

A Study of the RMB Exchange Rate Regime

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Abstract: *China has been becoming more and more important in the global market, and the RMB exchange rate regime is also attracting more and more attention. To adapt the development of China, the RMB exchange rate regime had experienced several great adjustment. This paper focuses on the RMB exchange rate regime. At first, it introduces the reform process of the RMB exchange rate regime and then goes into depth on the current RMB exchange rate regime, analysing its the advantages and disadvantages. After that, it studies the influence of RMB exchange rate regime on RMB exchange rate stability during the Russia-Ukraine conflict with comparative analysis method and the result shows that RMB exchange rate regime has its own superiority. Finally, I give four policy recommendations, including strengthening the flexible management and reform of the RMB exchange rate regime, strengthening the regulation of the balance of payments, developing a reasonable range of exchange rate fluctuations to increase the flexibility of the RMB exchange rate, and improving the national central bank's intervention mechanism for monetary policy.*

Keywords: *RMB exchange rate; monetary policy*

1. Introduction

1.1 Background of the Study

China has been playing more and more important role in the global market. As the foreign exchange regime of China, the RMB exchange regime is very important to China's foreign trade, which is also attracting the world's attention. In recent years, the expansion of international commerce has quickened, and exchange rate reserves have increased. The discussion on this issue has been particularly vigorous across the globe, because the RMB exchange regime differs from that of most countries. In the current international economic environment, China's monetary policy and the RMB exchange rate regime may have bigger influence on the its own and world's economic development.

1.2 Research Objectives and Methodology

This research on paper has three purpose. The first one is to know about the reform process of the RMB exchange rate regime and the advantages and disadvantages of the current RMB exchange rate regime. The second one is to show the RMB exchange rate regime's outstanding performance during the Russia-Ukraine conflict, compared with other currencies. Finally, I give four policy recommendations to improve the RMB exchange rate regime.

The primary research method adopted by this paper is literature research and case study. By reviewing books, literature, journals, and miscellaneous articles related to this topic and combined with current affairs, this paper provides a theoretical basis for the study and analysis of the RMB exchange rate regime.

The following of this paper has four parts: reform process of the RMB exchange rate regime, the main characteristics of current RMB exchange rate regime and its advantages and disadvantages, the RMB exchange rate regime's influence on RMB exchange rate stability following the Russia-Ukraine conflict, and suggestion.

2. Reform Process of the RMB Exchange Rate Regime

The exchange rate is the price of one currency in relation to another currency. An exchange rate regime is the system that a country's monetary authority, -generally the central bank-, adopts to establish the exchange rate of its own currency against other currencies. In the Bretton Woods era, the IMF simply divided the exchange rate regime into pegged exchange rate regime and others. After the collapse of the

Bretton Woods system, the IMF continued to refine the classification of exchange rate regimes. According to the latest standards, it includes pegged exchange rate regime (exchange arrangements with no separate legal tender, currency board arrangements), intermediate exchange rate regime (other conventional fixed peg arrangements, pegged exchange rates within horizontal bands, crawling pegs, exchange rates within crawling bands) and floating exchange rate regime (managed floating with no predetermined path for the exchange rate, and independently floating).

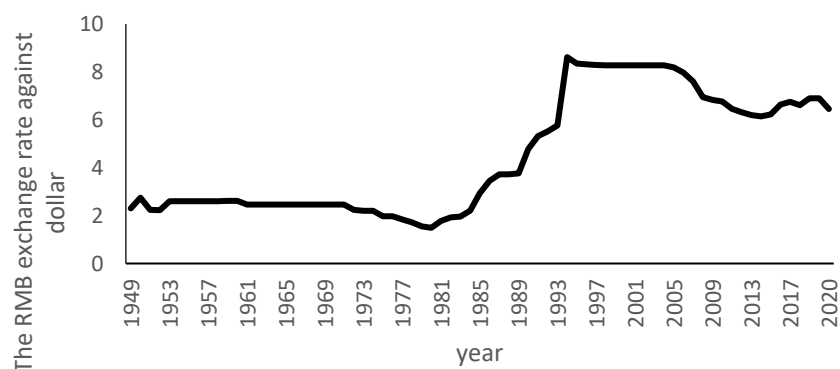
In terms of China, the RMB exchange rate regime is constantly adjusted to adapt to the changes of international and domestic political and economic situation^[1-2] (He, 2015; Yu, 2018). Figure 1 shows the RMB exchange rate against dollar from 1949 to 2021. Based on China's actual, de facto, arrangements, the reform process of RMB exchange regime can be divided into five periods roughly: single floating exchange rate regime(1949-1952), single fixed exchange rate regime(1953-1972), pegged exchange rate regime (1973-1978), dual exchange rate regime (1979-1993) and managed floating exchange rate regime (1994 to now)^[3] (Weng, 2019).

