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Analysis of the Impact of Importation on the Economic Development of the Davao Region

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Abstract
The research explores the impact of importation on various economic factors, shedding light on its correlation with prices, employment, unemployment, investments, and agricultural production in the Davao region. By employing the descriptive quantitative method, the findings indicate a statistically significant relationship between importation and prices/inflation, suggesting that heightened importation costs can substantially contribute to increased overall prices and inflation within an economy. However, when examining employment, the study indicates that a surge in importation prices does not necessarily translate to a significant rise in employment due to various mitigating factors such as increased business expenses and misaligned consumer demand. Conversely, the analysis reveals a strong inverse correlation between importation and unemployment, indicating that higher import levels are linked to reduced unemployment rates. Moreover, despite importation not significantly correlating with increased investments, it shows positive associations with palay and corn production, highlighting the potential impact of importation on stimulating local agricultural investments, especially in essential crops. However, increased importation prices in the livestock and fish production sectors do not demonstrate significant correlations with enhanced output, potentially due to complex dynamics involving cost structures, market uncertainties, and demand-supply imbalances in these industries. The findings are expected to offer insights to guide policymakers, businesses, and stakeholders in optimizing import-related strategies for sustainable economic advancement in the Davao region.

Keywords
Importation's economic impact, Davao region economy, Prices and inflation unemployment trends, Agricultural investments

1. Introduction
1.1 Background and Scope of the Problem
Importation is a cornerstone of economic vitality within the Davao region, an influential region located in the southeastern Philippines. Renowned for its robust trade networks and strategic location, Davao City serves as a pivotal hub for import activities, contributing significantly to the region's economic growth and development (Philippine Statistics Authority, 2021). The region's extensive port infrastructure and well-connected transportation systems facilitate the seamless flow of imported goods, positioning it as a key player in the country's import-export landscape.

Davao region imports a wide array of goods, reflecting its diverse economic activities and trade connections. Among the significant imports are agricultural products, machinery and equipment, consumer goods, raw materials for industries, and petroleum products (Business World, 2021). Despite the Davao region’s agricultural prowess, it imports various agricultural products, and even processed food items. These imports cater to local consumption and export demands, contributing to the region's role as a major agricultural center. The importation of machinery and equipment is crucial to support the region's industries, including manufacturing, construction, and infrastructure development. These imports enhance production capabilities and technological advancements within the region. (Philippine Statistics Authority, 2021).

Moreover, imported consumer goods like electronics, clothing, household items, and other everyday products play a significant role in meeting the diverse needs of the population in the region. These imports cater to the region's consumer market and contribute to its retail industry. Davao region also imports various raw materials such as metals, plastics, chemicals, and other industrial inputs required for manufacturing processes. These materials are essential for the production and growth of local industries, supporting economic development (Department of Trade and Industry - Davao Region, 2021). On the other hand, like many other places, Davao region imports petroleum products to meet its energy needs. These imports are crucial for transportation, power generation, and various industrial activities.

However, importation also poses disadvantages, especially if it is off-balanced with exports. Importation is important to the Philippine economy because, like most other countries, it accounts for a sizeable portion of GDP (gross domestic product), which is the best indicator of a nation's health. However, excessive importation can harm homegrown industries; it skews the country's economic picture balance of commerce and causes a nation's currency to lose value. Imports of commodities are subject to tariffs and taxes in order to safeguard native industries. These levies and taxes prevent the items from being sold for less, which generates cash for the government that is then utilized to improve the nation (Buted, 2018).

Section 400 of the Customs Modernization and Tariff Act (CMTA) in the Philippines states that all imported commodities into the Philippines must pass through a customs office at the port of entry. The Port of Davao serves as the entryway for all imported products coming into Davao region. It has three sub-ports of entries: these are Mati in Davao Oriental, Dadiangas in General Santos City, South Cotabato, and Parang, Maguindanao. The main port is Davao City, the center of Administrative control (Progress Report Port of Davao, 2017).

The port in Davao City is a cornerstone of economic development, significantly influencing the region's growth trajectory through its pivotal role in trade facilitation and regional connectivity. This vital infrastructure serves as a gateway for diverse imports and exports, stimulating economic activities and fostering a dynamic business environment (Philippine Ports Authority, 2021). The port's strategic location and efficient operations contribute immensely to the Davao region's economic landscape. This accessibility satisfies local demand and fuels trade connections regionally and internationally, attracting investors and businesses seeking to capitalize on the region’s trade potential (Department of Transportation - Philippines, 2020).

