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**The Evolution of International Monetary System and China's Choice
in the Process of It's Diversification**

—An Analysis From Perspective of Monetary Power

by

Peng Xingyun

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Stanford University

John A. and Cynthia Fry Gunn Building, 366 Galvez Street

Stanford, CA 94305-6015

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Abstract

This paper analyzes on the evolution of international monetary system based on the concept of international monetary power, holds that the collapse of the Bretton Woods System was resulted from not only its internal instability but also American desire to strive for more monetary power. The float exchange rate and the real dollar standard have been expanding American monetary power. However, the expansion of American monetary power brings reflective shock to the system. Asia crisis was the most momentum episode. Thereafter, many countries altered their views on optimal foreign reserve, global reserve soared fast and the structure of holders changed dramatically. As a result, any monopoly international reserve monetary arrangement inherits intrinsic instability, the soaring of reserve pushes reverse mechanism to reform the international monetary system. All of the twin of deficit in U.S, low interest rate of dollar and expansion of dollar liquidity are inherited from the system dominated by dollar. They are balance measures by U.S, Unfortunately, it is knife-edged balance. This further develops Triffin dilemma. Meanwhile, the diversification of global economy challenges the existed international monetary system. The diversification of the system is indispensable to accord with economy changes and is the intrinsic requirement to enhance the stability of the system and to break away from monopoly monetary power. This is a great opportunity for RMB to internationalization. In line with the above, this paper probes the RMB's internationalization precondition in perspective of international monetary system history.

Keywords: Monetary power, Dollar Standard, Intrinsic instability of monopoly reserve currency, Diversification of international currency, RMB'S internationalization.

JEL Classification No.: E42, E58, F30.

¹ Stanford Center for International Development Visiting Scholar.
email:pxyifb@cass.org.cn;xingyunp@stanford.edu

I. Introduction

International monetary system is one of the most important factors effecting on current global economy and financial stability, Economists have for a long time probed its evolution, development and influence, but have not ended up with consistent. A currency becomes an international money when it is used by private sectors and official authorities outside of the issuing nation (Cohen, 1971) ,hence becomes a central money in international monetary system and embraces international monetary leadership. Why a central money is indispensable? McKinnon(2006) argues it could make global FX market more efficient, the money in the center in fact is money's money which holds some functions such as exchange media, value standard, deferral payment and value storage. A kind of money from a large size economy will be elected as central money with global FX market development and expansion. The issuing country will benefit much from the money if it becomes international money. In the past, many economists concentrated on the seigniorage gained by the issuing country. Besides, Prakash(2007) redeems that the country can get additional interest through trade term channel, that is, a unit of the money can buy much more foreign commodities. The central money with leadership enjoys international monetary power, the leading country can impinge much effect on the peripheral countries through monetary relationship(David M.Andrews,2006) . Monetary power embodies in many aspects such as the power to transfer the cost of money translation, the power to defer payment for the cost of continuous adjustment, the power to reconstruct the participants in international society, and so on. The country with monetary power can rein and impose constraints on the competitive country by exchange rate weapon. The United States has ever discounted the measures by Japan and European Union by means of money coerce(exchange rate weapon) (Henning, 2006) .

What is the precondition to enjoy international currency? Barry Eichengreen(2008) puts accent on that it is the result of network externality. One country joining the network will save much transaction cost, otherwise it will burden more cost when others countries(enterprises) take advantage of a money to facilitate their transaction. The theory of network externality implies that there will be one money enjoy the international central money. However, the explanation of what is the original engine for the international currency has not been delivered by the network externality doctrine. A currency acts as international currency when the sellers are ready to adopt it as international trade and settlement currency, the decision by the sellers hinges on others sellers' behaviors, the relative size of the

trade counterparts and the inflation rate of the money (Prakash Kannan,2007).Michael Kumhof(2009) hold that there is monotone increasing relationship between the nominal interest rate and the share in international portfolio denominated by the money. However, it is over simplified to attribute the status of a currency in the international monetary system to the nominal interest rate. A paradox phenomenon is now that the interest rate in developed countries is much lower than that in the developing countries which currency, by contrast, cannot enjoy the international currency. Wang Xing(2009) considers that the current account surplus played decisive role prior to 1990 in the evolution of international monetary system and the financial power instead has become the dominants. Zhang Ming and Qin Donghai(2005) argue that the evolution of international monetary system is inductive institutional changes, the existed international monetary system is not be sustainable and be substituted by a fresh system after a periods of expansion, the interchange between the central country and the peripheral country would take place and the number of the central countries would change, there could be one center as well as multicenter. Statistics by Barry Eichengreen and Marc Flandreau(2008) are for the views of multicenter, they show that Sterling and Dollar played part role interwar and many countries allocated their reserve asset between Sterling and Dollar equivalently .Benjamin Cohen(2006) probe the macro foundation of monetary power, Andrew Walter(2006) argues that all conservative monetary policy and institutional arrangement facilitating financial development are the presuppositions for a currency to enjoy international monetary power. Besides the size of economy, commerce and finance, attainment of reserve currency is contingent upon a country's political influence(Barry Eichengreen, Marc Flandreau, 2008), the rising and falling of international currency will stemmed from the changes of all the factors, therefore, the monetary power has never been unchangeable and changes with a country's rising and falling(Mundell,2003).

As well known, the current international monetary system is unitary. IMF's statistics show that dollar asset accounts for more than 60% in the global foreign reserve currency composition, Euro accounts for about 20%. import and export are invoiced and settled in term of dollar also account for paramount share, which is 60%-90% in Asia countries especially(Goldberg and Tille, 2006). Consequently, the structure of the international monetary system is asymmetric, characterized by that the central country can pass through the risk of exchange rate vulnerability to creditor countries which can not lend fund to debtor denominated by their own currency. This is named as conflict virtue by McKinnon(2005),meanwhile, he calls those countries without developed financial market and with inability to offer funds

to debtor with their own currency as immature creditor. Those countries with conflict virtue and immature creditors holding substantive foreign reserve feel deeply the unfair consequence in the fields of crisis and adjustment cost transferring caused by the countries with monetary power. Therefore, they pump themselves up to call for reforming the international monetary system. Nonetheless, not only are the global monetary map restructured and the monetary power reallocated, but also the global geographical interests are redistributed to reform and restructure the system, stakeholders put different advocacy related to the system reform. It complicates the reform of international monetary system and it determines it is a long march to reform it. However, it is a subjective problem that the vested interest government whether is ready to motivate the reform or not, the necessity and how to reform are objective results from the combination of global economies, politics and technologies.

