Fukino Project

Discussion Paper Series

No.013

A Study of Currency Internationalization:

JPY and CNY

Qiyuan Xu Institute of World Economics and Politics Chinese academy of Social Sciences

October 2009



Fukino Research Project

Hitotsubashi University 2-1 Naka, Kunitachi, Tokyo, 186-8601 Japan

A Study of Currency Internationalization: JPY and CNY

Qiyuan Xu

xuqy@cass.org.cn

Institute of World Economics and Politics

Chinese academy of Social Sciences

1528[#], 15th Floor, No.5 Jianguomen Nei St. Beijing, China, 100732

_

Abstract: There is a relationship lies between the international specialization system and the international currency system. It would be meaningful to discover the relationship. And the currency internationalization can be in this way explained by the extension of the specialization system from domestic to abroad. Seen from this perspective, lessons are drawn from the history of Japanese Yen, which is helpful not only to comprehend the status of Chinese Yuan today but also to give suggestions on policies in the future.

Keywords: currency internationalization, international specialization system, Japanese Yen, Chinese Yuan

In the East Asia Financial Crisis, the authorities of China have managed to keep the stabilization of RMB exchange rate from attacking. It was a considerable price that China's economy has paid, whereas the competitive devaluation has been blocked. It is a turning point for RMB, at which time the currency wins great popularity in the area. Coupled with the China's strong growth and the remarkable imbalance of BOP, RMB itself has come into being a focus of international community since then. The questions upon RMB become the FAQ in the interview with curious journalist. RMB exchange rate regime and its internationalization, both of them have caught the attention from academia and officials. Driven by the Sub-prime Crisis, RMB internationalization has been formally advanced as an official strategy. In addition, substantial policies have launched such as the Bilateral Swap Arrangement in domestic currencies, the push of RMB settlement in international trade and the issue of RMB Treasury Bond in Hong Kong.

It is crucial for us to comprehend the original incentive of the currency internationalization. For this is the way to answer the specific questions about RMB internationalization. Yet the previous research works concentrate too much on the results of currency internationalization and consider it to be the process of money

functions expanding to the international market. It is not favorable to discover the cause and effect. In this paper, it is going to investigate the relationship between the international specialization and the currency internationalization. Seen from this point, lessons are drawn from the history Japanese Yen, which is helpful not only to comprehend the status of RMB today but also to give suggestions on policies in the future. The content of this paper is organized as follows: in part I the previous researches are reviewed; part II is going to drill down in the way of money functions so as to find out the relationships between international specialization system and the currency internationalization; part III and IV make comparisons between the internationalization of US dollar and Japanese Yen; at last, in part V the conclusions about RMB internationalization are reached in forms of historical lessons.

1 Introduction

The model of "one country, one currency" has come into being since the *Treaty of Westphalia*¹ for centuries. It is therefore named by Cohen (1999) as *the model of Westphalia*. But the currency internationalization means an overthrow of the old model. From the 15th century BC, the time of the Athens Drachma being the first international currency, to the modern times, the time of Great Britain Pound and US dollar being dominant successively; the prominent currencies have never given up to break down the old conventions. In the last few decades, the economic globalization has leads to the collisions of different currency symbols. And the international monetary system has been brought into an epoch of diversification to some extent. At the same time, there are growing concerns on the currency internationalization. Most of the previous researches study in the way of money functions, which are known as follows: a medium of exchange, a unit of account and a store of value².

1.1 The Functions as a Medium of Exchange and a Unit of Account

¹ In 1740s, in order to bring Europe back to peace, belligerent states of Thirty Years War hold a meeting in Westphalia. *Treaty of Westphalia* was signed, which stood for the appearance of sovereign state in modern times. The space of a currency and territory of the country have been coincided from then on.

² Mankiw, N. Gregory (2007). *Macroeconomics* (6th ed.). New York: Worth Publishers. pp. 22-32

These two functions are always associated with each other. But the former connects with the flows of money and the latter only keeps abstract in one's mind. Grassman (1973) has observed that the exporters are inclined to take the domestic currency as vehicle currency in international trade between the developed countries. This is called Grassman's Law at first. After that, McKinnon(1979), Carse and Wood(1981), Page(1977), Mundel(1983) validate the observation and expand the law into three points as follows: (1) In the bilateral trade between developed and developing countries, the currency of the former plays a dominant role; (2) In the settlement of bilateral trade between developed countries, the choice of the currency depends on the relative size of the economy; (3) In the trade of raw products, US dollar is always selected as the medium of exchange, because the homogeneity and large quantity of the products demands an efficiency for the information dissemination. So Grassman's Law provides a description on the function of exchange medium in international trade. In addition, Swoboda(1969), Brinley(1975) and Tavlas(1991) revealed that once a currency has become the medium of exchange internationally, it would be popular with a historical inertia. Ogawa and Sasaki (1998) have tried to measure the inertia of US dollar. It is found that dollar enjoys a remarkable inertia based on its function as a general medium of exchange.

