

Comprehensive Analysis: Effects of World Events on the Global Stock Markets

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Abstract:

This research paper investigates the factors that have impacted the recent global stock markets by analyzing the world events that may impact substantial global economic consequences, inflation, monetary policy, and the future outlook on the global stock markets. The world events that impacted the global financial markets are the COVID-19 pandemic and the 2022 Russia-Ukraine war. The results highlight that there is a negative relationship between the world events, which induced uncertainty, volatility and geopolitical risks, and the global stock markets. Also, due to the interconnectedness and dependence of global markets, spillover effects were noted among the connected global markets. Furthermore, inflation plays a crucial role in the global financial markets that influences stock prices and monetary policy authorities to react. The future outlook is unpredictable with the ongoing conflict. This analysis aims to inform the economic industry and policy makers of the factors that influence the global stock markets.

Keywords: global stock markets; COVID-19; Russia-Ukraine war; inflation; monetary policy

JEL Classification Codes: E66, G15, F51, F62

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1-Introduction :

A stock exchange is a central area where firms and governments can buy and sell equities (Harper, 2022). There are 60 major global stock exchanges, one of them being the New York Stock Exchange (Cattlin, n.d.). There are 16 stock exchanges in the world that have a market capitalization that is greater than \$1 Trillion USD, referred to as the “\$1 Trillion Club”. In 2016, this club of exchanges accounted for 87% of the total market capitalization (Desjardins, 2016).

The stock markets can be impacted or altered based on a variety of elements. The five main factors that affect the stock market are internal firm developments, the impact of world events, inflations and interest rates, the impact of exchange rates, and anticipation and financial reports (Wolski, 2019). This includes government, global trade, speculative expectations, and supply and demand factors that trigger the global stock markets (Mitchell, 2022). Furthermore, world events such as war and civil unrest, natural disasters, and terrorism can have an impact on stock prices for individual companies as well as the stock market. These events create a cascading effect both directly and indirectly on the financial markets. One of the main influences on the US stock market is the periodic interest rate changes made by the U.S. Federal Reserve to fight inflation. Whereas exchange rates directly affect the cost of doing business in a country, which has an impact on the price of stocks of companies conducting business abroad. Changes in exchange rates may impact the price and value of stocks in foreign countries (Wolski, 2019).

World events such as the coronavirus COVID-19 has spread to all parts of the world creating a global pandemic in 2020 which led to destructive economic impacts (Baldwin & Di Mauro, 2021; Goodell, 2020). Many of the global stock markets have suffered greatly in the trillions of dollars in which international financial institutions were required to reduce their forecasted growth for 2020 and beyond (Boone, Haugh, Pain, & Salins, 2020; Lyócsa, Baumöhl, Výrost, & Molná, 2020). After the pandemic, another world event shocked the global stock market/exchange, the 2022 Russia-Ukraine war. On February 24, 2022, Russia attacked Ukraine with its months of military deployment along the borders of Ukraine. Many concerns regarding the war is the duration of the conflict, the effects of the sanctions, its impact on the global economy and the reaction of global stock markets (Boungou & Yatié, 2022). However, globalization influenced the formation of global economies and increased the interdependence of global financial markets (Chatjuthamard, Jindahra, Sarajoti, & Treepongkaruna, The effect of COVID-19 on the global stock market, 2021). Thus, it is important to explore the factors that affect the global stock markets and its interconnectedness.

2. Impact of World Events on the Global Stock Markets:

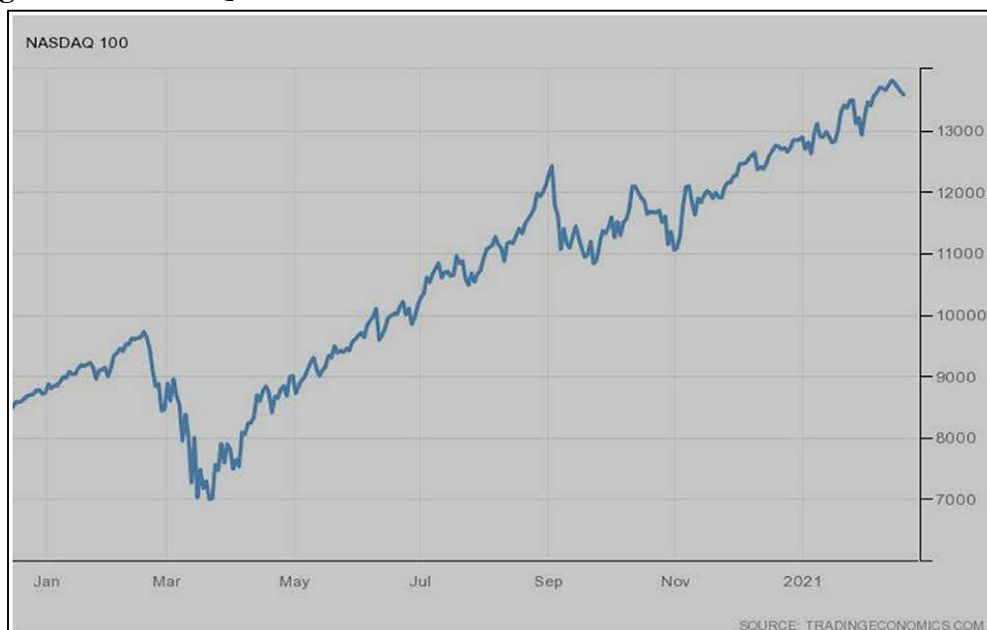
2.1 Effects of COVID-19 on the Global Stock Markets:

