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Federal Reserve's Monetary Policy and Its Impact on China's Economic Development

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Abstract: The global financial crisis in 2008 caused great trauma to the economy and financial markets all over the world. Following the onset of the financial crisis, the monetary authorities of various nations implemented a range of monetary policies to deal with the crisis's negative impact on the real economy. The United States, as the world's largest country, the implementation of the Fed's monetary policy has a significant impact not only on its own macro-economy, but also on the world macro-economy. Following the onset of the financial crisis in 2008, the Federal Reserve implemented a series of monetary policy operations, including lowering the federal fund interest rate and the money market re-discount interest rate, to address the financial crisis' impact on the domestic economy of the United States. Unconventional monetary policy mainly includes reducing the federal funds rate to the zero range boundary. Based on previous studies, this paper finds that the monetary policies of the Federal Reserve mainly affect other countries' economies through four channels: asset price, exchange rate, interest rate and credit. At the same time, in view of the negative spillover effects brought by the Federal Reserve, China should adopt proactive financial policies to resist risks.

1. Introduction

The Federal Reserve has executed three rounds of quantitative easing since the financial crisis began in 2008. (QE). In November 2008, the first round of quantitative easing monetary policy (QE1) began.The Federal Reserve announced to take over the "Fannie and Freddie" and real estate related bonds. The first wave of quantitative easing has officially begun.However, the macroeconomic situation in the United States has not changed since the first round of quantitative easing monetary policy was implemented; the domestic unemployment rate remains high, real-economy investment is sluggish, and the prospect of economic recovery remains dim. The Federal Reserve initiated the second phase of quantitative easing (QE2) in November 2010 in response to the previous round's lackluster results. The second round of quantitative easing policy includes putting up to $600 billion of base money into the money market and maintaining the federal funds rate at a low interest rate of 0-0.25%. In September 2012, the Federal Reserve began the third wave of quantitative easing, which included the purchase of $40 billion in mortgage-backed securities on a monthly basis. When the Federal Reserve's three rounds of quantitative easing monetary policy have been gradually implemented, the macroeconomic environment in the United States has been continuously improved, the unemployment rate has continued to decline, enterprise investment has begun to activate, and the overall economy has entered the recovery channel. To this purpose, then-Federal Reserve Chairman Ben Bernanke declared that the Fed would phase out quantitative easing over time.

The Federal Reserve announced in December 2013 that it will gradually cut its monthly asset purchase plans until it stopped buying mortgage-backed securities, long-term treasury bonds, and other monthly asset purchase plans. Since 2015, the US macro-economic recovery has shown obvious signs, the real economy and financial markets have shown an obvious rebound momentum, and the unemployment rate has also remained at a low level. The Federal Reserve raised the target range of the federal funds rate by 25 basis points from 0-0.25 percent to 0.25 percent - 0.5 percent on December 16, 2015, against the backdrop of a positive overall domestic economic outlook. It is the end of the Federal Reserve's quantitative easing monetary program.

The practice of monetary policy implementation in the United States shows that during the financial crisis, unconventional monetary policy operations have played a good role in helping the United States recover its economy and financial markets, but the spillover effect of this policy is also very obvious. The Federal Reserve's unconventional monetary policy has resulted in the continuing depreciation of the US dollar, which has resulted in a rapid rise in international commodity prices. Furthermore, the United States' long-term low interest rate has resulted in a massive flow of US dollars into other economies, which has harmed the stability of foreign currency and financial markets in other countries. After the Fed officially withdrew from the quantitative easing monetary policy in 2015, the US dollar began to appreciate due to the Fed's interest rate increase, which led to the devaluation of the currencies of other economies in the world to varying degrees. As a result, the financial markets of some countries are faced with problems such as sharp shrinkage of asset prices and massive capital flight.

As China's economy enters the "new normal" stage and the economic structure enters the period of adjustment and transformation, the downward trend of economic growth is inevitable. At the same time, as the global economy becomes more integrated and the international financial market becomes more important, a country's monetary policy will effect not just its own economic production, but also the economic growth of other countries. In this setting, China's macro-economy faces a slew of external dangers as the Federal Reserve embarks on a new round of monetary policy. As a result, in light of the potential impact of the Fed's monetary policy on China's macro-economy, and based on the Fed's monetary policy implementation, this paper will examine the impact of the Fed's monetary policy spillover

effect on China's economy, as well as the transmission effect of various influence channels, which is also of practical importance.

2. Literature Review

2.1. Definition of Unconventional Monetary Policy

Due to the complexity and diversity of the Fed's monetary policy, we mainly focus on the unconventional monetary policy, namely quantitative easing policy, from 2008 to 2016.

