COSTING: Journal of Economic, Business and Accounting
Volume 9 Nomor 1, Tahun 2026
e-ISSN: 2597-5234

THE IMPACT OF NATIONAL GINGER PRODUCTION, IDR/BDT EXCHANGE RATE, PARTNER COUNTRY GDP, AND INDONESIA'S INFLATION ON INDONESIA'S GINGER EXPORT VALUE TO BANGLADESH (2014–2024)

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ABSTRACT

This study aims to analyze the effect of national ginger production, the IDR/BDT exchange rate, Bangladesh's Gross Domestic Product (GDP), and Indonesia's inflation on the value of Indonesian ginger exports to Bangladesh during the period 2014–2024. The research employs a quantitative approach using time series secondary data obtained from Statistics Indonesia, Bank Indonesia, the World Bank, and other official sources. The independent variables consist of national ginger production, the IDR/BDT exchange rate, Bangladesh's GDP, and Indonesia's inflation, while the dependent variable is the value of ginger exports. Data were analyzed using multiple linear regression with the assistance of EViews 13 software. The results indicate that, partially, national ginger production does not have a significant effect on the value of Indonesian ginger exports to Bangladesh. The IDR/BDT exchange rate has a significant effect on export value, indicating that exchange rate movements play an important role in determining export competitiveness. Furthermore, Bangladesh's GDP has a negative and significant effect on Indonesian ginger export value, suggesting that economic growth in the partner country does not necessarily lead to increased imports of Indonesian ginger. Meanwhile, Indonesia's inflation does not show a significant effect on export value. Simultaneously, all independent variables have a significant effect on the value of Indonesian ginger exports to Bangladesh.

Keywords: *Ginger Production, IDR/BDT Exchange Rate, Bangladesh GDP, Inflation, Ginger Export Value*

1. INTRODUCTION

International trade refers to the exchange of goods and services between countries conducted under officially agreed-upon arrangements. Beyond serving as a mechanism for cross-border transactions, international trade also contributes to increased levels of industrialization, advancements in transportation systems, the process of globalization, and the growth of multinational corporations. International trade activities generally include imports and exports (Suhardi et al., 2023). Therefore, it can be concluded that international trade has a significant influence on a country's economic growth. Empirical studies confirm the close relationship between international trade and economic growth(Apriliana, 2021)show that export and import activities significantly influence economic performance, particularly when global economic conditions affect cross-border trade flows.

Economic growth plays a crucial role in determining the direction of a nation's development. Indonesia, as a developing country, is currently striving to optimize various policies to stimulate economic growth. Imports and exports play an important role in the economic growth of both developed and developing countries.

Indonesia is widely recognized as an agrarian country endowed with abundant

natural resources. The agricultural sector plays a vital role in supporting national economic resilience. A wide range of agricultural commodities thrive across various regions of Indonesia. According to Goodstats (2024), the agriculture, forestry, and fisheries sector is the largest employer in the country, absorbing approximately 40.72 million workers, or about 28.64% of the total employed population in Indonesia. This figure indicates that the performance of this sector has a substantial impact on economic stability, public welfare, and regional development.

In addition to serving as a primary source of food and employment, the agricultural sector also makes a significant contribution to non-oil and gas export revenues. Its strategic importance is further reflected in its contribution to national Gross Domestic Product (GDP), which has remained relatively stable amid fluctuations in the industrial and services sectors. According to data from the Central Bureau of Statistics (Badan Pusat Statistik/BPS, 2023a), the agricultural sector accounts for approximately 13% of Indonesia's GDP.

Within the framework of sustainable economic development, the agricultural sector is divided into several major subsectors, including food crops, horticulture, plantations, livestock, fisheries, forestry, as well as agricultural services and hunting. Horticulture is considered one of the most promising agricultural subsectors due to its high economic value and strong market demand (Suryadi et al., 2017), including medicinal and aromatic plants (biofarmaka). The biofarmaka category consists of fifteen plant species: dringo, ginger, cardamom, kecibeling, kencur, turmeric, galangal, lempuyang, aloe vera, mahkota dewa, noni (mengkudu), sambiloto, black turmeric (temu ireng), fingerroot (temu kunci), and temulawak (Directorate General of Horticulture; Central Bureau of Statistics, 2021).