COVID-19 has affected many industries, businesses, families, and individuals globally. The global financial markets reacted very strongly and the returns of the stock market dropped significantly as the pandemic evolved (Al-Awadhi, Alsaifi, Al-Awadhi, & Alhammadi, 2020; Ashraf, 2022; Erdem, 2020; Ramelli & Wagner, 2020). Due to the high levels of risks, COVID-19 has made investors suffer greatly in a short period of time (Zhang, Hu, & Ji, 2020). The impact of COVID-19 on the global stock market includes lower market returns and increase in volatility of the stock market (Al-Awadhi, Alsaifi, Al-Awadhi, & Alhammadi, 2020; Ashraf, 2022; Erdem, 2020;

Ramelli & Wagner, 2020). The World Bank (WB), the International Monetary Fund (IMF), and the Organization for Economic Cooperation and Development (OECD) reported significant decrease in the projected rate of growth in late-2019, and 2020. IMF indicated that the global economic growth forecasts declined from +3.4% to -4.4% from October 2019 to October 2020. OECD reviewed its forecast growth rate and it was reduced from +2.9% to -4.5% from November 2019 to September 2020 (Jabeen, Farhan, Zaka, Fiaz, & Farasat, 2021;2022). However, not all countries reacted the same way to the impact of the pandemic. The characteristics of a country are fundamental in shaping the stock market response to COVID-19-induced financial market instability (Chatjuthamard, Jindahra, Sarajoti, & Treepongkaruna, The effect of COVID-19 on the global stock market, 2021).

The COVID-19 pandemic changed the global future outlook due to fear and uncertainty, where the global stock markets fell by \$6 trillion US dollars from February 24-28, 2020 (Ozili & Arun, 2022). The stock markets are referred to as the indicator of any economy (He, Sun, Zhang, & Li, 2020; He, Liu, Wang, & Yu, The impact of COVID-19 on stock markets, 2020). In March 2020, the S&P 500 Index (Standard and Poor's 500 – a well-known index in the USA) observed an abnormal drop of 35%, however, the UK and Germany's stock markets performed worse than the US market with a drop of 37% and 33%, respectively. Although, the bottom-line performers in the global stock markets in 2020 were Brazil and Columbia with a drop of 48% and 47%, respectively (Jabeen, Farhan, Zaka, Fiaz, & Farasat, 2021;2022). The coronavirus pandemic has gravely affected the global stock markets compared to the 2003 SARS virus, in which China's economic developments in the last 2 decades reflects China's global stance as a leading economy in global production and manufacturing of highly demanded technology and products (Alameer, Elaziz, Ewees, Ye, & Jianhua, 2019). The SARS virus affected the global economy but mainly influenced the Asian markets, including airline stocks and hotel industry stocks.

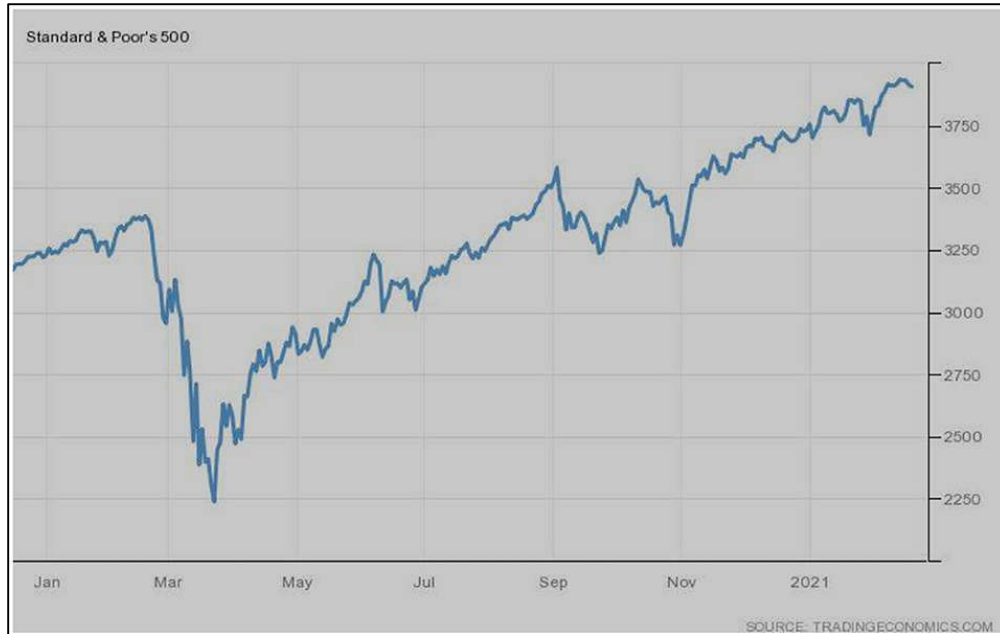
Figure 1. NASDAQ Index Performance Pre- & Post-Pandemic Announcement



Source: (Jabeen, Farhan, Zaka, Fiaz, & Farasat, 2021;2022)

The NASDAQ, USA's leading indices, stock market performance was below average before the start of the pandemic, and in March 2020, it fell to its lowest point (Figure 1). However, after its decline, the index jumped upward and hit its highest level in early 2021.

