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## Research Article

### Economic Downturn, Economic Recovery, Economic Indicators, and Investment Opportunities

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#### ABSTRACT

Economic downturns represent an inevitable challenge that nations and businesses must confront, presenting considerable risks. As a result, it becomes imperative for them to formulate strategies to secure their survival. The world has recently experienced an economic downturn due to a pandemic. COVID-19 has caused a significant economic crisis, leading to job losses and disruptions across various sectors worldwide, including the Philippines. The study utilizes economic indicators to determine patterns, meanings, and subsequent opportunities. Specifically, the study sought to identify relevant economic indicators, find patterns and meaning within each indicator and among indicators, and determine implications from findings. Content analysis was used in the study. It is a qualitative research method to identify and interpret themes, meanings, and patterns. The materials used include eleven Philippine economic indicators, namely, the Philippine Stock Exchange Composite Index, Balance of Trade, Core Inflation Rate, Consumer Spending, Tourist Arrivals, Consumer Confidence, Consumer Credit, Gold Reserves, Foreign Exchange Reserves, and Money Supply M2, and Interest Rate. In conclusion, the study determined that the collective surge in economic activities is positively related to the rise of inflation; increased interest rates potentially mitigated the rise in inflation, and other factors negated the trade deficits and gold reserve fluctuations. The Philippine economy is on the path to recovery, and the unique interrelations of economic indicators imply a more stable environment in the Philippine economy. This signals a green light for investors and an opportunity for policymakers to fine-tune existing initiatives to sustain economic recovery.

**Keywords:** *Economic Downturns, Economic Indicators, Investment Opportunities, Stock Exchange Composite Index, Balance of Trade, Core Inflation Rate, Consumer Spending, Tourist Arrivals, Consumer Confidence, Consumer Credit, Gold Reserves, Foreign Exchange Reserves, Money Supply M2, Interest Rate, Philippines*

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## Introduction

Economic downturns represent an inevitable challenge that businesses must confront, presenting considerable risks. As a result, it becomes imperative for them to formulate strategies to secure their survival. A study by Kim and Upneja (2021) suggests a strategy that focuses on forewarning business establishments by employing a business failure prediction model during economic recessions. Although the study focused on restaurants, other businesses may adopt its approach. In addition, a study on ambidexterity and public policy highlighted policymakers' need to effectively align their demand-pull strategies with firms' internal capacities to implement policies (Doblinger et al., 2022). The preceding measures may equip businesses to survive an economic crisis. However, economic crises are caused by several factors and could have diverging effects, and subsequent solutions could remain both challenging and uncertain. A study concerning an investigation of underlying causes, effects, and solutions of a dollar crisis that revealed an intermingling of several causes and multi-faceted effects supports this assertion (Amit & Kafy, 2024).

From a worker standpoint, a study on job-loss prevention through education during an economic downturn revealed evidence that education-enhanced skills reduce the likelihood of workers losing their jobs during economic downturns (Beuermann et al., 2024). Additionally, a study on economic resilience alongside economic sectors revealed that resilience-building measures should include organizational, sectoral, and country levels while recognizing the alignment of the mentioned sectors (Jayasinghe et al., 2022). The preceding strategies reveal some ways of surviving an economic downturn from a personal and communal perspective, but communities also depend on businesses. A study on the dimensions of rural resilience revealed that businesses are essential to supporting rural resilience, and the resilience of rural communities supports the resilience of businesses (McIntyre & Roy, 2023).

Speaking of resilience to an economic downturn, the world economy has had one of its most significant tests in the recent pandemic. This pandemic was considered the most

significant threat since World War II and the greatest global health crisis of the century. It is officially named Coronavirus Disease 2019 (COVID-19) by the World Health Organization (WHO). The global economy has undergone significant changes amid the unprecedented global crisis triggered by the COVID-19 pandemic. In response to the escalating crisis, countries globally have implemented varying degrees of lockdown measures to slow the spread of the disease. These lockdowns have led to a substantial slowdown in global economic activities, causing many companies to scale back operations or shut down entirely, increasing job loss rates. The impact extends across diverse sectors, affecting not only traditional industries but also service providers, manufacturers, agriculture, the food industry, education, sports, and the entertainment sector, all witnessing a notable decline (Naseer et al., 2023). The widespread impact of COVID-19 emphasizes the deep interconnectedness of nations in the context of globalization. Although the virus originated in China, it quickly surpassed national borders, facilitated by open borders and unrestricted movement. Developing countries with less advanced health systems were especially vulnerable (Andronova et al., 2020); among these countries is the Philippines.

Businesses and investors play a crucial role in the global economic landscape, and understanding the impacts of the pandemic is significant for them. This comprehension enables businesses to navigate the complex challenges presented by the pandemic and make well-informed decisions. From adjusting operational strategies to anticipating future risks and disruptions, a thorough understanding of the pandemic's implications empowers businesses to adapt, innovate, and ensure resilience in the face of ongoing uncertainties. This is akin to the key points shown in a study on outcomes of firm resilience in wild card crises, which highlighted the development of economic resilience capabilities and financial liquidity as fundamental for survival (Safón et al., 2024).

Investors, too, benefit significantly from studying the global economic impacts of the pandemic. This knowledge aids in strategically positioning investment portfolios, identifying

emerging trends, and discerning sectors that may experience growth or face challenges. Informed investment decisions contribute to an investor's or a fund's financial success and the overall stability and adaptability of the global economic system. This knowledge goes hand in hand with an investor's financial flexibility. A study examining the mitigation of stock price crash risk by leveraging financial flexibility demonstrated a noteworthy influence in reducing the likelihood of stock price crashes (Nguyen & Dang, 2023). Information coupled with strategy forms a combination.

Research has uncovered the adverse impact of the pandemic on financial markets, with reduced stock returns and increased investment risk. While governments' swift responses have positively affected stock returns, they have also contributed to increased market volatility. Notably, a study suggests that more open economies face more severe disruptions, revealing a heightened susceptibility in such economic systems. However, countries with elevated wealth levels effectively mitigate COVID-19's negative impacts on the stock market by promptly implementing relevant measures (Huynh et al., 2021). The public sector, including policymakers and governmental bodies, can draw valuable lessons from this study. The insights gained can inform the creation and amendment of laws and regulations to better respond to similar crises in the future.

Understanding the economic repercussions of the pandemic allows for the development of targeted policies to support the most financially vulnerable sectors and members of society. Policymakers can leverage this knowledge to refine and optimize the actions taken by central banks, ensuring a more effective and strategic approach to economic stability and recovery. A related study that focused on the economic and social consequences of the COVID-19 crisis, after considering the conditions in a region, emphasized the need for adaptive capacities to survive similar crises (Bourdin et al., 2023). Furthermore, research underscores that low-income, developing countries, emerging markets, and middle-income economies are outpacing advanced economies in rebounding and growing faster. Remarkably, despite their lower ranking on the world economic

hierarchy, these economies have surpassed the overall global economic performance. They are leading in accelerated recovery and swift growth, particularly in trade volume and the pace of economic recovery (Chirwa, 2023).

