Corvinus University of Budapest
Faculty of Economics
World Economics Institute

Analysis of Comparison between the
Internationalization of RMB and Other Currencies

XU XIAOTONG
MA in International Business and Economy
International Economics Analysis Specialization
2017

Thesis Supervisor: Stephan.Wirtz
Acknowledgement

Firstly, I would like to express my sincere gratitude to my thesis supervisor Stephan Wirtz of World Economics at Corvinus University of Budapest, who accepted me and had always tried his best to support and inspire me with his patience, motivation and enthusiasm. Besides, I would like to express my profound appreciation to my parents for providing me with unfailing support throughout my years of study. Last but not least, I also would like to show my gratefulness to my friends who helped me all the time of the research and writing of thesis, especially Steven who always encourages me to go forward.
Abstract
In the recent 30 years, with the sustainable and rapid growth of China's national economy, the RMB has begun to integrate into the world monetary and financial system. In 2016, the RMB officially joined the SDR and became international currency following US dollars and Euro. This paper aims to analyze three important steps of RMB integration, RMB regionalization and eventually RMB internationalization based on theoretical monetary model which includes currency substitution theory, Mundell monetary theory and impossible trinity, and practical analysis of three key currencies. However, it also can’t be neglected that the possible challenging situations that Chinese government will face in the process of RMB internationalization.

Key Words: RMB internationalization, Mundell Monetary theory, Construction of offshore market, Reform of the financial system.
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1. Introduction
   1.1 Research Background

With the disintegration of the Bretton Woods system and the establishment of the Jamaica system, the national credit began to replace the general equivalent such as gold and silver, and the international monetary system has entered the era of credit money. Due to the disconnection between the issuance of the currency and silver and gold with relatively stable value, serious unbalance of the economic development among different regions, in addition with the liberalization of the financial innovation and trade promoted by the development of the electronic information technology, the interest rate and exchange rate of financial market fluctuate frequently, further motivating the international financial capital transnational speculation, and leading to frequent global financial crisis.

Because the issuers of the international currency own the initiative and right of speech when formulating exchange rate policy and currency policy in face of crisis by their right of issuing currency, and the issuer only consider their own interests, so the currency policy of the recipient countries usually is caught in the passive situation of being kidnapped and manipulated. In addition, the currency receiving country also gave birth to a strange phenomenon named “Capital Doubtful Recycling Of Stiglitz” ¹ that the emerging market countries in international capital circulation support developed countries by funds (for example, many East Asian countries hold a large sum of foreign exchange reserves), in which the loss outweighs the gain. The typical case is that the emerging market countries attract surplus capital of the developed countries with high cost and return it back by some low earning forms such as buying United States government bonds and portfolio investment.

After the American financial crisis, the international community began to re-examine the risk of the international monetary system and the necessity of the reform, scholars in some countries began to seriously examine and reflect on the rationality of the international monetary system.

¹Capital Doubtful Recycling of Stiglitz refers to the out-of-pocket Capital Doubtful Recycling that countries with emerging market financially support the developed countries during the international financial cycle. After introduced excess capital from developed countries at relatively high cost, the emerging market returned the borrowed capital in the form of low-yielding loans such as U.S. Treasuries and securities investment.
monetary system in which the dollar is on the dominant position and the necessity of pushing the circulation reform of every country’s currency.

Since 2000, the foreign exchange reserves in China keeps rising significantly from 0.17 trillion dollars to 3.84 trillion dollars in 2014 which reaches the top, and after then it started to decrease to 2.998 trillion dollars in 2017 as is shown in the graph one. Among them, the dollar securities assets account for a large proportion. According to the estimation of World Bank, during 2002 to 2010, the U.S. dollar securities assets held by China accounted for a large proportion of foreign exchange reserves, which is about 74%-80\%\(^2\).

![Foreign Exchange Reserves of China (T$)](chart)

Source: Trading Economics, China Foreign Exchange Rate

In order to maintain the stability of exchange rate with the dollar, the People's Bank of China was forced to increase foreign exchange reserves; in order to reduce the rise in base money caused by the increase in reserves, and thus lead to inflation, the Central Bank of China also implemented monetary sterilization measures to control the increase in liquidity. In fact, sterilization is a kind of short-term monetary policy tools which is used by the Central Bank of China for a long time. In a long run, it will inevitably bring distortion effect on the China's economic development. RMB internationalization, as an effective solution, has been paid more and more attention by

\(^{2}\) international financial research 2011.44-51
the Chinese government's macroeconomic management department. At the same time, the unceasingly increased Chinese comprehensive economic strength creates favorable conditions to achieve the target of RMB internationalization. At present, Chinese is one of the world's largest countries which attract the direct investment of foreign capital, since 2005 it has become the world's second largest importer and exporter, in 2007, it became the world's first gold producer surpassing the South Africa, in 2009, its commodity futures trading scale ranked first in the world, in 2010, it has second largest value of the stock market and in 2011, its GDP surpassed Japan and became the second largest country.

In the global financial market, if a country's currency wants to become an international strong currency, it should depend on the economic strength of the issuing country and the supporting environment of the high openness of the economy.

In order to alleviate China market inflationary pressure and promote the effective circulation between the foreign capital and the mainland economy, in 2011, the central government China expressly authorized Hong Kong as the "RMB offshore center" and issue overseas RMB through the Hong Kong, making the RMB to realize the self circulation by deposits, loans, stocks, bonds and other services. The current policies of RMB offshore center established by China government include: increase the issuance of RMB bonds in Hong Kong, allow qualified foreign institutional investors to purchase domestic stocks, and directly invest in China with RMB (FDI) and so on. In 2012, the national Development and Reform Commission has clearly pointed out in the" 12th Five-Year" plan of constructing Shanghai international financial center that Shanghai will gradually build a cross-border RMB financing, the formation of benchmark price of products, product innovation, asset management and cross-border payment and settlement center, and in 2015 confirmed the Shanghai as the global RMB center. The move means that the RMB capital account will gradually achieve full liberalization and the implementation of RMB internationalization strategy in China represents the general trend. On October 1st, 2016, RMB officially joined the SDRs a basket of currencies and became the world currency after the dollar and the euro, but the actual utilization rate of RMB overseas is still low. In order to improve the level of internationalization of the RMB, China government has taken many measures to promote the marketization of interest rate, exchange rate reform, deepen the reform of the financial system,

3 World Integrated Trade Solution
strengthen financial supervision, and gradually realize the convertibility of capital projects. China proposed to build the Silk Road Economic Belt and the Twenty-First Century Maritime Silk Road, set up strategies such as Asian infrastructure Investment Bank, which also provides favorable conditions and an important guarantee for the internationalization of RMB.

However, on the other hand, RMB internationalization still has huge external resistance, in order to achieve its global military and diplomatic objectives, in recent years, the United States started to launch the "Return to Asia" strategy in the Asia Pacific region, including building a Cross-Pacific Strategic Economic Partnership TPP Agreement with an important objective of preventing the increase of the economic influence of China worldwide. Someone vividly refers this strategic containment measure of the United States as “pen in one hand and sword in the other hand". Therefore, against the background of a increasingly complex geopolitical situation, China government will undoubtedly face a series of important and realistic problems such as how to deal with the frequent fluctuation of exchange rate, how to deal with the global capital flows, how to learn lessons from the development path of international currency status, how to estimate the current situation of the RMB internationalization, how to promote the process of internationalization of the RMB and how to implement effective management on the internationalization of RMB. In order to make the results of their research better adapt to the needs of the new situation and close to the world economic competition and development, this article chooses the development of RMB internationalization and the necessary steps as the research subject and hopes to summarize and analyze the practice of RMB internationalization strategy and the realization path through further exploration on this topic so as to deepen the understanding and thinking about the government Chinese monetary macro management policy.

1.2 Research Objective

This article sees from the national strategic perspective, focuses on the RMB internationalization strategy target, attempts to observe development status of RMB internationalization, analyzes the mechanism and the impact of RMB internationalization, learns the experience and internationalization path of other currencies, thinks about the strategic framework of the currency internationalization which is suitable for China, explores the path and progress of promoting the RMB
internationalization and proposes some ideas about realizing the RMB internationalization. This research focuses on the currency internationalization strategy including RMB and the path, to sum up, the it has following key meanings. First of all, currency internationalization is conducive to easing the pressure of excessive foreign exchange reserves. After the WWⅡ, Germany accumulated a lot of foreign currency reserves during its golden economic growth period, and took them as stabilization fund which was mainly used to adjust the exchange rate of the domestic currency and guaranteed the exporting of the domestic currency by the constant deficit of the capital account. While alleviating the pressure of excessive huge foreign exchange reserves, the supply of the German currency Mark increased greatly in the market, laying solid foundation for the establishment and development of the Euro later. Similarly, for China, because the total amount of foreign exchange reserve is huge, the currency structure of a single, the internationalization of RMB and accelerating the international capital circulation can be a way to solve or alleviate the foreign exchange reserve pressure. Second of all, currency internationalization complies with the objective needs of the diversified reform of the international monetary system. Since the outbreak of the financial crisis started in the United States in 2008, G20 group leaders and central bankers began research the reconstruction and optimization of the international monetary system seriously aiming to build a diversified international monetary system including the RMB and to adapt to the new pattern of the world economy in which the China has become the second largest economy in the world. Now the shortcomings of the international monetary system have been understood by the government macroeconomic management departments in various countries, and after being shocked by many financial and economic crisis, the economy of various countries has suffered serious losses and been affected a lot, so the international monetary system should have diversified characteristics and urgent needs like the international monetary system reform and optimization have become increasingly prominent. The internationalization of RMB complies with the objective needs of the diversified reform of the international monetary system, which can make the RMB and other major international currencies play a more important role in the world economy and financial activities.

Thirdly, currency internationalization is conducive to promote the integration of domestic economy and world economy. Under the background of economic globalization, the internationalization of RMB is conducive to Chinese economy’s integration into the international economy, the further upgrading of the financial market,
and enhancing the international status of China's economy. Fourth, currency internationalization is helpful to promote the reform of monetary policy in China. To implement the strategy of internationalization of the RMB in China can effectively promote the process of China's financial system reform with the internationalization of RMB reform measures and economic impact, such as accelerating market-oriented interest rate reform by the currency internationalization, reforming the capital market supervision and enhancing the efficiency of capital market reaction.

2. Literature Review

So far, a series of problems about the internationalization of currency has always been a hot topic for governments and academia which are committed to research and discussion. This paper will review the situation of the internationalization of foreign currency and Chinese domestic currency internationalization literature respectively in order to summarize the latest research findings on the currency internationalization study and the research track, laying a sufficient theoretical basis for the follow-up research. The study of currency internationalization mainly focuses on the following fields and categories.

2.1 Definition of Currency Internationalization

Currency internationalization refers to a country's currency surpasses its own sovereign geographical restrictions, give its full functions of money or part of the functions to play in the larger international range, and the currency is widely accepted by the international society and has become the main accounting unit of other activities like capital circulation, official reserves, international trade settlement and so on.

The concept of currency internationalization derives from the theory of currency substitution, referring to a large amount of money that is substituted for the local currency outside the issuing country, which was first put forward by Chetty (1969). Academic circles have gradually formed different factions on the study of currency substitution theory. Marc A Miles (1978) put forward the monetary service theory of the production function, focusing on the effects of currency substitution on monetary policy and he pointed out, currency substitution in open economy will lead to the ineffectiveness of monetary policy and the free flow of capital will offset the effect of monetary policy, even the implementation of a floating exchange rate policy can not guarantee the independence monetary policy. During this period, King, Putnam &
Wilford (1977) put forward the portfolio theory of monetary demand, followed by Bordo and Chondhri (1978), Poloz (1986) who put forward the theory of marginal utility of money demand and precautionary demand theory, illustrating the formation mechanism and the degree of currency substitution effect in different angles, however, the interactive relationship between currency substitution and monetary policy is still the focus of attention of every theory. Among them, the researches of Douglas Joines and John H. Rogers have certain representativeness. Douglas Joines (1985) pointed out that if both the local currency and foreign currency are regarded as the monetary income of production services, in an open economy, it will lead to cross-border flows of money and weaken the independence of monetary policies because the opportunity cost of holding a currency changes. The research of John H. Rogers (1990) considered factors like the expectation, the inflation, the size of the state and he proposed that in the floating exchange rate system, the initial stock of foreign currency and the elasticity of the demand of foreign currency are the two key factors of the foreign inflation and domestic transmission. At the same time, under the premise of adopting floating exchange rate, China's economy will be unable to isolate foreign inflation input, thus weaken the independence of monetary policy.

Cohen (1971) subdivides the concept of currency internationalization from the theory of currency substitution, and defines the concept of currency internationalization from the angle of monetary function. Cohen pointed out that currency internationalization is the extension and expansion of its monetary function abroad. When the currency plays its own role outside the issuing country, the currency has begun to have the concept of internationalization. Hartmann (1998) extended based on the conclusions of Cohen and elaborated the concept of currency internationalization from the angle of different functions of the currency such as payment means, storage means, value measure in many fields like the foreign exchange market, international trade and international capital.

2.2 Research on the Conditions of Currency Internationalization

In the time order of the research development, the earliest research on the conditions of currency internationalization came from Grassman (1973). By investigating in the currency of price in trade of Denmark and Sweden, he found that no matter in Denmark or in Sweden, the currency used by the producer is usually taken as the currency of price, and this discovery later is called as Grassman's law. Bergsten
(1975) studied the condition of currency internationalization from two aspects of politics and economy. He pointed out that the prosperity of political power and the support of international cooperation are essential conditions for currency internationalization. In economic terms, currency issuers should have stable economic strength, stable price level, a comparative advantage in the international economic system, and their money should have good independence as well as developed financial market conditions, these all are the internal factor; in addition, external factors are also required, for example the confidence in the currency convertibility and healthy flow rate of currency. Krugman (1980) regards the international currency as the medium currency, and puts forward the condition of the medium money and the inertia concept of the medium currency through the research of the domestic and foreign currency transaction cost. Krugman pointed out that with the increase of trading volume, the currency with decreasing transaction costs will gradually become the media currency and be widely used. Once a country's currency becomes a medium currency, even if the country's commercial position falls, there will be an inertia phenomenon in which the currency is still used as a medium. For the study of Krugman, Rey (2001) established a general equilibrium model for analysis. It is found that the currencies of countries with the greatest openness and the minimum currency exchange cost will become the medium currency. The appearance of medium currency is closely related to the preference of the commodities in the country. If the demand for goods in the country increases, the export will increase, the demand for money will rise, the foreign exchange market trade will become frequent, and the transaction costs will decline.

