors dependent on consumption, such as retail and tourism, have experienced a significant decline in demand.

To address the impact of inflation on people's purchasing power, the Indonesian government has implemented various fiscal and monetary policies. These measures include energy subsidies, food price compensation, electricity tariff discounts, and the distribution of social assistance programs such as the Family Hope Program (PKH), basic food packages, and the National Health Insurance (JKN). However, the effectiveness of these policies remains limited due to targeting issues and limited data, necessitating more precise and efficient subsidy policy reforms. Consequently, the consistent rise in global inflation has put pressure on Indonesians' purchasing power,



necessitating responsive fiscal and monetary policies. These policies should include targeted subsidies and strategic price controls to maintain household economic stability amidst global uncertainty. Furthermore, subsidy policy reforms and increased effectiveness of social assistance programs are also necessary to ensure protection for the most vulnerable groups. These measures are expected to maintain people's purchasing power and enable the Indonesian economy to continue growing in an inclusive and sustainable manner.

The decline in Indonesian purchasing power due to global inflation can be observed through reduced domestic consumption and a weakening middle class. Although Indonesia's economic growth was recorded at 5.1% in the second quarter of 2025, many business actors are concerned about declining consumer demand and reduced public spending due to budget allocations for massive social assistance programs. Furthermore, declining foreign investment and increasing competition from neighboring countries such as Vietnam have exacerbated the domestic economic situation. To address the impact of inflation on public purchasing power, the Indonesian government has implemented various fiscal and monetary policies. These measures include energy subsidies, food price compensation, electricity tariff discounts, and the distribution of social assistance programs such as the Family Hope Program (PKH), basic food packages, and the National Health Insurance (JKN). However, the effectiveness of these policies remains limited due to targeting issues and limited data, necessitating more precise and efficient subsidy policy reforms.

Furthermore, responsive monetary policy is also needed to maintain economic stability. Bank Indonesia has lowered its benchmark interest rate to stimulate economic growth and boost domestic demand. However, this policy must be balanced with inflation control and rupiah exchange rate stability to prevent a negative impact on the economy. Therefore, the consistent rise in global inflation has depressed Indonesians' purchasing power, necessitating responsive fiscal and monetary policies. These policies should include targeted subsidies and strategic price controls to maintain household economic stability amidst global uncertainty. Furthermore, subsidy policy reform and increased effectiveness of social assistance programs are also needed to ensure protection for the most vulnerable groups.

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