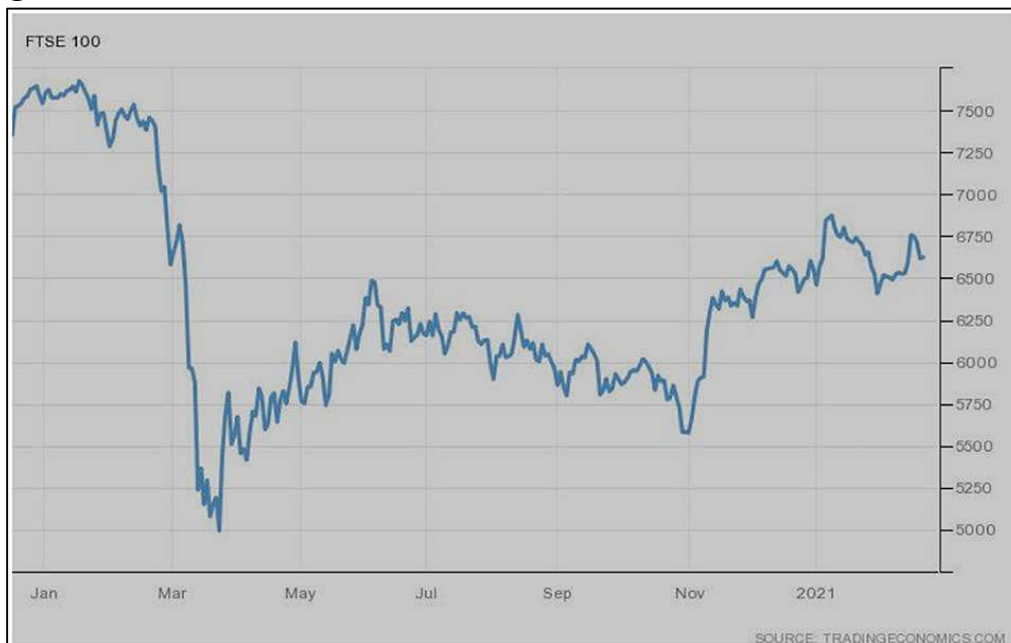
Figure 2. S&P 500 Index Performance Pre- & Post-Pandemic Announcement



Source: (Jabeen, Farhan, Zaka, Fiaz, & Farasat, 2021;2022)

The S&P 500 index, a well-known index in the USA, had a similar financial market performance as the NASDAQ index (Jabeen, Farhan, Zaka, Fiaz, & Farasat, 2021;2022). Although the S&P 500 index performed higher than the NASDAQ index before the pandemic, it hit its lowest point in March 2020, then afterward escalated and reached its peak level (Figure 2).

Figure 3. FTSE 100 Index Performance Pre- & Post-Pandemic Announcement



Source: (Jabeen, Farhan, Zaka, Fiaz, & Farasat, 2021;2022)

Whereas Europe's index market of FTSE 100 went to the lowest point in March 2020 (Figure 3). The figure depicts Europe's market conditions from January 2020 to January 2021, after hitting its lowest point, it slowly recovered but after a year it was not able to return to its previous position, before the pandemic (Jabeen, Farhan, Zaka, Fiaz, & Farasat, 2021;2022).

A study used a jump detection technique to investigate the effects of the number of confirmed cases/deaths on the global financial market quality by measuring the return, realized volatility, jumps, and co-jumps for 43 stock indices across the globe. Researchers noted the increase in the growth rate of confirmed cases/deaths increases jumps and volatility, as well as reduces returns. Also, researchers concluded that COVID-19 influences economic, financial, and political risks. The findings suggested that in high political risk countries, the impact of COVID-19 on volatility was weaker and in high financial risk countries, the impact of COVID-19 on market return was stronger (Chatjuthamard, Jindahra, Sarajoti, & Treepongkaruna, The effect of COVID-19 on the global stock market, 2021).

In the United States, from February 24 to March 24, 2020, 18 market jumps were observed due to the reaction from the news of COVID-19 (Baker, et al., 2020). Globalization influenced the formation of global economies and increased the interdependence of global financial markets. Researchers found that during the pandemic the G7 countries (United States, United Kingdom, Germany, France, Japan, Italy, and Canada) and listed firms across China experienced substantial increases in the conditional correlations in regard to market returns (Akhtaruzzaman, Boubaker, & Sensoy, 2020). Moreover, researchers argued that the impact of COVID-19 on stock markets has bidirectional spillover effects between Asian countries and Western countries (Europe and North America) (He, Liu, Wang, & Yu, 2020). In contrast, other research suggests that COVID-19 may accelerate the trend of de-globalization and de-dollarization (Tokic, 2020). Other research suggests that countries respond differently to the pandemic and the implementation of national-level policies, in which the US stock market was negatively affected (Zhang, Hu, & Ji, 2020).

Furthermore, previous studies suggest that fiscal capacity shapes the degree to which countries can respond effectively to the pandemic and in consequence, leads to the response of the stock markets (Chatjuthamard, Jindahra, Sarajoti, & Treepongkaruna, The effect of COVID-19 on the global stock market, 2021). Countries in debt are more likely vulnerable to a pandemic, this is seen in richer countries/economies where their stock markets survived better than the poorer countries/economies (Ding, Levine, C., & W., 2021). Other research focused on the relationship between corporate features and stock price reactions by analyzing the individual stock level data from over 100 countries. It was found that the stock market responses were less negative in countries that have the higher fiscal capacity (lower debt-to-GDP ratios – Gross Domestic Product) (Gerding & Nagler, 2020).