Matsuyama, Kiyotaki and Matsui (1993) use the search models of money method to study the generation mechanism of media currency. Search models of money is a two country model, assuming that the two countries issue different currencies, the trading is random, the population keeps increasing, the trading rate between two people in same country is quite high and the nominal price is fixed. There are three possible equilibrium results, namely, the local currency without trade, the single medium currency and dual media currency. The research selects among the possible equilibrium results with evolutionary game theory, indicating the openness of the economy plays an important role in realizing the currency internationalization. If the country has more prominent advantages in economic scale (the probability of residents in two countries meeting with each other is higher and the trading is more), single medium currency will appear easier. The degree of economic integration is the main factor determining the
emergence of dual media currency. Tavlas (1997) put forward the research method of the optimum currency area criteria, relating with the factors that will affect the currency internationalization to explain the problem of choosing international currency in national trade and investment. The optimal currency area standard includes the relevant provisions on the degree of trade integration, inflation situation and the financial market development degree of a country. Its standard is intended to prevent the impact of external shocks on the stability of the exchange rate. Tavlas also uses the criteria of the optimal currency area to explain the conditions and reasons why a currency can become an international currency.

Mundell (1961) points out that the factors influencing the internationalization of a country's currency are the stability of monetary policy, the existence of control, the ability of money to cope with the external shocks, the size of the currency circulation or trading area, the political, economic and military status of the currency issuing country. These factors determine people's confidence in the stability of the country's currency, and indirectly affect the process of internationalization of a currency. Cohen (2004) pointed out that although there were many currencies at the top of the monetary system in history, only the dollar can enjoy this honor at present, and it is used in the cross-border trade settlement in most areas. Despite the global financial crisis shook the dollar position on the top of the Pyramid, but scholars like Helleiner, Kirshner (2009), and Eichengreen (2011) never stop discussing its future development. For the impact of currency internationalization, foreign research literature mainly uses cost benefit analysis method, because it is difficult to quantify the analysis and the analysis always is qualitative. From the currency internationalization cost perspective, the earliest analysis derives from the dollar dilemma under Bretton Woods system, and Triffin (1961) at the earliest analyzed the responsibility should be shouldered by the dollar during this time, that is to guarantee the international liquidity, exchanging for gold in official price and maintaining the confidence of other countries on dollar. Bergsten (1975) analyzed a series of political and economic difficulties facing by the dollar as the international currency and put forward the issues about dollar royalty income at the same time.

From the perspective of international monetary income, Aliber (1964) thought that monetary internationalization can finance for the country's balance of payments deficit while increasing the monetary seigniorage income. Although the absolute amount of seigniorage is very big, but compared to the U.S. GDP, it is very small and the cost of
maintaining the international currency position of the issuing country will be very large. Cohen (1971) took the net seigniorage income of pounds between 1965-1969 as an example, verified his inference on the international currency issuing country seigniorage income, and the test results show that the net seigniorage income of the British pound in the international use between 1965 to 1969 is zero. Cohen pointed out that the seigniorage income is related to the currency issuing country monopoly. A complete monopoly will lead to the maximum seigniorage tax. But the competitive international currencies are more, the issuing country will be forced to pay the interest on the debt to attract foreigners to keep holding, and finally loss its net seigniorage tax income under the situation of complete competition and capital free flow. Bergsten (1975) analyzed on the dollar seigniorage income and believed that the seigniorage revenue gained by United States will keep declining with the European monetary market and European bond market development. Currency internationalization has obvious advantages for the improvement of capital project, Menzie Chinn and Jeffre Frankel (2007) believed that the internationalization of a currency will increase its liquidity, and attract national capital to be invested in the currency or in the financial assets priced by the currency. Hartmann (1998) believed that if a country's currency is recognized by other countries people or enterprises, it shows that the currency turns into the international currency. Mundell (1961) thought that when the scope of circulation of the currency is larger than the country itself, it can be regarded as an international currency. From the real situation of existing international currency, a currency becoming as an international currency and raising its level of internationalization can bring great benefits for their issuing country development, therefore, the world's largest economies basically are taking positive efforts to make their legal currency become an international currency. The world's largest economies hope their local currencies to become the international currency because they mainly focus on the large amount of seigniorage tax they can earn if the legal sovereign currency becomes the international currency and the risk caused by the fluctuation of exchange rate can be reduced.

Benjamin J. Cohen(1971) think that the issuing country of the international currency is at the complete monopoly position and it will make it earn a large amount of seigniorage tax, but due to the existence of a variety of international currencies, net income gained by the issuing company will be reduced because of the competition among them. Some scholars think that a country's currency will drive the development of the financial department in the process of internationalization, this is because the
international monetary expansion, the use of domestic and foreign financial services are realized by the finance department and correspondingly increases the earning of the finance department. But the currency internationalization not only has benefits, it also affects the independence of its monetary policy, may increases the disturbance of domestic capital market, increases the cost and difficulty of the supervision of the capital market, and if a sovereign currency becomes an international currency, there still will be the certainty of "Triffin Dilemma". Some scholars believe that the degree of internationalization of the currency is strongly affected by the political power of the state. For example, Posen (2008) illustrated by comparing the dollar and the euro that the strong American political influence will continue to maintain the dominance of the dollar in the world, and it is difficult for the euro to surpass the dollar. R.Mundel expressed his personal views on the internationalization of the RMB in a press conference in 2012, he believed that the need for RMB of the investors in the global market and supply of RMB by Chinese Central Bank all decide whether the RMB can become an international currency and the currency demand and currency supply are the two most important factors ultimately making a currency to become an international currency. At the same time, he also proposed that the currency internationalization has two sides, on one hand, the enormous benefits it can bring to the issuing country are not only the seigniorage tax, but also can provide relatively unlimited liquidity, and the monetary policy can have strong independent operation. On the other hand, currency internationalization will bring the potential burden and risk, for example, the balance of payments deficit, very high debt, and this potential risk cost must be reasonably considered in the process of currency internationalization. Although after a national statutory sovereign currency becomes an international currency, it will bring out the "Triffin Dilemma" phenomenon, but the international currency play an important role in establishing the global monetary system and making it stable. R.Mundell said that in order to make the global monetary system more stable, he is willing to accept RMB as an international currency when he was participating in the "Shanghai Forum", and after repeated financial crisis, the world needs a more stable global monetary system, many

4The Triffin dilemma is the conflict of economic interests that arises between short-term domestic and long-term international objectives for countries whose currencies serve as global reserve currencies.
scholars are actively researching on this issue related to the global monetary system stability. R.Mundell pointed out that considering the Chinese economy occupies an important position in the world economy, if the exchange rate of RMB to the US dollar to the euro is more fixed, the current international monetary system can be more stable.

3. Research Methodology

This paper mainly uses the following research methods: First, it combines the method of theoretical research and empirical analysis. It firstly carries on the analysis to the currency internationalization theory, combining with the theory of currency substitution, the optimal currency area theory, Mundell Fleming model and The Impossible Trinity, pointing out that the process of currency internationalization is a process that replacing the currency. Second, it combines the method of historical analysis and logical analysis. In this paper, the process of internationalization of the dollar, euro and yen, the three major international currencies is combed, and their internationalization path is analyzed. Also the conditions and differences between the three currencies in the process of internationalization are analyzed to summarize the general law of currency internationalization and to refine the experiences and lessons the RMB can learn for its internationalization.

3.1 Theoretical Framework

There are quite a few related theories of currency internationalization from many scholars.

The realization of currency internationalization must be accompanied by the substitution of other currencies, because once a country's currency becomes the world's main credit currency and enters the circulation, it is necessary to play its currency internationalization function. In a country where the economy is highly open to the outside world, the internationalization of a country's currency also faces challenges from monetary policy and the effectiveness of exchange rate policy, how to understand the currency substitution, how to construct the optimal currency area, how to harmonize the relationship between policy and market, and to provide theoretical support is the main research content to be elaborated in this chapter.
3.1.1 Monetary Substitution Theory

The phenomenon of currency substitution first appeared in the metal currency period, the Gresham law\(^5\) is the theoretical basis of the substitution of money in this period, and the full circulation of the different quality currencies in the trading market makes people tend to store the higher quality currency so that more poor currency enters the market circulation, resulting in the phenomenon of bad currency expelling good ones. Later, in the credit-currency period, American economist Chetty V K (March 1969), in the American Economic Review, published the paper titled "On Measuring the nearness of Near money", for the first time to propose a theory of currency substitution, Under the condition of open economy and currency convertibility, the people choose to increase the currency with higher credit and give up the lower credit, which is called the rebellious phenomenon of the Gresham law (good currency expels the bad currency). The motive of currency substitution arises from the need of money, and the theory of money demand put forward by Keynes is attributed to people's trading motives, prevention motives and speculative motives. The currency substitution, which is based on the trade motive and the prevention motive, is mainly influenced by the gross national income and the current situation of the regular project, which is caused by the international trade settlement and the payment of the internationally deferred payment. The monetary substitution which realizes the maximization of assets is mainly based on speculative motives, the interest, the exchange rate and the inflation rate and other factors. On this basis, the meaning of currency substitution can be expressed as multiple currency holders under the premise of a certain amount of wealth, because the currency can be freely convertible, in order to meet the transaction motives, prevention motives, speculative motives and the maximization of assets and other needs, can be exchanged between different currencies, In order to generate various monetary assets structure and total volume change of economic phenomenon.

The phenomenon of currency substitution appeared in the period of credit and currency after the Bretton Woods system. The attitude of the resident currency is derived from the purchasing power of money, and the good currency starts to expel the bad currency. The conversion between Non-monetary financial assets expressed in different currencies is more common than the direct exchange of good money by people.

\(^5\)In economics, Gresham's law is a monetary principle stating that "bad money drives out good". For example, if there are two forms of commodity money in circulation, which are accepted by law as having similar face value, the more valuable commodity will disappear from circulation.
which also belongs to the category of currency substitution. In order to avoid the exchange rate risk, the currency assets are converted into good money assets for the purpose of preservation, so even if the foreign currency cannot be circulated in the country, it is still unable to prevent the emergence of monetary substitution. The phenomenon of currency substitution is one of the most likely circumstances that happens after the capital item is freely convertible, after the emergence of this phenomenon in the internationalization of the RMB, it is generally believed that the stability of the currency should be the primary task, so that it has a certain appeal to curb currency substitution, can be improved by raising the actual rate of domestic financial assets, and tighten monetary policy to regulate. (W. Peng. 2014)

The factors that influence the currency substitution mainly include three factors, such as system, scale and macro-economy. In particular, the institutional factors mainly refer to the difference of transaction costs between countries due to the differences of economic system, exchange rate system and so on, including the convertibility degree of currency, transaction cost and market factor in the foreign exchange market. The monetary doctrine holds that, under the fixed exchange rate regime, the monetary authorities ' use of foreign exchange reserves to stabilize exchange rates will lost monetary policy independence, triggering foreign currency substitution for local currency, and frequent exchange rate fluctuations will also trigger frequent currency substitution. The scale factor mainly refers to the trade motive and the prevention motive, the foreign currency total retained by the trader, when the marginal import and export tendency is invariable, it will increase with the international trade volume, thus causes the currency substitution scale growth, including the national income level, the wealth level, the international trade scale and so on. The macro-economic factor refers to the currency substitution caused by the change of the cost and income of the foreign currency held by the macroscopic environment, including the difference of the real rate of return, the exchange rate, the inflation rate, the political and economic risk. (Marc a Miles 1978)

3.1.2 Mundell Monetary Theory

The theory of optimal currency area (hereinafter referred to as OCA) was presented in a paper published by American economist Mundell in 1961, and the same time, the American economist McKinnon also elaborated on the theory, subsequently, many scholars have enriched the theory of optimal currency area and made it more
systematic. (1961. Robert A. Mundell.) The essence of the theory of optimal currency area lies in the existence of a single or multiple currency, the exchange rate system can be exchanged between various currencies, while the whole space is applied to the external exchange rate system with free floating. The eurozone is an extraordinary practice of optimal monetary theory. The core of the research on OCA theory lies in the condition of the optimal currency area in which a country integrates with the fixed exchange rate system. The choice of a country's exchange rate system is the key to the early research of OCA theory, and the standard of Mundell's production factor liquidity, the standard of economic openness of Mai-jin agriculture and Kennan's product diversification standard are all the basic conditions for establishing the optimal currency area at that time. Later research began to focus on the criteria and conditions of regional monetary integration from the perspective of cost-benefit, and the theoretical basis is still the OCA theory. Specifically, the reference criteria for OCA theory to research in whether the optimal currency area is formed in some countries or regions are as follows:

First, Mundell (1961) considers that the free flow of productive factors, such as labor force and capital, can effectively solve the imbalance of balance of payments caused by demand transfer. Transfer of production elements to areas of high demand, can reduce the trade deficit caused by the decline in exports and avoid balance-of-payments imbalances, but if the liquidity of the factors of production is insufficient to coincide with the convergence of the economic cycles between countries, it will be necessary to maintain macroeconomic stability through the adjustment of exchange rates in order to restore the balance between nations. Second, economic openness refers to the proportion of a country's trade products as Non-trade products. McKinnon (1979) pointed out that the openness of trade reflected the maturity of the currency area, that is, the region should have a wide range of close trade, the region to achieve a fixed exchange rate, to ensure price stability, while the external exchange rate system, to ensure that the price of trade products and real wages linkage. If foreign demand for domestic products falls and there appears trade deficit, floating exchange rate system of devaluation of foreign currencies, it will lead to a general rise in the price of domestic non-trade products, and trigger fluctuations in the overall level of national prices, if at the same time use the administrative directives and other ways to limit the price rise of domestic non-trade products, it will also cause unemployment and demand contraction. From the point of view of the residents, the highly open economy will weaken the effect
of the "Money Illusion"\textsuperscript{6}, the residents will obviously feel the decrease of real income and the increase of consumption, the anticipation of the rising of wages, which leads to the rise of production cost and the advantage of reducing the cost of currency devaluation. Third, integration of financial markets is also one of important factors. The highly developed and tightly linked financial markets and financial transactions were taken by Ingram as another important standard to achieve the best currency area, the above two criteria are mainly around the international balance of payments issues, and capital flows should be the focus of the content. Ingram explains the side effects of exchange rate fluctuation in the region by analyzing the capital flow, and then demonstrates the best choice of the system. Short-term changes in supply and demand relations are a short-term cause of balance-of-payments imbalances in the region, the movement of capital from surplus countries to deficit countries helps to cushion and regulate the real economy, and if it is a structural factor of long-term nature, the imbalance of balance of payments in the region can also be achieved through the flow of capital for the period of economic adjustment, The use of capital inflows to make up for long-term deficits is not a long-term strategy. The highly developed financial integration in the region provides an effective way to regulate the balance of payments in the region, and through the fine adjustment of interest rate, the large-scale movement of capital can avoid the large-scale trade transfer caused by the change of exchange rate, which alleviates the imbalance between the regions. In a certain extent, the adjustment of interest rate reduces the increase of the uncertainty caused by the fluctuation of exchange rate and the increase of transaction cost, so financial integration becomes one of the important standards to realize the fixed exchange rate system in the region and gives full play to the means of interest adjustment. Fourth, Kenen (1969) pointed that the diversity of product production in a country is a necessary condition for frequent exchange rate adjustments. As with investment theory, product diversity guarantees the affordability of a country in the face of systemic risk, while a single country with a simple product structure is often susceptible to risk shocks, while the diversification of production can effectively spread the risk and make the impact of external shocks on the overall economic structure is limited and reduce the likelihood of intervening in the economy through exchange rate adjustment. Fifth, for monetary regional cooperation,