In alignment with the recovery theme, another study supports that as the epidemic stabilizes, stock indices in China and the United States experience a rapid resurgence. Advancements in the Internet technology sector predominantly propel this resurgence. In contrast, the United Kingdom, heavily reliant on the financial industry, exhibits a slower recovery (Chen, 2023). Collectively, these studies present a comprehensive narrative of global economic shifts amid the pandemic, emphasizing the resilience of some economies and the varied pace of recovery.

Economic indicators could reveal significant insights in determining the pace of economic recovery. Following the same line of thinking, a study centered on a railway passenger transport company emphasizes the necessity of ongoing monitoring of critical economic indicators and assessing their influence on business operations (Dömény et al., 2021). Furthermore, a study investigating the impact of political orientation on economic indicators highlighted a robust correlation between two specific metrics, demonstrating the relationship between gross domestic product (GDP) growth and the implicit tax rate on labor (Krajňák et al., 2022). Similarly, a study on regional resilience alongside sustainable livelihoods showcased the relevance of economic indicators as tools for assessment (Zhong et al., 2024). Moreover, a study examining the influence of economic and geographical indicators on the dietary environmental footprint highlighted the significance of considering both economic and geographical factors when analyzing dietary environmental impact (Su et al., 2023). All the preceding studies show the indispensability of economic indicators as tools for economic analysis.

The study focuses on the Philippine economy. It uses economic indicators covering the period from the latter part of 2019 to the latter part of 2023. This period included the onset of the COVID-19 pandemic and post-COVID, which comprised subsequent economic

stabilization and recovery. Eleven economic indicators were used, which included the Philippine Stock Exchange Composite Index, Balance of Trade, Core Inflation Rate, Consumer Spending, Tourist Arrivals, Consumer Confidence, Consumer Credit, Gold Reserves, Foreign Exchange Reserves, Interest Rate, and Money Supply M2. Through these indicators, analyses were made to determine patterns and meanings to gain insights on business opportunities in a period beset with a global economic crisis and subsequent recovery.

### **Research Questions**

The content analyses concentrated on economic indicators aimed at determining the state of the Philippine economy from late 2020 to late 2023, spanning the period encompassing both the pandemic and post-pandemic phases, finding patterns, meanings, and subsequent opportunities. Specifically, the study aimed to address the following questions.

1. What Philippine economic indicators were utilized as bases for analyses in the study?
2. What patterns and meanings were derived from each Philippine economic indicator?
3. What were the patterns and meanings derived from the interrelations among the Philippine economic indicators used in the study?
4. What were the implications of the findings derived from the study?

### **Methodology**

Content analysis, a qualitative research method aimed at identifying and interpreting themes, meanings, and patterns in a material, was used in the study. The content was sourced from Trading Economics, a website that furnishes users with precise data on several countries, encompassing historical records of economic indicators, exchange rates, stock market indexes, government bond yields, and commodity prices. Furthermore, materials were drawn from reputable institutions, including the Philippine Statistics Authority, the National Statistical Coordination Board (NSCB) in the Philippines, Bangko Sentral ng Pilipinas, and the World Gold Council. Moreover, the study used different Philippine Economic Indicators, including the Philippine Stock Exchange

Composite Index, Balance of Trade, Core Inflation Rate, Consumer Spending, Tourist Arrivals, Consumer Confidence, Consumer Credit, Gold Reserves, Foreign Exchange Reserves, and Money Supply M2, and Interest Rate. The study examined the trends of the economic indicators by analyzing the historical data and exploring how these indicators interacted with each other. The Philippine Stock Exchange Composite Index assisted in identifying the market movements. In addition, the study thoroughly reviews relevant literature and existing studies to contextualize the findings and strengthen the theoretical framework that underlies the analysis. This approach ensures a comprehensive understanding of the Philippine economic landscape from various perspectives.

## **Result and Discussion**

### ***Philippine Economic Indicators***

An analysis of the Philippines' economic landscape from 2020 to 2023 utilized eleven key economic indicators. The objective was to uncover interconnections among these indicators, thereby revealing significant patterns and potential avenues for growth and development. The subsequent paragraphs offer concise descriptions of these economic indicators.

*Philippine Stock Exchange Composite Index (PSEi).* The Philippine Stock Exchange Composite Index (PSEi) is a primary indicator that tracks the performance of representative companies listed on The Philippine Stock Exchange (Trading Economics, n.d.-a).

*Philippines Balance of Trade.* The balance of trade (BOT) refers to the difference between the value of a country's imports and exports for a specific period, a crucial component of the country's balance of payments (BOP). When a country imports more than it exports, it experiences a trade deficit, while a country that exports more than it imports has a trade surplus (Kenton, 2023).

*Philippines Core Inflation Rate.* Core inflation refers to the change in the prices of goods and services but excludes specific volatile sectors. These sectors are excluded because their prices tend to fluctuate significantly, which could lead to an inaccurate measure of inflation (Kenton, 2022). In the Philippines, the Core Inflation Rate monitors changes in consumer

prices for a specific set of goods, excluding certain volatile items (Trading Economics, n.d.-c).

**Philippines Consumer Spending.** Consumer spending is all spending on goods and services for personal and household use. It is an essential economic driving force and a crucial concept in economic theory. Investors, businesses, and policymakers regularly follow published statistics and reports on consumer spending to forecast and plan investment and policy decisions (The Investopedia Team, 2023).

**Philippines Tourist Arrivals** refers to the number of visitors who travel to a foreign country and leave their usual environment (Glossary | DataBank, n.d.).

**Philippines Consumer Confidence.** The Consumer Expectations Survey in the Philippines covers more than 5,000 consumers (Trading Economics, n.d.-f). It is an economic indicator that measures consumers' optimism about their financial situation and the overall state of the country's economy (Britannica Money, 2024).

**Philippines Consumer Credit.** Consumer credit typically involves loans provided by commercial banks or other financial institutions to individuals for their daily expenses, acquisition of household appliances, furniture, electronic products, and even personal or children's development, among other daily consumption needs (Li & Zhu, 2020).

**Philippines Gold Reserves.** Gold reserves in the Philippines refer to the number of gold assets held or controlled by the country's central bank (Trading Economics, n.d.-h).

**Philippines Foreign Exchange Reserves.** Foreign Exchange Reserves in the Philippines represent the foreign assets held or controlled by the country's central bank, consisting of gold, specific currencies, special drawing rights, and marketable securities denominated in foreign currencies such as treasury bills, government bonds, corporate bonds, equities, and foreign currency loans (Trading Economics, n.d.-i).

**Philippines Money Supply M2.** Money Supply M2 in the Philippines includes M1, which comprises the most liquid forms of money that can be readily used for transactions and short-term time deposits in banks (Trading Economics, n.d.-j). In simpler terms, money supply refers to the total amount of currency and other liquid assets in an economy at a particular time (The Investopedia Team, 2024).

**Philippines Interest Rate.** Interest rate decisions in the Philippines are made by the Monetary Board of the Bangko Sentral ng Pilipinas (BSP) (Trading Economics, n.d.-k). The interest rate is the percentage of the principal amount a lender charges a borrower for a loan (Banton, 2024).