In 2007, the credit market in the United States devolved into turmoil, and asset prices plummeted, wreaking havoc on the financial system's normal operation and jeopardizing lucrative arbitrage opportunities. Under the normal operation of the market arbitrage environment, the expectation of the market subject on the long-term real interest rate will affect the expenditure decisions such as household purchase of real estate and enterprise expansion. The Federal Reserve's management of the federal fund interest rate will have an impact on the long-term nominal interest rate, resulting in a change in the real interest rate, which will affect the market subject's economic decision-making. The elimination of the arbitrage environment will disrupt the federal funds rate's action mechanism on long-term interest rates, causing expectation disorder and affecting the US real economy. The Federal Reserve attempted to cope with the crisis via conventional monetary policy in the face of substantial economic decline. The Federal Reserve has reduced interest rates many times since September 2007. By the end of 2008, the interest rate fell to the range of 0 ~ 0.25%, which has basically no room for decline. When the role of conventional monetary policy has reached its limit, in order to achieve economic recovery, the Federal Reserve began to use unconventional monetary policy tools.

In academics, there is currently no agreed definition of unconventional monetary policy. Unconventional monetary policy planning can be classified into two types based on the order in which monetary policy operations are carried out (Trichet, 2013).The first one takes unconventional monetary policy as an extension of conventional monetary policy. When the implementation of conventional tools has reached the limit, the central bank uses other new tools to stimulate the economy.The other is the policy of using unconventional monetary policy to recover the economy when there are obstacles in the transmission of conventional monetary policy. This classification method holds that unconventional monetary policy is mainly applied to the serious impact of financial markets in a relatively brief length of time.

Unconventional monetary policy is a policy measure to stimulate the economy when the effect of conventional monetary policy is poor. Some scholars also divide the types of unconventional monetary policy. Bernanke and Reinhart (2004) pointed out that unconventional monetary policy can be divided into three forms: the first is to adjust the structure of the central bank's balance sheet; The second is to expand the scale of the central bank's balance sheet (i.e. "quantitative easing"); The third is to communicate policies to ensure that the future interest rate will be lower than the expectations of market participants.

2.2. Interest Rate and Exchange Rate Channels

The monetary policy of the United States not only affects the asset price level of the United States, but also has a significant impact on the asset prices of other countries in the world.Under the loose monetary policy, a country's domestic interest rate drops, inflation rises and capital flows out. At the same time, loose monetary policy will also increase domestic output and stabilize employment. The monetary policy of the United States will affect the holding income of currencies of various countries through the flow of capital. For countries with fixed exchange rate system, the goal of monetary policy pays more attention to exchange rate stability. Therefore, the independence of monetary policy in many countries is affected by Federal Reserve monetary policy.

Gourinchas and Ray (2007) pointed out that the fluctuation of US dollar exchange rate and interest rate is the main cause of the crisis, and once the crisis occurs, it will be transmitted among countries. This kind of crisis is called "monsoon crisis". The United States uses its position as the main reserve currency of the US dollar and its strong financial system to overdraw credit, borrow and consume around the world. This "borrowing consumption" centered on the United States has been amplified into global monetary expansion through the global financial system, thus driving the global economic development.

The research results of Bu et al. (2021) show that the Fed's monetary policy first has an information effect on the economic market, especially on the short-term interest rate, and then changes the long-term yield. Berge and Cao (2018) concluded that under the zero lower limit, the impact of US monetary policy on international asset prices is different. Short term interest rates and stock markets are most sensitive to changes in the federal funds rate, while long-term interest rates are more sensitive to future policy expectations.

Howard (2015) looked at the nominal and real interest rates' equilibrium term structures, as well as the time-varying bond risk premium predicted by the stochastic endogenous growth model with incomplete price adjustment and monetary policy influence. Craine and Martin (2008) studied the spillover effects of monetary policy shock and non monetary policy shock. The empirical results show that the monetary policy shock of the United States can affect the bond yield of Australia, but the monetary policy shock of Australia has no impact on the United States. The spillover effect of non monetary policy shocks in the United States is more significant in the long run.

Bhuiyan (2012) took the bank overnight interest rate as the goal of monetary policy tool to study the macroeconomic impact of the monetary policy of the Canadian monetary authority. It is found that monetary policy can affect real economic growth through market interest rate and exchange rate channels. Neri and Nobil (2010) studied the impact of the federal funds rate on the economy of the eurozone. It is found that in the international transmission mechanism of monetary policy, the impact of monetary policy on macro-economy works through the transmission mechanism of exchange rate, commodity price, short-term interest rate and trade balance. The results show that the rise of the federal funds rate will lead to the immediate depreciation of the euro, and the sharp decline in the prices of commodities, especially oil, reflects the decline in demand. In the short term, lower commodity prices will boost household consumption, resulting in an increase in aggregate demand and an expansion of economic activity in the eurozone. In addition, they assessed the possible impact of the ECB's own response to macroeconomic changes on the eurozone economy. The study found that in order to curb the inflationary pressure in

economic expansion, the European Central Bank offset the expansion effect of euro depreciation on the euro area economy by increasing short-term nominal interest rates.

