**Original Research Article**

**The Economic Toll of Financial Crimes: Analyzing the $3.1 Trillion Impact on Global Markets**

# Abstract

The main aim of the study was to analyze the economic impact of financial crimes on global markets, with a particular focus on the estimated $3.1 trillion annual loss attributed to illicit activities such as money laundering, terrorist financing, and fraud. The study specifically assessed the financial and economic consequences of financial crimes on global market. The study adopted ex-post facto research design. Secondary data for the study were collected from macrotrends.com, Nasdaq Verafin 2024 Global Financial Crime Report, statista.com, the U.S. Treasury and other financial institutions reports over a ten year period from 2014 to 2023. The data were first descriptively analysed, after which Jarque-bera test was conducted to ascertain normality of the residuals. Ramsey RESET test was done to assess the linearity of the model. Breusch-Godfrey LM Test was used to assess Serial Correlation while Breusch-Pagan-Godfrey test was used to check whether the model suffered from heteroskedasticity. The hypotheses were tested using estimates from Ordinary Least Square regression since all the assumptions of the OLS model were met. Hence, the decision rule for the test of hypotheses was to accept the alternate hypothesis if the p-value is less than 0.05, otherwise, accept the null hypothesis. It was found that losses from financial and economic crimes negatively and significantly affected the global GDP (b = -6.146909; p-value = 0.0434). Thus, the financial and economic consequences of financial crimes are significantly detrimental to the performance of the global market. The study recommends that governments and international financial institutions should strengthen global financial regulations and improve cross-border collaboration to track and combat illicit financial flows by implementing stricter controls on money laundering, terrorist financing, and fraud that can reduce the economic distortions caused by financial crimes.

Keywords: Financial Crimes; Global Markets, Money Laundering

# 1.0 Introduction

The global financial system serves as the backbone of economic development, trade, and growth, connecting countries, industries, and individuals in a complex web of transactions. However, within this vast network, a significant challenge looms—financial crimes. These illicit activities, which range from money laundering and terrorist financing to market manipulation and tax evasion, pose a direct threat to economic stability and growth (Nasdaq, 2024). Financial crimes undermine the integrity of financial institutions, distort market efficiency, and erode public trust in economic systems. While the impact of financial crimes is often difficult to quantify due to their clandestine nature, the global economy has long suffered from the hidden yet substantial consequences (Sigetova, Uzikova, Dotsenko & Boyko, 2022). A disturbing trend that has emerged in recent years is the alarming scale at which financial crimes are perpetrated across borders, often involving sophisticated networks and the abuse of financial systems meant to facilitate legitimate economic activities.

Recent estimates indicate that over $3.1 trillion in illicit funds flowed through the global financial system (Nasdaq, 2024). This staggering figure accounts for a variety of illicit activities, including money laundering, terrorist financing, tax evasion, and corruption, and represents approximately 3% of global GDP. This massive toll is not only a reflection of the scale of financial crimes but also highlights the far-reaching impact these activities have on financial markets, institutions, and the broader economy. As the scope of financial crimes continues to grow (see Figure 1 below), it becomes increasingly clear that tackling this issue is crucial to maintaining the integrity of the global financial system, ensuring fair competition, and fostering sustainable economic development. The pervasive nature of these crimes demands urgent attention from governments, international bodies, and financial institutions to develop effective regulatory frameworks, enforcement mechanisms, and innovative solutions to combat illicit financial activities.

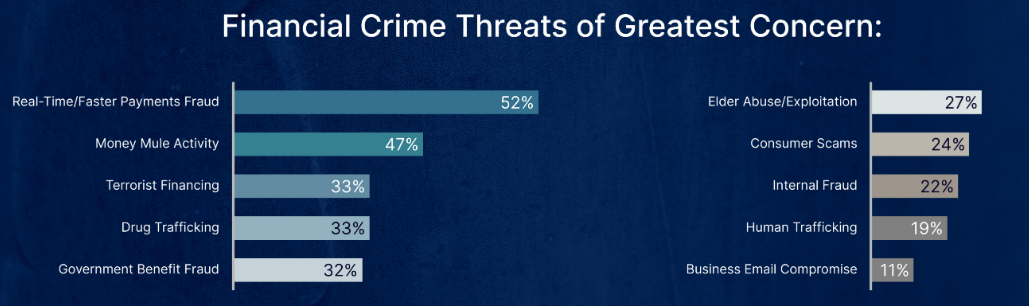


Figure 1 Financial Crimes Prevalence

Source: Nasdaq (2024)

In addressing the threat of financial crimes shown in Figure 1 above, one significant recent development is the publication of the 2024 National Risk Assessments for Money Laundering, Terrorist Financing, and Proliferation Financing by the U.S. Department of the Treasury. These assessments provide a comprehensive analysis of the most pressing illicit financial risks facing the United States and offer hint into the broader global context of financial crimes. The U.S. Treasury's National Risk Assessments serve as a critical tool for policymakers, regulators, financial institutions, and law enforcement agencies in understanding the vulnerabilities and threats associated with illicit finance. According to the 2024 report, the financial system in the United States remains susceptible to a range of money laundering activities, with risks linked to sectors such as real estate, casinos, and digital assets (U.S. Department of the Treasury, 2024). The report emphasizes the growing challenge posed by the digitalization of financial services, noting that cryptocurrencies and other emerging technologies are increasingly being exploited by illicit actors to facilitate money laundering, terrorist financing, and other financial crimes.

