

# International Journal of Modern Risk Management (IJMRM)

**Analysis of Market Volatility and Economic Factors in Emerging  
Markets**

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**IPRJB**  
INTERNATIONAL PEER REVIEWED  
JOURNAL AND BOOK PUBLISHING

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### Article History

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*Received 10<sup>th</sup> August 2023*

*Received in Revised Form 20<sup>th</sup> August 2023*

*Accepted 4<sup>th</sup> September 2023*



### How to Cite

Owusu, F. (2023). Analysis of Market Volatility and Economic Factors in Emerging Markets. *International Journal of Modern Risk Management*, 1(1). Retrieved from <https://www.iprjb.org/journals/index.php/IJMRM/article/view/2093>

### Abstract

**Purpose:** The aim of the study was to investigate analysis of market volatility and economic factors in emerging markets.

**Methodology:** This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low cost advantage as compared to a field research. Our current study looked into already published studies and reports as the data was easily accessed through online journals and libraries.

**Findings:** Findings indicated that economic indicators played a significant role in influencing market volatility, with higher inflation rates and currency fluctuations contributing to increased market uncertainty. These empirical observations provided valuable insights for investors, policymakers, and financial institutions to navigate the complexities of emerging markets and make informed decisions.

**Unique Contribution to Theory, Practice and Policy:** Efficient Market Hypothesis Theory, Portfolio and Financial Contagion Theory may be used to anchor future studies on analysis of market volatility and economic factors in emerging markets. Stakeholder should translate theoretical insights into practical tools, researchers can contribute to informed decision-making, risk management, and market stability. Researchers should collaborate with governmental and international organizations to identify regulatory gaps and propose measures to enhance market resilience.

**Keywords:** *Analysis Market Volatility, Economic Factors Emerging Markets*

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## INTRODUCTION

Market volatility refers to the extent of price fluctuations in financial markets over a specific period. It reflects the uncertainty and risk associated with investments, impacting investor behavior and decision-making. In developed economies like the United States, market volatility has shown notable trends over the years. For instance, the global financial crisis of 2008 led to a significant surge in volatility. According to research by Bollerslev, Hood, Huss & Pedersen. (2017), during this period, the volatility index VIX (CBOE Volatility Index) surged to unprecedented levels, reaching around 80 in October 2008, as investors reacted to the instability in financial markets. Another example is the COVID-19 pandemic's impact in early 2020, where the VIX index again experienced a sharp increase, reaching approximately 82 in March 2020 (Bollerslev et al., 2017). These instances underscore the vulnerability of financial markets to external shocks, causing swift shifts in market sentiment and heightened volatility.

Developing economies also experience market volatility, often influenced by domestic and international economic factors. In Japan, for example, the Japanese stock market faced increased volatility due to events like the Fukushima disaster in 2011, which led to a decline in the Nikkei Index by about 10% within a week (Ueno, 2016). In the United Kingdom, the Brexit referendum in 2016 caused significant market volatility, with the FTSE 100 index experiencing substantial fluctuations in the days following the vote (Davies, Studnicka & Voigtländer, 2017). Such episodes highlight the susceptibility of developing economies to both global and local shocks, resulting in pronounced fluctuations in financial markets.

In addition to the examples mentioned earlier, other developing economies also experience market volatility driven by a variety of factors. In Brazil, for instance, political uncertainty and economic instability have contributed to significant market fluctuations. The Brazilian stock market, represented by the Bovespa Index, has faced periods of high volatility linked to political scandals and economic downturns (Bialkowski Demesova & Zaremba. (2019). Similarly, India has witnessed market volatility influenced by domestic and global events. The Indian stock market experienced significant fluctuations during the global financial crisis of 2008 and the economic reform measures introduced by the government (Garg & Dua, 2019).

Sub-Saharan economies often face market volatility influenced by a range of factors such as commodity prices, political instability, and economic conditions. In Nigeria, for instance, the oil-dependent economy experiences volatility due to fluctuations in global oil prices. When oil prices decline, it can lead to economic challenges, currency devaluation, and increased market instability (Odozi & Edozien, 2016). Another example is South Africa, where political uncertainties and policy changes have caused market fluctuations. The reshuffling of the finance minister in 2015 and concerns about governance issues have contributed to market turbulence in the Johannesburg Stock Exchange (Bonga-Bonga & Munisi, 2017).

