Potential Boost of RMB Internationalization in 2020s

Master Thesis

Author: Bolong Wei
Supervisor A: Shi Yadong
Supervisor B: Li Xing
Major: China and International Relations
Keystrokes: 85871

Table of Contents

Abstract

The thesis aims to answer the question that why does the Chinese government need to speed up the process of RMB Internationalization, especially in the new global context of 2020s. The thesis based on empirical data collected from official reports, database of international organizations and scholar's articles, will use qualitative and deductive methods to exemplified the problem formulation. International Political Economy will be used in this thesis as a framework, because it have a more comprehensive theoretical framework to deconstruct a more complicated situation or phenomenon, which is RMB Internationalization in the text.

The thesis at first the thesis will briefly review the history of RMB Internationalization, including the overall development and the policy transformation. Then several aspects of the processes will be introduced and analyzed separately in the following orders: international use, infrastructure construction (especially for payment or clearance), China's Belt and Road initiative and Asian Infrastructure Investment Bank, RMB's Inclusion into SDR, RMB-denominated Commodities (INE crude oil), offshore RMB market and Digitalization of the RMB. In these chapters, different parts apply different theories. At last, the author will give conclusions on the verification of the formulated problem, and also try to share more thoughts based on some new international context (especially the coronavirus pandemic) on it.

Potential Boost of RMB Internationalization in 2020s

1. Introduction

1.1. The Development of RMB

The People's Bank of China (PBC) was formally established in the late 1948, and the Renminbi (abbreviated RMB) was born at the same time. PBC began to exchange various currencies issued by the liberated areas, while prohibiting the circulation of currency issued by other parties, such as gold bonds ("Jinyuan Quan") and silver bonds ("Yinyuan Quan"). After the end of Chinese Civil War, currency of China was gradually unified (Zhong & Wei, 2018). Thus，the first set of RMB was born in the liberation fire, opening a new chapter in China's financial history. The end of the chaotic history of the flow of money markets in old China laid a solid foundation for the victory of the liberation war in the country.

In 1949, Tianjin, Shanghai, Xiamen, Guangzhou and other ports have been liberated. Under the unified leadership of the central government, the Chinese the People's Bank of China, based on the exchange rate of the Tianjin port, shall, according to local conditions, formulate and publish the foreign exchange licence price on its own. On January 18, 1949, Tianjin first reported that the exchange rate of RMB to the US dollar was equivalent to RMB 80 (old currency). After February 1973, the United States dollar imposed its second statutory devaluation since the Second World War, and subsequently other major Western countries announced that they would no longer assume the obligation to maintain a fixed exchange rate under the Bretton Woods system, and the international monetary system entered an era of general fluctuations. Under the floating exchange rate system, the international financial situation is volatile. In order to avoid the damage that western countries may cause China's economy by using the devaluation of currency to pass on the economic crisis, export inflation and unfair competition in the international market, the formulation and adjustment of RMB exchange rate has changed from the original US dollar as the benchmark currency to the peg to a basket of currencies, i.e. to select a number of important currencies related to China's foreign trade, and calculate the exchange rate of RMB against a certain currency according to the changes in the weighted average exchange rate of these currencies.(PBC, 2015)

In 2009, the RMB ushered in a good period of opportunity for cross-border trade settlement and peripheral development. After that, the internationalization of RMB has officially entered the track, the specific situation will be analyzed later.

Central bank digital currency (CBDC, also called digital fiat currency or digital base money) is the digital form of fiat money (a currency established as money by government regulation or law). China has been working on its own CBDC, DCEP, for years, and it turns out to have some breakthroughs in recent years. According to April 16 news, the central bank's digital currency of China will first land in Suzhou Xiangcheng to test the first application scenario. (Xinhuanet, 2020) This also may cause great impacts on multi-dimensional economic ties, including bi-multilateral trades, in/direct investment, cross-border circulation and so on.

1.2. Opportunities and Challenges of RMB Internationalization

While the RMB is increasingly used for cross-border payments, it is limited to border trade with neighboring countries and between foreign companies in China and their parent companies. Current international situation provides probably a golden chance for RMB Internationalization. China has undertaken some important methods to promote RMB Internationalization including the pilot program of international trade settlement, the bilateral currency swap agreements and other uses in financial markets. However, there're still some challenges from both the international conditions and the domestic economy. The objective of this study is to discuss some feasible means to overcome the challenges and to provide a promising future of RMB Internationalization.

1.3. Development obstacles to the internationalization of RMB

Although the dollar's position has weakened, it is still at the top of the world currency. The rise of the euro has failed to impact the hegemony of the dollar, and the RMB is far from the euro's world influence. The 2008 world financial crisis made all countries aware of the risks of the world financial system and continued to take measures to avoid them again for the next 12 years. At the time of the epidemic, the world economy began to go backwards, GDP growth turned negative, a new round of financial crisis may occur sooner or later.

PF: Why does the Chinese government need to speed up the process of RMB Internationalization?

Objective: The objective of the thesis is to provide an explanatory framework for the current RMB internationalization process and try to understand its past, present and future.

2. Literature Review

The researches on RMB Internationalization are relatively abundant, including three main study groups: researchers from China, Asia and the West. However, it still lacks global attention comparing to issues like de-dollarization. Foreign scholars are more likely study merely on its contemporary limited economic influence, ignoring its potential for future development.

Scholars from the West have contributed some articles mostly on Sino-capitalism. Christopher A Mcnally has conceptualized China's domestic political economy as having generated Sino-capitalism and made efforts trying to reveal the basic institutional logic behind it; Peter G. Zhang ,Thomas Chan and Simon Gleave have written a book *The Chinese Yuan internationalization and financial products in China*; Sarah Hall has been focusing on RMB Internationalization impact in London financial district through several articles. It can be seen that some Western scholars realize the importance and researchability of this problem.

In contrast, Asian scholars may have rather more understandings on the process among foreign scholars. Takatoshi Ito has written a couple of works related to the world economy and the International usage of RMB; Jong Wha Lee has commented on Chinese scholar’s work on RMB cross border arbitrage; Park, Yung Chul has written an article about financial and monetary cooperation in East Asia resulted from RMB internationalization;

China's research on RMB Internationalization is much more detailed. Most articles are in Chinese, involving geopolitical analysis, the dilemma of RMB as a global foreign exchange reserves, Opportunities for the RMB Internationalization along the Belt and Road Initiative and so on. For instances, Yu Yongding has made up four objectives of RMB Internationalization including less need for China to hold US dollar assets, the elimination of exchange-rate risks for Chinese firms, greater funding efficiency for Chinese financial institutions and the promotion of Shanghai as an international financial center; Lin Hongyu thought the rise of euro and the appearance of the internationalized RMB will have great impact on the US dollar hegemony and competition for international monetary power will become the main cause of geopolitical conflict in recent years; Xia Guangtao has done analysis through the evolution track of Sovereign Currency Internationalization perspective.

In addition to the scholars' articles, there are detailed official reports. The International Monetary Institute of Renmin University of China issues the “RMB Internationalization Report” annually from 2012, faithfully recording the development footprint of RMB internationalization. Moreover, PBC has published annual reports on RMB internationalization.

3. Methodology

3.1. Methods

The main method of this thesis will be qualitative method, basically documentary analysis, supported by quantitative basic economic data analysis.

The reasoning process will be deductive. The hypothesis that China needs to accelerate the RMB internationalization was brought up at first and will be verified through the writing of the thesis.

At the beginning, the thesis will briefly review the history of RMB Internationalization, including the overall development and the policy transformation. Then several aspects of the processes will be introduced and analyzed separately in the following orders: international use, infrastructure construction (especially for payment or clearance), China's Belt and Road initiative and Asian Infrastructure Investment Bank, RMB's Inclusion into SDR, RMB-denominated Commodities (INE crude oil), offshore RMB market and Digitalization of the RMB. In these chapters, different parts apply different theories. At last, the author will give conclusions on the verification of the formulated problem, and also try to share more thoughts based on some new international context (especially the coronavirus pandemic) on it.

3.2. Theoretical Choices

The deductive way of reasoning needs to have a more comprehensive theoretical framework to deconstruct a more complicated situation or phenomenon. This will need a relatively inclusive theory as the support of this thesis. Therefore, International Political Economy will be used in this thesis as a framework, because it doesn't focus on single actor, issue or perspective that can not fit either "international" context (between nation-states) or "transnational" context (across the national borders of two or more states). Although some of these perspectives are somewhat contradictory and incompatible with each other, they all have persuasive ability when they are working separately. In other words, it will be more

3.3. Empirical Considerations (Data)

The data relating to statistics, big events and official policies mainly comes from official Reports (especially on RMB Internationalization) written by institutes in China or international organization. The language of the data and resources are mainly in English and Chinese.

3.4. Delimitations of the thesis

The thesis may focus on International Political Economy and International Relations aspects, since the author are weak in mathematical and financial analysis. However, the author will try to qualitatively analyze relevant data and events trying to explore the reasons and to reveal some opportunities for development of RMB Internationalization. Also, the author's understanding of theory is likely limited to contemporary development, the origin and some part of the history on IPE’s perspectives may be ignored.