Furthermore, it is concerning that criminal organizations are continuously evolving their tactics to launder money, including the use of shell companies, trade-based money laundering schemes, and financial intermediaries that facilitate cross-border transactions (Milanovic, 2024). The 2024 assessment underscores the importance of a collaborative approach to tackling financial crimes, with a focus on strengthening international cooperation, improving the transparency of financial transactions, and enhancing the enforcement of anti-money laundering (AML) and counter-financing of terrorism (CFT) regulations. It also stresses the need for continuous adaptation of regulatory frameworks to address emerging threats, such as the exploitation of decentralized finance (DeFi) platforms, digital currencies, and non-fungible tokens (NFTs). The findings of the 2024 National Risk Assessments are a call to action for all stakeholders involved in the global fight against financial crimes. The hints provided are essential for shaping future policies and regulations aimed at mitigating the economic damage caused by illicit financial activities (U.S. Department of the Treasury, 2024).

The economic toll of financial crimes extends far beyond the immediate losses incurred by financial institutions, governments, and businesses. The $3.1 trillion worth of illicit financial activities includes significant amounts of unpaid taxes, which could otherwise be used to fund public services, infrastructure development, and social programs. Governments worldwide are forced to compensate for this loss through higher taxes on law-abiding citizens and businesses, which in turn can lead to economic inequality and reduced public trust in the tax system. The lost tax revenue also limits governments' ability to invest in key areas such as healthcare, education, and public infrastructure, thereby hindering long-term economic growth.

Another significant aspect of the economic toll of financial crimes is the erosion of financial institution integrity (Mahanama, Shirvani & Rachev, 2021). When financial institutions are complicit in money laundering or terrorist financing, they risk facing substantial fines, reputational damage, and legal consequences. The fines imposed on major banks involved in illicit activities can reach billions of dollars, diverting resources away from productive investment and eroding shareholder value. Furthermore, the scandal surrounding these financial crimes can damage consumer confidence, leading to a decline in investment, a rise in the cost of capital, and lower overall economic growth. This loss of confidence also extends to international financial markets, where the exposure of systemic vulnerabilities can cause volatility and reduce foreign direct investment.

Financial crimes also exacerbate the risks faced by individuals and businesses. Money laundering and terrorist financing are closely linked to organized crime and corruption, which contribute to instability in both developed and developing economies (U.S. Department of the Treasury, 2024). In countries with weak regulatory frameworks or political instability, illicit financial flows often exacerbate corruption, bribery, and other illegal activities that undermine public institutions (Feher & Borlea, 2021). This creates an environment of uncertainty, discouraging investment and hindering economic development (Achim, Borlea, Văidean, Florescu, Mara & Cuceu, 2021). In developing nations, the lack of effective enforcement mechanisms to combat financial crimes can perpetuate cycles of poverty and inequality, as criminal networks exploit the vulnerabilities of marginalized populations.

Ideally, the global financial system should be characterized by transparency, fairness, and the free flow of capital, where financial transactions are conducted in a legitimate and regulated environment. In such a system, financial institutions operate in a way that promotes market efficiency, fosters economic growth, and ensures that public trust in economic systems is maintained. Properly regulated markets and financial institutions are fundamental to the effective functioning of the global economy. If financial crimes such as money laundering, terrorist financing, and corruption were effectively prevented, markets would function with greater integrity, resource allocation would be optimized, and governments would be able to generate adequate revenues for public services (Feher & Borlea, 2021). A properly functioning financial system would also contribute to reducing inequality, fostering investment, and ensuring long-term economic stability.

However, the actual situation is far from this ideal scenario. Financial crimes are rampant in the global economy, costing an estimated $485.60 billion in 2023 (Nasdaq, 2024), a staggering amount that represents roughly 0.5% of global GDP. Despite significant progress in creating regulatory frameworks and enforcing anti-money laundering and counter-terrorist financing policies, the scale and complexity of financial crimes continue to grow. Illicit financial flows, including those from money laundering, tax evasion, fraud, and corruption, continue to permeate financial markets, undermining the integrity of financial institutions. Criminal networks exploit loopholes in global regulations, with emerging technologies like cryptocurrencies offering new avenues for illicit activities (Koker & Goldbarsht, 2022). These trends persist despite efforts by governments and international organizations to curb them, highlighting significant weaknesses in enforcement mechanisms and the ability to track illicit financial activities across borders. Consequently, financial crimes are becoming more sophisticated and harder to detect, placing a substantial burden on regulatory agencies and financial institutions worldwide.

The consequences of this situation are far-reaching and damaging to the global economy. The amount lost to financial crimes annually not only undermines the stability of financial markets but also distorts economic growth and development. Governments face substantial revenue losses due to tax evasion and avoidance, resulting in reduced resources for public services and social programs, which exacerbates inequality and limits economic opportunities for citizens. Additionally, the erosion of public trust in financial systems, due to scandals surrounding money laundering and corruption, leads to a decrease in investments and capital flow. This undermines the resilience of both domestic and global economies, making them more vulnerable to external shocks. Ultimately, the continued prevalence of financial crimes poses a threat to economic stability, growth, and security worldwide, affecting not only individuals and businesses but entire national economies.

