



China's Choice about RMB Internationalization: Will the Belt and Road Initiative accelerate the process?

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Summary

The thesis studies the current status of RMB internationalization and find: (1) The RMB Internationalization Index has increased significantly in just a few years. The internationalization of RMB developed very fast after 2010. Compared with the major international currencies, RMB internationalization index is still at a relatively low level, but the gap is gradually narrowing. (2) Overall, the scale of Chinese cross-border trade with RMB as settlement currency shows a fluctuating trend. (3) Financial transactions with RMB is highly affected by Chinese government policies. The regulations of Chinese currency authority on capital is apparent. RMB exchange rate is another important factor of RMB internationalization. (4) The inclusion of RMB in SDR means that the IMF officially confirmed that the RMB is a freely usable currency. Although the RMB internationalization has achieved a certain progress, the scale and share of the RMB as a global foreign exchange reserve is still very low. (5) The reform of the RMB exchange rate system continued to advance, and the RMB exchange rate index remained stable in recent years.

Chinese government has been committed to promoting the internationalization of RMB since 2009. China has taken many direct measures to promote the internationalization of RMB, including the implementation of Huggingtong to open capital market, the development of RMB offshore market, the establishment of Cross-border Interbank Payment System (CIPS), the reform of RMB exchange rate system, the launch of RMB crude oil futures etc. Besides, the inclusion of RMB in SDR, the Belt and Road Initiative and the establishment of the AIIB are all conducive to further promoting RMB internationalization.

The Belt and Road Initiative, on one hand provides an opportunity for the RMB to be used as a regional settlement currency, on the other hand, will further

consolidate the status of the RMB as an international currency. The RMB has a great potential to become a major currency in the Belt and Road Initiative region.

Based on the Neoliberal Institutionalism, Currency Substitution Theory and the Ternary Paradox, China should take following measures to accelerate the internationalization of the RMB: (1) To further enlarge cross-border trade with RMB as settlement currency. (2) To promote RMB internationalization with large ODI. (3) To further improve RMB exchange rate system. (4) To further develop China's domestic financial system and financial infrastructure. (5) To be cautious to open capital account and to further develop RMB offshore market.

Contents

Summary	I
1 Introduction.....	1
2 Problem Formulation	4
3 Methodology	5
3.1 Choice of theory	6
3.2 Choice of empirical material	7
3.3 Mixed methods.....	8
3.4 Limitation	9
4 Theory	10
4.1 Neoliberal institutionalism	10
4.2 Currency Substitution Theory	13
4.3 The Ternary Paradox	15
5 Analysis.....	18
5.1 Current status of RMB internationalization	18
5.1.1 RMB Internationalization Index and its influencing factors	18
5.1.2 Cross-border trade with RMB as settlement currency.....	22
5.1.3 Financial transaction with RMB.....	23
5.1.4 RMB in global foreign exchange reserve: the inclusion of RMB in SDR ..	25
5.1.5 The reform of RMB exchange rate system.....	27
5.2 China’s efforts to promote RMB internationalization.....	28
5.3 The influence of BRI and AIIB on RMB internationalization.....	31
5.3.1 The possibilities of RMB to become the main currency of the BRI region	33
5.3.2 The role of RMB in promoting economic cooperation in BRI region	35

5.4 China's choices to promote RMB internationalization	38
5.4.1 To further enlarge cross-border trade with RMB as settlement currency ...	39
5.4.2 To promote RMB internationalization with large ODI	40
5.4.3 To further improve RMB exchange rate system	41
5.4.4 To further develop China's domestic financial system and financial infrastructure.....	42
5.4.5 To be cautious to open capital account and to further develop RMB offshore market.....	43
6 Conclusion	44
Bibliography	47

1 Introduction

Since the reform and opening up in 1978, China's economic development has made remarkable achievements. Before 1978, China was just an underdeveloped country struggling with poverty and food shortage. However, in 2017, China has become the second largest economy in the world in terms of gross domestic product (GDP), with 10.16 trillion US dollar only behind the USA with 17.30 trillion US dollar (World Bank database, 2019). Moreover, China has already surpassed the USA to become No.1 in the world in terms of purchasing power parity (PPP) in 2013 and gross national income (GNI) in 2014, with the former amounting to 23.30 trillion US dollar and the later 23.24 trillion US dollar in 2017, which are both much higher than 19.39 trillion US dollar and 19.61 trillion US dollar of those in the USA (Ibid). In terms of foreign trade, China ranked No.2 in the world behind the USA in 2017, with trade volume of 4.11 trillion US dollar of goods and 0.69 trillion US dollar of services, ranking No.1 and No.2 in the world respectively (World Trade Organization database, 2019).

These extraordinary economic achievements indicate that China has gradually changed its position in the international system. In 1997, Chinese government did not depreciate its currency in face of the Asian financial crisis, and thus effectively curbed its spread, which brought China with high recognition from neighboring countries. In 2001, China participated in the World Trade Organization and committed to accelerate marketization reform of economic system and opening up of domestic market. In 2008, although faced with the world financial crisis and harsh conditions inside and outside, China still maintained an average annual growth rate of 8.26% from 2008 to 2017 (World Bank database, 2019), making great contribution to the stability and recovery of world economy. In 2013, Chinese President Xi Jinping proposed the Belt and Road Initiative (B&R), which adheres to the principle of multilateral free trade,

aims to promote global development through deepening economic cooperation and should be jointly built through consultation to meet the interests of all.

With the rapid economic growth and changes in the international system, China's influence in the world is increasing day by day, and thus has gradually gained greater power in international affairs. This is reflected in many aspects. In addition to the economic achievements mentioned above, China also plays an important role in global and regional issues such as the DPRK nuclear issue, the Iranian nuclear issue, climate change, etc. Among them, to accelerate the Renminbi (RMB) internationalization is seen as an important step in financial sector for China to move toward an emerging power.

The internationalization of RMB means that RMB serves as an international currency in international market, which will become a major currency for international trade, investment, financing and also an important international reserve currency. Statically, it is a state and result of the use of RMB as an international currency. Dynamically, it involves the entire process of RMB to become a major international currency. Under the current system of international currency, RMB internationalization have to go through a long and tortuous process, the ultimate goal of which is to become one of the major international currencies and to match China's current situation of economic and trade in the world.

After the 2008 financial crisis, the international monetary system with the US dollar as the core has been strongly shocked, which has shaken the dominance of the dollar to some extent. The quantitative easing (QE) policy implemented by the US Federal Reserve after the financial crisis has greatly affected the confidence of global investors in the US dollar, which in turn promoted RMB internationalization. The United States is supplying global liquidity through trade deficits. The US economy currently accounts for about one-fifth of the

global share, but the trade share has fallen to about 10%. The US dollar accounts for about two-thirds of the world total official reserve and is actually the only super currency. Relying on the trade deficit to support the super-position of the US dollar will only lead to problems such as the overmuch of US dollar supply, the dollar asset bubble, the expansion of the US domestic subprime mortgage crisis developing into a global crisis, and the impact of US domestic monetary policy spillover on the global economy.

Other countries, especially most of developing countries, are deeply worried about the current international monetary system. These countries have experienced rapid economic and trade growth and thus have accumulated a lot of US dollar foreign exchange reserves. Due to the "dollar trap", they have to pay for the US economic and financial crisis. Therefore, it has become a consensus that the international monetary system needs reform. In November 2015, the Executive Board of the International Monetary Fund (IMF) decided to include RMB into the special drawing rights currency basket, with a weight of 10.92%, ranking third only behind the US dollar (41.73%) and the euro (30.93%). From then on, RMB has officially become one of the international reserve currencies, which is a milestone in the process of RMB internationalization.

With the increasing foreign trade and investment, the status of RMB in global market has also been improved. More and more countries accept RMB as one of the currencies for cross-border trade, investment and pricing. Up till now, China has signed bilateral swap agreements with more than 30 countries. The scale and circulation of RMB outside China is expanding through the border trade, regional currency cooperation, RMB foreign direct investment, and the offshore RMB center in Hong Kong.

Recently, the B&R has strengthened trade and financial cooperation between

China and its neighboring countries, which to some extent expands the circulation of RMB in these areas and provides favorable conditions for RMB peripheralization and regionalization. However, RMB is still not an international currency in terms of capital control, underdeveloped financial market and limited exchange under capital account. Despite this, the process of RMB internationalization in the context of the B&R has been greatly accelerated. In other words, the B&R indeed provides a very good opportunity for RMB internationalization.

2 Problem Formulation

Currency internationalization is always an attractive issue. After 2008, China has been committed herself to promoting the RMB internationalization in spite of many obstacles inside and outside China. For example, the scale and circulation of RMB outside China is gradually increasing but still at a very low level and internal factors like capital control, managed floating exchange rate system, underdeveloped financial market, etc. The B&R, which is jointly built through consultation to meet the interests of all, aims to achieve global development through enlarging trade and investment in the alongside area. This is undoubtedly a good opportunity for RMB peripheralization and regionalization which are necessary phases for internationalization. Thus, Chinese government can increase the scale and circulation of RMB outside China through the Belt and Road Initiative. Meanwhile, it is essential to move forward on Chinese domestic reforms of financial systems and foreign exchange systems and further enhance the development of financial market, which are seen as institutional bases for RMB internationalization.