2.1 Single Floating Exchange Rate Regime (1949-1952)

Between 1949 and 1952, this was the time of centralized foreign exchange management system. The real meaning of single floating exchange rate regime is that the fluctuation of RMB exchange rate was based on the price level and changes at home and abroad. In the early days of the founding of the people's Republic of China, the economy was depressed and the price was unstable, so the RMB exchange rate changed very frequently. In order to encourage export, the Chinese government had to adjust the RMB exchange rate frequently to peg to the US dollar according to domestic prices. From 1949 to March 1950, the RMB exchange rate was adjusted as many as 52 times.

2.2 Single Fixed Exchange Rate Regime (1953-1972)

From 1953 to the end of 1972, China implemented a single fixed exchange rate regime, and the exchange rate of RMB against the currencies of western countries remained basically stable, which was due to the domestic political and economic environment and the international monetary system at that time. Since 1953, China had implemented a planned economic system, and the prices of major products have been fully incorporated into the national plan, thus domestic prices are very stable. Besides, foreign trade was uniformly operated by state-owned foreign trade companies, and foreign trade profits and losses were completely balanced and borne by the state finance, thus it was unnecessary to adjust the exchange rate to regulate current account. Furthermore, China's government implemented a comprehensive and highly centralized administrative plan for foreign capital and foreign exchange, and foreign exchange is collected and paid by the state. At that time, the Bretton Woods system still worked, and the exchange rates of the currencies of the major capitalist countries remained relatively stable by pegging to the US dollar.



Data source: www.CEIC Data.com

Note: The RMB exchange rate against USD reached the highest point of 8.725 in 1994 and the lowest point of 1.452 in 1980.

Figure 1: The RMB Exchange Rate against Dollar(1949-2020)

Table 1: The Reform Process of RMB Exchange Rate Regime

Time	Exchange rate of regime	Main characteristics
1949-1952	Single floating exchange rate regime	Centralized foreign exchange management system; The fluctuation of RMB exchange rate is based on the price level and changes at home and abroad; Adjusted frequently.
1953-1972	Single fixed exchange rate regime	Foreign trade was uniformly operated by state-owned foreign trade companies, and foreign trade profits and losses were completely balanced and borne by the state finance; Foreign exchange is collected and paid by the state; RMB exchange rate was an accounting tool, and couldn't regulate economic operation.
1973-1978	Pegged exchange rate regime	A frequently adjusted pegged exchange rate regime pegged to a basket of currencies
1979-1993	Dual exchange rate regime	From 1979 to 1980, the RMB could only be used in China, and foreigners must use foreign exchange certificates; From 1981 to 1984, coexistence of the internal settlement price of RMB and the official exchange rate; From 1985 to 1993, coexistence of official exchange rate and foreign exchange adjustment market exchange rate.
1994-2020	Managed floating exchange rate regime	From 1994 to 1997, abolished the dual exchange rate regime and established the unified inter-bank foreign exchange market; From 1997 to July 2005, exchange rate pegged to the US dollar and implemented compulsory settlement and sale of the foreign exchange system; From July 2005 to 2008, a managed floating exchange rate regime based on market supply and demand and with reference to the basket of currencies and China introduced the inquiry trading system and the market maker system; From 2008 to June 2010, exchange rate pegged to the US dollar again; From June 2010 to August 2015, back to managed floating exchange rate regime From August 2015 to May 2017, the RMB central parity pricing mechanism was "closing exchange rate + exchange rate change of a basket of currencies" From May 2017 to now, the RMB central parity pricing mechanism was updated, which was "closing exchange rate + exchange rate change of a basket of currencies+counter-cyclical factor".

Source: Summarized by author

In this context, the RMB has adopted a rigid exchange rate regime. It remained basically stable and made timely adjustments to the open appreciation or depreciation of the currencies of individual countries. The main function of RMB exchange rate was an accounting tool, and couldn't regulate economic operation.

2.3 Pegged Exchange Rate Regime (1973-1978)

After the collapse of Bretton Woods system in 1973, western countries generally implemented a

floating exchange rate regime. Under the hyperinflation in western countries, in order to maintain China's economic development, the RMB exchange rate adopted a frequently adjusted pegged exchange rate regime pegged to a basket of currencies.

It helped China mitigate the impact of international exchange rate fluctuations on the stability of the RMB exchange rate. However, due to the lack of an objective basis for the selection of currency and the weight of the currency basket, the exchange rate was higher than domestic and foreign prices, resulting in a large trade deficit and a severe shortage of international foreign exchange reserves in this period.

2.4 Dual Exchange Rate Regime (1979-1993)

Since 1978, China has started reform and opening up. In order to encourage the export enthusiasm of foreign trade enterprises and reverse the impact of the sharp depreciation of the US dollar, China's exchange rate regime has changed from a single exchange rate regime to a dual exchange rate regime. In December 1978, the RMB implemented a two track exchange rate regime. The RMB could only be used in China, and foreigners must use foreign exchange certificates.