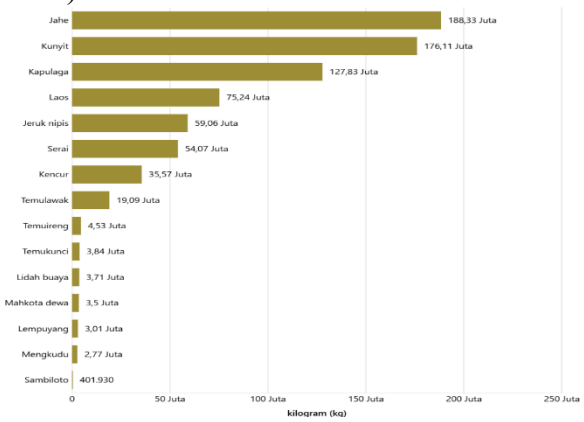

Figure 1. Types of Biofarmaka (Medicinal and Aromatic) Plants Produced in Indonesia

Based on data from Databoks (2024), ginger is the most widely produced biofarmaka crop in Indonesia in 2024, with a production volume of 188.33 million kilograms, followed by turmeric at 176.11 million kilograms and cardamom at 127.83 million kilograms. Other commodities, such as galangal, lime, lemongrass, and kencur, recorded relatively lower production volumes. These data confirm that ginger is a national flagship commodity within the biofarmaka category, both in terms of production volume and economic value.

As one of the key biofarmaka commodities, ginger has strong prospects in the international market, in line with the increasing global demand for plant-based medicinal products. Indonesia, as a major producer of biofarmaka crops, has considerable potential to improve the export performance of these commodities in the global market (Wirakusuma, 2021). However, ginger production in Indonesia over the past eleven years has experienced substantial fluctuations. These changes reflect conditions in the agricultural sector that are still influenced by various factors, including climate variability, the availability of cultivated land, and policies related to the management of horticultural and biofarmaka commodities. The variation in production levels indicates that the stability of national ginger supply has not yet been fully achieved.

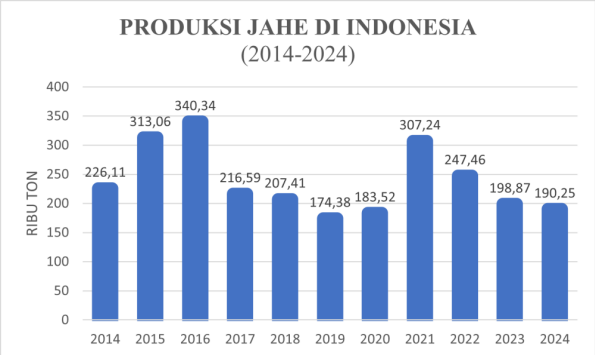

Figure 2. Indonesia's Ginger Production (2014-2024)

Based on data from the Central Bureau of Statistics (Badan Pusat Statistik/BPS, 2025), Indonesia's ginger production during the 2014–2024 period exhibited considerable year-to-year variation. Production increased in 2015 and reached its peak in 2016 at 340.34 thousand tons. However, following this peak, output declined sharply to 216.59 thousand tons in 2017 and further to 207.41 thousand tons in 2018, reaching its lowest level in 2019 at 174.38 thousand tons.

In 2020, ginger production began to recover, rising to 183.52 thousand tons, followed by a more substantial increase in 2021 to 307.24 thousand tons. This surge was closely associated with heightened public demand for ginger as a herbal beverage ingredient and immune-boosting product during the COVID-19 pandemic, which significantly increased domestic consumption (Goodstats Indonesia, 2023). However, this upward trend was not sustained. Production declined again to 247.46 thousand tons in 2022, fell further to 198.87 thousand tons in 2023, and remained at a relatively similar level in 2024 at 190.25 thousand tons.

Overall, this pattern indicates that although Indonesia possesses relatively large ginger production capacity, output levels remain volatile and are influenced by demand-side factors as well as external conditions such as price fluctuations, planting seasons, and market dynamics (Hortiindo, 2025). This volatility suggests that the stability of national ginger supply has not yet been consistently achieved. Despite these fluctuations in domestic production over the past decade, Indonesia's ginger exports have continued to demonstrate resilience in the global market. Demand from major destination countries, particularly in South Asia, remains a key factor supporting the sustained performance of Indonesia's ginger exports.