In contrast, importation can also potentially exert adverse effects on the local economy, despite its role in meeting consumer demands and sustaining industries. The dependency on excessive imports might lead to a trade imbalance, where the region imports significantly more goods than it exports, negatively impacting the local economy (Davao City Chamber of Commerce and Industry, 2020). Furthermore, an overreliance on imports can impede the
growth of local industries and businesses in the Davao region. A lack of support for domestic production and manufacturing due to extensive reliance on imported goods could stifle the development of homegrown industries, limiting job creation and economic diversification (Department of Trade and Industry - Davao Region, 2021). This situation may also pose challenges for the agricultural sector. Despite being an exporter of certain agricultural products, over-reliance on imported goods can disrupt local farming economies by flooding the market with cheaper imported alternatives, potentially undercutting local producers (Business World, 2021).

1.2 Objective of the Study

This study examines the macro performance of the Davao region from 2017-2022 due to importation activities. Specifically, this aims to determine its impact on the following areas: prices and inflation rate, employment, unemployment, investments, and agricultural production (e.g., palay, corn, cattle, chicken, swine, and fish).

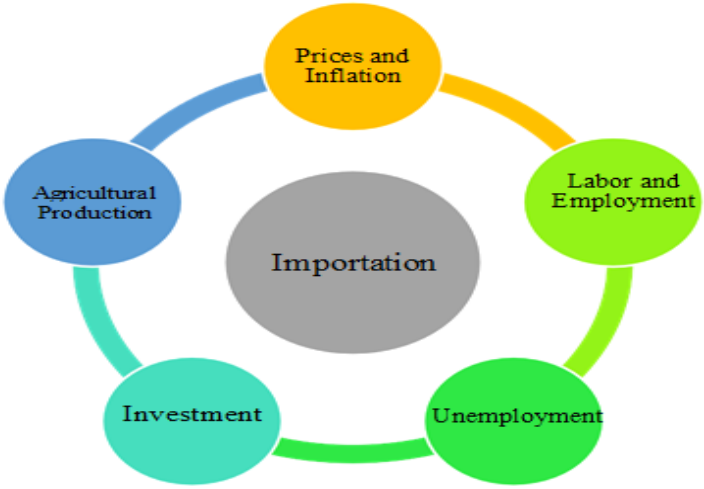
1.3 Hypothesis

The null hypothesis of the research problem is that importation has a correlation with prices, employment, unemployment, investments, and agricultural production in the Davao region. The study utilizes descriptive quantitative methods and documentary analysis to test the hypothesis.

The evaluation's findings will make the stakeholders—consumers, enterprises, government agencies, and importers—aware of its effects since they will know much more about how these activities affect society.

1.4 Conceptual Framework

The conceptual framework of this study lies around the notion that importation is the driver of economic variables. The independent variable of this research is the importation prices, while the dependent variables are prices and inflation rate, employment, unemployment, investments, and agricultural production.



2. Methods

2.1 Research Design and Data Collection

This study will employ a descriptive-quantitative research design wherein documents and data from pertinent government agencies are analyzed. The secondary data is a valuable and justified source of information due to its accessibility, cost-effectiveness, and wide-ranging scope. It encompasses data collected by others for various purposes, such as government reports, academic studies, and industry publications, making it readily available for analysis and research without incurring the time and expense of primary data collection. Its historical nature allows for longitudinal analysis, enabling researchers to observe trends and patterns over time, providing a comprehensive understanding of the subject matter.

2.2 Data Analytic Technique

Correlation and regression analysis are fundamental statistical tools commonly employed in assessing relationships between variables, making them suitable for determining the impact of importation on economic development in the Davao Region. Both correlation and regression analyses help in understanding the strength and direction of relationships between variables (Zou, 2003). In studying the impact of importation on economic development, these analyses can elucidate how importation levels correlate with economic factors such as inflation rates, employment, investments, and agricultural production in the Davao region. Furthermore, utilizing these statistical methods enables the determination of statistically significant relationships. Assessing significance helps in distinguishing incorrect correlations from genuine causal relationships, ensuring the reliability of findings and conclusions drawn from the analysis.

3. Results, Analysis and Discussion

3.1 Gross Regional Domestic Product (GRDP)

Fig. 1 shows the inevitable increase of Gross Regional Domestic Product (GRDP) in the region through the last decade, resulting from various interconnected factors that shape economic growth and development. Urbanization itself serves as a catalyst for economic expansion due to the concentration of economic activities, infrastructure development, and a larger labor pool (Turok et al., 2013). One significant driver of GRDP growth is the agglomeration effect—an urban setting fosters the clustering of industries, leading to increased productivity and efficiency through knowledge spillovers, specialized labor markets, and economies of scale (Thisse, et. al 2018). Moreover, urban centers often attract domestic and foreign investments drawn by diverse market opportunities and access to resources, contributing to increased economic output and higher GRDP figures. However, there was a dip in the year 2020 as the COVID-19 crisis disrupted economic activities across various sectors, causing a significant downturn in economic output. Several interconnected factors led to the decrease in GRDP during the pandemic. One primary factor was the implementation of strict lockdowns and social distancing measures, which led to the closure of businesses, disrupted supply chains, and reduced consumer demand (Jena et al., 2020).

