

# A Theoretical Study on the Impact of Us Exit from QE on China's Short-Term Working Capital

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## Abstract

**This paper briefly introduces the concept, characteristics and influence factors of short-term capital flows, and from the perspective of the impact on the commercial banking system stability, the United States withdrew from the quantitative easing of the influence of international capital flows, and America's withdrawal from quantitative easing monetary policy impact on China's response to the countermeasures and Suggestions for the integration.**

## Keywords

**Exit Quantitative Easing, Capital Flow, Commercial Bank.**

## 1. INTRODUCTION

In the whole financial history, every turn of US monetary policy is accompanied by crisis. In the early 1980s, after the U.S. monetary policy changed from loose to tight, the high interest rate and exchange rate of the U.S. dollar increased the foreign debt cost of Latin American countries and triggered the Latin American debt crisis. In the late 80s, the US federal funds rate shifted from low to high, and led the major developed countries to raise interest rates in an attempt to pierce Japan's economic bubble. In the early 1990s, driven by a new round of interest rate reduction cycle in the United States, a large number of US dollar liquidity flows to emerging market countries pushed up asset prices. In 1995, after the US dollar turned into the interest rate increase channel, the capital flow reversed, and successively triggered the financial crisis in Mexico and Southeast Asia. The outbreak of the US subprime crisis in 2006 also stems from the rise in the US dollar interest rate, which has punctured the real estate bubble caused by long-term ultra-low interest rates.

In view of the financial crisis caused by the shift of us conventional monetary policy, the impact of the US unconventional quantitative easing monetary policy on China's financial environment is also worthy of attention. Generally speaking, the withdrawal of the quantitative easing monetary policy of the United States will reduce the supply of the international dollar, increase the value of the dollar, affect international trade, and also have a huge impact on the emerging economies. A large amount of funds will be withdrawn from the emerging economies, causing a temporary ischemia of the emerging economies represented by China. All of these factors will be reflected by the decline of commercial banks' profits and stock market turbulence. The impact of us exit from QE on China's finance also reflects the impact of us exit from QE on China's economy through capital channels.

## **2. LITERATURE REVIEW OF SHORT-TERM CAPITAL FLOWS**

### **2.1. Characteristics of Short-Term Capital Flow**

Sula (2010) took emerging markets with currency crisis as the research object, and found that short-term capital inflows would surge before the crisis, while during the crisis, there would be a reversal or "sudden stop" of the direction of short-term capital flows, especially the surge of current account deficit or the appreciation of real exchange rate, which would increase the possibility of "sudden stop" of short-term capital flows. In addition, private lending and portfolio flows are more likely to "suddenly stop" than direct investment flows to these countries. Lee, park and Byun (2013) studied the volatility contagion effect of capital flows. They believed that there was a strong volatility contagion effect of transnational capital flows, and the severity of crisis spread depended on the type of transnational capital flows, while the volatility of foreign direct investment was most vulnerable to the impact of regional crises. Compared with total capital inflows, short-term net capital inflows are more vulnerable to the financial crisis spreading in the region. Cavoli (2014) takes East Asian countries as the research object, and believes that in these countries, the order of strength and weakness of each component of capital flows is due to information asymmetry and financing constraints. If only transnational capital inflows are considered, and if the two types of capital flows are mutually alternative, under the policy of financial liberalization, these two types of capital flows will appear the phenomenon of mutual exclusion.

### **2.2. The Influencing Factors of Short-Term Capital Flow in China**

Lin Iefen and Ying Wei (2014) found that in the process of exchange rate marketization, the exchange rate factors including exchange rate marketization index and its expectation have the most obvious effect on short-term international capital flow, followed by asset price factors represented by stock price and real estate price, and finally interest rate factors. Yang Zhen (2014) thinks that there are four reasons for short-term international capital flowing into China, which are arbitrage agent represented by the change of expected exchange rate of RMB, risk avoidance agent represented by the change of 10-year Treasury bond yield which can reflect investors' risk attitude, arbitrage agent represented by the change of real estate price yield between China and the United States and arbitrage agent represented by the interest margin between China and the United States. Liu Yang (2014) based on the classic motivation theory of short-term international capital flow, including interest rate determinism, exchange rate determinism, asset portfolio theory and transaction cost theory, combined with China's actual economic situation, analyzed the factors that affect China's short-term international capital flow, including exchange rate difference, interest rate difference, securities market price and investors' investment confidence. On the basis of the existing research, this paper will focus on the short-term capital flow of China caused by the withdrawal of quantitative easing monetary policy of the United States.

