# Problems and Solutions of China's Foreign Exchange Market

# Yongquan Li<sup>1,a,\*</sup>

<sup>1</sup>Business School, University of New South Wales, Sydney, Australia a. Z5447482@ad.unsw.edu.au corresponding author

Abstract: This paper explores the current state, significance, and issues of China's foreign exchange market, emphasizing its crucial role in the global financial system. The market has seen substantial growth, with daily trading volumes exceeding \$6.6 trillion by 2023, supporting international trade and investment through a stable RMB exchange rate and ample liquidity. Despite these advancements, several key challenges persist, including information asymmetry, excessive government intervention, and high policy sensitivity. These issues contribute to market volatility and inefficiency. The paper provides a deep analysis of these problems by data on trading volumes and market activities from 2015 to 2023. To address these challenges, the study proposes solutions like enhancing investor education, managing government intervention more appropriately, and improving information transparency. Implementing these strategies can enhance market stability and efficiency, supporting sustainable economic growth and strengthening China's position in the global financial system. Future research is suggested to evaluate the long-term impacts of these strategies and to explore further measures to mitigate ongoing risks and problems in FX market.

**Keywords:** foreign exchange market, China, exchange rate.

#### 1. Introduction

The international FX market has experienced apparent growth in recent year and become a crucial part of the global financial system. According to statistics of Triennial Central Bank Survey of FX and OTC derivatives markets, as of 2023, the daily trading volume in the foreign exchange market has reached over \$6.6 trillion, which is even exceed the daily trading volume of the stock market. The key functions of foreign exchange market include motivating international trade and investment, managing foreign exchange risk and ensuring mobility of global capital.

China's foreign exchange market plays an essential role to Chinese economic development. Chinese FX market supports excellent environment for international trade and investment through stable RMB exchange rate and foreign exchange liquidity. Additionally, FX market is also important in implementing government policy, maintaining market stability as well as protection of investors from external shock. Furthermore, the FX market also has a decisive influence on the marketization of RMB.

Despite the gradual opening and internationalization of China's foreign exchange market, there are still several noteworthy issues. Firstly, the transparency of information is a notable problem, this is highly relative to information asymmetry and is one of the causes of market volatility. Secondly,

© 2024 The Authors. This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0 (https://creativecommons.org/licenses/by/4.0/).

excessive government intervention can sometimes affect the development of marketization and market efficiency. Thirdly, policy sensitivity is also a main challenge that FX market should overcome; this will indirectly influence the efficiency of government policy.

#### 2. Current Situation

China's foreign exchange market has experienced significant development and transformation in past decade, some key policies, and events such as improving the central parity quotation system in 2015, foreign exchange control measures in 2017 and pilot schemes for trade facilitation in 2020 have laid the foundation for further change of China's FX market in the future.

One indication of the increasing openness and maturity of FX market is the change in trading volume. The chart below shows the total trading volume of China's FX market from 2015 to 2023. From the figure, the China foreign exchange market is huge, and the trading volume has significantly increased year by year. Since 2015, the total foreign exchange market turnover has been 110,929,012 billion yuan, and it has reached approximately 2,525,773.90 billion yuan by 2023 (See Figure 1). In less than ten years, the total trading volume has increased by more than 100%. Overall, the change of China's FX market has shown a significant upward trend, although there was a slight decline in foreign exchange trading volume in 2021, but the overall trend is still upward, which shows that the fluctuation of China's FX market has certain sustainability and stable growth.

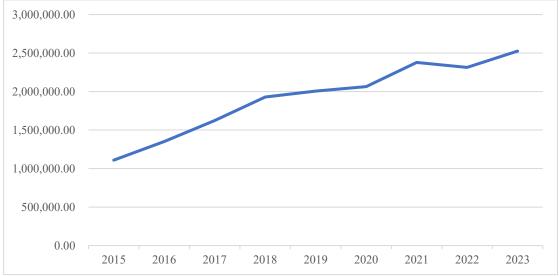


Figure 1: Total trading volume of China's foreign exchange market from 2015 to 2023