Bangladesh represents Indonesia's largest primary export destination for ginger, with export values that significantly surpass those of other countries. This status highlights Bangladesh's strategic role as the main absorber of Indonesia's ginger exports. Trade relations between Indonesia and Bangladesh in the ginger commodity demonstrate substantial potential for further development. Ginger production is closely related to Indonesia's capacity to meet market demand, both domestically and internationally.

Based on the foregoing background, this study aims to examine the impact of national ginger production, the IDR/BDT exchange rate, Bangladesh's Gross Domestic Product (GDP), and Indonesia's inflation on the value of Indonesia's ginger exports to Bangladesh during the 2014–2024 period.

2. THEORITICAL REVIEW

Production Theory

Production refers to the process of transforming factors of production into goods and services that possess economic value. In the context of international trade, production is not merely viewed as a domestic activity but also as a key determinant of a country's export supply capacity. A country's ability to export largely depends on the quantity, continuity, and efficiency of its production.

According to the Heckscher–Ohlin theory as discussed by Krugman and Obstfeld (2018), a country tends to export goods that intensively use production factors that are relatively abundant within the country. Nations endowed with specific factor advantages, such as labor or natural resources, generally face lower production costs, enabling them to compete more effectively in international markets. This theory highlights the crucial role of production structure and capacity in shaping export patterns.

Krugman and Obstfeld (2018) further explain that improvements in productivity and production capacity allow countries to generate output surpluses that can be allocated to international markets. In the agricultural sector, increased and stable production reflects a country's ability to maintain a sustainable export supply. Therefore, production is considered a primary supply-side determinant of exports.

Accordingly, an increase in the production volume of a commodity enhances its export potential, both in terms of quantity and value, as it strengthens a country's capacity to meet international market demand.

Exchange Rate Theory

The exchange rate refers to the price of a country's currency relative to the currencies of other countries and plays a strategic role in international trade. Exchange rates determine the relative prices of exported and imported goods, thereby influencing a country's trade competitiveness in global markets.

In international economic theory, changes in exchange rates directly affect export demand through price mechanisms. Krugman and Obstfeld (2018) argue that a depreciation of the domestic currency lowers the foreign-currency price of exported goods, thereby enhancing competitiveness and increasing export demand. Conversely, an appreciation of the domestic currency tends to reduce export competitiveness, as goods become more expensive for foreign buyers.

Furthermore, the Marshall–Lerner condition, as discussed by Krugman and Obstfeld (2018), explains that a depreciation of the exchange rate will increase export value and improve the trade balance if the elasticities of export and import demand are sufficiently high. This suggests that the effect of exchange rates on exports is not merely nominal but also depends on the responsiveness of international market demand. Therefore, exchange rates exert a significant influence on export performance through changes in relative prices as well as through adjustments in the volume of international trade.

Gross Domestic Product (GDP) Theory

Gross Domestic Product (GDP) is the primary indicator used to measure the level of economic activity in a country. GDP represents the total value of final goods and services produced within an economy over a specific period. In macroeconomic analysis, GDP is commonly used to describe economic growth, production capacity, and national income levels.

According to macroeconomic theory, an increase in GDP indicates higher levels of output and national income. Krugman and Obstfeld (2018) explain that economic growth reflected in rising GDP stimulates greater consumption and production activities. These conditions affect both demand and supply for goods in domestic as well as international markets.

GDP is also closely associated with an economy's capacity to engage in international trade. An economy with a higher GDP reflects greater economic capacity in terms of both production potential and purchasing power. In the context of international trade, rising GDP indicates an increased ability of a country to participate actively in global trade flows.

Furthermore, GDP serves as an indicator of macroeconomic conditions that influence the stability and performance of various economic sectors, including the export sector. Stable GDP growth reflects favorable economic conditions for production and trade activities, thereby supporting increases in export value. GDP is therefore regarded as a macroeconomic variable that reflects the strength and capacity of an economy, which is theoretically linked to international trade performance and export outcomes (Krugman & Obstfeld, 2018).

Inflation Theory

Inflation is an indicator of the general increase in price levels within an economy and reflects the degree of macroeconomic stability. In international trade, inflation affects export competitiveness through changes in relative prices and production costs.

Krugman and Obstfeld (2018) explain that domestic inflation that is higher than inflation in other countries makes domestic goods

relatively more expensive. This condition can reduce export competitiveness, as domestic products become less attractive in international markets.