1.2 The Function as a Store of Value

From the point of the function as a store of value, Cooper (1986) shares the opinion with Hayek (1970) that the changes of an international currency's status largely depend on the stabilization of value. In the same perspective, Williams (1968) and Kenen (1988) discover that the development of the financial sector and the freedom of the financial market are crucial to the currency internationalization. Both of the histories of GB Pound and US dollar are the case, while it is proved by the case of Japanese Yen that it is not a sufficient condition but only a necessary one for the currency internationalization.

1.3 A Further Classification on the Functions by Hartmann (1998)

Based on Benjamin (1971)¹, Hartmann (1998) advanced a further classification on the functions as shown in table 1: (1) A medium of exchange. The function plays the role as vehicle currency in the merchandise trade and financial transactions for private use and the intervention in the foreign exchange market for official use. (2) A unit of account. In this way, the international currency serves as the quote currency in the commodity and financial market. On the other hand, it serves as the pegging currency in the international monetary system. (3) A store of value. It means investment currency for private use and reserve currency for official use.

Tab.1 Functions of the international currency

	Private Use	Official Use
A Medium of Exchange	vehicle currency:	vehicle currency :
	in merchandise trade,	intervention currency in the
	financial transactions	foreign exchange market
A Unit of Account	quote currency	anchor of the other currency's
		exchange rate
A Store of Value	investment currency	reserve currency
	or currency substitution	

Source: Hartmann (1998).

1.4 A Further Comprehension of Currency Internationalization

1.4.1 Cohen's (1998) Comprehension on the Currency Territory

The analysis in Table 1 is easy to operate in the empirical research, while it tells little about the original incentive of the currency internationalization. Cohen (1998) has therefore put forward a deeper view so as to give an explanation. It is considered that the size of a currency territory lies on two sides: (1) a visible hand. The influence imposed on the administrative area by the government; (2) an invisible hand. The effects exerted on the transaction network by the market.

1.4.2 A Deeper View with Two Hands

¹He defined the international currency in the perspective of functions. That is, a currency becomes an internationalization when the functions have expanded to abroad.

The visible hand means the monopoly of the government upon currency issue and monetary management. Therefore it is in effect merely at home. While the invisible hand plays an important role not only interiorly but also overseas.

In general, the domestic money market is dominated by the monopoly supplier. This model could be named as "supply-dominated". In this case, there comes the result of "one country, one currency", that is, *the model of Westphalia*. Under some circumstances, the influence of the invisible hand could expand to abroad and affect the currency system of other country. This IS the international extension of money functions, or rather, the currency internationalization.

The detail of the extension can be interpreted as follows: Because of the dominant position in the international specialization, the external demand for domestic commodities rises. It would hence induce the external demand for domestic currency. With the accumulation and expansion of the demand, the domestic currency becomes more important in the international financial market in the forms of vehicle and reserve currency. More details will be analyzed thereinafter. So it can be concluded that the currency internationalization is not the model of "supply-dominated" but the case of "demand-dominated" with competitiveness from different currencies.

Young's theorem (Young, 1928) tells the relationship between the division of labor and market capacity. It points out that on one hand, market capacity determines the degree of division, and on the other hand, the former is restricted by the latter. It has been proved by Yang (1991) in a way of inframarginal analysis. Accordingly, the space extension of the market capacity is driven by a higher degree of specialization; meanwhile the latter is largely caused by the market capacity expanding rapidly in domestic and the improvement of the transactional efficiency (Yang, 1999). So there lies a strong and energetic economic system behind the international currency. It enjoys a positive circle between transactional efficiency and specialization because of sound institutional arrangements. Based on these, the economy wins a strong

position in international specialization system, which would result in the currency internationalization.

2 A survey of the Functions: Key Currencies

The money functions extending to abroad would be generally in a sequence as follows: At first, the currency are used more frequently as the medium of exchange and the unit of account; and then it is in some way taken as the anchor of exchange rate by the authorities abroad; at last, the growing transaction demand for money is certain to induce the precautionary and speculative demand of the currency, and the currency therefore behaves as a store of value. In a word, the money functions expand from private use to official; and from commodity market to financial market. According to the logic, private-commodity and official-financial are the two ends of the functions, which should also be consistent with each other.

2.1 At One End: A Medium of Commodity Transaction by Private Use As shown in Figure 1, it is striking that the currency compositions of the selected countries. Among them¹ there is the one with the highest level of the settlement in US dollar, while the minimum in domestic currency. It IS Japanese Yen.