2.2 Effects of the Russia-Ukraine War on the Global Stock Markets:

The 2022 Russia-Ukraine war has negatively impacted the global stock markets and countries bordering Ukraine and Russia, along with UN countries that condemned the war, were the most affected. On the first day of the attack the S&P 500 Index hit a record drop of 10%. The ongoing military actions yield destructive outcomes including loss of life, destroyed property, and

uncertainties in the global stock markets (Boungou & Yatié, 2022).

Previous studies have shown the impacts of war on the global economy and global stock markets (Leigh, Wolfers, & Zitzewitz, 2003; Schneider & Troeger, War and the World Economy: Stock Market Reactions to International Conflicts, 2006; Hudson & Urquhart, War and Stock Markets: The Effect of World War Two on the British Stock Market, 2015). However, the Russia-Ukraine war differs from the previous wars as the war has induced a huge influx of refugees, an estimation of 5 million people. Another aspect is that the war has been occurring in Europe which signaled a cascade of geopolitical risks. Also, the sanctions and restrictions, in which many countries and organizations have opposed and taken action against Russia. These features are the potential drivers that impact the war's stock price responses, which influences the stock return (Sun & Zhang, 2022). Previous research shows that war instigates geopolitical risks that have negative impacts on national and international markets (Schneider & Troeger, 2006; Charfeddine & Al Refai, 2019).

A comprehensive analysis of the Russia-Ukraine war on the global stock markets surveyed 21766 listed firms from 86 countries from the period of January 1, 2021, to March 27, 2022. The analysis investigated the effects of the war on global stock markets based on geopolitical, economic, institutional, humanitarian, industrial, and firm-related factors. The results of the analysis indicate that various factors influence the market reaction to the war, this includes country-level, industry-level, firm-level factors, geopolitical risks, influx of refugees, and news of sanctions. Those who gain or lose in the conflict depend on their status of roles, positions, and actions taken in regard to the war (Sun & Zhang, 2022).

Table 1. Impacts of Country, Industry and Corporate Factors

Variables	AR	CAR(-1,1)	CAR(-3,3)
	(1)	(2)	(3)
EU	-0.0247***	-0.0150***	-0.0252**
	(0.0011)	(0.0012)	(0.0018)
Trade_dependence	-0.4528***	-0.2175***	-0.2224***
	(0.0271)	(0.0179)	(0.0236)
Oil_Gas	0.0162***	0.0219***	0.0488***
	(0.0037)	(0.0047)	(0.0067)
Military	0.0137***	0.0174***	0.0210***
	(0.0032)	(0.0037)	(0.0061)
ROA	-0.0064***	-0.0027	0.0046
	(0.0019)	(0.0023)	(0.0033)

Lev	-0.0013	-0.0062***	-0.0119***
	(0.0014)	(0.0016)	(0.0024)
Size	-0.0001	0.0006***	0.0016***
	(0.0001)	(0.0001)	(0.0002)
Intang	0.0289***	0.0214***	0.0046
	(0.0023)	(0.0028)	(0.0040)
Liquidity	0.0103***	0.0115***	0.0093***
	(0.0016)	(0.0020)	(0.0028)
Observations	18052	18052	18052
R ²	0.138	0.036	0.044
Notes: Robust standard errors are in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. Cumulative abnormal returns (CARs); Abnormal returns (ARs); Return-on-assets ratio (ROA); Leverage (Lev); Firm size (Size); Intangible assets ratio (Intang); and Liquidity (Liquidity)			
Source: (Sun & Zhang, 2022)			

Table 1 demonstrates the impacts of the Russia-Ukraine war on various factors including country-level factors, industry, and firm level. These include the EU, dependence on Russia for trade, and unusual market returns of firms. The results suggest that firms based in the EU countries or countries of higher dependence on Russia for trade respond more negatively to the conflict. The cumulative abnormal returns (CARs [-1,1]) for head firms based in the EU are approximately 1.5% lower than firms from other countries. A one-standard-deviation increase in Trade dependence decreases CARs for [-1, 1] by 0.00554. Also, the oil, gas, and military industry have reacted significantly higher in abnormal returns (ARs) and CARs by 2.19% and 1.74% higher CARs over [-1,1], respectively, compared to other industries. In regard to liquidity, firms with higher liquidity perform well in the Russia-Ukraine war or its consequences (Sun & Zhang, 2022).

Furthermore, a study of 94 countries' stock returns from January 22 to March 24, 2022, showed a negative relationship between the Ukraine-Russia war and world stock market returns. Table 2 presents the impact of the Russia-Ukraine war on the global stock market returns. These results suggest a negative relationship at a significance level of 1% between the war and the global stock markets. Thus, the war has a significant negative impact on the performance of global stock market indices and underlines the sensitivity of the global stock markets to the Russia-Ukraine war (Boungou & Yatié, 2022). Previous studies detected a negative relationship between conflict and stock markets, such as World War II negatively affecting the British stock market (Hudson & Urquhart, 2015).

