The Different Performance of the Stock Market Indexes of the Three Countries in Different International Events

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Abstract. During the period of different changes in the global situation, the stock indexes of China, the United States and the United Kingdom all showed different trends. Overall, during the outbreak of the epidemic, they all received a huge impact, and due to the different policies and coping strategies of various countries, the follow-up performance also varies greatly. Brexit has only had a slight impact on the British domestic market in a short period time, and China and the United States have prepared for investment in the new market after Brexit, which has also caused the corresponding market index to perform better before the follow-up. Due to the differences in the main market targets and the differences in the geographical location of countries, the negative impact on the British market was more obvious during the Russia-Ukraine conflict, while the stock indexes of China and the United States were relatively stable and even showed an upward trend. It can be seen from the data analysis that the markets in different countries are affected by time differently. With the growing correlation between the markets of various countries, investors should pay more attention to the global situation and the policy orientation of different countries. Considering risk diversification while taking policy dividends helps to obtain stable returns.

Keywords: Covid-19; Brexit; Stock index; Global economic; Russian-Ukraine conflict.

1. Introduction

1.1 Background

The stock index can be used as one of the tools to measure the economic and financial health of various markets. Under the changes of different international situations, the stock markets of various countries will also have different changes. The three stock indexes of CSI300, S&P500 and FTSE100 represent the main changes in the securities markets of China, the United States, and the United Kingdom. The policies of different countries and changes in the international environment will also affect the performance of stock indexes in various countries. For example, after the implementation of China's reform policy, the Chinese stock market performed well. While the U.S. government is in an unstable environment, the stock market will also experience temporary fluctuations. This article compares the changes in the stock indexes of China, the United States and the United Kingdom when three major international events occurred in recent years: Brexit, the new crown epidemic and the conflict between Russia and Ukraine.

1.2 Related research

Kamal study what is the impact on UK equity returns during the first year of Covid-19. The authors conduct a more comprehensive analysis through three periods and find that Covid-19 registration cases are negatively correlated with stock return and significantly performed by econometric OLS. In the rebound phase of the second half of the year, the number of virus deaths and stock market returns shows a positive correlation which means the investment market has a small impact during the 1st year of the pandemic [1]. Anastasiou detected Google's monthly Covid-19-related query keyword data and established panel data with positive and negative classifications from 2020 to 2021. The author illustrates the relationship between the two kinds of data and the return behaviour of G20 overall market stocks. The data results show that Covid-19-related search terms with negative signs will bring more crisis sentiment to investors, while keywords with positive signs will do the opposite, meaning that G20 might have a higher return on the stock market [2]. Zhang studying the daily case data of the first three months of Covid-19, a comparative analysis of the degree of infection in various countries is carried out through simple statistics. The research results show that due to the impact of different degrees of epidemics, the degree of risk rise in financial markets and the degree of economic loss in various countries are unpredictable [3].

Boubaker points out that the conflict between Russia and Ukraine has a strong negative correlation with global stock indices. The author finds that NATO member countries react oppositely to other European countries based on a cross-sectional analysis of European country data. Although all were affected by the conflict, there was significant heterogeneity in certain Covenant countries [4]. Gaio uses the multifractal detrended fluctuation analysis method to investigate the impact of the Russia-Ukraine conflict on the stock indices of developed countries. The authors assess market efficiency and compare whether it has changed during the pandemic and the Russia-Ukraine conflict. Evidence suggests asset prices are predictable in times of instability and global financial crisis [5]. Choudhry focuses on the changes in Dow Jones average stock prices at different turning points during World War II. The results show that the war does affect the volatility and stability of U.S. stocks and that any news of a protracted war could lead to a subsequent price decline that lasts until the end of the war. Wartime events can also alter investors' uncertainty about what lies ahead and their ability to return [6].