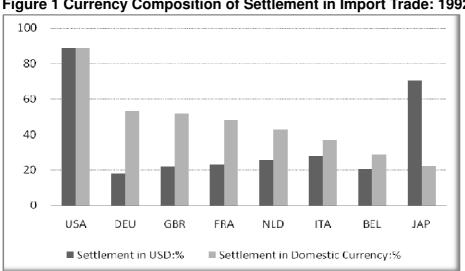


Figure 1 Currency Composition of Settlement in Import Trade: 1992-1996

Source of data: The Geography of Money. Benjamin J. Cohen. London: Cornell University Press, 1998

¹ The composition of USA could be excluded as an outlier.

Figure 2 Currency Compositions of Official Foreign Exchange Reserves

Source of data: IMF, Currency Composition of Official Foreign Exchange Reserves, June 30, 2009.

2.2 At the Other End: A Store of Value by Official Use

Figure 2 shows us another situation for the key currencies, from which we can see the Japanese Yen shares a composition relatively high in the reserves compared with its composition of trade settlement in the same period of 1990s. It is a striking contrast that the composition of Japanese Yen in the reserves is roughly equivalent to the sum of Great Britain Pound, French Franc and Netherlands Guilder in the mid and late of 1990s¹.

2.3 A Feature of JPY as an International Currency

The situations about Japanese Yen displayed in Figure 1 and 2 contrasts against each other, while the other key currencies share a consistency in these two ends of functions. That is, Japanese Yen has been rather week in the use of trade settlement while behaved quite strong as a store of value during 1990s. Why it plays a role of international currency in this way?

Ogawa (2001) provides an interpretation which emphasizes the fact that the depreciating US dollar has kept a position as a key currency implies that the function

¹ However, it has been declined since 2000. As a result, the positions of JPY and GBP has exchanged in recent years. There is an explanation offered in the following section.

as a medium of exchange is generally considered to be more important than its function as a store of value. Furthermore, Ogawa and Sasaki (1998) describe the benefit by holding US dollar as a medium of exchange with a money-in-the-utility model so as to separate it from the cost by holding dollar as a store of value. According to the data from the first quarter of 1986 to the second quarter of 1993, a conclusion reached by the model that marginal rates of substitution were relatively low between the US dollar and the other currencies. It implies that the US dollar has had an overwhelming function as a medium of exchange compared with other currencies, in despite of the depreciation of the US dollar. Because of the inertia of US dollar as a key currency in the world, currencies such as Japanese Yen would consequently compete with the US dollar in a function as a store of value. The feature of JPY as an international currency mentioned above can be explained in this way, whereas the consistency between the two functions of other key currencies is not the case, such as Deutsche Mark, Great Britain Pound and French Franc. These key currencies also play a considerable role in international trade transactions.

At the same time, much attention has been focused on the export sector in order to understand the weakness of JPY as a medium of exchange in trade. Ito (1993) and Sato (1999) are interesting with the pricing method by the exporters. But the import sector means more important for a currency to play the role as a medium of exchange in international transactions on account of the following reasons: (1) Yen Internationalization means the currency is used abroad, and Yen flows out through the way of import trade but not export; (2) Japan is a country lack of natural resources, which implies the output (export commodities) would depend on the input (import commodities). And the pricing method in export sector would be highly influenced by import sector in the same way.

3 A Comparison between US dollar and JP Yen

In order to meet the demand of domestic currency by non-resident, it is inevitable to result in the export of domestic liquidity. To some extent, the process of a currency

internationalized is just the export of domestic liquidity to the world. Seen from this point, a comparison could be made between the internationalization of US dollar and Japanese Yen.

3.1 Different Channels to Export the Liquidity: US dollar and Japanese Yen

There are two channels for the non-residential to get the availability: on one hand, the importer pays the foreigners in domestic currency and the non-residential get the liquidity through **current account**; on the other hand, activities belonged to **capital and financial account** could also plays as a role of liquidity export, such as foreign direct investment, portfolio investment and international loans.

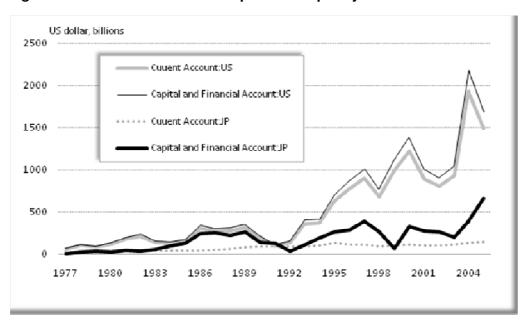


Figure 3 Different Channels to Export the Liquidity: US dollar and JP Yen

Illustrations: (1) It is assumed that the channel of capital and financial account export the liquidity entirely in domestic currency both US and Japan. (2) The data from Cohen (1998) reveals that the currency composition of settlement in import trade of US dollar and Japan Yen are 0.888 and 0.225 respectively. (3) Source of data: IMF, BOP Online, 2009.