This paper's purpose is to explore the other intrinsic factor fermenting the evolution of international monetary system in perspective of history in reference to the concept of international monetary power put forward by Andrews David, etc(2006), the economy underlying is put accent on as well, to explore the endogenous instability of the system in case of foreign reserve swelling and the economic base appetite for diversification of the system. What should be done by China in financial system to internationalize RMB also be put out on the ground of the above at last.

II. From Sterling to Dollar, A Brief Description From Gold Standard to the Bretton Woods System

Prior to and advent of gold standard, various metals acted as money in further developed commodity countries. In view of the same attribute of a kind of metal, the currencies made from the same materials can compare with each other on the ground of parallel standard such as weight and purity. Until 1870, with the rising of industry revolution, steam engine eradicated the technological block, as well as the shortcomings of bimetallic standard, made Great Britain turn to gold standard(Barry Eichengreen,2008).More importantly, the industry revolution made England become the dominative force of the world economy and the main source of other countries finance. According to the analysis by Eichengreen(2005), England dominated the global trade system at that time, From 1860 to the early of 20th century, England's export accounted for 20%-30% of the global exports. This forced those countries, traded with and borrowed capital from England, to turn to gold standard in

succession by the action of networks externalities. Thereafter, Pound became the central currency of international monetary system. Examples as following, in the corresponding period, the global trade invoiced and settled in term of Pound accounted for 60% or so (Eichengreen, 2005); Prior to War I, foreign accounted for 20% of total gold and foreign reserve held by central banks and governments. At the same time, Pound took the dominative place in reserve currencies, 64% official foreign reserve was deposited in Landon, 15% was held respectively in Paris and Berlin. (Lindert, 1969). Triffin (1968) estimates that Pound accounted for 80% of global foreign reserve in the end of 1920s and 70% in 1938.

As the influence of industry revolution turned from Europe to America, the dominates of global economies, trades and capitals shifted from England to the United States, consequently, the relative competitiveness between Pound and Dollar in international currencies inverted. Although Chinn and Frankel (2008) argue that dollar took pound's place in dominative international currency after war II, Barry Eichengreen and Marc Flandreau (2008) hold that dollar factually replaced pound and enjoyed the international central currency in the middle of 1920s (Pound made repercurssion and surpassed dollar as a consequence of dollar's depreciation in 1933.) Interwar characterized remarkably by the rising of New York as a financial center to compete with Landon and the rising of dollar as international currency to compete with pound. In order to reconstruct international monetary system and to redistribute international monetary power, British and the United State began to schedule respectively in 1940 and 1941 the new order of international monetary system following War II, their strives activated lastly the 1944 Bretton Woods System conference. In order for the conference, Keynes and White put out the well-known "Keynes Plan" and "White Plan" on the ground of British's and the United States' interests respectively. The two plans distinguished from each other in many aspects duo to the gap between British's and American's interests. However, the results of the international monetary conference in all aspects closed to White Plan and took distinctly part from Keynes Plan caused by British's and America's comparative strength change in economy, politic and military in the past decades. The Bretton Woods conference built up the new international monetary system that dollar pegged gold at a fixed rate and other countries' currencies pegged dollar. Hence, the domination of dollar in international monetary system was set up formally and pound's role in the system washed out. The Bretton Woods System was stemmed from the handover of power from British to the United States, British was in bad condition to lead the world and pound was unable to keep on the leadership in international monetary system (Skidelsky, 2006).

The Bretton Woods System was one of the most important factors pumping up the gold growth in some countries in the wake of War II, it realized to some extent exchange rate stability, resolved sharply the problems of payment and fostered the unprecedented development of international trade and investment (Eichengreen,2009). However, after the establishment of the Bretton Woods system, dollar enjoyed the central currency in the system and the Federal Reserve played the role of the central bank of the world, Charles de Gaulle was in-content very much with dollar's exorbitant privilege(Eichengreen,2009), the Bretton Woods system in function encountered political conflict . Meanwhile, the Bretton Woods system inherited flaws: as everyone knows, the first flaw is Triffin dilemma, there is conflict between dollar as reserve currency and its value, secondly, the convertibility between dollar and gold would make the confidence to the commitment vacillate with the ratcheting up of dollar liability relative to the gold stock held by America, thirdly, it contingents upon the discrete change in exchange rate to correct the payment, once the payment's imbalance last long time due to economy underlying, speculative shock will take place(Richard Cooper,1984).In view of this, the Bretton Wood System retained the control over capital account. Nonetheless, the difficulties with identifying speculative capital was increasing with the innovation of IT, the changes in the structure of trade and the soaring growth of foreign investment by private sector. All of the above paradox lastly brought about the collapse of the system in 1973.

The above conventional interpretations on the collapse of the system grasp some crucial points, nonetheless, they pay no attention to the constraints on the "monetary power" enjoyed by America under the intrinsic arrangement of the system. Although the double pegged monetary system in the Bretton Wood System endowed dollar as the central currency (or the exorbitant privilege in De Gaulle sense, or the fixed rate dollar standard as McKinnon pointed out), the structure at the same time reined the monetary power that the United States could benefited from the system, America was deprived of the exchange rate weapon by the fixed rate system, the monetary power enjoyed by dollar maybe was not as much as that De Gaulle conjectured. Without the Triffin dilemma, the intrinsic conflict between the adjustable pegged rate and capital mobile, in order to gain more and more monetary power, there were some incentives that made America get rid of the constraint by gold and resulted in the collapse of the system. The constraints on monetary power as follows:

Firstly, the Bretton Woods System fixed the rate of gold to dollar, but the market price is volatile as the supply and demand changes. When one goods' price

is different in different market, the arbitrage incentives will occur. Once the gold's market price was higher than the fixed price set by the Bretton Woods System, some central bank without exception would take advantage of the arbitrage opportunity. Such arbitrage activities imposed additional constraints on American monetary policy. If the United States tried to issue more dollar or monetarize its fiscal deficit, it would precipitate gold arbitrage, therefore, the fixed exchange rate arrangement in the system makes the peripheral countries, beyond all doubt, lose autonomy in monetary policy, but the United States' monetary policy also carries without autonomy. This is much akin to the gold standard. In the great depression between 1929-1933, the Federal Reserve facing the crisis shock had been ratcheting up interest rate, not been diminishing it, one of the reasons was that the gold standard constraints would result in the money stock scaling down if the Federal Reserve had decreased interest rate (Milton Friedman and Schwartz, 2009). Similarly, free risk gold arbitrage activities in the system would have exhausted the gold reserve held by the Federal Reserve eventually. This mechanism let America could not make vast influence on other countries through changes in monetary policy. In order to gain substantial international monetary power, dollar must break away from its convertibility between gold.