\textsuperscript{6}In economics, money illusion refers to the tendency of people to think of currency in nominal, rather than real, terms. In other words, the numerical/face value (nominal value) of money is mistaken for its purchasing power (real value) at a previous point in the general price level (in the past).
the synchronous economic cycle (synchronization) is an important criterion that can be referenced, which is one of the measures to achieve common currency and adopt a single central bank to formulate a unified monetary policy. Similar economic cycle fluctuations are conducive to partial abandonment by regional cooperation members, or the total abandonment of their monetary and exchange rate policies, the use of common currency, exchange rate policy, to deal with external shocks, reduce the cost of adjustment, and comparability of inflation rates. Fleming (1971) elaborated on the necessary conditions for the implementation of common currency and common monetary policy among the Member States in the optimal currency area, pointing out that achieving similar inflation rates in the region was an important criterion. The difference in inflation rates will lead to differential monetary policy among the different member countries, the need for tighter monetary policy in the high inflation countries, and the need for an expanded monetary policy to stimulate consumption, while the lower-inflation countries are willing to keep the current situation. The different positions of member countries on the Phillips curve have brought about a deviation in monetary policy making, which has an impact on employment and balance of payments. Conversely, if Member States in the region can maintain a similar rate of inflation, it will be relatively easy to ensure that the exchange rate target is stable in the optimal currency area.

Plus both Friedman(1953) and Kawai(1991) have pointed out in their studies that full wage price elasticity can guarantee the rapid restoration of stability and equilibrium within and outside the macro-economy when the economies are exposed to external shocks, and that the Member States of the optimal currency zone give up their independent monetary policies. When the member economies encounter the external shocks, it not only can rely on the liquidity of factors, the flexibility of factor prices can also be adjusted, the higher the price elasticity of wages, the supply and demand of raw materials market can promote the supply and demand of elements to match again faster, thus ensuring the macroeconomic recovery equilibrium, so, the choice of exchange rate regime in this case will no longer have a substantial impact. The similarity of the trade structure is also a criterion in optimal currency area. The Study of Mundell (1961) has pointed out that if the Member States of the optimal currency area have a similar trade structure, that is to say, they are sensitive to the specific risks, assuming that they have a competitive relationship in the market, they need to develop a certain degree of exchange rate cooperation to avoid competition through devaluation. In this way, the
countries with higher trade structure similarity in the region adopt common monetary policy and adopt the standard of fixed exchange rate system. What’s more, it is stressed that policy integration needs to coordinate the currency integration. The best currency area of the member countries must be part of the sovereignty, especially the formulation of monetary policy, in order to achieve the economic and social aspects of the coordination of policies, to ensure that the region's economy functions normally.

### 3.1.3 Mundell-Fleming Model

Mundell-Fleming Model (Mundell-fleming models) were jointly presented by Mundell(Robert A. Mundell) and J. Marcus Fleming (J.marcus Flemins) in the 1960s and is the form of the IS-LM model in an open economy, referred as F-M model. The model expands the analysis of different policy effects under the condition of opening to the outside world, and illustrates the free flow of capital and the influence of different exchange rate regimes on a country's macro economy. The aim is to prove that the "Meade Conflict"\(^7\) under the fixed exchange rate system can be resolved. The model assumes 4 items: the difference of the price is assumed to be unchanged in the short term, the output in the economy is assumed entirely determined by aggregate demand, the currency is neutral, the demand for money is not only related to income, but also is negatively correlated with real interest rates; free flow of capital can eliminate interest rate differentials in any domestic or foreign market. (Fleming, J. Marcus & Mundell 1962) According to the hypothesis, the model can be concluded that, in the absence of capital flows, monetary policy in a fixed exchange rate in the impact and change a country's income in the short term is effective, but in the long term is ineffective while with the floating exchange rate is more effective; in the case of limited capital flows, the overall adjustment structure and policy effect are essentially the same as the absence of capital flows, and in the case of fully convertible capital, monetary policy is completely powerless to affect and change the income of a country in a fixed exchange rate, but it is effective in a floating exchange rate.

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\(^7\)The Meade conflict means that in many cases, the expenditure adjustment policy or the expenditure conversion policy are separately implemented while pursuing the goal of both internal and external equilibrium,which will lead to a conflict between internal and external equilibrium.
3.1.4 Impossible Trinity

The impossible trinity is the monetary and financial theory proposed by American economist Paul Krugman (1980) on the basis of the Mundell-Fleming model. The ternary here refers to the three economic goals of a country, namely, the independent monetary policy, the stability of the exchange rate and the complete flow of capital. Paradox means that the premise is logically deduced to form contradictory conclusions, and vice versa, which can push each other. The overall expression of the three above-mentioned goals is irreconcilable and cannot be achieved simultaneously with the economic phenomenon.

Impossible trinity provides three choices for people to understand monetary theory and policy (See figure 2)

First, if a country is to ensure the independence of its currency and the complete nature of capital flow, it must abandon the stability of the exchange rate and introduce the floating exchange rates system. The reason is that if a country achieves the full flow of capital, it usually refers to the opening of capital projects. The inflow and exit of international funds will cause fluctuations in the income and expenditure situation, if a government uses monetary policy to intervene, it must use the exchange rate change, or be at the expense of exchange rate stability, then the use of floating exchange system is the inevitable result.
Second, if a country is to maintain its own currency independence and exchange rate stability, then the full liquidity of capital cannot be maintained and capital control is inevitable. The reason can be reversed by the above explanation as the government's policy should be effective, and the exchange rate should be stable, of course, it cannot allow the full flow of capital. In the case of keeping the exchange rate, the government's monetary policy can play a role under the existing expectation, excluding the intervention of foreign capital. Under the precondition of capital control, the monetary policy of China's central bank has achieved some control effect in recent years.

Third, if the exchange rate stability and capital flow of a country are to be maintained, the independence of the currency must be waived. Because when the international capital flows completely, in the condition that the exchange rate system is invariable, any change of the domestic monetary policy will trigger the corresponding capital flow, and will also offset the expected effect of the monetary policy, therefore, the monetary policy at this time does not work. (Mundell&Fleming 1961)

According to the theory impossible trinity, the independence of monetary policy in the process of RMB internationalization has become a concern. The monetary policy tool has been an important and effective tool in the main mode of macro-control in China at the present stage. The free flow of capital is a problem that must be solved, but the exchange rate liberalization is easy to become the target of international idle money attack. The logic has formed a dilemma. Although the theory of ternary paradox is correct, its hypothetical model is highly abstract and extreme, requires the exchange rate to float completely, the monetary policy is completely independent, and the capital can flow freely. A complete capital project from a capital project does not mean that all 11 categories are fully convertible. If the capital project is not fully liberalized, it can get monetary policy and the incomplete exchange rate stability, China can still grasp the monetary policy and exchange rate system to some extent.

4. The Process of Internationalization of US Dollar, Euro and Yen

The internationalization of major international currencies in the world the national legal sovereign currency include the pound, the dollar, the euro, the Japanese yen and so on, the ways of the sovereign currency becoming the international currency are different. Britain, mainly through the Industrial Revolution, the expansion of overseas trade and other strategies, became the world's empire, the corresponding legal sovereign currency sterling also accompanied by the national globalization into a global trade hard currency,
and became a world currency naturally. Britain has lost its position as the world's largest economic power, surpassing America as the world's leading economic power, and Japan and the European Union have been one of the world's most developed economies for a long time. This chapter introduces the U.S. dollar in terms of economic development (money supply) and financial development (monetary demand) and how the Japanese yen and the euro became the major international currencies, and it is of great significance to study the internationalization course of the sovereign currency for internationalization of the sovereign legal currency—the Chinese RMB of China which is an economic power in the world.

4.1 The Internationalization of the US Dollar

The process of dollar being an international currency has its historical contingency and its inevitability of development, we analyze how to promote the internationalization of the U.S. dollar from two aspects of the development of finance and economy. In terms of economic development, since the United States achieved independence from other country's colony and turned to economic development to the second half of nineteenth century, the United States has become the world's first industrial power in 1900 by successful industrialization process, with its economy aggregate surpassing the Britain and becoming the first economy power in the world. In 1913, the United States became the world's largest exporter. Before the first World War, the economy aggregate of United States was 2.3 times as large as that of the United Kingdom. During the Second World War, the American economy has not been destructed by the war, and the United States accelerated the entrance of the dollar into the European market and was constantly blowing on the British pound by arms trade and material assistance, meanwhile the United States also had 3/4 of the world's gold reserves. During the global economic crisis in 1929, the British economy was more stubborn, unable to maintain the gold standard while the United States implemented the "Roosevelt New Deal", making it quickly get rid of the crisis and further increased the gold reserves. (DA Irwin.2012) The United States has become stronger in economy, and with the most reserves of gold, it has begun to lead the new pattern of the global economy. In 1940s, White planned and established the "Bretton Woods System", providing institutional guarantee for the internationalization of US dollar, and it became more conducive to the global trade of the United States, which led to more dollars entered into overseas
markets. In 1947, American implemented the "Marshall plan" to aid Western Europe, which strengthened the American influence on the European economy, and by the way of economic assistance, the dollar entered the European market, the implementation of the Marshall plan also made European pro American countries quickly recovered from the damage caused by the war, and these countries gained the ability to have international trade with the United States, thus promoting the flow of dollars to Europe. In 1950, when the Korean War broke out, the United States increased its military aid to its allies and made its dollar rapidly enter the allies. This series of measures could increase the liquidity of the US dollar in the overseas market. In August 1971, the Nixon administration announced that the dollar was directly linked to the value of gold, which made the issue of the dollar no longer limited by the gold reserve, and it was more conducive to the expansion of the dollar. In February 1973, with the further depreciation of the dollar, it was unable to support the fixed exchange rate, and the Bretton Woods system came to an end. (Bergsten, C. 1975) The world began to seek a new economic and financial system. The three oil crisis increased the international oil price, on the surface, it is not conducive to the development of the petroleum users, and it caused the decline in economic growth, increased the production costs, and caused stагflation and affected the living standards of the people as well. But the rise in oil prices absorbed the dollar circulating outside the United States, and would not cause the flood of dollars, while the essence is to absorb excess dollars by petroleum and increase the demand of the dollar liquidity to maintain the position of the dollar in international trade of bulk commodity as well as its large circulation in global trade. In January 1976, the global economic and financial system "Jamaica system" was born and it no longer supports a single fixed exchange rate system, promotes the floating exchange rate. Because the dollar is a hard currency and the value of the currency is relatively stable, other countries more chose the dollar to be a reserve currency to avoid the risks brought by the floating exchange rate, which undoubtedly increased the demand for dollars of other countries. This system also has the effect of weakening gold and strengthening the dollar, making the dollar play a more important role in the international economic, trade and financial development. The US dollar's status has been further improved, and more imports of agricultural and sideline products and mineral resources from other countries have been promoted. Although the current account is in a deficit position, a large amount of dollars has been injected into the global market, which has improved the utilization of the US dollar in the world. At the same time, because of America's
technological strength, overseas U.S. dollars make partial dollars go back to home by importing electronic and technological products such as automobile, computer, and etc. to further promote the economic development. 1990s mainly was the era of the Clinton administration, and the revolution of information technology has further improved US economy, bringing the golden age of American economic development when the fiscal deficit reduction even turned into surplus until 1998 and the unemployment rate and inflation rate decreased while the economy grew. This period strengthened the U.S. economic hegemony in the world, and as a powerful economy in the world, the United States naturally was followed and admired by other countries, so the dollar reserves increased in the world and the dollar’s international currency status was further strengthened. At the same time, the free trade areas of United States and other countries or regions have played a positive role in improving the economic strength of the United States, expanding the economic influence of the United States and strengthening the international dominance of the dollar. At the beginning of 21st Century, the global economy continued to fluctuate, and the American economy was seriously affected by the subprime crisis, but the U.S. government adopted quantitative easing (QE) policy, making the U.S. economy exited out of crisis quickly and the economy aggregate of U.S maintained the first in the world. The "Euro Debt Crisis" made the euro cannot challenge global economic hegemony of the dollar, and in the future for a long period of time, the dollar will still be the world's largest official foreign exchange reserve currency.