This thesis sets out to explore ***how China can accelerate RMB internationalization through the Belt and Road Initiative.*** Furthermore, it aims to find out ***the opportunities and challenges*** faced

by RMB internationalization through the B&R Initiative.

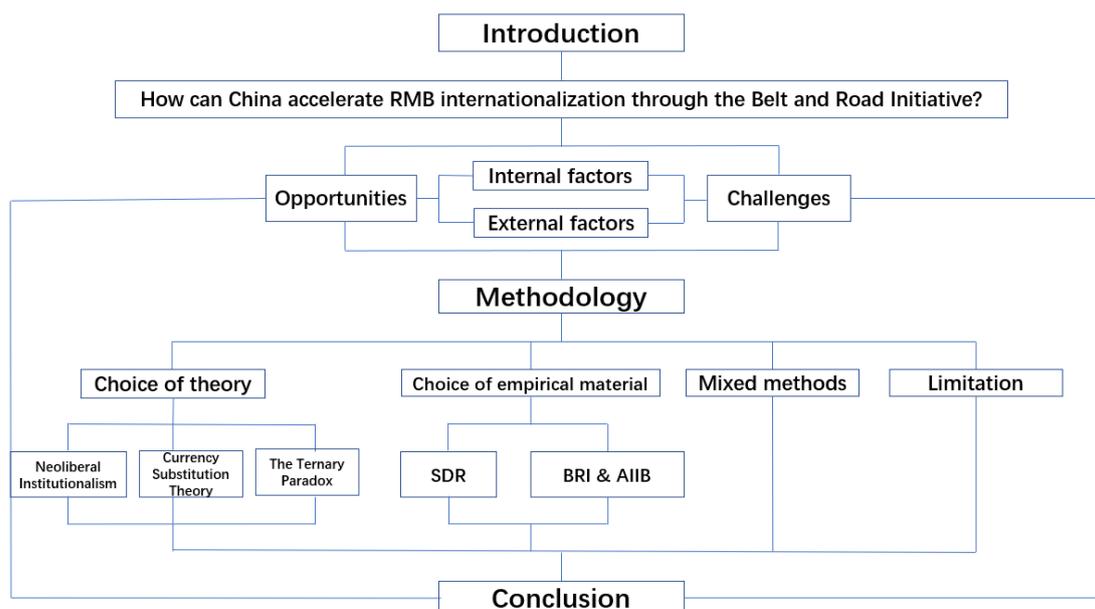
In order to solve the problem, the thesis will mainly focus on the following research questions: What are the reasons, bases and conditions for RMB internationalization? What are the inside and outside constraints of RMB internationalization? And as mentioned above, what are the opportunities and challenges faced by RMB internationalization through the B&R Initiative. After answering these questions, the thesis is expected to find the path to accelerate RMB internationalization in the context of the B&R.

To answer the above research questions, the thesis will follow below steps: firstly, to explain the reasons, foundation, conditions, process and obstacles of RMB internationalization; secondly, to summarize the opportunities and challenges faced by RMB internationalization through the B&R; thirdly, to find the path to accelerate RMB internationalization based on the above analysis.



3 Methodology

This chapter will illustrate the structure of the project, and describe how the individual parts contribute to answering the research question.



3.1 Choice of theory

Neoliberal institutionalism is one of the most influential theories of international relations, which has a complete theoretical analysis framework. It emphasizes the influences and constraints of international regimes on state behavior and explains the possibilities and conditions of cooperation among nations under anarchy (Qin Yaqing, 1998:45). Neoliberal institutionalism will help analyze how China can strengthen cooperation with the B&R countries to further expand the scale of trade and investment, and thus boost the process of RMB regionalization and internationalization. In addition, the establishment of institutions such as the Asian Infrastructure Investment Bank (AIIB) is not only a practice of neoliberal institutionalism, but also proves the views of neoliberal institutionalism with its well function among its members.

Relevant economic theories include Currency Substitution Theory and the Ternary Paradox. The Currency Substitution Theory reveals the substitution of foreign currencies for local currency in measure of value, medium of exchange, store of value and other fields in the condition of free exchange system. It helps explain why it is possible that RMB will become regional currency instead of

local currencies or US dollar with the increase of trade and investment between China and the B&R countries and the improvement of RMB free exchange system. RMB internationalization will also face the dilemma of “Ternary Paradox”. As the second largest economy in the world, China has to ensure the independence of its monetary policy. At the same time, RMB internationalization requires stable exchange rate and completely free flow of capital (Y. C. Park, 2010). Therefore, it is a big challenge for Chinese monetary authorities to balance the free flow of capital and the stable exchange rate.

3.2 Choice of empirical material

In 2013, Chinese President Xi Jinping proposed the Belt and Road Initiative (B&R), which should be jointly built through consultation to meet the interests of all and aims to promote global development through deepening economic cooperation. Up till now, more than 100 countries and international organizations have participated in the B&R, and over 40 countries and international organizations have signed cooperation agreements with China, which achieves growing consensus on international cooperation (Belt and Road Portal, 2017).

In 2017, the first Belt and Road Forum for International Cooperation was held in Beijing, mainly focusing on two topics: one is to enhance cooperation on policy-making and development strategies, and the other is to promote pragmatic collaboration on interconnection. The second Belt and Road Forum for International Cooperation will be held in Xian, the starting point of the B&R in China, in 2019. This indicates that the B&R is gradually developing from the initial unilateral propose of China to a regular and institutional international regime. In other words, the B&R has already played the role of some international organizations or institutions in boosting regional economic development.

Therefore, the B&R will serve as an important empirical material for the thesis. The data of trade and investment of the B&R countries and the use of indexes like economic interdependence index will be the main method to answer research questions.

Asian Infrastructure Investment Bank (AIIB) and Silk Road Fund are the main ways to promote RMB internationalization in the context of the B&R. AIIB was established in 2015, which is a development organization between governments and a multilateral financial institution first initiated by China. AIIB has 93 members from all over the world until December, 2018. It focuses on infrastructure construction aiming to enhance interconnection and economic integration in Asia and also strengthen cooperation between China and other Asian countries. Silk Road Fund was established in 2014. It is a unilateral financial institution wholly funded by China and aims to provide financial support for economic and trade cooperation and interconnection programs in the context of the B&R, which is seen as a momentous step to promote the B&R. Therefore, AIIB and Silk Road Fund will be used in the thesis as other sources of empirical material, especially for their investment programs outside China.

3.3 Mixed methods

The thesis will explore the current status of RMB internationalization and the opportunities and challenges faced by RMB internationalization in the context of the B&R. The research is mainly based on qualitative method, and economic data and relevant indexes will be used and calculated as supplement to prove the argument. This research design not only helps explore the problem from multiple aspects, but overcomes the limitations of a single research method.

Based on secondary literatures, the thesis will summarize the reasons,

foundation, conditions, process and obstacles of RMB internationalization, providing theoretical support to analyze the opportunities and challenges faced by RMB internationalization in the context of the B&R. In addition, the data of trade and investment, programs through AIIB and Silk Road Fund and other empirical materials will be used in the analysis. For example, economic interdependence indexes between China and major countries along the B&R will be calculated in the analysis in order to examine their common interest. The combination of qualitative method and the calculation of relevant indexes, on one hand, enhances the reasonableness of the thesis, on the other hand, helps analyze the opportunities and challenges faced by RMB internationalization more comprehensively.

3.4 Limitation

The B&R is China's most important plan for international economic cooperation in recent years, which has significant influence on China's domestic economic reform and policy-making. Large-scale investment driven by the B&R has a positive impact on the RMB internationalization and China's domestic reform of financial and foreign exchange system. Therefore, to analyze RMB internationalization through the Belt and Road Initiative helps to better understand China's efforts to accelerate RMB internationalization. Besides, it is feasible and reasonable to limit the RMB internationalization to the field of the B&R.

Many theories can be employed to analyze the RMB internationalization. The thesis is mainly based on Neoliberal Institutionalism to explore how China can promote economic cooperation with the B&R countries which aims to accelerate RMB internationalization. After 5 years, the B&R has become more regular and institutional, and is actually playing the role of some international organizations or institutions in boosting regional economic development.

Besides, the role played by AIIB in the investment on Asian infrastructure is also growing. In view of the powerful explanatory ability regarding the role of international regime to promote collaboration between states, the thesis mainly employs Neoliberal Institutionalism to explore the opportunities and challenges faced by RMB internationalization through the cooperation between China and the B&R countries, especially the financial cooperation. In this way, it is expected to reveal the important role of the B&R and AIIB in the process of RMB internationalization.