Secondly, the fixed rate system between dollar and peripheral currencies deprived America of exchange rate weapon to restrict other countries when America's position in international economy system was threatened by the later. In 1960s, America carried out expansionary monetary policy and the inflation rate soaring ensued, American export lost competitiveness in face of the rising of German and Japan after War II. For instance, the share of export from German and Japan counting for the global export mounted up from 1.4% and 0.4% in 1948 to 11.6% and 6.4% in 1973, by contrast, America's share dwindled from 21.7% to 12.3% in the corresponding period (see table 1). However, the United States could not regulate international economy relationship with exchange rate mechanism in the fixed rate system. Hence America's another indispensable choice to get more monetary power was to throw away the fixed rate system between dollar and rejuvenating countries' currencies. The intrinsic conflict between the Bretton Woods System and the monetary power run after by America intensified by the soaring inflation rate in America in the second half of 1960s. In order to get rid of the constraints on monetary power from the double pegged system, Nixon administratively announced 1971 to depreciate dollar and close the gold window, denounced the convertibility between foreign countries dollar reserve and the United States' gold reserve. At the end of 1971, Smithsonian Agreement tried again to fix the

exchange rate between dollar and other currencies, but it came to nothing. In March 1973, the exchange rate among main industrialized countries could float freely. Hereafter, the Bretton Woods System in which dollar pegged gold and peripheral countries' currencies pegged dollar became history, Dollar freed from gold, dollar enjoyed real international currency by the action of path independence of international monetary system, the monetary power gained by America expanded substantially.

III. Strengthening of dollar Standard, Expansion of Monetary Power and It's New Constraints

International exchange rate system diversified in the wake of collapse of the Bretton Woods System. 11 currencies realized floating freely in 1975, 81 currencies took single pegged system, 19 currencies pegged SDR and other basket currencies and 7 currencies pegged jointly (Ronald McKinnon, 1979). In view of those, member countries of IMF convened in Jamaica in 1976 and the so-called Jamaica system was set up. The new system legalized floating exchange rate, demonetized gold and called for SDR acting as main reserve assets. Jamaica system provided permission to countries to choose exchange rate system, however, supervision by IMF on member countries was in place, exchange rate must accord with long economy underlying and member countries were not ought to seize unfair competitive interests by means of exchange rate manipulation. McKinnon(1993) thus names this as "floating rate dollar standard". Dollar would not have pegged to gold any more, other countries could not rein on the issuance of dollar (under the Bretton Woods System, arbitrage activities by other countries could constraint on dollar issuance), dollar's issuance hinges on America's government credit worth, the dollar standard without constraints by gold expanded America's international monetary power vitally. America's exchange rate weapon possesses more free space to cope with international affairs in line with America's interests. Therefore, it is not surprise that every once dollar exchange rate cycle always resulted in economy and financial system turbulence in other countries(regions)(Huang Xiaolong, 2007). Plaza Accord mentioned by people from time to time is a classical monetary power case of exchange rate weapon wielded by America.

The collapse of the Bretton Woods System has not curbed America's exorbitant privilege, by contrast, there is no more precise metal to which other countries currencies anchored, the order of international monetary system submerged into mess, those economies without monetary power had to descend to more exterior

shock vulnerably. Because European trade accounted for about 50% of the global trade, the volatility of exchange rate imposed renewal uncertainty on Europe, which has been a vital polar of the global economy. Some European countries executed snake float in order that the exchange rate among those countries were stabilized and the adverse effect by dollar exchange rate on European trade was tripped out. Nevertheless, many difficulties in face of the snake float in practice stemmed from the discrepancy of economies underlying, fiscal discipline and monetary policy constraint, under the great pressure of speculative shock, those countries joined in the snake float was forced to adjust the parity, the exchange rates among European countries fluctuated increasingly dramatically, even several national currency crisis occurred (Eichengreen,2009).The turbulence of currencies in Europe accelerated the integration of those currencies. By the way of currencies integration, the exchange rates among the member countries wiped off all at once, exchange rates risk and the cost of currencies exchange among the member countries did not exist, as a result, the factors markets in Europe also were pumped up(Barry Eichengreen, 2008). The integration of currencies in Europe eliminated the exchange rate risk, so the demand for foreign reserve diminished. The figures in ECB show that the balance of foreign reserve held by 12 countries in Euro area decreased by more than 40% from 2002 to 2005. On top of that, the unification of currencies has been gearing up financial market integration and deepening. This fuels more and more competitiveness of Euro as a reserve currency. Elias Papaioannou, Richard Portes and Gregorios Siourounis(2006) argue, by means of mean-variance model, that the optimal share of Euro in international reserve currency raised sharply and Euro in fact enjoys international currency because increasing countries issue securities denominated by Euro in international financial market. Eichengreen(2005) holds that it is possible that Euro will be as important as dollar as international reserve currency in the future 20-40 years. More optimistically, Euro will preponderate over dollar and become the dominative reserve currency in the future 15 years (Menzie D. Chinn and Jeffrey A. Frankel, 2008). If they are correct, then we can draw conclusion undoubtedly that the unification of European currencies put new constraints on dollar's monetary power. As far as this is concerned, the integration of European currencies and its development is rather a collective cooperation that the European countries restrict dollar's exorbitant privilege and monetary power.