In financial development, the United States facilitated the return of dollar by developed financial system, increase the incentive for holding dollar in the world, and build a strong financial system and supervision mechanism step by step to serve the internationalization of the dollar. First of all, Wall Street has developed step by step in the financial market and become a synonym of the financial industry in the United States and even the world. Then, the Dow Jones index was established and became a barometer of economic development and vitality of the United States. From the mid 1950s to the early 1970s, the Dow Jones industrial index continued to rise and the U.S. financial system has been further developed and improved. In the early twentieth Century, the United States set up an organization which has far-reaching impact on the United States, namely the Federal Reserve System, referred to as the Federal Reserve, and many famous chairmen appeared in the Federal Reserve such as Rue Greenspan, who have made important contributions to the development of the U.S. financial reform.
The introduction of the Glass Steiger Act marked the rise of the Federal Reserve and the establishment of the deposit insurance system. (Friedman, 1963) The promulgation of programs related to securities and the establishment of the Securities Exchange Commission are conducive to the development of securities market and the regulation of the securities market transactions norms. In order to avoid the recurrence of systemic financial crisis, ensure financial stability and promote the safety of the financial system, the Obama administration announced a comprehensive financial regulatory reform, hoping to restore the global financial system of the United States, while the issue of the financial regulatory reform bill has made substantial breakthroughs. There will be different problems happened in United States economic and financial system with the development of the times, but the economic scholars and the governments of the United States can find problems and reform and modify them in time, thus making it more adapt to the new situation. The reform and development of the U.S. economic and financial system are of great significance to the dollar to maintain the world's strong currency. We can also see that the continuous development and improvement process of the U.S. economic and financial system is also the process of the continuous internationalization of the dollar.

4.2 The Process of the Internationalization of Yen

There is not only chance but also inevitability for yen to become a world currency in a very short period of time, we can analyze the internationalization process of yen from two aspects the financial development and economic development, hoping to get some inspiration to further promoting the internationalization of the RMB. After the surrender, Japan started to focus on the development of the national economy, established Economic Stability Ministry and formulated a series of economic reform policies, while the United States also issued supportive policies for the Japanese economy and even the abolished all Japanese reparations, so the Japanese economy entered a recovery state in a relatively short period of time. During the Korean War, Japan is an important main base as well as the source of a variety of products for the United Nations military action, and Japan became a rear supply base of the U.S. military and “special need for North Korea” became the cardiac for the Japan's economic development. By buying a large number of Japanese military materials, a large number of orders rescued Japanese enterprises (represented by TOYOTA), a large number of foreign exchange inflows into Japan, increased the dollar foreign exchange reserves in
Japan, which solved the problem of Japan's foreign exchange shortage after the war. In 1968, Japan became the world's second largest economy (if the Soviet Union was considered, Japan was the third). Japan implemented “Establish Country by Science and Technology” and "Establish Country by High-technology" Strategies(Kenichi,2006), so Japan was in a leading position of science and technology, especially in high-tech field, and Japan paid more attention to converting the domestic and foreign advanced scientific and technological achievements into industrial production, which led to a series of high-tech, high value-added products being produced and exported, bringing huge profits for Japan, greatly promoting the economic development of Japan and increasing the Japan's GDP. From 1974 to 1991, the Japanese economy has entered a "moderate increasing rate" period and Japan included the education in national policy. Since the Plaza Agreement signed in 1985, Japan's economy has undergone a structural adjustment, transformation and upgrading, which has laid a good foundation for the healthy economic operation in the future.(Kenichi,2006)From the perspective of financial development, the paper analyzes how Japan promotes the internationalization of the yen. And through the internationalization process of the dollar, we can see that for a country's currency becoming an international currency, it must have a stable financial system and a sound financial supervision system. Of course there is no exception for yen to be an internationalization currency. Japan began to pledge free convertibility of the yen in 1964. As the United States announced the decoupling of the dollar and gold, the Japanese government declared that the yen began to float in 1971, which was the starting of the appreciation of the yen. In December 1980, Japan changed the foreign exchange law. Before that, Japan prohibited the capital transactions, but since then Japan allowed free trade on the basis of certain principles of the foreign exchange, not only making the exchange of yen without any barrier, but also allowing the residents to provide yen loans according to their willingness. The Japanese yen realized the convertibility of the current account, and the Japanese capital project gradually change from the limited exchange to loosen the limitation, so that the yen could move to the overseas from the capital project channel, and the capital flow was liberalized. In early 1980s, the Japanese government report mentioned that the raising of problems related to the financial reform and the internationalization of the yen means that the Japanese government sincerely started to act regarding the internationalization of the yen by political measures. The late 1980s was an important period of Japan's financial development. During this period, a series of events affecting the
internationalization of the yen step by step were taken place. Japan has set up a bond futures market, a bank acceptance market and allowed eligible organizations to issue European yen bonds. The famous Plaza Hotel incident happened in the history forced the appreciation of the yen, from that on, Japan has accelerated the pace of financial reform, began to issue bonds, established Japan's offshore financial market and the commercial paper market, created Tokyo offshore financial market, opened up overseas financial market, canceled the foreign capital outflow restriction, at the same time, a series of measures such as increasing the quota of foreign capital inflows further improved the degree of internationalization of the yen. At the end of the twentieth Century, Japan intended to carry out a thorough financial reform, and adopted various policies and measures to promote financial reform, such as the reamendment of the foreign exchange act, which clearing out the obstacles for the flow of domestic and international capital in the world. From the above analysis of economic development and financial development in the process of internationalization of the yen, we can see that the Japanese government played an important role to in improving the economic development, financial development and the internationalization of Japanese yen.

4.3 The Process of the Internationalization of the Euro

To understand the internationalization of the euro, we must first understand the process of the appearance of European Union and the euro. After the emergence of the European Union and the euro, the euro naturally played the role of international currency. After the Second World War, the Western European countries recovered quickly from the destruction of the war by the aid of the United States, specially the Marshall aid plan in the aspects of the economy, society, people's livelihood and so on. In 1950s, six European countries signed community treaties of coal, steel and other aspects, which created conditions for the establishment of the European Economic Community. The establishment of the European Economic Community marked a crucial step in the integration of trade freedom. The economic development of the European economic community has gradually realized the liberalization of the trade inside the Europe, the free flow of elements and the unification of the market. In 1969, the idea of establishing the European Monetary Union was first proposed, and related countries were preparing for realizing this idea. After many years of hard negotiations
with the parties, finally in 1971, "Werner plan" was passed and in 1979, the European Monetary System was set up. Obviously, these achievements have accelerated the speed of integration of European currencies. In February 1986, the European Economic Community signed the relevant documents, setting forth the goal of establishing a unified market by no later than the beginning of 1993. Moreover, the EC member states proposed that the economic and monetary union of Europe should be realized step by step from three stages. First of all, complete freedom of capital flow within the EC. Then, set up a European Monetary Bureau whose functions are similar to the "Central Bank" in the European Community. Finally, replace the currency issued by member states with a single currency among EC members, that means to establish and implement a financial and currency community. In 1992, the EC agreed on the "Maastricht Treaty" concerning economic, monetary and political alliances, which laid an important foundation for the establishment of the European Union. With the establishment of the European Central Bank in 1998 and with the joint efforts of the member States of the European Union, the euro has finally been officially established as the unifying currency of the European Union. In 1997, as the EU signed a series of documents on the use of the euro, it strongly promoted the actual circulation of the euro in all EU countries. By January 1, 1999, the official launch of the euro marked the official use of the euro by the EU member states since then. This event marked a milestone in the development history of the euro and the EU. With the EU's strong economic and trading position in the world, the euro has become a strong international currency. Since January 1, 2002, the euro was officially circulated in the markets of the euro member countries. The economic development of EU countries, especially Germany and France, is escorting the internationalization of the Euro.

For the EU's financial development, EU countries have a strong and mature financial system market, having an important significance for the euro to enter into the world. The financial markets and financial supervision in EU countries are well developed. There are many international financial cities such as Berlin, Paris, Zurich and other capital cities with shipping capital markets and monetary markets. There are

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8The Werner project was launched by the Luxembourg Prime Minister, Pierre Werner in the late 1960s to promote the European monetary integration initiative when there was a crisis with the dollar-centric world monetary system.
many world famous banks such as Deutsche Bank AG, the Germany's largest bank and the central bank in France- the Bank of France. Later, the Bank of France became one of the most important institutions in France and even in the European Union, Sweden has a well-developed financial sector and became the world's largest financial center. The European Central Bank, officially established in 1998, is headquartered in Frankfurt, Germany, and is assimilated as the world's leading International Monetary Fund, and the world's Silver Smart headquarters is also located in the EU. The EU financial capital system cannot be simply regarded as an integration the European Union finance institutions, but should be as a whole to form the capital system network of the European Union countries, and the EU implementing a unified monetary policy is conducive to the continuity of the EU internal monetary policy and to promote the stable development of capital market. In short, the EU's strong economic strength and a strong and stable financial system ensure the euro to enter the global market, as one of the important international currency.

4.4 Similarities and Differences in the Internationalization of the Three Currencies

In this chapter, I will analyze the similarities and differences among USD, Euro and Japanese Yen to find some evidences to support my research of internationalization of RMB. First, I will investigate the similarities from four points of view: strong economy, currency stabilization, loose financial market and cautious attitudes from Central Bank to currency internationalization.

4.4.1 Similarities

First, there are strong economic strength behind the currency as the base and support. The proportion of a country's economy and total trade volume in the world can be regarded as an important index for us to examine its economic strength. If the country's economic strength is strong, it can provide more conditions and supports for the trade calculated by the local currency, and also can resist more economic shocks, as well as symbolizes its large capacity of the capital market. The national economic capacity is closely related to the international status of its own currency. Historically, the rise of the dollar was based on the strengthening of its own national economic strength. After World War II, the dollar also rose gradually, the United States became a leader in international trade, the new International monetary system was established, and the dollar became the core currency. In the the 1990s, the world's three largest
economies were the United States, Germany and Japan, the corresponding currency also became the main international currency. After the appearance of the euro, because the EU's economic strength and the United States do not have much gap, so from the economic strength and economic size, the eurozone is currently the only one in the world can contend with the United States economy, that is to say that the euro has the ability to fight against the dollar. With the rapid development of in 1950s and the flying development in 1960s, Japan became the second largest economic power in the West in the 1970s. According to relevant statistics, Japan's GDP in 1980 amounted to $1 trillion dollar, 10% of the world's GDP, equivalent to half of that of the U.S.. In the 1982, Japan's gross domestic product accounted for more than 10% of the world's total GDP, ranking third in the world. In 1980, in terms of export trade, Japan's amount exceeded $130 billion, which accounted for 7.4% of the world's total exports, accounting for 65% of the U.S. export level.  

In 1982, Japan's International trade volume ranked third in the world. In the same period, Japan's central financial institutions launched a low-interest policy, resulting in a large outflow of excess capital, so the export volume increased rapidly. On the other hand, the international status of the yen has been greatly promoted by its economic growth. Since the 1990s, compared with developed countries, Japan has the lowest inflation rate, and in 1993, Japan's total exports accounted for 10% of total world exports, while the United States occupied 12.7%, the European Union occupied 36%, and Japan was ranked as the third largest trading country in the world. 

The gradual realization of the internationalization of the Japanese yen is closely related to the improvement of the balance of payments. From 1983 to 1989, Japan was the internationally renowned supplier of capital. Since 1986, the issuance of yen bonds has risen sharply, ranking the United States as the world's second-largest issuer of bonds. The yen as an international currency, had a rapid rise in the trend regarding the proportion of foreign trade payments, its proportion in foreign exchange transactions has also been raised, and for a long time, the United States dollar ranked first in international trade settlement while the Japanese yen ranked second. Therefore, the author thinks that we should not only focus on the current economic ability when investigating the relationship between the national economic ability and the

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9CountryEconomy
10World Integrated Trade Solution
11International Monetary Fund
international status of currency, but also analyze the future development trend. Capacity is crucial to the fast-growing currency, especially the decision-making and institutional design of the country in the transition period, which will directly determine the basis of the future currency internationalization.

Second, the currency holding country maintained the long-term stable currency situation. In general, the current and future value of an international currency should be highly stable. Because only a currency with a stable currency can be evaluated by people stably, and people can create sufficient confidence and good expectations in its circulation of international financial market, and thus greatly enhancing the stability and sustainability of international business cooperation. In the international financial market, the use of currency with good stability for payment and settlement can reduce the exchange costs and save time. In the course of choosing which currency to settle, the import and export merchant's focus a lot on the stability of currency, the commodity with unstable currency value increases the risk of the merchant's accounting cost and profit, and may lead to more hedging cost. Currency instability is characterized by higher rates of inflation or changes in inflation, which make it difficult to play the role and function of the international currency. From the historical data, since the implementation of the floating exchange rate system in the 1970s, the United States, Germany, Japan and other countries had better control of the level of inflation, had less stimulation on the society and economy, among them, Germany and Japan's performed particularly outstanding. Third, these countries have relatively high levels of openness in their respective financial markets

The currency issuer with deep financial market is an important precondition for its currency internationalization. The reason is that developed financial markets can increase the international community's strong demand for their own currencies, and developed financial markets have a large number of market participants and trading volumes which can effectively reduce the cost of financial transactions. On the other hand, whether the financial market is developed, determines whether the national central bank and foreign investors will be able to obtain more low-cost, liquid and reliable financial instruments, which is in favor of importers and exporters regarding foreign exchange risk control and management. The establishment of the three major financial centres, such as New York, London and Tokyo, provides an unobstructed channel for the circulation of three of international currencies. The openness of a country's financial markets affects the confidence of foreign residents and groups who
hold the country's currency, and a highly open financial market can ensure that its currency has more function and status in the global financial and trade markets.

Fourth, the central bank has a cautious attitude towards currency internationalization. How fast and effective the internationalization process of a country's currency will also be affected by the attitude of the central Bank of the country, considering the possible advantages and disadvantages of the internationalization of the national currency, taking the measures to stabilize inflation and establishing and implementing the monetary policy are the central bank's job. The Bank of Japan had argued that if foreign individuals were able to buy their own assets, it would result in large inflows of capital into the country, allowing the currency to appreciate, and the appreciation of the currency would weaken the competitiveness of domestic products in the international market. In response, Japan has been cautious about the internationalisation of the yen in the last 60 years. In order to ensure the effectiveness of monetary policy, the ECB will also consider the issue of currency internationalization, and the former ECB president Duissenberg has pointed out that the ultimate goal of the European Monetary Union is not to promote the internationalization of the euro but to further deepen the economic integration process in eurozone. The ECB's mission and aim are to ensure the stability of eurozone prices, and whether the euro needs to be internationalized, and the central bank's attitude remains neutral and relies entirely on the market to control and guide. The independence of monetary policy is the precondition of stabilizing the domestic economy, but based on the ternary paradox, the internationalization of currency will seriously weaken this independence, limit the ability of policy intervention, and central banks with a cautious attitude has become the same thing in the internationalization process of the dollar, yen and the euro.