Andrikopoulos examines the impact of the exchange rate exposure of 26 FTSE100 and 10 IBEX non-financial companies in the UK before and after the Brexit referendum. The authors compared company data before and after the referendum, using four different statistical tests to evaluate. The results show that the foreign exchange exposure of British companies has increased significantly. Considering that other EU companies need to take certain costs to launch the British market, the situation of IBEX is just the opposite [7]. Aristeidis analyzed the impact of 43 emerging stock markets before and after the UK referendum, the actual data shows that after the referendum, the stock price of the London Stock Exchange fell by 21%, but it did not last for a long time. The comparison finds that FTSE100 has a stronger negative impact than FTSE300 within the European market [8]. Davies examines how news of Brexit affects expectations reflected in stock returns by using a two-stage estimation process. Before the referendum is announced, it will create obstacles to the smooth functioning of global value chains. Big firms appear to weather Brexit turmoil more easily than average firms [9]. Arshad assesses the impact of Brexit risks on various sectors of the London Stock Exchange. While overall volatility fell amid events involving the Brexit referendum, it increased in the banking, technology, and real estate sectors, while it decreased in the oil and gas and financial sectors. Second, the efficiency of the UK stock market has deteriorated sharply during the period of uncertainty surrounding the Brexit referendum [10].

1.3 Objective

The article aims to help investor’s better grasp market changes and formulate reasonable strategies for follow-up investment. First discuss the literature related to the impact of global stock indices during pandemics, Brexit and war. In the second chapter, the range of price changes of the representative stock indexes of China, the United States and the United Kingdom are analyzed when different events occur, and what is the impact on the long-term stock market.

2. Analysis

2.1 The impact of Covid-19

According to research data, after the outbreak of the epidemic in January 2020, China imposed a blockade on Wuhan, which affected overall economic activities. As shown in Figure 1, the CSI300 index fell sharply in the following three months and fell to the lowest level of the year on March 15. After the Chinese government implemented the epidemic prevention policy promptly on time, the epidemic situation was brought under control, and the increase in consumption levels and the reopening of shopping malls were some of the factors that contributed to the gradual recovery of the

CSI300 index. The interruption of the international supply chain during the epidemic outbreak caused the S&P500 index presented in Figure 2 to have the same trend change as the CSI300 during 2020-2021. At the same time, the epidemic caused great changes in the realization of various industries, and the technology and e-commerce industries accounted for most of the dividends during the epidemic. Compared with the CSI 300 and the S&P 500, the FTSE 100 do not have an obvious recovery after March 2020. The UK mainly relies on the financial service industry as its main source of income, and there are not many real industries that can be used as a means of rapid recovery after the epidemic stabilizes. The technology and Internet industries in China and the United States have a greater impact on the market, online shopping and office work have become mainstream during the special period of the covid-19. In addition, the introduction and implementation of the British government's anti-epidemic measures are not strong enough to cause the epidemic to be severe. Investors have fewer choices in technology and network industries, and they do not have enough investment confidence in the market. On the other hand, the rapid introduction of the monetary policies of China and the United States also played a positive role in the stability of the stock market.

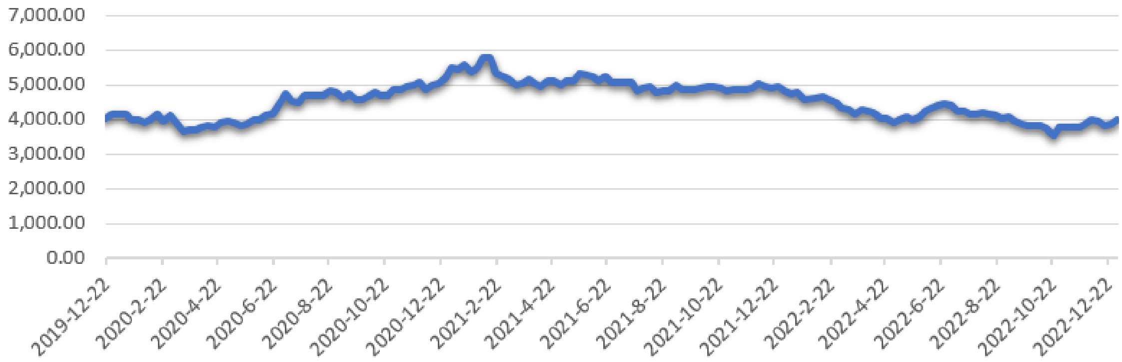

Fig 1. CSI300 during covid-19 year of 2019-2023.