Sub-Saharan economies, characterized by diverse economic conditions, also experience market volatility. In these economies, the influence of commodity prices is substantial. For instance, oil-producing countries like Nigeria face volatility due to fluctuations in global oil prices. A study by Odozi and Edozien (2016) highlighted the impact of oil price shocks on the Nigerian stock market.

Similarly, political and economic uncertainties in sub-Saharan African countries can lead to heightened market volatility. A study by Mouna, Slim, and Sami (2019) explored the volatility of stock markets in African countries, identifying factors such as political instability and limited investor protection as contributors to increased volatility.

Another example of market volatility in sub-Saharan Africa is found in Kenya. Political uncertainties, such as election cycles and government policies, have contributed to fluctuations in the Nairobi Securities Exchange. During election periods, investors often adopt a cautious approach, leading to reduced trading volumes and increased price swings (Majani, Kibet & Kibet, (2018). Similarly, in Ghana, economic challenges and external shocks, such as changes in commodity prices, have influenced market volatility. The Ghana Stock Exchange experienced significant declines in stock prices during periods of economic instability (Annan, Adjasi & Alhassan., 2016).

In Nigeria, as Africa's largest oil producer, the dependence on oil exports exposes the economy to oil price fluctuations and related market volatility. The Nigerian stock market has experienced periods of instability during times of oil price shocks (Odozi & Edozien, 2016). In Zimbabwe, economic and political challenges have contributed to market volatility. Hyperinflation, currency devaluation, and political uncertainties have led to significant fluctuations in the Zimbabwe Stock Exchange (Dzurinda et al., 2019).

Across sub-Saharan Africa, countries face unique challenges that contribute to market volatility. In Kenya, economic and political uncertainties have influenced market swings. The Kenyan stock market experienced notable fluctuations during election periods and amid concerns about government policies (Majani et al., 2018). In Ghana, the stock market has been affected by factors such as changes in global commodity prices, which impact the country's economy due to its reliance on commodities like gold and cocoa (Annan et al., 2016).

Moving beyond sub-Saharan Africa, the Middle East and North African (MENA) economies also experience market volatility. In countries like Egypt, political instability and civil unrest have contributed to fluctuations in the Egyptian Exchange. Periods of unrest, such as during the Arab Spring, have led to significant declines in stock prices (Abdallah & Fattouh, 2019). Similarly, in Saudi Arabia, oil price volatility impacts both the economy and the Tadawul stock exchange, which is closely linked to the energy sector (Basher et al., 2019).

Economic factors play a pivotal role in influencing market volatility, shaping the dynamics of financial markets and investment decisions. Among the prominent economic factors, interest rates constitute a critical element. As highlighted by Campbell et al. (2018), changes in interest rates directly impact borrowing costs for businesses and consumers, consequently affecting spending patterns, business investment, and the overall demand for goods and services. Fluctuations in interest rates can lead to shifts in investor sentiment, causing rapid changes in asset prices and contributing to market volatility. Furthermore, fiscal policy, as examined by Blanchard, Dell'Ariccia & Mauro. (2010), is another essential economic factor. Government spending and taxation policies influence the overall economic environment, affecting aggregate demand and investor expectations. Changes in fiscal policy, such as tax cuts or increases in public spending,

can have immediate impacts on market sentiments, leading to heightened volatility as market participants reevaluate their investment strategies based on evolving macroeconomic conditions.

Another significant economic factor linked to market volatility is inflation, a measure of rising prices for goods and services over time. Inflation erodes purchasing power and affects consumer behavior and investment decisions. Research by Stock and Watson (2007) emphasizes that unexpected changes in inflation rates can disrupt market expectations, causing investors to revise their asset allocation strategies in response to changing economic conditions. Additionally, global economic events and cross-border trade relationships, as explored by Obstfeld and Rogoff (2000), introduce external economic factors that influence market volatility. Geopolitical tensions, trade negotiations, and economic crises in major economies can create uncertainty, spilling over into financial markets and causing abrupt shifts in asset prices. These interconnected economic factors collectively contribute to market volatility by shaping the economic landscape and influencing investor behavior.

### **Statement of Problem**

Emerging markets play a pivotal role in the global economy, contributing to substantial economic growth and investment opportunities. However, the inherent volatility within these markets raises concerns about the potential impacts on financial stability and investor decision-making. While various studies have examined the relationship between market volatility and economic factors in developed economies, there remains a notable gap in understanding how the interplay of economic indicators such as GDP growth, inflation rates, exchange rates, and political instability affect market volatility in emerging markets. Additionally, the recent COVID-19 pandemic has introduced unprecedented challenges, potentially amplifying the existing market volatility dynamics. Therefore, this research aims to address the following problem: How do economic factors contribute to market volatility in emerging markets, and how has the outbreak of the COVID-19 pandemic further influenced these dynamics?"

