



The Impact of Major Emergency on International Foreign Exchange Markets: The Case of Brexit Vote

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ABSTRACT

On June 24, 2016, the results of the UK's EU referendum were announced, with Prime Minister David Cameron declaring the Leave camp the winner. Not only did the exchange rate of the British pound plummet, but most non-US dollar currencies also weakened significantly. The international foreign exchange market is the most liquid traded financial market and is highly sensitive to major events. This paper systematically review the history of the UK's exit from the EU and the key events after the start of the process, while analyze the trends of major currency exchange rates by using data on the exchange rates of the British pound, the euro, the Japanese Yen and the Chinese Renminbi as the objects of this study.

Keywords: major emergencies, exchange markets, Brexit Vote

1. INTRODUCTION

At present, major emergencies such as natural disasters, political unrest, security accidents and terrorist attacks have erupted frequently, which have had a significant impact on global economic growth, social development and people's normal life, such as the "9.11" incident in the United States and the Madrid bombings. Although there is no unified definition of major emergencies at home and abroad, it is often defined as emergencies that have caused huge losses to the social environment and assets, people's normal life and work, and need to pool the resources and forces of the whole society for rescue and disposal. Since the beginning of this century, the unpredictability of major emergencies has increased significantly, and the harmfulness of their disaster consequences has been increasing; However, due to its complex conditions, causes, social environment and influencing factors, it is very difficult to deal with it. Major emergencies will cause substantial economic fluctuations and instability of social development. At the same time, the risks it causes will be quickly transmitted to the financial market and have a rapid impact on the market. In the global financial market, the daily trading volume of foreign exchange and related products market is as high as about US \$6 trillion. As the largest and most liquid market in the world, the foreign exchange market is bound to be impacted by major emergencies. Affected by factors such as poor information efficiency,

psychological expectation gap and artificial speculation, there will be short-term or even long-term price changes and distortions in the foreign exchange market, which will affect its basic functions in international settlement, capital financing, risk dispersion and transfer. Therefore, it is necessary to study and explore the impact of major emergencies on the foreign exchange market.

On June 24, 2016, the United Kingdom held a referendum to withdraw from the European Union. This political event triggered large fluctuations in the exchange rates of major currencies and added to the uncertainty in the international foreign exchange market. The exchange rate formation mechanism and its influencing factors are very complex, and in the short term they are even more strongly influenced by investors' psychological expectations, speculative behavior, information effects and other factors [1]. As an important tool for regulating the internal and external balance of a country's economy, exchange rate fluctuations have a wide range of effects on imports and exports, prices, capital flows, output and employment. The exchange rates of major international currencies fluctuated significantly in the short term after the UK referendum was settled [2]. London is a major international financial center in the world. Whether and how the UK leaves the EU will affect the political and economic outlook of the UK, the EU and the world, and therefore has been sensitive for the international financial system from the beginning to the end [3].

Understanding the change characteristics of the foreign exchange market under the influence of major emergencies can have a clearer understanding of the fluctuation law of the foreign exchange market and avoid the risk of the foreign exchange market, which has important enlightenment for maintaining the health and stability of the foreign exchange market and the national financial stability and economic security. Especially in the context of frequent outbreaks of major emergencies in this century, this research is more important. This paper examines the impact of major political events on the international economic and financial system, especially the mechanisms and channels of exchange rates, and compares and analyzes the volatility characteristics of several major currencies, by reviewing the key events that occurred after Britain's exit from the EU and the start of the process. The findings of the study can help foreign exchange market participants to correctly assess the impact of the Brexit event.

2. ANALYSIS OF GBP EXCHANGE RATE MOVEMENTS SINCE BREXIT

On June 24, 2016, the "brexit event" of the UK referendum finally realized the opportunity for the UK to completely "go its separate ways" from the EU, and ended the more than 40 years of "seemingly close and apart" history between the UK and the EU. For a long time, traditional Britons have lacked a sense of identity with Europe. They believe that in the process of European integration, economic and social development has been affected, and some negative social phenomena, such as refugees and terrorist attacks, tend to increase... All the above reasons are important factors in the brexit referendum. On the morning of the 24th, when the foreign exchange market saw that the number of "brexit" votes was significantly ahead, the exchange rate of sterling against the US dollar fell sharply. Most non US dollar currencies (Euro, Singapore dollar, etc.) also fell significantly; Treasury prices rose significantly, while yields fell.