# 1.1 Objective of the study

The main aim of the study is to analyze the economic impact of financial crimes on global markets, with a particular focus on the estimated $3.1 trillion annual loss attributed to illicit activities such as money laundering, terrorist financing, and fraud.

The specific objective is to assess the financial and economic consequences of financial crimes on global market, using data from the U.S. Treasury and other financial institutions.

# 1.2 Research Hypothesis

H0: Losses accruing from financial and economic crimes do not significantly affect the global market.

# 2.0 Literature Review

# 2.1 Conceptual Review

# 2.1.1 Financial Crimes

Financial crimes refer to illegal activities that exploit financial systems for illicit gain, typically involving deceit, manipulation, fraud, or breach of financial laws (Zakaria, 2023). Birdi (2021) submitted that these crimes can be committed by individuals, corporations, or criminal organizations, and often have far-reaching implications for both national economies and global financial systems. Financial crimes entails the intentional use of financial transactions to conceal illicit activities, misappropriate funds, or evade regulatory controls (Gupta, 2023). Such crimes often involve illegal activities like money laundering, tax evasion, insider trading, market manipulation, embezzlement, bribery, and fraud (Jakovljević, 2024). These offenses not only violate financial regulations but can also cause systemic risks within the financial sector, undermine investor confidence, and distort market mechanisms. Money laundering, one of the most prevalent forms of financial crime, involves disguising the origins of illegally obtained money, typically by passing it through legitimate businesses or financial institutions (Milanovic, 2024). This makes tracing the source of the funds extremely difficult. Tax evasion, another common financial crime, is the deliberate avoidance of paying taxes owed to governments by falsifying information or concealing income.

The impact of financial crimes is far-reaching, as these illicit activities can create vulnerabilities in the financial systems of both developed and developing nations (Zakaria, 2023). Criminal organizations often exploit gaps in regulation or loopholes within financial markets, using sophisticated tactics to evade detection. Technological advancements, such as digital currencies and online financial services, have provided new opportunities for these crimes to thrive (Koker & Goldbarsht, 2022). The anonymity provided by cryptocurrency transactions and other online financial platforms has made it increasingly difficult for authorities to trace and prosecute financial crimes. Moreover, financial crimes often cross borders, involving complex international networks that complicate enforcement and regulatory efforts (Birdi, 2021).

The broader societal impact of financial crimes is also significant (Feher & Borlea, 2021). In addition to the direct financial losses caused by illicit activities, financial crimes can contribute to corruption, erode public trust in financial institutions, and undermine the integrity of market systems (Jakovljević, 2024). These activities can create economic inequality, reduce investor confidence, and destabilize entire economies. Governments and financial institutions must continually strengthen regulatory frameworks and enforcement mechanisms to combat financial crimes, ensuring the long-term stability and transparency of global markets.

# 2.1.2 Financial and Economic Consequences of Financial Crimes on Global Markets

The financial and economic consequences of financial crimes on any markets are profound, affecting everything from market integrity to economic growth and public trust (Kadir, Perdana, Rahman, Sandih, Anggoro & Akbar, 2021). The most direct impact of financial crimes on global markets is the loss of capital, which significantly distorts the functioning of economies. Financial crimes result in the diversion of resources that would otherwise have been used for legitimate economic activities (Gupta, 2023). This leads to a misallocation of capital, distorting markets by directing funds away from productive investments into illicit channels. This misallocation can undermine economic growth by diverting resources from sectors that contribute to sustainable development (Birdi, 2021), such as healthcare, education, infrastructure, and innovation.

In addition to capital loss, financial crimes undermine investor confidence, which is essential for the smooth operation of global markets. The perception that financial systems are susceptible to fraud, corruption, and manipulation discourages both domestic and international investors. When investors fear that their assets could be exposed to financial crimes, they may choose to withdraw their investments or avoid certain markets altogether. This loss of confidence can lead to reduced liquidity, higher volatility, and increased cost of capital, all of which disrupt the functioning of financial markets and increase the cost of doing business globally.

The economic consequences of financial crimes also extend to public institutions and government revenues. Many forms of financial crimes, such as tax evasion and money laundering, result in substantial losses in government revenue. Governments rely on taxes and other forms of legal revenue to fund public services, infrastructure, and social programs. When financial crimes reduce the tax base, governments are left with fewer resources to invest in public goods, which can result in a decline in essential services like education, healthcare, and welfare. This, in turn, exacerbates inequality and undermines social stability. Furthermore, financial crimes have a negative impact on the stability and integrity of the financial sector itself. When financial institutions are complicit in illegal activities, they risk facing severe reputational damage, legal penalties, and regulatory scrutiny. The cost of complying with regulations, paying fines, and addressing reputational damage can erode the financial health of these institutions, leading to job losses, reduced credit availability, and broader economic instability.