Other countries, which have not established common monetary area, carried out universally pegged dollar system on purpose of exchange rate stability and pinned their hope on dollar as a nominal anchor of domestic anti-inflation and currency stability. However, those countries encountered increasing tough difficulties to

monitor and control capital mobile effectively with the more and more frequent and enormous capital mobile. Moreover, exchange rate could not change with the economy underlying in the context of pegged exchange rate system, it was not exiguous that those currencies were overvalued. Currencies crisis incurred at last under speculative shock. Among of those crisis, the most impressive is no more than Asia crisis launched in Thailand in 1997, which subverted the conventional thoughts on the optimal foreign reserve. Prior to the crisis, the underlying in crisis hit countries was sound, the foreign reserve was sufficient according to the traditional thumb rule of optimal foreign reserve(that is the foreign reserve meets with 3 month import demand). However, Thailand central bank exhausted its foreign reserve soon following the speculative shock and it was compelled to announce that Thai Baht float freely. As a result, Thai Baht depreciated more abruptly. it was not a long time before Philippines, Indonesia and Malaysia carried crisis contagion. South Korea and Japan, which are remote from the South-east Asia, also involved in the serious crisis quickly. The crisis speeded up financial overhaul in the crisis struck countries, the existed pegged rate system was threw out and more flexible rate system took its place, domestic financial institutions were restructured and their balance sheets were cleared, vast public funds was pumped into financial institutions which capital adequacy thus increased substantially, the financial regulatory systems were reformed and financial system further opened up (Peng Xingyun and Jiang Songling,2007). Crisis immuned countries such as China in face of Asia crisis invigorated by contrast pegged dollar system in order to avoid competitive currencies depreciation. As a result, dollar's monetary power solidification ensued. In general, there are three changes which influenced international monetary system during and in the wake of the crisis.

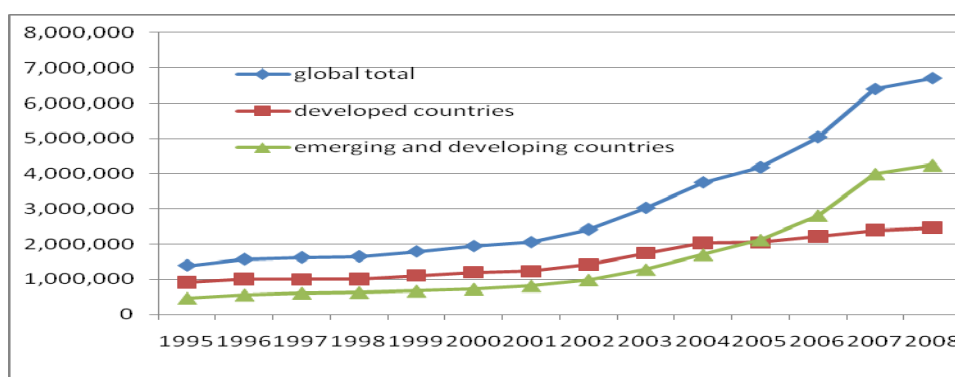
At first, many countries learned lessons from the crisis, did not comply doctrinally with the traditional thumb rule of optimal foreign reserve and hold tremendous reserve which override vastly 3 month imports in order to shield from another financial turbulence .The global reserve in 1997 was 1616.248 billion dollar. This figure in 2008 soared to 6712.857 billion dollar. It increased 2.5 times in about decade. Meanwhile, the holder structure changed profoundly (see figure 1) .Before 2005, foreign reserve held by developed countries had been being more than that by developing countries and emerging markets. One of the problems facing many developing countries was that they were in shortage of foreign reserve. After 2005, foreign reserve held by emerging and developing countries surpassed that by developed countries. The total foreign reserve held by emerging and developing countries was 2127 billion dollar and 2047.6 billion dollar by developed countries in

2005. Foreign reserve belonged to the former reached 4248.4 billion dollar and to the latter was 2464.4 billion dollar in 2008(see figure 1). Among the developed countries, the balance of foreign reserve (up to the third quarter,2009)held by America, Great British and Euro Area, which enjoy issuance of reserve currencies, was respectively 78.3 billion dollar,65.5 billion dollar and 520.7 billion dollar. Although they are large economy with more opening up to the rest of the world and more frequent capital mobile, the balance of foreign reserve was not as much as ,or even much less than 3 month imports. On the contrary, foreign reserve in Asia countries soared up sharply in the past decade. According to the statistics from IMF, the total foreign reserve up to 2009 held by China, Japan, South Korea, Chinese Hong Kong and Taiwan, Malaysia, Indonesia, Thailand and India reached 4500 billion dollar, which accounted for 70% of global reserve. In technical term of McKinnon, Asia countries are “immature debtors” with “conflict virtues”. This situation reflects profoundly Asia dependence position in international economy and monetary affairs, reflects the asymmetry between the international monetary arrangement and the changes in global economy: the global manufactory system depend increasingly on Asia but the latter depend more and more on developed countries in international monetary affairs.

Therefore, if the root of international monetary system was gold , dollar was not more than the shadow of gold and the intermediary between gold and countries currencies in the Bretton Woods System, then dollar has been enjoying real central currency in international monetary system after the collapse of the Bretton Woods System. Dollar’s such position in the system is consolidated by the swelling of foreign reserve in Asia in the wake of the crisis. America, in face of the rising of Euro, can keep on its existed monetary power. One of the most remarkable character of the international monetary system after the collapse of the Bretton Woods System is that dollar standard resuscitate(Li Yang,2008) .To some extent, America grabs more monetary power from pegged dollar by Asia countries, but this arrangement endows dollar with function of nominal anchor to stabilize domestic price more efficiently and to reconcile the relationship between domestic and America’s monetary policy by means of commodities arbitrage and signal mechanism (McKinnon,2005) . In particular, in view of dollar’s international status is not shakable ,there is lack of core currency and nominal anchor is indispensable in this area, it is a rational choice to peg their currencies to dollar and make use of dollar as the invoice and settlement currency in foreign trade and investment (McKinnon,2005) .Michael Dooley, etc(2003) names the international monetary system that emerging industrialized countries peg their currencies at undervalued

rate to dollar and reinvest their gained dollar to the United States as the Bretton Woods System II. Perfunctorily, this is double-win choice.

Figure 1 balance of global foreign reserve and it's holder millions dollar



Source, IMFwebsite.