According to the total trading volume of FX market's major trading products in China from 2015 to 2023, the total trading volume of foreign exchange swaps and spot transactions has increased overall year by year, with the growth rate of spot transactions being smaller (See Figure 2). The total trading volume of spot transactions increased from 51,552.10 billion yuan in 2015 to 89,640.18 billion yuan in 2023. Meanwhile, the total trading volume of foreign exchange swaps has shown a significant increase, increasing from 537,837.72 billion yuan in 2015 to 1,482,934.65 billion yuan in 2023, with a growth rate of approximately 275.72%. Despite this, the volume of foreign exchange forward and options trading remained at a relatively low level throughout the period, it is worth mentioning that the volume of options trading in 2023 was more than four times that of options trading in 201. Overall, with the development of the marketization of the exchange rate and the diversification of market need, as well as the gradual promotion of FX policy, the volume of trading in various foreign exchange instruments in FX market has shown a significant growth trend, especially swaps

and spot transactions. Swaps have become the main trading tool in foreign exchange market, which means that the risk management capabilities of participants in FX market are gradually becoming mature.

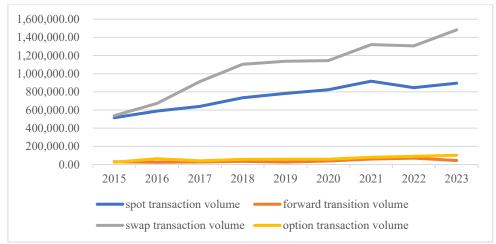


Figure 2: Total trading volume of China's foreign exchange market's major trading products

#### 3. Problem

### 3.1. Policy Sensitivity

Policy sensitivity refer to the degree to which the China's FX market change or the RMB exchange rate fluctuate when a new government policy occurs. According to figures of monthly USD/CNY exchange rate volatility and exchange rate change below, an overall upward trend can be witnessed from the figure of exchange rate change, indicating a gradual depreciation of RMB against USD over the period of 2012 to 2023. In addition, the RMB exchange rate can be seen in various periods of large fluctuations, exchange rate volatility reached the peak of this range in August 2022, which was even over 10%. As can be seen from the figure, the RMB exchange rate fluctuated to a certain extent before and after the policy implementation, for instance, RMB exchange rate formation program reformed in 2015, the trade friction between the US and China, and the policy measured to the COVID-19 pandemic (See Figure 3 and Figure 4).

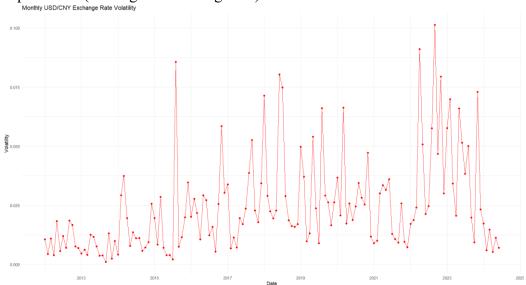


Figure 3: Monthly USD/CNY exchange rate volatility from 2012 to 2023



Figure 4: monthly USD/CNY exchange rate change from 2012 to 2023

There are some reasons why policy sensitivity exists. The frequent change in regulatory environment is one of the main reasons why China's foreign exchange market is sensitive to policies. Although these changes initially aimed to achieve Chinese economic purposes and address domestic issues, they also cause significant reactions among market participants. Additionally, limited policy transparency is also a notable problem which may cause policy sensitivity because market participants may have pessimistic mood with the uncertainty and lack of policy information. Furthermore, Although China's foreign exchange market is gradually opening and striving to promote the development of marketization, it is still in the learning stage of marketization, adjusting to new norms and practices, which amplifies sensitivity to policy shifts [1].

#### 3.2. Over-market Intervention

After the implementation of the new policy and the occurrence of international events, the FX market and the RMB exchange rate in China would experience significant fluctuations, although the central bank of China would introduce corresponding measures and effectively stabilize the foreign exchange market fluctuations in the short term. However, because of excessive intervention in the FX market, there are certain negative impacts in the long run.