From 1981 to 1984, China adopted dual exchange rate system, in which the internal settlement price of RMB (applied to the settlement of foreign exchange such as transportation, insurance, and other labor projects and current transfer projects) and the official exchange rate coexisted (only applied to import and export). For foreign trade enterprises, China adopted the foreign exchange retention system, which meant that foreign trade enterprises must sell all foreign exchange receipts to banks designated by the government at the official price, and get a certificate according to the retention ratio, that was, the foreign exchange quota. When enterprises need to use foreign exchange, they can purchase foreign exchange at the internal settlement price of foreign exchange at the bank with foreign exchange certificates.

The adoption of the internal settlement price decreased the export exchange cost of the foreign trade department and the foreign exchange reserves were greatly increased. This is because at that time, the domestic price was relatively stable, and the US dollar exchange rate was in a state of appreciation due to the US policies of expanding fiscal deficit and deflation, and the economy of western countries was recovering, which improved China's trade balance. But it also brought a series of problems, such as cracking down on the enthusiasm of non-trade departments, expanding foreign trade losses, causing confusion in foreign exchange management, increasing the financial burden, and so on. Therefore, there was a reformation of the exchange rate regime in 1985.

On January 1, 1985, the internal settlement price was canceled and the system of coexistence of official exchange rate and foreign exchange adjustment market exchange rate was implemented. However, with the deepening of China's reform and opening up, the disadvantages of the dual exchange rate regime have gradually emerged. On the one hand, the coexistence of multiple exchange rates had caused chaos in the foreign exchange market and encouraged speculation. On the other hand, the existence of long-term foreign exchange black market was bad to the stability of RMB exchange rate and the reputation of RMB. The urgency of foreign exchange system reform has become increasingly prominent. The urgency of foreign exchange system reform has become increasingly prominent.

2.5 Managed Floating Exchange Rate Regime (1994 to now)

2.5.1 From January 1994 to July 20, 2005

Before the exchange rate reform in 1994, there was a large deficit in foreign trade. In 1993, the deficit reached US \$11.6 billion, while the foreign exchange reserve in that year was only US \$21.2 billion. The market price of foreign exchange adjustment was significantly higher than the official price, which reflected the overestimation of the official exchange rate, resulting in excessive import demand. Meanwhile, due to the extraordinary growth of money supply, the inflation rates of domestic CPI and PPI reached 14.7% and 19.6% respectively, and the depreciation pressure of official exchange rate also increased sharply. The real interest rate was in the negative range, increasing the pressure of capital outflow. Besides, China began to open to foreign direct investment in 1994.

In January 1994, China abolished the dual exchange rate regime, combined the official exchange rate and foreign exchange adjustment market exchange rate and devalued the RMB exchange rate from 5.8 to 8.6 at one time, with a depreciation of about 33%. Enterprises and individuals could buy and sell foreign exchange from banks according to regulations, and banks could enter the inter-bank foreign exchange market for transactions to form a market exchange rate. The central bank set a certain floating range of exchange rate and maintained the stability of RMB exchange rate by regulating the market. The

unification of dual exchange rates in 1994 marked the official beginning of the managed floating exchange rate regime. Meanwhile, with a unified inter-bank foreign exchange market being established, China began a new stage where the RMB exchange rate was based on market supply and demand.

Besides, the compulsory settlement and sale of the foreign exchange system was implemented, which indicated that except the foreign exchange account stipulated by the state can be kept, enterprises and individuals must sell excess foreign exchange to designated foreign exchange banks, and designated foreign exchange banks must sell the excess foreign exchange (more than the cash of the State Administration of foreign exchange) in the inter-bank market. In this system, the central bank was the largest receiver in the inter-bank market, thus forming China's foreign exchange reserves.

Affected by the Asian financial crisis in 1997, the RMB exchange rate has changed from appreciation trend to depreciation pressure. The RMB exchange rate was pegged to the US dollar, with the exchange rate between 8.27 and 8.28. Due to the lack of flexibility, this exchange rate regime distorted the allocation of resources in the international market, and massive capital flowed into China, which led to a continuous double favourable balance of current account and capital and financial account, and the RMB faced great appreciation pressure.

2.5.2 From July 21, 2005 to August 10, 2015

Under the increasing pressure of RMB appreciation, on July 21, 2005, the people's Bank of China officially announced the abolition of the original exchange rate policy pegged to the US dollar, and began to implement a managed floating exchange rate regime based on market supply and demand and with reference to the basket of currencies. The reference to a basket of currencies meant that China selected several significant currencies according to the closeness of trade and investment, set different weights for different currencies to form a basket of currencies, and made sure the exchange rate float within the range. In 2006, China introduced the inquiry trading system and the market maker system to improve the formation of the central parity of the RMB exchange rate.

In July 2008, the US financial tsunami led to the outbreak of the global financial crisis. After that, China pegged the RMB to the US dollar again, and the exchange rate was set at about 6.83. In June 2010, China gave up the fixed exchange rate regime pegged to the US dollar at 6.83 and returned to the managed floating exchange rate regime.