Table 2. Impact of the Russia-Ukraine War on Global Stock Market Returns

Stock Market Index				
	(I)	(II)	(III)	(IV)
Ukraine-Russia War	-1.412***	-0.889***	-1.466***	-0.858***
	(0.42)	(0.33)	(0.46)	(0.26)
Number of observations	3747	3747	3747	3747
Number of countries	94	94	94	94
Country fixed-effect	No	No	Yes	Yes
Day fixed-effect	No	Yes	No	Yes
R₂ (within)	0.001	0.017	0.001	0.017
Notes: Robust standard errors clustered at the country level are presented in brackets. ***, **, and * stand for significance at the 1%, 5%, and 10% levels, respectively.				
Source: (Boungou & Yatié, 2022)				

Table 3. Analysis of Global Stock Market Responses of the War

Stock Market Index			
	All periods	Pre-invasion	Post-invasion
Ukraine-Russia War	-0.858***	-0.224	-1.001***
	(0.26)	(0.36)	(0.20)
Number of observations	3747	1945	1802
Number of countries	94	94	94
Country fixed-effect	Yes	Yes	Yes
Day fixed-effect	Yes	Yes	Yes
R₂ (within)	0.017	0.142	0.016
Notes: Robust standard errors clustered at the country level are presented in brackets. ***, **, and * stand for significance at the 1%, 5%, and 10% levels, respectively.			

Source: (Boungou & Yatié, 2022)

Table 3 shows the analysis of the global stock market responses to the war. The results are divided based on pre-invasion (January to February 2022) and post-invasion (February to March 2022). A negative relationship is shown, where the most significant impact was after February (Boungou & Yatié, 2022).

Table 4. Analysis of Global Stock Market Responses by Geographical Proximity to Ukraine and Russia

Stock Market Index		
	Nearby countries	Distant countries
Ukraine-Russia War	-7.780**	-0.901**
	(3.41)	(0.37)
Number of observations	724	3023
Number of countries	18	76
Country fixed-effect	Yes	Yes
Day fixed-effect	Yes	Yes
R₂ (within)	0.36	0.022
Notes: Robust standard errors clustered at the country level are presented in brackets. ***, **, and * stand for significance at the 1%, 5%, and 10% levels, respectively. Source: (Boungou & Yatié, 2022)		

Table 4 demonstrates the analysis of global stock market responses by geographical proximity to Ukraine and Russia. The analysis studied the responses of stock markets on a week-by-week basis. At the start of the war, the results show a substantial impact at the two-week mark and then subsides after the following weeks (Boungou & Yatié, 2022).

Moreover, another study investigated the stock markets' reaction to the 2022 war and revealed that the stock markets of Hungary, Russia, Poland, and Slovakia were the first to react anticipatedly of Russia's military actions in Ukraine, in which prior to February 24, 2022, negative market returns were observed. However, the stock markets of Australia, France, Germany, India, Italy, Japan, Romania, South Africa, Spain, and Turkey were negatively affected after the invasion. The regions that were most affected were European and Asian countries (Yousaf, Patel, & Yarovaya, 2022).

2.3 Effects of Geopolitical Risks on the Global Stock Markets:

As geopolitical risk (GPR) increases including sanctions, the Russian market's impact may cause spillover effects on national and international markets. The role of Russia as a leading player in global energy markets and Russia's economy affected the global commodities and global stock markets. The drivers of the shocks in the global stock markets are European equities and Russian bonds, in which the war impacted the returns and amplified volatility. The connectedness of financial markets increases when periods of high uncertainty and turmoil occur due to the risk of transmission and spillover effects. There is a high demand for assets that can preserve their value and a decrease in demand for assets that are vulnerable to risks and may reduce their value. The globalization of financial markets has allowed these demands and enhanced the spillover effects, in which the COVID-19 pandemic or the global financial crisis has allowed for regional and global markets to increase in connectedness (Umar, Polat, Choi, & Teplova, 2022).

A study investigated the impact of geopolitical risk (GPR) on the connectedness of Russian, European, and US equities and bond markets, major commodities exported by Russia (wheat, gas, and oil), gold as a safe asset, and Bitcoin as a newly developed digital asset. The findings showed a network analysis of short-term (transitory) return connections is greater than long-term (persistent) return connections which suggests the short-term shocks within the returns. Also, the network analysis indicated that long-term volatility is greater than short-term volatility interdependencies, referring to permanent volatility shocks. Furthermore, the equities (European), bonds (Russian), and the bond pairs of the US and Europe have the strongest short-term return connectedness. The strongest long-term return connectedness was found to be between European bonds and US bonds, European bonds and wheat, the VIX (a popular index that measures the stock market's expectation of volatility) and US equities, Russian bonds and oil, and gold and oil. Also, the strongest short-term volatility interconnectedness was found to be US equities and natural gas, as well as the VIX and oil. The strongest long-term volatility interconnectedness was found to be European equities and oil, European equities and US bonds, European equities and wheat, Russian and European equities, Russian bonds and wheat, and Russian bonds and equities (Umar, Polat, Choi, & Teplova, 2022). The findings indicate that the Russia-Ukraine war has severely impacted and changed the relationship between financial markets. Also, the results highlight those shocks and volatility are long-term and this is also seen in another research (Barunik & Ellington, 2020).

2.4 Behavioural Analysis of Investors within the Global Stock Markets:

The efficient market hypothesis (EMH) considers that all investors are sensible and stock prices sufficiently reflect all available information. However, many financial abnormalities, which include excess volatility and systemic under- or over-valuation of stock prices compared to their intrinsic values cannot be explained by the EMH. Behavioural finance researchers assume investor sentiment may help to clarify these market abnormalities (Chatjuthamard, Jindahra, Sarajoti, & Treepongkaruna, The effect of COVID-19 on the global stock market, 2021).