4. Theory

4.1. International Political Economy theory

IPE's three overriding perspectives are economic liberalism, mercantilism and structuralism. Each one reflects on the relationships that occur between different actors and institutions.

A clear distinction between these viewpoints is rather subjective and has been enforced by institutional practice that makes it often difficult to understand each other's relations. Different values, players and solutions to policy issues are emphasized from a viewpoint, but certain important elements are still ignored by both viewpoints.

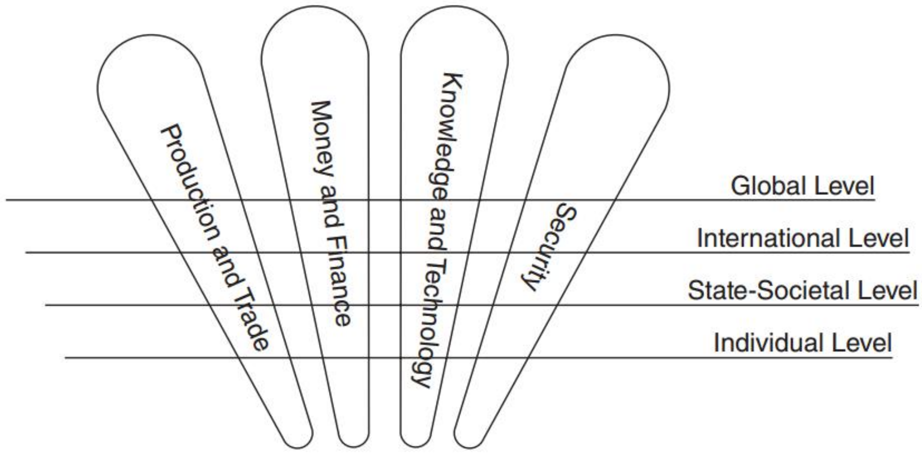
In order to provide a more detailed overview, IPE combines various perspectives. It is more flexible than other disciplines as it permits the researcher to choose how and what tools to study it.

Social science has always reflected this in interpretations of human behaviour. Today the IPE represents the attempt of political theoreticians and philosophers to return to the form of study that they perform before human social interaction is separated into various fields of social science.

4.2. 4 Levels and 4 Structures

IPE theorists commonly use different levels of analysis in their research: the global level, the interstate level, the state/societal level and the individual level. The classification is easy to understand, but the application of different approaches and combination with 4 structures make the analysis process more diverse.

Also Susan Strange's four structures (the production and trade structure, the finance and monetary structure, the security structure, and the knowledge and technology structure) are widely used in related analysis. The production and trade structure is the issue of who produces what, for whom, and on what terms lies at the heart of the international political economy. Making things and then selling them in world markets earns countries and their industries huge sums of money, which ultimately can quite easily shift the global distribution of wealth and power. With perhaps the most abstract set of linkages between nations, the finance and monetary structure determines who has access to money and on what terms, and thus how certain resources are distributed between nations. (Balaam, 2015)



4 levels and structures in IPE analysis

Sources: Introduction to international political economy. Sixth edition Balaam, (2015), p.14.

At the global level, the security structure comprises those persons, states, international organizations, and NGOs that provide safety for all people everywhere.
Knowledge and technology are sources of wealth and power for those who use them effectively. And this construct the knowledge and technology structure, including technologies from daily life to weapons of mass destruction.

As for this thesis, most problems will be analyzed in a liberal way on global level; On international level, mercantilism will be mostly used for exploring the root causes of conflicts between nations; on state-societal level, structuralism can better explain how nations adjust their policies to fulfill their (mostly economic) development ends; Finally on individual level, Trump may be more suitable as an example on individual level than Merkel mentioned in the textbook in nowadays situations.

4.3. Liberalism Perspective

For economic liberals (also referred to as neoliberals), the state should play a limited, if not constricted, role in the economy and society. Orthodox economic liberals (OELs) who advocate open markets and free trade and HILs who endorse more governmental intervention and trade security to preserve markets. HIL's have continually emphasized that markets operate better as they are incorporated into (connected to) society and as the state intervenes to address problems that markets alone can not cope with. Many HILs recognize that many of these problems are caused by the market. Keynes has been a key figure because he explained uncertainty—exclusive of rational expectations—and justified efforts to manage the economy in such a way as to serve the broader interest of society instead of the wealthy. The crisis has led HILs to assert that states must act to save the financial system and even capitalism itself. Interestingly, some OELs agree. For example, in a Financial Times piece titled "The Seeds of Its Own Destruction," the OEL Martin Wolf acknowledges that "the era of financial liberalization has ended and that the state can be expected to play a bigger role in rescuing banks and adopting other interventionist measures.

Most often discussed HIL proposals are as follows (Balaam, 2015, p.46.):
Spend more to grow the economy, without worrying about inflation. Create more jobs; Invest more in new technology for energy and transportation, infrastructure, education, and health care; Impose tougher regulations on banks related to derivatives, deposit requirements, pay, and bonuses; Break up big banks to increase competition; Better manage globalization, but without stopping it.

In light of these factors and others, OELs prefer to keep the main laissez-faire characteristics of the free market, subject to a few, more passive reforms. They propose to (Balaam, 2015, p.49.):
Limit government support for banks, infrastructure projects, and social Welfare programs; Decrease regulation of many parts of the economy; Cut taxes of the wealthy and middle class to stimulate economic growth; Foster more globalization, which is good for the united states and the world.

4.4. Mercantilism Perspective

Mercantilism is the oldest and most psychologically integrated of the three IPE viewpoints. It constitutes one of the basic compulsions of all citizens and nation-states: building and maintaining wealth and power to safeguard and defend the stability and freedom of the country from a range of real and imagined threats.

While mercantilists typically concentrate on a country's economic challenges, realists emphasize a broader variety of physical challenges and promote use of both military and economic means to avoid attacks.

Firstly, traditionally, mercantilism is rooted in the need for security of individuals and states. Secondly, the experience of merantilism shows that States have always been compelled to control markets and that without the state's readiness to embrace, sustain, and handle them, there are no beneficial effects of markets. Thirdly, if these priorities align with national interests, it states that follow economic liberal aims, including the opening of markets and the promotion of freedom of trade. Fourthly, paradoxically, globalization has not diminished states' desire to defend themselves as economic liberals have indicated. Rather, because of rising tensions and conflicts, globalization has actually further exacerbated national insecurities. Finally, mercantilists argue that States find it difficult to work with each other and other global actors in addressing problems such as the recent financial crisis.

In the 1930s, Keynes' ideas became more popular because of pressure on the state to respond to more voters and higher standards, rendering the laissez-faire philosophy politically no longer appropriate. Keynes offered more optimistic ideas as to how developed countries would rebuild their economies and tackle the social consequences of depression. He assumed that recessions and depressions could last a long time, not just because markets often collapse. To mitigate people's propensity to follow authoritarian leaders, states had to step in to improve the national economy's pump to raise employment, cope with the social effects of unemployment, and restore trust in the capitalist system. The architecture and function of the three Bretton Woods institutions—the GATT, IMF, and World Bank—have all been greatly influenced by Keynes' ideas after World War II. Economic liberals also argue that, after the war , the United States and its allies in the Second World War (less the Soviet Union and China), with different economical liberal aims, established a new international political-economic order. The GATT has eliminated trade barriers.

The IMF helped to eradicate discrimination against currencies. The World Bank helped European countries recover from war and subsequently helped the least developed countries (LDCs) to expand. U.S. officials also suggested that a gradual opening of foreign markets would avoid the kind of mercantilist conflicts which had ravaged states before World War II under United States leadership.

It was hard for states, as the well-known political economist Robert Gilpin argued, to choose the correct counteractions without understanding the intentions of the countries involved. Gilpin distinguished between aggressive and benevolent mercantilist intimidation. The first is a more hostile version of economic warfare and the policies used by nations expanding their territorial base and/or political and economic influence, beyond what is considered reasonable to protect themselves. at the expense of other nations. On the other hand, benevolent mercantilism is more protective in nature “it attempts to protect the economy against untoward economic and political forces.”(Balaam, 2015, p.22.) Of course, the problem is how to discriminate between the two in an environment where the difference seems to be a matter of degree rather than of kind.

There are two common types of neomercantilist policies today: industrial and infrastructural policies and strategic resources policies. The former aims to promote industrialization and infrastructure construction, while the later focus on the "scramble" on (rare) resources that may constitute a part of energy security of a country. For instance, the United States shall be classified to the latter type.

Many states limit foreign investments in their country in a variety of subtle and not so subtle ways—often in an attempt to reduce threats to independence or national sovereignty. They can limit the percentage of shares in a domestic company (like an oil company) that foreigners can own or they can ban foreign investments in strategic industries like natural resource extraction, power generation, banking, and media. It is also common to make it difficult for foreigners to buy land or real estate on which to build factories, set up services, or accumulate office space. The intent of these policies is often to give domestically owned companies an advantage or to prevent foreigners from gaining too much control of a sector of the economy by forcing them to cooperate with local companies.