Inflation is also closely associated with production cost structures, a phenomenon commonly referred to as cost-push inflation. Rising production costs compel producers to increase selling prices, including for export commodities. This perspective is consistent with Mankiw (2019) in Macroeconomics, who argues that domestic price levels are a key component in determining the real exchange rate. When domestic inflation exceeds that of trading partner countries, the real exchange rate tends to appreciate, meaning that domestic goods become relatively more expensive for foreign buyers. Ultimately, this condition reduces national product competitiveness and exerts downward pressure on net export volumes.

Export Value Theory

Export value represents the monetary value of goods and services exported by a country to international markets within a given period. It reflects not only the volume of exports but also prevailing prices in international trade. In international economics, export value is a key indicator used to assess a country's trade performance and external sector strength.

Export value is determined by the interaction between export volume and export prices. An increase in export volume, assuming stable prices, leads to higher export value. Similarly, rising international prices can increase export value even if export volume remains constant. Therefore, export value captures both quantity and price effects in international trade.

From a theoretical perspective, export value is influenced by both supply-side and demand-side factors. On the supply side, production capacity, productivity, and cost efficiency determine a country's ability to supply goods to international markets. On the demand side, economic conditions in importing countries, such as income levels and market demand, influence the absorption capacity of exports. Macroeconomic variables such as exchange rates, inflation, and economic growth play a crucial role in shaping export value by affecting relative prices, purchasing power, and competitiveness in international markets (Krugman & Obstfeld, 2018).

In the context of international trade, export value is also closely related to a country's comparative advantage and competitiveness. Countries with favorable production structures and stable macroeconomic conditions are more likely to achieve higher export values. Consequently, export value is widely used as a dependent variable in empirical studies analyzing the performance of international trade and exports.

3. RESEARCH METHOD

This study employs a quantitative research approach to analyze the empirical relationship between economic variables influencing Indonesia's ginger export performance. Quantitative methods are used to process and analyze numerical data statistically in order to test predefined hypotheses related to international trade dynamics.

Descriptive statistics are first applied to provide an initial overview of the characteristics and distribution of the research variables. This step helps to summarize key patterns in the data prior to further econometric analysis. Subsequently, regression analysis is employed to examine the relationships between the independent variables and the export value of Indonesian ginger. This methodological approach is considered appropriate for capturing the empirical linkages among macroeconomic variables in international trade.

The object of this study is Indonesia's ginger exports to Bangladesh, which are analyzed quantitatively using numerical data. The study aims to examine the empirical relationship between domestic ginger production, exchange rate movements, the Gross Domestic Product (GDP) of the destination country, and Indonesia's inflation rate on the value of Indonesia's ginger exports to Bangladesh. The analysis focuses on identifying the effect of each independent

variable on Indonesia's ginger export performance.

All data used in this study consist of annual time-series data collected in accordance with the specified research period. The data are processed and analyzed using statistical methods to identify the empirical relationship between the independent variables and the dependent variable.

This study employs a multiple linear regression model to examine the simultaneous effects of multiple independent variables on the dependent variable within a single estimation framework. The application of this model allows for an empirical assessment of the relationships among variables and supports the systematic testing of the proposed research hypotheses.

4. RESULT AND DISCUSSION

Descriptive Statistics

	Y	X1	X2	X3	X4
Mean	6192,545	236840,2	161,9000	339,7727	3,402727
Maximum	24009,00	340341,0	175,3000	460,1300	8,360000
Minimum	0,000000	174380,0	137,5000	172,8900	1,570000
Std. Dev	7494,200	57739,60	12,86079	100,0666	1,976163

Descriptive statistics are employed to provide an initial overview of the characteristics of the research variables during the 2014–2024 period. The results indicate that Indonesia's ginger export value to Bangladesh exhibits substantial volatility, as reflected by a standard deviation that exceeds its mean value. Export performance reached its peak in 2014, while a zero-export observation occurred in 2021, representing an outlier linked to global supply chain disruptions and heightened domestic demand during the COVID-19 pandemic.

Domestic ginger production recorded an average output of approximately 236 thousand tons, with the highest production level observed in 2016 and the lowest in 2019. This wide range suggests that although production capacity is relatively large, output remains highly dynamic and influenced by seasonal patterns, cultivated area, and climatic conditions.

The IDR/BDT exchange rate showed notable fluctuations over the study period, with the strongest appreciation of the Rupiah occurring in 2020 and the weakest position recorded in 2024. Meanwhile, Bangladesh's GDP displayed a consistently upward trend, reflecting sustained economic growth and increasing market size. Indonesia's inflation rate remained relatively stable, averaging 3.40%, indicating a generally controlled macroeconomic environment.