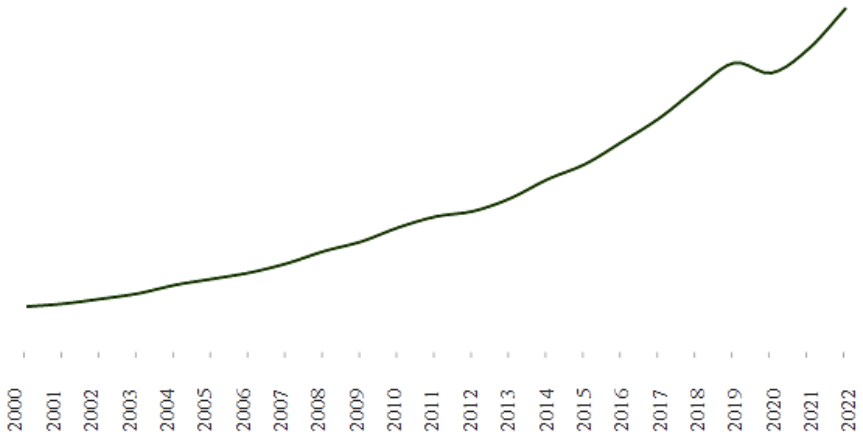


Fig. 1 Gross Regional Domestic Product (GRDP), Region XI. ***Source:*** *Philippine Statistics Authority*

3.2 Exportation and Importation in the Region

The fluctuating trend of importation in Davao City, as in Fig. 2, reflects a dynamic interplay of various factors that impact global trade, local market demands, economic conditions, and policy changes. Domestic and international economic conditions play a significant role in importation trends. Fluctuations in exchange rates, global economic crises, and demand and supply dynamics shifts impact the cost and availability of imported goods (Escaith et al., 2010). Changes in consumer preferences, technological advancements, and shifts in global market trends influence the types and quantities of goods imported into the Davao region.

Government policies, trade agreements, and regulations also contribute to importation fluctuations (Brooks et al., 2012). Changes in tariff rates, trade agreements, and regulatory policies influence the ease and cost of importing goods.

Alterations in government priorities, protectionist measures, or initiatives aimed at promoting domestic industries can impact the volume and nature of imported goods in the Davao region's market.

Moreover, shifts in local production capabilities can influence fluctuations in importation trends. Changes in the capacity or efficiency of local industries to produce certain goods might lead to variations in import volumes. For instance, an increase in local production might reduce the need for specific imports, while a decrease in local production might result in higher imports to meet consumer demands (Milberg, 2008).

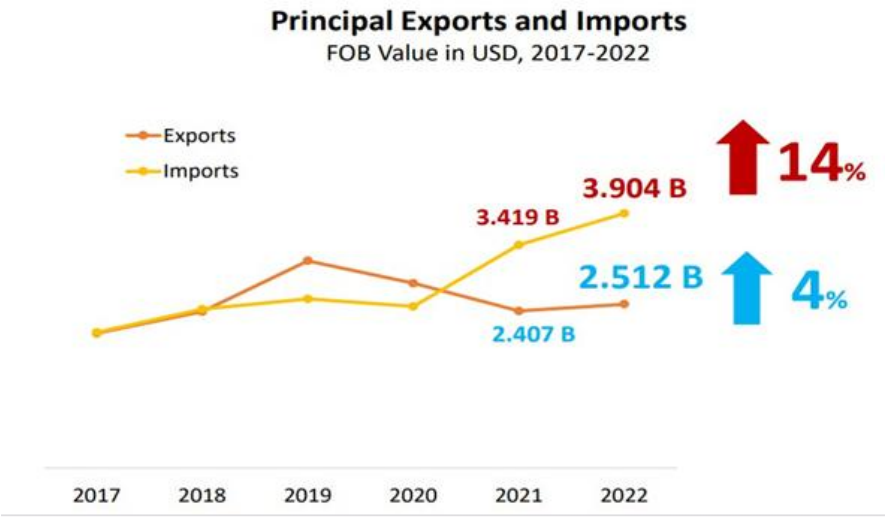


Fig. 2 Principal Exports and Imports, Region XI. ***Source:*** *Port of Davao*

3.3 Prices and Inflation

Fig. 3 shows the rise and fall of prices and inflation rate in the region. The fluctuating inflation from 2017 to 2022 can be attributed to various factors impacting the local economy and global market dynamics. Understanding these fluctuations requires considering multiple contributing elements, such as supply chain disruptions, changes in global commodity prices, government policies, and local market conditions (Christopher et al., 2017).

During this period, supply chain disruptions caused by natural disasters, global health crises, or geopolitical tensions such as the war in Russia v. Ukraine could have influenced the prices of goods and services. For instance, the COVID-19 pandemic in 2020 led to disruptions in global supply chains, affecting the availability and cost of imported goods and subsequently impacting local prices (Barua et al., 2020). Moreover, changes in global commodity prices, especially in essential goods like fuel and food, often directly impact local inflation rates. Fluctuations in oil prices or disruptions in agricultural production can significantly affect prices in the region, as it relies on imports for certain commodities.