### Philippine Stock Market (PSEi)

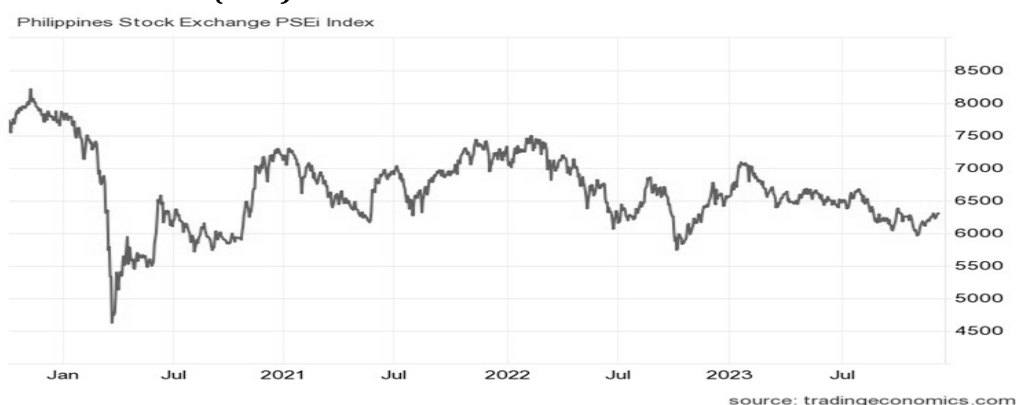


Figure 1. Chart of the Philippine Stock Market (PSEi)

On February 6, 2020, the Philippine Stock Exchange Composite Index (PSEi) reached a high of 7,506.21. However, it experienced a significant downturn and plunged to 4,623.42 on

March 19, 2020, a 38 percent decrease. Although it has struggled to sustain levels around 7,000 from 2021 to 2023, it currently hovers above the 6,000 level. The PSEi is on a path of

recovery but has yet to surpass its pre-2020 levels and is currently on a sideways trend.

A study conducted across 28 European Union countries reaffirms the well-established empirical fact that a positive correlation exists between stock market development and economic growth. According to the research, stock markets typically thrive in economies characterized by substantial size and high levels of capital accumulation. In addition, the study recommends encouraging foreign portfolio investments to enhance the positive correlation between savings and investment, increasing transaction volume on stock markets (Oprea & Stoica, 2018). Furthermore, a study on transportation policies and regulations revealed that political programs affect stock market dynam-

ics (Zefirov & Shadrina, 2022). Aside from political programs, a country's stock market dynamics are also affected by the fluctuation of its primary product. This was shown in a study on the impact of oil and global markets on Saudi stock market predictability (Abdou et al., 2024). In the cited study, the primary product was oil. Moreover, expanding on the influence of the stock market on economic growth, papers examining Sri Lanka (Madurapperuma, 2022) and India (Haokip, 2022) lend further support to the importance of considering stock market indices in economic studies. These insights underscore the intricate relationship between stock market dynamics and economic growth.

### ***Philippines Balance of Trade***



*Figure 2. Philippines Balance of Trade Chart*

During the start of 2020, the Philippines had a nearly balanced trade, but it gradually increased to a deficit of around USD 6 billion. However, there are indications that the situation is stabilizing as the deficit has reduced to around USD 4 billion. Despite the trade deficit worsening initially, it has demonstrated resilience and has not revisited its all-time low. A study that included 28 European Union countries found that a trade balance decrease generally leads to a decrease in average economic growth (Blavasciunaite et al., 2020). Another study suggests that minimal trade deficits can

lead to better economic growth. The study highlights the negative impact of trade deficits on countries' economic growth (Rehman et al., 2021). Looking at international trade from a different perspective, a research study examining the effects of energy consumption, economic growth, international trade, and urbanization on environmental degradation found that total exports contribute positively to environmental quality in the short and long run (Yusuf, 2023). Thus, advancement in trade affects not only economic growth but also environmental development.

### Philippines Core Inflation Rate



Figure 3. Philippines Core Inflation Rate Chart

The inflation rate 2020 was just below 4 percent, but it decreased to around 2 percent in 2022. However, it has since spiked above 7 percent and is now above 4 percent. The increase in consumer credit could lead to increased spending, which may add to inflationary pressures. Central banks may respond to this by raising interest rates to counter inflation. This strategy has proved to be gradually effective, as evidenced by the easing trend of the Philippines' core inflation rate. Since 2022, there has been a spike in the core inflation rate, which coincides with the recovery of consumer spending. It is important to note that the purchasing

power of fixed payments is eroded by inflation unless they are inflation-adjusted to maintain their absolute values (Remesh, 2021).

However, inflation may be caused by other factors. A study on the oil price inflation nexus asserted that crude oil prices are one of the key drivers of inflation worldwide (Ding et al., 2023). Moreover, a study on the relationship between exchange rate uncertainty and inflation revealed that the two variables are positively related (Çitçi & Kaya, 2023). The preceding studies indicate that other factors affect analysis certainty and subsequent intervention.

### Philippines Consumer Spending

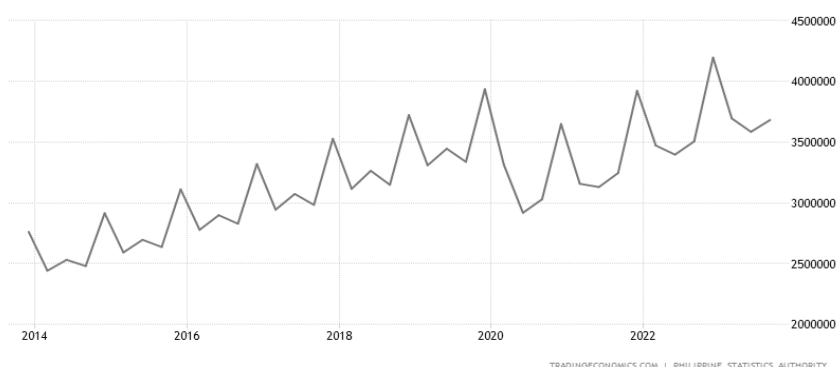


Figure 4. Philippines Consumer Spending Chart

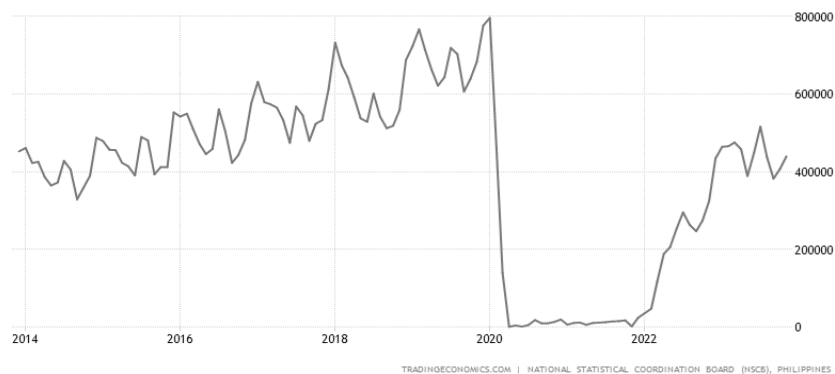
Consumer spending in the Philippines dropped to below 3,000,000 PHP Million in 2020. Although it has struggled to recover to pre-2020 levels fully, it has surpassed 4,000,000 PHP Million from 2022 onward. As

consumer credit has stimulated spending, it has the potential to add to inflationary pressures. Since 2022, there has been an increase in the core inflation rate, which coincides with the recovery of consumer spending.