Kim (2001) established a transaction cost model to explain international capital flow. He believed that capital flow is a function of foreign investment return, domestic transaction cost and foreign transaction cost. Although the explanations of capital flow theory for the reasons of capital flow are different, they all have one thing in common, that is, the expected return on foreign investment is the main factor affecting capital flow. Sousa and Zaghinib (2007) believes that international capital flows will not only affect the price of money and financial assets, but also affect the total amount of money. Under the fixed exchange rate system, in order to maintain exchange rate stability, the central bank's currency circulation is restricted by international capital flows. For countries with floating exchange rates, the impact of international capital flows can be offset by changes in exchange rates, but there is a time lag in the adjustment of exchange rates and central bank interest rates. If the policy regulation does not match the changes of capital flow and exchange rate, it will easily lead to the imbalance of liquidity in the domestic market. Goldstein and Lardy (2006) believes that China is facing difficulties in the exchange rate system, and both China and the world economy need to make compromises to avoid further aggravation of the imbalance of the world economy.

2.3. Asset Prices and Credit Channels

In the macroeconomic model, Gertler and Karadi (2013) argue that the Federal Reserve uses large-scale asset purchases as a monetary policy tool. As a result, it has been discovered that monetary policy can have an impact on the macro economy via term premium, credit spread, and other channels.

Frankel (1986) found that the loose monetary policy of the Federal Reserve will cause a significant rise in commodity prices, and further found that the loose monetary policy can cause inflation by improving the liquidity of the money market and the rise of commodity prices. Therefore, the Fed must also implement specific monetary policy according to the actual situation of inflation and monetary policy objectives. Akram (2009) found that after the implementation of the Federal Reserve's loose monetary policy, commodity prices rose significantly simultaneously by using the SVAR model. Moreover, in the short term, the rise of commodity prices is significantly greater than that of interest rates. In the long run, there is a significant correlation between the supply of US dollars and commodity prices.

Wongswan (2006,2009) used high-frequency data to study the impact of monetary policy changes in Japan and the United States on South Korea and Thailand. It was found that although the impact is significant, the impact time is relatively short. He also used high-frequency data to analyze the impact of U.S. monetary policy on 15 countries. The research believes that the unexpected reduction of federal fund interest rate will have an impact on the stock market of other countries and promote the rise of stock prices in other countries. Kim and Nguyen (2009) also studied the impact of the monetary target interest rate adjustment information of the Federal Reserve and the European Central Bank on the stock markets of Asian countries. The results show that the unexpected increase of the target interest rate has a significant negative effect on the stock markets of Asia Pacific countries, and the adjustment of the target interest rate will increase the volatility of the stock markets of Asian countries. In the research conclusions of Bhattarai et al. (2020), on average, a standard deviation impact on the U.S. volatility index caused the short-term interest rate to rise by 0.017 percentage points. Compared with the United States, the long-term interest rate increased by 0.065 percentage points, the stock price fell by 2.372%, the local currency depreciated by 0.487%, and the capital inflow decreased by 0.053 percentage points relative to GDP. The increase of uncertainty in the United States will also have an impact on the macro-economy of emerging market economies. The output of these countries decreased while net exports increased. In addition, consumer prices in emerging market economies fell. Specifically, in order to cope with the impact of a standard deviation of the U.S. volatility index, on average, output decreased by 0.248%, and the net exports of these countries to the United States increased by about 0.033 percentage points relative to GDP. These are peak effects that appear after a delay of 2-4 months. Consumer prices continued to decline, reaching about 0.079 per cent at the end of the biennium. With the sudden increase of uncertainty in the United States, these spillover effects may be huge and economically significant.

The Fed's interest rate decision has an impact on the level of investment and productivity in China through monetary transmission and credit channels. According to the calculation results of SUR model, Öner and Oglu (2020) concluded that at least 50% of the changes in the ratio of private non-financial credit to GDP in China can predict the interpretation of the Fed's policy interest rate, because the square value of R is 0.5000, and there is an inverse relationship between the Fed's interest rate and credit growth.Yang and Teng (2011) found that in China's monetary transmission mechanism, credit channel is the most effective and dominant, while the role of interest rate and exchange rate channel is not obvious. As an asset price channel, the stock market did not play its due role until after 2009 due to its own development. However, according to the analysis results of Lin and Lei (2018), the Fed's quantitative easing policy has the greatest impact on foreign exchange reserves, followed by the foreign exchange and stock market, but the credit market has the least impact. When the Fed implemented quantitative easing policy, the depreciation of the US dollar and the export difficulties of emerging countries eventually led to the decline of GDP and negative spillover effect.

2.4. Spillover Effect of Monetary Policy on Inflation in Other Countries (Regions)

Although quantitative easing does not have legitimacy in the formal system, the Fed has its own policy implementation standard combined with the maximum employment goal. However, when the Fed implements quantitative easing policy, it will deliberately ignore the impact of exchange rate, and make other central banks around the world have to follow the Fed's policy, which will bring spillover effects to the world and trigger inflation to a certain extent.(Ronkainen & Sorsa, 2017)

Joyce et al. (2012) conducted an empirical study on the spillover effect of the Federal Reserve's quantitative easing program after the financial crisis of 2008. The analysis reveals that the Federal Reserve's unconventional monetary policy has a clear impact on the global economy. Under the direction of the Mundell-Fleming-Dornbush model, Frankel (1988) built a VAR model to analyze the influence of US monetary

policy on key European economies. The findings suggest that the Fed's expansionary monetary policy will boost output while depreciating the dollar. The influence of Federal Reserve expansionary monetary policy on other nations' trade balances is unknown, making it difficult to predict the direction of expansionary monetary policy's spillover effect. Wright (2012) used a structural VAR model to investigate the impact of monetary policy on various long-term interest rates. The impact of monetary policy on the macroeconomy was shown to differ significantly on days of FOMC meetings and some speeches when the federal fund interest rate was inside the zero lower limit band, according to the study.