Government policies and local market conditions also play a pivotal role in inflation fluctuations. Monetary policies, such as changes in interest rates or currency exchange rates implemented by the central bank, can influence inflation rates. Additionally, fiscal policies and regulations, including taxes or subsidies, can directly or indirectly affect prices. Local market conditions, including demand and supply dynamics, consumer behavior, and business competitiveness, can also contribute to inflation fluctuations (Ho et al., 2003).

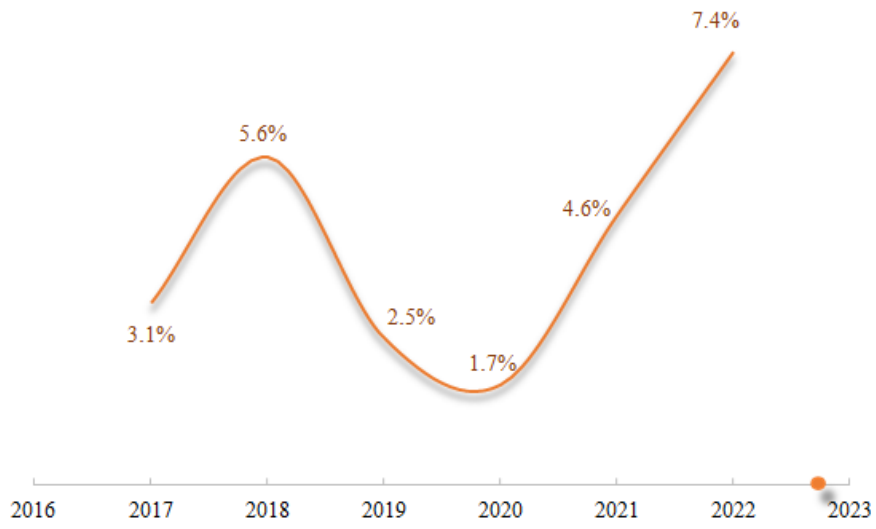


Fig. 3 Prices and Inflation, Region XI. ***Source:*** *Annual Regional Economic Situationer, NEDA*

3.4 Labor and Employment

Fig. 4 shows the column graph of employed and unemployed in the Davao region. Fluctuations in labor and employment in recent years can be attributed to various economic, social, and global factors impacting the local job market. Understanding these fluctuations involves considering multiple elements, such as changes in the business landscape, global economic trends, government policies, and social dynamics.

Economic factors, including shifts in industry demands and technological advancements, significantly influence labor and employment. Industries experiencing growth or decline, technological disruptions leading to automation, and changes in consumer preferences can directly affect job availability and labor requirements (Egaña del Sol et al., 2021). For instance, the COVID-19 pandemic in 2020 led to global disruptions across industries, resulting in layoffs, temporary closures, and changes in work arrangements, affecting employment rates in the region.

Government policies and initiatives also shape labor and employment dynamics. Programs promoting job creation, investment in infrastructure projects, and business incentives can positively impact employment rates. Conversely, changes in labor laws, regulations, or policies related to hiring practices and wages can influence job availability and labor force participation (Jarmolowicz, et al., 2011).

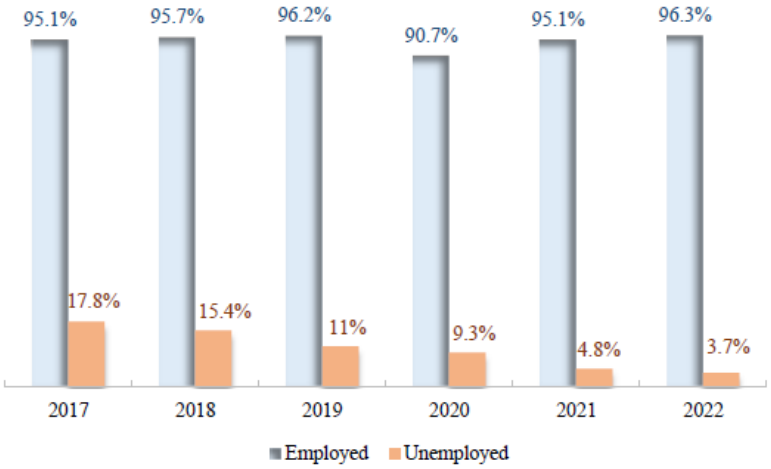


Fig. 4 Labor and Employment, Region XI. ***Source:*** *Annual Regional Economic Situationer, NEDA*

3.5 Investments

The surge in investments in Davao City in 2018, as in Fig. 5, can be attributed to several key factors that collectively created a favorable environment for business and economic growth. The biggest investment recorded was the PhP13.2 billion bulk water supply project by the APO Agua Infrastructura Inc. in Tamugan District, Davao City. Other major investments included a PhP2 billion flour production facility by the Universal Robina Corporation in Davao City, and a PhP314.3 million investment in a condominium project (Mesatierra Garden Residences) by Cebu Landmaster's Corporation in Davao City (Annual Regional Economic Situationer NEDA, 2018).