On the whole, the fluctuation range of RMB exchange rate against the US dollar continues to expand except the period from 2008 to June 2010. The fluctuation range of RMB against US dollar per trading day was $\pm 0.3\%$ since 2005, $\pm 0.5\%$ since May 2007, $\pm 1.0\%$ since April 2012, $\pm 2.0\%$ since 2014.

2.5.3 From August 11, 2015 to 2020

On August 11, 2015, the central bank announced the adjustment of the central parity quotation mechanism of RMB against the US dollar, and market makers provided the central parity quotation to the China foreign exchange trading center with reference to the closing exchange rate of the inter-bank foreign exchange market of the previous day, forming the RMB central parity pricing mechanism of "closing exchange rate + exchange rate change of a basket of currencies"^[4](Ni, 2022). The regularity, transparency and marketization of the RMB exchange rate regime have been significantly improved.

In order to eliminate unilateral market expectations, the central bank added the counter-cyclical factor to the RMB exchange rate mid-price quotation model, forming a quotation model of "previous day's closing price + change in the exchange rates of a basket of currencies + counter-cyclical factor" on May 26, 2017, which is still implemented in China nowadays^[5](Luo, 2018).

3. Current RMB Exchange Rate Regime

3.1 Main Characteristics

First, the RMB exchange rate is based on market supply and demand with increasing flexibility and marketization. The improvement of foreign exchange settlement and sales business, the establishment of an over-the-counter spot foreign exchange market and markets for currency swaps and futures and the development of the interbank foreign exchange market have contributed significantly to the marketization of the RMB exchange rate. The decoupling of the RMB from the US dollar has increased its flexibility of RMB. But it doesn't mean the RMB will no longer maintain a relatively close relationship with the US dollar in the future, because the US dollar still plays the most important role in the global money market and the United States remains one of China's most important trading partners.

Second, the central bank canceled the daily fluctuation limit of the exchange rate listed on the bank counters and expanded the exchange rate fluctuation in the interbank market to 2% in line with international practice.

Third, the current exchange rate arrangement is a managed floating exchange rate regime within an adjustable range. The central bank doesn't necessarily follow the established formula of a basket to currencies to determine the RMB exchange rate against the US dollar and other currencies. For example, if the US dollar appreciates against other currencies, the RMB should depreciate against the US dollar. However, the central bank could take measures not to intervene in the foreign exchange market or only intervene slightly to make the RMB appreciate with market forces to make RMB not depreciate. Of course, this model implies that the various parameters (especially the weights) which determine the currency basket need to be adjusted frequently. The CNY has the greatest co-movements with EM currencies during the basket management period^[6] (Robert N. McCauley and Chang Shu 2018). China foreign exchange trading center adjusts the weight of CFETS RMB exchange rate index currency basket according to CFETS RMB exchange rate index currency basket adjustment rules. Table 2 shows the basket of currencies and their weight, which implemented from January 2022.

Table 2: The basket of currencies and their weight implemented from 2022.01

Currency	Weight	Currency	Weight
USD	0.1988	CAD	0.0217
EUR	0.1845	MXN	0.0206
JPY	0.1076	AED	0.0167
KRW	0.0967	ZAR	0.0121
AUD	0.0571	PLN	0.0105
MYR	0.0444	TRY	0.0082
RUB	0.0366	CHF	0.0076
HKD	0.0346	NZD	0.0061
THB	0.0335	SEK	0.0061
GBP	0.0313	DKK	0.0046
SGD	0.0302	HUF	0.004
SAR	0.0228	NOK	0.0037

Data source: <http://www.pbc.gov.cn/>

Last, there is a gradual mechanism for the RMB exchange rate to rise against the US dollar. If the RMB appreciates by more than 0.3% against the US dollar due to the depreciation of the US dollar against the yen and the euro, the mid-price of the RMB against the US dollar will rise by 0.3% in the next working day. The central parity mechanism was established, with the RMB/USD rate allowed to fluctuate. In a daily band of +/-0.3 percent around the central parity, which was the previous day's close.^[7](Sonali Das and James Daniel (2019) The introduction of this appreciation mechanism will inevitably lead to frequent adjustments in the parameters of the currency basket but not necessarily lead to a continuous appreciation of the RMB. Only if the US dollar continues to depreciate against other major currencies would this mechanism imply the possibility of a significant RMB appreciation against the US dollar in a short period.

3.2 Advantages and Disadvantages

The current RMB exchange rate regime has many advantages compared to the exchange rate regime implemented before^[8] (Yuan & Xiang, 2021).

First of all, it makes the exchange rate more flexible, sparing more space for the government to make economic adjustments and boost the economy. With reference to the trade-weighted currency basket exchange rate, the central bank can adjust the exchange rate appropriately according to differences in international inflation rates and avoid substantial changes caused by fluctuations in a single currency. A basket of currencies acts as a buffer, eliminating the possibility of a sizeable one-time devaluation. Meanwhile, the principle of a basket of currencies increases the weight of other currencies while reducing the importance of the US dollar, thereby weaken the significant impact of the depreciation of the US dollar on the RMB.