The global nature of modern financial markets means that financial crimes often have transnational consequences (Sigetova, Uzikova, Dotsenko & Boyko, 2022). Money laundering, for example, typically involves the movement of funds across borders, making it challenging for authorities to track and prevent (U.S. Department of the Treasury, 2024). This can lead to a situation where illicit financial flows destabilize entire regions, causing economic instability that can affect global supply chains, trade relationships, and foreign direct investment. The presence of financial crimes in global markets also complicates international efforts to combat corruption and illicit financial flows (Birdi, 2021). As countries struggle to enforce regulations, financial criminals exploit differences in legal frameworks and enforcement capabilities, making it difficult to establish a cohesive global response.

# 2.2 Theoretical Framework: Systems Theory

Systems Theory, originally developed by biologist Ludwig von Bertalanffy in the 1950s, emerged as a way to understand complex, interconnected systems in various fields, ranging from biology to social sciences (Von Bertalanffy, 1950). Bertalanffy proposed that instead of studying individual components in isolation, it is more effective to examine the interactions between the parts within a whole system. His concept of "general systems theory" aimed to describe systems that function as unified wholes, with interdependent elements that affect each other (Drack, 2009).

The main postulations of Systems Theory emphasize the idea that a system is composed of interrelated parts that work together to achieve a common goal or function (Von Bertalanffy, 1950). One of the key principles of this theory is that the whole is greater than the sum of its parts, meaning that the behavior of the system cannot be fully understood by analyzing individual components in isolation. Furthermore, Systems Theory posits that systems are dynamic and constantly influenced by both internal and external factors (Drack, 2009). Feedback loops, both positive and negative, are central to the functioning of systems, as they help regulate and adapt to changing conditions. The theory also highlights the importance of boundaries, as systems interact with their environments and can be influenced by or influence external systems. In short, Systems Theory emphasizes the interdependence, complexity, and adaptability of systems, as well as the need to understand the system as a whole in order to manage or influence its behavior effectively (Pickel, 2011).

Systems Theory is highly relevant to the study of the economic toll of financial crimes on global markets because financial systems are inherently complex and interconnected. Financial crimes, such as money laundering, fraud, and terrorist financing, do not occur in isolation but rather affect and are affected by various elements within the global financial system. The actions of individual criminals or organizations can trigger ripple effects throughout the broader economic system, destabilizing markets, undermining institutions, and eroding trust. Just as Systems Theory suggests that a system’s behavior cannot be understood by looking at individual components, the full impact of financial crimes cannot be grasped by examining isolated cases or sectors. Financial crimes in one region or institution can create a cascading effect, affecting economies, policies, businesses, and individuals globally. By applying Systems Theory, this study aims to better understand how financial crimes disrupt the balance of the global financial system, exploring the feedback loops and interconnectedness that contribute to the vast economic toll estimated at $3.1 trillion annually. The theory highlights the need for comprehensive, systemic approaches to combat financial crime, rather than piecemeal or isolated efforts.

# 2.3 Empirical Review

Kulmie, Hilif, and Hussein (2023) explored the socio-economic consequences of financial crimes. Their study used a descriptive research design to examine how these crimes impact society. Data were collected through a questionnaire distributed to 200 participants. The findings indicated that financial crimes and corruption have significant socio-economic effects. These crimes erode public trust, hinder the delivery of essential services such as education and healthcare, and negatively affect small businesses, leading to reduced employment, lower GDP, and diminished life expectancy. Additionally, they undermine societal values, ethics, and trust among businesses, public institutions, and society as a whole. The study also highlighted that these crimes contribute to increased inequality and poverty.

Kulmie (2023) investigated financial crimes within the Somali public sector, focusing on public workers’ perceptions of financial crimes and the key causes and consequences of these crimes. A descriptive research approach was used, with data collected from 160 participants using a questionnaire. The research was guided by the Fraud Triangle Theory and the Fraud Diamond Theory, which emphasize pressure, opportunity, rationalization, and capability as key factors contributing to financial crimes. The findings showed that the primary factor leading to financial crimes in the Somali public sector was opportunity, particularly stemming from inadequate internal audits, poor governance, and a lack of proper duty segregation. The study concluded that financial crimes in Somalia's public sector are severely affecting the economy, public trust, and overall social progress.

Kovalchuk, Shynkaryk, and Masonkova (2021) conducted a study using econometric models to assess the financial impact of cybercrimes. They developed a multifactor regression model to analyze the costs associated with business disruption, information loss, revenue loss, and equipment damage caused by cyberattacks in 2019. The study found that information loss had the most significant impact on the overall cost of cyberattacks, reducing profits and leading to additional costs for businesses. They also created a canonical model to assess the relationship between the total cost of cybercrime, including ID ransomware, and key economic development indicators for the top 10 countries. The results showed a significant correlation, indicating that countries with higher development levels are more likely to be targeted by cyberattacks, and that the consequences are more severe in lower-income countries.

Achim, Borlea, Achim, and Borlea (2020) examined the effects of economic and financial crimes and explored strategies for combating them. They discussed the “grease the wheels” theory, which suggests that some economic and financial crimes may have a positive impact on economic development. However, the negative effects of these crimes—such as their impact on public services, population health, and overall social stability—are also significant. The chapter concludes by outlining measures to prevent and combat economic and financial crimes, as well as the role of national and international organizations in enforcing these measures. Additionally, it highlights the use of judicial expertise as a technical method for investigating such crimes.