Based on the purpose and policy of the government intervention in the FX market, China has expended a huge portion of its foreign exchange reserves to maintain the stability of its exchange rate. China's currency markets are subject to relatively stronger government influence [2]. The frequent intervention by the government accelerates the consumption of foreign exchange reserves. According to reports by the International Monetary Fund and the Bank for International Settlements, it decreased from nearly \$400 billion in 2014 to about \$300 billion in 2017, showing the high cost of intervention to maintain exchange rate stability [3]. To maintain the high foreign exchange consumption in the intervention market, the Chinese government has continuously increased its foreign exchange reserves, reaching a total of \$324.6 billion by March 2024, according to CEIC data, the proportion of foreign exchange reserves to GDP was about 14.7% in 2024 [4]. Despite the huge consumption of foreign exchange reserves in stabilizing the market, the market's expectations are always uncertain. Storing excessively high foreign exchange reserves also brings new problems. The improvement of foreign exchange reserves is usually accompanied by an increase in domestic currency issuance,

which may bring pressure on inflation. To offset the increased liquidity brought about by foreign exchange reserves, the central bank of China needs to conduct counter-cyclical operations, which increases the complexity and cost of monetary policy operations.

#### 3.3. Information Ssymmetry

Information asymmetry refers to the unequal ability and speed of market participants in obtaining information, which leads to significant differences in market decision-making. The information asymmetry problem discussed in this paper mainly exists between the government and investors, and in China's FX market, the government, as the policy maker, is generally better informed about the implementation and effectiveness of new policies. However, compared with market participants, investors may have slower access to policy-related information in the early stages of policy implementation or underestimate the effectiveness of policies. They also have difficulty predicting the intentions and objectives of government policies. Moreover, investors depend on information transparency to measure the value of investment in FX market [5]. Due to the lack of transparency in the early stages of policy implementation, market participants tend to have low policy expectations, which can cause short-term fluctuations in the foreign exchange market. Although the Chinese government's ability to stabilize exchange rates is well-known, the impact of information asymmetry on foreign exchange market fluctuations and the increase in speculative activities cannot be ignored. For market participants, short-term foreign exchange market fluctuations have a significant impact on investor psychology and may cause pre-existing market panic, leading to loss aversion or overconfidence irrational behavior. In Chinese foreign exchange market, loss aversion refers to investors may be hesitated to sell losing investments, which may reduce trading volumes and lead to cautious trading behaviors that can affect the whole market supply and demand [6]. And over-confidence refers to Investors' expectations about their own investment capabilities and the market are too high, which will further cause unusual increase in trading volume and exacerbate market trends. Two behaviors may spread negative sentiment in the foreign exchange market, encouraging investors to produce irrational behaviors especially individual investors [7].

#### 4. Solution

### 4.1. Enhance Investor Education

Enhancing investor education is an important measure to improve market stability and efficiency. To expand the scope of investor education, investor education courses can be disseminated through various channels and platforms, such as promoting the importance of investment education on the online platforms of major financial institutions, setting up special investment courses aimed at improving investors' own risk prevention awareness and psychological quality. At the same time, the government can disseminate investor education through official social media platforms via videos or live streaming and can also hold offline investment education seminars and lectures in various places. In addition, the government can call on financial institutions to emulate these relevant measures and promote and educate investment knowledge to their customers. Additionally, the government can promote the introduction of financial knowledge into the education system, such as encouraging major universities to offer investor education as a required course, thus expanding the coverage of investment education. Only by continuously promoting investor education can the market participants strengthen psychological tolerance for market expectations and their ability to predict risks, reduce the widespread panic caused by policy changes, avoid excessive reactions to policy expectations, and thus better help investors make rational investment decisions.

# 4.2. Manage Government Intervention Appropriately

Reduce the government's direct intervention to the FX market and promote the market-oriented innovation of the FX market to reduce the government's direct intervention in exchange rates and allow the supply and demand relationship in the market to determine the exchange rate level. This will help improve the market's self-regulatory ability and enhance market stability. Lift strict foreign exchange controls and gradually loosen capital account controls to allow more cross-border capital to flow freely, encouraging more investors to assess the Chinese FX market and thus enhancing the breadth and depth of the FX market. This can improve market liquidity and stability, enhance the market's resilience to external shocks [8]. Develop and introduce more foreign exchange derivatives and financial tools, such as foreign exchange options and foreign exchange swaps, to provide more risk management tools to help market participants hedge foreign exchange risks. Additionally, for investors, excessive government intervention in the market may increase the likelihood of confirmation bias, where investors may be over relied on the same historical intervention measures to adjust their investment decisions, thereby ignoring changes in market supply and demand and fundamental economic analysis [9]. Therefore, by limiting its own intervention in the market, the government also protects investors from irrational investment behavior and high-risk investment decisions.