Secondly, sovereignty wealth funds developed and expanded. The mushroom of foreign reserve indicates global economy imbalance as well as international monetary power imbalance. Additionally, it induces liquidity building up rapidly and asset price soaring in those countries with inflexible exchange rate system, this can make America realize monetary power to delay and to transfer continuous adjustment cost. In view of this, those countries bound up by international monetary power changed aggressively their reserve management strategy, they did no longer satisfy with the more conservative liquid portfolio with low credit risk and return. Thereupon, in order to either mitigate the domestic monetary expansion pressure from the colossal foreign reserve or to separate the superfluous reserve to take an active management strategy. Sovereignty wealth funds erupted in global financial system. Sovereignty wealth funds are specialized financial institutions which are sponsored and managed by governments, are financed from mainly export revenue and foreign reserve, invest overseas (Xie Ping and Chen Chao, 2010). Many international investment banks estimated sovereignty wealth funds. City Bank etc hold that the global sovereignty wealth funds is totally about 3 trillion dollar, IMF forecasts that global sovereignty wealth funds will be 6 trillion to 10 trillion dollar in 2013 (Xie Ping and Chen Chao, 2010). Those countries, which could not establish monetary union in short time, set up sovereignty wealth funds is more realistic choice, because these do not violate the existed international monetary position and is a feasible alternatives to manage the plethoric reserve (Xie Ping and Chen Chao, 2010). In fact, the rising of sovereignty wealth funds is reasonable response to the asymmetry between the power and obligation of the country issuing the reserve

currency, naturally, it brings forth new conflicts between reserve holding countries and the issuance country. The holders of sovereignty wealth funds are usually governments, the reserve issuance country, on ground of freedom market idea, is afraid that the former will intervene in the company they invest in. Therefore, it requires IMF formulate unified rule to govern sovereignty wealth funds, or constraints on and defies politically the investment by sovereignty wealth funds. On the contrary, the holders of sovereignty wealth funds allege that the rising of funds is the result of unreasonable international monetary system, in order to restrict the funds, the international monetary system must be overhauled firstly.

Thirdly, regional financial cooperation has been deepening continuously. During Asia financial crisis, IMF offered aid under aggressive condition such as it required the embracers retrench monetary and fiscal policy, revamp structure and liberalization. IMF is no more than a legal institution that the country which has leadership and major vote right in international monetary system implements monetary power. However, aids from IMF did not alleviate the crisis, IMF, act as international last lender to resort, encountered either political obstruction when it gave its hand to Asia crisis struck countries to response to the crisis or strong opposition from popular. Interregional financial cooperation had thus been put into agenda, they did their best to set up regional financial stability mechanism by means of mutual currency swap and credit network. The typical regional financial cooperation is Chiang Mai Initiative. Learning from short and very-short finance facility of European monetary system, the participants' central banks agree to provide finance facility to the neighbor countries. If one faces speculative shock in the future, they can make use of official finance to response to it. Multilateral foreign reserve pool emerged at the right moment. In February 2009, the multilateral reserve expanded from initial 80 billion dollar to 120 billion dollar, the share of participants was defined (People's Bank of China,2009). Chiang Mai Initiative is conceived as a mutual mechanism without IMF styled aggressive clause, consequently, it maybe deepen the financial cooperation in practice, mitigate the restrictions by central currency country's monetary power and relieve the burden shouldered of continuous adjustment cost transferred by central currency country's imbalance.

Among the above three aspects, it seems that the soaring of foreign reserve has consolidated dollar's monetary power, sovereignty wealth funds and the development of regional financial cooperation indicate that the peripheral countries strive for breaking away from to some extent monetary power. Subprime crisis concerned people and cast doubt about dollar and the prospect of the international

monetary system centralized by dollar(Li Fuan and Li Shan,2009). But Eichengreen(2008)then holds that US treasury bond is still the most liquid financial market in the world, this endows it attraction to central bank's foreign reserve. After the recession stemmed from subprime crisis is over, the Bretton Woods System II will be much more solid, because the developing countries will still and are able to bolster export and stimulate economy growth by the way of control over domestic currency, the Bretton Woods System II will rein the international monetary system(Dooley, etc, 2009) . More optimistically, dollar probably will keep the dominative status for a long time in the future, it seems that no currency can surpass it(Cooper, 2009) .

However, the problem is that what is the meaning of foreign reserve soaring on the system's stability and monetary power?

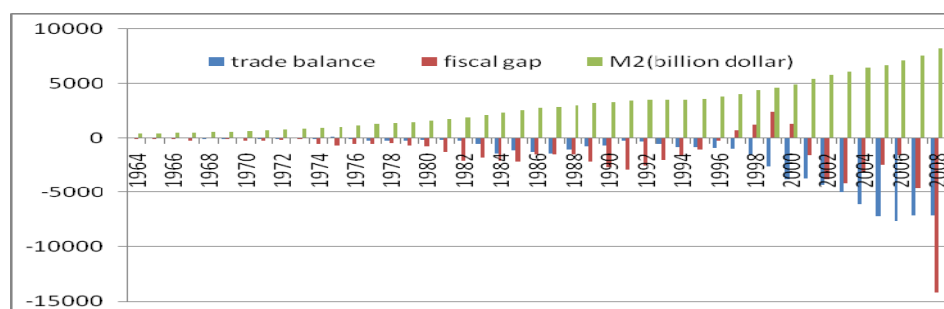
IV .The Intrinsic Instability of Monopoly Reserve Currency: Further Developing Triffin Dilemma.

Foreign reserve soaring in peripheral countries is on purpose of building up domestic financial stability, in particular exchange rate stability. It seems it is consistent with the desirability of central and leading currency country because it strengthens monetary power enjoyed by the country, which can transfer and defer more smoothly the continuous adjustment cost and constraint on other countries. But unfortunately to central country, the soaring of foreign reserve pops out the intrinsic instability of international monetary system with monopoly reserve currency, the reflective shock require its diversification at a faster pace than expected, the monopoly of monetary power thus will be undermined inevitably.