# 2.4 Gap in Literature

While numerous studies have explored the socio-economic impact of financial crimes, such as those by Kulmie, Hilif, and Hussein (2023), and Kulmie (2023), there remains a significant gap in the literature concerning the *economic impact* of financial crimes on global markets, particularly in the context of illicit financial flows like money laundering, terrorist financing, and fraud. Existing research has largely focused on specific regional or sectoral studies, with a notable emphasis on the public sector (Kulmie, 2023) and the broader socio-economic consequences of corruption and financial crimes (Achim, Borlea, Achim, and Borlea, 2020). Studies like those by Kovalchuk, Shynkaryk, and Masonkova (2021) have provided valuable hints into the cost of cybercrimes but remain limited to specific types of financial crimes, such as those involving information loss and cyberattacks. These studies, while informative, often fail to provide a comprehensive understanding of how financial crimes, in their broader context, directly affect global market dynamics, such as GDP growth, employment rates, and cross-border trade.

Moreover, existing empirical literature has primarily focused on the consequences of financial crimes on national economies or specific industries, with limited attention given to the broader macroeconomic effects at the global market level. The $3.1 trillion annual loss attributed to illicit activities, as reported by financial institutions like the U.S. Treasury, has yet to be fully explored in terms of its far-reaching impact on global financial stability, investment flows, and international trade. Studies by authors such as Kovalchuk, Shynkaryk, and Masonkova (2021), Kulmie (2023), and Achim, Borlea, Achim, and Borlea (2020) have contributed valuable perspectives on financial crime impacts within specific regions or sectors, but the complex interconnections between illicit financial flows and global market performance remain under-examined. As such, this gap in the literature highlights the need for more holistic, globally-focused research to assess how financial crimes disrupt international markets and economies at large, particularly in the face of escalating illicit financial activities.

# 3.0 Methodology

The study adopted an ex-post facto research design, which is particularly suitable for examining existing data and analyzing the relationships between variables after the events have already occurred. This design allows for the investigation of the impact of financial crimes on global markets by looking at data from previous years and drawing conclusions from those past observations. This design is appropriate as it effectively assesses the nexus between past events without room for manipulating the variables (Ikwuo, Ukoha & Nworie, 2025; Nworie, Okafor & John-Akamelu, 2022). The ex-post facto design enables the researchers to assess the consequences of financial crimes on a broad scale, utilizing data over a decade to capture trends, shifts, and patterns in the financial system.

For the study, secondary data were collected from reputable and reliable sources including macrotrends.com, Nasdaq Verafin’s 2024 Global Financial Crime Report, Statista.com, the U.S. Treasury, and other financial institutions’ reports. These sources provide comprehensive data covering financial trends, market performance, and the prevalence of financial crimes over a ten-year period from 2014 to 2023. The data gathered from these resources serve as a robust basis for the study, as they offer a detailed look at both global and regional financial crime statistics, market developments, and regulatory responses during the past decade. The use of secondary data ensures that the study benefits from pre-compiled, extensive datasets, which increases the accuracy and reliability of the research findings. This also allows for a broad and thorough examination of financial crimes in relation to various global financial markets, covering a wide range of issues and developments in the field of financial regulation, compliance, and criminal activity.

The collected data were first subjected to descriptive analysis, which provides a clear summary and understanding of the basic features and patterns within the dataset. Descriptive statistics were used to organize the data, calculate central tendencies such as means, medians, and modes, and measure the variability of the data through standard deviations and ranges. Following the descriptive analysis, more rigorous statistical tests were performed to ensure the validity and reliability of the model and to assess the underlying assumptions required for robust regression analysis.

A series of diagnostic tests were performed on the data to assess the suitability of the model and the integrity of the residuals. First, the **Jarque-Bera test** was conducted to check for normality of the residuals, which is a critical assumption in many regression models. This test examines whether the residuals of the data follow a normal distribution, which is necessary for the reliability of hypothesis tests and the validity of regression results. Normality of residuals is a key assumption for accurate parameter estimation and hypothesis testing in statistical modeling. The **Ramsey RESET test** was then performed to assess the linearity of the model. This test ensures that the relationship between the dependent and independent variables is correctly specified in a linear form and that the model does not suffer from omitted variable bias or misspecification. Ensuring the linearity of the model is essential for producing reliable and meaningful results.

Next, the **Breusch-Godfrey LM Test** was used to assess the presence of serial correlation in the residuals. Serial correlation, or autocorrelation, occurs when residuals from one time period are correlated with residuals from previous periods. This can lead to biased or inefficient estimates in regression models. The test helps determine whether there is a correlation in the error terms, which, if found, would require corrective measures to address potential issues such as autocorrelation. Similarly, the **Breusch-Pagan-Godfrey test** was conducted to detect heteroskedasticity, which occurs when the variability of the residuals is not constant across all levels of the independent variable. Heteroskedasticity can cause inefficient estimates, so detecting and addressing it is crucial for ensuring the accuracy of the model's conclusions.