As shown in Figure 3, it tells us the difference in channels to export the liquidity between US and Japan. In case of the former, both of the two ways have nearly an equal effect on the export of liquidity. But that is not the case for the latter. In most of

the years, the amount of the Yen's liquidity exported through capital and financial account was much higher than the other channel. There is the conclusion we can draw from Figure 3: Yen's liquidity exports mainly through the way of capital and financial account which differs sharply from the case of US dollar and other key currencies¹.

3.2 The Causation of the Difference

First of all, Yen's internationalization through the way of imports is heavily restricted by two factors. (1) The structure of import is inclined to be resource-input. Fukuda (1996) points out that the low yen-invoiced ratios in international trade are attributed mainly to the Japan's import structure. Sato (1999) shows imports of raw materials and fuels account for 51.4 percent of Japan's overall imports from Southeast Asia even in 1997. As we can see from Figure 4, the proportion of raw material, mineral fuels and foodstuff in the imports has wandered from 40% to 50% since 1991. As it is mentioned in Grassman's Law, US dollar is always selected as the medium of exchange in the trade of raw products; therefore the amount of Yen's export through this way is constrained. (2) The amount of imports is relatively small. Figure 5 shows the variation of import dependence ratio in past decades. Firstly, we can see that the import dependence ratio has declined rapidly in 1980s, at which time the Yen internationalization was in a smooth progress. Considering the high proportion of raw material in imports, Yen Internationalization through this way was blocked, too. On the other hand, the channel of capital and financial account has consequently played the leading role in this period. Secondly, the amount of imports has been relatively small compared with exports, which results in the net inflow of capital through current account. And it is also an unfavorable for the internationalization of Yen.

¹ It is because Yen's composition of settlement in import trade is the lowest among the key currencies as shown in Figure 1, furthermore the amount of capital export is rather high for Japan compared to others.

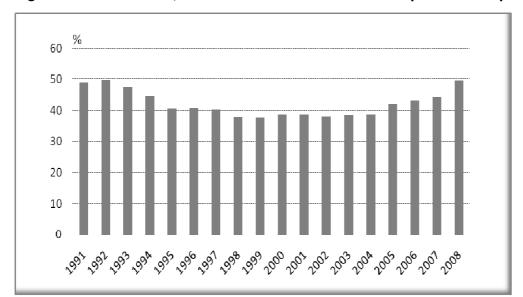


Figure 4 Raw Materials, Mineral Fuels and Foodstuff: Proportion in Imports

Source of data: Ministry of Finance, Japan.

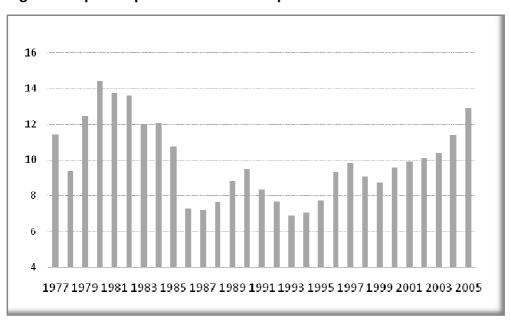


Figure 5 import dependence ratio of Japan: 1977-2005

Source of data: IMF, BOP Online, 2009.

In 1980s, some measures are taken by the authorities to improve the Yen's composition in trade settlement. Both the import and export sectors have been involved in these measures, which were proved to be small effect especially in the case of import. As has been noted, raw material shares a large proportion in imports.

And the raw materials are always settled in US dollar, which is hard to change in short time. Many export products depends on the imports like this. It is the reason that exporters were inclined to settle in US dollars so as to avoid the FX risk. In addition, importers were also likely to settle in dollar because of the deappreciation tendency.

Secondly, Yen Internationalization have been pushed forward smoothly in financial sector from 1970s to 1980s. The financial market priced in Yen has developed rapidly. (1) Yen bonds are issued abroad; (2) medium and long term loans in Yen are provided abroad; (3) international investors are permitted to enter the stock market in Japan. Furthermore, Yen has also been upgraded as reserve currency since then. Therefore the measures taken by the authorities have given a big push to Yen Internationalization in the financial sector.

From a logical point of view, it is certain to export domestic liquidity so as to keep up with the foreign demand in the process of Yen Internationalization. But the channel of current account has been blocked as it is mentioned above. In consequence of these situations, Yen Internationalization is bound to rely heavily on the channel of capital and financial account. On the basis of the above, Yen Internationalization goes along in a strange way differs from the other key currencies, which is also can be seen from Figure 3 intuitively.