4.4.2 Differences

Although the U.S. dollar, the euro and the yen have the same basis of strong national economic strength behind them, their specific path to internationalization is different. Among them, the internationalization of the U.S. dollar has a unique background. The U.S. dollar has risen in the period when the world economy and the political power are unbalanced. The internationalization of the Euro is the product of the regional political and economic union. The internationalization of the Yen is the result of the state's seeking international status and economic strength. After World War II, the United States has become the world's largest country with the ability to dominate the
international economic and political situation. The international rules and international institutions have always reflected the interest of the United States. It has the privileges that other countries do not have. The background of the internationalization of the euro is rather special because individual countries in the European region, both in terms of their land area and the total population are small. Most countries have more average strength. No single country can independently control the economic and political situation in Europe. For the sake of regional, common internal economic interests, political stability, and their own economic ability, the European countries have chosen to rely on common systems and constraints to bring together the power of individual organizations to reduce internal consumption, to achieve the overall level of rise in economy, policy and international influence. The internationalization of the euro can provide valuable experience for the process of internationalization of currencies prevailing in the rest of economic unions in the world. The internationalization of the yen takes place in the process of the collapse of the old international order and the formation of a new international order. By relying on the continuous improvement of the economy and by reforming the domestic financial markets and securities markets, it was promoted by the pursuit of a higher level of economy and financial interest. As a small country in natural resources, Japan is a big country in terms of economic strength. Its open development strategy and its wide praise by international capital countries have created a favorable environment and status in the international economic system. With the continuous improvement of the level of foreign trade and investment by Japanese enterprises, the level of internationalization of Japanese financial markets has also been raised. Japan has long tended to adopt prudent fiscal and monetary policies. Surplus in the balance of payments can emerge in most years. Adequate foreign exchange reserves are the strong backing for the development of the yen and its international status has been raised. The role of the system in the international finance is also growing.

The 1970s saw a substantial increase in the international payment ability of the Japanese yen and was a period of dollar decline. Japan used this opportunity to speed up the overall reform of its financial system, deepen the liberalization of financial markets, so the internationalization of the yen will happen naturally. In a nutshell, the path of internationalization of the euro is suitable for the regional economic association to promote the internationalization of the currency in the region; the internationalization of the yen is suitable for the internationalization of the currency of the sovereign countries; while because the internationalization of the dollar is too special in terms of the
background, it can’t be a reference for the RMB internationalization process. In addition, the difference between the economic development is obvious. The position of a country's currency in international economic and financial markets is influenced by the size of its economy and the size of its trade, and Japan was lagging behind US and EU in both economic and trade size, and it has huge trade surplus. The following table shows the economic and trade size of three economies from 2006 to 2009.

Table 3: The comparison of economic and trade size among US, EU and Japan from 2006 to 2009 (Unit: Billion USD)

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>US</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP</td>
<td>13366.2</td>
<td>13996.0</td>
<td>14296.9</td>
<td>14043.9</td>
</tr>
<tr>
<td>Export</td>
<td>1037.0</td>
<td>1162.5</td>
<td>1299.9</td>
<td>1056.7</td>
</tr>
<tr>
<td>Import</td>
<td>1919.0</td>
<td>2017.1</td>
<td>2164.8</td>
<td>1801.9</td>
</tr>
<tr>
<td>Current Account</td>
<td>-882.0</td>
<td>-854.6</td>
<td>-864.9</td>
<td>-545.2</td>
</tr>
<tr>
<td><strong>EU(27)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP</td>
<td>14362.3</td>
<td>15275.6</td>
<td>16014.6</td>
<td>15645.1</td>
</tr>
<tr>
<td>Export</td>
<td>1441.8</td>
<td>1703.1</td>
<td>1929.3</td>
<td>1527.4</td>
</tr>
<tr>
<td>Import</td>
<td>1671.9</td>
<td>1966.6</td>
<td>2287.7</td>
<td>1670.9</td>
</tr>
<tr>
<td>Current Account</td>
<td>-230.1</td>
<td>-263.5</td>
<td>-358.4</td>
<td>-143.5</td>
</tr>
<tr>
<td><strong>Japan</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP</td>
<td>4014.1</td>
<td>4290.2</td>
<td>4318.6</td>
<td>4082.6</td>
</tr>
<tr>
<td>Export</td>
<td>646.7</td>
<td>714.3</td>
<td>761.4</td>
<td>560.7</td>
</tr>
<tr>
<td>Import</td>
<td>579.1</td>
<td>622.2</td>
<td>762.5</td>
<td>552.0</td>
</tr>
<tr>
<td>Current Account</td>
<td>67.7</td>
<td>92.1</td>
<td>18.9</td>
<td>28.7</td>
</tr>
</tbody>
</table>

Source: OECD Factbook Statistics, 2011

I believe it can be measured by the country's GDP as a percentage of the world's total GDP and its percentage of world trade in total foreign trade. In 2009, the EU's GDP accounted for 38.9% of the world's GDP, reaching 15.6 trillion U.S. dollars, while the U.S. accounted for 34.9% and Japan 10.1%. The EU's foreign trade totaled 3.2 trillion U.S. dollars, which is 12.8% of the world average, the United States accounted for 10.7%, and Japan accounted for 4.5%. It can be learned from the economies scale and trade size, Japan has certain disadvantages compared to the United States and the EU. On the other hand, Japan is lagging behind the United States and the EU in opening up its domestic market. The United States is the largest import market in the world, and each year there is a large number of trade deficit, a large number of the dollar thus

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World Bank
inflows into the international market while the yen is used for foreign payments, and soon goes back Japan through other channels. In 1986, Tokyo's offshore financial market was formed. With the promotion and leadership of Japan, the integration of Asian financial markets has been deepened. During this time period, a large amount of short-term Japanese yen funds flowed to Hong Kong and Singapore. However, there was no evidence that a huge amount of capital flowed to other Asian countries or regions. There are indications that the Japanese yen funds did not participate in corporate trade and investment activities in Asia, the flow of the yen in other parts of Asia also failed to provide more help to deepen the internationalization of the yen. On the other hand, since the 90s of the 20th century, Japan's economic downturn has shown a decline in its external advantages. Since the 1990s, the process of internationalization of the yen has basically stopped because of the decline of its own economy and the decline of its international competitiveness.  

Their financial market maturity varies to some degree. From the perspective of financial markets, Japan's industrial economy and the hollow of the monetary and financial industry have become more and more obvious. Whether from the scale of financial markets and the liquidity of capital, or from the reliability of financial markets, it lags far behind the United States and Europe. As an international currency, a country's currency has a dual role, which requires that the domestic financial market is highly developed and has a certain depth and breadth. The depth here mainly refers to the market with a multi-level network structure to meet the diversified investment needs of domestic and foreign investors. Breadth refers to the market range. A wide range of markets can accommodate more capital flows. Financial innovation capability is strong and the degree of liberalization in financial markets is high as well as the transaction costs can be effectively controlled. A financial market with such characteristics as mentioned above should be able to promote the confidence of foreign residents who hold such currency and use such currency in such financial markets for investment and foreign trade settlement so as to strengthen the status and role of the currency in the international financial market. After Japan's economic bubble burst, the hollowing out of the financial market in Tokyo was very obvious, naturally losing the characteristics of large scale, high liquidity and stability. The securities and foreign exchange markets were the core business of Tokyo's financial markets. In 1985, the Five Western

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13 Report of Japan Bank
Countries proposed the "Plaza Agreement,"14 with the intention of appreciating the value of the Japanese Yen and creating the overcapitalization of Japanese yen in Japan. During this period, the Japanese government adopted a proactive fiscal policy to over-reach the interest rate level, resulting in the stock market and real estate absorbed a lot of money, and the stock prices was skyrocketing. The rapid development of the securities market also contributed to the Tokyo foreign exchange market. After London and New York, Tokyo became the third largest international financial center in the world. However, after Japan's economic bubble burst, the Japanese stock market began to enter a sustained bear market phase. At the same time, some institutional shortcomings in the Tokyo stock market gradually emerged. For example, the listing standards of enterprises are excessively stringent. In addition, the transaction tax that investors need to pay for buying and selling stocks is too harsh. (Kazuo, 1996) Under the influence of these factors, Japan's stock, futures and foreign exchange transactions began to run away from their country. The trend of hollowing of the Japanese financial market is obvious. Due to the excessively high transaction tax in the foreign exchange futures market, there is no advantage compared to the Singapore-free transaction tax, resulting in a large inflow of futures into Singapore. The phenomenon of financial hollowing was worsening in Japan's Tokyo market, and in response to this situation, Japan implemented the financial reform in 1998. So far, the Japanese financial market has ushered in a crucial period of transition in the wave of reforms. However, subject to high reform cost, large difficulty and other factors, the progress of reform was relatively slow, and it can be expected that Japan's financial market will take a long time before it is possible to break the hollowing situation. Before the end of the Cold War, Japan's offshore financial market in Tokyo witnessed rapid development, the foreign exchange market expanded healthily, and Tokyo's position in the international financial market improved rapidly. The reason why it can not catch up with London and New York is still a problem of capital liberalization and the financial institutions can not fully and freely start operations in the financial market in Tokyo. On the other hand, most of Japan's short-term government securities

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14 The Plaza Agreement was an agreement between the governments of France, West Germany, Japan, the United States, and the United Kingdom, to depreciate the U.S. dollar in relation to the Japanese yen and German Deutsche Mark by intervening in currency markets. The five governments signed the accord on September 22, 1985 at the Plaza Hotel in New York City.
are held by governments and banks, with few foreign investors holding it. In stark contrast, a number of government securities issued by the U.S. Treasury Department are widely held by foreign investors. It is the emergence of such a situation that led the dollar to quickly become an international currency. From this we can see that an effective financial market is an important basis for the internationalization of the currency, and an effective and safe financial market can attract more foreign capital to flow into the country.

4.5 Experiences and Inspirations of Internationalization of US Dollar, Yen and Euro

4.5.1 The Practical Experience the Internationalization of US Dollar

Dollarization refers specifically to the situation where other countries outside the United States regard the U.S. dollar as the main currency or formulate monetary policy around the U.S. dollar. The state renounces its currency autonomy and financial autonomy toward the dollarization system or policy. The dollar has experienced two rises of postwar. Despite the impact posed by other currencies, by virtue of its own powerful economic and political power, it is still the "hegemony" currency of world financial markets. The path of development of dollar is similar to that of the euro, taking the road of regionalization. Taking the American Monetary Union as an example, its development path covers two major areas: Latin America and North America. The North American Monetary Union tends to develop in a special form of monetary union, that is, take U.S. dollar as the main currency or the alternative currency. For a long time, both the United States and Canada have close economic and cultural ties and can easily form a monetary union. For Mexico, its advantages lie in cheap labor resources, Canada's capital is mainly rich in technical resources and natural resources, while the United States has a reliable free trade market. The difference of the per capita GDP among Mexico, Canada and the United States and the difference of per capita GDP among the first member countries of the euro zone are relatively small and have certain comparability. Canada and Mexico have now joined the North American Free Trade Association. Dollarization in Mexico and Canada has not yet been policy-oriented. However, its role in the economy, trade, finance and politics of the two countries has become increasingly evident. From the perspective of Latin American monetary cooperation in the future, dollarization is also a more obvious development
trend. (Sebastian Edwards, 1990) The currencies of these countries do not have advantages and do not have a strong economic background. The U.S. dollar is the world's hard currency. Its strong economic strength has made the market moves closer to it naturally. The internationalization of the U.S. dollar is a historical choice. After the loss of the gold standard, the development of the modern credit monetary system has chosen to be centered on the U.S. dollar. In the three decades after the United States gained its international status, it enjoyed many of natural advantages in the policy and institution which is an inherent property that other currencies could not have. The outbreak of the two world wars made the United States achieve superpower and military power under the joint action of many factors and provided a powerful economic foundation for the U.S. dollar. Nowadays, the path of the internationalization of the dollar is hard to be copied, but there is the reference value.

The foundation of the internationalization of the United States is based on the powerful economic strength of the United States. After the United States won the victory of the War of Independence, it took full advantage of all the resources of its own and the external environment to achieve a leap-forward development of its economy rapidly.

Although the pound began to weaken in the 1930s, bur in the pound zone, its important influence has not been weakened. It can be proved by the appreciation of the pound against the U.S. dollar from the World War I until World War II. Due to the lack of economic strength at that time, the dollar failed to become the world's major currency. After World War II, the situation began to become advantage for the United States. After the victory of World War II, the United States quickly surpassed established capitalist countries by virtue of advanced technology. In addition, its territory was not damaged by the war and thus became an economic power. At the Bretton Woods conference, the United States took the initiative and laid the foundation for the establishment of the dominance of the U.S. dollar in international status. In the late 1970s, the Bretton Woods system collapsed and the U.S. dollar declined in its international status. However, due to the strong economic strength of the United States, the centrality of the U.S. dollar in international trade and international financial markets remained stable. According to the historical experience of the internationalization of the U.S. dollar, the government of a country plays an extremely important role in the internationalization of its currency. Internationalization of currencies includes the natural internationalization and the policy-driven internationalization. The natural
internationalization is a slow and gradual process. Although the process is slow, the security of financial currencies is guaranteed. Man-made currency internationalization refers to the fact that the domestic currency has not yet fully qualified for internationalization. However, the government adopts policies and various measures to promote the internationalization of currency. Although it can shorten the time it takes to achieve the target, if the policies or measures deviate, the currency crisis may appear. In the course of the internationalization of the U.S. dollar, the role played by the U.S. government is very important. As early as 1972, the U.S. government introduced the seigniorage-related legal system and introduced the gold standard system, which provided conditions and basis for the exchange of U.S. dollars and other currencies. Since then, the United States has started to actively promote the Jin Yuan foreign policy and increase its overseas investment to promote the international circulation of the U.S. dollar. The active restoration of the gold standard and the establishment of the Bretton Woods system are all important measures in the process of internationalization of the U.S. dollar.(Barry Eichengreen.2011) Therefore, we should attach great importance to the driving role of the government and its policies in the process of RMB internationalization.