Gambacorta et al. (2014) also estimated a panel VAR model to assess the macroeconomic consequences of unconventional monetary policy. Exogenous growth of the central bank's balance sheet with a zero lower limit leads to a temporary increase in economic activity and consumer prices, according to the findings. Although the measures employed by the monetary authorities of each country are different, there is no substantial variation in the impact of unconventional monetary policies on the macro-economy, according to a comparative examination of the spillover effects of the target nations.

Haroon (2012) studied the impact of monetary policy fluctuations. He found that firstly, the time-varying variance of monetary policy shocks is considered through the random volatility norm. Second, it allows the dynamic interaction between the level of endogenous variables and time-varying volatility in the VAR model. The analysis shows that when the volatility of monetary policy increases, the nominal interest rate, output growth and inflation will show a downward trend.

According to Blinder et al. (2008), the impact of monetary policy on different sectors varies substantially. To assess the impact of the central bank's use of unconventional monetary policy to deal with the financial crisis, Gertler and Karadi (2011) built a quantitative monetary DSGE model. The central bank is less efficient than private intermediaries in giving loans, but it has the advantage of being able to obtain cash by issuing government debt, according to the study. It is not subject to balance sheet limits, unlike private intermediaries.

Chen et al. (2012) investigated the impact of Fed quantitative easing (QE) on major developed economies, particularly emerging market economies, across borders. Quantitative easing policy has a major impact on the global financial market, according to the findings. Quantitative easing has influenced developing market asset prices, as well as stock prices, government and corporate bond yields, and CDS spreads. The empirical results confirm that the quantitative easing plan of developed economies has affected the expectations of international financial markets on the intensity of cross-border capital flows in emerging market economies and the concerns of emerging market central banks about these capital flows. An economy's announcement of quantitative easing measures can help increase global liquidity by causing quick repricing of assets in global financial markets. The expansionary impact of quantitative easing in the United States is quite considerable in some economies, such as Hong Kong and Brazil, and is accompanied with rapid credit growth and strong capital inflows, currency appreciation, and inflationary pressure (Bauer and Neely, 2014).

Jeong and Lee (2001) analyzed the spillover mechanism of monetary policy changes on inflation among developed countries. The research shows that the economic cycle and economic structure of G7 countries are relatively similar, so there is a certain degree of cointegration relationship between inflation in various countries. In terms of relative impact, the United States has the greatest impact on inflation in G7 countries, and will also be affected by other countries. According to the identification method of Romer and Romer (2004), a new method to measure monetary policy innovation is constructed. The results show that for every 1 percentage point increase in policy interest rate, output will decrease by 0.6%, and inflation will decrease by up to 1 percentage point in 2 to 3 years. Kapetanios et al. (2012) studied the effect of quantitative easing monetary policy on UK output and inflation. The results showed that the first round of quantitative easing monetary policy increased GDP by 1.5% and inflation by 1.25%. Oda and Ueda (2005) studied the effect of Japan's quantitative easing policy. They believe that quantitative easing monetary policy significantly improves output in the short term, but does not significantly improve the level of inflation. They believe that this experience can be used for reference by other countries. Therefore, when the financial crisis broke out, the Fed chose quantitative easing monetary policy as its further regulation means after the target interest rate was close to zero. Ugai (2007) also studied the effect of quantitative easing monetary policy in Japan from 2001 to 2006. The results show that Japan's quantitative easing monetary policy has created a very loose relief for corporate finance and reduced the cost of obtaining funds for Japanese enterprises, including financial enterprises, but the effect is not obvious in improving the total domestic demand and price. Nakajima (2011) studied the effect of monetary policy in Japan under zero boundary interest rate. The results show that quantitative easing monetary policy can significantly reduce bond yield and then affect macroeconomic variables, but the direct relationship between quantitative easing monetary policy and macroeconomic variables is difficult to be clearly explained.

However, Hansan et al. (1995) believes that the previous theories of international inflation transmission are based on the national conditions of developed countries and are not necessarily applicable to developing countries. For example, there is a general surplus of labor in developing countries, and the relationship between inflation and unemployment described by Phillips curve does not necessarily hold in developing countries. Nell (2004) believes that the shortage of means of production and means of living in developing countries will cause long-term inflation, rather than short-term demand driven inflation. Its demand for imported goods can only be realized through the additional issuance of currency and the depreciation of domestic currency. The devaluation of the currency leads to the rise of import commodity prices and inflation expectations, resulting in a wage price spiral. Kolodko (1987) believed that the transmission of inflation is generally from developed countries to developing countries, and developing countries can hardly fight inflation because of their limited economic scale and management level.