3.3 What is the Strange Way Means to Yen?

- (1) Resulted from the outflow of capital, there is an effect hollowing out of the manufacturing sector. It is consequently weakened that the position of domestic economy in the international specialization system. Moreover, a weak role of Yen playing in the international trade holds back the expansion of domestic trading network to the world.
- (2) The Internationalization of Yen has started as a reserve currency. The channel of capital and financial account plays a major role in the export of Yen's liquidity, while

the role of current account appears weak. Moreover, it is long-term trade surplus and large amounts of income¹ back-flowing to Japan that result in an enormous surplus in current account and a continually rising foreign exchange reserve. As a result, Yen is good at playing the role of reserve currency. That is why Yen behaves with imbalance in different money functions.

(3) It must be stressed that Yen's role as a reserve currency is lack of foundation. Because of the weakness of Yen in trade settlement from the very beginning, Yen's role of value store is not mainly for the purpose of hedging, but speculation! So the exchange rate of Yen is inclined to volatile results more from the speculation. When the exchange rate is in a trend of appreciation which could be strengthened by speculation, the internationalization of Yen will proceed extremely smoothly; on the contrary, when the exchange rate is wandering away from the trend of appreciation, the internationalization of Yen is certain to be shocked. In long term, Yen Internationalization is bound to be undermined in this way. As shown in Figure 2, Yen's proportion in official reserves declines in past decades.

4 International Specialization System: Current Situation

As mentioned above, Grassman's Law provides a description on the function of exchange medium in international trade. The first two points of the law tells us what kind of currency could be internationalized as a medium of trade exchange. Firstly, developed and developing countries can be easily distinguished by per capita GDP (PGDP). Secondly, the size of an economy can be quantified by GDP. PGDP and GDP indicate the average level and the scale of an economy respectively. This two dimensional analysis may be helpful for us to comprehend the international specialization system. In this part, we are going to narrow down the area to see the status of international specialization system in different coverage: the global, East Asia and surrounding countries of China on the continent.

 $^{^{1}\,}$ The amount of income has been even more than the trade surplus in recent years $_{\circ}$

4.1 Data and Processing

According to the data supplied by WDI Online¹, a cross-section data of 146 economies² in 2004³ is selected. The detail of the data is as follows: (1) both of PGDP and GDP are in constant 2000 international dollars based on PPP; (2) these data are dotted in a distribution of exponential respectively, therefore it is proper to take logarithm of them so as to draw a scatter plot with a nice looking.

4.2 International Specialization in the Global and the Monetary System

As shown in Figure 5, Names in red indicate the countries in East Asia; the blue means the dollarized countries in Latin America; the green indicates other countries. The average of InGDP with full samples is marked by the vertical dotted line and the average of InPGDP by the dotted line sloping upward⁴.

The sample of 146 economies is then divided into four quadrants by the two dotted lines. As it shows, in the first quadrant⁵, there are the scatters representing the countries such as: US, EU⁶, Japan, UK, Germany, France, Italy, Canada, Australia and Netherland. All these economies share two things in common. That is, both the scale of GDP and PGDP of the economies are higher than the average of the sample. In a word, they are all the economies large and developed, which is corresponding to the description of the first two points in Grassman's Law. In fact, currencies in all of these economies to some extent⁷ play the role as a medium in international trade. Especially the ones in the ellipse are all the **key currency** countries: US, Germany, Japan, UK, France, Italy etc. Based on the primary function, these key currencies expand their liquidity to other fields.

¹ World Development Indicators Online, Word Bank, 2009.

² All the economies whose data is available are included.

³ There are plenty of samples in 2004. Moreover, little changes there can be in this system for only several years.

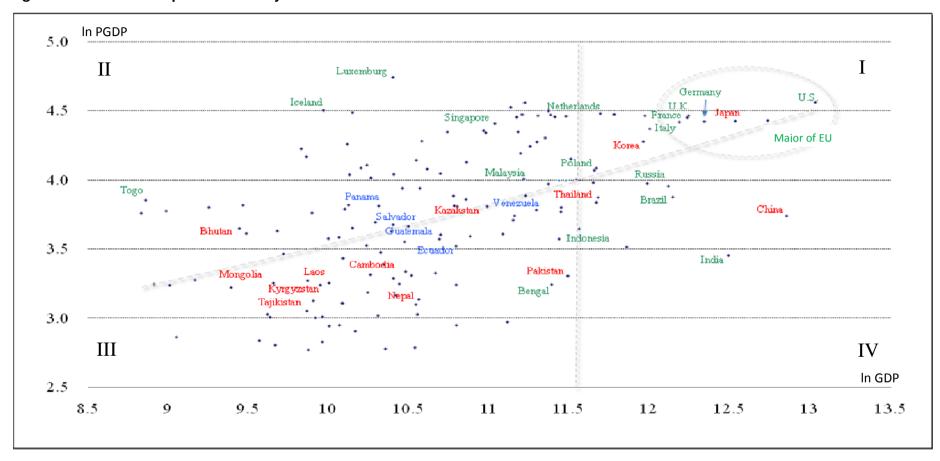
⁴ It shows a positive correlation between InGDP and InPGDP. So the processed average line varies with the growing of InGDP

⁵ It means in the northeast area.