Furthermore, the area of research is limited to the B&R countries and those who has experiences of currency internationalization like the USA, the UK and Japan. Although RMB internationalization made some progress before 2008, the period of research is limited between 2008 and 2017 since the global financial crisis in 2008 is seen as the official starting point of RMB internationalization (Cao Biao, 2013:67). Therefore, the data of trade and investment and relevant documents after 2008 are the main materials of the thesis.

4 Theory

The thesis employs Neoliberal Institutionalism, Currency Substitution Theory and the Ternary Paradox. Neoliberal Institutionalism is used to explore the common interest between China and the B&R countries which will result in the collaboration. Currency Substitution Theory and the Ternary Paradox are used to explain the conditions, path, obstacles and other factors of RMB internationalization.

4.1 Neoliberal institutionalism

Neoliberal institutionalism is an important theoretical genre of international

relations developed in the United States in the 1980s. The representatives of neo-liberal institutionalism are Robert Keohane and Joseph Nye, whose representative works are *Power and Interdependence* and *After Hegemony* which were published in 1977,.

The purpose of states' external behavior is to promote the national interests, and states are reasonable to make decisions (Robert, 1986). Neoliberal institutionalism believes that cooperation can enable states to gain more benefits in an environment of strong international interdependence. However, the international community is in anarchy and cooperation is not easy to achieve. Parties which recognize common interests are willing to negotiate and achieve a same goal. This is the basis for national cooperation. International institutions can increase the flow of international information and promote mutual consultation which is likely to generate opportunities for cooperation. From this point of view, international cooperation requires international institutions. In other words, if countries have common interests and willingness to cooperate, establishing a system is an effective way to promote cooperation. The international institutions can provide effective mechanisms and institutional guarantees for international cooperation. This is the important role of international institutions to maintain world peace, security and order, and promote positive interaction and active cooperation among states. In order to seek the maximum common interest, states need international institutions to help reach agreements (Robert O. Keohane and Joseph S. Nye, 1977).

The Asian Infrastructure Investment Bank (AIIB) is an international organization established in response to the Belt and Road Initiative to support infrastructure development in developing countries in Asia. By December 2018, there were 93 member states. Specifically, the establishment of the AIIB has the following functions: Firstly, to reduce the cost of interaction. If there is no mechanism or norm to be followed, all issues must be negotiated from the

original point and parties have to burden too much cost. Secondly, to provide the basis for legal framework. Although the AIIB cannot issue mandatory orders to its members, its principles, norms, rules and decision-making procedures can help its members reach agreements. Thirdly, to provide sufficient information. Insufficient information is a major obstacle for international cooperation, leaving international community in a state of uncertainty and mutual suspicion. It is feared that fraud will occur in the reached agreements. The AIIB can provide reliable and high-quality standardized information for participating countries, so that members can obtain sufficient information and the intentions of each member will be highly predictive. The more transparent and reliable the information is, the more likely it is to generate international cooperation. Fourthly, to play a supervisory function. The AIIB can serve to assess the behavior of its members. For those who violate the rules or fail to fulfill their obligations, the AIIB has rights to give them pressure to correct the violations.

The Belt and Road Initiative and the establishment of the AIIB will bring a lot of investments and cooperation opportunities to the Asian countries, especially the countries along the Belt and Road (or BRI countries). The economic ties between China and these countries will also become closer and closer, and economic cooperation will gradually be enhanced, which will promote RMB internationalization.

The BRI and AIIB will expand the value storage function of the RMB. The closer economic cooperation will lay a solid foundation for the RMB swap agreement, which will continue to expand the share of the RMB in Asian countries' international reserves. In the future, it will promote the international reserve status of the RMB in the world, and further promote RMB internationalization. Another manifestation of the RMB's value storage function in the international arena is the use of RMB as a financial asset for private sectors. The

establishment of the AIIB will also promote RMB internationalization in the field of private investment. According to the statistics of the Asian Development Bank, the annual financing needs for infrastructure construction in Asia will be about 730 billion US dollars by 2020 (Liu Ali and He Huaping, 2016). Any institution including AIIB is unable to cover such big gap and large-scale fundraising is needed, which leaves huge room for Chinese domestic investors to go abroad and invest.

The BRI and AIIB will expand the pricing function of the RMB. The establishment of the AIIB can promote infrastructure construction in Asia. Chinese companies have advantages in capital and technology and will actively participate in infrastructure construction. In this process, the economic and financial links between China and BRI countries will inevitably be strengthened, and the scale of cross-border trade and investment within the region will also increase. In order to promote cross-border trade and reduce the risk of exchange rate fluctuation, reducing the dependence on US dollar is necessary. This will be a very good opportunity for RMB to become the price and settlement currency in BRI region.

4.2 Currency Substitution Theory

The concept of currency substitution was first proposed by American economist Karuppan Chetty in his paper *On Measuring the Nearness of Near-Moneys* published in *American Economic Review* in 1969. Currency substitution means when a country's residents lose faith in local currency, or when the return of local currency is low, a foreign currency replaces the domestic one in whole or in part and fully utilizes the functions of value storage, trading medium and pricing (V. Karuppan Chetty, 1969). It is well-known that “good money expelling bad money”, which is an important phenomenon in the process of currency internationalization.

After the disintegration of the Bretton Woods system, financial liberalization and globalization have gradually arisen, and the phenomenon of currency substitution began to appear in the global market. The most prominent one is US dollar. The US dollar is currently the most accepted currency in the world, and even some countries regard it as its main currency, such as Puerto Rico, Panama, Ecuador and other countries. In addition to the US dollar, the euro, the pound and the Japanese Yen can also be regarded as international currencies.

At present, the coverage of Chinese RMB has expanded significantly in recent years and there has been a phenomenon of RMB substitution in some Asian countries, such as Pakistan, Cambodia, Myanmar, Vietnam, Iran, Mongolia and other countries. The acceptance of RMB is gradually improving. However, RMB cannot be regarded as an international currency at present. The usage frequency and coverage of RMB in the international arena are still low and RMB exchange rate is not very stable. Most importantly, Chinese government still imposes currency controls on capital account, which is not beneficial to the process of RMB substitution in other regions outside China.

From the perspective of geography, the process of currency internationalization includes three steps, with peripheralization, regionalization and internationalization respectively. China should also follow this way to promote the process of RMB internationalization. Nowadays, RMB is widely accepted in regions such as Hong Kong, Macao and Taiwan as well as neighboring countries like Vietnam and Laos. In the next step, China should enhance the status of RMB in near countries such as Pakistan, Kazakhstan, Russia etc. and gradually become the dominant currency in the BRI region. In the future, RMB will automatically become an international currency once it steps on the right way to become a regional currency. From the perspective of currency function, RMB

plays multiple roles in the progress of RMB internationalization, with the settlement currency, the investment currency, and the reserve currency respectively. Through geographical expansion and multiple functions, China will rapidly expand the regional influence of RMB.

The main factors affecting currency substitution include exchange rate, interest rate, inflation, national income and so on. Among them, the exchange rate has the greatest impact on currency internationalization. For example, China's total import and export which take RMB as the settlement currency dropped significantly in 2016. The choice of trade-denominated currency are affected by many factors. The macro factors include economic development, exchange rate and the development of financial market. The micro factors include trading risk and cost, bargaining power and product differentiation. In the case that China's economic status, the development of financial market, transaction cost, bargaining power and other reasons have not changed significantly, the main reason for the sharp decline of RMB settlement scale in 2016 should be the fluctuation of exchange rate. In other words, the depreciation of RMB exchange rate and the expectation of RMB depreciation in the world market in 2016, made importers and exporters reluctant to use RMB as settlement currency in cross-border trade, resulting in a sharp decline in the RMB settlement share.

4.3 The Ternary Paradox

In the 1960s, Mundell Fleming analyzed the different effects of macroeconomic policies in countries with different exchange rate systems. He concluded that in an open economy with frequent capital flows, the deficit of the balance of payments will reduce the domestic money supply and on the opposite the surplus of the balance of payments will increase the domestic money supply, on the condition that the country adopts the fixed exchange rate system. If the balance of payments of a country is balanced, then any change in monetary

policy or money supply will lead to external imbalances. If the government adopts monetary policy to correct the imbalance, it is ineffective. It will be effective only if the floating exchange rate system is adopted. (Mundell Fleming, 1961)

On the basis of Mundell's findings, Paul Krugman further proposed the ternary paradox in 1999. Krugman argues that in open economies, free capital flow, the independence of monetary policy and the fixed exchange rate system cannot be achieved at the same time. The monetary authority of a country can only choose two of them at most. The ternary paradox provides three options for monetary authority: firstly, to abandon the stability of exchange rate to maintain the independence of domestic monetary policy and free capital flow; secondly, to abandon free capital flow and implement capital control to maintain the independence of the country's monetary policy and the stability of exchange rate; thirdly, abandon the independence of the country's monetary policy to maintain free capital flow and the stability of exchange rate.

For an emerging power like China, the independence of monetary policy is crucial, and is also a prerequisite for becoming a currency power. Whether a country's monetary policy is independent is a prerequisite for the effectiveness of the country's monetary policy tools. The independence of monetary policy means that the central bank is able to formulate a corresponding monetary policy according to its own will, regardless of the economic conditions of other countries. Only under the premise of the independence of monetary policy, can monetary policy tools fully play their role to promote economic growth, ensure the full employment, maintain the stability of prices and achieve a balance of international payments in the long run.