## **3. THE IMPACT OF US EXIT FROM QE ON CHINA'S CAPITAL FLOW**

### **3.1. General Theoretical Analysis**

First of all, the gradual withdrawal of US monetary policy will increase the fluctuation of China's international capital flow. The rapid strengthening of the US dollar index is the root cause of the devaluation of the RMB exchange rate and cross-border capital outflow from many emerging markets, including China. The rapid strengthening of the US dollar has brought a series of adjustments to the behavior of domestic economic entities, changed the supply and demand situation of the foreign exchange market, and exerted devaluation pressure on the RMB exchange rate. In the past, some economic entities have changed their exchange settlement from receiving US dollars to holding US dollar assets and reducing the foreign exchange supply in the

market. In addition, some economic entities changed the past practice of "borrowing US dollar liabilities to hold RMB assets" under the weak US dollar, purchased foreign exchange to repay us dollar debts, and increased foreign exchange demand. However, the exit of quantitative easing monetary policy of the United States will be realized by gradual and staged interest rate increase. With the rapid rise of the U.S. dollar index into the consolidation period, the capital flow situation of emerging economies such as China will be improved. In addition, the volatility of the capital market may continue to decline, and the credit spread may continue to narrow. These factors will promote more international capital to flow into China. Secondly, the withdrawal of the quantitative easing monetary policy of the United States will have an indirect impact on China's international capital flow by influencing the monetary policies of other developed countries. With the US withdrawing from QE, the central banks of Europe and Japan adopted QE because of their weak economic recovery under the pressure of global deflation. When the economic fundamentals and monetary policies of Europe and Japan diverge from those of the United States, and the loose monetary policies of Europe and Japan compete to release water, it will hedge the negative impact of the Fed's expectation of raising interest rates to a certain extent, so as to alleviate the trend of large outflow of International capital from emerging economies.

In addition, the impact of China's economic fundamentals on China's capital flight caused by the withdrawal of the U.S. quantitative easing monetary policy is controllable. The main factors influencing China's short-term international capital flow are exchange rate difference, interest rate difference, stock market price and investors' confidence in investment. Because the RMB exchange rate system is managed by floating exchange rate system, and the exchange rate fluctuation is controlled to some extent, the channels of the quantitative easing monetary policy of the United States affecting China's exchange rate are not smooth, so the fluctuation of exchange rate has little impact on China's international capital flow. On the contrary, the interest rate gap between China and the United States has a significant impact on China's international capital flows in the short term. According to the rules of the open market meeting held by the Federal Reserve, it will take at least two years for the US interest rate to recover to the level before the crisis, and China's monetary policy will turn to control the increment and activate the stock. In the short term, there is little possibility that the interest rate gap between China and the US will reverse. Therefore, the short-term international capital with the characteristics of pursuing interest still tends to China with higher interest rate. However, with the acceleration of the normalization of US monetary policy and the increase of US interest rate increase, the interest rate gap between China and the United States may continue to narrow or even reverse, resulting in the decrease or even partial outflow of international capital flowing into China. Although the U.S. exit from quantitative easing policy has a significant impact on China's international capital flow in the short term, in the long term, due to China's timely adoption of various measures to stabilize domestic economic fluctuations and significant results, the trend of international capital flow will not change much in the long term, and capital outflow will be within the controllable range. In addition, after the US exited the quantitative easing monetary policy, the US dollar liquidity in the international monetary market decreased and the US dollar strengthened. On the one hand, a stronger dollar will help prevent the decline of foreign exchange reserves. On the other hand, capital outflow is conducive to reducing the burden of China's huge foreign exchange reserves, the balance of payments structure tends to be reasonable, reducing the potential inflationary pressure in the future. To a certain extent, it shows that the phenomenon of the United States plundering China's domestic tangible resources in disguised form by printing money in the future will be alleviated, which will win time for the transformation and upgrading of China's economic structure and the optimal utilization of resources in the future. It also creates conditions for China's future economic recovery and stock market prosperity.

To sum up, the trend of international capital flowing back to the United States after the exit of quantitative easing monetary policy cannot be avoided. However, under the background of quantitative easing monetary policy still implemented by the European and Japanese central banks and relatively stable growth of China's economic fundamentals, China's international capital flow may alternately appear periodic capital outflow and capital inflow in the short term, and large-scale capital outflow may occur. It's less sexual, but it's still worth taking precautions.