⁶ EU means the major economies in Continent of European. Germany, France, Italy, Spain, Netherland are included

⁷ Some of the economies play the role through Euro: Germany, France, Netherlands etc.

Figure 5 International Specialization System: Current Situation



Source of data: WDI Online, Word Bank, 2009. Names in red indicate countries in Asia; the blue means dollarized countries in Latin America; the green indicates other countries. The ones in the ellipse are key currency countries. The average of InGDP with full sample is marked by the vertical dotted line, and the InPGDP average by the dotted line sloping upward (It shows a positive correlation between InGDP and InPGDP. So the processed average varies with the growing of InGDP).

The figure also shows the scatters named in blue, which stand for the **dollarized countries**¹ in Latin America. Panama, Salvador, Guatemala, Ecuador, Venezuela are included. Some of them lie in the second quadrant, others in third quadrant. But we can find that: (1) All of the economies share a scale well below the average. (2) And all of them lie in southwest relatively to the scatter of US at a distance, which indicates the superiority of US to these countries in the framework. (3) They are all Latin America countries. The third point means the close relationship in trade between US and these countries. The first two points combined with the Grassman's Law imply that US dollar is certain to be the medium of trade transactions, based on which US dollar could expand its functions to even more fields. That is the foundations of dollarization in this area. In fact, the economy of US enjoys a position of top right corner in Figure 5. So it is natural for US dollar to be regarded as the most important key currency.

4.3 International Specialization in East Asia and the Monetary System

As shown in Figure 5, names in red represent the countries in East Asia and the surrounding countries of China on the continent. Observations in the scope of East Asia can be made in the same way as above.

There are merely three economies in the area have the advantage in scale: China, Japan and Korea. As we can see from the figure, **Japan** lies in a position with a high PGPD and a large scale, which is the most prominent within the area. But as mentioned above, Yen's internationalization was blocked by structural factors. Furthermore, **China** possesses characteristics of largest scale² and a rather low per capita level. The scatter of **Korea** lies to the southwest of Japan, which means it is weaker in both sides compared with the latter. It is such embarrassed situation that there is still a lack of core currency in East Asia.

18

-

¹ The list of dollarized countries comes from Song (2006). Because the data is not available, some of the countries are exclude from the sample.

² In purchasing power parity.

4.4 International Specialization among China and Neighbors on the Continent

China lies in the fourth quadrant, which indicates a large scale of GDP but relatively low of PGDP in total sample. It is determined by both of the features that China Yuan would play a role in local area differing sharply from the global. As shown in Figure 5, China's economy has a prominent advantage over neighbors in both scale and average. Most of the neighbors lie to the southwest of China: Bhutan, Mongolia, Tajikistan, Kyrgyzstan, Laos, Cambodia, Nepal, Pakistan, Kazakhstan and so on¹. As it can be seen from the figure, it seems alike the relationship between US and the dollarized countries. It is supported by facts that China Yuan has already plays an important role in the area. For example, in Mongolia, China Yuan has shared a ratio of 60 percents of the currency in circulation for many years. The ratio is particularly high in the northwest of the country at a level between 80 to 90 percent². And in the north of Laos, China Yuan could be absolutely used as the substitute of domestic currency.

From the perspective of the world, China lies in the fourth quadrant. There is still a distance for China to enter the ellipse so as to become a key currency. It means that China Yuan could hardly so far take the role of a key currency in the world because of the low per capita level. And the things lie behind the restriction is the development of labor productivity, technological progress, the efficiency of the institution and so on. Progress made in these fields would promote the internationalization of China Yuan. But it takes a long term to realize. At the same time, China has prominent advantage in both sides of the two dimensions compared to the surrounding neighbors. Therefore the internationalization of Yuan in the area is expected go along smoothly with relaxed policies.

5 Suggestions for RMB Internationalization

_

¹ Some of the neighbors are excluded because of the non-availability of data, which however, probably meet the criterion. Vietnam, Myanmar and North Korea are the case.

² Liu Lizhen and Xu Qiyuan, Exploration of RMB Internationalization, People's Publishing House, Beijing, 2006.

Before the substantial measures on RMB internationalization taken by the authorities, most of the research works had concentrated on the problems such as feasibility, cost-benefit and the current situation. Interests have therefore been obviously changed to the field of how to promote the internationalization of China Yuan, and what to do next from short-term to long-term. Zhang Yuyan and Zhang Jingchun(2008) argues that the conditions for China Yuan to become an internationalization currency are still kept insufficient, and regional monetary cooperation is consequently more realistic from the perspective of China. But Li and Liu (2008) arrive at the opposite side that China should choose the way of internationalization rather than Asia dollar, and it can be pushed in a way of dual system making use of both onshore and offshore market against the background of gradual reform in the capital account. Yu (2009) points out that the internationalization of RMB and regional monetary cooperation are in a state of consistency at least in the present stage. So the debate on the choice could come to an end temporarily.