Neomercantilists also believe that interdependencies are not always symmetrical (felt equally) between states. The suppliers of strategic resources and commodities like oil tend to view their capacity and the resulting dependency of others as something positive that improves their power and security. In many cases, the relatively high cost of oil, coupled with supplier threats to cut it off to client states, makes the issue of dependence on any resource or vulnerability to a supplier of that resource synonymous with a national security threat. Rare earth resources are also competing resources between countries. China has also had frictions with some partner countries because of rare earth resources, such as Japan. Ideally, only complete self-sufficiency in raw materials would make a nation-state politically and economically secure.

Mercantilist ideas have evolved over the years and adapted to changing conditions in the international political economy. Both mercantilists and their realist cousins would also note that by their very nature states can be expected to use the economy, either legally or illegally, as a means to generate more wealth and power. The end of the Cold War in 1990 also helped blur the line between economic and broader national security concerns for most states. For mercantilists and realists today, the world has not been ready for the market to rule all for very long. HILs would agree with mercantilists that there would be no market without the state, and the invisible hand must serve more than the interests of a select few.

4.5. Structuralism Perspective and the World System Theory

Structuralism has its roots in the ideas of Karl Marx but today encompasses a much broader group of scholars and activists. While most structuralists do not share the commitment to a socialist system as envisioned by some Marxists, they do believe that the current global capitalist system is unfair and exploitative and can be changed into something that distributes economic output in a more just manner.

It is a great tragedy, according to Marxists, that capitalists not only exploit workers but also manipulate their beliefs so that they become ignorant of, or apathetic about, their own exploitation. Marx’s four main contributions to IPE—the definition of class, class conflict and the exploitation of workers, control of the state, and ideological manipulation are separated from his theory of history, which predicted the inevitable collapse of capitalism and its replacement with socialism (and ultimately communism)

The term neo-imperialism defines a more subtle and younger form of imperialism, asserted by the Structuralists after the end of the 1975 Vietnamese war by the United States and other industrialized nations Others blame transnational corporations for exploitation, natural resources and for the quest for markets and cheap labour in developing regions

A structuralistic viewpoint that emphasizes connections between the core and peripheral countries, while at the same time drawing attention to the constraints on the countries of the latter community, is called theory of dependence. Instead, Structuralists oppose the progressive liberal understanding of freedom of trade and deregulated economies, arguing that power inequalities between capitalists and workers and between the rich and poor creates exploitation, inequality, unemployment and poverty.

The global monetary and financial system is still fragile and uncertain for the time being. Increasingly, the IMF and the World Bank play less important positions in currency exchange supervision and lending. Many OELs and some HILs (also known as the austere or deficit hawks) point out that trade surplus economies will avoid keeping huge foreign currency reserves as a means of self-assurance against having to use the IMF to receive lending. Countries such as China, Japan and Saudi Arabia would allow their currencies to increase domestic spending and consumption.

World-system theory by Immanuel Wallerstein is a macro-sociological perspective that aims to describe the dynamics of the capitalist world economy as a comprehensive social system. National states are factors, components in the scheme. States in the case of core countries are used by class powers to pursue their interests. Imperialism refers to the domination of strong core states over weak periphery areas. Hegemony refers to a core state that exceeds the rest theoretically. Hegemonic forces maintain a stable balance of power and promote free trade for their benefit.

The world system refers to the inter-regional and transnational labor division, which divides the world into core, semi-peripheral and peripheral countries. The core countries depend on increased expertise, capital-intensive development and the rest of the world are low-skill, labor intensive manufacturing and raw material extraction. The domination of core countries is increasingly increased. Over the last few years, the global structure has grown globally and risen economically, and this position has gone from the Netherlands, the United Kingdom and, most recently, the United States. China is considered as a semi-periphery state, but it also has the status of great power, which makes some contradicts in the theory.

5. Analysis

5.1. 10 year development of RMB Internationalization in a nut shell

At the beginning of the Reform and the Opening up, RMB flows through networks such as personnel exchanges, border trade and border tourism to Chinese neighboring nations, and also to Hong Kong, Macau and Taiwan areas. The exchange rate of major world reserve currencies like USD, EUR and JPY had fluctuated dramatically since the international financial crisis outbreak of 2008, and demand was increasing for businesses and individuals to use RMB across borders. The internationalization of RMB was launched following voice of the market. The regulatory restrictions on cross-border use of RMB have gradually been eliminated over the last ten years. RMB has been used globally slowly from the current account to the capital account, from banks and corporations to individuals, and from simple companies to complicated firms. RMB Internationalization 2019 report by PBC writes (PBC, 2019):
"The function of RMB, as an international currency, had also been expanded from the single settlement function to functions of investment and financing, trading and pricing, and international reserve."

5.2. Policies Transformations——From Pilot Program for Trade Settlement to Current Account Settlement, then to Capital Account Settlement

Following the international financial crisis in 2008, domestic import and export companies demand RMB settlement in cross-border trade in order to reduce exchange cost and achieve stable trade financing. In July 2009, in Shanghai and four other cities in Guangdong province, including Guangzhou, Shenzhen, Zhuhai and Dongguan, the RMB Cross-border Settlement Pilot Program was introduced. The geographical cover for Overseas Counterparties was limited to Hong-Kong SAR China, Macao SAR China and SEAN countries. In August 2011, the pilot program was nationwide expanded to cover the business scope of cross-border settlements for goods and services, and other existing settlements. Since 2009, annual cross-border RMB settlements on the account were rapidly increasing, at an initial stage of less than RMB 400 billion yuan, and in 2015 they reached RMB 7 trillion yuan, followed by continuous growth. (PBC, 2019)

In October 2010, the PBC initiated an Outward Direct Investment (ODI) Pilot Program in Xinjiang. In January 2011, the PBC authorized the RMB pilot regions to settle cross-border trade with ODI. In August, the RMB cross-border trade pilot program expanded across the country, as did the RMB ODI businesses. In October, the Foreign Direct Investment Policy (FDI) was introduced. The cross-border ODI and FDI RMB settlements were established from scratch and their share in all cross-border direct investment settlements continued to grow from less than 5% in 2010 to more than 50 percent in 2018. (PBC, 2019)

With the accumulation of offshore RMB, investment and asset allocation demand for RMB had increased. At the same time, China's financial markets' bid-opening process has been accelerating, with investment platforms, such as China's interbank bond market, Renminbi Qualified Foreign Institutional Investment (RQFII), Renminbi QDII, Shanghai-Hong Kong Stock Connect and the Shenzhen-Hong Kong Stock Connect, and the Reconnaissance of Mutual Funds. There was a increasing diversification in the types of domestic entities issuing RMB bonds abroad and offshore entities issuing RMB bonds in China (Panda Bonds). Cross-border RMB securities investment settlement rose from RMB 100 billion yuan in 2011 to over RMB 6 billion yuan in 2018, reaching growth of 84 percent in 2018.

RMB’s Inclusion into SDR Laid an Initial Foundation for its International Currency Role In October 2016, the RMB officially joined the SDR currency basket, with a weight of 10.92%, ranking the 3rd among the basket currencies. During the fourth quarter of 2016, the RMB reserve amount in the IMF 's Official Foreign Exchange Reserve Currency Composition (COFER) was equivalent to USD 90.78 billion, which was the first time that IMF published RMB reserve details. In March 2017, IMF released data of the COFER on an expanded currency range, separately identifying holdings in RMB for the first time. The size of RMB COFER Reserves by the end of the fourth quarter of 2018 amounted to USD 202.79 billion , representing 1,89 per cent of the total, which ranked sixth among major reserve currencies. According to outdated estimates, the RMB was included in their currency reserves by more than 60 central banks or monetary authorities.

The RMB was the second largest cross-border settlement currency in China in eight consecutive years and ranked fifth in payment, third in export finance, eighth in foreign exchange trading and sixth in reserves around the world. The RMB was absorbed into its foreign reserves by more than sixty central banks or monetary authorities worldwide. More than 320,000 companies and 287 banks carried out cross-border RMB operations and two hundred forty two countries and regions entered into cross-border RMB agreements with China. (PBC, 2019)

Openness on Money and Finance sector becomes bigger and bigger. Although the size of RMB used as an international reserve currency stay small comparing to the prevailing US dollars and euros, qualitative changes will bring about quantitative changes in the future. This means that as long as only a few enterprises from developed country that accept RMB using in cross-border settlement, the other enterprises in the same country tend to accept it too sooner or later. The settlement role of RMB has been continuously improved and its investment and financing and exchange feature has also constantly deepened. It made a breakthrough in terms of the pricing function and gradually became a reserve currency.

Policies transformations on RMB usage in China has been an essential part for both production and finance structures on state-societal level. As long as the direction of domestic reform remains towards openness, the impact of RMB internationalization on each financial aspect will be boosted.