Tyers (2016) found that in the context of economic globalization, China's economic, monetary and financial markets have entered the transformation from low savings to high savings mechanism. The first one is the expectation of the appreciation of the US dollar, which leads to the rise of us real interest rate and deflation. When the Federal Reserve realizes this problem, it will implement an expansionary

monetary policy, and other countries will change their monetary policy in order to maintain their own interest rate target.

3. The Impact of the Fed's Quantitative Easing Monetary Policy on China

3.1. China Faces Greater Inflationary Pressure

The Fed's quantitative easing monetary policy will make China face greater inflationary pressure. First of all, as the world's second largest trading country, China's exports are mainly processing trade, and its economic development is highly dependent on some imported raw materials. Due to the depreciation of the US dollar caused by quantitative easing monetary policy, the prices of international bulk commodities such as energy and raw materials will rise sharply, and the prices of domestic products produced with imported raw materials will inevitably rise, which will increase China's "imported" inflationary pressure and promote the rise of the overall level of domestic prices. Secondly, the sharp rise in commodity prices and the inflation risk brought by hot money inflows will further strengthen domestic inflation expectations. As inflation has the characteristics of "self realization of expectations", the continuous quantitative easing monetary policy of the United States may also have a self realization effect of inflation by affecting market expectations, thus having a vicious impact on China's economy.

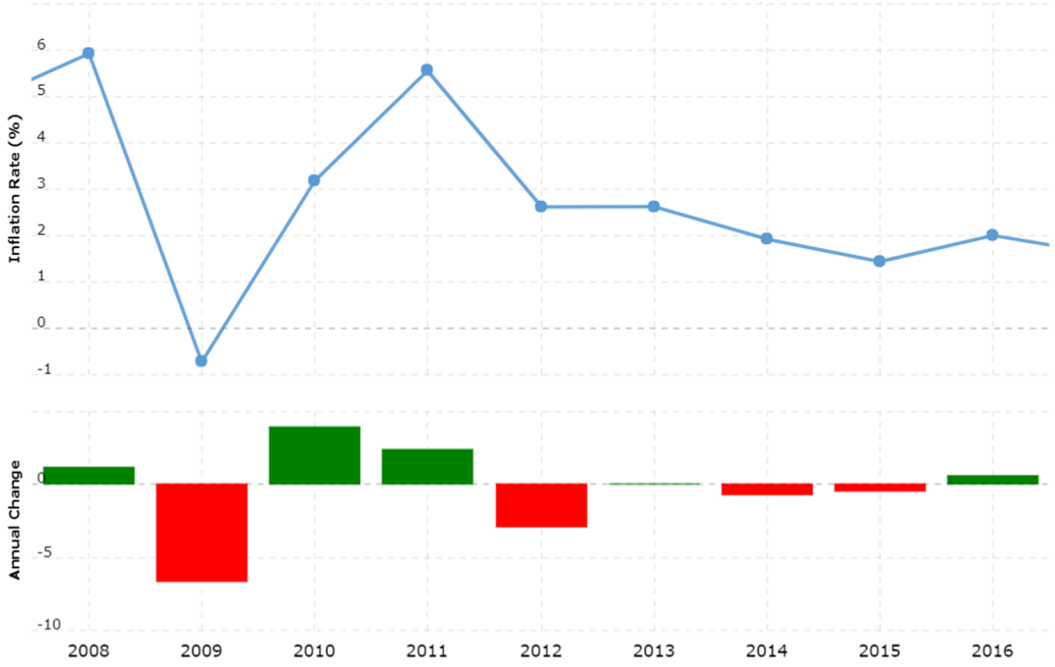

Figure 1. Inflation rate
Data source: World Bank

3.2. The Influx of International Hot Money Has Further Increased the Pressure of RMB Appreciation and Exacerbated the Recession of China's Foreign Trade

As the largest and fastest growing emerging market economy in the world, China has attracted a large number of international investment capital due to its strong anti crisis ability, rapid recovery ability, high rate of return on investment and long-term expectation of RMB appreciation. In addition, the strong performance of China's economy after the outbreak of the global financial crisis also makes China the main target of liquidity created by the Fed's quantitative easing monetary policy. Although China's capital account has not been fully opened, and hot money cannot come in and out freely, it will still flow in through various channels, increasing the pressure of RMB appreciation and increasing the turbulence of domestic financial markets. The quantitative easing monetary policy of the Federal Reserve not only releases a lot of liquidity and promotes the depreciation of the US dollar, but also makes the RMB exchange rate face greater appreciation pressure. Since the deterioration of the global economic situation has already reduced foreign demand for Chinese products after the outbreak of the global financial crisis, the sharp appreciation of the RMB will further reduce China's export trade and exacerbate the recession of China's foreign trade. For China, whose dependence on foreign trade is as high as 60%, the reduction of foreign trade will have a great negative impact on economic development.