There are two types of investors: noise traders and rational investors. Rational investors are sentiment-free and form rational anticipations about the expected future cash flow of asset values. Whereas noise traders experience waves of irrational sentiment and/or form cognitive bias expectations which cause substantial and continuous mispricing. Both investor types compete in the financial market and set prices and expected returns, thus, the equilibrium price reflects the sentiments of both rational investors and noise traders (Chatjuthamard, Jindahra, Sarajoti, &

Treepongkaruna, The effect of COVID-19 on the global stock market, 2021).

External or unexpected shocks can affect the economic trends and unexpectedly change investors' sentiments, this can include a financial crisis or pandemic (Chatjuthamard, Jindahra, Sarajoti, & Treepongkaruna, The effect of COVID-19 on the global stock market, 2021). Investors behave pessimistically when the market trend goes down which leads to upward revisions in volatility and lower future excess returns (Lee, Jiang, & Indro, 2002). Two factors that escalate in the initial stage of a crisis as the public responds to news reports, social media, or other social interactions are perceived risks and negative emotions (Burns, Peters, & Slovic, 2012).

3. Impact of Inflation on the Global Stock Markets:

3.1 Analysis of Inflation in the Financial Markets:

Inflation can negatively affect firms as they have to absorb higher prices and slow sales can impact their revenue and profits. However, some financial markets may benefit from inflation. When inflation quickly increases, central banks may implement higher interest rates. Thus, higher interest rates will increase the cost of borrowing which may lead to consumers borrowing and spending less. This applies to firms as they need to cut spending and invest less in growth, and firms that are in huge debt may be severely impacted (QTrade, n.d.). A rise in inflation influences monetary authorities to increase interest rates. The increased interest rates will create a shift of assets from equity to debt since the risk-reward ratio changes (Gabajiwala & Jain, 2022). Most studies have discovered that lower market prices and higher inflations are usually correlated (Jordà, Knoll, Kuvshinov, Schularick, & Taylor, 2019). This can be observed in emerging markets, where stock market volatility is greater than in developed ones. According to research conducted since the 1930s, periods of high inflation are when almost every nation has suffered its worst real returns. Decades of data from the S&P 500 returns revealed that the highest real returns occur when inflation is between 2-3%. Inflation that is higher or lower than the range of 2-3% signals a macroeconomic environment with substantial issues which impact the financial stock markets (Zucchi, 2022).

Inflation is a sustained increase in the general level of prices. Low inflation is associated with economic growth, whereas high inflation is associated with risks, an overheated economy, slow economic progression, and the possibility of a recession. The inflation's effects on the stock market may be complex or simple. The stock market serves as a continuous mechanism for assessing the current state of the economy and discounting its condition in the future. In an ideal stock market, the preferred inflation range is to have a sustained period of low (1%) to moderate (3%) inflation. This suggests that the economy is not overheated as there is a healthy demand for goods and services, steady prices of goods and services, and an acceptable eroding value of each dollar. The stock market is more volatile during periods of high inflation (Georgiadis, 2022).

3.2 Effects of 2022 Inflation in the Financial Markets:

The year 2022 has observed volatility in the stock market. It continues to become more volatile as interest rates increases. Nominal returns may be negative due to high inflation. However, the real returns, calculated by deducting the nominal return from the inflation, may be negative as well. This is observed with the inflation rate of 8% during mid-2022 yielding negative returns, making it difficult to choose stocks during high inflation periods. When inflation is very high, a

recession is likely to occur with two continuous periods of negative economic growth. This concludes that inflation causes negative impacts on the stock market and enhances unstable economic conditions that may inhibit the growth and stability of the economy (Georgiadis, 2022).

4. Impact of Monetary Policy on the Global Stock Markets:

4.1 Role of Monetary Policy in the Financial Markets:

Previous research has indicated that monetary policy (US) plays an important role in the stock markets (Chevapatrakul, 2014). Uncertainty of the future monetary policy rates influences the transmission of monetary policy to the stock markets (Bauer, Lakdawala, & Mueller, 2021). An empirical study examined the effect of the pandemic on economic activities, stock markets, and macroeconomic performance from 2020 to 2021. The findings highlighted that pandemic restrictions and monetary policy mandates are the factors that negatively affected economic activities, stock prices, and conditions (Ozili & Arun, 2022).

4.2 Effects of Monetary Policy Uncertainty in the Financial Markets:

A study included data analysis of asymmetric and heterogeneous effects of monetary policy uncertainty (MPU) on stock returns in the BRICS (Brazil, Russia, India, and China) and Group of Seven (G7- United States, United Kingdom, Germany, France, Japan, Italy, and Canada) countries from January 2007 to June 2018. The results indicate that in most countries, MPU has an all-around negative effect on stock returns, however, there are differences among countries, quantiles of MPU, and stock markets. This is seen in the regions with high MPU quantiles combined with lower stock market quantiles. The study highlights that high MPU is referred to as a risk factor that can negatively affect stock returns, particularly in a financial crisis. Also, the countries of BRICS and G7 had varying levels of volatility, and the G7 countries' stock markets were greatly vulnerable to the MPU shocks, suggesting that G7 countries are mainly interdependent with the US than the BRICS countries. This means monetary policy uncertainty is mainly associated with the G7 countries' stock markets (Wen, Shui, Cheng, & Gong, 2022). Thus, stock markets are affected by economic shocks and current market conditions. The volatility of the stock markets may influence instability in a nation's economy (Li, Ma, Zhang, & Xiao, 2019).