Besides, it reduces the pressure on People's Bank of China to regulate the foreign exchange market.

There is no need for the central bank to intervene in the foreign exchange market as frequently as it was under the pegged exchange rate regime for the RMB against the US dollar. By referring to a basket of currencies, it widens the range of fluctuations of the RMB against the US dollar and solves the dilemma of appreciation or depreciation faced by the central bank.

What's more, reference to a basket of currencies is conducive to dispersing the foreign exchange risk of the central bank ^[9] (Kang, 2020). People's Bank of China holds a large number of foreign exchange reserves under the single pegged exchange rate regime, and it allows for the diversification of reserve currencies and promotes the preservation of foreign assets.

Last but not least, it optimizes the behavior of microeconomic entities. Under the new exchange rate regime, they are exposed to the value risk of exchange rate changes if they hold foreign currency claims or debts. Therefore, they have the incentive and need to hedge and require the foreign exchange market to provide hedging instruments, information, and other services, contributing to the improvement and development of China's foreign exchange market.

Meanwhile, the current RMB exchange rate regime is not perfect and still has some disadvantages. China's capital control policy is still discretionary, and the pattern of capital flows is greatly affected by changes in the external financial environment. After 2002, China's capital account liberalization accelerated. However, on the whole, China still has strict control over capital outflow, and the qualification of residents to participate in the international financial market is greatly limited. Although QDII (qualified domestic institutional investor) has been implemented, it's still a exploration process to establish a "two-way capital flow" channel on the premise of how to effectively prevent risks.

In addition, the continuous favorable balance in both current account and capital account makes China have the most foreign exchange reserves. This means that China will continue to face the trend of rigid growth of foreign exchange supply, and foreign exchange supply and demand will be in an asymmetric state. To solve the imbalance between foreign exchange supply and demand, China must start with the fundamentals of the economy and People's Bank of China must adjust economic policies to achieve balance of payments.

4. The RMB Exchange Rate Regime's Influence on RMB Exchange Rate Stability Following the Russia-Ukraine Conflict

It has been two months since the outbreak of the military conflict between Russia and Ukraine, but there is no sign of an end yet. With the spread of covid-19, the Russia-Ukraine conflict and the sanctions imposed by G7 countries led by the United States, 27 EU members, the South Korean and other countries on Russia make the global economy even worse.

On one hand, it increases inflationary pressure by pushing up bulk commodity prices. Russia Ukraine region is not only one of the most important export place of bulk commodities such as oil, natural gas, grain, metal, chemical fertilizer, rare gas and so on in the world, but also the most important import source of these commodities in Europe. The Russia-Ukraine conflict and the sanctions imposed by the United States and Europe on Russia restricts the export of Russian bulk commodity, thus pushing up relevant commodity prices.