Once these preliminary tests were completed, the hypotheses for the study were tested using **Ordinary Least Squares (OLS) regression** estimates. Since all the assumptions of the OLS model were met, including normality, linearity, and no serial correlation or heteroskedasticity, OLS regression was deemed an appropriate and reliable method for hypothesis testing. OLS regression provides estimates of the relationships between independent and dependent variables, offering hints into how financial crimes affect global markets and helping to quantify the magnitude of this impact. The decision rule for testing the hypotheses was as follows: if the p-value of a given hypothesis test was less than 0.05, the null hypothesis would be rejected in favor of the alternate hypothesis. This threshold of 0.05 is commonly used in social sciences and economics to establish statistical significance and determine the strength of evidence against the null hypothesis. If the p-value was greater than 0.05, the null hypothesis would be accepted, indicating that there is insufficient evidence to support a significant effect.

Global market performance was measured using global gross domestic product (GDP), as GDP is a widely accepted indicator of economic performance and overall market health. The GDP reflects the total value of goods and services produced within a country or region, making it an appropriate measure for assessing the impact of financial and economic crimes on the broader economy. The amount of losses from global financial and economic crimes, including crimes such as money laundering, fraud, market manipulation, and corruption, was treated as the independent variable. These losses can have significant consequences for global financial markets by undermining investor confidence, disrupting trade and investment flows, and damaging the integrity of financial systems. The linear regression is specified below:

GDPt = β0 + β1LFECt + ϵt \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_eq1

Where:

GDPt = the global gross domestic product in year t

LFECt = Losses from Financial and Economic Crimes in year t

β0 = the constant term, representing the baseline level of global GDP when financial crimes losses are zero.

β1 = the coefficient of the independent variable, which indicates the strength and direction of the relationship between financial crimes losses and global GDP.

ϵt​ is the error term, capturing the random variation or other factors affecting GDP that are not accounted for by the model.

# 4.0 Data Analysis

# 4.1 Descriptive Analysis

Table 1 shows the descriptive analysis of the data.

**Table 1 Descriptive Analysis**

|  |  |  |
| --- | --- | --- |
|  | ***Global GDP (US Billion)*** | ***Losses from Financial and Economic Crime (US Billion)*** |
| Mean | 87779.03 | 867.8600 |
| Median | 86132.29 | 253.8000 |
| Maximum | 105435.0 | 3000.000 |
| Minimum | 75359.66 | 1.400000 |
| Std. Dev. | 10403.29 | 1094.285 |
| Skewness | 0.499348 | 0.797676 |
| Kurtosis | 1.936837 | 2.249009 |
| Jarque-Bera | 0.886546 | 1.295474 |
| Probability | 0.641932 | 0.523229 |
| Sum | 877790.3 | 8678.600 |
| Sum Sq. Dev. | 9.74E+08 | 10777136 |
| Observations | 10 | 10 |

Source: Eviews 10 Output (2025)

From Table 1, the mean global GDP stands at $87,779.03 billion, indicating that the average global economic output over the study period was just under $88 trillion. The maximum value of $105,435 billion suggests that in the highest observed year, global economic output reached over $105 trillion. Conversely, the minimum value of $75,359.66 billion indicates the lowest recorded global GDP in the study period, which was still a substantial amount, highlighting the general growth trajectory of the global economy. The standard deviation of $10,403.29 billion indicates a moderate level of variability around the mean global GDP. This variability reflects fluctuations in global economic performance, possibly due to external factors such as economic crises, changes in trade volumes, or global market instability. The skewness value of 0.499348 indicates a slight positive skew in the data, meaning that the distribution of global GDP is slightly right-tailed, with a few years showing exceptionally high economic output. The kurtosis value of 1.936837 suggests that the data is relatively flat compared to a normal distribution, meaning there are fewer extreme outliers in global GDP over the study period. The probability of the Jarque-Bera test for normality is 0.641932, which is well above the typical significance threshold of 0.05. This indicates that the data on global GDP follows a normal distribution, further supporting the robustness of the regression analysis.

The mean losses from financial and economic crime, as shown in Table 1, are estimated to be $867.86 billion. This suggests that, on average, financial crimes cost the global economy nearly $868 billion annually over the study period. The maximum recorded loss is $3,000 billion, which reflects a peak in illicit financial activity, likely driven by large-scale criminal operations such as widespread fraud or money laundering activities, or perhaps a single event like a significant financial scandal or economic collapse. On the other hand, the minimum loss is recorded at $1.4 billion, which represents the smallest loss during the study period, pointing to instances where financial crime losses were relatively contained or smaller in scale. The standard deviation of $1,094.285 billion indicates a high degree of variability in the losses from financial crimes, suggesting that these losses can fluctuate significantly from year to year, with some years witnessing dramatic increases in criminal activity. The skewness value of 0.797676 indicates a moderate positive skew, meaning that while there are some years with lower-than-average losses, there is a tendency for more years to show larger losses, possibly due to the growth of more sophisticated and widespread financial crimes. The kurtosis of 2.249009 suggests that the distribution of losses from financial crimes is slightly leptokurtic, meaning there are a few years with extremely high losses, reflecting the significant economic toll such crimes can take. The Jarque-Bera probability of 0.523229 is above the 0.05 threshold, suggesting that the losses from financial crimes data is normally distributed, providing a reliable basis for the statistical analysis that follows in the study.

# 4.2 Model Diagnostics

The study conducted four model diagnostic tests: normality test, linearity test, serial correlation test and heteroskedasticity test, as shown below.