### **3.2. International Capital Flow in Terms of Impact on the Stability of Commercial Banking System**

3.2.1 The direct impact of international capital flow on the stability of commercial bank system

(1) The shift of US monetary policy makes international capital impact on commercial banks in the form of bank loans

When the U.S. implemented quantitative easing monetary policy to promote international capital flow into Chinese commercial banks in the form of loans, on the one hand, it directly expanded the credit scale of commercial banks and increased the credit risk of commercial banks. Commercial banks sell foreign currency loans to their central banks in exchange for local currency, which increases the liquidity of commercial banks. Sufficient liquidity and cost considerations promote commercial banks to expand the scale of credit, resulting in the expansion of credit system. Among them, the number of loans with poor credit rating will increase, resulting in the decline of loan quality and the increase of credit risk. On the other hand, it increases the moral hazard of commercial banks. The inflow of foreign currency loans makes commercial banks abundant in funds and directly reduces the bank's debt constraint. Driven by the interest, the strong desire of commercial banks to invest and lend makes them blindly engage in high-risk investment and issue high-risk loans, thus undermining the stability of the commercial bank system. However, when the United States withdraws from quantitative easing monetary policy, resulting in a large amount of international capital outflow, Chinese commercial banks can not supplement new foreign currency loans in time, resulting in a decline in bank liquidity, which may lead to a run crisis. In particular, asset bubbles such as real estate, which have been pushed up during the massive easing of capital flows into China during the implementation of quantitative easing monetary policy, are likely to break down, and banks are facing Default risk.

(2) The shift of US monetary policy makes international capital impact on commercial banks in the form of direct investment

When the U.S. implements quantitative easing monetary policy to promote foreign capital to enter China in the form of FDI, enterprises or individuals need to convert US dollars into RMB for investment. Because FDI mainly involves the particularity of the target, it is not easy to withdraw from the inflow country. Therefore, FDI is safe for the stability of banking system, but it is not absolute. When the U.S. withdraws from quantitative easing monetary policy and promotes the withdrawal of FDI, because of the large scale of funds involved, it is easy to cause "herd effect", resulting in a larger scale of fund withdrawal, resulting in insufficient foreign exchange, decreased bank liquidity, and affecting the stability of the commercial banking system. In addition, many scholars believe that there are many short-term arbitrage funds to enter the host country for arbitrage in the form of FDI. When the arbitrage goal is achieved, they withdraw quickly. This process of one in one out leads to the fluctuation of bank balance sheet and money supply, which is not conducive to the stability of the commercial bank system. The decrease of global capital liquidity has an impact on the increase of liquidity risk of commercial banks, which has impacted the stability of commercial bank system. As a developing country, China needs to absorb a lot of foreign capital for development and construction. When international capital flows out of China on a large scale, China's available foreign capital will be reduced,

which will restrict the stable development of the macro-economy. In order to make up for the demand of capital, China will inevitably implement a looser monetary policy, expand the money supply, reduce the interest rate, resulting in the decline of bank income. In order to maintain itself, the bank But high return means high risk, which is not conducive to the stability of the banking system.

(3) The shift of US monetary policy makes international capital impact on commercial banks in the form of securities investment

When the U.S. implements quantitative easing monetary policy to promote international capital to enter China in the form of indirect investment such as stocks and bonds, investors still need to convert the U.S. dollar into RMB before investing. This process must go through China's banking system. When international capital invests indirectly, the main purpose is short-term arbitrage. Short-term arbitrage is not only speculation in the financial market, but also may attack China's currency and cause currency crisis and bank crisis. In particular, when the United States withdraws from quantitative easing monetary policy and promotes the shift of international capital flow, China may be attacked by the international hot money that shortens the RMB. There are two ways to short RMB. One is to sell the forward contract of RMB. When the RMB depreciates in real terms, speculators buy the people who are bearish from the spot market to deliver the forward contract so as to gain speculative profits. Second, obtain loans from the Bank of China, convert the loans into US dollars and hold them until the maturity date of the loans. If the RMB currency depreciates in real terms, arbitrage can be realized. No matter which way, the commercial banks in China bear the risk brought by the arbitrage process, which destroys the stability of the commercial bank system. If the arbitrage is successful, the devaluation of RMB will increase the external debt burden of commercial banks. On the contrary, if the arbitrage fails, the repayment ability will be affected, which will lead to the default risk of the bank. In particular, when the US implements quantitative easing monetary policy and makes international capital flow into China in the form of securities investment, it will push up asset bubbles in China's bond market and stock market. Once the US withdraws from the quantitative easing monetary policy, it will pierce China's asset bubble, which will enable commercial banks to become loans with equity loans and become more toxic assets and increase the operational risks of commercial banks.