## 4.3. Improve Information Transparency

A lack of economic data and hidden weakness of government policy may lead to a loss to investors [10]. Improving information transparency can, to some extent, reduce the information asymmetry problem in Chinese foreign exchange market and enhance market participants' speed and ability to obtain policy information. Firstly, information transparency should be based on policy transparency. When the government formulates and implements foreign exchange policies, it should make relevant information public to the maximum extent possible, including the purpose and intent of policy implementation, the background and timing of the policy, the theoretical basis and effectiveness analysis of policy implementation, as well as the specific implementation details, so that market participants can have a deeper understanding of the policy content. Secondly, the government should also ensure fine-grained data transparency to enhance information transparency, including but not limited to timely disclosure of policy implementation. Overall, it is necessary for government to form a reliable information system to make FX market more transparent [11].

#### 5. Conclusion

This study has examined the current situation, key challenges, and potential solutions for China's foreign exchange market. The findings highlight three main issues: policy sensitivity, overgovernment intervention, and information asymmetry. These challenges can affect the market's efficiency and stability, posing risks to both domestic and international investors. To deal with these problems, the study proposes several solutions including enhancing investor education, managing government intervention and improving information transparency. In conclusion, dealing with these challenges is critical for the further change and stability of foreign exchange market. By implementing the proposed strategies, China can enhance its market efficiency, support sustainable economic growth, and strengthen its position in the global financial system. Future research should put a emphasis on the long-term influences of these strategies and discover additional measures to further challenges as well as risks in China's FX market.

#### References

- [1] Guo, Y. (2020). The impact of policy sensitivity on China's foreign exchange market. China Political Economy, 3(1), 45-60.
- [2] Wang, Y.-C., Tsai, J.-J., & Chen, X. (2021). The impact of RMB internationalization and international situations on China's foreign exchange market: Dynamic linkages between USD/CNY and SDR/CNY. Emerging Markets Finance and Trade, 57(5), 1437-1454.
- [3] People's Bank of China. (2021, December 29). Review of China's monetary policy in 2021. Bank for International Settlements. Retrieved from https://www.bis.org/review/r211229j.pdf
- [4] State Administration of Foreign Exchange. (2024, April 7). SAFE report on the current situation of China's foreign exchange market. State Administration of Foreign Exchange. Retrieved from https://www.safe.gov.cn/en/2024/0407/2193.html
- [5] Yeh, Y. M. C., Chen, H.-W., & Wu, M.-C. (2014). Can information transparency improve earnings quality attributes? Evidence from an enhanced disclosure regime in Taiwan. Emerging Markets Finance and Trade, 50(4), 237-253.
- [6] Wang, G., & Lin, N. (2020). 70 years of China's foreign exchange market development: history and experience. China Political Economy, 3(1), 3-17.
- [7] Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. Econometrica, 47(2), 263-291.
- [8] Wang, Z., Zhang, Z., Zhang, Q., Gao, J., & Lin, W. (2021). COVID-19 and financial market response in China: Micro evidence and possible mechanisms. PLOS ONE, 16(9), e0256879.
- [9] Sakawa, H., & Watanabel, N. (2022). Self-restraint, subsidy, and stock market reactions to the coronavirus outbreak: Evidence from the Japanese restaurant industry. PLOS ONE, 17(12), e0278876.
- [10] Gelos, R. G., & Wei, S.-J. (2002). Transparency and international investor behavior (Working Paper No. 9260). National Bureau of Economic Research. Retrieved from http://www.nber.org/papers/w9260
- [11] Broll, U., Eckwert, B., & Wong, K. P. (2014). Transparency and Risk Sharing in International Trade. The Manchester School, 82(6), 716–731.