Like capital investment, consumer spending is vital in driving economic growth. Reduced interest rates can stimulate more lavish consumer spending. Additionally, the prevalence of consumer credit and consumers' ability to use their housing wealth can further encourage increased consumer spending. Conversely, higher interest rates often prompt

consumers to save or reduce debt levels, limiting their expenditure (Scopelliti, 2016). Furthermore, certain countries issued stimulus checks amid the pandemic to bolster consumer spending temporarily. However, these measures typically failed to reverse the economic downturn trend (Yang et al., 2021).

### ***Philippines Tourist Arrivals***

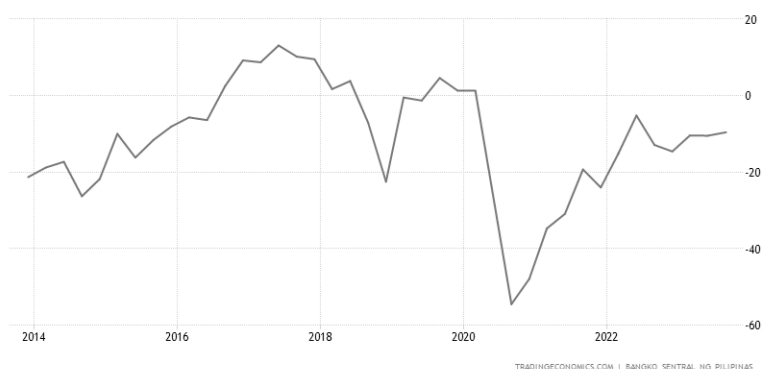


*Figure 5. Philippines Tourist Arrivals Chart*

Tourist arrivals in the Philippines took a massive hit in 2020 and dropped to nearly zero. Although there has been some improvement since then, with around 400,000 arrivals post-2022, it still has not reached the levels seen before 2020. It is worth noting that since 2022, there has been a surge in the core inflation rate, which has coincided with the increase in the number of tourists arriving in the country. The improvement in tourist arrival is the reverse of

a study published in 2021 on international tourist arrivals, which revealed that the COVID-19 pandemic has caused losses of around 50%, resulting in setbacks for the tourism industry equivalent to 15 years of growth. The study found that there has been a significant drop in tourist arrivals in 2021 (Fotiadis et al., 2021). With increased tourist arrival comes an increased inflow of foreign currency (Makoni et al., 2023).

### ***Philippines Consumer Confidence***



*Figure 6. Philippines Consumer Confidence Chart*

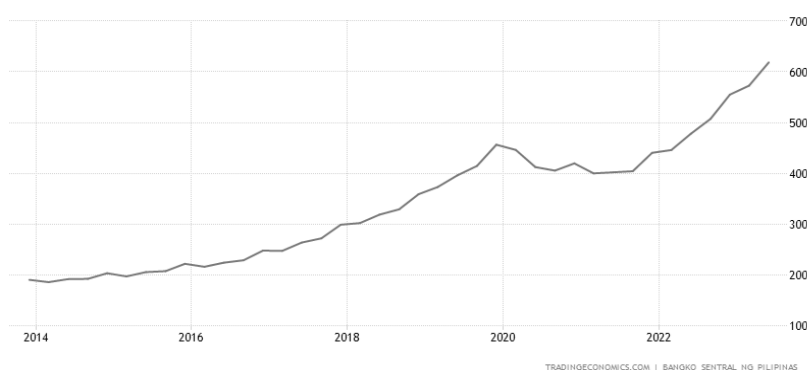


Before 2020, consumer confidence in the Philippines was unfavorable, with levels hovering around zero. Since then, it has deteriorated further, reaching almost harmful 60 levels. While there has been a recovery to around negative 20 since 2022, it is still below zero. Furthermore, since 2022, there has been a noticeable surge in the core inflation rate, which coincides with the recovery of consumer confidence. This scenario results from a study that revealed that the consumer confidence index can sometimes predict consumption (Dees & Brinca, 2013). This dynamic was also illustrated in a study on the impact of consumer confidence on oil prices, which revealed that consumer confidence can positively impact oil

prices by boosting oil demand and leading to higher prices (C. Su et al., 2023).

From a different angle, consumer confidence also has implications for other factors. Research on consumer confidence and intention to make environmentally friendly purchases demonstrated a positive correlation between consumer confidence levels and the intention to purchase green products (Han et al., 2022). Moreover, a study on how consumer confidence affects price-conscious behavior revealed that individual consumer confidence is a mediator in the association between national consumer confidence and perceived financial vulnerability, fostering heightened price-conscious behavior (Hampson et al., 2021).

### **Philippines Consumer Credit**



*Figure 7. Philippines Consumer Credit Chart*

Consumer credit in the Philippines almost reached 500 PHP billion before 2020 but decreased to around 400 PHP billion since then. However, it has now surpassed 500 PHP billion since 2022. The increase in consumer credit can encourage spending, contributing to inflationary pressures. Since 2022, there has been a significant rise in the core inflation rate, which coincides with the recovery of consumer credit. This scenario is consistent with research findings indicating that consumer credit can effectively increase total consumption expenditure for individuals and families (Li & Zhu, 2020).

From a different perspective, consumers often adapt their credit behaviors in uncertain

periods. Research on the evolving consumer credit landscape unveiled a trend where consumers transition from spending on larger purchases and discretionary services to focusing on smaller, essential expenditures in their daily lives (Hu et al., 2024). Furthermore, instances of personal bankruptcy can result in consumer credit delinquency. Baulkaran's study in 2022 emphasized the significance of personal finance education in mitigating personal bankruptcy and reducing consumer credit delinquency rates. These studies illustrate contrasting representations within the spectrum of consumer credit behavior, ranging from more cautious to more reckless tendencies.