### 3.1.2 Indirect impact of international capital flow on the stability of commercial bank system

(1) US monetary policy turns to impact commercial banks through exchange rate mechanism

The change of US monetary policy will increase the fluctuation of international capital flow, and the change of international capital flow through the balance of payments account will affect the exchange rate of RMB. The change of RMB exchange rate will further affect the exchange rate risk of Chinese commercial banks. The concentration of bank exchange rate risk caused by the increasing fluctuation of RMB exchange rate must affect the stability of commercial bank system. In addition, the change of exchange rate will also affect a country's macro-economy. After the US exited the quantitative easing monetary policy, the increasing pressure of RMB devaluation also made the RMB assets of commercial banks shrink, and the burden of foreign debt increased. As a result, commercial banks with foreign currency liabilities face the risk of asset liability imbalance.

(2) US monetary policy turns to impact commercial banks through interest rate mechanism

With the exit of quantitative easing monetary policy in the United States, the overflowing liquidity in the past will no longer exist, and the water level of the global "capital pool" will drop. Although the European Central Bank and Japan and other developed countries continue to implement quantitative easing policy and release a large amount of liquidity, it is still difficult to fully hedge the negative impact of the return to normalization of monetary policy in the United States. In order to cope with the impact of global liquidity tightening, China can only

adopt loose monetary policy to ensure exchange rate stability by selling foreign exchange reserves on the one hand, and on the other hand to supplement the reduced liquidity of the US dollar tightening. Under the loose monetary policy, the interest rate of RMB will be lowered.

#### **4. POLICY SUGGESTIONS FOR CHINA**

From the above analysis, it can be seen that the exit of quantitative easing monetary policy of the United States will increase the pressure of RMB devaluation, while promoting China's export to the United States, it will reduce China's total export, increase the pressure of China's capital outflow and the risk of the financial system, and the impact on China's output also depends on its policy operation mode and China's response strategy. In the face of the opportunities and challenges brought to China by the withdrawal of the quantitative easing monetary policy of the United States, on the one hand, China should take precautions against the risks and improve the awareness of risk prevention; on the other hand, China should actively promote structural reform and financial system reform by taking advantage of the opportunity of the economic recovery of the United States and the release of the pressure of RMB appreciation. The specific measures to be taken are as follows:

##### **4.1. Strengthen International Policy Cooperation and Actively Innovate Monetary Policy Tools**

(1) Strengthen the communication and coordination of international macroeconomic policies

From the analysis of the global financial crisis in 2008, we can see that the world economy is closely connected with the national economy. Due to the existence of the background of economic globalization and financial globalization, no country can be alone. Global economies have promoted their respective economies through economic globalization and trade liberalization. Mutually beneficial and win-win cooperation is effective in many trade processes. As the first and second largest economies, China and the United States should strengthen monetary policy cooperation and fully consider the spillover effect of monetary policy, which will help to more effectively stabilize investment expectations and reduce the volatility of global financial markets. China should also pay attention to the change and intensity of monetary policy, capital flow and interest rate policy of developed and active economies, such as Japan and the European Union. In response to the economic crisis, China and other Asian countries, as well as European and American countries, have established a very good relationship of mutual help and support. In the process of implementing the quantitative easing policy in the United States, the Chinese government should further deepen the economic and trade cooperation between China and its neighboring countries and other countries in the world, improve the cooperation mechanism and break the trade barriers in order to realize the coordinated development of the economies of all countries, so as to reduce the economic risks caused by the uncertainty of the external economy and challenge the future economy Prepare for the war.

(2) Increase the flexibility and innovation of monetary policy tools

The state needs to intervene the economy in the way of demand management in order to avoid unemployment and crisis. In other words, through the combination of appropriate monetary and fiscal policies, it can adjust the total social demand to keep balance with the total social supply. The exit of quantitative easing monetary policy in the United States will inevitably lead to short-term liquidity shortage. China should adopt flexible ways to deal with the possible problems of liquidity in the adjustment of monetary policy. As the trend of monetary policy in developed economies is uncertain in the future, China should, on the premise of ensuring stable economic growth, widely adopt rediscount, refinance, standing loan facilities and adjust the deposit reserve ratio to stabilize the market expectation, maintain the smoothness and stability

of the channel of basic currency supply, and ensure the domestic economic development. The liquidity is stable and sufficient, creating good conditions for the transformation of China's economic structure. In addition, with the exit of quantitative easing monetary policy in the United States, the weakening of foreign exchange occupation makes China's macro-control more active and selective. We should actively use this favorable opportunity to carry out monetary policy innovation and buffer the negative impact of the exit of quantitative easing. In response to the financial crisis, a series of monetary policy innovations carried out by the Federal Reserve are worth learning from in China.