At the same time, the free capital flow is also an important condition for a currency to become international. However, Chinese government still has

regulations on capital flow. Although capital flows freely under the current account of foreign trade, there are still some restrictions under the capital account. Considering that China's financial market is still underdeveloped, opening up capital account blindly without full preparation will lead to shocks of international hot money on Chinese domestic finance market and cause instability in China's domestic economy. From this point of view, the choice of policy to maintain regulations on capital account is reasonable. However, this does not mean that China cannot start to promote the RMB internationalization. In fact, RMB has already been widely circulated and used in some Asian countries and regions. The establishment of the AIIB and the development of RMB offshore markets will generate important conditions for RMB to become an important currency in BRI region. China should seize this opportunity to accelerate the process of RMB internationalization.

The independence of monetary policy and the free capital flow are very necessary for China. Therefore, the floating exchange rate system has become the only viable option for Chinese currency authority, which is also consistent with China's current exchange rate system. According to the statement of Chinese central bank, China currently implements a managed floating exchange rate system based on market demand and supply, with reference to a basket of currencies. This also indicates China's choice in promoting RMB internationalization.

RMB internationalization is not a one-step process, but a comprehensive and time-consuming process. The opening of capital account is also a gradual process: first to become freely convertible under current account and gradually become the pricing, settlement and reserve currency used by other countries in trade, and finally to achieve freely convertible under both current account and capital account. Among the numerous national currencies in the world, only a few can become international currencies. It can be seen that the

internationalization of currency cannot be achieved by relying on one's own will. Those who want to achieve currency internationalization have to make full preparation and seize the opportunity.

5 Analysis

The internationalization of RMB can be examined from different perspectives. Considering the integrity and logicity, the analysis part mainly includes current status of RMB internationalization, China's efforts to promote RMB internationalization, the influence of BRI and AIIB on RMB internationalization and China's choices to promote RMB internationalization.

5.1 Current status of RMB internationalization

In recent years, China has made great progress in promoting the internationalization of RMB, but it also faces many problems. The analysis of current status of RMB internationalization includes 5 parts: RMB Internationalization Index and its influencing factors, cross-border trade with RMB as settlement currency, financial transactions with RMB, RMB in global foreign exchange reserves (the inclusion of RMB in SDR) and China's reform of RMB exchange rate system

5.1.1 RMB Internationalization Index and its influencing factors

The RMB Internationalization Index (RII) is used to describe the actual use of RMB in international economic activities. Through this indicator, we can understand the development of RMB as an international currency in terms of trade settlement, financial transactions and official reserves and also make comparison with other major international currencies, thus establishing a foundation for the study on RMB internationalization. The RII used in the thesis adopts the measurement method in the Annual Report on the

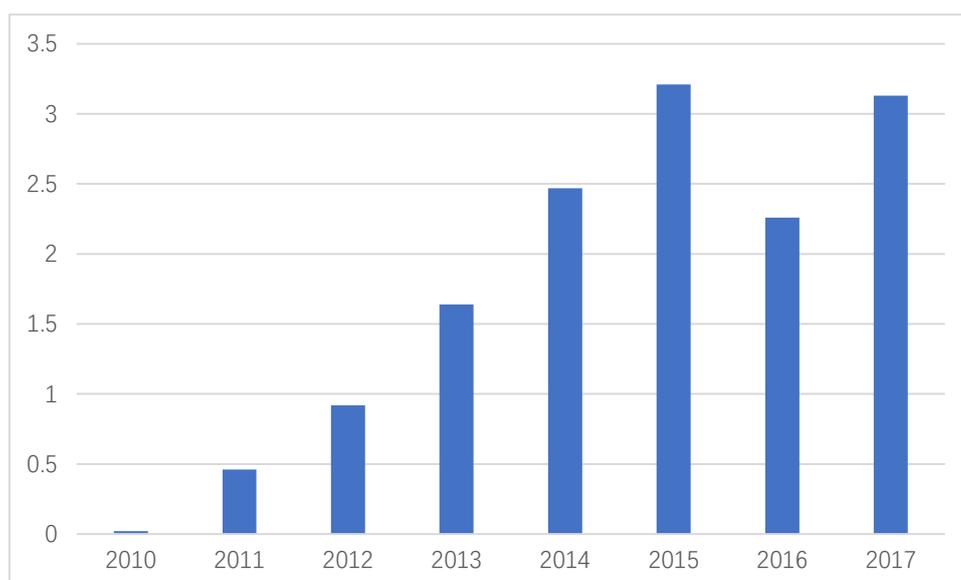
Internationalization of Renminbi 2015, published by International Monetary Institute of RUC. The main data are collected from the People's Bank of China, the International Monetary Fund, the World Bank, etc. (International Monetary Institute of RUC, 2015:67).

The RII is not only a number but has economic meaning. The larger the RII value is, the wider the RMB is used in international market. In other words, the value of RII represents the degree of RMB internationalization. If RMB is the only international currency, the RII should be equal to 100. Conversely, if RMB is not used at all in any international economic transaction, its value should be zero. If the value of RII continues to increase, it indicates that the RMB has become more and more international. For example, when the RII is 10, it means that 10% of the global transactions use RMB in international trade, investment, finance and official reserve. (Ibid:72)

As is shown in Figure 5.1, in 2010, RII was only 0.02, and the coverage of RMB in international market was almost blank. By the end of 2017, the RII reached 3.13, and the internationalization of RMB has increased significantly in just a few years. From 2010 to 2015, despite the great downward pressure, China maintained steady economic growth. With the implementation of cross-border RMB policy, the improvements of clearing system and the expansion of RMB offshore market, the acceptance of RMB has been enhanced in international trade, financial transactions and global official exchange reserve. RMB internationalization has been greatly promoted, and RII grew rapidly. In 2016, due to the impacts of dual pressures from both international and domestic level, such as the Brexit, the rise of international trade protectionism, the slowdown of China's economic growth, the decline of RMB exchange rate, and the government regulations on capital account, RII experienced negative growth for the first time. With the recovery of global economy in 2017, the performance of Chinese economy is getting better and the RMB exchange market is expected

to maintain stable. China also improved its RMB cross-border policy and infrastructure, and several major projects of the BRI have started. Therefore, RMB internationalization gradually digested the previous negative impacts, and rebounded significantly in 2017. RMB continued to maintain a stable position in the global monetary system.

Figure 5.1 China's RMB Internationalization Index from 2010 to 2017



Source: RMB Internationalization Report 2014/2015/2016/2017/2018, International Monetary Institute of RUC

The same method is used to calculate the internationalization indices of the US dollar, the euro, the pound and the Japanese Yen. The results are shown in Table 5.2.

Table 5.2 The comparison between Chinese RMB and main international currencies

Year	US Dollar	Euro	GB Pound	Japanese Yen	Chinese RMB	Total
2016	54.42	23.25	5.06	4.17	2.26	89.16
2017	54.85	19.90	3.92	4.73	3.13	86.53

Source: RMB Internationalization Report 2018, International Monetary Institute of RUC

In 2017, US President Trump's economic policy became increasingly clear. Protectionism and tax cuts brought short-term economic growth, and the Fed's interest rate hike led international capital into the United States, strengthening the international status of the dollar. The internationalization index of the US dollar was 54.85 in 2017, a slight increase from 54.42 in 2016. The Eurozone gradually got rid of the downturn and its economy recovered more than expected. Private consumption, trade, government deficits and debt levels all improved. However, subjected to the sharp reversal of the direct investment in the end of the year, the internationalization index unexpectedly fell to 19.90 in 2017, which was a sharp drop compared with 23.25 in 2016. The UK was still suffering from the uncertainty of Brexit, and the economic growth has slowed to the lowest level in five years. The internationalization index of the Pound was 3.92, much lower than 5.06 in 2016. On the opposite, Japanese economy grew strongly with the increase in external demand. Due to the financial market volatility, Japanese Yen became a popular international safe-haven currency. The internationalization index of Japanese yen rose to 4.73 in 2017 from 4.17 in the previous year, exceeding the pound.