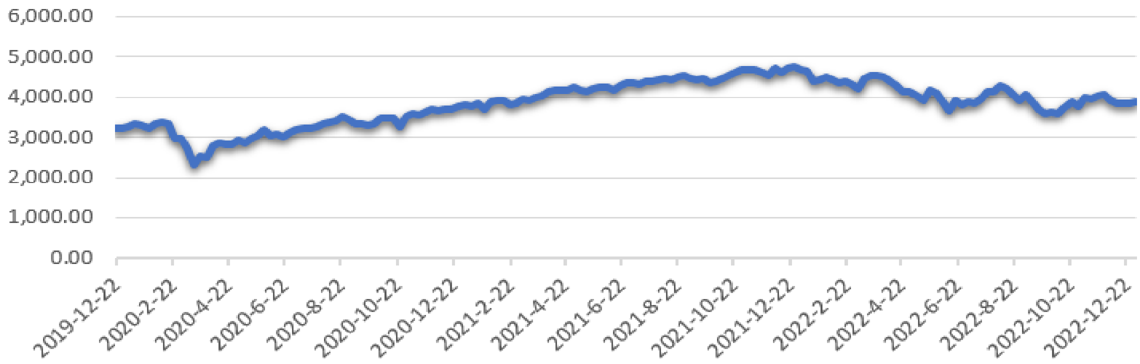

Fig 2. S&P500 during covid-19 year of 2019-2023.

With the successful development of vaccines in the second half of 2020 and the implementation of a series of anti-epidemic measures such as the mandatory wearing of masks in public places and restrictions on the number of people in indoor places, the global epidemic has eased, and the tourism and accommodation industries have improved. It can be seen from Figure 1 and Figure 2 that both the CSI300 and S&P500 indexes declined to a certain extent in 2021 and 2022. However, the analysis proves that the epidemic was not completely over, and the virus continues to rebound and mutate around the world. Under the subsidy provided by the government with free loans and substantial tax reductions, the domestic and foreign trade and tourism industries of China and the United States have still received considerable negative impacts. The random recurrence of the epidemic will also cause investors to reduce investment in the financial market. The rapid recovery of the epidemic in a short period time is also likely to lead to faster monetary inflation, which will cause the government to step up monetary tightening policies, which will also have a bad impact on the market. Due to the small population of the UK, the goal of universal vaccination can be achieved more quickly, effectively controlling the spread of the virus, and reducing the probability of virus rebound. Therefore, the UK can open international trade more quickly than other countries, increasing its export opportunities and recovering its economy faster. With the end of the global basic epidemic in 2022, all countries were seeking to recover their economies actively and quickly. Global capital flows are rapid, but the post-Brexit trade issues have not been completely resolved, which still has a certain negative impact on the British stock market. So, the FTSE 100 did not recover much.

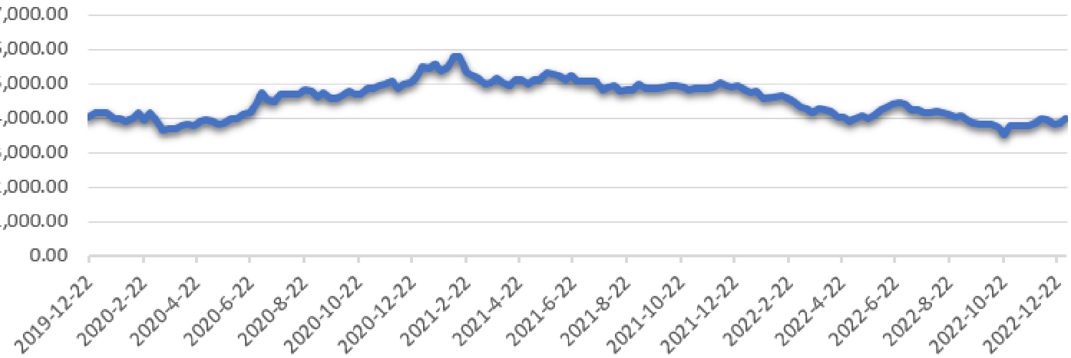

Fig 3. CSI300 during covid-19 year of 2019-2023.