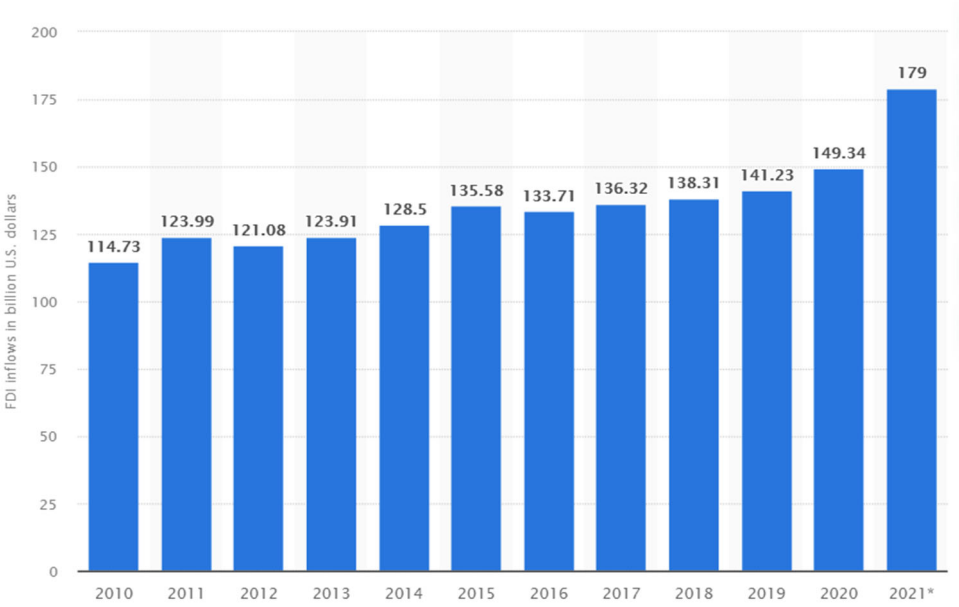

Figure 2. Data source: World Bank

3.3. Leading to A Sharp Decline in China's Foreign Exchange Reserves

As the quantitative easing monetary policy implemented by the Federal Reserve will cause the sharp depreciation of the US dollar, China, as the largest creditor of the United States, accounts for 65% of China's US $3.2 trillion foreign exchange reserves. The sharp depreciation of the US dollar is bound to lead to the serious shrinkage of China's foreign exchange reserves for a period of time. Since the bond price is inversely proportional to the yield, the implementation of the policy will significantly reduce the yield of US treasury bonds, and the record low yield of US treasury bonds will put great pressure on China's foreign exchange reserve management, as the largest creditor of the United States. The yield of newly purchased treasury bonds is quite low, while the risk of long-term treasury bonds is relatively high, and the price will be more sensitive to the impact of interest rate fluctuations.

3.4. Squeeze the Space of China's Monetary Policy

The implementation of quantitative easing monetary policy will accelerate the influx of hot money into China, and push up China's stock market, property market and other asset prices, which will eventually lead to huge foam risks, especially China's inflation control. When China's capital account has not been fully opened, the influx of hot money will increase the expectation of RMB appreciation. In order to maintain the stability of the exchange rate, the central bank is forced to absorb foreign exchange, resulting in a sharp increase in foreign exchange reserves, which seriously affects the operation space and implementation effect of the central bank's monetary policy and restricts the independence of monetary policy. In the face of the continuous interest rate reduction of the United States and the competitive depreciation of the US dollar under the quantitative easing policy, China can only be forced to adjust at the pace of the United States, which not only increases the difficulty of macro-control, but also greatly reduces the policy choice space of the Chinese government.

4. China's Countermeasures

4.1. Timely Adjustment of Monetary Policy

During the global financial crisis, China adopted a large-scale active fiscal and monetary policy to stimulate economic growth, achieved good results and maintained rapid economic growth. However, with the recovery of the global economy and the implementation of the US quantitative easing monetary policy, China began to face greater inflationary pressure. In 2011, China's prices soared and inflationary pressure increased. The people's Bank of China timely sent a "tightening" signal, and macroeconomic policy began to shift from moderately loose monetary policy to prudent monetary policy. As of July 2011, the people's Bank of China has raised the benchmark interest rate of RMB deposits and loans three times and the deposit reserve ratio six times to control the overheating of the economy and the continuous rise of prices. A prudent monetary policy with strong flexibility will help to more actively and properly handle the relationship between steady growth, structural adjustment and anti inflation. It is an inevitable choice for China in the current domestic environment. It will not only help to strengthen the management of inflation expectations, prevent asset price foam, but also facilitate economic structural adjustment and transformation of development mode, and adjust the credit structure of banks, rationally guide investment and consumption behavior, and provide a stable and moderate monetary environment for adjusting economic structure and improving the efficiency of resource allocation. At the same time, a prudent monetary policy is also conducive to preventing systemic financial risks and guiding financial institutions to strengthen asset scale and structural adjustment. In the face of the changing domestic and international economic environment, China should timely adjust the strength of monetary policy according to the actual situation, enhance the flexibility of monetary policy and ensure that it is compatible with its own economic situation.