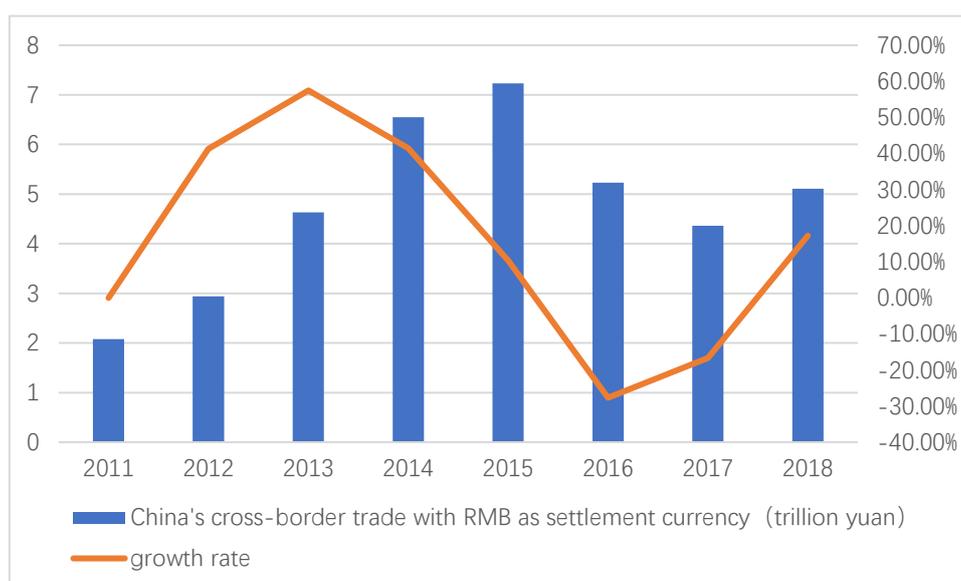
Compared with the major international currencies, RMB internationalization index is still at a relatively low level, but the gap is gradually narrowing. In 2018, despite the trade war between China and the United States and many uncertainties in economic development, China kept reform and opening-up policy and maintained stable and good economic prospects. The RMB exchange rate remained stable. Financial risks were effectively alleviated. These performances provided basis for RMB internationalization. Germany, France and a growing number of emerging market economies have included RMB into foreign exchange reserves. RMB-denominated crude oil futures are listed in the Shanghai International Energy Exchange Center. Chinese iron ore futures were introduced into overseas traders. These positive signs further promoted RMB internationalization.

5.1.2 Cross-border trade with RMB as settlement currency

Overall, the scale of Chinese cross-border trade with RMB as settlement currency shows a fluctuating trend, as shown in Figure 5.3. After the global financial crisis in 2009, Chinese cross-border trade has been declining due to the weak global economic recovery and the downward pressure on the Chinese economy. On the contrary, despite the extremely harsh external environment, the cross-border trade volume with RMB as settlement currency has maintained a significant growth from 2011 to 2015. This is mainly due to the quantitative easing policy of the United States, the strong confidence in China's economy, the active fiscal and monetary policies, and the gradual opening of China's capital account. After 2015, affected by various of factors such as the return of funds caused by the US economic recovery, the withdrawal of quantitative easing policy, the continued appreciation of the US dollar, and the Sino-US “trade war” and other factors, the cross-border trade volume with RMB as settlement currency experienced a significant decline.

In 2018, due to the influence of the BRI, the AIIB, and the inclusion of RMB into SDR and other factors, the confidence of investors in RMB has increased significantly and the cross-border trade volume with RMB as settlement currency has rebounded. China's overseas direct investment in BRI countries reached to US \$14.4 billion in 2018 and the bilateral trade volume was 7.4 trillion yuan, with a year-on-year increase of 17.8%. The coverage of RMB in bilateral trade settlement has increased significantly. China has provided RMB liquidity support to BRI countries through currency swap cooperation. The RMB regional function has been enhanced.

Figure 5.3 China's cross-border trade with RMB as settlement currency from 2011 to 2018



Source: China Central Bank, <http://www.pbc.gov.cn/>

5.1.3 Financial transaction with RMB

From the perspective of RMB overseas direct investment (ODI), the scale of China's ODI with RMB has shown an increasing trend year by year from 2013 to 2016, but there has been a significant decline in 2017. There are two main reasons. Firstly, Chinese government has implemented limitations on capital outflows. Secondly, the US government has postponed or prevented many Chinese companies from acquiring US companies on the grounds of national security.

From the perspective of RMB security investment, the stock of RMB international bonds and bills showed a trend of rising and then decreasing from 2013 to 2017. Due to the high interest rate in China, the large financing needs of overseas enterprises, and the rapid growth of overseas RMB supply, the stock of RMB international bonds and bills experienced a substantial increase from 2013 to 2015. However, the expectation of RMB depreciation in 2016 has led to a slight decline in the stock of RMB international bonds and bills in 2016 and 2017. Compared with the major international currencies, the RMB has a lower

share in the international bond market, accounting for only 0.43% in 2017, which does not match the RMB's share in the SDR.

Table 5.4 RMB financial transaction data from 2013 to 2017

Year	2013	2014	2015	2016	2017
China's ODI with RMB (billion RMB)	85.6	186.6	736.2	1061.9	456.9
Growth rate	-	118%	295%	44%	-57%
China's international bond and bill balance with RMB (billion USD)	71.45	94	124.79	110.66	103.35
Growth rate	-	32%	33%	-11%	-7%
Balance of RMB overseas loans of Chinese domestic financial institutions (billion RMB)	187.37	198.97	315.35	437.33	442.1
Growth rate	-	6%	58%	39%	1%
RMB foreign exchange spot transaction amount (trillion USD)	4.07	4.12	4.86	5.9	6.4
Growth rate	-	1%	18%	21%	8%

Source: China Central Bank, <http://www.pbc.gov.cn/>

From the perspective of RMB overseas credit, the balance of overseas loans of Chinese domestic financial institutions has shown an increasing trend from 2013 to 2017, especially in 2015, the growth rate reached 58%. The main reasons are the reduction of overseas RMB interest rates, the expectation of RMB depreciation in the market, the reform of the RMB exchange rate system and the further opening of the Chinese domestic credit market.

From the perspective of RMB foreign exchange trading, the amount of RMB foreign exchange spot transactions has shown an increasing trend from 2013 to 2017. In 2015, the People's Bank of China issued an announcement to introduce

foreign central banks (or monetary authorities) and other official reserve management agencies, international financial organizations and sovereign wealth funds to participate in transactions of foreign exchange in Chinese inter-bank foreign exchange market. This is an important step in the convertibility of RMB capital account and the internationalization of RMB. It has created favorable conditions for foreign central banks to hold RMB assets in official reserves and greatly increased the volume of RMB foreign exchange transactions.

5.1.4 RMB in global foreign exchange reserve: the inclusion of RMB in SDR

On November 30, 2015, the International Monetary Fund (IMF) Executive Board decided to include RMB into the Special Drawing Rights (SDR), and then the SDR currency basket was expanded to five currencies: US dollar, Euro, RMB, Japanese yen and Pound. The weight of the RMB in the SDR currency basket is 10.92%, and the weights of the US dollar, the euro, the Japanese yen and the Pound are 41.73%, 30.93%, 8.33% and 8.09% respectively. The new SDR basket will take effect on October 1, 2016.

The inclusion of RMB in SDR will help to enhance the representativeness of SDR and improve the current international monetary system. Specifically, the benefits are as follows: (1) The SDR basket is more diversified, the currency structure is more balanced, and the basket constitutes is more representative of the world's major currencies. (2) The inclusion of RMB in SDR indicates that the internationalization of RMB has been recognized by the IMF. As the RMB is used more, it can improve the current international monetary status which highly rely on the US dollar and reduce the risk of the “dollar trap” for surplus countries. (3) The inclusion of RMB in SDR can increase the hedging space between major currencies, help to smooth the fluctuation of SDR and increase

the stability of SDR.

The inclusion of RMB in SDR is an important milestone in the history of RMB internationalization. Most importantly, this means that the IMF officially confirmed that the RMB is a freely usable currency. According to the definition of the IMF, freely usable currency means that the currency is found to be in fact widely used for international transaction payments and are widely traded in the major foreign exchange markets. Therefore, although the RMB exchange rate system is still managed free floating and the RMB capital account is not fully convertible, the RMB is already one of the freely usable currencies recognized by the IMF. This will help strengthen the confidence of RMB in the international market, further leverage the financial trading functions and reserve assets functions of RMB, and promote the internationalization of RMB. By the end of March 2018, the People's Bank of China had signed bilateral currency swap agreements with central banks or monetary authorities of 36 countries and regions. The total amount of the agreement exceeded RMB 3.3 trillion yuan (International Monetary Institute of RUC, 2018).

However, we still have to realize that the inclusion of RMB in SDR does not mean that China's capital account is fully open, nor does it mean that the RMB has achieved its goal of internationalization. From the past international experience, capital account opening is not a sufficient condition for currency internationalization, and it is not a necessary condition even in the early stage of currency internationalization (Lu Lei, 2014). In this sense, the development of international markets and trade has promoted the internationalization of currencies, which in turn has created needs for capital account opening. The current situation is that the fast-growing global RMB offshore market not only satisfied the need of enterprises to use RMB for settlement under the conditions of capital account control, but also meets the demand of non-residential investment for RMB assets and enhances the confidence in RMB. To a certain

extent, RMB offshore transactions has "convertibility". This kind of "convertibility", coupled with the convenience of RMB, have jointly promoted the rapid development of RMB internationalization.