4.5.2. The Practical Experience the Internationalization of Yen

The process of yen internationalization is full of twists and turns, and we can also learn many lessons and experiences. In the process of implementing the convertibility of current account and capital account in China, learning from the internationalization of the yen will surely give some enlightenment about how to correctly handle and coordinate the relationship between the internationalization of money and the domestic financial system. As can be seen from the internationalization of the yen, the process of the internationalization of domestic currencies is, in the final analysis, the process of perfecting and developing the domestic financial markets. Because the degree of development, openness and soundness of the domestic financial system cannot meet the requirements of the internationalization of the yen, as a result, its effect is different from its own economic strength, resulting in the internationalization of Japanese yen going even backward in the 1990s compared to that in 1980s. It is also important that the process of monetary internationalization takes into account the maintenance and management of the domestic financial order.
Summarizing the lessons learned from the internationalization of Japanese currency, we can see that while grasping the standard of international coordination of exchange rates, we must also pay attention to the stability of the domestic financial order. Since the late 1980’s, the yen has undergone a drastic change in the exchange rate to the U.S. dollar, The domestic financial order was severely damaged. This is undoubtedly an important reason for the deterioration of Japan's economy and national strength and the obstruction of the internationalization of the yen. (Matsuyama, 1993)

What is more, the currency internationalization should focus on the timely amendment and adjustment of economic and trade policies.

Japan's trade balance surged more than the GDP of the same period over the last decades and the current account surplus appeared for many years. The international balance of payments usually showed a surplus and the foreign exchange reserves have been rapidly accumulated and increased (see graph 4).

Source: Trading Economics: Ministry of Finance, Japan

From the above, we can see that Japan's export policy as an important means of promoting rapid economic development has enabled Japan's foreign exchange reserves to accumulate in a long period of time, laying the foundation for the internationalization of the yen. However, what needs to be understood is that if there is favorable trade balance in one country there must be unfavorable balance of trade in another country at the same time. For the deficit countries, the existence of an excessive deficit will restrict the growth of the domestic economy and employment levels, and the deficit countries
may retaliate against the surplus country. In the 1880s, the yen was hit by the huge deficit in the U.S. trade with Japan, resulting in the currency to fluctuate significantly and the yen was forced to appreciate continuously, causing Japan's economy to decline. The gap between the idea of a yen zone and the practice in the euro zone has become quite clear. Since January 1999, all countries in Western Europe have achieved economic unification and union, and the birth of the euro has enabled monetary integration to be realized in the euro area. While in East Asia, the economy has failed to form a unified and united region, and there has been no integration in monetary terms. So the concept of the Yen zone is nothing more than a mere scrap of paper.

4.5.3. The Practical Experience the Internationalization of Euro

As the Euro can provide precious experience for the integration of the regional currencies, summarizing the drawbacks and contradictions that have emerged in its internationalization process will facilitate the Chinese government to better learn from its lessons, avoid weaknesses and ultimately help promoting the historical process of the internationalization of the RMB. Single currency is an important symbol of the internationalization of currency.

Traditional currency cooperation only cooperates on the exchange rate. The emergence of the euro has changed this situation and created a precedent for the innovation of the world currency exchange rate system. The monetary system thus formed is more scientific and advantageous in terms of efficiency of implementation. The author thinks that the Bretton Woods system can adjust the fixed exchange rate system, EMS's combined floating exchange rate system, and they all have a common flaw, that is, in order to maintain fixed exchange rates, the country's internal economic objectives cannot make concessions for the external balance, and when the conflict between the internal and external balance reach a certain extent, there can be intensification, and the fixed exchange rate is difficult to be adjusted and sustainable, international speculative capital inflow and exit will have an unpredictable impact on the domestic economy, thus the financial turmoil appears. (Richard,1998),The birth of the euro, eliminated the issues of currency exchange between member countries, and to a certain extent, limited the occurrence of internal speculative shocks. With the increasing scale of world capital flows, a single country is unable to control capital flows, and based on that, and driven by common economic interests, all members of the euro-zone have created a single currency by abandoning their own monetary policy and
implementing a highly coordinated policy. The formation and practice of the single currency in Europe have made the cooperation exchange rate system in the region upgraded into a unified monetary management system, and the stability of the regional currency can be depended on economic convergence and policy coordination, which is also the key factor for the euro to realize internationalization. In general, the realization of monetary integration in a certain economic region has the following functions: First, the improvement of micro-economic efficiency can be achieved. Currency unification can bring about the control and decrease of the transaction cost in the region, and improve the efficiency of resource allocation. The integration of intra-regional currency can reduce the economic and trade settlement, the exchange cost of payment and the risk of exchange rate fluctuation. It can also improve the information environment, enhance the transparency of prices and transactions, and promote the confidence and enthusiasm of producers in international economic activities. However, some short-lived negative effects and short-term adjustments will also be accompanied by the micro-benefits of monetary integration, such as the decreasing size of the foreign exchange business, restructuring and change of bank structure, etc.. Second, it contributes to macroeconomic stability. The inefficiency of exchange rate fluctuations can be solved in the field of currency integration, as the cost of stabilizing the exchange rate is no longer within the region, and the risk of exchange rate change of member countries to outside countries in other regions can also be reduced. On the other hand, the internal exchange rate policy instruments have been abolished, and an unified exchange rate policy and monetary policy have been adopted by the foreign countries, which effectively solves the problem of opportunism or noncooperation. In the case of member countries, monetary integration is not all good, there will be some disadvantages at the macro level, the member countries need to abandon the freedom of exchange rate and policy instruments, and abandon their own currency sovereignty. Third, strengthen the ability of Member States to withstand the financial crisis. Most of the financial crisis in a country or region comes from speculative hedge funds. It is of great practical significance for the member countries to unite together to withstand the impact of the financial crisis. On the other hand, the coordination and cooperation of member countries ‘ monetary policy enhances confidence in the foreign exchange market and is a powerful weapon against and restricts the influx of international financial speculative capital. Finally, it can improve the external utility. The impact of monetary integration is external and not closed. In terms of increasing external utility, it mainly manifested in:
regional currency obtained more space of circulation and played more roles and functions outside the region to reduce transaction costs, bring more convenience in the global trade and finance field and control risk for member countries so that the member countries obtain seigniorage income, reduce the types of foreign exchange and help to improve the overall efficiency of international economic coordination. (Hartmann, 1998)

The goal of a single monetary policy is the strategic guidance for the internationalization of currencies. The Maastricht Treaty made clear the overarching goal of ECB's stabilization of prices. The EU has already identified the issue of stabilizing prices as its most important task, which is also the sole goal of monetary policy. However, the establishment of the ECB's monetary policy and objectives is an inevitable choice that can be mainly understood from the following two aspects: First, a single monetary policy can unite Eurozone countries and enhance their international competitiveness. Regional economic integration is the main direction of economic cooperation and development in the coming years. Under this background, the competition in the global economy will be even more fierce. The coalition of countries in euro zone can boost the economic strength of the euro and play a in greater role in the international market, and even compete with the dollar. For the euro-zone countries, maintaining the euro's own internal value, stabilizing prices and ensuring the stability of the euro currency is the focus of the task. In response to this situation, the European Commission has specifically pointed out that the euro should be in the international monetary system and should rely on stable monetary prices as the core of monetary policy, with the appropriate fiscal policy to promote the volume of euro circulation and holding in the international economy. Second, the single monetary policy can promote the transformation of the member states of the euro zone in the macroeconomic regulation and control. Prior to this, the promotion of employment and economic growth is mainly based on expansionary economic policies. However, from the perspective of effect, this macro-control can significantly stimulate aggregate demand but there are also many drawbacks. Since the 1970s, the EU countries have been suffering from economic stagnation. They all think that expansionary economic policies are the culprit of the high inflation rate, and the overall economic growth of the European Community has also been restricted. Through repeated consultations and reconciliation, the member states of the eurozone reached consensus on the use of monetary policy and fiscal policy. The goal of price stability has accordingly become the sole criterion for the macro-control policies of various member countries. (ECB, 2007)
On the other hand, the coordination and cooperation of monetary policies of various countries can also help the deepening of the integration of European financial markets so as to accumulate experience in the implementation and use of a single monetary policy. The transition from monetary policy to single monetary policy in many countries in the past is an inevitable trend for the development of the European Monetary Union. The implementation and promotion of a single monetary policy is of great significance to the stability of the price in the European Monetary Union and the enhancement of the external value of the Euro.

Monetary policy strategy is the institutional arrangements for the stability of the internationalization of monetary. After the formation and establishment of the ECB, the objective of the monetary policy strategy has always been to revolve around the monetary and inflation control objectives. In the final goal, both strategic objectives are centered on price stability with the main difference being the choice of intermediary goals, that is how to keep prices stable. The European Central Bank chooses a monetary aggregate as the target of the monetary target strategy, compares it with changes in the real money, and formulates monetary policy measures on this basis. In other words, it develops a target for the growth rate of the total amount of money by the European Central Bank, and closely takes measures around this goal while stabilizing prices is the ultimate goal.

Monetary policy has a lagging effect on the control and influence of the inflation rate. In the direct inflation target strategy, we first compare the inflation target with the predicted inflation rate, and then adopt the corresponding monetary policy. Under normal circumstances, the inflation is predicted based on the survey of financial indicators and economic indicators. The central bank's strategy of choosing an inflation target means that the ultimate goal is not just the inflation rate, but also the intermediate target is the forecast of the inflation rate. From this we can see that the forecast of the inflation rate will affect the realization of the ultimate goal of the strategy. Although the European Central Bank expects the monetary target and inflation target strategy to take into account the implementation, but from the point of view of current monetary policy strategy, the former was more important than the latter. Therefore, we can summarize the ECB monetary policy strategy: the core of the monetary policy strategy is to
stabilize prices, requiring the annual growth rate of the Harmonized Index of Consumer Prices (HICP) to be less than 2%.  

The support of fiscal policy is the material guarantee of internationalization of currency. In order to prevent the abuse of fiscal expansion measures by member countries and interfere with the target of price stability in the euro area, the European Monetary Union will impose strict restrictions on the member states through the signing of the "Maastricht Treaty" and the "Stability Pact and the Convention on Growth and Stability". The Maastricht Treaty’s Annex "Protocol on Procedures for Excessive Deficit" sets out clearly the financial debts and deficits of the member states. The fiscal deficit of the member states cannot exceed 3% of the total GDP. The total debt proportion of GDP cannot exceed 60%. On the other hand, the "Stability Pact and the Convention on Growth" clearly stipulates that the fiscal deficit of member countries cannot exceed 3% of its GDP. For every percentage point exceeding 3%, the country must pay 0.25% of its GDP to the European Central Bank as an interest-free stable deposit.  

Once the effect of the country's fiscal deficit is still unsatisfactory within two years, the deposit automatically becomes a penalty for confiscation. In the economic zone, the implementation of a single monetary policy can effectively promote the realization of the macroeconomic goals. Economists generally agree on the role of monetarism in monetary policy. In the short term, the effect of monetary policy on real output is obvious, but it is neutral in the long run. Therefore, the European Central Bank take the goal of stabilizing prices as the absolute priority rather than the output growth and the long-term effect is valued rather than short-term goals.

5. Current Situation and Tendency of RMB Internationalization

From the background of the times, with China becoming a new market economy power, China's economic status has greatly improved its position in the world economy. At the same time, emerging countries' economies have started to run, and the corresponding traditional international monetary system can no longer be very good to meet the needs of the current global economic development, so to establish a new international monetary system that adapts to the new pattern of world economy is the general trend. However, raising the official internationalization level of the RMB is an important measure for the reform of the international monetary system. In facing of the

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15 European Central Bank Report
16 EU Stability and Growth Pact
heating problems of the RMB internationalization and since the RMB as a whole is in a trend of appreciating, the Chinese government proposed to stabilize the GDP growth rate of about 7%. With the enhancement of China's economic influence, the internationalization of the RMB has also achieved some success. In the bilateral or multilateral trade between China and Vietnam, Russia and other surrounding areas, the RMB is also mainly used as the settlement currency and RMB has even become the hard currency in trading of the surrounding area such as Southeast Asia, South Asia and other parts. Therefore, to some extent, China's neighboring countries or regions have widely accepted the RMB. At present, China's economic development is under the new normal of steady growth, structural readjustment and promotion of reform. The strategies of Shanghai Free Trade Zone, the "Silk Road Economic Belt" and the "21st Century Maritime Silk Road", the BRICS Development Bank, The founding of the Asian Infrastructure Investment Bank have provided a rare opportunity for RMB internationalization. At the same time, the 18th National Congress of the Communist Party of China proposed that capital projects should be gradually converted into freely available ones. The People's Bank of China has repeatedly stated that it wants to progressively promote the internationalization of the RMB and sign currency swap agreements with the central banks of some countries. In principle, the G7 agreed on the inclusion of RMB into the IMF reserve currency. Since RMB joined IMR special drawing right in 2015, the new weight is shown is the following chart. US dollar and Euro are much higher which are respectively 41.73% and 30.93%, followed by Chinese yuan. RMB takes up around 11% which is even higher than Japanese Yen and Pound (See table 5). RMB will become the world currency after the resolution comes into force.
At the same time, with the current total economy in China being the second largest in the world, the RMB has made steady progress in fully convertible terms. The improvement of the RMB's international status is the general trend. In addition, with the increasingly global economic impact on China in economic and political terms, the demand for RMB reserve settlement by foreign economic entities such as government, enterprises and residents has also increased. But at the same time, we should also see that the actual utilization rate of RMB in overseas markets is still far behind that of other international currencies. The actual use of the RMB in the world is not as good as that of other major international currencies. As for to the end of December 2016, the global payment of RMB was only 1.67%, as for the fourth quarter of 2016, RMB official foreign exchange reserves accounted for only 1.07%, RMB is only in a gradual and initial stage of becoming the international currency. (Wang, 2017) Once the goal of internationalization of RMB has been established, it will directly affect and produce very different results due to different route choices. The author believes that what angle or strategic path the Chinese government chooses to promote this process is an issue that needs further exploration and research. At this stage, if we look at the trade and economy of China's RMB, the financial situation and the international political status that China faces, it is almost certain that the RMB will indeed not enjoy the status

Table 5: The weights of the five currencies in the new SDR basket in 2016

<table>
<thead>
<tr>
<th>Currency</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>British pound sterling</td>
<td>8.09%</td>
</tr>
<tr>
<td>Japanese yen</td>
<td>8.33%</td>
</tr>
<tr>
<td>Chinese renminbi</td>
<td>10.92%</td>
</tr>
<tr>
<td>Euro</td>
<td>30.93%</td>
</tr>
<tr>
<td>US dollar</td>
<td>41.73%</td>
</tr>
</tbody>
</table>

Source: International Monetary Fund Factsheet.Review of the Special Drawing Right (SDR) Currency Basket
of an international currency as the United States dollar which relied on international agreements after World War II, nor will it like the yen which quickly became an international currency with the advantages of international trade in its own country.