2.2 Brexit

The success of the British referendum to leave the European Union has caused a certain impact on the global market. Data show that all three indexes have declined slightly but none exceed 3%. The FTSE 100 index in Figure 4 shows rebounded and continued to decline within 4 months after the referendum result may be due to the short-term market shock. Investors' lack of confidence in the increase in venture capital investment in the market has led to some international companies withdrawing from the UK market. In contrast, Brexit has little impact on the S&P500 and CSI300 indices. The British market is not the main economic investment area of the United States, based on Figure 5 and Figure 6 the stock indexes of the two countries continued to rise after Brexit. The CSI300 index can only represent the economic situation in some parts of mainland China, and the result of Brexit has a relatively limited impact on the index. Investors may overreact to the market due to the impact of Brexit news in a short period time. However, the continued trade negotiations between the British government and the EU in the following year adjusted and stabilized the overall market atmosphere and improved investor confidence. On the other hand, the British government may have prepared measures before the referendum to provide some buffer for financial market shocks. The FTSE 100 Index represents that the centers of companies are in the international market rather than the UK, so the negative impact on the UK is also limited. Considering the short-term volatility of the investment market, some investors took this opportunity to buy many undervalued stocks affected by the impact, which also played a positive role in promoting the market recovery.

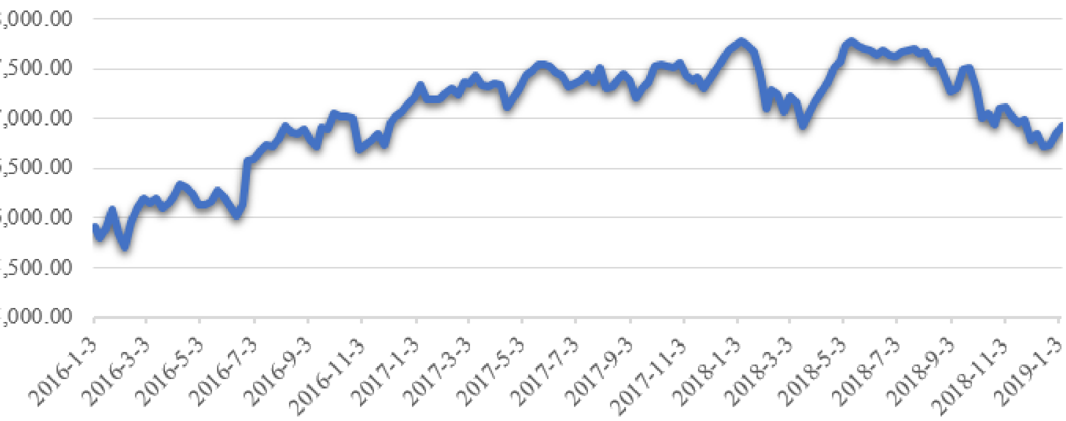

Fig 4. FTSE100 after the Brexit referendum between 2016-2019.