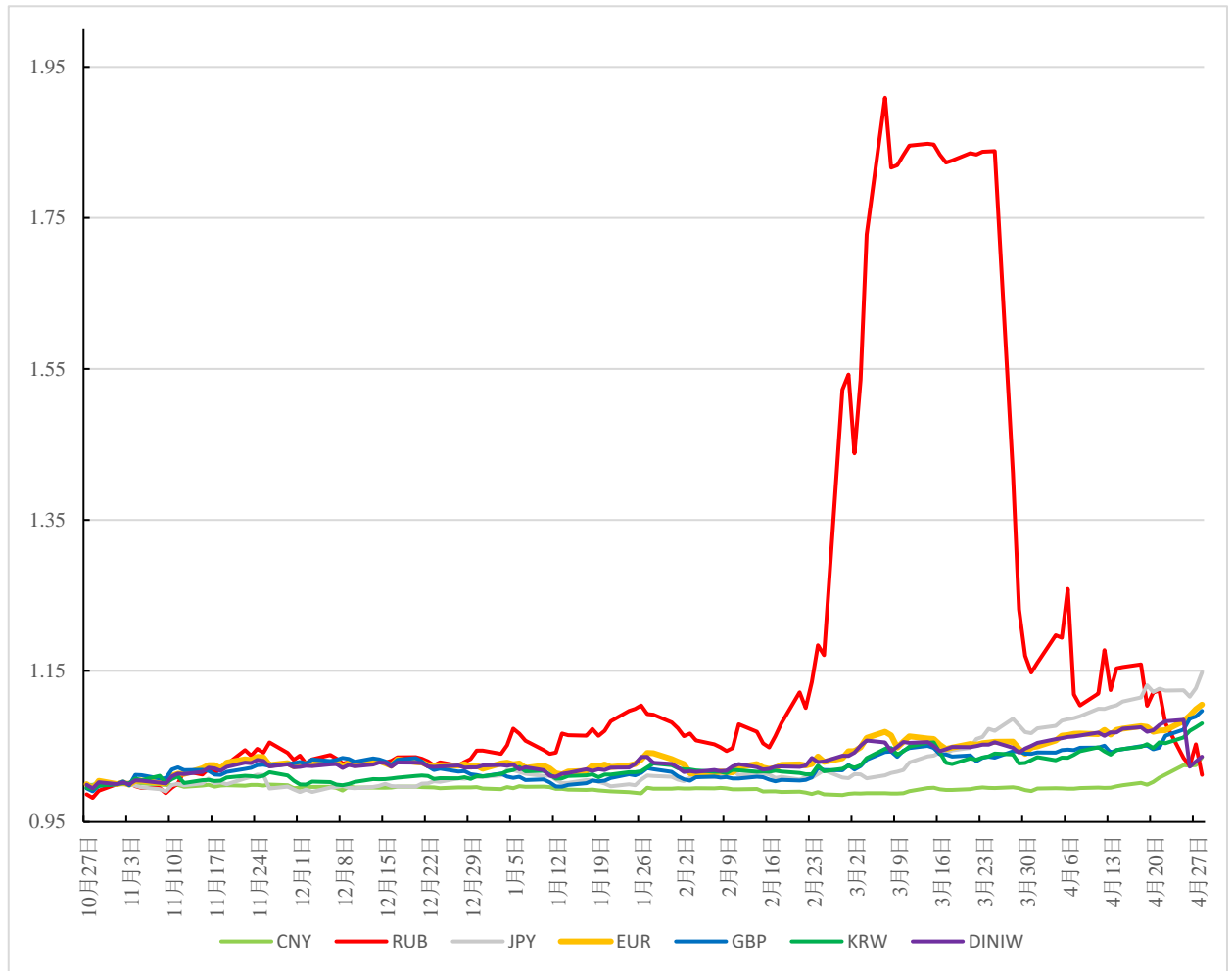
On the other hand, it decreases demand by cracking down the confidence of risky assets and private sector, which eventually delay the self-healing process of the global economy. The Russia-Ukraine conflict has boosted risk aversion in the global market and the security situation in Europe has deteriorated sharply, thus global capital fled to safe assets. Eventually, the prices of safe haven assets such as bonds and gold have risen and the prices of risky assets such as stocks and emerging market currencies have fallen.

The Russia-Ukraine conflict may change the process of globalization in the long term. The process of globalization may be broken down into three plates in the future, which are the United States with its surrounding countries, European continent, and China with its surrounding countries. Besides, there will be major systemic changes in the world financial system, world finance from centralization to multipolarization. Western countries kicked Russia out of swift international settlement system, which promote the demand of a diversified financial system.

In such a global environment, whether the central bank of each countries can maintain the stability of its own currency has become touchstone to test the monetary management level of various countries. As we know, there are two main indicators to measure currency stability—one is inflation rate in domestic

market and the other one is the change of exchange rate in foreign exchange market. In this paper, I will study the RMB exchange rate regime's influence on RMB exchange rate stability following the conflict. To make it clear, I make a comparative analysis among the rate of change on exchange rate of RMB, Yen, Won, Rouble, Euro and Pound against dollar, which stands for Asia and Europe countries respectively, before and after Russia-Ukraine conflict.

Figure 2 shows the rate of change of RMB (CNY), yen (JPY), won (KRW), rouble (RUB), euro (EUR) and pound (GBP) exchange rate against dollar from 2021/10/27 to 2022/4/28 (the recent 180 days' trend), based on the data on 2021/11/1. In order to understand the whole picture, I also add the US Dollar index (DINIW) into comparison during the same period, based on the data of 2021/11/1 too. The US dollar index is an index that comprehensively reflects the exchange rate of the US dollar in the international foreign exchange market (detail data and calculation process can see appendix 2). It is used to measure the exchange rate change of the US dollar against a basket of currencies.



Data source: Bloomberg

Figure 2: The Rate of Change of CNY, JPY, KRW, RUB, EUR and GBP Exchange Rate against Dollar and the Dollar Index (DINIW) from 2021/10/27 to 2022/4/28 (based on the data of 2021/11/1).

From figure 2, we can find that the currency exchange rate fluctuated violently after February 22, 2022, the day Russia invaded Ukraine. The RMB exchange rate regime shows its superiority following conflict. Compared with other currencies, the exchange rate of RMB against the US dollar is the most stable one. However, compared with itself, the RMB exchange rate depreciated sharply in late April and the RMB devalued by 600 basis points on April 25.

In my opinion, there are three main reasons for the depreciation of the RMB. First, the Federal Reserve announced an increase in the benchmark interest rate on reserves in the middle of March, which released the signal of raising interest rate, and the market expected the fed to raise interest rates by 50 basis points in May and 200 basis points in the year. This caused international capital flows to the United States from other countries and China is no exception. The international investors sold China's

government bonds and Chinese stocks.