In order to dig into the instability of monopoly reserve currency under condition of foreign reserve soaring, we should firstly investigate America's trade and fiscal deficit, decreasing federal fund rate. Figure 2 shows that since the early of 1980s America's trade and fiscal deficit have changed consistently with expansionary trend. The expansion of fiscal deficit has brought about the balance of federal debt and ratio of debt to move up sharply. In 1966, the ratio of America federal government debt was 43.21%, in 2007, this figure overrode 70%. Another phenomenon parallels with this is that interest rates in America have been falling off endlessly. Examples as following, in the early of 1980s, interest rate of 3 month term treasure bill was 12%-15%, but at the end of 2009 it was only 0.05%; Similarly, federal fund rate descended from over 10% to 0-0.25% in the corresponding periods. Did the twin deficit of America and decreasing interest rates are resulted from dollar

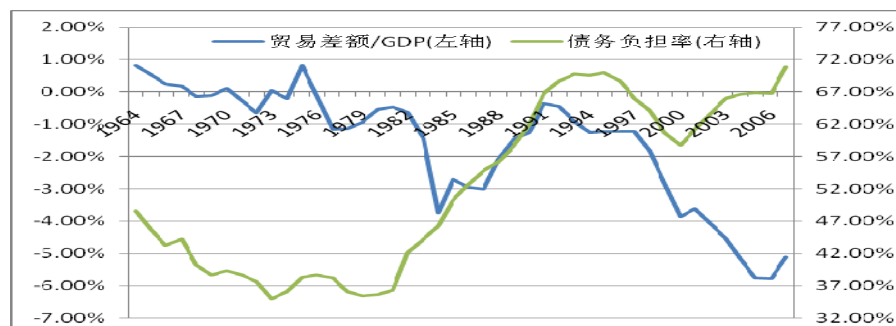
as monopoly reserve? What will it place effect on the monopoly international monetary system centralized by dollar?

Figure 2 American fiscal gap, trade balance(100 million dollar) and M2



Source: <http://research.stlouisfed.org/>

Figure3 Ratio of trade balance to GDP and federal government debt rate in America



Source: <http://research.stlouisfed.org/>

Triffin(1960) explores the influence of dollar as reserve currency, America's current account deficit on the system's stability. He points out dollar peg gold and other countries' currencies peg dollar, dollar therefore possesses the central currency in the system, but others have to use dollar as settlement and reserve currency for the sake of foster foreign trade, dollar flows out of America thus accumulates continually overseas, America will incur chronically trade deficit, however, the premise of dollar as the core of international currency is that dollar value must be stable and solid, this make request for America trade surplus. Those requirements are paradox. The above is distilled as Triffin Dilemma. According to Triffin dilemma, America trade deficit will surge with the increasing of demand for foreign reserve by other countries. As a consequence, we can draw the following conclusion in the light of Triffin dilemma: America's trade deficit resulted from more the dollar as the dominative reserve currency to meet the demand for countries' increasing reserve than the restructure of global division. Put other words, new international

division and product system must be framed in order that the dollar keep the central currency, consequently, global economy imbalance shaped and consolidated under such international monetary arrangement.

Triffin dilemma is a wisdom insight. When he put out the problem, America's trade status was not as deteriorated as today. At his era, there was even some trade surplus(see figure 3),we cannot but say Triffin is prophetic vision. Nonetheless, he merely points out one side of the problem, that is, how the intrinsic paradox between dollar as international key currency and export dollar effect on the currency value stability. It has not considered what the country issuing reserve currency provide for foreign reserve keeping value and appreciation. This is no other than indispensable financial arrangement by America to maintain dollar's monetary leadership and power. Among the available assets, government bond and bill are alone the assets satisfying liquidity and security, other assets such as company bonds, stocks, bank deposits and even government sponsored institutions bonds cannot meet with those requirements by foreign reserve. This was verified very well during the subprime crisis. Those countries which shoot for active reserve management and established sovereignty wealth funds suffered jumbo lose in the investment of reserve in stocks, company bonds and even government sponsored enterprises bonds such as Fannie Mae and Freddie Mac in the subprime crisis. Subprime crisis taught those countries doing their best to allocate more in America stocks and bonds a impressive lesson in reserve management. On the contrary, due to desirability for risk aversion and liquidity, the demand for America treasury securities (especially the bill) increased abruptly, yields hence diminished. In the wake of crisis shock, it is found that it would encounter fractious risk to invest colossal reserve (even if a small fraction of it) in portfolio excluded from government securities. In the era of Triffin, the foreign reserve held by the rest of the world was not as tremendous as today's, relative little fiscal deficit could meet still with the demand for dollar asset. However, under the international monetary system dominated by dollar, the demand for America government securities rolled up with the soaring of global foreign reserve. In order to meet with the requirement by reserve management, America issues a large amount of government securities, that will require correspondingly some fiscal deficit. If America fiscal deficit and the balance of government securities had not been gone up with the increasing of reserve, those holders of reserve would have troubles with management of their reserve asset. There was existed example. In the periods of Clinton Administrative, America had fiscal surplus for a short time, not only did the issuance of government securities cut down, but also its net issuance was negative. As a consequence, the balance of America government securities

rebated. This change induced peripheral countries unexpected difficulties with their management of reserve, many countries found that there were no desirable financial instruments in which they invested reserve (Li Yang, 2003). Much more, today's foreign reserve is not parallel with that in the periods of Clinton fiscal surplus, the demand for America government securities and fiscal deficit is much more than that before. It is thus clear that, just as the trade deficit, the swelling of America fiscal deficit inherits endogenously from the dollar as a global dominative reserve currency and the sharp growth of foreign reserve. So far, we can elucidate in other perspective America's twin deficits (trade and fiscal deficit) and their expansion.

The explanation on America's twin deficits in some macroeconomics textbooks is that the trade deficit is resulted from the fiscal deficit. The increasing of fiscal deficit will move up IS curve, interest rate in US thus America will rise and dollar will appreciate, that will curb the export competitiveness of America's commodities, America thus will incur trade deficit (Stiglitz, 1999). The traditional explanation from textbook seems perfect logically, but it is little consistent with the reality. An example given as follows, one phenomenon coexisting with twin deficits is that interest rate in America has been decreasing for 30 years. This utterly counteracts with the result from the above macroeconomics logical. As far as the reason of interest rate decreasing concerned, Greenspan (2007) gives interpretation on the ground of classical theory of saving and investment. He argues that the transition of former socialism countries would lead global saving build-up and interest rates go down because the social security systems in those countries are absent. But it was not in 1990s that America's interest rates began to decrease. Moreover, saving and investment and thus export and import should be balanced when all global countries are combined. In view of investment is much more than saving and the gap between them has been increasingly widening year after years, in line with Greenspan's logical framework based on classic theory of saving and investment, the interest rates in America should have gone up, at least they should not have fallen sharply and even zero interest rate should have hit. It is not different from Stiglitz (1999) macroeconomics implication which is opposite to the reality.