4.2. Strengthen the Control of Capital Inflow and Curb the Influx of International Hot Money Into China

International hot money has the characteristics of strong liquidity, strong profit seeking and short term. When the capital account control is loose, its massive influx is easy to impact China's capital market. There is no doubt that China's political and social instability will be exacerbated, and this kind of financial market turbulence may even endanger China's economic and social stability. The quantitative easing monetary policy of the United States will make China face huge capital flow impact pressure. The Central Bank of China should strengthen the supervision of cross-border capital flows, crack down on hot money inflows and limit short-term capital flows. As China's interest rate spread is now at an all-time high, the economy is performing well and there is a lasting expectation of RMB appreciation, China is likely to become the first choice for short-term capital inflows, which will significantly increase the difficulty of capital control. Against this special background, in order to prevent the influx of international hot money and reduce the risk of China's monetary policy and the risk of China's asset foam, China must fight the "hot money" blocking war and establish the early-warning mechanism for hot money inflow, considering temporary or even unconventional capital controls to minimize the inflow of hot money. As capital account control is a distortion of the market, China should dynamically evaluate the development and changes of the market at any time, and adjust and cancel the control measures in time. In addition, China should speed up the development of domestic financial market and increase the depth and breadth of the market, so as to strengthen its ability to resist external risks. The role of Hong Kong as an international financial center in resisting the impact of hot money should be enhanced. As Hong Kong has a mature financial market, it can take strict regulatory measures to increase the cost of hot money speculation and objectively reduce the impact of hot money on the mainland market.

4.3. Vigorously Promote the "Going Out" of Enterprises and Encourage Enterprises to Operate and Invest Internationally

As a measure corresponding to capital control, China should gradually relax the supervision of capital outflow according to the needs of its own economic and social development, vigorously promote the "going out" of enterprises, and encourage domestic enterprises to expand foreign investment. Domestic enterprises should be encouraged to acquire and merge foreign resource and high-tech enterprises through market-oriented channels, or strengthen transnational cooperation with international resource and high-tech enterprise groups, which is not only conducive to the introduction of advanced technology and management experience, but also reduce the risk of reserve assets, reduce the interest loss caused to China by the sharp rise in the price of primary products in the international market, and effectively improve the security of China's resource supply.

4.4. Steadily Promote the Reform of RMB Exchange Rate Formation Mechanism and Implement A More Market-oriented and Transparent Exchange Rate System

In the current environment, with the continuous depreciation of the US dollar, the appreciation of the RMB has once again become the focus of public opinion and an excuse for the United States to suppress it. Therefore, China should adhere to the principles of initiative, controllability and gradualness, further improve the RMB exchange rate formation mechanism, enhance the flexibility of the exchange rate formation mechanism, and give full play to the basic role of market supply and demand in the formation of exchange rate. It is necessary to actively and steadily promote the reform of the RMB exchange rate formation mechanism, implement a more market-oriented and transparent exchange rate system, gradually reduce the dependence of the RMB on the US dollar, maintain the basic stability of the RMB exchange rate at a reasonable and balanced level, and promote the basic balance of payments. As the implementation of the Fed's quantitative easing monetary policy has greatly exacerbated China's imported inflation pressure, the moderate and moderate appreciation of RMB is not only economically reasonable and helpful to curb inflation, but also an active choice under the increasing appreciation pressure and the impact of capital inflow.

4.5. Adjust the Economic Structure and Reduce the Trade Surplus

After the outbreak of the global financial crisis, the western developed countries led by the United States have been demanding the appreciation of the RMB under the pretext of huge trade deficit with China. Nowadays, some emerging economies have also put forward the requirements of RMB appreciation. The huge trade surplus has obviously become the most direct reason for countries around the world to suppress RMB appreciation. Under such circumstances, China should actively adjust its economic structure and reduce its trade surplus. On the one hand, China should pay more attention to the upgrading and optimization of industrial structure, actively adjust the import and export structure, encourage the development of high-end export products, continuously improve the competitiveness of Chinese products in the international market through the adjustment of domestic economic structure, and prepare for China's export upgrading after the global economic recovery. On the other hand, China should implement a proactive fiscal policy and reduce the savings rate by expanding domestic demand, especially household consumption, so as to reduce the trade surplus and strive for some initiative to maintain the stability of the RMB exchange rate.

4.6. Gradually Change China's Export Settlement Method and Steadily Promote RMB Settlement of Cross-border Trade

In order to avoid the adverse impact of the depreciation of the US dollar on China's import and export under the US quantitative easing monetary policy as much as possible, China should take a more active way and actively promote the internationalization of the RMB, so as to get rid of the dilemma of continuous appreciation under pressure and obtain a more equal position with the United States in

economic and trade exchanges. Although the internationalization of RMB still has a long way to go and is difficult to achieve in the short term, from a strategic perspective, the most effective way for China to deal with the "cheap dollar" policy is to obtain the regional currency status of RMB in Asia and steadily promote the RMB settlement of cross-border trade. Due to the sharp depreciation of the US dollar, countries try to avoid using US dollar for settlement in foreign trade. Many countries have shown a tendency of "De-dollarization" in the field of trade and financing, which provides a powerful opportunity for the internationalization of RMB to a certain extent. In June 2010, China began to carry out the pilot of RMB cross-border settlement worldwide. On this basis, China should continue to expand the use of RMB in import and export foreign trade and investment, increase the trading volume of RMB in the international market, and improve its position in valuation, settlement, investment, reserves and other fields. At present, China should focus on major trading partners, take RMB as the settlement currency of bilateral trade between China and major trading partners, and promote the transformation of RMB use from peripheralization to Asia Pacific regionalization, so as to lay the foundation for RMB internationalization.