Investments were also recorded for oil storage and transportation (Php287.4M, Seaoil), IT-BPM (PhP121.2M, Flatworld Solutions, Inc.), banana production (PhP14M, See's International Food Manufacturing Corporation), and low-cost housing (PhP179.7M, Urbaneast Development, Inc.), among others. Firstly, the city's proactive stance in promoting itself as an investment destination through various initiatives, such as investment forums, trade fairs, and promotional campaigns, played a pivotal role. Davao City's robust infrastructure development plans, including transportation networks and utilities, attracted investors seeking regions with sound infrastructure to support their business operations (Annual Regional Economic Situationer NEDA, 2018).

The regional administration's political stability and business-friendly policies were crucial in instilling confidence among investors. The administration's commitment to creating an enabling environment for businesses, streamlining bureaucratic processes, and providing incentives for investors encouraged both domestic and foreign companies to consider Davao City as an ideal investment location.

On the other hand, the decline in investments from 2019 to the present can be attributed to various factors that affected investor confidence and local and global economic conditions. Several key elements likely contributed to this decline. One factor could be the global economic slowdown and uncertainties caused by geopolitical tensions, trade conflicts, and the COVID- 19 pandemic (Grinin et al., 2020). These events disrupted global markets, leading investors to adopt a cautious approach and reevaluate their investment strategies. The uncertainty surrounding these factors often prompts investors to hold back on making substantial investments or reevaluate existing ones, leading to a decline in capital inflow into the region.

Additionally, while Region 11 previously saw a surge in investments due to its strategic advantages, such as infrastructure development and business-friendly policies, the saturation or completion of certain projects might have led to a temporary slowdown in investment activities. After the initial surge, projects may have reached the completion stages, resulting in a natural decline in the influx of new investments until new opportunities arise (Fishman et al., 2016).

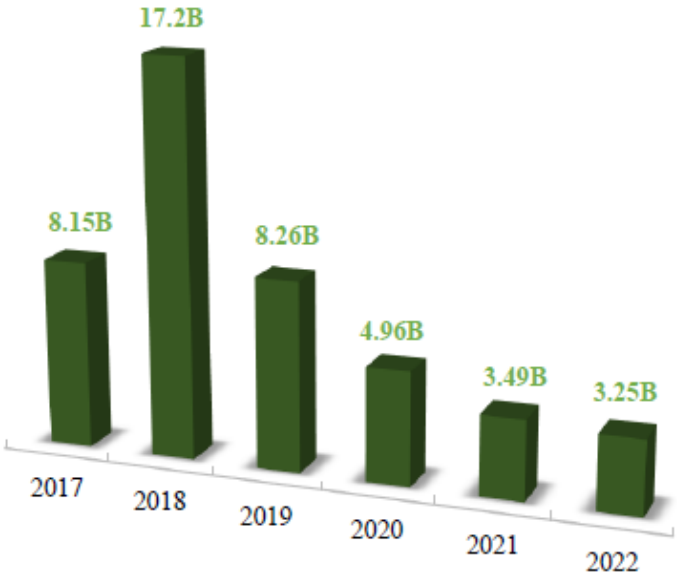


Fig. 5 Investments, Region XI. ***Source:*** *Annual Regional Economic Situationer, NEDA*

3.6 Agriculture Sector

Fig. 6 provides the data representing the production yields (in million metric tons/hectare) of palay (rice) and corn in Davao over the years from 2017 to 2022. The consistent figures from 2020 to 2022 suggest that there has not been a significant change in the recorded yields for both palay and corn during this period.

Looking at the earlier years, there is a slight fluctuation in the yields of both palay and corn. In 2017, Palay production was recorded at 0.43 million metric tons/hectare palay and corn at 0.22 million metric tons/hectare. Subsequently, there was a gradual increase in both essential crop's production yields in 2018, reaching 0.49 and 0.26 million metric tons/hectare, respectively. However, by 2019, there was a slight decline in palay yield to 0.45 million metric tons/hectare, while corn remained stable at 0.27 million metric tons/hectare.

The consistent figures from 2020 to 2022 indicate a possible stabilization or plateau in the production yields of both palay and corn in Region XI. This stabilization might suggest that the agricultural sector achieved a level of consistency or reached a production peak during these years.