5.3. International Use of the RMB

5.3.1. Overall situation

RMB was listed as an international reserve currency by intergovernmental orgnizations. The RMB reserves, which accounted for 1,89% of total foreign-exchange reserves of the designated currencies by the end of the fourth quarter of 2018 ranked sixth and exceeded 1,62% of AUD and 1,84% of CAD, which had been the highest level since the IMF had issued RMB reserve assets in 2016, were based on the IMF COFER data. More than 60 central banks or monetary authorities have included RMB into their foreign exchange reserves, according to incomplete statistics.

Although the foreign reserve currency of the RMB is obviously rising, the global share is still too small. At the end of 2018, the USD index closed at 96.17, with a year-on-year increase of 4.4%. The latest data released by the IMF showed that as at the end of the 4th quarter of 2018, the global official foreign reserve reserves were USD 10.73 trillion, representing 61.7 % of USD reserves, which fell for 3 consecutive quarters. According to the latest data published by the IMF, the EURO represented 20.7% of global official foreign reserve assets, the highest level since the fourth quarter of 2014, at the end of Q4 2018. Based on recent data released by the IMF, the JPY reserves accounted for 5.2 % of global official foreign reserve reserves at the end of the fourth quarter of 2018. According to latest data released by the IMF, as of the end of Q4 2018, 4.4% of the global official foreign reserve reserves accounted for pound reserves. (PBC, 2019)

5.3.2. The Use of RMB in Neighboring Countries

Cross-border RMB settlements between China and neighboring nations stood at RMB 3.1 trillion in 2018, with an increase of 46.3 percent year-on-year, higher than the average rate of increase. Between them, current account settlements for RMB were RMB 1.1 trillion yuan, an rise of 13% year-on-year. Cross-border RMB direct investment settlement amounted to RMB 282.8 billion yuan with an annual growth of 68.1 percent. The total sum of cross-border RMB trade and investment settlement accounted for over 40 % of the overall cross-border RMB settlement value.

Of the above, cross-border RMBs with Nepal grew by nine times and Belarus grew by seven times a year, and thirteen countries such as Singapore, Korea, Russia and Thailand grew by more than 50% a year. In its foreign exchange reserves, 15 foreign central banks, including Singapore, South Korea, Russia and Cambodia, included RMB assets. China currently has RMB clearings in six neighboring countries, bilateral settlement agreements with 9 neighboring countries including Vietnam, Kazakhstan for local currency and bilateral trade agreements with central banks and/or monetary bodies from 14 neighboring countries such as Mongolia and Japan. Regional RMB trading against Thai Baht was extended to the domestic interbank exchange market in February 2018. The RMB direct quotation and position squaring process for Kazakhstani Tenge was introduced in September and the first batch of foreign banks was introduced to enter the regional trade on the foreign-exchange market of Kazakhstan. Thus an RMB listing system for Kazakhstani Tenge was initially developed on the basis of the bank-counter listing and sponsored by regional trade in the interbank foreign exchange market.

Moreover， in 2018 China launched the "Port-Interconnection Information Service Platform" and the "China (Xinjiang)-Silk Road Currency Regional Trading Information Platform" and created and completed the Overseas Border Residents Bank Account Services Platform, which allowed border residents to take part in borders.

5.3.3. Multinational Enterprises Prefer RMB in Cross-border Receipt and Payment

With China's comprehensive national strength increased, China played an increasingly important part in the global architecture of multinationals. As an example, Shanghai has established the regional headquarters in Shanghai for eighty-three of the world's five hundred top businesses, with various functions such as fund management, procurement, sales and sales in China.

In 2018 the Shanghai multinationals conducted a total of RMB 174.2 billion in yuan of cross-border RMB settlement, representing 54 percent of their total RMB and foreign exchange revenue and payments during the same period. The settlement volume of cross-border RMB was for the first time higher than that of foreign exchange settlement. Among these were 20 companies whose share of RMB cross-border receipts and payments reached over 90% in overall cross-border settlements.

Many multinationals had considered settling all China-related cross-border businesses in RMB. Cross-border RMB companies have had tangible advantages for multinationals. First of all, exchange rate risks were avoided and exchange costs reduced. Secondly, it was useful to reduce the operational costs of the supply chain and to focus upstream and downstream companies on their major enterprises. Third, it was useful to improve the efficiency of settlement of cross-border funds. Fourthly, it was useful to strengthen the discourse power of China's regional multinationals headquarters. Many multinationals in China have actively sought to convince their parent companies to use RMB for their Chinese-related business and to pass on their international RMB assets for centralized operations to domestic companies. There have been some fluctuations in the RMB exchange rate since 2018, but multinationals had not reduced RMB's use across borders, showing that multinationals were path dependent on the use of RMB cross-border settlements. The survey shows that multinationals expect to maintain the current healthy business environment, maintain the stability and continuity of RMB policy across borders. They also want to further improve the convenience of policies and improve the RMB's convertibility and free use.

5.3.4. Panda Bond was Welcome by the Market

Since 2018, Panda Bond's market had attracted considerable attention from the international market due to the accelerating development of a two-way opening of China's financial market. The category of bond issuers has grown further and the emission scale has also increased considerably. Panda Bond issued by non-financial companies has risen the most rapidly as a bond issuer in 2018, with 16 issuers issuing 36 panda bonds totalling RMB 62.7 billion yuan, rising 191.6% year-on-year. The total Panda Bond issued by foreign governments from the Philippines, the United Arab Emirates and Hungary amounted to nearly RMB 5.5 billion. Eight sovereign Panda Bonds had been released by the end of 2018, with a total emission amount of near-RMB 16.5 billion, by six sovereign bond issuers of Poland, Hungary, the Philippines, the United Arab Emirates, Canada and South Korea respectively. The Philippines and the United Arab Emirates accessed China for the first time in 2018 to issue bonds. 4 financial institutions including MUFG Bank, Mizuho Bank, ABC International and BOCGI released a total of RMB 6,5 billion yuan Panda bond. The bond issuance rate of non-financial companies was overall the largest in 2018, reaching 84%, while the bond issuance of financial institutions and foreign governments accounted for 8,7% and 7,3% respectively.

With the growth of the Panda Bond market, the interest of investment institutions has slowly increased. In 2018, the types of institutions participating in Panda Bond investments increased, gradually involving rural commercial banks and urban commercial banks. Investment size has increased substantially in domestic institutions of international exchange banks, such as HSBC (China), MUFJ (China) and Mizuho (China). In 2018, international commercial banks' overall investment reached RMB 1.3 billion, three times more than in 2017. International investors had boosted their excitement. A ton of Panda Bond has been subscribed by international investors in recent years. In Hungary, Canada and the Philippines, 55 percent, 73 and 88 percent of international investors subscribed, including sovereign wealth funds and central banks. In linking China's bond market with international issuers and investors, Panda Bond played an important role.

The Interim Rules for the Administration by Overseas Institutions of the Interbank Bond Market (PBC and MOF Public Announcement [2018] No.16) were jointly released in September 2018 by the PBC and by the MOF, which comprehensively standardize the bond issuance processes of four types of China financial institutions, including issuance authorization, registration, custody and settlement. The enforcement of the rules was important for the sound and structured development of the Panda Bond market. When RMB internationalization progresses and China's bond market is opened up, more bond issuers and investors enter the market and opportunities for Panda Bond increase.

Panda Bonds issuers had protected international development agencies, foreign governments, non-financial multinational firms and financial institutions by the end of 2018. The total amount of panda bonds registered or approved reached RMB 662,3 billion yuan and the total emission reached RMB 314,7 billion yuan. In 2018, the latest Panda Bonds issuance volume hit almost RMB 74.7 billion yuan, up 23.8 per cent year earlier.(PBC, 2019)

5.3.5. Chinese Bond were Included in Important International Indexes

In March 2018, Bloomberg announced the inclusion of Chinese government bonds and policy bank bonds in the Bloomberg Barclays Global Composite Index from April 2019 in twenty months. In April 2019 Bloomberg was officially listed in the index as Chinese bonds, while RMB bonds became the fourth currency portion of the index after the USD, EUR and JPY, the first RMB bonds listed in three major foreign binding indexes worldwide. This has literally enhanced China's position in the money and finance structure on global level.

5.4. Infrastructure Construction

5.4.1. RMB Cross-border Interbank Payment System

The RMB Cross-Border Interbank Payment System (CIPS) was started in 2012 by the PBC. In these years, CIPS' roles have been continually strengthened, the number of participants increased and the amount of business increased. Participants have widely recognized the efficiency of clearing and settling. CIPS (Phase I) was implemented in October 2015 to support payment firms in the real-time gross settlement mode, such as payment forwarders and financial institutions, which meet the settlement needs of cross-border RMB companies, investment and finance in major time regions around the world. Bond Connect was released in October 2017 and CIPS met the settlement criteria accordingly. By using Hong Kong as a node, CIPS linked China with a number of economies' markets and supported an foreign settlement mode of delivery versus payment (DVP), covering the spot trading, bonding and bonds buying business area, which satisfied the needs of foreign investors to invest in mainland bonds without changing their business.

