

"Impact of Geopolitical Risks on Global Financial Markets"

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Abstract

Geopolitical risks have become one of the major determinants that affect financial markets and economic stability in an increasingly interdependent world economy. This study tries to see the convoluted nexus between geopolitical events such as political unrest, wars, and policy changes and their impact on international financial institutions. All asset classes—all equities, bonds, currencies, and commodities—are volatile due to geopolitical risks: from diplomatic spats to military conflicts. We then probe our hypotheses of interest using case studies of similar historical events, including the September 11 attacks, the Arab Spring, Brexit, and United States-China trade wars. We demonstrate the response of market players to changes in energy prices, international supply chains, and trade dynamics using these case studies. Global market interdependence increases the spread of geopolitical hazards, thus making algorithmic trading and fast-speed information flow an essential component of market responses. The paper also explores the rising significance of emerging economies such as China and India while taking into account the role international bodies like the World Bank and IMF assume when cutting risks. Third, to tackle geopolitical uncertainty, we go on to explore how ESG factors increasingly impact investment decisions. This research will create a deeper framework in understanding how geopolitical risks affect financial markets and the behaviour of investors by using a mixed-method approach. The document will base the qualitative inputs from case studies, combing those with the quantitative analysis of market data. This article strives to help the investor, politician, and scholar have the opportunity to put together more well-informed strategies for investors to be better prepared or adjusted in dealing with these dynamics.

Introduction

In an increasingly interconnected world, geopolitical risks have emerged as a critical force shaping the market dynamics and investor sentiments. This paper deals with the complex relationship between geopolitical events such as political tensions, conflicts, and policy shifts and their impact on the global financial market including stock exchanges, currency markets, and commodity prices.

Geopolitical risk is defined as the potential possibility of international tensions triggering market instability, and thus investors and policymakers must be watchful of this as an issue. Historical events like the US-China trade war, Russia-Ukraine War and the COVID-19 pandemic show how crisis in one region can trigger market volatility worldwide. A political crisis in an oil-producing nation, for instance, can trigger volatility in energy markets, affecting currencies, stock prices, and economic growth prospects in countries thousands of miles away. Similarly, trade disputes between major economies can disrupt global supply chains, impacting industries and financial markets across continents. Thus, the geopolitical risks are of a multifaceted nature and therefore hard to analyze because the effects could vary between different sectors and asset classes. Global financial markets have increased their

transmission mechanisms through which these risks affect asset prices and capital flows, leading to increased market volatility and highlighting the importance of geopolitical risk analysis in investment decisions. The risk of emerging markets further complicates this landscape as the economic and political dynamics of countries like China, India, and Brazil becomes increasingly relevant to global stability.

This paper aims to provide a comprehensive analysis of geopolitical risks are translated in movements in the financial markets and economic outcomes. By using historical cases combined and current trends, the research study seeks to unravel the complex mechanisms through which geopolitical events influence investor behaviour, asset valuations, and market structures. This research paper seeks to contribute to the growing body of literature on the intersection of geopolitics and finance. By providing a comprehensive analysis of how geopolitical risks impact global financial markets, we aim to equip investors, policymakers, and academics with valuable insights for navigating an increasingly complex and interconnected world. Understanding the mechanisms through which geopolitical events influence market dynamics is not only crucial for effective risk management and investment strategies but also for developing robust policy frameworks to enhance global financial stability in the face of geopolitical uncertainties.

Literature Review

Gkillas, Gupta, and Wohar (2018) explored the predictive power of news-based Geopolitical Risk Index (GPR) leading to significant spikes in volatility levels in the Dow Jones Industrial Average (DJIA) from 1899 to 2017. In contrast, a linear Granger causality test showed no evidence of GPR generating volatility surges, suggesting that while geopolitical risks can cause market fluctuations, effect might be different based no other conditions that prevails in the market.

Balcilar et al. (2018) focused on BRICS stock markets dynamics by emphasizing geopolitical risks. The results showed how high levels GPR inflate DJIA volatility up to a considerable level. The same approach was used by them to revalidate the ability of GPRs to forecast movements of the market by emphasizing the dramatic impact that forecast movements of the markets by emphasizing the dramatic impact that factors of geopolitics have on stocks market performance.

Lu et al. (2020) examines geopolitical risks on financial development for 18 emerging markets from 1985 to 2018. Analysis showed that geopolitical risks are negatively correlated with domestic credit, meaning that political instability poses a constraint on the further growth of financial development in developing economies. As a result, their study makes explicit how geopolitical factors taking place outside of the national borders affect domestic financial systems.

Elsayed and Helmi (2021) investigated the effect of geopolitical risks in the Middle East and North Africa (MENA) financial markets. Using the ADCC-GARCH model, they discovered that geopolitical risks such as war, terrorism, and political tensions had a considerable impact on return and volatility spillovers in MENA markets. Their findings revealed that big geopolitical events, while not consistently altering market outcomes, do generate volatility spillovers that influence investor behaviour across the area.