Second, many places in China, particularly Shanghai, Shenzhen and so on, were affected by the COVID-19 seriously in March and April, which slow down China's economic growth. The market was worried about the decline of export fundamentals and risk aversion towards RMB local currency assets rise, thus investors chose to purchase foreign exchange in advance. If only the capital outflow, the depreciation pressure on the RMB exchange rate will not be too great. If the export fundamentals are damaged, the depreciation pressure will be released quickly. Therefore, the disturbance of the COVID-19 to the economic fundamentals is the main contradiction in the short term. If the resumption of work and production is accelerated, the export fundamentals are repaired quickly, and the RMB exchange rate may stop falling and rebound.

What's more, the monetary policy of major overseas economies has tightened this year, so the external demand tends to fall. At the same time, the resumption of work and production in Southeast Asia has a substitution effect on China's exports, which affects exports and the settlement and sales of foreign exchange in the current account, thus tightening the domestic foreign currency supply. Of course, the recent sharp decline in the exchange rates of the Japanese yen and the Korean won has made many investment institutions bearish on the currencies of the Asia Pacific region and exacerbated the decline of the RMB, but this is not as important as the two main reasons.

Even so, compared with other currencies, the exchange rate fluctuation of RMB is still the smallest, it can be seen from figure 1 and table 2. Table 2 shows the mean and var of the rate of change of CNY, JPY, KRW, RUB, EUR and GBP exchange rate against dollar and the Dollar index (DINIW) from 2021/10/27 to 2022/4/28 (based on the data of 2021/11/1).

Table3: The Mean and Var of the Rate of Change of CNY, JPY, KRW, RUB, EUR and GBP Exchange Rate against Dollar and the Dollar Index (DINIW) from 2021/10/27 to 2022/4/28 (based on the data of 2021/11/1).

Currencies	Mean	Var
CNY	0.995832805	4.93663E-05
JPY	1.026274442	0.001580093
KRW	1.021078597	0.000317662
RUB	1.173489579	0.069735622
EUR	1.035434862	0.000487535
GBP	1.024711375	0.000374426
DINIW	1.032037423	0.000385301

Data source: Bloomberg

This is not only because that China's long-term good economic fundamentals will not change, supported by China's latest balance of payments and other data, but also because the RMB exchange rate regime plays an important role. People's Bank of China used the tool of the foreign exchange deposit reserve ratio to maintain exchange rate stability since late April. The foreign exchange deposit reserve ratio refers to the ratio between the foreign exchange deposit reserve deposited by financial institutions with the central bank of China and their foreign exchange deposits. The foreign exchange deposit reserve ratio matters liquidity of foreign currency. If it decrease, it will increase the supply of foreign currency, and reduce the pressure of depreciation of domestic currency. People's Bank of China announced to decrease the foreign exchange reserve ratio of financial institutions by 1 percentage point on the 25th, from 9% to 8%. As soon as the news of the came out, the RMB exchange rate stopped falling and stabilized. The offshore RMB was pulled back immediately after it fell below the integer point of 6.6 and ran again in the range of 6.5. This is because the policy will release 10 billion dollars of liquidity, cooling the demand for us dollar exchange. By the end of March 2022, the balance of foreign exchange deposits of financial institutions had reached US \$1050 billion. Economist at Bloomberg Intelligence, a 1% depreciation of the renminbi's real exchange rate could boost the country's export growth by 1 percentage point^[10] (www.bilan.ch 08.2015).Decreasing the foreign exchange deposit reserve ratio of financial institutions by 1 percentage point could release US \$10.5 billion of liquidity. Besides, the central bank's movement has released the policy signal of hoping to maintain foreign exchange stability. Once the RMB exchange rate out of acceptable fluctuation range, the central bank will intervene in time to stabilize expectations, under the managed floating exchange rate regime. People's Bank of China has effective toolbox to stabilize the exchange rate, such as starting the counter cyclical factor, adjusting the foreign exchange deposit reserve ratio, adjusting the risk reserve for forward foreign exchange sales, tightening the offshore RMB liquidity and strengthening the capital account control, etc. Thus it is conducive to

correct the irrational market expectations that was greatly affected by foreign investment. The current round of RMB exchange rate depreciation is driven by offshore, which is greatly affected by foreign investment sentiment.

In my opinion, to some extent, the two-way fluctuation of the RMB, which has appreciated for two years, may be not bad. For example, last year, the central bank raised the foreign exchange reserve ratio twice to curb the rapid appreciation of the RMB exchange rate. The market responded positively and the continuous appreciation of the RMB was suspended. It can be seen that a small appreciation or depreciation of the RMB may not be a big deal. As long as it fluctuates within a reasonable equilibrium range. In addition, the depreciation of RMB this time is also good for exports, offsetting the negative impact of the Russian Ukrainian war and the impact of the epidemic. However, the rate of increase or decrease should not be too fast, otherwise it may induce risks.