In May 2018, CIPS (phase II) was launched and the deferred net settlement (DNS) mode was introduced. The operating hours were extended from 5×12 to 5×24+4 hours, covering all the financial markets' working hours in each time zone around the world, and promoting intra-day settlement. The CIPS introduced a night session on the interbank monetary market to meet the liquidity adjustment needs of domestic and international direct participants at night. In addition to DVP, CIPS has also introduced RMB payment versus payment (PVP) for foreign currencies and the local counterpart regional clearing mode. At the end of 2018, 31 direct participants and 818 indirect participants, representing 89 countries and regions in six continents, had been participating in CIPS. The business included literally one hundred and sixty-one countries and territories and two thousand six hundred and fifty-nine financial companies incorporated. By the end of 2018, CIPS had managed over RMB 45.84 trillion of yuan in over 3.42 million international payment transactions.

In 2018, the CIPS settled 1.44 million payments in total, amounted to RMB 26.45 trillion yuan, with a year on year increase of 14.6% and 81.7% respectively. The total day-to-day amount amounted to 5,724 payments, RMB 105 billion, with a customer referral amount of RMB 4,63 trillion Yuan, RMB 9,36 billion Yuan and a bilateral transaction of RMB 4,300 Payment, RMB 575,8 Million Yuan and a total of RMB 5,724 billion Yuan and average customer remittance sum of RMB 4,63 trillion Yuan. In 2018, a total of 7,478 payments of Bond Connect funding amounted to RMB 893.1 billion yuan was completed by CIPS. From a bond trading viewpoint, institutions outside the EU made 4,619 bond purchase payments, totaled RMB 559.8 billion yuan and charged 2 859 bond selling payments of RMB 333.3 billion yuan. From a domestic custodian viewpoint, China Central Depository & Clearing Co. Ltd. paid 4,721 custody payments worth RMB 441.4 billion yuan, and Shanghai Clearing House made 2,757 custody payments worth RMB 451.6 billion yuan.

5.4.2. RMB Cross-border Payment Management Information System

In July 2009, the RMB Cross-border Payment Management Information System (RCPMIS) was launched by PBC to support the orderly development of the cross-border RMB pilot business. RCPMIS was officially the only regional information management company in China specialized in tracking the cross-border movement of RMB funds. Since its introduction, the device performance of the RCPMIS has been continuously optimized to meet the needs of business growth.

After a number of upgrades and reconstructions, the information collected by the system covered business information, flow information and stock information related to cross-border RMB receipts and payments. The statistical and monitoring role was slowly enhanced to meet the needs of the PBC for research, reporting, assessment and macro-control decision-making on cross-border settlement of RMBs. At the end of 2018, four hundred and twenty-four integrated financial entities and clearing banks in the Hong Kong and Macau regions had entered RCPMIS, with sixty-nine thousand two hundred and forty-nine successful members, and more than 33.78 million pieces of data and knowledge had been obtained.

5.4.3. The Operation of Cross-border Transportation of RMB Banknotes

Since 2009, the business scale of cross-border RMB banknotes transportation had continued to grow. The amount of cross-border RMB banknotes transportation by banks had increased from the initial RMB 10.9 billion yuan in 2009 to RMB 117.1 billion yuan in 2018, with an average annual growth rate of 28.9%. Before 2009, RMB banknotes transportation mainly took place in Hong Kong, Macau regions of China, as well as Mongolia, Vietnam and other neighboring countries. Since 2010, the clearing bank in Hong Kong, relying on the depository vault of Bank of China (Hong Kong), had provided the channel of supply and backflow of offshore RMB banknotes, which had gradually extended globally.

There had been three ways of cross-border RMB banknotes transportation used by banks: the overseas depository vault mode, the overseas clearing bank mode and the correspondent bank mode. With the continuous optimization of the overseas RMB clearing mechanism, transportation, and deposit and withdrawal environment, the secondary market of overseas RMB banknotes had continued to develop, and it had been increasingly convenient to obtain RMB banknote abroad.

5.5. China's Belt and Road Initiative and Asian Infrastructure Investment Bank

China's Belt and Road Initiative (B&R or BRI), also known as the One-Belt-one Road (OBOR) initiative, is a Beijing development initiative involving the construction of infrastructure and investments in Europe , Asia, Near East, Latin America and Africa, countries and international organizations. For future promotion only "initiative" may be used in Chinese official documents to avoid elements of political domination, instead of "strategy," "mission," "agenda" etc. President Xi announced the first proposal of the B&R initiative to 'establish a shared economic belt along Silk Road' alongside Central Asian partners to 'deepen cooperation and broaden growth in the Euro-Asian region,' when he addressed an audience on 7 September 2013 at Nazarbayev University in the capital city in Kazakhstan. The National Committee to

Establish and Reform (NDRC) later released an official initiative paper entitled 'Vision and Acts on Joint Building Silk Road Economic Belt and Maritime Silk Road of the 21st Century' in 2015. This document describes six main 'economic corridors' linking the Silk Road Economic Belt (SREB) with the Maritime Silk Road (MSR) of the 21st century, and defines a set of multilateral financial institutions such as the Asian Infrastructure and Infrastructure Bank (AIIB) and the Silk Road Fund (SRF).

According to the vision and action taken by the B&R Initiative, the key goals are to facilitate policy alignment, communication facilities, unimpeded trade, financial integration and people-to - people links alongside the belt and the road. "Five interconnections" (Deut, Wutong in Chinese) can be preceded by certain similarly important countries. Some western media, however, pay attention only to communication services, including various infrastructure projects within regional partners, which contribute to a limited understanding of the BRI objectives. China cooperated not only with its global allies in building the network but also in other movements. This will be further analyzed later in the third part.

The B&R program has grown over the years and new milestones have been accomplished. Belt and Road Technology Summit recently took place in Beijing on 5G+4K. This forum was attended by technology giants such as Sony and Huawei and 150 members from 30 media outlets. The Forum has released a 5G+4 K innovation plan calling on all members of the Belt and Road Media Alliance to share ideas, leverage emerging technology and create new opportunities for win-win benefits. France is set to begin many infrastructure and environmental initiatives in partnership with China months before this year, and several major countries, such as Italy, Switzerland and New Zealand, are all working under the BRI with China. With the implementation of strategic cutting-edge technology and collaboration with leading EU countries, the B&R initiative may be a more strong rival to US presence in Asia-Pacific.

The B&R initiative is a macro strategy that covers various facets, from geopolitics to communication on techniques and cultures, so its motives must be numerous and complex. The author divides these motivations into three main parts: economic motives, political motivations and other motivations.

The inspiration behind the B&R initiative is starting from the economy. China's annual GDP growth rate is beginning to decline in 2008 and the speed of growth has slowed since then. In order to revive the economy, the B&R program will undoubtedly become a "top concept" for the Chinese domestic economy to carry out the 13th "five-year plan" and help large state-owned enterprises make profits while sustaining the country's GDP growth. The BRI would promote trade across the region as well as on a large scale and eliminate physical and regulatory barriers between states. It will also tackle the excess potential of the infrastructure industry in the BRI member countries. However, from a regional economic perspective, China is trying to establish a win-win trade background and to connect more easily to regional partners , especially to Eurasian countries.

Political intentions may be split between internal policy and external policy. For internal political aspects, China needs to maintain stability in its territory, especially in rural provinces such as Xinjiang, Tibet and Yunan. Several BRI corridors move through the restive areas to strengthen the basic law of Beijing. Moreover, preferential policies will boost the economy of these relatively underdeveloped provinces. On the other hand , China has constructed many ports, highways, railroads and airports in many underdeveloped Eurasian and African countries that are not in real demand for infrastructure, Fitch Ratings suggested. In the future, these infrastructures could become military pivots for China. The BRI must plan for a new battle between the Sino-US rivalry and the hegemony struggle in the related areas. Sino-centric economic order and China-advanced norms and rules of engagement may be followed by BRI over longer periods of time.

Certain reasons may count as well. BRI may be the second act in the process of opening up and reforming China. China's high-speed rail technology and 5 G telecommunications technology are regarded as main products to be exported by Beijing via Belt and Road. In addition , cultural industries, such as Chinese media, film and music, want to spread more widely across regions. International recognition with Chinese technology and culture and greater production will therefore be key motivations behind BRI. However, the growth of the Shanghai Cooperation Organization (SCO) indicates a trend towards the creation of a China-led security architecture. In other words, BRI could improve China's military relations with other states and extend China's military scope to the world.

It is true that China's rise destabilizes the second periphery and, to some extent, challenges the world-led order of the US. In recent years, more Western media have linked debt-trap diplomacy to China's foreign diplomacy, which mainly includes the B&R initiative. A notable case is the major Port loaned by the Exim Bank of China, established in Hambantota, a small fishing town in southern Sri Lanka. As the Sri Lankan government was unable to clean up its debts, the port was leased to a Chinese state-owned corporation for a 99-year lease in 2017. While the Chinese authority declared that the port was solely commercially used, this Chinese "white elephant" had raised fears that it would become a Chinese naval base in the USA and India.