### Philippines Gold Reserves

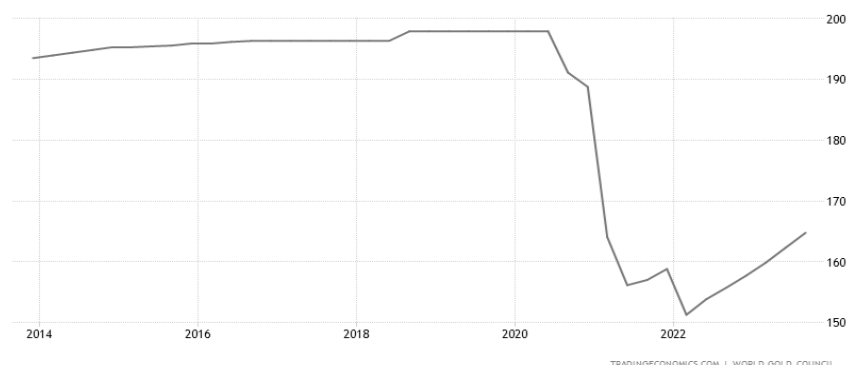


Figure 8. Philippines Gold Reserves Chart

Gold reserves increased to nearly 200 tonnes before 2020 but experienced a decline to almost 150 tonnes since 2022. However, there are signs of recovery as reserves have surpassed 160 tonnes since then. The decline in gold reserves may have impacted the economy's ability to withstand macroeconomic shocks such as the recent pandemic. Nonetheless, the current recovery trend in gold reserves is promising and provides hope for the future.

A study has indicated that having gold reserves in central banks can improve a country's creditworthiness. The study also shows that central bank gold reserves can act as a stabilizing factor for a nation's external position. By diversifying central bank portfolios through increasing gold reserves, countries can create a buffer against potential macroeconomic shocks in the future (Rathi et al., 2021).

### Philippines Foreign Exchange Reserves

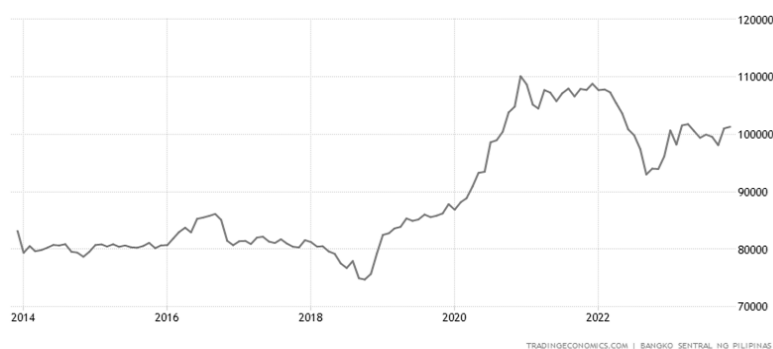


Figure 9. Philippines Foreign Exchange Reserves Chart

Before 2020, the foreign exchange reserves of the Philippines were slightly below 90,000 USD Million. However, since then, there has been a remarkable increase, reaching around 110,000 USD Million, and currently maintaining around the 100,000 USD Million area. This significant increase in foreign exchange reserves has helped boost the Philippine economy's resilience during this period. A research paper investigating the impact of accumulating

foreign exchange reserves on economic growth in emerging countries has revealed a positive correlation between the accumulation of foreign exchange reserves and a heightened economic growth rate in emerging countries. The study emphasized that the intense accumulation of foreign exchange reserves stimulates the long-term economic growth rates in developing and emerging nations (Krušković & Maričić, 2015). Similarly, a study on the

effectiveness of foreign exchange reserves revealed that foreign exchange reserves can potentially enhance monetary policy independence, especially in the context of global spillovers (Ahmed et al., 2023). Following the same thinking, a study on corporate leverage re-

sponse to a more stable macroeconomic environment found that increased foreign reserve accumulation is associated with higher corporate leverage. Notably, this effect is particularly pronounced in sectors inherently more sensitive to uncertainty (Tong & Wei, 2021).

### Philippines Money Supply M2

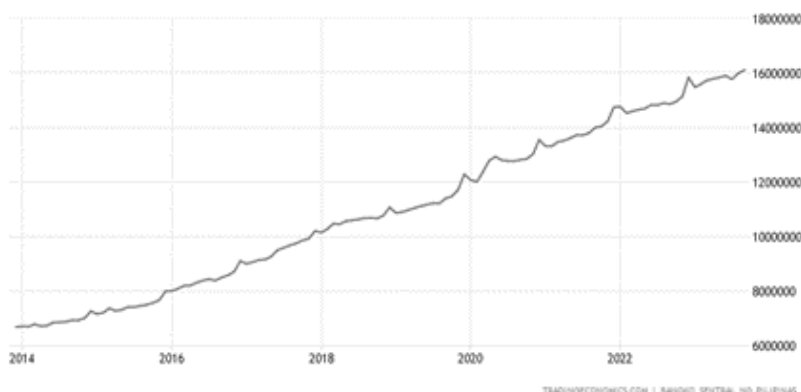


Figure 10. Philippines Money Supply M2 Chart

The Money Supply M2 in the Philippines has remained stable since 2020, with no significant fluctuations. It has consistently stayed above the 12,000,000 PHP million mark and surpassed the 14,000,000 PHP million mark since 2022. Currently, it has reached levels as high as 16,000,000 PHP million. It appears that the money supply is maintaining its upward

trend. This scenario is consistent with a study that suggested that an increase in the money supply over a sustained period may lead to inflation in the long run (Van, 2019). Similarly, a study on the relationship between money supply and inflation found that fluctuations in money growth are associated with an increased risk of inflation (Okedigba et al., 2024).

### Philippines Interest Rate

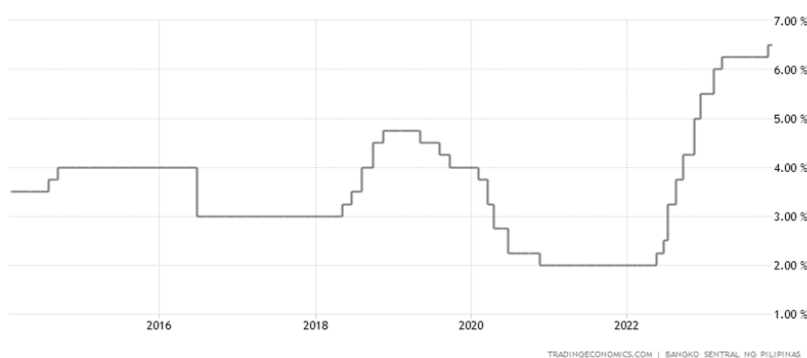


Figure 11. Philippines Interest Rate Chart

In 2020, the rate was at 4 percent. It declined to 2 percent in 2022 but has risen rapidly, exceeding 6 percent. To combat inflation, central banks may increase interest rates. This approach appears to be gradually effective, as

evidenced by the easing trend of the core inflation rate in the Philippines. Opposite to the latter scenario, a study by Kang et al. (2024) revealed that interest rate liberalization enhances banking stability and brings deposit

competition among banks. Additionally, the combination of lower interest rates and the increasing importance of credit has facilitated more accessible access to financing for essential purchases, thereby fostering economic growth. However, this trend has also led to elevated debt levels, posing challenges for some individuals in managing their financial obligations (Kozlov, 2023).