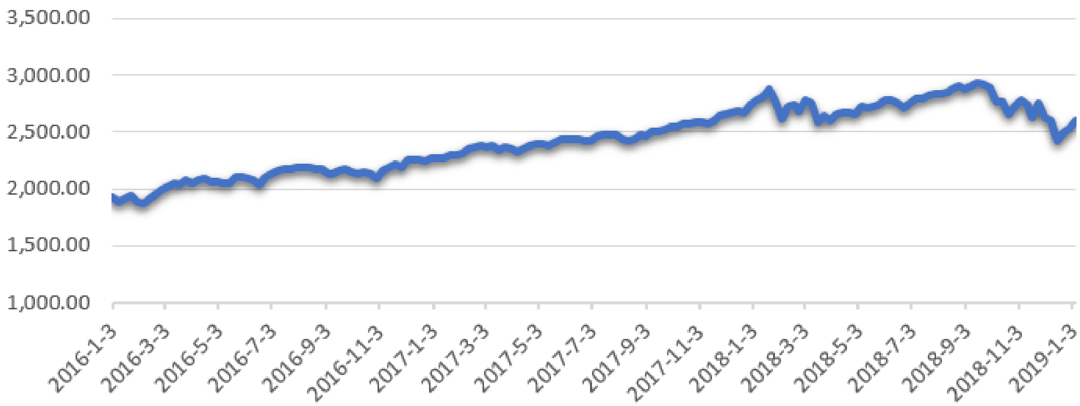

Fig 5. S&P500 after the Brexit referendum between 2016-2019.

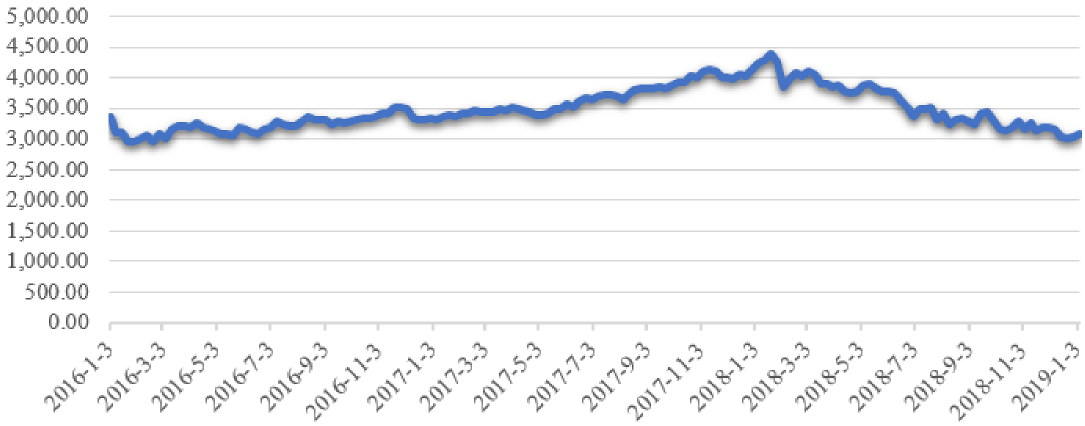

Fig 6. CSI300 after the Brexit referendum between 2016-2019.

After the conclusion of the trade agreement between the UK and the EU, changes in the global market environment led to market expansion between China and the EU and the UK also played a different role. As one of China's main partners, the British market has provided more demand and choices for China's exports after leaving the EU's restrictions. Brexit has also led to fewer risk options for global investors, preferring to invest in gold rather than stocks. Therefore, Figure 4 presented the CSI300 index has a certain degree of negative impact while the overall rise. The trade relationship between the United Kingdom and the United States is not as close as that of China, and the S&P500 index companies have less time to be affected by Brexit and the overall market economy is healthier. Many multinational companies in the United States sold the pound in time before Brexit to reduce the short-term losses caused by Brexit. After that, they increased their supply chains in the UK and the EU to ensure that production will not be affected. Overall, all countries have prepared in advance before the news of the Brexit referendum came out. Transfer the investment center to other European countries or add additional production chains in the UK to reduce the risk of instability in the follow-up UK policy. Meanwhile, The British government has strengthened the import and export cooperation between British companies and other countries and more relaxed immigration policies to ensure the reduction of brain drain. Due to sufficient preparation, Brexit is more inclined to be a pre-planned event and has not caused a long-term destabilizing impact on the global investment environment compared with the outbreak of the new crown epidemic. For some companies, Brexit means a new investment market that can achieve greater returns.