The rise of China may have an influence on the present world order led by the West. This is likely to understand China 's transition from rule-follower to rule-maker, but it is not precise enough. It is very natural that every nation may have its own reasons for growth and concerns about the fact that others are too powerful in power relations. However, given the "delicately measured" impetus behind BRI, China's rise is and will be peaceful, with a better system set up and organized by China and its partners around the world.

At present, "Belt and Road" along the RMB settlement ratio still has a lot of room for improvement. Through currency swaps, China can continue to promote the direct exchange of RMB and more national currencies, and improve the convenience of RMB settlement, while developing more RMB products and opening up channels for the return of funds to form a closed loop for RMB trade and investment, and to enhance the trust and willingness of international investors to use the RMB.

The AIIB is a multilateral development bank with a mission to improve social and economic outcomes in Asia, which headquartered in Beijing. Its business mainly includes sovereign-backed financing, nonsovereign-backed financing, equity investment and preparation advances for sovereign-backed financing. The organization structure of the AIIB is more complex, including not only different departments of general banks, but also the different region management sectors, which could be considered as a creative organization of a sovereign-backed bank. By May 2020, AIIB already has 80 members (44 regional members and 36 non-regional members) and 22 prospective members (6 regional prospective members and 16 non-regional prospective members across all 5 continents.

According to structuralism perspective, the B & R and AIIB are trying to build a RMB based new financial order with commitment for development of all mankind.
The establishment of the AIIB has had an important impact on financial support for the Belt and Road Initiative strategy and is of great strategic significance. The AIIB has formed a strategic interaction with the Belt and Road from the aspects of financial support, the establishment of economic cooperation platform and the improvement of the financing chain. The AIIB's financial help "Belt and Road" has produced a greater Chinese effect and world impact, in the process also encountered many problems and challenges, and how to deal with these challenges to make strategic choices. In the context of Covid-19 pandemic, the great governance and management ability of China

has shown to the whole world. It’s no doubt that this may increase the sovereign credit of China in many countries especially both semi-periphery western countries (South and East Europe) and periphery countries (mostly in Asia and Africa). Moreover, the implementation of a new financial order is always much more moderate than the promotion of a new governance order, in other word, hegemon. Thus, Running of AIIB could in some ways fix the problem that the B & R initiative could not be implemented smoothly in some countries or areas.

5.6. RMB’s Inclusion into SDR

On November 30, 2015, the IMF Executive Board discussed and approved the SDR review by a full vote, concluding that the RMB had met the export and "free to use" criteria, and decided to include the RMB in the SDR currency basket, which entered into force on October 1, 2016. The SDR basket was expanded to five currencies: USD, EUR, RMB, JPY and GBP, with the RMB weighting 10.92 per cent in the SDR basket and 41.73 per cent, 30.93 per cent, 8.33 per cent and 8.09 per cent of the POUND, respectively.

China is already the largest trading partner and foreign investor in many countries, and the potential demand for the renminbi is enormous. In fact, after the IMF announced that it would include the renminbi in the SDR, many countries, such as Singapore and Tanzania, announced that they would include the renminbi in their foreign exchange reserves. Another example is that the addition of the renminbi to the SDR would make bilateral currency swaps more attractive. Reflects the international status of emerging market economies.

The successful entry of RMB into the basket is a win-win outcome for China and the world, which not only represents the international community's recognition of China's reform and opening-up achievements, and is conducive to promoting the steady progress of the RMB internationalization process, promoting China's participation in the global economy in a deeper and wider field, and enhancing the representation and attractiveness of SDR itself, and perfecting the current international monetary system.
Historical experience has shown that the international monetary system, which relies too heavily on a single sovereign currency, is inherently unstable. The international financial crisis that broke out in 2008 deeply reflected the inherent shortcomings of the current international monetary system's over-reliance on the dollar. After the RMB joins the SDR, it will gradually develop into one of the major currencies in the world, and the situation of "three-legged" dollar, euro and RMB may be present in the future, which will help to promote the diversification of the international monetary system and improve the stability of the international monetary system. This will promote

RMB’s status among mainstream international currencies.

5.7. RMB-denominated Commodities: Shanghai International Energy Exchange Co., Ltd. (INE) crude oil as an example

After the listing of INE crude oil futures, the scale of the demand has been slowly growing. At the end of February 2019, the cumulative trade volume (unilateral, the same below) had reached 34.18 million hands, with an aggregate trading volume of almost RMB 16 trillion yuan and an estimated regular keeping of 22,000 hands. The total regular trading amount of INE crude oil futures surpassed that of Oman crude oil futures on the Dubai Mercantile Market, being the highest trading volume of crude oil futures in Asia and the third largest in the world, alongside the trading volume of WTI crude oil futures in the United States and BRENT crude oil futures in the United Kingdom. Currently, INE's crude oil futures had been filed with 52 foreign intermediaries in the Hong Kong SAR of China, Singapore, Britain, South Korea and Japan. Global merchants originate from the United Kingdom, Australia, Switzerland, Singapore, Cyprus and the Seychelles, as well as the Chinese regions of Hong Kong and Taiwan. With the steady development of the INE crude oil futures, the number and level of participation of foreign traders was expected to increase gradually. (INEwebsite, 2020)

The role of INE's crude oil futures, representing the supply and demand relationship in China's oil sector, had initially appeared. In March 2018, Shell concluded a crude oil trade deal with China International United Petroleum & Chemicals Co., Ltd. (UNIPEC), the first spot import-export market valued at INE crude oil futures as a benchmark. In October, UNIPEC concluded a crude oil trading deal with Shandong Jingbo Petroleum & Chemicals Co., Ltd., the first domestic spot trading valued at INE crude oil futures as a benchmark. Governmental bodies such as the Governmental Energy Agency (IEA), the Association of Petroleum Exporting Countries (OPEC) paid careful attention to the prospects of INE crude oil and gave constructive feedback. Quotation agencies such as Platts and Argus have obtained SHFE's approval to add INE crude oil futures price data to their information products and to increase the assessment of Asian cost insurance and freight (CIF) of SHFE's deliverable oil.

In March 2018, China's crude oil futures denominated and settled in RMB were officially listed on the Shanghai International Energy Exchange (INE), a subsidiary of Shanghai Futures Exchange, and foreign traders were introduced. The commercial variety consisted mainly of medium-sour crude oil, including the following seven deliverable crude oils: Dubai crude oil, Upper Zakum crude oil, Oman crude oil, Qatar marine oil, Yemen Masilla crude oil, Iraqi Basra light oil and domestic Shengli crude oil. The trading unit was 1,000 barrels per hand and trading hours were mostly 9:00 a.m.-11:30 a.m., 13:30 a.m.-15:00 a.m. and 21:00 a.m.-2:30 a.m. (the next day). For the time being, the distribution system was spot transfer, and the contract structure was net price sale and bonded distribution. Net price transaction refers to value excluding tariffs and value-added taxes. Bonded distribution applies to the actual transfer of the bonded oil warehouse. Actively, INE's crude oil futures trade was initially excluded from value-added taxes.(PBC, 2019)

At the end of April, U.S. crude futures WTI fell to an all-time low of $37.1 a barrel, which undoubtedly had a huge impact on the crude oil futures market. The use of RMB pricing price of crude oil futures not only for the internationalization of the RMB, but also for the national energy security, closely related.

5.8. Offshore RMB Market

5.8.1. Global RMB Foreign Exchange Trading

RMB's foreign exchange trade across the world growing gradually in 2018. According to statistics published by the Bank for Foreign Settlements (BIS) in April 2016 (updated on a triennial basis), RMB ranked eighth among the most successful currencies for global trade, placing fifth among emerging-market currencies. The average regular trade volume of RMB worldwide grew from USD 120 billion in 2013 to USD 202 billion, while the position of RMB trading value in the global foreign exchange sector increased from 2% in 2013 to 4%. Growth in RMB trading was mainly due to growth in RMB trading against USD, which represents 95 per cent of the total trading amount of RMB against all foreign currencies. The overall trade value of RMB versus USD rose from 9th in 2013 to 6th in the global rating, and the average regular trading volume rose from USD 113 billion in 2013 to USD 192 billion. According to SWIFT figures, RMB became one of the most competitive currencies on the world foreign exchange sector. Currently, RMB foreign-exchange trading volumes in the United Kingdom, Hong Kong SAR in China , the United States and Singapore rank among the top four in the offshore market, accounting for over 80 per cent of RMB foreign-exchange offshore trading in total.

Through the end of 2018, the volume of offshore RMB clearing banks had exceeded RMB 316.61 trillion yuan, with a year-on-year growth of 11%. Among which, the amount of voucher clearing amounted to RMB 29.41 trillion yuan, with an annual increase of 8.3 per cent, and the amount of interbank clearing amounted to RMB 287.2 trillion yuan, with an annual increase of 11.2 per cent. As of the end of 2018, 886 participating banks and other institutions opened clearing accounts in foreign clearing banks, increasing international cooperation by 3.1% year on year. In 2018, the RMB clearing amount carried out by RTGS reached RMB 241 trillion yuan with a year-on-year increase of 11,8 per cent in Hong Kong, reaching the highest level in history.