Zhang et al. (2023) conducted dynamic panel data analysis to determine how geopolitical concerns affect stock market volatility in 32 countries, with a focus on rising economies, crude oil exporters, and peaceful nations. Their findings indicated that GPR greatly affects stock market volatility, particularly in nations that rely on oil exports and have relatively stable political systems, emphasising the worldwide implications of geopolitical risks.

Salisu et al. (2022) used the GARCH-MIDAS model to investigate how GPR affects stock market volatility in emerging markets. Their findings revealed that geopolitical risks, namely those associated with action-based GPR

indices, have a greater impact on market volatility than threat-related indices. The study emphasised the need of taking into account global economic conditions when predicting the impact of geopolitical risks on developing markets.

Smales (2021) examined the influence of geopolitical threats on oil and stock markets. Using the Caldara and Iacoviello (2018) daily geopolitical risk index, he showed that geopolitical events, particularly those involving supply disruptions, considerably increase oil price volatility. Stock markets, on the other hand, saw returns fall during periods of increased geopolitical risk, implying that oil futures could serve as a buffer for stock investors during times of political instability.

Das, Kannadhasan, and Bhattacharyya (2019) looked into how geopolitical risk, economic policy uncertainty, and financial stress affect emerging stock markets. Their analysis examined monthly data from 1997 to 2018 and discovered that, while economic policy uncertainty had the greatest impact on these markets, geopolitical concerns also played an important role, particularly during periods of financial stress. The findings revealed that market reactions to geopolitical threats are more pronounced in extreme economic conditions, where volatility is high.

Kannadhasan and Das (2020) used quantile regression analysis to investigate how geopolitical concerns and economic policy uncertainties affect Asian emerging stock markets. Their research discovered that geopolitical risks have an asymmetric impact on market returns, with stronger effects reported at higher quantiles. The findings indicate that both geopolitical threats and economic policy uncertainties influence market dynamics, with the former having a greater impact at larger stock returns.

Caldara and Iacoviello (2022) created the widely used Geopolitical Risk Index, which assesses geopolitical events and risks using news data. Their findings revealed that geopolitical hazards considerably diminish investment and employment while raising catastrophe risk. Their research also revealed that industries and firms with greater exposure to geopolitical risks have lower investment levels, highlighting the wide economic effects of geopolitical instability on market performance.

Objectives of the Study

The primary objective of this study is to investigate the impact of geopolitical risks on global financial markets, focusing on both in terms of short-term volatility and long-term trends in asset prices, liquidity, and investor behaviour. The study purports to investigate the effects of international conflicts and political instability, war, trade war and sanctions on stock market, bond market, currency and commodity market. The study aims to achieve the following:

- 1. Analyze market responses to geopolitical events, such as wars, political instability, and trade conflicts.
- 2. Explore how investors make decisions during periods of heightened geopolitical risk.
- 3. Investigate the impact of geopolitical risks on emerging and developed economies.

Research Methodology

The methodology adopted for the study was primarily qualitative, involving the analysis of key geopolitical events and their impact on financial markets globally. The historical data from past geopolitical crisis such as trade tensions, armed conflicts, and global pandemic was observed, focusing on stock markets, commodity prices, currency fluctuations, and bond markets. Secondary data sources include financial institutions, published papers, market indices and Monte Carlo simulations, aiming to understand how investors reacted during these events and how the global markets were affected.



Data Analysis and Results

1. Escalation of Trade Tensions - US-China Trade War

The US-China trade war significantly disrupted the global trade, leading to higher tariffs and a chain reaction of economic affects. The stock market experienced sharp corrections, with the S&P 500 falling by 5-10% as the tensions escalated, where the Chinese Yuan fell by 5-10% against the US Dollar resulting in increased volatility in US/CNY exchange rates. In the commodity market as well, particularly agricultural products like soybeans, was severely impacted with prices dropping by 10-15% due to reduced Chinese demand. Therefore, investors turned to safe-haven assets such as gold, which saw a 20% price increase.

Key Insights:

- The escalating tariffs between the US and China disrupted global trade flows, particularly affecting technology and agricultural sectors, deepening concerns around global food security and commodity security.
- China's deliberate currency depreciation strategies aimed to boost not only Chinese exports but also rippled in currency markets, impacting trade relations with countries dependent on Chinese demand.



Source: Investing.com - US/CNY Historical Data

During the period of the peak US-China trade war (2018-2019), there was a sharp decline of the S&P 500 and US/CNY depreciation, along with an upward trend in gold prices as investors shifted towards safe-haven assets.