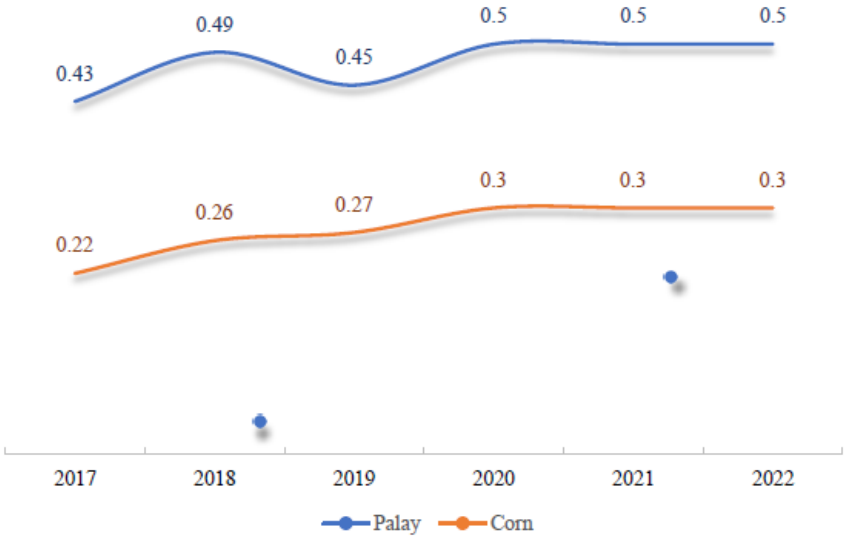


Fig. 6 Palay and Corn Production, Region XI. ***Source:*** *Annual Regional Economic Situationer, NEDA*

Meanwhile, Fig. 7 shows the inventory or production quantities (in million heads or metric tons) of livestock such as cattle, chicken, swine, and fish over the years from 2017 to 2022. Looking at the trends for cattle production, there was a slight fluctuation in cattle inventory from 2017 to 2022. The numbers started at 13.31 million heads in 2017, dipped to 11.19 million in 2020, then increased to 12.5 million by 2022; chicken inventory showed a consistent increase from 2017 to 2019, rising from 71.76 million heads to 81.09 million heads. However, there was a decline in subsequent years, dropping to 70.2 million heads by 2021, then recovering slightly to 76.7 million heads in 2022; swine inventory exhibited a decline from 2017 to 2021, falling from 151.6 million heads to 136.3 million heads. There was a slight increase in 2022, reaching 138.6 million heads; fish production remained relatively stable across the years, hovering around 0.5 to 0.58 million metric tons.

Several factors could contribute to these fluctuations, including disease outbreaks affecting specific livestock, changes in demand and consumption patterns, market forces affecting production, and even environmental factors like weather conditions impacting fishery outputs (Herrero et al., 2023).

For instance, the fluctuations in chicken and swine inventories might be influenced by disease outbreaks such as avian flu or African swine fever during specific years, reducing inventories. Economic factors, consumer preferences, or shifts in production strategies could also contribute to these changes.

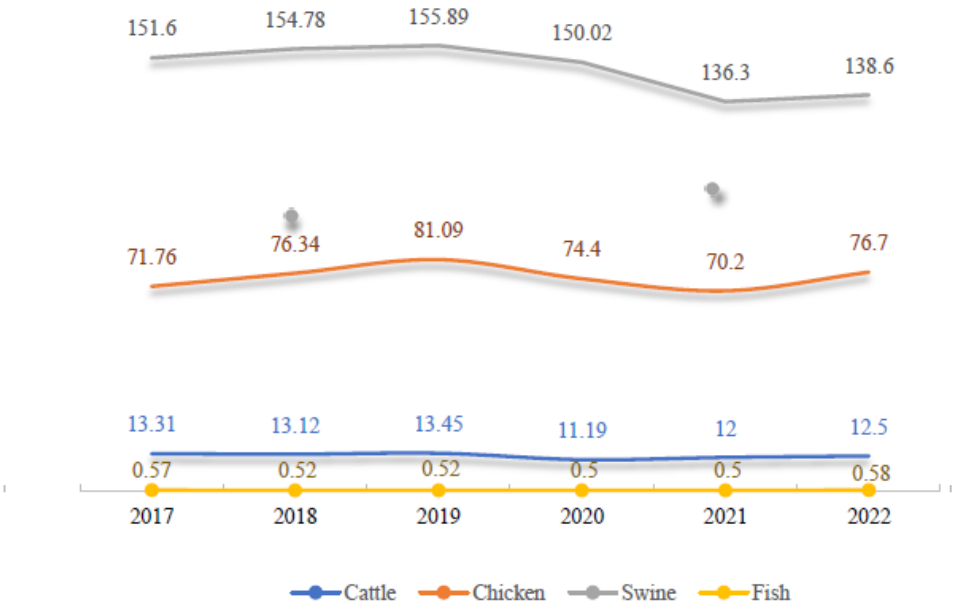


Fig. 7 Fish and Livestock Production. ***Source:*** *Annual Regional Economic Situationer, NEDA*

4. Correlation and Regression Analysis of Importation to Other Macroeconomic Factors

4.1 Importation v. Prices and Inflation

Table 1 shows the statistically significant relationship between importation and prices and inflation; the importation variable does appear to have a substantial impact on explaining the variation in prices and inflation when considered independently within this model. Thus, a significant increase in importation prices equates to a significant increase in prices and inflation.