Figure 2 Normality Test

Source: Eviews 10 Output (2025)

The normality of the residuals was tested using the Jarque-Bera test, which assesses whether the data follow a normal distribution, an important assumption for reliable regression results. As shown in Figure 2, the probability value for the Jarque-Bera test is 0.787125, which is well above the commonly accepted threshold of 0.05. This indicates that there is no significant deviation from normality in the residuals of the regression model. A p-value greater than 0.05 suggests that the residuals are normally distributed, which validates the assumption of normality. This is crucial because the normality of residuals ensures that the statistical inference derived from the regression model, such as hypothesis tests and confidence intervals, is valid and reliable.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 2 Ramsey RESET Test** | | |  |  |
| Equation: UNTITLED | | |  |  |
| Specification: GGDP LFEC C | | | |  |
| Omitted Variables: Squares of fitted values | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | Value | df | Probability |  |
| t-statistic | 0.404597 | 7 | 0.6979 |  |
| F-statistic | 0.163699 | (1, 7) | 0.6979 |  |
| Likelihood ratio | 0.231163 | 1 | 0.6307 |  |
|  |  |  |  |  |
|  |  |  |  |  |

Source: Eviews 10 Output (2025)

The linearity of the model was tested using the Ramsey RESET test, which checks whether the model has omitted variables or a functional form misspecification, ensuring that the relationship between the dependent and independent variables is linear. According to Table 2, the probability value of 0.6979 indicates that there is no evidence of misspecification in the functional form of the model. The high p-value suggests that the model does not suffer from issues such as omitted variables or incorrect functional specifications, and therefore, it supports the assumption of linearity in the model (Nwoye, Udunwoke & Nworie, 2023). This means that the chosen regression model is appropriate and accurately captures the relationship between global GDP and losses from financial crimes without significant errors due to misspecification.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table 3 Breusch-Godfrey Serial Correlation LM Test:** | | | |  |
|  |  |  |  |  |
|  |  |  |  |  |
| F-statistic | 0.552455 | Prob. F(2,6) | | 0.6023 |
| Obs\*R-squared | 1.555136 | Prob. Chi-Square(2) | | 0.4595 |
|  |  |  |  |  |
|  |  |  |  |  |

Source: Eviews 10 Output (2025)

To assess the presence of serial correlation, the study conducted the Breusch-Godfrey Serial Correlation LM test, which tests whether residuals from one time period are correlated with those from previous periods. As shown in Table 3, the probability value of 0.6023 is above the typical threshold of 0.05, suggesting that there is no significant serial correlation in the model. This result implies that the residuals do not exhibit patterns of correlation over time, which supports the assumption that the errors are independent and do not influence each other. This is essential because serial correlation can lead to inefficient estimates and biased statistical inference, making it critical to confirm that the residuals are independent and not autocorrelated.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Table .4 Heteroskedasticity Test: Breusch-Pagan-Godfrey** | | | | |
|  |  |  |  |  |
|  |  |  |  |  |
| F-statistic | 1.897188 | Prob. F(1,8) | | 0.2057 |
| Obs\*R-squared | 1.916896 | Prob. Chi-Square(1) | | 0.1662 |
| Scaled explained SS | 0.944558 | Prob. Chi-Square(1) | | 0.3311 |
|  |  |  |  |  |
|  |  |  |  |  |

Source: Eviews 10 Output (2025)

The Breusch-Pagan-Godfrey test was used to check for heteroskedasticity, which refers to situations where the variability of the residuals is not constant across all levels of the independent variable. According to Table .4, the probability value of 0.2057 indicates that there is no significant evidence of heteroskedasticity in the model. Since the p-value is greater than 0.05, we fail to reject the null hypothesis, suggesting that the variance of the residuals is constant across the observations. This is an important result because heteroskedasticity can lead to inefficient parameter estimates and misleading statistical tests, and the absence of heteroskedasticity means that the model’s error terms are homoscedastic, ensuring the accuracy of the regression results.

# 4.3 Test of hypothesis

H0: Losses accruing from financial and economic crimes do not significantly affect the global market.

**Table 5 OLS Regression Output**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dependent Variable: Global GDP | | |  |  |
| Method: Least Squares | | |  |  |
| Date: 02/14/25 Time: 22:14 | | |  |  |
| Sample: 2014 2023 | | |  |  |
| Included observations: 10 | | |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|  |  |  |  |  |
|  |  |  |  |  |
| LFEC | -6.146909 | 2.564109 | -2.397289 | 0.0434 |
| C | 93113.69 | 3469.510 | 26.83771 | 0.0000 |
|  |  |  |  |  |
|  |  |  |  |  |
| R-squared | 0.418055 | Mean dependent var | | 87779.03 |
| Adjusted R-squared | 0.345311 | S.D. dependent var | | 10403.29 |
| S.E. of regression | 8417.597 | Akaike info criterion | | 21.09089 |
| Sum squared resid | 5.67E+08 | Schwarz criterion | | 21.15141 |
| Log likelihood | -103.4545 | Hannan-Quinn criter. | | 21.02451 |
| F-statistic | 5.746994 | Durbin-Watson stat | | 0.994482 |
| Prob(F-statistic) | 0.043360 |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Source: Eviews 10 Output (2025)

In **Table .5**, the Ordinary Least Squares (OLS) regression output shows the results for the effect of financial and economic crime losses (LFEC) on global GDP, with the dependent variable being global GDP. The **R-squared** value is 0.418055, which indicates that approximately 41.81% of the variation in global GDP can be explained by the model, specifically by the losses from financial and economic crimes. While this is a moderate level of explanatory power, it suggests that other factors outside the scope of this model may also influence global GDP. Despite this, the model still explains a reasonable portion of the variation in global GDP, and the remaining unexplained variability may be attributed to other macroeconomic factors, policy interventions, or global shocks.