Therefore, it is obvious that the continuous stepping down of America's interest rates can be interpreted conceivably in light of neither standard macroeconomics nor the classical saving and investment theory which Greenspan applied. The following question thus naturally is put forward: Is America desirable for lower interest rates and does it have incentive to curb it purposely in order to maintain dollar's central currency in international currency? The answer is affirmative. As above mentioned, America has to make a amount of issuance of government securities so that the

demand for dollar as reserve currency is met with, but meanwhile, it has to ponder the sustainability of its debt and to shield from fiscal crisis as a consequence of satisfaction with the demand for reserve currency. The burden of debt on government is usually measured by the ratio of debt that is the ratio of outstanding interest and principal of debt to GDP. If the growth rate of debt issuance and economy is fixed, the government must try its best to reduce interest rates so that the debt rate can be depressed and the sustainability of debt can be shaped up. If America's interest rates had not reduced so much over the past twenty years, what are the results of America government debt ratio? Without other considerations, the debt ratio would have been influenced adversely in three aspects. Firstly, relative higher interest rate would have repressed the economy growth rate, America's GDP thus would have decreased; secondly, the decrease in GDP would have eroded the tax base and the government would have had to incur more fiscal deficit; and lastly, higher interest rates would have accrued the government's payment for interest on debt and more issuance of debt is indispensable. Put them together, the debt ratio of the government would have been certainly more oppressive. Well then, what is the shortcut to curb the interest rates on the government colossal outstanding debt? It would be difficult to come true without the cooperation by the Federal Reserve Bank. Factually, in the history of the United States, the Federal Reserve Bank had to tailor its monetary policy stance several times so that the interest rates on the government debts could be cut down coordinately. For instance, after the outbreak of War II, the Federal Reserve Bank consented to do the America Treasury Ministry favor to peg the interest rate at 2.4% for the sake of raising funds for the war. Once the interest rate was over it, the Federal Reserve Bank would buy bonds at the open market and descend it. Consequently, the monetary policy targeted interest rate monetarized the government bonds to great extent (Peng Xingyun, Shi Huaqian, 2007). Similarly, under the ground of global reserve soaring, America Treasury Ministry also requires the Federal Reserve Bank carry out relative easy monetary policy and reduce market interest rates by means of money expansion in order to meet with the demand by reserve currency for the government bonds, as well as to control over the ratio of government debt, to reduce the debt interest cost, to enhance its fiscal sustainability and the government bonds markets' stability and to keep thus the interests from dollar as global dominative currency. For as much as this, the easy monetary policy by the Federal Reserve Bank, reducing the interest rate, is to some extent inherited endogenously from the international monetary system dominated by dollar.

Another question sprouts. Not only existed the implacable paradox between the current account deficit and dollar's stability, as mentioned by Triffin, due to the

fiscal deficit and debt expansion, easy monetary policy and lowering interest rates. but also the conflict between monopoly international monetary policy characterized by dollar standard and dollar's value stability become increasingly implacable and intense in the past three decades, this point is affirmed by the inhibited dollar exchange rate index along with twin deficit expansion and declining interest rates. On the other hand, although McKinnon argues that dollar standard is well-functioned as nominal anchor and in favor of price stabilities in some countries, as long as expectation of appreciation turns up, those countries which adopt implicitly dollar standard incur new troubles stemmed from international monetary power. For example, the radical monetary policy response to crisis evoked carry trade more substantially in international financial market, swelling of foreign reserve and inflation pressure embodied in the asset bubble in dollar standard countries. Put into one word, the swelling of foreign reserve brings about tough contradiction for central currency as well as more and more destructive shocks to macroeconomy stability in peripheral countries.

Barry Eichengreen(2005) places accent on that whether dollar keep its reserve currency status or not hinges critically on if America itself execute improper seriously economy policies which induce inflation and dollar depreciation and dim dollar as reserve currency. However, up to now in this paper, it is easy to draw such conclusion that all of those that the expansion of America's trade and fiscal deficit, declining dollar's interest rates and expanding dollar liquidity inherit from the international monetary system dominated by dollar, that shakes and crisps the system. In other words, American in pursue of monetary power itself inevitably takes seriously improper economy policies. As central currency country, America has to balance painfully between meeting with the demand for dollar as international dominative currency, maintaining America's cardinal interests(monetary power) in the system and preventing from deterioration of the system instability. Unfortunately to America, as the global foreign reserve soars, such balance is knife-edged. Obviously, Neither Eichengreen nor Cooper notice that dollar reserve growth itself will make the system more shakable and reflective shocks, the more and faster dollar reserve growth, the more momentous of shocks to the system and the faster the Bretton Woods System II break down. As far as this is concerned, the soaring of foreign reserve in peripheral countries is a strong reverse mechanism to overhaul the international monetary system.

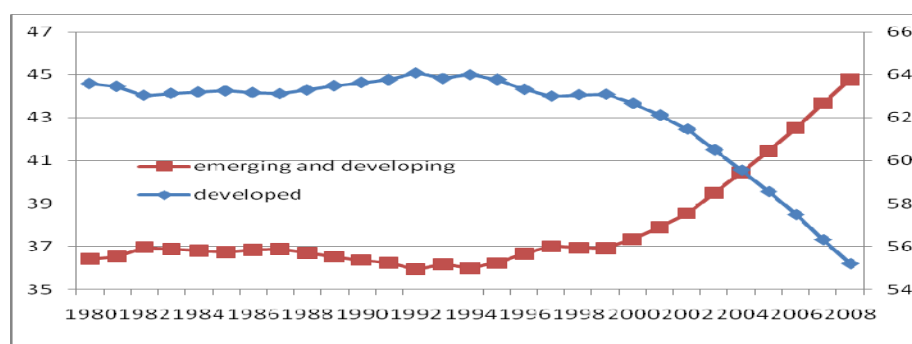
In line with the above analysis, the following corollary is clear , in fact, not only is the system dominated by dollar as reserve currency unstable, but also any

arrangement with single sovereign currency as dominative reserve currency will propagate spontaneously intrinsic instability in the case of global reserve swelling.

V. The Challenge of Global Economy Diversification on Monopoly International Monetary System and Redistribution of Monetary Power.