Classical Assumption Test

Prior to hypothesis testing, classical assumption tests were conducted to ensure the validity of the regression model. The Jarque–Bera test confirmed that the residuals are normally distributed. Multicollinearity diagnostics using the Variance Inflation Factor (VIF) indicate that all independent variables have VIF values well below the threshold of 10, suggesting no multicollinearity issues. Additionally, the Breusch–Pagan–Godfrey test reveals no evidence of heteroskedasticity, confirming that the model satisfies the BLUE criteria.

Multiple Linear Regression Anslysis

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	89890,64	22463,19	4,001686	0,0071
X1	-0,004323	0,022506	-0,192082	0,8540
X2	-425,0620	111,4166	-3,815070	0,0088
X3	-49,92200	16,42498	-3,039395	0,0228
X4	912,6362	751,2612	1,214806	0,2701

R-squared	0,853582	F-statistic	8,744652
Adjusted R-squared	0,755970	Prob(F-statistic)	0,011177

Based on the estimated coefficients in the regression results, the multiple linear regression model can be expressed as follows:

ExportValue = 89.890 – 0,004 (Production) – 425,06 (Exchange Ratet) – 49,92 (GDP) + 912,64 (Inflation)

The constant term captures the intercept of the model and serves as a mathematical component of the regression equation rather than an economically interpretable value. Therefore, the discussion focuses on the

estimated coefficients of the independent variables.

The coefficient of domestic ginger production is negative, indicating that increases in national production are not necessarily associated with higher export values during the observation period. This suggests that additional output may have been absorbed by domestic demand rather than allocated to export markets.

The exchange rate variable exhibits a negative coefficient, implying an inverse relationship between the IDR/BDT exchange rate and export value. A depreciation of the Rupiah against the Bangladeshi Taka enhances export value, supporting the role of price competitiveness in international trade.

Bangladesh's GDP also shows a negative coefficient, indicating that higher economic growth in the importing country does not automatically translate into increased ginger imports from Indonesia. This may reflect import substitution policies or shifts in consumption preferences as domestic production capacity expands.

Finally, the inflation coefficient is positive, suggesting that increases in domestic inflation are associated with higher nominal export values. However, this relationship must be interpreted cautiously and evaluated in conjunction with statistical significance tests.

t Test

The hypothesis testing results indicate varying effects of the explanatory variables on Indonesia's ginger export value to Bangladesh during the 2014–2024 period.

1. Domestic ginger production does not have a statistically significant effect on export value. The estimated coefficient is insignificant, leading to the rejection of Hypothesis 1. This finding suggests that increases in national ginger production do not necessarily translate into higher export values during the study period.
2. The IDR/BDT exchange rate has a statistically significant effect on export value. Hypothesis 2 is therefore accepted, indicating that movements in the Rupiah against the Bangladeshi Taka play a crucial role in determining Indonesia's ginger export performance. Exchange rate changes affect export competitiveness through relative price mechanisms.
3. Bangladesh's GDP is found to have a statistically significant but negative effect on Indonesia's ginger export value. Hypothesis 3 is accepted in terms of significance; however, the negative coefficient indicates that economic growth in the importing country does not always lead to increased demand for Indonesian ginger. This result implies the presence of import substitution behavior or changes in consumption patterns as Bangladesh's domestic production capacity expands.
4. Indonesia's inflation rate does not show a statistically significant effect on ginger export value. Hypothesis 4 is rejected, suggesting that domestic price stability during the observation period did not exert sufficient pressure on export performance to generate a measurable impact.

F Test

Based on the regression results, a joint significance test (F-test) was conducted to examine the simultaneous effect of all independent variables on the dependent variable. The results indicate that the model is statistically significant at the 5% level, as reflected by the F-statistic and its corresponding probability value. Accordingly, Hypothesis 5 is accepted, confirming that national ginger production, the IDR/BDT exchange rate, Bangladesh's GDP, and Indonesia's inflation jointly have a significant effect on Indonesia's ginger export value to Bangladesh during the study period. This result suggests that the regression model is statistically valid and suitable for empirical analysis.