2.3 Russian and Ukraine conflict

The outbreak of the Russia-Uzbekistan conflict in February 2022 had a great impact on the global stock market. The economic market between the two countries was affected by the UK's announcement of economic and aviation sanctions against Russia. While the UK's import and export trade was restricted, Russia's sharp increase in natural gas and other energy prices may be one of the reasons for the sharp drop in the UK stock market. The ban on connecting airlines between the United Kingdom and Russia has also adversely affected airlines and caused uneasiness in the industry market. As a country that relies mainly on imports and exports, it did not have enough policies to stabilize the market after Russia's anti-sanctions, resulting in a large amount of capital outflow from the market, reducing investors' confidence and risk expectations. In addition, the instability brought about by the war will also cause investors to reduce their investment in the market and turn to relatively stable safe-haven assets, which will have a bad impact on the British stock market. After Russia was excluded from the international payment system Swift, the UK was forced to use the ruble as a transaction currency and was required to maintain a certain number of rubles as foreign exchange reserves. Lower sterling exchange rate while increasing risk and transaction costs in the UK market. As Figure 7 shows the volatility of the FTSE 100 Index in the following year was unstable, and it may also be that the demand for natural gas energy increased due to the cold weather, and the reason for the financial crisis in the UK at this time was that it could not afford the high cost of imported natural gas. In July, the Nord Stream 1 natural gas pipeline was destroyed, which indirectly led to an increase in transportation costs, UK must pay extra high border crossing charges. The FTSE 100 index fell sharply.

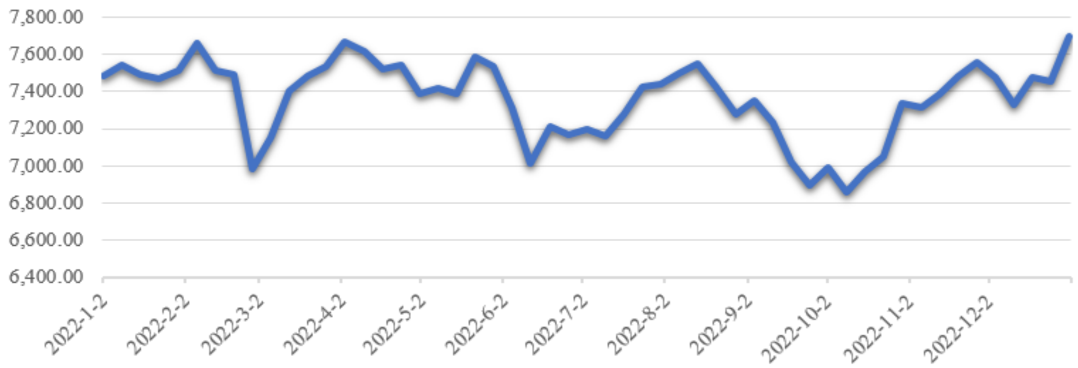

Fig 7. FTSE100 after the Russian-Ukraine conflict in 2022.

On the other hand, The U.S. and Chinese markets do not have much trade with Ukraine, so it can be seen from Figure 8 and Figure 9 that the negative impact of the Russia-Ukraine conflict on the S&P 500 and CSI300 is minimal. Considering that the Russia-Ukraine conflict has led to mutual sanctions between European countries and Russia, investors are more willing to transfer their investments to countries with stable financial market environments. The inflow of a large number of funds from European countries to China and the United States can also reduce the negative impact of some wars. As a developed country, the United States has a very mature military industry. During the Russian-Ukrainian conflict, the US provided Ukraine with part of the weapons within one year. The US government will increase investment in the military industry and sell them to Ukraine to increase income and profits.

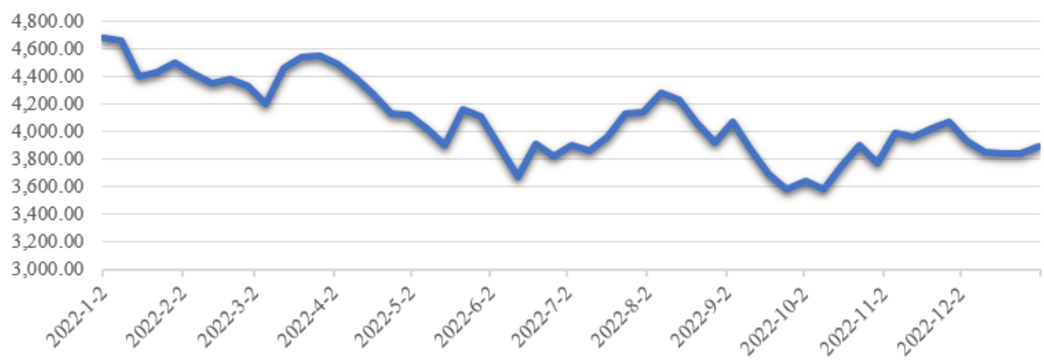

Fig 8. S&P500 after the Russian-Ukraine conflict in 2022.