### (3) Strengthening the early warning and monitoring of cross-border capital flows

In the process of implementing zero interest rate policy in the United States, the high interest rate in China has attracted a large number of funds to invest in the Chinese market, so as to achieve the purpose of arbitrage. These funds make China's housing prices soar; on the other hand, it has a great impact on the virtual economy, and has caused certain obstacles to China's economic development. As the United States announced a gradual exit from quantitative easing, these funds began to waver. Changes in the flow of cross-border capital will make China bear the pressure of huge amount of capital flowing out through various channels in a short period of time, impact on China's real economy and cause a temporary shortage of currency liquidity. Although China's current capital projects are not fully open and the impact is relatively limited, the government should also be highly vigilant to do a good job in the emergency plan of controlling short-term capital outflow in advance. First, regulatory and cross-border capital flow alert systems should be strengthened. The regulatory authorities should strengthen the supervision of the authenticity of short-term international capital flows and the changes of active funds, improve the statistical analysis mechanism of active funds in China's asset market, so as to form a relatively perfect monitoring system for cross-border capital flows, so as to achieve the purpose of effectively preventing financial risks.

## 4.2. Curb Asset Bubbles and Strengthen Financial Regulation

We can conclude from the analysis of many financial crises in history that to curb potential asset bubbles requires adequate financial supervision. In May 2014, Zhou Xiaochuan, President of the people's Bank of China, once again said that the state has determined to implement thorough financial and economic reform and will not hope to save the real estate market by releasing liquidity. Therefore, we also understand the government's determination to curb asset bubbles. If we want to develop an excellent capital market and build a new type of industry, we must curb asset bubbles. On the one hand, a good capital market can provide a sustainable and stable capital source for the development of real economy, especially for the development of new industries. On the other hand, a good capital market also provides relatively high yield investment products to investors for investment. In this way, it not only meets the capital demand of the capital demander, reduces the cost of financing, but also makes the capital holder not to put all the capital into a single investment product. Under the background of economic globalization, it is more urgent to prevent asset bubbles by financial regulation. Although China's capital account is not fully open, it is impossible for China's capital account to be completely closed through trade account and underground bank. We can't completely prevent the negative impact of the exit of quantitative easing monetary policy of the United States on China's stock market and financial ecology. Therefore, we should take corresponding preventive measures to reduce the impact and harm of the possible international transmission of monetary policy on the stability of China's financial market system from the perspective of domestic financial regulators. In particular, according to the rhythm of the US interest rate increase, we should actively take advance measures to leverage China's economic and financial operations in advance to squeeze the bubble, thereby avoiding the change of funds caused by the spread of the US interest rate and triggering the financial crisis. Specifically, we should further strictly

control the mortgage policy and housing conditions of the first tier cities, avoid the real estate bubble, further crack down on illegal allocation of funds, guard against the stock market bubble, pay attention to the price movements and risk of commodity futures, and guard against the bubbles of financial derivatives.

#### **4.3.Improve the Formation Mechanism of RMB Exchange Rate and Promote RMB Internationalization**

The spillover effect of the implementation and withdrawal of quantitative easing in the United States reflects the Triffin Dilemma of national currency as an international currency under the current US dollar credit standard system. Therefore, while actively advocating the diversification of international reserve currency, we should actively promote the internationalization of RMB and reduce the problem of currency mismatch faced by China. In addition, the US exit from QE provides a good opportunity for RMB internationalization. On the one hand, one of the purposes of the US exit from QE is to revive the US dollar. However, the instability of the US dollar in the process of exit reduces the credibility of the US dollar as an international currency to a certain extent, which is conducive to the process of RMB internationalization. On the other hand, after the US's plan of withdrawing from QE is put into practice, it will inevitably cause foreign exchange tensions in many emerging economies, especially in small open countries. Emerging economies with insufficient foreign exchange reserves are facing the huge pressure of liquidity contraction caused by the withdrawal of the quantitative easing monetary policy of the United States. At the same time, China now has a large number of foreign exchange reserves. China can provide financial support and currency exchange based on certain conditions, so as to release a large number of financial products and credits denominated in RMB, so as to balance the balance sheet of these emerging economies. From a long-term perspective, this will gradually make the RMB gain the position of regional currency in Asia, and it can be widely used for pricing transactions and settlement. At present, we should build the RMB market from the whole at home and abroad, strengthen the attention to the anti impact function of RMB offshore market at home and abroad, so as to further expand the scope and scale of currency swap.

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