### ***Findings related to the Integration of Indications***

As the economic indicators of the Philippines from 2020 to 2023 were examined in the study, a complex and interconnected landscape can be observed. Since 2022, there has been a spike in the core inflation rate, which coincides with the recovery of consumer spending, consumer confidence, and consumer credit, aligning with the increasing arrival of tourists. This suggests that a collective surge in economic activities is positively related to inflation. Furthermore, since 2022, it has been observed that interest rates have risen rapidly, which coincides with the rise in inflation. Since central banks arbitrarily set interest rates, the rise in interest rates may be a move to counter inflation. A study on the scarring effects of major economic downturns supports this action by highlighting the mediating role of fiscal policy (Larch et al., 2024). The intricacies of this relationship provide valuable insights into the ongoing economic recovery in post-COVID-19 times, emphasizing the dynamic nature of economic indicators.

Considering the relevant studies and data, it can be inferred that the Philippines is on a path of economic recovery. Despite a high-interest rate environment, consumer spending and credit continue to rise, with a relatively easing inflation rate. The Philippine Stock Market (PSEi) reflects the national economy, as it is also on a path of recovery, although it has yet to surpass its pre-2020 levels. This holistic analysis underscores the resilience and adaptability of the Philippine economy amidst global challenges, positioning it for continued recovery. Stakeholders such as investors, businesses, and policymakers can derive valuable insights from the study, as shown in economic indicators' identified interrelations and trends.

Investors have reasons for optimism despite challenges like a persistent trade deficit and fluctuations in gold reserves. The nation's resilience, particularly evident in the surge of foreign exchange reserves and the easing inflation rate, signals potential investment opportunities. The synchronicity of economic indicators provides investors with a nuanced understanding of potential growth areas and stability within the Philippine market. Businesses operating in the Philippines can strategically leverage insights from the synchronized movement of economic indicators. The rebound in consumer spending, confidence, and credit since 2022 indicates a positive trajectory in economic activities. Understanding the dynamic connection between these indicators and interest rates is crucial for businesses navigating market conditions. Moreover, awareness of the ongoing economic recovery post-COVID-19 empowers businesses to effectively align their strategies with emerging opportunities.

Policymakers can harness observed economic dynamics to inform strategic decisions. The synchronized movement of consumer-related indicators and the subsequent post-2022 spike in core inflation rate emphasize the necessity for a balanced approach to economic policies. Policymakers should consider measures supporting the recovery of consumer spending while managing potential inflationary pressures. The resilience of the Philippine economy amidst global challenges suggests the efficacy of existing policies, forming a foundation for continued recovery.

However, caution is warranted, considering the United States Fed Funds Interest Rate spike since 2022 (Federal Funds Effective Rate, 2024). As per a study by Iacoviello and Gaston (2018), U.S. monetary tightening may considerably impact foreign economies, especially emerging ones. Additionally, the World Bank's release in January 2024 indicates a mixed global economic outlook. While global recession risk has receded, geopolitical tensions pose near-term hazards. Developing economies, especially those with poor credit ratings, may face steep borrowing costs due to global interest rates at four-decade highs in inflation-adjusted terms (World Bank Group, 2024).

Given the comprehensive facts and data presented, it is recommended that readers remain vigilant in monitoring the latest economic developments. Since economic landscapes are dynamic, continued focus on emerging data and additional analyses is crucial. Exploring additional economic indicators such as Gross Domestic Product (GDP) and the Consumer Price Index (CPI) would be particularly insightful for a more comprehensive understanding. This emphasizes the need for further in-depth studies to fully understand recent economic developments, especially regarding the trend of ongoing economic recovery.

## Conclusions

In a nutshell, the study concluded that the collective surge in economic activities, as evidenced by the increase in consumer spending, consumer confidence, consumer credit, and the arrival of tourists, is positively related to inflation. Also, increased interest rates potentially mitigated the rise in inflation. Thus, the surge of foreign exchange reserves and the easing inflation rate negated the harmful effects of trade deficits and gold reserve fluctuations.

The Philippine economy is on the path to recovery, as evidenced by the surge of economic activities, the increase in interest rates, the relative easing of inflation rates, and the stabilization of the Philippine Stock Market. This unique interrelation of economic indicators implies a more stable environment in the Philippine economy, which signals a green light for investors. It also implies an opportunity for policymakers to fine-tune existing initiatives to sustain economic recovery.

## Recommendations

After reviewing the findings, the subsequent recommendations were provided:

1. A study to determine the underlying factors contributing to the resiliency of the economic environment included in the study was recommended.
2. It was recommended that a study be conducted in other economic environments to compare patterns and trends.
3. It was recommended that further in-depth studies be conducted to fully understand the recent economic trends of the ongoing

recovery in the economic environment focused on the study.

4. It was recommended that researchers and all interested parties conduct an analysis of the dynamics used in the study to stay informed in the face of an ever-changing economic landscape.
5. Other economic indicators should be utilized to gain a more insightful comprehension of economic scenarios.

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## References

- Abdou, H. A., Elamer, A. A., Abedin, M., & Ibrahim, B. A. (2024). The impact of oil and global markets on Saudi stock market predictability: A machine learning approach. *Energy Economics*, 107416. <https://doi.org/10.1016/j.eneco.2024.107416>
- Ahmed, R., Aizenman, J., Saadaoui, J., & Uddin, G. S. (2023). On the effectiveness of foreign exchange reserves during the 2021-22 U.S. monetary tightening cycle. *Economics Letters*, 233, 111367. <https://doi.org/10.1016/j.econlet.2023.111367>
- Amit, S., & Kafy, A. A. (2024, June). Addressing the dollar crisis by investigating underlying causes, effects, and strategic solutions in emerging economies. *Research in Globalization*, 8, 100187. <https://doi.org/10.1016/j.resglo.2023.100187>
- Andronova, I. V., Digilina, O. B., & Andronov, K. A. (2020). The Economic Impact of COVID-19 on the Global Community. *Advances in Social Science, Education, and Humanities Research*. <https://doi.org/10.2991/as-sehr.k.201105.019>
- Banton, C. (2024). Interest rates: different types and what they mean to borrowers. *Investopedia*. <https://www.investopedia.com/terms/i/interestrates.asp>
- Baulkaran, V. (2022). Personal bankruptcy and consumer credit delinquency: The case of personal finance education. *International*