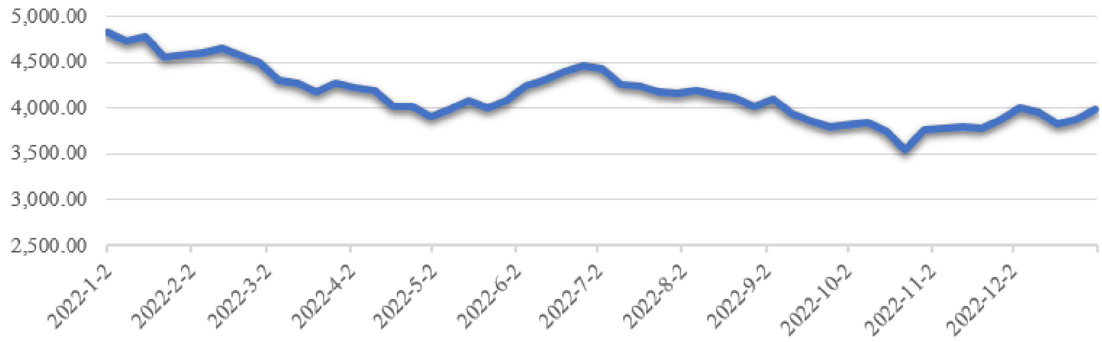

Fig 9. CSI300 after the Russian-Ukraine conflict in 2022.

And with the war, other investors put funds into the US market, which can quickly promote the increase of the country's investment production value. At the same time, war requires a large amount of burning energy, and the increase in energy demand has also promoted the development of the US energy industry. U.S. Treasury bonds, as a stable low-risk investment, were also the target investors expected to invest in besides gold during the war, comparing Figure 7 and Figure 9, the S&P 500 did not suffer as much as the FTSE 100 during the war. As a long-term friendly and cooperative relationship with Russia, China also conducted a large amount of import and export trade with Russia after the conflict broke out. China's multinational companies which were influenced by the conflict can immediately have alternative trade after being hit, which has greatly slowed down the losses caused by the war. Besides, China, as a country outside the scope of war conflicts, has not participated in mutual sanctions with Russia, and trade with the rest of the countries has not been restricted. The changes in the CSI300 index are more due to the impact of repeated epidemics than the war.

3. Conclusion

Brexit, the epidemic, and the Ukrainian war are important times that have affected the global market in recent years. The article compares the price fluctuations of the three major economic markets in three countries when these three times occurred. After data comparison, it is found that the unexpected outbreak of the epidemic caused the stock market indexes of the three countries to experience a cliff-like decline in the early stage. When the epidemic stabilized, the stock indexes of China and the United States recovered quickly, mainly relying on the rapid development of the Internet technology industry. In contrast, the United Kingdom, which is more dependent on the financial industry, recovered slowly. However, Brexit occurred when all countries had made sufficient preparations in advance, so it did not cause significant fluctuations in the stock market. Reciprocal sanctions and gas cost restrictions between the UK and Russia contributed to the underperformance of stock market indices amid the Russia-Ukraine conflict. Since The main investment markets of China and the United States in Europe are not in Ukraine, the multinational companies of the two countries adjusted their investment direction and stopped losses in time after the conflict broke out. Therefore, the impact on Chinese and American companies is not obvious. Investors should consider the diversification of investment and avoid investing funds only in the market of the same country to effectively diversify risks. In a special period, investors can take advantage of the policies issued by the government to seize policy opportunities promptly on time, pay attention to changes in policy-related industries, and change their investment strategy.

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