5. Future Out of the Global Stock Markets:

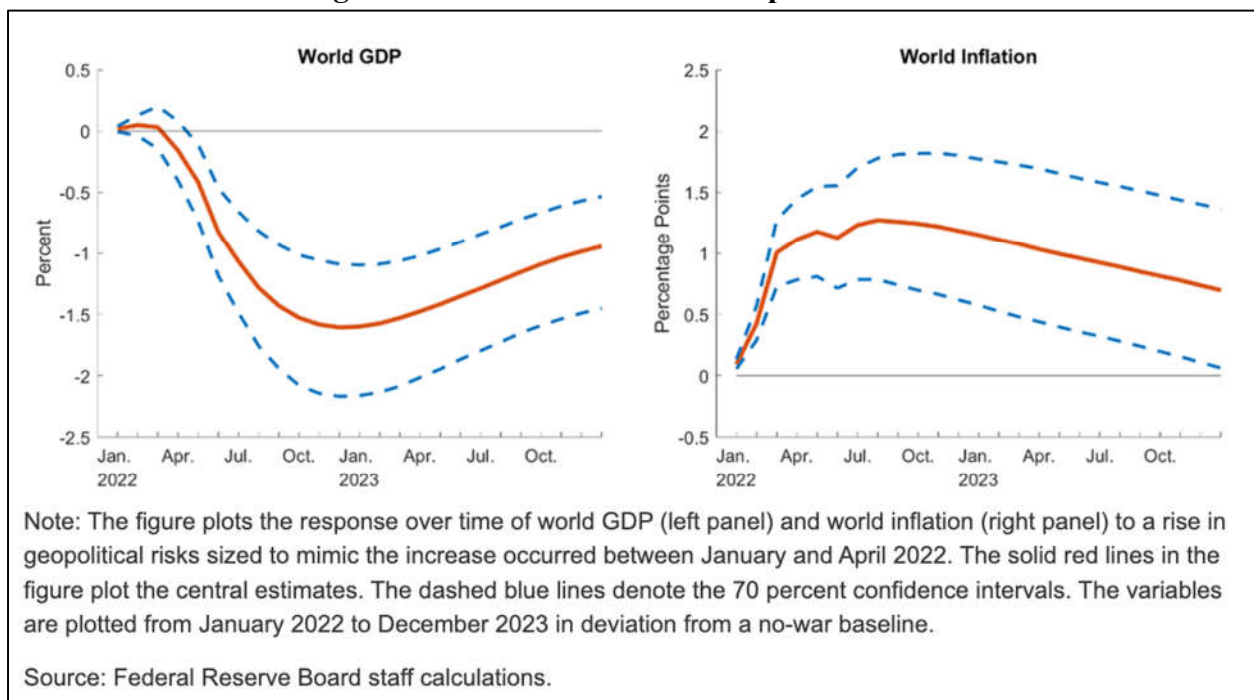
5.1 Outlook of Increased Geopolitical Risks in the Financial Markets:

The 2022 Russia-Ukraine war presents a challenge for monetary policy makers since it will increase inflation, that will eventually impair growth and harm consumer and business confidence, which has already been destabilized by COVID-19 price increases (Liadze, Macchiarelli, Mortimer-Lee, & Juanino, 2022). Global geopolitical risks have increased since the start of the Russian invasion in Ukraine. The war and the sanctions imposed on Russia are directly causing a strong contraction in Russia's and Ukraine's economy. Since the start of the war financial markets have been extremely volatile, and the commodity markets have been since in turmoil (Caldara, Conlisk, Iacoviello, & Penn, 2022).

Research predicts that the war will result in an increase in global inflation of approximately 1.3 percentage points with a decrease in the level of global Gross Domestic Product (GDP) of roughly 1.5 percent when compared to a no-war scenario. The findings of the research highlight the negative effects of geopolitical risks appear as reduced consumer confidence, increasing commodity prices, and tougher financial conditions. Also, firm-level statistics indicate that the European economy has taken the most impact, primarily in those that produce goods/products (Caldara,

Conlisk, Iacoviello, & Penn, 2022).