From the Brexit referendum in 2016 until January 31, 2020, the UK reached an agreement with the EU on Brexit and formally left the EU in law. During this period, the two sides went through long and repeated dramatic negotiations. Over the course of four years, the progress of the Brexit negotiations had a direct and significant impact on the movement of the British pound and, to a lesser extent, the euro. While the exchange rates of the other major currencies were sharply affected by the 2016 Brexit referendum, they were not significantly affected by most of the subsequent Brexit negotiations. This was due to joint action by the world's major central banks to stabilize markets and inject liquidity. As market sentiment gradually eased, volatility subsided and markets stabilized. As the noise faded, international

financial markets gradually returned to fundamentals and achieved a new equilibrium.

GBP/USD



Figure 1 GBP/USD Exchange Rate Chart.

In May 2015, when the UK government submitted its referendum on Brexit proposal for the first time, and the British pound showed a downward trend in a short period of time. To a certain extent, this reflects that the general public in the UK is not optimistic about the economic outlook after Brexit [4]. The formal announcement of the UK's departure from the EU in June 2016 caused significant market volatility. International currency markets and the UK equity markets recovered relatively quickly and began to strengthen on the back of the short time the then new Prime Minister was in office and the easing of UK monetary policy. In contrast, the pound sterling exchange rate continued to weaken as interest rate levels remained low. After the formal announcement of the UK's departure from the EU, the GBP/USD exchange rate fell to a low of 1.1948 and recovered slightly to around 1.25 at the beginning of 2017. But the rebound was much weaker than the overall decline and did not return to the pre-Brexit range of 1.45 or higher for the next four years. Until early 2017, the euro exchange rate was also in a downward path and had not recovered from the overall decline. The impact of Brexit on other currencies was absorbed in the short term, and the recovery was achieved.

On March 29, 2017, the UK's then Ambassador to the EU, Tim, handed over the UK Brexit Letter to European Council President Donald Tusk, marking the official start of the Brexit process and the commencement of Brexit negotiations. At this time, the British public had expectations about the prospect of Brexit. The Bank of England announced the first interest rate hike in a decade on November 2, 2017, raising interest rates by 25 basis points to 0.5%, which continued to benefit the pound. However, from 2018 onwards, the British pound exchange rate suddenly went down, and the downward trend from this point onwards continued until the end of 2018. At this point, the disruptions caused by the Brexit

negotiations had not really begun. As the expected time for Brexit approaches, the UK government and the EU have yet to reach a clear agreement.

3. ANALYSIS OF THE MECHANISM OF THE IMPACT OF BREXIT ON THE EXCHANGE RATES OF MAJOR CURRENCIES

In recent years, the British economy has been relatively stable but still faces the test of recession, and while other factors remain unchanged, Brexit is the most influential variable on the movement of the British pound.

In addition to the impact on the pound exchange rate, Brexit will also have an impact on major international currencies. In the case of the euro, there is a strong correlation between the euro and the pound. Brexit affects the trade balance between the UK and the EU. In the short term, this will have a negative impact on the trade economies of both sides and increase the trade pressure on other countries in the EU, which will also put the euro under pressure from a trade perspective. After the UK formally leaves the EU, the issue of mutual recognition between the UK and other countries in the EU will be complicated. The "brexit" incident reduced the trade and investment of investors in the UK and affected the exchange rate. In terms of trade, the EU is the largest trading partner of the UK. Once brexit, the UK will no longer enjoy tariff preferences from the EU, which will increase trade costs and new trade barriers to a great extent. As for the UK, it has always been a net demand country of EU countries, with high dependence on foreign trade and trade deficit. The move of brexit will reposition the economic and trade relationship between the UK and the EU, which will aggravate the trade deficit and make the exchange rate fall to a certain extent. The production environment of enterprises will be more unstable, which will affect the enthusiasm of investment. In the long term, the result of the Brexit referendum will affect market participants' expectations of the future economic development of the EU, which will affect the exchange rate of the euro. On a deeper level, the result of the Brexit referendum has created doubts about the EU. As an important country in the EU, the UK's exit has seriously weakened the EU's power. Britain's exit from the EU has stimulated populism within the EU. The rapid rise of extremist political parties in several European countries, including Germany and France, has had a significant political and social impact. This could slow down the pace of European integration and affect the international standing and political power of the EU as a whole [5]. From this perspective, the impact of the euro on the UK's exit from the EU is very long-term and far-reaching. For the EU, the dividends of the unified economic policy adopted in response to the 2008 financial crisis have gradually disappeared, and the EU

itself is already facing public debt risks and economic downside risks [6].