United Kingdom. According to SWIFT, London was the largest RMB foreign exchange trading center in the world, the region with the most use of RMBs other than Hong Kong, as well as one of the most active markets for issuing and trading offshore RMB-denominated bonds. RMB foreign exchange trading in London includes spots, forwards, swaps and options. According to the Bank of England, by the end of December 2018, RMB foreign exchange trading in London accounted for 36.1 per cent of the global total, 6.5 percentage points higher than Hong Kong (second place), with an average daily trading volume of GBP 76.6 billion. As of the end of 2018, there were 114 undue RMB-denominated bonds and the volume reached 33.6 billion yuan in the London market. In 2018, the London Stock Exchange recently sold 42 RMB-denominated bonds totalling RMB 12.5 billion yuan, although both issuers and issuers improved dramatically from 2017.

Singapore. In 2018, the number of cross-border RMB transactions between China and Singapore reached RMB 1.4 trillion yuan, although Hong Kong placed second. According to SWIFT statistics, Singapore was the second most widely used RMB market other than Hong Kong; it had an active foreign exchange and derivatives market and served as one of the most active markets for issuing and trading offshore RMB-denominated bonds. Singapore Exchange (SGX) traded RMB-denominated futures and securities. As of the end of 2018, RMB-denominated foreign exchange futures trading in SGX amounted to USD 530 billion. For RMB-denominated securities, SGX provided listing, quotation, transaction, clearing and settlement services, as well as investor convenience for RMB, Singapore Dollar and other foreign currencies through a dual currency quotation mechanism. By the end of 2018, the Singapore market had a total of 87 undue RMB-denominated bonds totalling RMB 47.6 billion yuan. In 2018, the Singapore sector recently released 35 RMB-denominated bonds with a total value of RMB 20.6 billion yuan. Free States of **America.** According to SWIFT figures, RMB foreign exchange trade in the USA accounted for 8.5 per cent of the global value in 2018 and placed third in the world behind the United Kingdom and the Hong Kong SAR in China. In February 2018, the PBC approved JP Morgan Chase & Co. to serve as the RMB clearing bank in the USA, the first approved foreign-funded RMB clearing bank.

Luxembourg. Luxembourg has played an increasingly important role in the global investment and financing of the RMB. According to the Central Bank of Luxembourg, RMB-denominated bonds reported on the Luxembourg Stock Exchange (LuxSE) accounted for 26% of the global market and surpassed Hong Kong as the largest offshore RMB-denominated bond issuance centre in the world. Luxembourg was also the largest country to record investment funds in China, over 29 per cent of investment funds in China were recorded in Luxembourg, the management size of the RMB-denominated investment funds reached RMB 330 billion yuan, and about 78 per cent of the European funds invested in China were reported in Luxembourg.

Germany. In 2018, the volume of cross-border RMB settlements between China and Germany amounted to RMB 663 billion yuan, only next to the Hong Kong SAR of China and Singapore. German real enterprises, particularly large and medium-sized multinational enterprises which traded with China, had high acceptance of RMB. In the past, they started owning and investing in RMB items, including intragroup pricing and settlement in RMB, the issuing of Panda Bonds and offshore RMB-denominated bonds, and the creation of cross-border RMB cash pools.

South Korea. In 2018 , the number of RMB cross-border transactions between China and South Korea reached RMB 611.5 billion yuan, ranked next to the Hong Kong SAR of China, Singapore and Germany. South Korea opened an interbank RMB / KRW direct trading system at the end of 2014; by 2018, the total regular (unilateral) value of the Seoul direct trading sector amounted to 2,300 transactions with a turnover of approximately RMB 12 billion yuan. In South Korea, foreign exchange trading options include open, forward, swap and futures. The Korea Exchange (KRX) offers listing, quote, trading, clearance and payment facilities for RMB denominated shares, as well as convenience for investor trade of RMB, KRW and other foreign currencies through a dual currency quote system.

United Arab Emirates. Since the establishment of the RMB clearing mechanism in the United Arab Emirates (UAE) in 2016, the amount of RMB business in the UAE has increased rapidly with an annual growth rate of 144 per cent. According to SWIFT statistics , the total amount of RMB business in the UAE in 2018 amounted to RMB 747.7 billion yuan, ranking first among all Arab countries and accounting for 58% of the total. At present, China's central banks and the UAE have developed a full range of cooperation, including RQFII pilots, bilateral local currency swap deals, the establishment of local RMB clearing system structures, and joint trading of the two countries' currencies. In order to further extend RMB industry in the region and Middle East, the UAE Central Bank organized a specialized forum on RMB in Abu Dhabi, the country's capital, in December 2018, along with the region RMB clearing agency, and the forum received a strong response.

The overall statistics of offshore RMB reveals its weakness related to finance and monetary structure. Still, the yuan's already existence in dozens of countries around the world is a remarkable breakthrough. The future is just an increase in the number of uses.

5.8.2. International settlement

5.8.2.1 Bilateral Local Currency Swap

In 2008, the outbreak of the international financial crisis meant significant liquidity problems for the global financial system and funding for liquidity for other trade and investment partners. The PBC had concluded bilateral local currency swaps deals, authorised by the Council of State, with central banks or monetary agencies of 38 countries and regions, totaling more than RMB 3.7 trillion yuan since 2008. In facilitating trade and investment between China and the relevant countries and regions, local currency swap arrangements played a positive role in preserving financial stability and promoting the RMB 's international use. At the end of 2018, thirty deals had been signed for a minimum of RMB 3.48 trillion yuan.

5.8.2.2 RMB Clearing Arrangement

The State Committee approved a clearing agreement in 2003 and 2004 for the personal RMB company of banks in Hong Kong and Macao, and allowed Bank of China (Hong Kong) and Macao branch of Bank of China to operate in Hong Kong and Macao respectively as RMB clearing banks. In 2009, the Pilot Program of RMB cross-border settlements began, and the RMB clearing banks in the Hong Kong and Macau regions expanded their market reach accordingly. To keep abreast of RMB markets developed and expand the two-way opening of financial markets, the PBC has signed the MOUs with central banks or monetary authorities from abroad, have established RMB clearing arrangements in 25 countries and regions and allowed 25 local banks to act as clearing banks of the RMB, including 24 Chinese-funded banks and 1 foreign banking company. Previously, RMB clearing banks in the overseas areas included China's Hong Kong, Macao, and Taiwan as well as Southeast Asia, Europe, North and South America, Oceania, Middle East and Africa.

The improvement and development on international settlement on RMB will increase the liquidity of currencies and assets. This may enhance the financial relationships in different countries and regions, consolidating the money and finance structure on interstate level.

5.9 Digitalization of the RMB

The central bank's digital currency project, known as DC/EP, or digital currency and electronic payment instrument, has exactly the same functional properties as paper bills and is nothing more than a digital form. The central bank has been studying legal digital currencies since 2014. In August 2019, The Director of the Central Bank's Digital Currency Research Institute, Mu Changchun, said publicly that the central bank's digital currency (DCEP) research had been under way for five years since 2014 and was now "calling out".

Progress in the implementation of the legal digital currency will accelerate in 2020. In January, the central bank issued a statement saying that, under the premise of maintaining two-tier operation, M0 substitution and anonymity, the top-level design of legal digital currency, standard-setting, functional research and development, and joint testing have been basically completed. We will carry out a solid study of digital currency, tracking the study of the international frontier information of digital currency.

Since April, the central bank's digital currency has been on the news. On April 10, the People's Bank of China held a first-quarter financial statistics conference. Asked about the current progress of the central bank's digital currency, Zhou Xuedong, the central bank's chief of staff, said the central bank's digital currency was moving ahead in an orderly manner as originally planned.

For now, the timing of the issue of the central bank's digital currency, DCEP, is crucial. Here The author wants to make a hypothesis that China, as one of the world's largest economies, is the first to launch its own central bank digital currency, DCEP, so that the digital economic impact on the world may be close to the dominant state, shaking the current monetary hegemony of the dollar, especially in the use of our great strategy "Belt and Road" framework. Similar to 5G in the field of communications, whoever sets the standard sits is the dominant or even dominant.

DCEP is still a credit currency in essence, and its value connotation is formed by a country's Chinese credit endorsement. As China continues to grow and prosper, the credit behind the yuan or DCEP becomes stronger, gradually forming a situation of "good money expelling bad money" in some scenarios. Of course, this is a very simple narrative, the credit currency value of the decision mechanism is far more complex than this, but in the final analysis it is bound to be an important manifestation of global de-dollarization.

Digitalization of fiat money, on the one hand, reflects the liberal view. Promoting inclusive Finance should be the common goal of all countries in the world. Digital currencies have many advantages such as reducing the operating costs of the banking industry, help to share the development of finance, very convenient means of payment, anti-money laundering and anti-terrorism advantages.