It should be emphasized that although the RMB internationalization has achieved a certain progress, the scale and share of the RMB as a global foreign exchange reserve is still low. As is shown in Table 5.5, the scale of the RMB as a global foreign exchange reserve increased by 45.33% in 2017 compared with 2016, reaching to 122.8 billion US dollar. However, from the terms of global share, it is relatively low, with only 1.23% which does not match the share of RMB in SDR. The inclusion of RMB in SDR means that the IMF has recognized the status of the RMB as an international reserve asset, but whether it can become one of the major international currencies still depends on the use and holdings of RMB in the international market.

Table 5.5 The scale of global foreign exchange reserve with RMB in 2016 and 2017

Year	Amount (Billion US Dollar)	Growth rate	Proportion	Growth rate
2016	84.5	-	1.08%	-
2017	122.8	45.33%	1.23%	13.89%

Source: RMB Internationalization Report 2018, International Monetary Institute of RUC

5.1.5 The reform of RMB exchange rate system

In 2015, the People's Bank of China reformed the RMB exchange rate formation mechanism, and further improved the managed floating exchange rate system based on market supply and demand with reference to a basket of currencies.

Since 2016, the exchange rate of the RMB against major international currencies has fluctuated, and the exchange rate of the RMB against a basket of currencies has remained stable overall. At the same time, the number of

currencies directly traded with the RMB in Chinese domestic foreign exchange market increased from 12 to 23, and the direct exchange transactions in the inter-bank foreign exchange market were active.

In 2017, the US dollar weakened as a whole, and most major currencies appreciated against the US dollar. The CFETS RMB exchange rate index issued by the China Foreign Exchange Trading Center was basically stable. These all enhanced the confidence of the international investors in RMB and promoted the internationalization of RMB.

5.2 China's efforts to promote RMB internationalization

Theoretically speaking, there are many benefits of currency substitution or currency internationalization. Firstly, to promote the international status of RMB. Secondly, to enhance China's power in the international financial system and rule-making. Thirdly, to provide China with considerable "coinage tax" income. Fourthly, to make China's cross-border trade no longer subject to foreign exchange reserves and reduce exchange rate risks for importers and exporters with RMB as settlement money. Fifthly, to reduce the holdings of foreign exchange reserves, thereby reducing the management costs and market risks of foreign exchange reserves.

Due to the above benefits, China has been committed to promoting the internationalization of RMB since 2009. Chinese leaders and central bank governors have also proposed to further promote RMB internationalization on different occasions. President Xi Jinping stressed that it is necessary to expand the opening up of the financial industry, to promote the opening of capital account in an orderly manner, to promote the internationalization of RMB steadily, to improve the RMB exchange rate formation mechanism, and to

maintain the stability of RMB exchange rate at a reasonable and balanced level (Xi Jinping, 2017). Zhou Xiaochuan, former president of the People's Bank of China, also pointed out that "the internationalization of RMB is a long-term process, and there may be some fluctuations, but it is necessary to consider the stability of the policy in the long run" (Zhou Xiaochuan, 2018).

China has taken many direct measures to promote the internationalization of RMB, including the implementation of Huggington to open capital market, the development of RMB offshore market, the establishment of Cross-border Interbank Payment System (CIPS), the reform of RMB exchange rate system, the launch of RMB crude oil futures etc.

One of the important obstacles for the internationalization of RMB is China's regulations over the capital account. On April 10, 2014, the China Securities Regulatory Commission and the Hong Kong Securities Regulatory Commission issued a joint announcement to allow investors from both Shanghai Stock Exchange and Hong Kong Stock Exchange to trade stocks through the exchange. This mechanism is called Huggington. Huggington not only enables overseas investors to participate in transactions in China's domestic capital market, which is an important milestone in the opening of China's capital account, but also expands the coverage of RMB in cross-border investment and cross-border finance, thereby promoting the internationalization of RMB.

Establishing and developing the offshore market of RMB is the key to realizing the internationalization of RMB. In Asia, the RMB offshore market mainly lie in Hong Kong, Taiwan and Singapore, with amount of RMB deposits reaching 1003.6 billion, 302.3 billion, 277 billion respectively(Annual report on the internationalization of RMB 2015). In Europe, the RMB offshore market mainly lie in Luxembourg, France and the United Kingdom, with amount of RMB deposits reaching 67 billion, 20 billion and 19 billion respectively (Annual

report on the internationalization of RMB 2015). At the same time, China also established China Europe International Exchange AG (CEINEX) with Germany, the main purpose of which is to meet the needs of investment and financing of RMB. The financial products are all priced and settled by RMB, which further promotes the opening of China's capital market and RMB internationalization. Bonds are the most popular investment products in the offshore market. The issuance of RMB bonds by Chinese companies and financial institutions in international market has greatly increased the global liquidity of RMB.

The RMB Cross-border Interbank Payment System (CIPS) is the most important financial infrastructure in the process of RMB internationalization. Instead of SWIFT system using US dollar as pricing and settlement currency, the CIPS can undertake the tasks of pricing, settlement and payment in cross-border business in BRI region. With the help of CIPS, the payment and settlement services will become cheaper, safer and more convenient. Therefore, cross-border trade and investment in BRI region will increase and transaction costs and exchange risks will be reduced.

In 4.3, it is mentioned that China must maintain the independence of monetary policy and free capital flow, and thus a floating exchange rate system must be implemented. China is currently implementing “a managed floating exchange rate system based on market demand and supply, with reference to a basket of currencies”.

In recent years, China's exchange rate system has undergone several reforms, making the RMB exchange rate formation mechanism more market-oriented. On December 11, 2015, China Foreign Exchange Trade Center officially released the CFETS RMB exchange rate index, which helps guide investors to maintain the effective exchange rate of a basket of currencies as the main reference standard for the RMB exchange rate instead of the bilateral exchange rate of the

RMB against the US dollar. Under this circumstance, CFETS RMB exchange rate index can help maintain the stability of RMB exchange rate, enhance investors' confidence and promote the internationalization of RMB.

On March 26, 2018, the Shanghai Futures Exchange officially launched RMB crude oil futures, which reached 8.57 trillion yuan in just half a year, accounting for 12% of global crude oil trading volume and ranking third in the world. RMB crude oil futures have strategic significance. For investors, RMB crude oil futures does not have any restrictions, which opens a window for global investors to invest in China. At the same time, the launch of RMB crude oil futures has increased China's power in international crude oil pricing and paved the way for using RMB as settlement currency in crude oil transactions in the future.

In addition to the above measures to directly promote the internationalization of RMB, the inclusion of RMB in SDR which is already discussed in section 5.1.4, the Belt and Road Initiative and the establishment of the AIIB are all conducive to further promoting RMB internationalization. The impact of the BRI and the AIIB on RMB internationalization will be discussed in following section 5.3.

5.3 The influence of BRI and AIIB on RMB internationalization

The Belt and Road Initiative is beneficial for promoting the internationalization of the RMB. On the one hand, the core content of the Belt and Road Initiative is to promote economic cooperation among countries in the region, and the strengthening of regional economic cooperation will generate greater demand for a unified currency, such as the development of the euro zone. Undoubtedly, the US dollar remains the first choice of currency in Belt and Road Initiative countries, but after experiencing the painful lessons of the financial crisis, many

countries are now looking for and using alternative currencies to reduce risk through monetary diversification. This provides an opportunity for the RMB to be used as a regional settlement currency.

On the other hand, the Belt and Road Initiative will further consolidate the status of the RMB as an international currency. With the support of the Chinese government's policies to promote the construction of Belt and Road Initiative programs, many Chinese companies have increased their direct investment in the Belt and Road Initiative countries, and the Silk Road countries in particular have become new foreign direct investment spots for Chinese enterprises in recent years, such as the construction of Pakistan Economic Corridor, Yawan High Speed Rail, Gwadar Port, Sino-Russian Oil and Gas Pipeline Construction, and construction of the port of Piraeus, Greece and other projects. From 2013 to 2018, the total import and export volume of China and the countries along the Belt and Road Initiative reached 6.5 trillion US dollars. After experienced the global economic downturn in 2015 and 2016, the cross-border trade growth rate between China and the countries along the Belt and Road Initiative reached 13.45% in 2017, as is shown in Figure 5.6. In addition, China has established 82 economic and trade cooperation zones with countries along the line, and Chinese companies have directly invested more than US \$80 billion in these countries. With the increase in Chinese companies' investment in these countries along the Belt and Road Initiative and the coverage of RMB, as is shown in Figure 5.3, the scope and the scale of RMB will be further expanded, thereby further promoting the internationalization of the RMB.

Figure 5.6 The growth rate of China's cross-border trade with the BRI countries



Source: Belt and Road Portal, <http://www.yidaiyilu.gov.cn/>

5.3.1 The possibilities of RMB to become the main currency of the BRI region

The factors affecting the choice of major regional currencies mainly include economic development, economic risks, the development of domestic financial market, trade scale and cross-border consumption.

From the perspective of economic development, undoubtedly, China is the strongest economy in the Belt and Road Initiative region. Although China's GDP no longer maintains a double-digit growth rate after the financial crisis, it still maintains 6%-8% economic growth rate.