On the issue of the policies pushing forward the process, there is a common view that the domestic financial market should be sufficiently developed (Lin, 2009; Yu, 2009, Zhao, 2009). And it is approved that this should be accomplished before the opening of capital account (Zhao, 2009). Many research works agree with an internationalization of RMB with gradual reforms in the capital account (Li and Liu, 2008; Yu, 2009; Zhang, 2009). Yu (2009) emphasizes that we should be very cautious to deal with the internationalization of RMB, mostly because of the immature banking system and undeveloped capital market. On the other hand, few economists remind the important role of import trade and trade deficit playing in the currency internationalization (Lin, 2009; Ding, 2009).

As mentioned above, the internationalization of Yen develops in such a strange way.

(1) Structural features of imports have resulted in the export of Yen mainly through capital and financial account. (2) As a result, the Internationalization of Yen has started as a reserve currency. (3) It must be stressed that the role as a reserve

currency is lack of foundation. Because of the weakness of Yen in trade settlement from the very beginning, Yen's role of value store is not primarily for hedging, but speculation! In a long term, Yen Internationalization is bound to be undermined in this way. These conclusions would be meaningful to the internationalization of China Yuan.

First of all, more attention should be paid to the function of trade settlement in the process. (1) It is important to export domestic currency through current account, which would be a favorable condition for currency internationalization. For it is certain to induce the demand of financial transactions based on real economy and expand the currency function on solid ground. Or else there would be too much speculation in the price of the currency. Consequently, imports except raw materials should be encouraged to some extent. It is inspired that a proposition presented by Ogawa (2001) in order to improve the status of Japanese Yen as a medium of exchange in trade. He suggests that free trade agreements among Japan and other East Asian countries might gain a momentum to improve internationalization of Japan Yen. It is also the same with China Yuan. In addition, it is favorable that Chinese consumers are much more open to the imports. (2) New energy development and the adjustment of industrial structure are not only helpful to the real economy, but also favorable to reduce the dependence on dollar settlement, which behaves as the inertia of US dollar.

Secondly, the policy in financial sector should keep up with the progress in real sector. It was declared that Five major cities in south of China have got the nod to use Yuan in trade settlement. And it can be seen as a crucial step to promote the internationalization of Yuan. But there is yet a lack of Yuan demand in the market. (1) Capital account and the exchange rate are under the strict control of the authorities. (2) There are few financial instruments provided for the investors to preserve or increase the value of RMB assets against the risk. It is the case that the water faucet was open, but nothing in the water pipe. Measures should be taken further on financial sector to

keep up with the step of trade sector. However, it is expected to take quite a long time.

Last but not least, the internationalization of a currency depends fundamentally on the real economy. In the two dimension analysis of the international specialization, the conclusion is that China has prominent advantage in both of the two dimensions compared to the surrounding neighbors, whereas it is discouraging in the scope of the world. It determines that the RMB internationalization in the surrounding area is expected go along smoothly with relaxed policies. And there is a long distance for RMB to become a key currency around the world. RMB internationalization will always find its time when the conditions are ripe.

References

Bank for International Settlements. "BIS Triennial Central Bank Survey of Foreign Exchange Market Activity." Basle, 1996, 1999.

Bayoumi, T. and Eichengreen, B. "One Money or Many? Analysing the Prospects for Monetary Unification in Various Parts of the World." *Princeton Studies in International Economics*, 1994, 76.

Benjamin, J. Cohen. "The Geography of Money", London: Cornell University Press, 1998.

Carse, Stephen and Wood, Geoffrey E. "The Choice of Invoicing Currency in Merchandise Trade." National Institute Economic Review, 1981,98, pp. 60-72.

Cooper. Richard N. "Dealing with the Trade Deficit in a Floating Rate System." Brookings

Papers on Economic Activity, 1986, 1, pp. 195-207.

Ding Zhijie, "The Issues on RMB Internationalization", The Banker, 2009, No. 5, 25-28.

Frankel. Jeffrey A. "International Capital Mobility and Crowding-out in the U.S. Economy: Imperfect Integration of Financial Markets or of Goods Markets?" *Proceedings, Federal Reserve Bank of St. Louis*, 1985, pp.33-74.