Historically, money itself has gained its status through competition, and its status has been further strengthened through law, regulation, etc. The value of money roots in diverse credits. Sovereign credit is often higher than private credit, and it is the legalization of money that the market has chosen. DCEP is still a credit currency in essence, and its value connotation is formed by a country's Chinese credit endorsement. As China continues to grow and prosper, the credit behind the yuan or DCEP becomes stronger, gradually forming a situation of "good money expelling bad money" in some scenarios. Of course, this is a very simple narrative, the credit currency value of the decision mechanism is far more complex than this, but in the final analysis it is bound to be an important manifestation of global de-dollarization.

A report from the Bank for International Settlements (BIS) in 2019 shows that nearly a third of the world's central banks are now developing their own digital currencies. (BIS, 2019)Not all countries are welcoming the DECP. Japan needs closer cooperation with the US in order to curb the effect of China's proposed digital currency, according to a senior legislator in the ruling party of Prime Minister Shinzo Abe. "We believe that the digital yuan is a threat to the current global currency reserve structure and the current currency hegemony," said Nakayama, a top member of the ruling party who drafted the proposals. "We can't fight Chinese attempts to challenge the current reserve currency and international settlement regime without the United States."(Takeo et al., 2020) This reveals the global realism is still effective even to the edged technology competition and system establishment. One third of the countries are trying to consolidate their status in the knowledge and technology structure.

In international financial markets, the outbreak of the COVID-19 outbreak is a real "black swan" event. In the face of such a crisis, China, Singapore and other better-coping countries' financial markets are favored by some economic circles, while some countries, including the United States stock index, have seen a short-term serious decline. The author believes that if China could grasp the “pre-emptive opportunity” of digital currency, this will speed up the RMB Internationalization to a large extent around the world.

6. Conclusion

6.1 Increase China's Influence in the World

RMB Internationalization will mostly accelerate the growth of China's economy power. Although the process of internationalization of RMB has made great achievements in recent years, from a macro perspective, there is still a long way to go before it become one of the important international reserves and clearing currencies. The cross-border use of the RMB is more in bilateral trade with neighboring countries, and its impact is limited globally. We can say that the influence of the RMB is gradually rising and will continue to rise, but in the short term it will not be able to compete with a strong international currency, like US dollar or Euro. Perhaps the use of the central bank's digital currency could speed up the process of internationalizing the RMB. China's goal is not to establish "monetary hegemony", but to elevate the RMB's position to match china's economic influence.

RMB internationalization was determined by market force, as a rather natural process. Just as a Chinese saying goes, when water flows, a channel was formed. In the past decade, the function of RMB internationalization was mainly reflected in international payment and settlement, and the way forward would be to make RMB a freely usable currency. First, the PBC would insist on the principle of market orientation, constantly remove restrictions on the cross-border use of RMB, and explore ways to promote a higher level of the pilot program to facilitate trade and investment. Second, the PBC would continuously promote the two-way opening up of domestic financial market, and further facilitate foreign investors to use RMB to invest in domestic bonds and stocks. Third, the PBC would guide a healthy development of RMB offshore market, increase the degree of free use of RMB, and promote a constructive interactions and deep integration between the offshore and onshore markets. Fourth, the PBC would improve macro-prudential management and deliver a good work on counter-cyclical adjustments to prevent cross-border capital flow risks.

6.2 Stabilize the World Economy

As one of the largest economies in the world, contemporary China is affected by the world economic environment, but its reaction to the development of the world economy is enormous. As an important member of emerging market countries, China's economic growth has been a powerful driver of the world economy. Especially semi-periphery and periphery countries，China not only helps them optimize their market structure, but also stimulates their economies.

6.3 Seize the Development Opportunities

The new context of the covid-19 pandemic and the sovereign currencies digitization may bring opportunities promoting RMB Internationalization. By early May, China has been undoubtedly one of the best countries to contain the coronavirus outbreak, especially with such a huge population and territory. By contrast, the U.S. is the worst-hit country in the world. Not long ago, the Sino-US trade war was in full swing. But now Mr. Trump seems to have turned his approach to a trade war with the United States into a "tangle". China's pharmaceutical manufacturing industry, including the heavy industrial enterprises to join, and constantly export masks, protective clothing and other anti-epidemic tools.

Moreover, if China is the first to issue digital fiat money in the world, this may cause a huge power swift in the world market. Plus the advantage of infrastructure construction, China will not only attract semi-periphery and periphery countries to participate in its digital money system, but also surpass the advanced technology on clearing owned by the governments of the developed states to a certain extent. This will also draw more attention from mass TNCs. In short, the internationalization of the RMB is still a long way off, but we seem to see greater hope in the new situation. China must seize the current period of strategic opportunity to develop and expand the overseas use of the RMB and its influence.

Bibliography:

AIIB Website. [online]. Available from: https://www.aiib.org/en/about-aiib/who-we-are/financing-operations/index.html

ArmstrongQC, D., Hyde, D. & Thomas, S. (2019), Blockchain and Cryptocurrency: International Legal and Regulatory Challenges, Bloomsbury Professional.

Balaam, D. N. & Dillman, B. L. (2015) Introduction to international political economy. Sixth edition . New York: Routledge.

BIS. (2019) Proceeding with caution–a survey on central bank digital currency [online]. Available from: https://www.bis.org/publ/bppdf/bispap101.pdf

Clarke, Michael. (2018) The Belt and Road Initiative: Exploring Beijing's Motivations and Challenges for its New Silk Road, Strategic Analysis, 42:2, 84-102, DOI: 10.1080/09700161.2018.1439326.

Galindo Martin, M. A. & Nissan, E. (2010) International political economy. Hauppauge, NY: Nova Science Publishers.

INE website. [online]. Available from: http://www.ine.cn/en/

Ito, T. (2016) A New Financial Order in Asia: Will a RMB bloc emerge? NBER Working Paper Series. [online] Available from: http://search.proquest.com/docview/1831255925/

Li, Xing (ed.). (2018). Mapping China's 'One Belt One Road' Initiative. Springer.

Li, Xing (ed.). (2010). The Rise of China and the Capitalist World Order. Surrey, UK: Ashgate Publisher.

NDRC (2015, March 28). Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road. Retrieved from http://en.ndrc.gov.cn/newsrelease/201503/t20150330_669367.html.

PBC (2018) 2018 RMB Internationalization Report.

PBC (2019) 2019 RMB Internationalization Report.

PBC (2014) RMB and SDR series
http://changsha.pbc.gov.cn/changsha/130060/2927600/130064/2360802/index.html

TAKEO, Y., URABE, E. & FUJIOKA, T. (2020) Japan Seen Needing U.S. Help to Check China’s Digital Yuan.

World Bank database. (2020) https://data.worldbank.org.cn/country

Wang, C. & Wang, X. (2018) ‘The macroeconomic effects of RMB internationalization: The perspective of overseas circulation’, in International Symposia in Economic Theory and Econometrics. [Online]. Emerald Group Publishing Ltd. pp. 31–50.

Zhang, M. & Zhang, B. (2017) The Boom and Bust of the RMB’s Internationalization: A Perspective from Cross-Border Arbitrage.(Report). Asian Economic Policy Review. [Online] 12 (2), 237–253.

Zhou Xiaochuan. (2017) Promote the internationalization of the RMB steadily
https://finance.ifeng.com/a/20180811/16442078_0.shtml

Zhong, Wei. & Wei, Wei. Etc. (2018), Digital Currency: Financial Technology and Currency Reconstruction, Zhongxin Press Group.

姜波克 & 张青龙 (2005), "国际货币的两难及人民币国际化的思考", 学习与探索, No. 04, pp. 17-24.

李婧 (2011), "从跨境贸易人民币结算看人民币国际化战略", 世界经济研究, No. 02, pp. 13-19.

李晓, 李俊久 & 丁一兵 (2004), "论人民币的亚洲化", 世界经济, No. 02, pp. 21-34.

刘洋 & 刘谦 (2015), "国际货币的经验及“一带一路”、亚投行的设立对人民币国际化的启示", 湖北社会科学, No. 05, pp. 95-99.

宋长青, 葛岳静, 刘云刚, 周尚意, 吴相利, 胡志丁, 程昌秀, 高剑波, 方创琳, 韩增林, 武友德, 吉力力阿不都外力, 彭飞, 刘建忠, 董锁成, 王国梁, 熊理

然 & 潘峰华 (2018), "从地缘关系视角解析“一带一路”的行动路径", 地理研究, Vol. 37 No. 01, pp. 3-19.

孙健, 魏修华 & 唐爱朋 (2005), "从三大货币发展历程看人民币国际化战略的路径选择", 亚太经济, No. 02, pp. 69-71.

孙仁柱 (2016), "人民币国际化的未来——基于地缘政治视角的分析", 中国经济报告, No. 01, pp. 73-75.

夏广涛 (2020), "主权货币国际化的演变轨迹及人民币国际化的推进方略", 求索, No. 02, pp. 112-120.