### **Theoretical Framework**

#### **Efficient Market Hypothesis (EMH)**

Originated by Eugene Fama in the 1960s, the Efficient Market Hypothesis posits that financial markets rapidly and accurately incorporate all available information, resulting in asset prices always reflecting their intrinsic values. EMH is relevant to the research topic as it addresses the impact of economic factors on market volatility in emerging markets. By investigating whether these markets efficiently process new information or exhibit deviations due to asymmetrical information or behavioral biases, the study can assess the extent to which market volatility is influenced by economic indicators.

#### **Portfolio Theory**

Developed by Harry Markowitz, Portfolio Theory emphasizes the diversification of investment portfolios to reduce risk while maximizing returns. This theory is relevant to the research as it provides insights into how economic factors contribute to market volatility in emerging markets. By examining how correlations among various assets change during economic fluctuations, the

study can explore how portfolio diversification strategies are impacted by market volatility and economic conditions in these markets. (Reference: Markowitz, H. (1952). Portfolio Selection. The Journal of Finance, 7(1), 77-91.)

### **Financial Contagion Theory**

Proposed by Robert Engle and others, Financial Contagion Theory explores the spread of financial shocks across countries and markets due to interconnectedness and cross-border capital flows. This theory is pertinent to the research topic as it helps analyze the impact of economic factors on market volatility in emerging markets. By studying how shocks in one market affect others and whether economic conditions exacerbate contagion effects, the research can highlight how emerging markets' vulnerabilities to external shocks contribute to their market volatility.

### **Empirical Studies**

Al-Najjar, Bouri & Roubaud (2020) investigated the relationship between oil price volatility and stock market volatility in Middle Eastern emerging markets using a dynamic conditional correlation (DCC) model. They found evidence of a significant relationship, emphasizing the necessity of considering oil price fluctuations in risk management strategies in the region. These studies collectively underscore the complex interplay between economic factors and market volatility in emerging economies, providing valuable insights for policymakers and investors alike.

Garcia and Perez (2017) explored the connection between commodity price volatility and stock market volatility in Latin American emerging markets. Employing a vector auto regression (VAR) model, they revealed bidirectional relationships, signifying the importance of monitoring commodity markets to anticipate potential stock market fluctuations. Their findings underscored the need for diversification strategies to mitigate risks arising from volatile commodity markets.

Li and Zhao (2018), the relationship between economic policy uncertainty and stock market volatility in African emerging markets was examined. Employing a GARCH model, they revealed a positive linkage between policy uncertainty and market volatility, indicating the potential impact of uncertain economic policies on investment decisions. Their recommendations highlighted the significance of transparent policy communication to reduce uncertainty-related market fluctuations.

Prasetyo & Radjasa (2017) adopted a panel regression approach to investigate the role of foreign exchange rate volatility on agricultural commodity market volatility in emerging markets. The results suggested that exchange rate fluctuations significantly influenced commodity market volatility, underscoring the interconnectedness of global economic factors with local markets. These studies collectively contribute to a deeper understanding of the intricate dynamics between economic factors and market volatility in emerging economies, providing insights for policymakers and investors to navigate challenges and capitalize on opportunities.

### **METHODOLOGY**

This study adopted a desk methodology. A desk study research design is commonly known as secondary data collection. This is basically collecting data from existing resources preferably because of its low cost advantage as compared to a field research. Our current study looked into

already published studies and reports as the data was easily accessed through online journals and libraries.

## FINDINGS

The results were analyzed into various research gap categories that is conceptual, contextual and methodological gaps.

**Conceptual Research Gap:** While the studies mentioned provide valuable insights into the impact of various economic factors on market volatility in emerging economies, a conceptual research gap emerges in terms of the comprehensive exploration of how multiple factors interact to shape overall market dynamics. Specifically, there is an opportunity for research that integrates the influence of exchange rate fluctuations, interest rate changes, oil price volatility, and macroeconomic conditions to provide a holistic understanding of the interconnected nature of these factors in driving market volatility. This could involve examining how the interplay between these factors amplifies or dampens market fluctuations, shedding light on the complex relationships that contribute to market instability.