The **Prob(F-statistic)** value is 0.043360, which is less than the 0.05 threshold for statistical significance. This indicates that the overall regression model is statistically significant and that the independent variable (LFEC) has a meaningful effect on global GDP. In other words, there is sufficient evidence to reject the null hypothesis that losses from financial and economic crimes have no effect on global GDP. The constant term (**C**) has a coefficient of **93,113.69** with a **p-value of 0.0000**. This constant term represents the predicted value of global GDP when losses from financial and economic crimes are zero. It suggests that in the absence of financial crime losses, global GDP is expected to be approximately $93.1 trillion, which serves as a baseline for understanding the economic level when financial crimes do not impact the economy.

The coefficient for **LFEC** is -6.146909 with a **p-value of 0.0434**. This coefficient represents the marginal effect of losses from financial and economic crimes on global GDP. Specifically, for every one billion dollar increase in losses from financial and economic crimes, global GDP is expected to decrease by approximately **6.15 billion dollars**, holding all other factors constant. This is a negative effect, indicating that as losses from financial crimes rise, the global economy contracts. The **p-value of** 0.0434 indicates that this effect is statistically significant at the 5% significance level, as it is less than 0.05. Therefore, the alternate hypothesis is accepted that losses from financial and economic crimes negatively and significantly affected the global GDP (b = -6.146909; p-value = 0.0434). Thus, the financial and economic consequences of financial crimes are significantly detrimental to the performance of the global market.

# 4.4 Discussion of Finding

The finding that financial and economic crimes negatively and significantly impact global GDP can be attributed to the way illicit activities distort the functioning of global markets. Money laundering, terrorist financing, and fraud siphon off resources that could otherwise be used for productive investments, infrastructure development, or the support of social programs. Financial crimes undermine the efficiency of market systems by diverting funds away from legitimate businesses and investments, leading to a misallocation of resources and reduced economic growth. Furthermore, the damage caused by these crimes, including loss of investor confidence and reduced capital inflows, exacerbates market instability and hinders the long-term growth potential of economies. As illicit funds flow across borders, they contribute to economic instability by disrupting financial markets, increasing the cost of capital, and undermining trust in institutions.

Empirical studies support this finding. Kulmie, Hilif, and Hussein (2023) discussed how financial crimes and corruption erode public trust, leading to decreased investment in key sectors such as education and healthcare. The study found that these crimes diminish GDP and life expectancy while fostering inequality and poverty, reflecting how financial crimes can stifle economic progress. Similarly, Kulmie (2023) observed that financial crimes in Somalia's public sector negatively affected the economy and public trust, echoing the notion that illicit financial activities hinder socio-economic development. Kovalchuk, Shynkaryk, and Masonkova (2021) also found that cybercrimes, a form of financial crime, have a significant impact on global markets, particularly in terms of business disruption and revenue loss, further confirming the global economic toll of illicit financial activities.

# 5.0 Conclusion and Recommendation

The findings emphasize the profound economic repercussions of financial and economic crimes on the global market. The significant negative effect on global GDP suggests that the widespread prevalence of illicit activities, such as money laundering, fraud, and terrorist financing, does not merely affect the perpetrators or the immediate financial sectors but rather ripples through the entire global economy. These crimes contribute to a reduction in economic output by disrupting markets, eroding investor confidence, and diverting financial resources that could otherwise be used for productive investment. The adverse impact on GDP illustrates how financial crimes can undermine economic growth, hinder development, and create an environment of uncertainty that deters long-term economic planning.

Furthermore, the negative effect on global GDP underscores the vulnerability of economies to systemic risks posed by financial crimes. The sheer scale of losses attributed to financial crimes reveals the extent to which illicit financial flows distort market dynamics, affecting not only government revenues but also individual and corporate economic activities across borders. This strain on the global market can lead to reduced financial stability, making it more difficult for economies to recover from shocks or crises. As financial crimes siphon resources away from legitimate economic activities, they exacerbate existing inequalities and contribute to the inefficiency of global markets, highlighting the importance of addressing such crimes in maintaining the health of the global economy. The study recommends that:

1) Governments and international financial institutions should strengthen global financial regulations and improve cross-border collaboration to track and combat illicit financial flows by implementing stricter controls on money laundering, terrorist financing, and fraud that can reduce the economic distortions caused by financial crimes.

2) Corporations and financial institutions should invest more in advanced technologies and internal audit mechanisms to detect and prevent financial crimes since strengthening internal controls, improving compliance programs, and fostering a culture of transparency will help mitigate the impact of illicit financial activities on their operations and contribute to a more stable market environment.

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