- Review of Financial Analysis, 81, 102098. <https://doi.org/10.1016/j.irfa.2022.102098>
- Beuermann, D., Botta, N. L., Hoffmann, B., Jackson, C. K., & Vera-Cossio, D. A. (2024). Does education prevent job loss during downturns? Evidence from exogenous school assignments and COVID-19 in Barbados. *European Economic Review*, 162, 104675. <https://doi.org/10.1016/j.euroecorev.2024.104675>
- Blavasciunaite, D., Garšvienė, L., & Matuzevičiūtė, K. (2020). Trade Balance Effects on Economic Growth: Evidence from European Union Countries. *Economics*, 8(3), 54. <https://doi.org/10.3390/economics8030054>
- Bourdin, S., Cottareau, V., Hermet, F., Jean-Pierre, P., & Medeiros, E. (2023). How have Europe's outermost regions dealt with the economic and social consequences of the COVID-19 crisis? Effects, policies, and recommendations. *Regional Science Policy & Practice*, 15(8), 1820–1840. <https://doi.org/10.1111/rsp3.12690>
- Britannica money. (2024). <https://www.britannica.com/money/consumer-confidence>
- Chen, Z. (2023). The different performance of the stock market indexes of the three countries in different international events. *BCP Business & Management*, 47, 76–83. <https://doi.org/10.54691/bcpbm.v47i.5172>
- Chirwa, M. (2023). Accelerating global economic recovery and building resilient economies in the post-COVID-19 era. *The Journal of Applied Business and Economics*, 25(5). <https://doi.org/10.33423/jabe.v25i5.6510>
- Çitçi, S. H., & Kaya, H. (2023). Exchange rate uncertainty and the connectedness of inflation. *Borsa Istanbul Review (Print)*, 23(3), 723–735. <https://doi.org/10.1016/j.bir.2023.01.009>
- Dees, S., & Brinca, P. (2013). Consumer confidence as a predictor of consumption spending: Evidence for the United States and the Euro area. *International Economics*, 134, 1–14. <https://doi.org/10.1016/j.inteco.2013.05.001>
- Ding, S., Zheng, D., Cui, T., & Du, M. (2023). The oil price-inflation nexus: The exchange rate pass-through effect. *Energy Economics*, 125, 106828. <https://doi.org/10.1016/j.eneco.2023.106828>
- Doblinger, C., Wales, W. J., & Zimmermann, A. (2022). Stemming the downturn: How ambidexterity and public policy influence firm performance stability during economic crises. *European Management Journal*, 40(2), 163–174. <https://doi.org/10.1016/j.emj.2021.06.002>
- Dömény, I., Dolinayová, A., & Čarný, Š. (2021). Methodology Proposal of monitoring economic indicators in a railway passenger transport company using controlling tools. *Transportation Research Procedia*, 55, 141–151. <https://doi.org/10.1016/j.trpro.2021.06.015>
- Federal funds effective rate. (2024). <https://fred.stlouisfed.org/series/FEDFUNDS>
- Fotiadis, A., Polyzos, S., & Huan T.C. (2021). The good, the bad, and the ugly on COVID-19 tourism recovery. *Annals of Tourism Research*, 87, 103117. <https://doi.org/10.1016/j.annals.2020.103117>
- Glossary | DataBank. (n.d.). <https://data-bank.worldbank.org/metadataglossary/world-development-indicators/series/ST.INT.ARVL>
- Hampson, D. P., Gong, S., & Xie, Y. (2021). How consumer confidence affects price conscious behavior: The roles of financial vulnerability and locus of control. *Journal of Business Research*, 132, 693–704. <https://doi.org/10.1016/j.jbusres.2020.10.032>
- Han, M. S., Hampson, D. P., Wang, Y., & Wang, H. (2022). Consumer confidence and green

- purchase intention: An application of the stimulus-organism-response model. *Journal of Retailing and Consumer Services*, 68, 103061. <https://doi.org/10.1016/j.jretconser.2022.103061>
- Haokip, N. (2022). The role of Stock market in Economic Growth: Empirical Evidence from India. *Veethika: An International Interdisciplinary Research Journal*, 8(1), 25–32. <https://doi.org/10.48001/veethika.2022.08.01.006>
- Hu, J., Huang, Y., & Liu, J. (2024). The changing face of consumer credit: Evidence from a big tech platform in China. *Pacific-basin Finance Journal*, 83, 102254. <https://doi.org/10.1016/j.pacfin.2024.102254>
- Huynh, N., Dao, A., & Nguyen, D. T. (2021). Openness, economic uncertainty, government responses, and international financial market performance during the coronavirus pandemic. *Journal of Behavioral and Experimental Finance*, 31, 100536. <https://doi.org/10.1016/j.jbef.2021.100536>
- Iacoviello, M. & Gaston, N. (2018). Foreign Effects of Higher U.S. Interest Rates. *International Finance Discussion Papers* 1227. <https://doi.org/10.17016/IFDP.2018.1227>
- Jayasinghe, N., Fernando, S., Haigh, R., Amaratunga, R., Fernando, N., Vithanage, C., Ratnayake, J., & Ranawana, C. (2022). Economic resilience in an era of ‘systemic risk’: Insights from four key economic sectors in Sri Lanka. *Progress in Disaster Science*, 14, 100231. <https://doi.org/10.1016/j.pdisas.2022.100231>
- Kang, K., Ashhari, Z. M., Yahya, M. H., Ni, S. W., & Li, Y. (2024). Interest rate liberalization and the stability of the Chinese banking system: Exploring chained mediation effects of deposit competitiveness and wealth management products. *Finance Research Letters*, 105222. <https://doi.org/10.1016/j.frl.2024.105222>
- Kenton, W. (2022). Core inflation. *Investopedia*. <https://www.investopedia.com/terms/c/coreinflation.asp>
- Kenton, W. (2023). Balance of Trade (BOT): Definition, Calculation, and Examples. *Investopedia*. <https://www.investopedia.com/terms/b/bot.asp>
- Kim, S. Y., & Upneja, A. (2021). Majority voting ensemble with a decision trees for business failure prediction during economic downturns. *Journal of Innovation & Knowledge*, 6(2), 112–123. <https://doi.org/10.1016/j.jik.2021.01.001>
- Kozlov, R. (2023). The Effect of interest rate changes on consumption: An Age-Structured Approach. *Economies*, 11(1), 23. <https://doi.org/10.3390/economies11010023>
- Krajňák, M., Krzikallová, K., & Friedrich, V. (2022). Does political orientation affect economic indicators in the Czech Republic? *Journal of Policy Modeling*, 44(6), 1219–1231. <https://doi.org/10.1016/j.jpolmod.2022.10.001>
- Krušković, B. D., & Maričić, T. (2015). Empirical analysis of the impact of foreign exchange reserves to economic growth in emerging economics. *Applied Economics and Finance*, 2(1). <https://doi.org/10.11114/aef.v2i1.653>
- Larch, M., Claeys, P., & Van Der Wielen, W. (2024). Scarring effects of major economic downturns: The role of fiscal policy and government investment. *European Journal of Political Economy/Europäische Zeitschrift Für Politische Ökonomie*, 102509. <https://doi.org/10.1016/j.ejpoleco.2024.102509>
- Li, S. & Zhu, Z., (2020). Research on the Influence of individual household consumption credit on consumption Behavior-- Empirical analysis based on CHFS data. [https://webofproceedings.org/proceedings\\_series/article/artId/16181.html](https://webofproceedings.org/proceedings_series/article/artId/16181.html)
- Madurapperuma, W. (2022). The dynamic relationship between economic crisis, macroeconomic variables, and stock prices in Sri