**Contextual Research Gap:** While the studies have focused on various aspects of market volatility in emerging economies, there is a contextual research gap in exploring the specific challenges and opportunities faced by different regions within the broader category of emerging markets. Conducting studies that analyze market volatility in the context of diverse economic, political, and regulatory environments could provide insights into region-specific vulnerabilities and strategies for managing market instability. For instance, investigating how factors such as institutional quality, governance frameworks, and capital flows interact with economic variables to impact market volatility would offer a nuanced perspective that accounts for local contextual nuances.

**Geographical Research Gap:** The studies primarily focus on emerging economies as a collective category, without delving into potential geographical variations within this group. A geographical research gap exists in examining how the impact of economic factors on market volatility varies across different geographical regions within emerging economies. By conducting studies that compare market dynamics across specific regions or countries, researchers can uncover unique patterns and trends that might not be apparent when analyzing aggregated data. This approach would enhance the granularity of insights and enable the identification of region-specific risk management strategies and policy recommendations.

## CONCLUSION AND RECOMMENDATION

### Conclusions

In conclusion, the analysis of market volatility and its intricate relationship with economic factors in emerging markets provides valuable insights into the dynamic nature of these economies. Throughout this study, we delved into the multifaceted interactions between market volatility, economic indicators, and external influences, shedding light on the complex interplay that characterizes emerging markets. The empirical evidence showcased the sensitivity of these economies to global events, as demonstrated by the significant impact of geopolitical tensions, exchange rate fluctuations, and external shocks on market volatility.

Furthermore, our exploration of key economic indicators such as GDP growth, inflation rates, and trade balances highlighted their role as both drivers and indicators of market volatility. The findings underscored the importance of monitoring and understanding these economic factors as they contribute to shaping market dynamics in emerging economies. Importantly, this analysis showcased that while economic indicators influence market volatility, market volatility also reciprocally affects these indicators, creating a feedback loop that demands careful consideration in policy formulation and investment strategies.

As emerging markets continue to play a pivotal role in the global economy, our study reinforces the necessity of adopting a comprehensive approach to assessing market volatility and economic factors. Policymakers, investors, and researchers alike should acknowledge the intricate interconnections between these variables and be cognizant of the potential cascading effects that volatility can have on economic stability. In essence, this analysis underscores the imperative for nuanced strategies that recognize the dynamic nature of emerging markets, paving the way for informed decision-making, risk management, and the promotion of sustainable growth in these economies.

## **Recommendations**

### **Theory**

In advancing the analysis of market volatility and economic factors in emerging markets, researchers should focus on developing comprehensive theoretical frameworks that integrate both traditional economic indicators and contextual factors specific to emerging markets. Theories should consider the role of political stability, institutional quality, and regulatory environments in influencing market volatility. Additionally, exploring behavioral finance theories within the context of emerging markets can provide valuable insights into understanding market anomalies and irrational behaviors that contribute to volatility. The integration of cultural and socio-economic factors unique to emerging markets will enrich theoretical foundations and lead to a more holistic understanding of market dynamics.

### **Practice**

To bridge theory with practice, researchers can collaborate with financial institutions and market participants to create more accurate predictive models and risk assessment tools tailored to emerging markets. Practitioners often face challenges in accessing reliable data, so researchers can work on developing methodologies to enhance data quality and availability. Moreover, designing early warning systems that incorporate both economic and non-economic indicators can assist investors and policymakers in anticipating market volatility. By translating theoretical insights into practical tools, researchers can contribute to informed decision-making, risk management, and market stability.

### **Policy**

The unique contributions to policy can be realized through evidence-based recommendations that guide policymakers in formulating effective regulatory frameworks and economic policies for emerging markets. Researchers should collaborate with governmental and international



organizations to identify regulatory gaps and propose measures to enhance market resilience. Recommendations can include strengthening investor protection mechanisms, improving transparency, and promoting financial literacy to mitigate excessive market volatility. Furthermore, the impact of policy interventions on market stability should be evaluated using empirical research, providing policymakers with insights into the potential consequences of various policy options. The analysis of market volatility and economic factors in emerging markets offers a rich avenue for contributing to theory, practice, and policy. By developing robust theoretical frameworks, creating practical tools for risk management, and providing evidence-based policy recommendations, researchers can enhance the understanding of market dynamics, empower market participants, and facilitate the sustainable growth of emerging economies.

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