A significant surge in importation prices can lead to a substantial upturn in overall prices and inflation due to several interconnected economic mechanisms. Elevated import costs inherently drive up the price of incoming goods, directly influencing the cost of production and supply chain expenses. These heightened production costs are often passed on to consumers through increased retail prices, thus amplifying the general price level. Moreover, when imported goods constitute a significant portion of the consumption basket, especially essential commodities or raw materials crucial for local production, a surge in their prices significantly contributes to the overall rise in prices and inflation (Islam, 2013). Additionally, if it accompanies higher importation prices, currency depreciation can exacerbate the situation by further boosting the cost of imports and subsequently driving up consumer prices, ultimately amplifying inflationary pressures within the economy.

Table 1 Regression Analysis between Importation and Prices and Inflation

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.031	4.374	.343	.236	.825
	Importation	1.013	1.389		.729	.0506

a. Dependent Variable: Prices_Inflation

4.2 Importation v. Employment

Table 2 presents the regression model, which deems that the relationship between importation and employment is not statistically significant. Therefore, based on these coefficients and their associated statistics, there is no sufficient evidence to conclude that importation has a significant linear relationship with the number of employed individuals (dependent variable) in this model. A substantial rise in importation prices may not necessarily translate to a significant increase in employment due to several mitigating factors within the economic ecosystem. Heightened import costs can lead to increased expenses for businesses reliant on imported materials or goods, potentially squeezing profit margins. In response, companies might implement cost-cutting measures, which could include workforce reductions, automation, or seeking more cost-efficient production methods (Smorodinskaya, et al., 2021).

Moreover, if the increased import prices lead to a rise in overall production costs, businesses might face challenges in expanding operations or creating new job opportunities, as the added financial strain could deter investments in labor-intensive ventures or hiring initiatives. Additionally, consumer demand might not align with increased import costs, potentially limiting business growth and expansion, thus impacting employment prospects.

Table 2 Regression Analysis between Importation and Employment

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	96.560	4.499	-.191	21.462	.000
	Importation	-.555	1.429		-.389	.717

a. Dependent Variable: Employed

4.3 Importation v. Unemployed

Table 3 presents the regression model, indicating a statistically significant relationship between importation and unemployment. The negative coefficient for "importation" suggests that an increase in importation is associated with a decrease in the number of unemployed individuals (dependent variable). It signifies a strong negative relationship between importation and unemployment. Therefore, based on these coefficients and their associated statistics, evidence suggests that higher levels of importation are significantly linked to a reduction in unemployment in this model.

Table 3 Regression Analysis between Importation and Unemployment

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	32.327	4.901	-.917	6.595	.003
	Importation	-7.141	1.556		-4.588	.010

a. Dependent Variable: Unemployed

4.5 Importation v. Investments

The regression model in Table 4 presents the non- significant relationship between importation and investments. A notable increase in importation prices may not be correlated with a subsequent rise in investments due to a variety of economic considerations. Elevated importation costs can strain businesses financially, leading to diminished profit margins and increased production expenses (Winters et al., 2004). In response to these challenges, companies may adopt a conservative financial approach, prioritizing cost containment over expansive investment initiatives. Additionally, the uncertainty introduced by heightened importation prices and potential fluctuations in global markets can create an apprehensive business environment, prompting organizations to exercise caution in committing to long-term investments. The adverse impact on profitability and a reluctance to take on additional financial risks may result in businesses opting to defer or scale back investment activities despite the surge in importation prices. Moreover, market demand dynamics, resource allocation strategies, and the influence of government policies can further contribute to the observed lack of correlation between importation price increases and increased investments in certain economic contexts (Rodgers, et al., 1997).

Table 4 Regression Analysis between Importation and Investments

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	19478165604.580	9624773436.521	-.535	2.024	.113
	Importation	- 3872175141.267	3056162314.175		-1.267	.274

a. Dependent Variable: Investments

4.6 Importation v. Palay and Corn Production

Tables 5 and 6 present the regression model with "Palay" and “Corn” as the dependent variables and "Importation" as the independent variable, respectively. The positive coefficient for "Importation" suggests that an increase in importation is associated with an increase in the production of palay and corn.