Due to the complicated background and conditions of RMB internationalization in fact, its function as an international currency can hardly be effectively given any play until it becomes a freely convertible currency. From now, the RMB only achieved partial characteristics of a regional currency in the border trade with neighboring countries.

After the regionalization of RMB, regionalization promotes the development of RMB towards internationalization. This implies that it is inevitable that the internationalization of RMB should be realized. This not only shows the gradual expansion of RMB regionalization, but also demonstrates the process of the internationalization of RMB must be a gradual process.

In accordance with international experience, the realization of internationalization of the RMB must first of all start from the realization of the pricing and trading functions in frontier trade. After it has accumulated a certain status and credibility, it will play its role in general trading activities. This process will gradually develop the international trade. RMB as world payment currency in international trade is significantly increasing in recent years. The total trade volume denominated in RMB is 3.85 billion yuan in 2009 and it increased to 506.3 billion yuan in 2010. By the end of 2011, according to People’s Bank of China, the total trade payment was 2.58 trillion yuan as shown in the Table 6.

Table 6: The trade payment volume in RMB

![Table 6: The trade payment volume in RMB](image)

Source: Quarterly report from People’s Bank of China
When the domestic financial market is perfected to a certain extent and the RMB is freely convertible and the international trade has reached a certain scale, it can truly become internationalized and become an international reserve currency.

6. The Strategies for Internationalization of RMB

This chapter will discuss how Chinese currency can become international step by step. I will analyze the RMB internationalization from three steps: Integration strategy, regional integration and internationalization. The significance of these two strategies will also be mentioned in the following part. How the internationalization will decrease the risks and costs is one of important reasons.

6.1 RMB Integration Strategy

RMB integration will bring forth many benefits by reducing risks such as foreign exchange risk, financial speculation. Besides, it will help decrease transaction costs in international trade. I will also mention the current situation of RMB integration.

6.1.1 Reduction of Financial Risk and Uncertainty

RMB Integration (Mainland China, Hong Kong, Macau) is necessary for the Chinese Government to Resist Foreign Exchange Risk. RMB integration strategy helps to build a risk sharing mechanism to jointly resist the impact of the overseas economy. Due to their obvious industry complementarity between mainland China, Hong Kong and Macau, the establishment of a common risk-sharing mechanism can effectively reduce the impact of external shocks, facilitate the stability of the exchange rate and balance the international balance of payments in the region. For imbalances between the different members participating in the integration, we can make use of the channels provided by the risk sharing mechanism to make use of the specific transactions in the financial markets to achieve financial facilities, enable the deficit areas to borrow from surplus areas and make the economic adjustment cost been shifted and spread in the space and time dimensions and effectively break the dilemma of constraining economic growth due to the existence of the international payments problem and the weakening of economic growth of a country or region due to limitation caused by the imbalance of international payments of partner countries or regions. Take the 1998 Asian financial crisis as an example. The currencies of major countries and regions in Southeast Asia and East Asia are all included in the devaluation. Only the RMB and the Hong Kong
dollar have continued to strengthen in this impact. When the crisis hit the Hong Kong region, the Chinese central government made it clear in time that it would help Hong Kong's government to cope with the crisis at any time. Ultimately, with the support of the Central Government, the Hong Kong dollar maintained the "currency board" and also the stable operation of the RMB was ensured. This historical example can be corroborated by the unparalleled importance of the formation of a unified currency to resist financial risk in member regions. RMB integration helps reduce the scale of foreign exchange reserves and effectively reduce the cost of reserves.

Monetary integration can effectively reduce the uncertainty triggered by speculation in exchange rates and enhance the ability of member countries to resist shocks. Therefore, the scale of reserves maintained by the Mainland, Hong Kong and Macao in response to foreign exchange shocks will be significantly reduced. Of course, in order to manage the exchange rate with non-member currencies, it still needs to hold a certain amount of foreign exchange reserves. Taking into account the unification of currencies, it is inevitable to concentrate the foreign exchange reserves of the three places on one place, carry out effective unified management and use them in an integrated manner, so that the economic benefits of the scale of reserves can be clearly reflected. Therefore, the foreign exchange reserves required under such circumstances are relatively In order to cope with the impact of external currencies on the original three places, they are much smaller in terms of the total size of foreign exchange reserves prepared. At the same time, unified management also helps to achieve economies of scale in financial management and reduce foreign exchange speculation.

6.1.2. Reduction of Trade Related Costs

RMB integration can effectively reduce foreign exchange transaction costs and reducing the cost of foreign exchange transactions is actually the most direct benefit that a single currency can bring. In addition to reducing the foreign exchange costs, monetary integration can also reduce the costs and time required for clearing banks across different currency regions. The introduction of common currency and a single bank clearing system can greatly reduce the time and cost of bank transferring funds. In the three regions of the Mainland, Hong Kong and Macao, there are obvious economic

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17 A currency board is a monetary authority which is required to maintain a fixed exchange rate with a foreign currency. This policy objective requires the conventional objectives of a central bank to be subordinated to the exchange rate target.
complementarities. In particular, after the reform and opening up of the mainland, the economic and technological exchanges between the three places have been more frequent. The investment amount liquidity between the three places is also growing. However, since all three places have their own currencies, it has been decided that an enormous amount of interregional trade and investment activities must be implemented and completed once the currency exchange is completed or that the respective activities need to be converted into U.S. dollars and based on the middle currency to complete the relevant transactions. Therefore, the internationalization of RMB helps to reduce these obvious costs of economic transactions and determine the extent to which the unified currency is favored.

RMB integration can smooth exchange rate fluctuations and stimulate economic and trade growth. The realization of monetary integration can effectively reduce the uncertainty caused by exchange rate speculation and strengthen the ability to withstand shocks among member states. As a result, there is a significant reduction in the size of reserves in the mainland, Hong Kong and Macau which are to be maintained in response to foreign exchange shocks. Of course, in order to manage exchange rates with non-member currencies, a certain size of foreign exchange reserves is still required. In view of the unification of currency, it is necessary to centralize the three-place foreign exchange reserves in one place, to implement effective unified management, and to make the economic benefit of the reserve scale manifest, so that the foreign exchange reserves needed in such cases, compared with the total size of foreign exchange reserves that the original three places prepared in order to cope with the external currency impact, are much smaller, while the unified management is also conducive to financial management to achieve economies of scale, and reduce the phenomenon of foreign exchange speculation.

RMB integration can calm exchange rate fluctuation and stimulate economic trade. Monetary integration can directly reduce the cost of investors and traders caused by exchange rate fluctuations in hedging transactions, thus achieving the effect of stimulating investment, and bringing "Dynamic benefits" to promote the growth of the region's economy. After the process of currency integration is realized, the risk of exchange rate uncertainty will be reduced greatly, and the efficiency of resource allocation will be improved. The specific content is embodied in the following two aspects: on the one hand, reducing the exchange rate uncertainty can improve the efficiency of price mechanism resources allocation. Because of the original variability
of the exchange rate and it is difficult to predict the exchange rate, the market mechanism of the signal interpretation will not very be convenient, leading to the economic subject can hardly determine the relative price changes and determine the next step, resulting in that economic activity will sluggishly respond to market changes and resource allocation efficiency will be reduced. On the other hand, the stabilization of exchange rate will be beneficial to the enhancement of the competitive vitality of the enterprises in the monetary area. The uncertainty risk of exchange rate not only increases the corresponding cost to the external market, but also causes the distortion of the relative cost of the products in the country or region. The cost of managing exchange rate risk varies by company size, and the uncertainty of exchange rate often makes small and medium-sized enterprises are at a disadvantaged place in competition. After the effective elimination of exchange rate uncertainty, the enterprises in the region can participate in the market operation in a relatively fair competitive environment, which can stimulate the enterprises to improve their efficiency and enhance their competitive advantage.

RMB integration can improve market transparency and increase the total benefit of the region. While bringing forward the direct economic benefits discussed earlier, monetary integration can also produce significant indirect economic benefits. The results show that economic loss caused by trade cost in foreign exchange is far more than the direct cost on the surface. Therefore, it is inferred that the little change in transaction cost can lead to an obvious change in economic efficiency. An empirical study of EU countries shows that even if the EU does not have trade barriers, there is still a high proportion of price difference between the regions, the root of which lies in that the information cost between the currency exchange costs and the multiple currencies can cause the indirect loss.

One of the benefits of monetary integration is that it can effectively reduce or eliminate the negative effects directly. The same problem exists between mainland China, Hong Kong and Macau. As all kinds of economic and trade exchanges between the three places are close, the transparency of information, such as the market price between different regions, has been improved, but the problems left by history, such as insufficient liquidity of production factors, regional difference of production cost and information asymmetry, all result in that the scarce real price can’t be reflected in the commodity accurately, and the objective price difference among the three regions is still
relatively obvious, resulting in a lot of transaction costs among the three regions, or an obvious loss in the overall economic welfare in the region.

6.1.3 The Current Situation of RMB Integration

Financial integration in three regions provides a more convenient development space for RMB integration.

James C. Ingram (1973) put forward the best monetary area standard in the study. As financial markets enter a highly integrated stage of development, adequate capital flows can restore a slight shift in interest rates caused by balance-of-payments imbalances to a balanced state, and weaken the change of trade conditions within or between regions, especially in the short term, as a result of exchange rate fluctuations.

The Development of Financial Integration between Mainland China and Hong Kong is one of the most important foundations in the path of RMB internationalization. Since Hong Kong's return to the motherland on July 1, 1997, the mutual trade and investment between the two places have shown an accelerating trend of growth. And the two places have made closer contacts. Therefore, the governments of the two places have made remarkable progress in furthering the closer financial exchanges between the two places. For Hong Kong, the state-owned commercial banks in mainland China such as China Construction Bank, Agricultural Bank of China and Industrial and Commercial Bank of China have successively entered the financial markets of Hong Kong. Hong Kong's HSBC Group and Bank of East Asia also began to gradually join the banking industry in mainland China and compete in the mainland of China. Hong Kong is one of the major financial centers for the Mainland's funding. It not only has raised a large amount of construction funds directly for the Mainland, but also is a major provider of major foreign funds to the Mainland. Besides, China’s financial agents have been allowed to issue offshore RMB bond in Hong Kong since 2007, and then crossborder offshore RMB bond market started to flourish. Not only domestic financial institutions issues RMB bond but also overseas financial agents, and RMB bond valued 163.6 billion yuan was issued in Hong Kong till 2014. The chart below shows the diversification of financial agents that issue RMB bond in 2013, from which we can see the bond issued by overseas agents was as high as 41%, and it is much higher than the volume issued by National Ministry of Finance.
The Hong Kong dollar and the Macau dollar have long been listed on the Bank of China platform and can be circulated in the Pearl River Delta. At the same time, the RMB can be exchanged for markets in many places in both Macao and Hong Kong. It also has the payment function in many areas of the two places. The Hong Kong dollar is the currency normally circulated in Macao. And the bulk of transactions in Macao are usually settled in Hong Kong dollars. At the same time, the Hong Kong dollar has taken an important position in the foreign exchange reserves and deposit system in Macao. In 1997, the Macau dollar was pegged to the Hong Kong dollar with a fixed exchange rate. In this case, the interest rate of the Bank of Macao will generally follow the changes in the interest rates of the Hong Kong market.

The monetary convergence of various economies and more standardized conditions

As can be seen from the internationalization of the currency in the euro area, the convergence criteria of EU member states are mainly reflected in several aspects, such as prices, exchange rates, government finances and market interest rates. The table below shows the same kind of economic indicators for mainland China, Hong Kong and Macau. From the data analysis in this table, we can see that in terms of the inflation rate, the price levels in the three places have similar trends and the unemployment rate has converging identities, thus promoting a gradual convergence and stabilization of the price levels in the three places; From the fiscal deficit perspective, the fiscal conditions in the three places are good and Hong Kong keeps a surplus in successive years. The
mainland has also kept the fiscal deficit below 3% for many years. As for the exchange rate, the Hong Kong dollar and the Australian dollar have a fixed exchange rate. As the Hong Kong dollar is pegged to the U.S. dollar, the RMB against the Hong Kong dollar tends to have a long-term appreciation. In terms of market interest rates, interest rates have fluctuated greatly in recent years due to the international financial crisis (See Annex). However, there is an obvious trend in convergence in three places. It can be seen from this that the degree and level of economic development among the three places have basically fulfilled the most basic preconditions for achieving a unified monetary process.