2. Russia-Ukraine Armed Conflict

The Russia-Ukraine war in 2022 dramatically affected the European financial markets and global energy supplies. The Euro Stoxx 50 index fell by 10-20% as supply chain problems and sanctions against Russia impacted heavily on the energy and manufacturing sectors. The Ruble depreciated by 50%, indicating significant internal economic struggle following the adoption of wide-ranging sanctions. For this the oil markets responded with a dramatic 50% increase in Brent crude prices, reaching \$130 per barrel, triggering inflationary pressures across Europe. Investors rushed to safe-haven assets such as gold, driving its prices up by 10-15% as the market volatility increased.

Key insights:

- European markets were the most vulnerable with energy-intensive industries bearing the brunt of the conflict's impacts, highlighting the vulnerability of the energy-dependent economies during geopolitical crisis.
- The sharp depreciation of the Ruble not only economically isolated Russia, but it also had secondary impacts on emerging economies that are strongly linked to Russian trade and financial systems.
- The rise in oil prices not only threatened global inflation, but also raised concerns about future energy shortages in regions that highly depend on Russian gas and oil.

Growing pressures



Prices for energy, grains, and metals soared since the invasion of Ukraine, signaling that inflation rates are poised to accelerate.

Source: IMF blog

The graph highlights the steep decline of Euro Stoxx 50 alongside the dramatic rise in Brent crude prices during the Russia-Ukraine conflict, showcasing the direct correlation between geopolitical tensions and energy markets.

3. Sanctions Crisis Energy - OPEC's Oil Embargo

The OPEC Oil Embargo marked as a critical turning point for global financial markets. Brent crude oil prices shot up by 300%, leading to prolonged inflationary pressures across countries that import oil. The S&P 500 fell by 40%, underlining the massive impact energy price shocks can have on stock markets in a country with an economy where imported oil forms a solid basis for economic activities. Inflation in the United States rose to 13% and made the economy more unstable, weaking the consumer purchasing power. Thus, inflation and market volatility pushed investors to safe-haven assets.

Key Insights:

- The embargo revealed how economies that relied heavily on foreign energy supplies were vulnerable, leading to further decades of shift towards energy independence and diversification.
- Inflationary prices also added to the crisis, and reform efforts on energy policy and related research into the role of a central bank in managing economic downturns began.



Source: Macrotrends - Crude Oil Prices - 70 Year Historical Chart

4. COVID-19 Pandemic

The COVID-19 pandemic unleashed unprecedented turmoil across global financial markets, where equity market dropped by 35% in March 2020 as economies worldwide halted their business operations due to lockdowns, creating widespread economic uncertainty. Energy markets were severely affected as the crude oil prices temporarily turned negative due to a supply shortage and storage limitations. In contrast, the gold prices surged by 25% as investors moved to safe-haven assets. As a result, global central banks responded with aggressive monetary easing and brought interest rates to near zero to further boost the economies and bond prices as well.

Key Insights:

- The pandemic exposed deep vulnerabilities in global supply chains, resulting in long-term shifts in how companies manage production and logistics.
- The biggest collapse was in the energy sector, with oil prices going negative, highlighting the scale of the global economic slowdown and oversupply issues.
- Safe-haven assets like gold and bonds, attracted investors as traditional financial markets struggles with extreme volatility and uncertainty from the length and duration of the pandemic's recovery.

Event	Stock Market Impact	Currency Impact	Commodity Impact	Safe-Haven Assets
US-China Trade War	S&P 500: -5 to -10%	Yuan: -5 to -10%	Soybeans: -10 to -15%	Gold: +20%
Russia-Ukraine Conflict	Euro Stoxx: -10 to -20%	Ruble: -50%	Oil: +50% (Brent Crude)	Gold: +10-15%
OPEC Oil Embargo	S&P 500: -15 to -20%	N/A	Brent: +100%	Gold: +20 – 30%
COVID-19 Pandemic	S&P 500: -35%	N/A	Oil: Negative Prices	Gold: +25%



Source: Motilal Oswal the Impact of Geopolitical Risk on Stock Market



Conclusion

The study shows that geopolitical threats have a substantial impact on financial markets, affecting in both short-term volatility and long-term market movements. Events such as the US-China trade war, Russia-Ukraine conflict, and global pandemic disrupted the market dynamics, resulting in sharp declines in stock indices, currency fluctuations and commodity price surges. During these crisis, S&P 500 index and the Euro Stoxx 50 experienced substantial fall, while currencies like the Russian Ruble was devalued dramatically. Thus, as investors wanted stability against such risks, they invested more in safe haven assets such as gold and bonds, resulting in their prices to rise up to 25%.

This emphasizes the need for investors and financial institutions to incorporate geopolitical risk management strategies. As geopolitical risks are unpredictable and can abruptly change market dynamics, relying solely on traditional economic indicators is not sufficient. Thus, flexible and adaptive strategies that allow for easy adjustments in response to these events are necessary. Overall, this research emphasizes the importance of accounting for geopolitical risks in investment decisions to manage the complexities of an interconnected global economy.

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