The pressure of RMB depreciation may continue in the short term, but in the medium and long term, it's unlikely that the RMB exchange rate will continue to depreciate. The attraction of RMB assets mainly comes from four aspects. Firstly, China's economy and finance keep good resilience and vitality and the long-term good fundamentals will not change and the potential for endogenous economic growth is huge. There is no basis for significant depreciation of the RMB exchange rate under the background of the favorable balance in both current account and capital account. Secondly, the correlation between RMB assets and asset prices and returns of developed and emerging economies is low. It's a better choice for international portfolio to diversify risks. Thirdly, at present, foreign capital accounts for 3% to 5% in China's stock market and bond market. There is still great potential for global capital to further allocate Chinese assets. Finally, the exchange rate will play an automatic stabilizer role in regulating the balance of payments and the maturity of the foreign exchange market is improving.

5. Policy Recommendations

5.1 Strengthen the Flexible Management and Reform of the RMB Exchange Rate Regime

It will be great helpful to the existing floating exchange rate management if the government further strengthens the RMB exchange rate regime's elasticity and increases the RMB exchange rate's flexibility in economic development. Increasing the RMB exchange rate's flexibility is conducive to introduce the attraction of social resources, to help transform the industrial upgrading of enterprises, to change the way of China's economic development, and to reduce the dependence of China's foreign trade on international exchange rates. What's more, an adjustable exchange rate helps keep inflation within a range and enhances the initiative and effectiveness of the country in controlling the exchange rate. More importantly, the exchange rate regime reform will play an essential role in promoting China's economic development and international trade environment.

The China's central bank decreased the foreign exchange deposit reserve ratio of financial institutions by 1 percentage point to stop the depreciation of RMB this time, but to realize RMB internationalization, it's necessary to strengthen the Flexible Management.

5.2 Strengthen the Regulation of the Balance of Payments

The continuous favorable balance in both current account and capital account makes China have the most foreign exchange reserves, which is one of the biggest problems in China's foreign trade today. The RMB exchange rate regime and monetary policy affect China's trade in the international arena to some extent. China need to do more effort to regulate the balance of payments. The tools can be foreign exchange buffers, monetary policy, exchange rate policy, demand management, and other related measures of awarding outward and inward restrictions.

5.3 Develop a Reasonable Range of Exchange Rate Fluctuations to Increase the Flexibility of the RMB Exchange Rate

Combined with China's national conditions, the RMB exchange rate regime needs to be improved, and a reasonable range of exchange rate fluctuations needs to be reset. The movement of the RMB exchange rate is influenced by the international finance and trade economy in addition to the domestic financial economy. The trend of the RMB exchange rate changes every day. As the RMB exchange rate trend suggests, the boundaries of RMB depreciation and appreciation can be appropriately adjusted to make fluctuations of the RMB in a sustainable and reasonable range but without affecting the overall

national economy. Thus, it could increase the flexibility of the RMB exchange rate and keep it within an appropriate and controllable range.

5.4 Improve the Central Bank's Intervention Mechanism for Exchange Rate

In normal trade, it is essential to reduce the intervention brought by the government the central bank's intervention can happen under some urgent situation, but it doesn't mean it can intervene blindly for some problems that arise in the short term. Too much intervention is not conducive to the free development of the economy, and limits the growth of China in the financial and economic aspects.

6. Conclusion

This paper focuses on the RMB exchange rate regime. First, I study the reform process of the RMB exchange rate regime, which was divided into five periods roughly: single floating exchange rate regime(1949-1952), single fixed exchange rate regime(1953-1972), pegged exchange rate regime (1973-1978), dual exchange rate regime (1979-1993) and managed floating exchange rate regime (1994 to now), based on China's actual, de facto, arrangements. Then, I explain the main characteristics of current RMB exchange rate regime and analysis its advantages and disadvantages. It can be seen that the RMB exchange rate is becoming more and more flexible and marketize. After that, with comparative analysis method, I studies the influence of RMB exchange rate regime on RMB exchange rate stability during the Russia-Ukraine conflict and the result shows that RMB exchange rate regime has its own superiority. Finally, I give four policy recommendations to improve the RMB exchange rate regime.

At present, China is facing depreciation pressure. But it's unnecessary to be worry about too much, because economic fundamentals are the important factors that really dominate the change of exchange rate in the long run. Besides, due to the COVID-19 and Ukraine-Russia conflict, as well as the economic sanctions imposed by western countries on Russia bring lower global economic growth and higher price index. The Federal Reserve's policy of raising interest rates further triggered turmoil in global financial markets. I think the root of everything lies in the COVID-19 and the conflict between Ukraine and Russia and the world should find ways to solve these problems. Only by curbing the spread of the COVID-19 and stopping the Ukrainian Russian conflict can we have the possibility to solve the problem of global supply chain structural imbalance, return to normal prices, return to work and produce, and return to the life before 2019. I hope this day can come soon.

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