From the perspective of economic risks, the overall risk of the Chinese economy is relatively small. In recent years, with the advancement of China's domestic supply-side structural reforms and the implementation of de-capacity and de-leverage programs, China's economic foundation has become stronger and its development prospects become better.

From the perspective of the development of domestic financial market, China's various financial organization systems have been continuously developed and improved. Various banks and financial institutions have developed rapidly, and a multi-level financial market system based on money market, capital market, insurance market and foreign exchange market has been established. The People's Bank of China has strengthened its macro-control capabilities, and has shifted from direct regulation to indirect regulation such as adjusting the rediscount rate and open market business. China's domestic financial market has developed rapidly.

From the perspective of trade scale, the latest trade statistics of the World Trade Organization (WTO) released in 2018 shows that the total import and export volume of China's goods trade reached 4.6 trillion US dollars. Although China faces the risk of Sino-US trade war, China still ranks the first in the world for two consecutive years. In addition, unlike Trump's America First policy and other kinds of protectionism, China is further expanding its opening up, striving to improve the domestic business environment, and continuously exporting and importing goods and services with the international market.

From the perspective of cross-border consumption, with the development of China's economy, the increase in per capita disposable income and the extension of life expectancy, Chinese residents now have more money, time, energy and willingness to travel and consume in other countries. At the same time, the Chinese overseas students are also an important factor that cannot be ignored. Chinese overseas students generally live longer in foreign countries, so the amount of consumption is large and the frequency of consumption is high. Both of these two factors have created demand for the identity of the RMB to become regional currency, which is conducive to further increasing the coverage of RMB and expanding the scale of RMB.

Therefore, from the perspectives of economic development, economic risks, the development of domestic financial market, trade scale and cross-border consumption, the RMB has a great potential to become a major currency in the Belt and Road Initiative region. With the comprehensive development of the major projects of the Belt and Road Initiative, the regionalization of the RMB will be further strengthened.

5.3.2 The role of RMB in promoting economic cooperation in BRI region

The RMB will play a more important role in China's economic cooperation with countries along the Belt and Road Initiative.

Firstly, the RMB will support the growth of cross-border trade in the Belt and Road Initiative region. The process of RMB internationalization is accompanied by huge capital outflows. Various enterprises along the Belt and Road Initiative not only have opportunities to obtain RMB financing support in trade with China, but also have opportunities to quickly accumulate RMB assets and to create favorable conditions for further expanding intra-regional trade cooperation. At the central bank level, China has signed bilateral currency swap agreements with many countries along the Belt and Road Initiative. These countries can obtain RMB funds through the backup credit channel and inject them into its own domestic financial market, so that its domestic institutions or enterprises can conveniently borrow RMB to pay for imports from China, thereby facilitating bilateral trade cooperation and development. Besides, the development of the offshore market has facilitated the usage of RMB. At the same time, offshore RMB deposits have expanded in multiple countries under the operation of international banks, creating sufficient overseas RMB liquidity for countries along the Belt and Road Initiative to develop trade with China. It

can be concluded that the internationalization of the RMB has brought about an abundant RMB liquidity, which can promote the development of regional trade.

Secondly, to use RMB as pricing and settlement money can reduce the risk of using a third-party currency like US dollar. The choice of international trade-denominated currency is affected by various factors such as the amount of money supply, the fluctuations of exchange rate, currency transaction costs and interest rate returns. The most important factor is the cost of the currency. The US dollar has remained No. 1 trade currency in the world market for many years. The reasons are various, First of all, the US dollar as a key international currency, masters the pricing power of crude commodities such as crude oil, and thus international trade in dollar-denominated settlement has the advantage of low transaction costs. Besides, the US dollar is a kind of high-quality foreign exchange reserve. The national power of the US is stronger than any other countries in the world, and its economic and political development is stable. In addition, the exchange rate of the US dollar is relatively stable, the value of the currency is firm, the domestic interest rate is relatively high, and the capital gains of holding the US dollar is considerable. Although the US trade share has been declining year by year after 1970s, the US dollar is still the most widely used third-party currency in international trade and continues to remain dominant position in trade pricing.

After financial crisis in 2008, the US dollar exchange rate fluctuated significantly. The Fed's quantitative easing policy has caused the dollar to depreciate continuously, and both sides of international trade using the US dollar as settlement money have to face great risks of exchange rate fluctuation. The US domestic economic stimulus policy leads to the instability of its economic and political situation, and the decline of asset yields means that the US dollars in official foreign exchange reserves or private sector asset allocation

are also at high risk. At this point, it became apparent that the dangers of using a third-party currency as pricing and settlement currency in international trade.

China is an important trading partner of countries along the Belt and Road Initiative. If intra-regional trade is priced and settled in RMB, it can effectively avoid the risk of using a third-party currency. In recent years, the advantage of using the RMB as a trade-denominated currency has become more and more obvious, and it has gained more and more international recognition. The stable market value of the RMB has provided it with good international reputation for its expansion in international market. The expansion of RMB coverage in international market as a denomination and settlement currency can reduce the risk of exchange rates fluctuations of other currencies. The returns on RMB assets remain at a relatively high level. Holding RMB can also achieve considerable asset appreciation. China's growing economic power also provides it with credit guarantee for the RMB. Therefore, more and more companies began to use the RMB for trade pricing and settlement. The results of a survey conducted by Bank of China in the White Paper on RMB Internationalization 2014 show that the coverage of RMB in cross-border transactions by surveyed companies has increased significantly compared with that of 2013. The proportion of international enterprises which have more than 15% of total settlement using RMB reached to 26%, increasing 10% compared with 2013.

Thirdly, Chinese financial institutions can provide financing support with RMB for major construction projects in the Belt and Road Initiative. The construction of the Belt and Road Initiative involves a number of major projects related to the national economy and the people's livelihood, infrastructure construction is the main content among them. These major support projects are the basis for a country to improve its development potential and improve people's living standards, and directly affect the development of the national economy. Major projects have large investment scales and long construction periods. Taking

high-speed rail as an example, it is very difficult to cover the construction cost through fares. However, the construction of high-speed rail helps promote the flow of workforce, capital and technology along the Belt and Road Initiative, which enhances economic and trade ties, and will promote the development of regional science and technology, the increase of cross-border trade and the development of tourism.

The internationalization of the RMB is conducive to promoting the infrastructure construction of the Belt and Road Initiative. China has advantages in infrastructure construction. Through multilateral financial institutions such as the AIIB, the Silk Road Fund, the IMF etc., China is able to provide financing support in terms of RMB bonds, loans and direct investment, so as to extend the experience and achievements of China's infrastructure construction to other countries, enhancing regional economic cooperation and regional economic integration.

At present, the investment in the international financial market is dominated by the US dollar and the euro. Most of the international trade settlement is in US dollar as well. The establishment of the AIIB has supplemented the existing international economic and financial order. It has expanded the international influence of developing countries in Asia, especially China. After the operation of the Asian Infrastructure Investment Bank, it will inevitably strengthen trade in goods and services between China and other countries in Asian, thereby increasing the coverage of the RMB in international trade settlement in the Belt and Road Initiative region and reducing the reliance on the US dollar. The influence of RMB will be significantly enhanced.

5.4 China's choices to promote RMB internationalization

In the theory, it can be concluded that: (1) From the perspective of geography, the process of currency internationalization includes three steps, with peripheralization, regionalization and internationalization respectively. China should also follow this way to promote the process of RMB internationalization. From the perspective of currency function, RMB plays multiple roles in the progress of RMB internationalization, with the settlement currency, the investment currency, and the reserve currency respectively. (2) The main factors affecting currency substitution include exchange rate, interest rate, inflation, national income and so on. (3) The independence of monetary policy and the free capital flow are very necessary for China. Therefore, the floating exchange rate system has become the only viable option for Chinese currency authority. (4) International institutions, such as the International Monetary Fund and the Asian Infrastructure Investment Bank, play an important role in the internationalization of the RMB, which can reduce the cost of communication and consultation between China and other countries, thus promoting monetary cooperation.

Based on the above conclusions, China should take the following measures to accelerate the internationalization of the RMB: (1) To further enlarge cross-border trade with RMB as settlement currency. (2) To promote RMB internationalization with large ODI. (3) To further improve RMB exchange rate system. (4) To further develop China's domestic financial system and financial infrastructure. (5) To be cautious to open capital account and to further develop RMB offshore market.

5.4.1 To further enlarge cross-border trade with RMB as settlement currency

In the past 10 years, the continuous growth of cross-border trade has won wide market recognition for the internationalization of the RMB. With the

development of cross-border trade, China will have more and more initiative in the choice of pricing and settlement currency in cross-border trade. In the trade with the Belt and Road Initiative countries, it is necessary to further consolidate and improve the share of trade with RMB as pricing and settlement currency and expand the scale and coverage of RMB, thereby promoting the internationalization of RMB.