- Fukuda, Shin-ichi, "The Structural Determinants of Invoice Currencies in Japan: The Case of Foreign Trade with East Asian Countries," in Takatoshi Ito and Anne O. Krueger eds., *Financial Deregulation and Integration in East Asia*, Chicago: University of Chicago Press, 1996, pp.147-163.
- Goldstein, D.J. "Foreign Direct Investment in the United States and National Security Policy." *Comparative Strategy*, 1988, 7, pp. 143-158.
- Grassman, Sven. "A Fundamental Symmetry in International Payment Patterns." *Journal of International Economics*, 1973, 3, pp.105-116.
- Hartmann Phillip. "Currency Competition and Foreign Exchange Markets: the Dollar, the Yen and the Euro." Cambridge University Press, 1998.
- Hayek. F. A. "The Denationalization of Money." 2d ed. London :Institute of economic Affairs, 1970.
- Ito, Takatoshi, "The Yen and the International Monetary System," in C.F. Bergsten and M. Noland, eds., *Pacific Dynamism and the International Economic System*, Washington, D.C.: Institute of International Economics, 1993, pp.299-322.
- K. Sato, "The International Use of the Japanese Yen: The Case of Japan's Trade with East Asia", *The World Economy*, 22 (4), 1999, pp. 547–584.
- Kenen, Peter B. "International Money and Macroeconomics," in K.A. Elliott and J. Williamson eds., *World Economics Problems*, Institute for International Economics, Washington, 1988.
- Li Daokui, Liu Linlin,"To Promote the Internationalization of RMB in a way of Dual System", *China Finance*, 2008, No. 10, pp: 42-43.
- Lin Yifu, "Three Conditions of the RMB Internationalization", Wen Wei Po, June 28, 2009.

- McKinnon, R. I. "Money in International Exchange: The Convertible Currency System."

 Oxford University Press, 1979.
- Mundell, Robert. "Options for Monetary Reform." Cato Institute, 1983a.
- --. "The Case for a Managed International Gold Standard," in Michael Connolly ed., *The International Monetary System: Choices for the Future*. New York: Praeger, 1983b,
 pp.1-19.
- Ogawa E., "The Japanese Yen as an International Currency", *Regional Financial Arrangements in East Asia*, Korea Institute for International Economic Policy (KIEP), 2001, pp.25-51.
- Ogawa, E., and Y. N., Sasaki, "Inertia in the Key Currency," *Japan and the World Economy*, 1998, Vol. 10, No. 4, pp.421-439.
- Page, S.A.B. "Currency of Invoicing in Merchandise Trade." *National Institute Economic Review,* 1977, 81, pp.77-81.
- Rose, Andrew K. "Expected and Predicted Realignments: The FF/DM Exchange Rate During the EMS." C.E.P.R. Discussion Papers 552, 1991.
- Swoboda, Alexander. "Vehicle Currencies and the Foreign Exchange Market: the Case of the Dollar." in Robert Z. Aliber eds., *The International Market for Foreign Exchange*, Praeger Publishers, New York, 1969.
- Tavlas, G.S. "On the International Use of Currencies: the Case of the Deutsche Mark."

 *Princeton Studies in International Economics, International Economics Section,

 *Departement of Economics Princeton University, 1991, 181.
- Triffin. R. "Gold and the Dollar Crisis: The Future of Convertibility." Yale University Press, 1960.
- W.G. Song, "A Study of Dollarization", Research on Financial and Economic Issues, 2006,

- 8, 65-70
- Williams, Eric C. "Restrictions on the Forward Exchange Market: Implications of the Gold-Exchange Standard." The Journal of Finance, 1968, 23, pp. 899-900.
- World Trade Organization. "International Trade Statistics 2006", 2006, pp.8.
- Xi.Yang, "Specialization and Division of Labor: a Review", in M. Tang and Y. S. Mao ed.,

 Frontier of Modern Economics, Volume III, Beijing: The Commercial Press Ltd.,

 1999.
- Yang, X. "Development, Structural Changes, and Urbanization." *Journal of Development Economics* 1991, 34, pp.199-222.
- Young, Allyn. "Increasing Returns and Economic Progress." *The Economic Journal,* 1928, 152, pp:527-542.
- Yu Yongding, "Opinions upon RMB Internationalization", *China and Global Economy*Forum: Financial Crisis and Reforms of International Financial System, Shanghai,

 China, May 13th, 2009.
- Zhang Min, "RMB Internationalization Will be a process of long term and incrementality",

 Chinese Academy of Social Science, RCIF, Policy Brief No. 09037, 2009.
- Zhang Yuyan, Zhang Jingchun, "Property of Currency and the Choice of RMB in Future: a

 Study Combined with Asia Monetary Cooperation." *Journal of Contemporary*Asia-Pacific Studies, 2008, No.2, pp: 9-43.
- Zhao Xijun, "It is Important to Develop Domestic Financial Market for RMB Internationalization", *The Banker*, 2009, No. 5, pp: 38-42.