Table 8: Comparison of economic indicator among Hong Kong, Macau and Mainland

<table>
<thead>
<tr>
<th>Economic Indicator</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation rate (%)</td>
<td>Hong Kong: -8</td>
<td>-6.2</td>
<td>-2.2</td>
<td>-1.6</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>Macao: 8.42</td>
<td>-7.72</td>
<td>0.23</td>
<td>1.4</td>
<td>4.25</td>
</tr>
<tr>
<td></td>
<td>Mainland: 1.5</td>
<td>4.8</td>
<td>5.6</td>
<td>-0.7</td>
<td>3.3</td>
</tr>
<tr>
<td>Budget deficit (% GPD)</td>
<td>Hong Kong: -0.97</td>
<td>-7.65</td>
<td>-0.99</td>
<td>-1.04</td>
<td>-4.31</td>
</tr>
<tr>
<td></td>
<td>Macao: 0.99</td>
<td>0.17</td>
<td>-0.19</td>
<td>-0.2</td>
<td>-0.22</td>
</tr>
<tr>
<td></td>
<td>Mainland: 0.77</td>
<td>0.58</td>
<td>0.4</td>
<td>2.38</td>
<td>1.69</td>
</tr>
<tr>
<td>Exchange rate</td>
<td>Hong Kong dollar/Macao dollar: 1.03</td>
<td>1.03</td>
<td>1.03</td>
<td>1.03</td>
<td>1.03</td>
</tr>
<tr>
<td></td>
<td>Hong Kong dollar/RMB: 1.0262</td>
<td>0.9746</td>
<td>0.8919</td>
<td>0.8812</td>
<td>0.8713</td>
</tr>
<tr>
<td></td>
<td>RMB/Macao: 1.0037</td>
<td>1.0569</td>
<td>1.1678</td>
<td>1.1688</td>
<td>1.1814</td>
</tr>
<tr>
<td>Yearly interest rate (%)</td>
<td>Hong Kong: 3.72</td>
<td>3.65</td>
<td>1.08</td>
<td>0.13</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>Macao: 2.28</td>
<td>2.25</td>
<td>3.36</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>RMB: 2.25</td>
<td>2.22</td>
<td>4.14</td>
<td>2.25</td>
<td>2.25</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>Hong Kong: 4.4</td>
<td>4</td>
<td>3.6</td>
<td>5.4</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td>Macao: 3.8</td>
<td>3.1</td>
<td>3</td>
<td>3.6</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>Mainland: 4.1</td>
<td>4</td>
<td>4.2</td>
<td>4.3</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Source: Chinese Statistic Yearbook, Hong Kong Statistic Yearbook. Macao Statistic Yearbook

6.2 Regionalization of RMB

This part will mention about the importance of RMB regionalization as one key step in the internationalization process in consideration of experience from other three key currencies. By forming regional financial cooperation, it will facilitate the transformation of international monetary system pattern. Take Asian Infrastructure investment Bank as an example, the weight of RMB is quite high compared with other currencies and it forms a competition with the existent world monetary institutions.
6.2.1 The Importance of RMB Regionalization

RMB regionalization strategy facilitates the transformation of the International monetary system pattern. For a country, if not without the regional financial cooperation and directly transfer through the challenge of international hegemonic currency into direct internationalization, in terms of feasibility, it is very difficult. In the world financial development practice, I think that the two samples of the euro and yen failing to achieve the internationalization can demonstrate these assertions. First, as far as the experience level is concerned, the creation of the euro has provided strong support for the theory of "optimal currency area" (OCA), on the other hand, it presents a model which can be used for reference in the strategic goal of internationalization of some national currencies, supported by the current dollar-dominated international monetary system. Based on the more elementary regional cooperation, it can effectively reduce the difficulty and reduce the cost expenditure in the process of challenging the hegemonic currency. Because European countries have little difference in the level of economic development and similar historical culture, they have the social and economic conditions that transcend the concept of monetary sovereignty and realize the goal of monetary integration. However, for other regions, there is a distinct cultural background between countries, the level of economic development is also very different, and these countries have a more obvious sense of monetary sovereignty, the difficulty of operation is very large. It can be said that this problem is not only the real environment of the internationalization of yen, but also the main factor that leads to the failure of the international yen. Since 1964, when Japan became the eighth country of the IMF, it gradually assumed the yen's convertibility, which opened the way for the yen to shift to an international currency. After the 1980s, the internationalization of the Japanese yen has been rapidly developed and achieved some results. However, in 1991, the bursting of the economic bubble in Japan has greatly affected the internationalization of the Japanese yen, and a variety of complex factors have led to the failure of the internationalization of the Japanese yen, after analysis, I think generally it can be summed up as the following several reasons: The first one is that Japan's financial system essentially implements the "dollar financial dependency" system, this is bound to depending heavily on America's commodity markets, where Japan needs to accumulate larger dollar reserves, although Japan is the most important creditor of the United States, but Japan still has to implement its capital exports on the basis of the dollar model. Moreover, with the gradual formation of a relatively fixed pattern of
capital exports between the two countries, the United States can use the yen as a tool when formulating and implementing its international economic and financial policies, and the yen has since lost its monetary independence. The second one is that in this mode, firstly, Japan only implemented foreign policy in implementing its internationalization strategy while ignoring internal policy, with the main focus on the Tokyo offshore financial markets and the European yen market construction, but not implementing reform the domestic financial and capital market because of the interference of various forces; Second, it directly opened the internationalization of the yen while lacking of policies to enhance the stability of the yen and to create a corresponding environment, and also not providing the policy and environment for the implementation of regional monetary cooperation. The lack of good regional cooperation has negatively affected the internationalization of the yen and limited the role of the yen in the region and the expansion of its influence. At present, Japan is also trying to reverse such a strategic error, and gradually focus on the internationalization of Asia after the strategy. Based on this strategy, Japan has begun to actively promote and participate in regional monetary cooperation in Asia after the Asian crisis. Based on the above discussion of the current international monetary system, in the selection of a country's exchange rate system and national currency internationalization process, regional factors have become an important factor. China and ASEAN are implementing the "collective nominal anchor", and the stability of the nominal anchors of China and ASEAN countries is affected by the price stability of the United States, and also by the joint stability of each other's currencies. Because of the special relationship between the two sides in exchange rate and currency, in Southeast Asia, the RMB can only be used to achieve the goal of international currency.

RMB regionalization strategy is conducive to alleviating financial crisis and promoting regional monetary cooperation. After the Asian financial crisis in the late 20th century, the leaders of major countries in Asia gradually reached an "East Asian consensus", which is the principle of regional monetary and financial cooperation advocated by the East Asian countries and relevant regions, and has carried out some collective activities, in this context, The tendency of China to participate in monetary cooperation in East Asia is an inevitable choice.(Robert N.McCauley2011) The official and academic circles of East Asian countries believe that the cause of the Asian financial crisis is mainly focused on two aspects: on the one hand, because at the international level, not only the capital carries on the high speed and the massive
movement, the exchange rate of dollar and the yen, etc. also has the drastic change, so if to choose with the dollar peg exchange rate system, its disadvantage is very obvious. In the East Asian region, the real economy has a certain degree of correlation, because the regional monetary cooperation mechanism is not perfect, seriously affected the regional economic development and stability, in dealing with the problem of currency and financial crisis, leading to some countries to deal with the international capital of large-scale flow of governance measures to achieve the effect is not ideal. Therefore, the establishment of regional detection system based on macroeconomic indicators and monetary and financial indicators, and related crisis relief mechanisms, in contrast to the IMF and other international agencies, is more advantageous. Based on the "East Asia Consensus" mode of cooperation, countries and regions in East Asia, gradually began the form of a relatively basic model of monetary cooperation test. Since the "Chiangmai initiative" was introduced in May 2000, in many respects, the regional monetary cooperation between China and ASEAN has been developing rapidly, as follows: First, a series of bilateral or multilateral currency swap agreements have been signed on the basis of the strategic level of the country. Secondly, in view of the goal of constructing the regional monetary supervision system, a series of discussions and researches have been carried out between various countries and regions. With funding from the Asian Investment and Development Bank, ASEAN is conducting research on the following two areas, namely early warning systems for capital flows and regulatory studies. In the 1997 financial crisis, the Chinese government pledged to stabilize the RMB against the dollar, although in the economic crisis, China has paid a huge price for the stability of the RMB, but it has played a good role as a "breakwater" for the stability of the East Asian economy. China's practical actions show that in the face of regional financial crisis, the performance of mutual cooperation is always stronger than the result of mutual cooperation.

Over the years, in terms of currency exchange, China and East Asian countries have made great achievements in business development, and China has become an important force in promoting the economic development of East Asia region. Through the above analysis, the author found that based on the current international monetary pattern, for a country's currency, to achieve the grand goal of participating in international competition, can not be separated from the important support of regional economic cooperation. For China, in order to better promote the internationalization of RMB, it is necessary to include the content of RMB internationalization in the
construction of regional monetary system in East Asia, and to promote the internationalization of RMB by regionalization of RMB.

Table 9: Agreement on exchange of currency between China and ASEAN 10 countries

<table>
<thead>
<tr>
<th>Bilateral Agreement</th>
<th>Swap Signing Date of the Agreement</th>
<th>Related Currencies of the Agreement</th>
<th>Amount (10 million RMB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China-Malaysia</td>
<td>2012.2.8</td>
<td>RMB-Ringgit</td>
<td>1800</td>
</tr>
<tr>
<td>China-Thailand</td>
<td>2011.12.22</td>
<td>RMB-Thai baht</td>
<td>700</td>
</tr>
<tr>
<td>China-Indonesia</td>
<td>2009.3.24</td>
<td>RMB-Indonesia Rupiah</td>
<td>1000</td>
</tr>
<tr>
<td>China-Malaysia</td>
<td>2009.2.8</td>
<td>RMB-Ringgit</td>
<td>800</td>
</tr>
</tbody>
</table>

Sources: Reuters. https://cn.reuters.com/article/idCNCHINA-50890201111021

6.2.2 The Current Situation of RMB Regionalization

In a country, its attraction to foreign capital is affected by its economic development level, economic volume and economic growth stability, and the more it becomes a "market provider" in the region when the country and the other economies of the region have a greater degree of trade relevancy and industrial relevance, This will lead to more demand for the local currency, more likely to engage in deeper cooperation with the regional bodies. The actual situation is that China's economic development level is gradually improving, the economic volume is also expanding rapidly and developing into a dominant force in the Asian region.

China's economic growth has largely boosted the process of regionalization of the RMB in Asia. Since 2007, only China has achieved rapid economic growth based on the "10+1 economic model" (see chart 5-9). China's GDP per capita will continue to rise in the future, with a significant increase in gross domestic product. In addition, there is a clear positive correlation between China's economic growth and foreign investment, especially inward FDI, which shows that China's attractiveness to foreign capital is increasing gradually.
Table 10: Economic growth based on”10+1” economic model

<table>
<thead>
<tr>
<th></th>
<th>China</th>
<th>Singapore</th>
<th>Thailand</th>
<th>Malaysia</th>
<th>Indonesia</th>
<th>Philippines</th>
<th>Myanmar</th>
<th>Vietnam</th>
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Source: China’s Statistical Yearbook 2011

6.3 The Internationalization of RMB

The scope of RMB acceptance is rapidly expanding in different region in recent years. The extent to which a country's currency is accepted in a region means that within a domestic or international transaction the extent to which the currency of the country is used by the regional economy. The greater the extent of the use of a country's currency is within a region, the larger the scale will be, the easier it is to form the "scale effect" and the "network effect", and the more profitable it will be for the use of the currency, the more widespread the flow of RMB will be in some Asian countries and regions around China, so to a certain degree, the international acceptability has been acquired. However, the circulation of RMB in neighboring countries or regions is spontaneous, and the regional monetary and financial cooperation is not very big, not to mention the regional strategy dominated by the government. Due to the fact that the RMB has not been freely convertible, in many countries and regions, the RMB has not obtained the status of its foreign exchange reserves, and the regional status of the RMB is not obvious in the actual trade of East Asian economies. The RMB circulation in neighboring countries and regions can only provide a certain basis for regional cooperation of RMB.

International public trust and policy coordination capacity about Chinese yuan is increasing. If a country chooses monetary and financial policies for other countries in the region where the country is located, with a larger "spillover effect", the monetary and financial policies implemented and committed will have a higher level of consistency
and coherence, and the greater the credibility of their currencies, and this is important to enhance the variability of coordination in the region and to enhance the status of local currency. Since the onset of the Asian financial crisis at the end of last century, China has taken a responsible attitude to enhance the international credibility of China's monetary policy in the neighboring countries and regions, which is conducive to China's coordination with the Asian countries. As China promises not to devalue its currency during the crisis, this is extremely advantageous to reversing the internal competitive devaluation of the region, effectively boosting investor confidence, facilitating the return of international capital to the region, and helping to bring the crisis to an end as soon as possible and the rapid recovery of the economy and forming the "Asian RMB" image initially.
7. Conclusions

Through the deep research and analysis of the content of this paper, the author thinks that the process of currency internationalization is a complicated, long and arduous historical process for any country, and it has its inherent development law and changing trend. In summary, the study of this paper can draw the following conclusions:

First, currency internationalization is an important symbol of national economic development and progress, and an irreversible trend of currency evolution. As a developing country, China's RMB internationalization is also the historical stage that the Chinese government and Chinese must pass, and it is the inevitable outcome of the rapid development and prosperity of China's social economy. Therefore, in the development of China's economy to a relatively developed, and international economic integration with the degree of increasing, social and economic reform in the transition to a market economy in an important stage, the Chinese government should grasp the important historical opportunities and timely choose the path of internationalization of the RMB.

Second, the internationalization of RMB needs to play a dual driving force of market factors and government factors, the need to nurture a full market economy environment and financial system environment, the need to achieve its strategic objectives and achieve the ultimate success. The internationalization of RMB should actually be a process of the evolution of natural occurrence and development after the development of market economy, but also the development process of government-led and careful planning and increasing impetus.

In the course of this evolution, we need to run according to the Basic Law of the common currency in order to realize the internationalization, in particular, the RMB itself needs to follow the unique constraints, in the process to show its own characteristics. In addition, through the analysis of the experience and revelation of the International monetary internationalization in the US and Japan, the author finds that a country's currency internationalization needs to have both internal and external conditions while in-depth study of the successful experience of currency internationalization practices, such as the dollar, yen and euro. On the one hand, the internal need is to have a strong economic strength, stable value, open and developed financial markets, on the other hand, the external needs are the free trade system, international financial cooperation.
Third, the internationalization of RMB is a systematic project involving a variety of factors, which requires strategic planning and deployment beforehand, and needs careful preparation and steady advance. The process of currency internationalization of every country in the world has its specific environment and conditions, it needs to undergo a variety of factors of restriction and test, and this internationalization process is a gradual development process, there is no way to make it overnight. Therefore, the author put forward the necessary steps of RMB internationalization. First of all, the RMB internationalization should pay attention to the overall integration of the "one country, three currencies" in the scope of the Great China Economic Circle, that is, to form a common currency area as soon as possible in mainland China and Hong Kong and Macao, thus promoting the realization of monetary integration. After this stage of integration of the completion, the RMB will go to the next step in the international competition, thus occupies a dominant position in the international currency competition. Secondly, the active implementation of monetary cooperation within the framework of the development of regional economic integration, which is jointly constructed by China and ASEAN, makes it possible for the region to fully reach the stage of RMB free circulation and daily exchange, that is to say, to achieve the phased goal of RMB's overseas regionalization. All of East and South-East Asia including China, Japan and South Korea and ASEAN are included in the area of RMB regionalization to realize the significant breakthrough in the process of RMB internationalization. In addition, if the regional process has reached a certain level, the RMB in a broader scope can promote regional development, the region will gradually cover all regions of Asia, and gradually extend to the Asia-Pacific region, to achieve the local significance of the internationalization of the RMB development goals. Finally, on the basis of what has been achieved, the RMB not only achieves the global free circulation and convertibility, but also serves as the international currency, and dominates the world currency structure as the dollar and the euro, becoming the mainstream of the world currency. At this point, the RMB internationalization strategy has been successful. But competition with other world currencies will persist and continue.
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