The Japanese yen is a safe-haven currency. There are three major currencies that are generally recognized in international markets for their risk diversification functions: the Japanese yen, the U.S. dollar and the Swiss franc. These three currencies are known as safe-haven currencies because of their function. Japan is a traditional economic powerhouse in Asia, and its economic strength provides the basis for the stability of the yen's value. Historical data shows that the yen's exchange rate tends to be less affected or even appreciates against the trend [7]. When a global risk event like Brexit breaks out, risk aversion rises, risk appetite deteriorates, and U.S. 10-year Treasuries, which investors view as a risk-free asset, are favored, causing 10-year U.S. bond yields to fall and the U.S.-Japan bond spread to narrow. Therefore, the occurrence of such risky events as the UK's exit from the EU and the rising risk of a no-deal Brexit will lead to a rise in risk aversion in the short term, and capital will flow to safer assets, with the Japanese yen as a safe-haven asset, and prices are bound to be pushed up.

The impact of the UK's exit from the EU on the RMB tends to be neutral in the medium to long term. When the UK referendum result was announced, the unanticipated final result led to increased volatility in international financial markets and a surge in risk aversion. As a result, the US dollar, a safe-haven currency, generally surged against Asian currencies, and the RMB depreciated accordingly. However, prior to the Brexit, the RMB already had strong depreciation expectations in the international market, and the Brexit brought about significant volatility in global currency markets, which instead made market investors more tolerant of the RMB depreciation and served as a "flood relief". This has had a "flooding" effect and enhanced the resilience of the RMB [8]. China and the UK have had a close and long history of cooperation in recent years. The UK, as an important part of EU, was one of the first EU countries to recognize China's market economy status. Brexit has led to adverse effect to the normal trade between China and the UK. However, the UK's economic and financial cooperation with the EU will be less stable than previously as the Brexit process progresses. At the same time, the UK will place a greater emphasis on collaboration with China, it will increase China's influence in international discussions. It is more vital for the UK to build links with China in the financial market and in international commerce in order to exit the EU. After Brexit, the role of the UK as a first stop and transit channel for Chinese companies to enter the EU will be weakened. But on the other hand, the post-Brexit UK should also strengthen its relationship with China directly in more ways for its own strategic reasons. London's global presence and clearing function for the RMB is expected to be further strengthened. In summary, for the RMB, Brexit will lead to a depreciation in the short term,

while the impact on the RMB will be neutral in the medium to long term. However, it should also pay attention to the RMB exchange rate. On the one hand, with the depreciation of sterling and euro exchange rates and the challenge of London's position as a financial center, it will be conducive to China's international RMB business, which will help promote the process of RMB internationalization; On the other hand, the rising risk aversion caused by the continuous fermentation of this event makes the prevention of systemic financial risks a top priority all over the world. Under the background of the strengthening of the US dollar exchange rate, it will also increase the pressure of RMB devaluation and capital outflow.

4. CONCLUSION

The result of this paper show that the British pound and the euro are always significantly affected by the Brexit event and positively correlated with the risk of no-deal Brexit, i.e., the value of the currency decreases when the risk of no-deal Brexit increases and increases when the risk of no-deal Brexit is eliminated. The pound is more strongly affected than the euro. The exchange rates of the Japanese yen and the Chinese RMB were only significantly affected by the Brexit referendum and less by the subsequent exit process. The study is useful for understanding and grasping the intrinsic patterns and differences of exchange rate fluctuations of major currencies, so that countries can better cope with the impact of black swan events and manage exchange rate expectations.

Relevant administrative departments should attach great importance to and actively warn the impact of major emergencies on the foreign exchange market, especially strengthen the supervision and regulation of financial risks in the process of events. Due to the particularity, suddenness, destructiveness and other characteristics of major emergencies, it will have a significant impact on the exchange rate. In particular, this impact may have a significant impact on the foreign exchange market in the early stage of the event. Therefore, relevant departments should formulate emergency plans and safeguard measures to deal with such major emergencies. It is necessary to establish a monitoring and early warning system covering the global foreign exchange market on international capital flows, foreign exchange risk and fluctuations of international reserves with the foreign exchange management departments of other countries and regions. Through international cooperation and information sharing, we can better prevent and resolve the impact risk of major international emergencies on our currency.

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