Coefficient Determination

The estimation results R-squared value of 0,8536, indicating that approximately 85,36% of the variation in Indonesia's ginger export value to Bangladesh is explained by national ginger production, the IDR/BDT exchange rate, Bangladesh's GDP, and Indonesia's

inflation included in the model. The remaining 14,64% is attributed to other factors not captured in the model, such as trade policies, international logistics costs, and consumer preferences in the destination market. Overall, the relatively high R-squared value suggests that the regression model has strong explanatory power and is appropriate for empirical analysis.

Effect of National Ginger Production on Export Value

The estimation results indicate that national ginger production does not have a statistically significant effect on Indonesia's ginger export value to Bangladesh. The probability value of 0.854 (> 0.05) leads to the rejection of Hypothesis 1, indicating that variations in domestic production do not significantly influence export performance during the study period. This finding contradicts supply-side theory, which assumes that higher production capacity generates surplus output that can be allocated to export markets.

The empirical evidence suggests that strong domestic demand constrained the transmission of increased production to export markets. This condition is particularly evident in 2021, when national ginger production increased to approximately 307 thousand tons, yet ginger exports to Bangladesh were not recorded. This anomaly reflects a shift in domestic consumption patterns during the COVID-19 pandemic, when ginger demand surged due to its perceived health benefits.

This result is consistent with Lestari et al. (2022), who find that during the pandemic, ginger increasingly functioned as a health commodity, leading to substantial absorption by the domestic market. Similar conclusions are drawn by Kurniawaty et al. (2022), who argue that for strategic agricultural commodities, domestic markets often act as the primary absorber even when production levels are high. Empirical evidence from Rismiyati et al. (2021) further supports this finding, showing that domestic production does not always serve as a significant determinant of exports when domestic demand pressures and international market dynamics are present. Additionally, Surbakti (2023) emphasizes that trade structure and domestic market prioritization can weaken the relationship between production and exports, particularly for agricultural commodities facing volatile global demand.

Overall, these findings indicate that increases in national ginger production do not automatically translate into higher export values, as domestic market absorption and structural trade factors play a dominant role in shaping export outcomes.

Effect of the IDR/BDT Exchange Rate on Export Value

The empirical results indicate that the IDR/BDT exchange rate has a statistically significant and negative effect on Indonesia's ginger export value to Bangladesh (p = 0,008 < 0,05). This finding implies that a depreciation of the Rupiah against the Bangladeshi Taka reflected by a decline in the exchange rate leads to an increase in export value. The result is consistent with the Purchasing Power Parity (PPP) framework discussed by Krugman and Obstfeld (2018), which suggests that domestic currency depreciation lowers the relative price of exports in international markets, thereby enhancing price competitiveness.

The significance of the exchange rate coefficient indicates that the Bangladeshi market is highly responsive to price changes, making price competitiveness a key determinant of import demand for ginger. When the Rupiah depreciates, Indonesian ginger becomes relatively cheaper compared to products from major competitors such as China and India, stimulating higher import demand from Bangladesh.

This finding aligns with the results of I Gede Arya and Wenagama (2022), who document a negative and significant effect of exchange rate movements on Indonesia's ginger export volume. Similar evidence is reported by Rismiyati et al. (2023), who argue that in developing countries, exchange rate volatility plays a dominant role in bilateral trade of primary commodities, as price factors tend to outweigh quality considerations.

Additional empirical studies support this conclusion, showing that exchange rate fluctuations significantly influence agricultural export performance and may create uncertainty and risk for exporters when volatility increases (Satriana, 2019; Nthebe & Mosikari, 2025). Overall, these findings underscore that exchange rate movements particularly depreciation affect ginger export performance not only through price mechanisms but also through interactions with market risk and importer preferences.

Effect of Bangladesh's GDP on Export Value

One of the most critical findings of this study is that Bangladesh's GDP has a statistically significant but negative effect on Indonesia's ginger export value ($p = 0.022 < 0.05$). This result indicates that economic growth in Bangladesh is associated with a decline in ginger imports from Indonesia during the study period. This finding contradicts standard demand theory, which posits that higher income levels in the importing country increase demand for imported goods classified as normal goods (Mankiw, 2019).

The negative relationship can be explained by Bangladesh's increasing tendency toward import substitution policies in recent years. Rising GDP reflects enhanced capital accumulation, which has enabled Bangladesh to modernize its domestic agricultural sector. As economic conditions improve, the country appears to reduce its dependence on imported ginger by expanding local production capacity.