4.7. Diversify the Use of Foreign Exchange Reserves

As mentioned earlier, the quantitative easing monetary policy of the United States has greatly devalued the dollar assets held by China. In order to reduce the loss of a large number of fixed income US dollar assets held by China, we need to be highly vigilant in the purchase of US dollar assets and strictly control the stock scale of US dollar assets. The asset portfolio selected for reserve management should reduce virtualization and further tilt to physical assets, such as enterprise equity, resources and other asset portfolios closely related to the real economy. At the same time, the investment of foreign exchange reserves should also be more diversified, trying to find a balance between investment safety and profitability. First, when the IMF is ready to increase its capital position, China can provide funds to the IMF by purchasing IMF bonds, so as to increase China's contribution proportion and voting share in the IMF. Second, China can increase investment in overseas oil, natural gas, iron ore, copper ore and other resource-based enterprises and projects, build a stable and sustainable energy and raw material import base, and use China's sovereign wealth to develop China's economy. Third, China should increase the purchase of overseas assets such as non-ferrous metals, energy and mineral products, and expand the scale of national reserves of important strategic resources. At the same time, using some foreign exchange reserves to purchase from the international market will help cultivate advanced equipment and high-tech products for domestic industrial upgrading and independent innovation, and improve China's technical equipment level. In addition, while reducing the scale of fixed income dollar assets, China should also expand its investment in creditor's rights of fast-growing emerging market countries and increase its investment in anti inflation assets such as stocks and equity with stable returns.

4.8. Strengthen the "Conditionality" of Increasing US Dollar Assets

In the context of quantitative easing, there is a great risk for China to continue to increase its holdings of US Treasury bonds. When increasing its holdings of US dollar assets, the Chinese government can put pressure on the United States and attach some specific conditions. For example, the policy of requiring the US Treasury Department to redeem under specific conditions or requiring the US federal government to promote Congress to reduce trade and investment protectionism against China and relax restrictions on the transfer of high-tech and advanced equipment. In addition, it is also required that the United States should significantly reduce its fiscal deficit after economic recovery, so as to effectively ensure that China's U.S. Treasury bonds do not depreciate significantly.

4.9. Strengthen International Cooperation and Impose Constraints on US Policies

In order to improve China's international status and protect its own interests from damage, China should continue to increase its foreign voice and strive to play a more important role in maintaining the stability of the international financial system. In dealing with the negative impact of the US quantitative easing policy, China should strengthen cooperation with the international community. As the depreciation of the US dollar not only damages China's interests, but also the interests of most countries and economies in the world, China should closely contact emerging economies, strengthen policy coordination, fight with the United States with reasonable reasons, and strengthen the restriction on the US policy, so as to reduce the adverse impact of the US quantitative easing monetary policy.

5. Conclusion

The US dollar is in a leading and dominant position in the current international monetary system. The dominance of the US dollar leads to two contradictions: first, if the United States wants to maintain the international status of the US dollar, it needs to provide commodity sales places for other countries and maintain the balance of payments deficit, so as to provide us dollar liquidity for the international monetary system. However, the continued balance of payments deficit of the United States will lead to global economic imbalance, weakening confidence in the dollar and the balance of payments crisis of the United States, resulting in the decline of the status of the dollar in the international monetary system. Second, the US economy is one of the main objectives of US monetary policy services, and the US dollar is a global currency, which is enough to affect the global economy. When the two are inconsistent, the United States is bound to choose the former, which will have an impact on the economies of other countries.

At present, the spillover effect of US monetary policy on China is relatively significant. This has a lot to do with China's current relatively fixed exchange rate of RMB against the US dollar. When China needs rapid industrialization and absorbs a large number of surplus labor, such an arrangement has its merits. Today, many phenomena show that China's development path and the international trading system should be changed. In China, industrial upgrading is required, and economic development should be paid attention to from "quantity" to "quality" and "quantity". Externally, China has maintained a trade surplus all year round, even a double surplus between current account and capital account, accumulated a large amount of foreign exchange reserves, and

can only buy low interest us treasury bonds. Therefore, in order to block the spillover effect of US monetary policy on China, it is not possible to take measures in one aspect, and many aspects need to make long-term and systematic efforts. China should change the mode of economic growth internally, expand domestic demand and enhance the management and anti risk ability of the financial system. Externally, it is necessary to implement a more flexible floating exchange rate system, improve the opening of capital and financial accounts, and strive to internationalize the RMB.

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