- Lanka. *Journal of Money and Business*, 3(1), 25–42. <https://doi.org/10.1108/jmb-06-2022-0033>
- Makoni, T., Mazuruse, G., & Nyagadza, B. (2023). International tourist arrivals modeling and forecasting: A case of Zimbabwe. *Sustainable Technology and Entrepreneurship*, 2(1), 100027. <https://doi.org/10.1016/j.stae.2022.100027>
- McIntyre, S., & Roy, G. (2023). Revisiting the dimensions of rural resilience: The COVID-19 pandemic. *Journal of Rural Studies*, 103, 103107. <https://doi.org/10.1016/j.jrurstud.2023.103107>
- Naseer, S., Khalid, S., Parveen, S., Abbass, K., Song, H., & Achim, M. V. (2023). COVID-19 outbreak: Impact on global economy. *Frontiers in Public Health*, 10. <https://doi.org/10.3389/fpubh.2022.1009393>
- Nguyen, Q., & Dang, V. C. (2023). Does the financial flexibility prevent stock price crash risk during COVID-19 crisis? Evidence from the Vietnamese stock market. *Heliyon* (London), 9(11), e22287. <https://doi.org/10.1016/j.heliyon.2023.e22287>
- Okedigba, D. O., Akintola, A., Umaru, A., McDonald, Q., Inusa, E., Fashoro, B. O., Etudaiye, I., Joshua, R., & Osagu, F. (2024). Exploring Sub-Saharan Africa's Money Supply-Inflation Nexus: A GARCH-MIDAS Approach. *Scientific African*, e02111. <https://doi.org/10.1016/j.sciaf.2024.e02111>
- Oprea, O., & Stoica, O. (2018). Capital markets integration and economic growth. *Montenegrin Journal of Economics*, 14(3), 23–35. <https://doi.org/10.14254/1800-5845/2018.14-3.2>
- Rathi, S., Mohapatra, S., & Sahay, A. (2021). Central bank gold reserves and sovereign credit risk. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.3808521>
- Rehman, S., Taqi, M., Rahman, S., Ahmad, W. (2021). Impact of Trade Deficit on Economic Growth: A Case of Some Selected Countries. *International Research Journal of Management and Social Sciences*. <https://www.semanticscholar.org/paper/Impact-of-Trade-Deficit-on-Economic-Growth%3A-A-Case-Rehman-Taqi/95ca6c893cabe7b9ae7b71571271e8845d8857e9>
- Remesh, V. P. (2021). A study on inflation. *Social Science Research Network*. <https://doi.org/10.2139/ssrn.3816410>
- Safón, V., Iborra, M., & Escribá-Esteve, A. (2024). Outcomes of firm resilience in wild card crises—Country, industry, and firm effects in the Covid-19 crisis. *International Journal of Disaster Risk Reduction*, 100, 104177. <https://doi.org/10.1016/j.ijdrr.2023.104177>
- Scopelliti, D. (2016). Consumer spending: past and present. *Monthly Labor Review*, Nov. 2016. Semantic Scholar, <https://www.semanticscholar.org/paper/Consumer-Spending%3A-Past-and-Present-Scopelliti/606b92858d2079d31d7e29f38a9eb2e462448470>
- Su, B., Zhang, C., Martens, P., & Cao, X. (2023). How economic and geographical indicators affect dietary environmental footprint: Evidence from China. *Ecological Indicators*, 148, 110075. <https://doi.org/10.1016/j.ecolind.2023.110075>
- Su, C., Wang, D., Mirza, N., Zhong, Y., & Umar, M. (2023). The impact of consumer confidence on oil prices. *Energy Economics*, 124, 106820. <https://doi.org/10.1016/j.eneco.2023.106820>
- The Investopedia Team (2023). Consumer spending: Definition, Measurement, and importance. Investopedia. <https://www.investopedia.com/terms/c/consumer-spending.asp>
- The Investopedia Team (2024). Money Supply Definition: Types and how it Affects the economy. Investopedia. <https://www.investopedia.com/terms/m/moneysupply.asp>
- Tong, H., & Wei, S. (2021). Endogenous corporate leverage response to a safer macro



- environment: The case of foreign exchange reserve accumulation. *Journal of International Economics*, 132, 103499. <https://doi.org/10.1016/j.jinteco.2021.103499>
- TRADING ECONOMICS. (n.d.-a). Philippines Stock Market (PSEI) - quote - chart - Historical data - news. <https://tradingeconomics.com/philippines/stock-market>
- TRADING ECONOMICS. (n.d.-b). Philippines balance of trade. <https://tradingeconomics.com/philippines/balance-of-trade>
- TRADING ECONOMICS. (n.d.-c). Philippines core inflation rate. <https://tradingeconomics.com/philippines/core-inflation-rate>
- TRADING ECONOMICS. (n.d.-d). Philippines consumer spending. <https://tradingeconomics.com/philippines/consumer-spending>
- TRADING ECONOMICS. (n.d.-e). Philippines tourist arrivals. <https://tradingeconomics.com/philippines/tourist-arrivals>
- TRADING ECONOMICS. (n.d.-f). Philippines consumer confidence. <https://tradingeconomics.com/philippines/consumer-confidence>
- TRADING ECONOMICS. (n.d.-g). Philippines consumer credit. <https://tradingeconomics.com/philippines/consumer-credit>
- TRADING ECONOMICS. (n.d.-h). Philippines Gold Reserves. <https://tradingeconomics.com/philippines/gold-reserves>
- TRADING ECONOMICS. (n.d.-i). Philippines Foreign Exchange Reserves. <https://tradingeconomics.com/philippines/foreign-exchange-reserves>
- TRADING ECONOMICS. (n.d.-j). Philippines money supply M2. <https://tradingeconomics.com/philippines/money-supply-m2>
- TRADING ECONOMICS. (n.d.-k). Philippines interest rate. <https://tradingeconomics.com/philippines/interest-rate>
- Van, D. D. (2019). Money supply and inflation impact on economic growth. *Journal of Financial Economic Policy*, 12(1), 121–136. <https://doi.org/10.1108/jfep-10-2018-0152>
- World Bank Group. (2024). Global economy set for weakest Half-Decade performance in 30 years. World Bank. <https://www.worldbank.org/en/news/press-release/2024/01/09/global-economic-prospects-january-2024-press-release>
- Yahoo is part of the Yahoo family of brands. (n.d.). <https://finance.yahoo.com/quote/PSEI.PS/>
- Yang, Z., Choe, Y., & Martell, M. (2021). COVID-19 economic policy effects on consumer spending and foot traffic in the U.S. *Journal of Safety Science and Resilience*, 2(4), 230–237. <https://doi.org/10.1016/j.jnlssr.2021.09.003>
- Yusuf, A. (2023). Dynamic effects of energy consumption, economic growth, international trade and urbanization on environmental degradation in Nigeria. *Energy Strategy Reviews* (Print), 50, 101228. <https://doi.org/10.1016/j.esr.2023.101228>
- Zefirov, V. I., & Shadrina, V. (2022). The policies and regulations of transportation economic effects on the prospects of the growth of the US stock market. *Transportation Research Procedia*, 63, 2015–2020. <https://doi.org/10.1016/j.trpro.2022.06.224>
- Zhong, F., Chen, R. F., Luo, X., Song, X., & Ullah, A. (2024). Assessing regional resilience in China using a sustainable livelihoods approach: Indicators, influencing factors, and the relationship with economic performance. *Ecological Indicators*, 158, 111588. <https://doi.org/10.1016/j.ecolind.2024.111588>