Therefore, based on these coefficients and their associated statistics, evidence suggests a meaningful and positive correlation between the importation and the production of these essential crops. A significant increase in importation prices correlating with heightened crop production can be attributed to various intertwined economic factors. Elevated importation costs often prompt agricultural sectors to reassess their production strategies, particularly those reliant on imported inputs or goods for crop cultivation. As importation prices surge, it becomes economically favorable for nations

to bolster domestic crop production, aiming to reduce dependency on costly imports and enhance self-sufficiency. This shift may trigger increased investments in local agriculture, fostering advancements in technology, infrastructure, and farming practices to augment yields. Additionally, importation price hikes can impact market dynamics, incentivizing governments and farmers to prioritize rice cultivation, given its significance as a staple food, ensuring food security, and mitigating potential import-related expenses (Kasem et. al., 2012).

Table 5 Regression Analysis between Importation and Palay Production

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.368	.036	.847	10.333	.000
	Importation	.036	.011		3.184	.033

a. Dependent Variable: Palay

Table 6 Regression Analysis between Importation and Corn Production

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.141	.015	.976	9.267	.001
	Importation	.043	.005		8.992	.001

a. Dependent Variable: Corn

4.7 Importation v. Livestock and Fish Production

Tables 7, 8, 9, and 10 show the regression models with "Cattle, Chicken, Swine and Fish Production" as the dependent variable, respectively, and "Importation" as the independent variable, suggesting non- significance. The non-significant 't' value indicates that there is insufficient statistical evidence within this model to confirm a substantial relationship between importation and their production. A significant increase in importation prices not being correlated with an increase in livestock and fish production could be attributed to various economic factors influencing the industries. Heightened importation costs often impact the overall cost structure for livestock and fish farming, influencing feed, equipment, and veterinary supplies expenses. When importation prices surge, it might lead to increased operational costs, potentially constraining resources available for expanding production (Chae et al., 2019).

Moreover, market uncertainties arising from elevated importation prices can instigate a cautious approach among farm and fish producers, prompting them to be more conservative in their expansion plans due to financial risk perceptions. Thus, increased importation prices might not always align with proportional rises in demand for its products, affecting the overall incentive for the producers to ramp up production significantly.

Table 7 Regression Analysis between Importation and Cattle Production

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.064	1.445	-.658	10.424	.000
	Importation	-.802	.459		-1.747	.156

a. Dependent Variable: Cattle

Table 8 Regression Analysis between Importation and Chicken Production

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	72.353	8.383	.164	8.630	.001
	Importation	.886	2.662		.333	.756

a. Dependent Variable: Chicken

Table 9 Regression Analysis between Importation and Chicken Production

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	169.334	14.634	-.600	11.571	.000
	Importation	-6.971	4.647		-1.500	.208

a. Dependent Variable: Swine

Table 10 Regression Analysis between Importation and Chicken Production

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.564	.074		7.592	.002
	Importation	-.011	.024	-.220	-.451	.675

a. Dependent Variable: Fish

5. Conclusion

In summary, the relationship between importation, prices, and inflation appears statistically significant, indicating that heightened importation prices often lead to increased overall prices and inflation. However, this relationship is not observed in the context of employment, as a surge in importation prices does not necessarily equate to a significant rise in employment due to various factors like increased business expenses and consumer demand misalignment. On the contrary, importation seems correlated with a decrease in unemployment, suggesting higher import levels might be linked to reduced unemployment rates. Importation prices also show no significant correlation with increased investments, potentially due to financial strain on businesses and market uncertainties. However, increased importation is positively associated with palay and corn production, implying that rising import costs can stimulate local agricultural investments and strategies, particularly in essential crops. Nevertheless, in livestock and fish production, importation price surges do not appear correlated with increased output, possibly due to cost dynamics, market uncertainties, and demand-supply imbalances, highlighting the complexity of these industries' responsiveness to importation cost escalations in the observed economic context.

6. Recommendation

Based on the analyses of this study, the following are the recommendations:

(a) Price Stability Measures: Policymakers might consider strategies to manage importation costs to prevent substantial impacts on overall prices and inflation. This could involve trade policies, currency management, or local production incentives to mitigate the inflationary effects.

(b) Employment Policies: Despite importation influencing unemployment positively, strategies to translate import-related benefits into increased employment need consideration. Addressing business expenses and aligning consumer demand could be crucial in utilizing importation for job creation.

(c) Agricultural Investment Focus: Given importation's positive associations with certain agricultural productions, policymakers might consider targeted investment in essential crops. This could involve subsidies, technology transfer, or market support to bolster local agricultural sectors.

(d) Dynamics in Livestock and Fish Production: Understanding the intricate dynamics in these sectors, such as cost structures and market uncertainties, is pivotal. Policymakers and businesses may need nuanced strategies to address these complexities, possibly through risk management or sector-specific support programs.

(e) Optimizing Import-Related Strategies: Businesses could benefit from insights on importation's impact. They might explore diverse approaches like cost-efficient sourcing, diversification, or market-oriented strategies to leverage importation trends for sustainable growth.

Overall, these foresights suggest the need for nuanced and tailored strategies by policymakers, businesses, and stakeholders to optimize import-related actions in ways that positively impact economic factors in the Davao region, considering the varied impacts across sectors.

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