In recent years, China has developed rapidly in the field of e-commerce. China can make full use of the accumulated experience and advantages in e-commerce and logistics and express delivery to promote the development of cross-border e-commerce, and use RMB as pricing and settlement currency in cross-border e-commerce activities. Cross-border e-commerce websites should transform from the current dollar-denominated pricing to the dollar-RMB dual-currency pricing. In the future, it will make the RMB gradually become the main denomination currency in cross-border e-commerce. Domestic third-party payment platforms should seize the opportunity to develop mobile payment applications and provide services based on the cultural traditions and payment habits of countries along the Belt and Road Initiative. The convenient, safe and efficient mobile payment will promote RMB settlement in cross-border e-commerce.

5.4.2 To promote RMB internationalization with large ODI

In the new era of China's economic development, expanding ODI is not only conducive to the development of China's economy, but also to economic globalization and RMB internationalization. For the whole year of 2018, China's ODI reached 129.83 billion US dollar, with an increase of 4.2% year-on-year, ranking third in the world after the United States and Japan (Renminwang, 2019). Due to the large amount, the host country is willing to accept the RMB to some extent. As long as companies actively choose to use the RMB as the

investment currency, it is likely to directly increase the proportion of the RMB in global direct investment.

Most of the countries along the Belt and Road Initiative have weak infrastructure and large construction funding gaps, while China has strong infrastructure construction capacity and relatively abundant capital, and it has sufficient and necessary conditions for foreign investment. China can use its own comparative advantages to reduce the construction cost and exchange rate risk by providing capital, equipment, technology, management and labor force in the infrastructure construction projects that are urgently needed along the Belt and Road Initiative. In addition, through the financial institutions such as the AIIB, the BRICS Development Bank, the Shanghai Cooperation Organization Development Bank and the Silk Road Fund, more private capital will be attracted to invest in the Belt and Road Initiative construction and gradually transform from dollar-RMB dual-currency pricing to RMB-denominated pricing.

5.4.3 To further improve RMB exchange rate system

Stable RMB exchange rate is conducive to promoting the currency substitution of the RMB and undoubtedly is an important guarantee for promoting the internationalization of the RMB.

Firstly, it is necessary to improve the exchange rate formation mechanism and increase the degree of marketization of the RMB exchange rate, making it more flexible and tangible. It is also necessary to expand the range that allows RMB exchange rate fluctuations, enhance the awareness of enterprises in exchange rate risk management, and encourage enterprises and institutions to refer to the RMB exchange rate index.

Secondly, the RMB exchange rate system should be gradually transferred from the managed floating to the free floating, and the method to achieve the exchange rate policy goal should be changed from direct intervention to indirect intervention. Market arbitrage can promote the exchange rate to return to the long-term equilibrium. Therefore, the central bank of China should withdraw the common direct intervention, but still need to prevent a wide range of negative impact on the financial market and the real economy caused by the excessive exchange rate fluctuations .

Finally, it is necessary to adopt a variety of measures to stabilize the RMB exchange rate expectations, strengthen communication with market investors, improve government's credibility and policy effectiveness, and maintain the basic stability of the RMB exchange rate at an equilibrium level through a combination of monetary policies, fiscal policies and income policies. At the same time, when speculative shocks or financial crises occur in the foreign exchange market, the necessary policies should be taken to intervene in the capital and foreign exchange markets to ensure that the RMB exchange rate remain stable. This is an important way to prevent the spread of financial crises and avoid systemic financial risks.

5.4.4 To further develop China's domestic financial system and financial infrastructure

The premise of fully opening up the capital account is a relatively mature and developed financial system. From the domestic perspective, Chinese government should further improve China's domestic financial system and build a multi-level, efficient and diversified capital market as soon as possible, thus providing RMB and trade financing and payment settlement tools for enterprises and investors, and reducing transaction costs and risks.

From an international perspective, it is necessary to further improve and perfect the RMB cross-border payment and settlement system and enhance the convenience and attractiveness of RMB. Chinese central bank should continue to expand bilateral currency swap arrangements with countries along the Belt and Road Initiative, enlarge the RMB offshore market, establish a RMB liquidation mechanism in countries and regions where investment and financing are active, and promote the use of RMB for pricing and settlement in trade and infrastructure investment along the Belt and Road Initiative.

5.4.5 To be cautious to open capital account and to further develop RMB offshore market

In the case that China's domestic financial market is not yet mature, the financial supervision system is still not perfect, and the limited means to deal with cross-border capital shocks, the capital account cannot be opened prematurely. Maintaining proper supervision of the capital account will keep the risk of capital flow shocks within an affordable range, and prevent crisis like the 1998 Asian financial crisis from happening again.

Without fully opening of capital account, it is necessary to further exert the intermediary role of the RMB offshore market. To further enlarge the global RMB offshore market, to actively promote the use of the RMB in multilateral international financial institutions, to reduce the cost of cooperation in the process of RMB internationalization, and to enhance monetary cooperation through international institutions like the AIIB, Silk Road Fund, and International Monetary Fund. These measures will expand the coverage of RMB trading in the world and consolidate the important position of the RMB in the international market. At the same time, it is necessary to develop the RMB international capital market through Hugangtong, and establish the international circulation mechanism of the RMB under the capital account with

Hong Kong as the center.

6 Conclusion

The current status of RMB internationalization can be concluded as follows: (1) The RMB Internationalization Index has increased significantly in just a few years. The internationalization of RMB developed very fast after 2010. Compared with the major international currencies, RMB internationalization index is still at a relatively low level, falling far behind the dollar and the euro, similar to the Japanese Yen and the pound, but the gap is gradually narrowing. (2) Overall, the scale of Chinese cross-border trade with RMB as settlement currency shows a fluctuating trend, mainly affected by international economic development, American economic policies, the inclusion of RMB in SDR, the Belt and Road Initiative and other factors. From the international level the share of cross-border trade using RMB as settlement currency is small but from regional level the share is relatively high for the Belt and Road Initiative countries. (3) Financial transactions with RMB is highly affected by Chinese government policies. The regulations of Chinese currency authority on capital is apparent. RMB exchange rate is another important factor of RMB internationalization. The expectations of RMB depreciation will reduce investors' confidence, which in turn will reduce the coverage of the RMB in the international arena. (4) The inclusion of RMB in SDR is an important milestone in the history of RMB internationalization. Most importantly, this means that the IMF officially confirmed that the RMB is a freely usable currency. This will help strengthen the confidence of RMB in the international market, further leverage the financial trading functions and reserve assets functions of RMB, and promote the internationalization of RMB. Although the RMB internationalization has achieved a certain progress, the scale and share of the RMB as a global foreign exchange reserve is still very low. (5) The reform of the RMB exchange rate system continued to advance, and the RMB exchange rate

index remained stable in recent years.

Chinese government has been committed to promoting the internationalization of RMB since 2009. China has taken many direct measures to promote the internationalization of RMB, including the implementation of Huiyuan to open capital market, the development of RMB offshore market, the establishment of Cross-border Interbank Payment System (CIPS), the reform of RMB exchange rate system, the launch of RMB crude oil futures etc. Besides, the inclusion of RMB in SDR, the Belt and Road Initiative and the establishment of the AIIB are all conducive to further promoting RMB internationalization.

The Belt and Road Initiative, on one hand provides an opportunity for the RMB to be used as a regional settlement currency, on the other hand, will further consolidate the status of the RMB as an international currency. From the perspectives of economic development, economic risks, the development of domestic financial market, trade scale and cross-border consumption, the RMB has a great potential to become a major currency in the Belt and Road Initiative region. Meanwhile, the RMB will play a more important role in China's economic cooperation with countries along the Belt and Road Initiative in promoting cross-border trade, reducing exchange rate risk, providing financing support with RMB for major construction projects in the Belt and Road Initiative and enhancing the integrity of the Belt and Road Initiative region.

Based on the Neoliberal Institutionalism, Currency Substitution Theory and the Ternary Paradox, China should take following measures to accelerate the internationalization of the RMB: (1) To further enlarge cross-border trade with RMB as settlement currency. (2) To promote RMB internationalization with large ODI. (3) To further improve RMB exchange rate system. (4) To further develop China's domestic financial system and financial infrastructure. (5) To

be cautious to open capital account and to further develop RMB offshore market.

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Figure 5.1 China's RMB Internationalization Index from 2010 to 2017

Source: RMB Internationalization Report 2014/2015/2016/2017/2018, International Monetary Institute of RUC

Table 5.2 The comparison between Chinese RMB and main international currencies

Source: RMB Internationalization Report 2018, International Monetary Institute of RUC

Figure 5.3 China's cross-border trade with RMB as settlement currency from 2011 to 2018

Source: China Central Bank, <http://www.pbc.gov.cn/>

Table 5.4 RMB financial transaction data from 2013 to 2017

Source: China Central Bank, <http://www.pbc.gov.cn/>

Table 5.5 The scale of global foreign exchange reserve with RMB in 2016 and 2017

Source: RMB Internationalization Report 2018, International Monetary

Institute of RUC

Figure 5.6 The growth rate of China's cross-border trade with the BRI countries

Source: Belt and Road Portal, <http://www.yidaiyilu.gov.cn/>