This argument is supported by evidence from The Daily Observer (2024), which reports a significant increase in local ginger productivity in Bangladesh following the adoption of geo-bag cultivation technology. In addition, Rahman et al. (2020) document that the Bangladeshi government has actively implemented a Spices Action Plan aimed at achieving self-sufficiency in spices. These developments suggest that GDP growth during the observation period was accompanied more by strengthening domestic supply than by increasing import consumption.

Further empirical evidence supports this interpretation. Hasan (2023) finds that although export performance contributes positively to Bangladesh's GDP growth, stronger agribusiness structures do not necessarily lead to higher imports of specific agricultural commodities. Similarly, Ahmed (2024) shows that agrifood development strategies emphasizing technological support, productivity enhancement, and value addition can suppress import demand even as GDP rises. Collectively, these findings indicate that rising income in Bangladesh does not automatically translate into increased demand for Indonesian ginger, particularly when domestic production capacity becomes increasingly efficient.

Effect of Indonesia's Inflation on Export Value

The partial estimation results indicate that Indonesia's inflation rate does not have a statistically significant effect on ginger export value to Bangladesh ($p = 0{,}270 > 0{,}05$). This finding leads to the rejection of Hypothesis 4 and suggests that domestic price movements did not play a decisive role in determining export performance during the study period.

This result contradicts the cost-push inflation framework (Suparmono, 2018) and the real exchange rate concept proposed by Mankiw (2019), which predict that rising domestic prices increase production costs and reduce export competitiveness. However, the lack of significance in this study can be explained by the relatively stable inflation environment in Indonesia. Over the observation period, Indonesia's average inflation rate remained moderate at approximately 3,40%, with price fluctuations that were insufficient to generate persistent cost pressures affecting export prices.

As a consequence, the negative transmission of inflation to export prices (Free on Board) appears weak and statistically insignificant. This interpretation is consistent with the findings of Rismiyati et al. (2023), who report that inflation does not significantly affect Indonesia's ginger export performance

as long as inflation remains within the central bank's target range. Similar conclusions are drawn by I Gede Arya and Wenagama (2022), who argue that exchange rate volatility exerts a stronger influence on ginger export demand than relatively stable domestic price changes.

Additional empirical evidence from ASEAN countries further supports this result. Panel data studies indicate that the impact of inflation on exports tends to be weak or inconsistent when other macroeconomic variables particularly exchange rates play a more dominant role in shaping export competitiveness (Yuliadi et al., 2024; Khasanah & Nasir, 2024). Collectively, these findings suggest that under conditions of controlled inflation, domestic price stability does not significantly constrain Indonesia's ginger export value to Bangladesh.

5. CONCLUSION

This study examines the effects of national ginger production, the IDR/BDT exchange rate, Bangladesh's GDP, and Indonesia's inflation on Indonesia's ginger export value to Bangladesh during the 2014–2024 period. The findings indicate that not all explanatory variables individually influence export performance.

National ginger production does not have a significant effect on export value, suggesting that increases in domestic output do not automatically translate into higher exports, as a substantial share of production is absorbed by the domestic market. In contrast, the IDR/BDT exchange rate plays a crucial role in determining export value, highlighting the importance of price competitiveness in the Bangladeshi market. Bangladesh's GDP also significantly affects Indonesia's ginger exports, although economic growth in the importing country does not necessarily lead to higher agricultural imports. Meanwhile, Indonesia's inflation rate does not show a significant impact on export value, indicating that domestic price fluctuations during the study period were not strong enough to exert meaningful pressure on export performance.

Overall, the results demonstrate that Indonesia's ginger export value to Bangladesh is shaped by a combination of internal supply conditions and external macroeconomic factors, with exchange rate dynamics and partner-country economic conditions playing a more dominant role than domestic production and inflation.

future research is encouraged to incorporate additional variables that may influence export value, such as logistics costs, trade policies, non-tariff barriers, and product quality. Employing longer observation periods or higher-frequency data may also provide deeper insights into the dynamic nature of international trade.

From a practical perspective, the results suggest that ginger exporters should closely monitor exchange rate movements and economic conditions in destination markets when formulating export strategies. For policymakers, sustained efforts are needed to maintain exchange rate stability and enhance the competitiveness of Indonesia's ginger exports through improvements in product quality, distribution efficiency, and export market diversification. Such measures are essential to support the sustainable growth of Indonesia's ginger export performance.

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