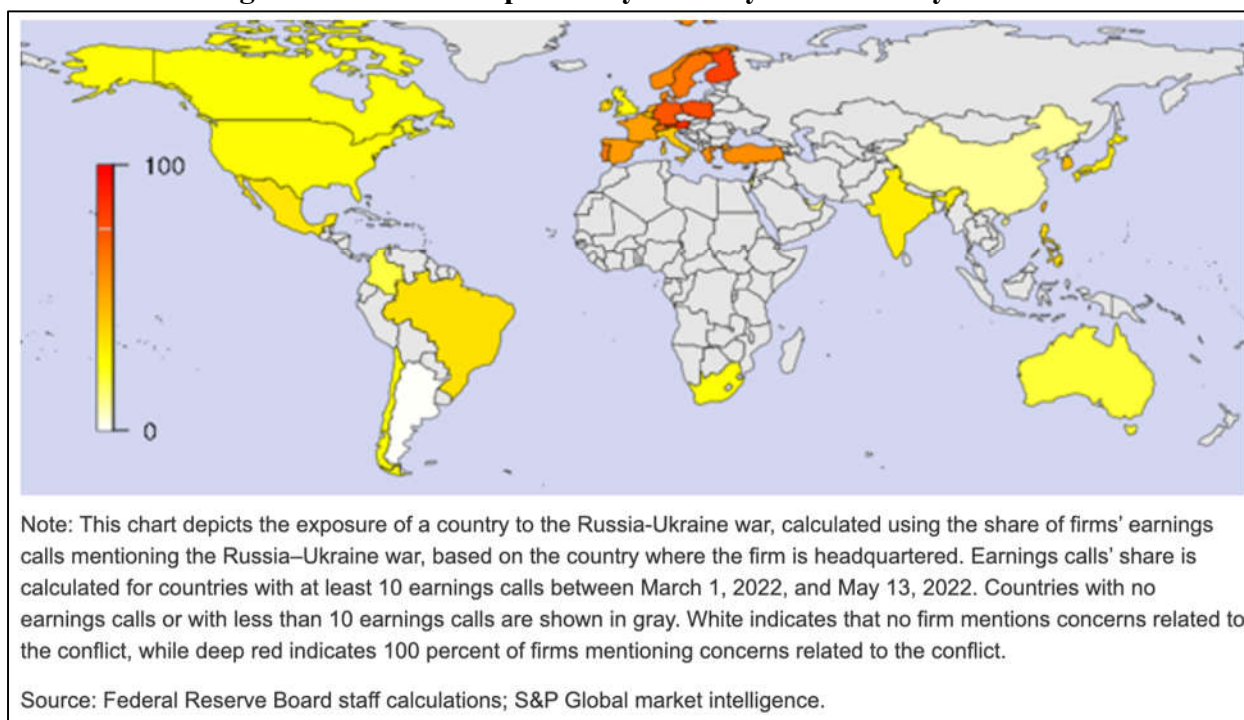
Figure 4. Effects of Increased Geopolitical Risks



Source: (Caldara, Conlisk, Iacoviello, & Penn, 2022)

Figure 4 presents a historical decomposition of the estimated vector autoregression (VAR - a type of forecasting algorithm) results to predict the effects of increased geopolitical risks on global GDP and inflation over time since January 2022. A study found that the rise in geopolitical risks seen from early to mid-2022 produces a drag on global GDP that develops throughout 2022, equating to a negative impact on the global output of about 1.7 percent. Furthermore, an increase in geopolitical risks increases prices, resulting in a 1.3 percentage point increase in global inflation by mid-2022, in which the forecasting algorithm predicts the effects will begin to fade afterward (Caldara, Conlisk, Iacoviello, & Penn, 2022).

In 2022, increased geopolitical risks are affiliated with declining consumer confidence and stock prices, which both weaken aggregate demand (Caldara, Conlisk, Iacoviello, & Penn, 2022). The exchange value of the dollar appreciates, in sequence with factors that spikes in global uncertainty and negative risks sentiment can trigger flight-to-safety international capital flows (Forbes & Warnock, 2012). Commodity and oil prices rise, causing downward pressure on global activity and increased inflation. The increased geopolitical risks induced by Russia's invasion of Ukraine may have a continuous negative impact on the global economy for the rest of 2022. However, the outlook of the war is extremely unpredictable given that the world is in recovery mode from the pandemic, and the unanticipated developments in the conflict may lead to significant shifts in the geopolitical risk and exacerbate its economic implications (Caldara, Conlisk, Iacoviello, & Penn, 2022).

Figure 5. Conflict Exposure by Country and Industry in 2022

Source: (Caldara, Conlisk, Iacoviello, & Penn, 2022)

As many geopolitical risks are influenced by regions, their economic effects may not be dispersed equally across the world. Figure 5 demonstrates the exposures of countries with warmer (darker) colors indicating greater exposure. The countries within Europe that are in close proximity to the conflict are the most vulnerable, where 80% of firms based in Finland and Poland are concerned and vulnerable to the conflict (Caldara, Conlisk, Iacoviello, & Penn, 2022).

5.2 Outlook of Exchange Rates Effects in the Financial Markets:

A foreign exchange (FX) rate, referred to as an international exchange rate, is the cost of one country's currency relative to another country's currency. It is important to understand the factors that influence exchange rates as well as the financial risks involved with severely impacting the global markets. Although supply and demand are the main drivers of exchange rate changes, other factors including societal, economic, and geopolitical impact the exchange rates (EWU, 2021). This is in line with the heightened geopolitical risks in the year 2022, thus the 2022 geopolitical risks may impact the exchange rates which consequently will affect the global stock markets.

6-Conclusion:

The analysis of this paper indicates the importance of acknowledging the factors contributing to the impact of the global stock markets and its economic consequences. The world events of the COVID-19 pandemic and 2022 Russia-Ukraine war resulted in unexpected shocks that strongly changed the investors' sentiments. These events have ignited a cascade of uncertainties and geopolitical risks that impacted the global stock markets. With increased inflation comes monetary policy mandates, thus affecting the selling prices within the global stock market. Globalization has influenced the formation of global economies and increased the interdependence of global financial

markets, however, with the current world events, it is anticipated that the war will continue to have a negative impact on the global economy, increase inflation, and increase uncertainties and risks of negative outcomes. Many concerns are regarding the recovery mode from the pandemic, effects of the ongoing war and spillovers effects on the global financial markets. As this is a current topic, research articles are limited, and further research and expansion are required to understand the extent and effect of world events in mid-year 2022 on the global stock markets.

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