Besides that the soaring of global foreign reserve will result in the monopoly international monetary system more shakable and the system itself appeals to diversification, the multi-polarization of global economy either challenges newly on the monopoly international monetary system or appetites for diversification of international currency and redistribution of monetary power. Since 1980s, with the rising of emerging market-based countries, the transitions of former socialism countries and globalization of economy and allocation of capital and labor, global economy has been developing in direction of multi-polarization. In many developed countries, many factors such as aged population, high welfare and taxation make the economies stiff, in face of exterior shocks, the economies regulated by governments and insufficient competition are absent of flexibility, productivity and economy growth rate are low relatively(Alan • Greenspan,2007; Robert·Shapiro,2009). By contrast, many emerging and transitional countries deregulated, propped up competition, attracted largely FDI. All of those in addition to low labor cost geared up impressive economy growth. Consequently, the share of developed countries' GDP in the global ratcheted down, the share of emerging market-based countries' ratcheted up(see figure 4). The share of developed countries GDP in global decreased from about 65% in the early of 1990s to 55% in 2008.it declined about 10 percent in two decades; contrarily, the share of emerging and developing countries increased about 45% in 2008. More and more countries are in the line of emerging.

figure4: the share of developed and emerging and developing economy GDP in the global unit: %



Source: IMF website

The changes in the structure of global aggregate economy are synthetic results from factors such as institutional changes, technical innovation, increasing in capital supply etc in developing and emerging countries. Nonetheless, put it into global system, the structure changes, which mirror the process of the reallocation of global capital and labors, have been remodeling thoroughly the demand for international currency. The emerging market-based countries, characterized outstandingly by export oriented, have supplied global more and more manufactures for more than decade, their share of trade in global moved up significantly, the trade among them ascended increasingly. On the other corresponding side, the foreign reserve held by them overrode largely that by developed countries. Table 1 shows the change in trade share in main countries since the Bretton Woods System. Take export as example, America's export accounted for global in 1948 21.7%, but this share declined to 8.2% in 2008. Europe as a whole, although its export still accounted for global 40% or so, it is obvious that its share has decreased by 10 percentage compared with 50.9% in 1973. Notwithstanding German's share in global after War II uprose markedly, it has stagnated since the early of 1970s; exports share in global in other European countries such as France, England and Italy has depauperated. On the contrary, the share of exports in global in Asia region has been ascended, it reached 27.7% in 2008. Meanwhile, the engine that motivated Asia exports share rising has shifted insensibly in the past half century. Prior to middle of 1980s, the increasing in Asia export share attributed mainly to Japan's boom, but after the outset of the new millennium, As China joined in WTO, China has become the dominative force that propped up Asia exports share, in 2008, China exports share accounted for global reached 9.1%, which exceeded Japan's 5% share. India, one of the BRIC and located in Asia, export share in global is still too low, this figure is about China's 10%. In the past decades, globalization developed rapidly, but the exports share in Middle and South America has dwindled sharply and been very low, this shows that it characterized by adverse globalization. On the import side, America's share is relative stable, that in Europe and Middle and South America diminished clearly and in Asia mounted up substantially (China is the most outstanding). According to Eichengreen(2005) analysis, that Sterling was the global dominative reserve currency in 19th century attributed to that Great British dominated global trade system at that time. In line with this conclusion and in perspective of current global trade system, the most influence on the existed international monetary system come from Asia's springing up. Especially, as the share of trade intracountries in Asia has been increasingly going up, they will encounter more serious currency mismatch if they keep use of another currency

outside of the region, as a consequence, their trade and macroeconomy will expose vulnerably to the volatility of key currency exchange rate. Once trade disputes (resulted from such as election cycle in central currency country, transferring adjustment cost, disputes in party interests) occurs, if those region with broad trade relationship make use of tri-party currency, they will be controlled by the central currency country by means of exchange rate weapon and monetary coerce, therefore, it is the essential outlet of monetary autonomy to seek for a kind of currency with mutual interests, lowering transaction cost and lifting monetary autonomy and keep from dependence on existed central currency.

Table 1 the share of exports in countries (regions) in global %

	1948	1953	1963	1973	1983	1993	2003	2008
America	21.7	18.8	14.9	12.3	11.2	12.6	9.8	8.2
Canada	5.5	5.2	4.3	4.6	4.2	4.0	3.7	2.9
Europ	35.1	39.4	47.8	50.9	43.5	45.4	45.9	41.0
Among:German	1.4	5.3	9.3	11.6	9.2	10.3	10.2	9.3
France	3.4	4.8	5.2	6.3	5.2	6.0	5.3	3.9
England	1.8	1.8	3.2	3.8	5.0	4.9	4.1	2.9
Asia	14.0	13.4	12.5	14.9	19.1	26.1	26.2	27.7
Among:Japan	0.4	1.5	3.5	6.4	8.0	9.9	6.4	5.0
China	0.9	1.2	1.3	1.0	1.2	2.5	5.9	9.1
India	2.2	1.3	1.0	0.5	0.5	0.6	0.8	1.1
Middle and South America	11.3	9.7	6.4	4.3	4.4	3.0	3.0	3.8
Among:Brzil	2.0	1.8	0.9	1.1	1.2	1.0	1.0	1.3

Source: WTO website.

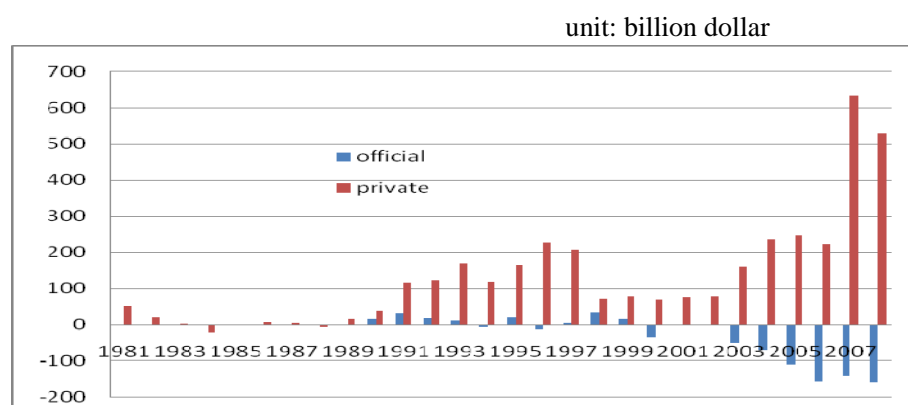
Table 2 the share of imports in countries (regions) in global %

	1948	1953	1963	1973	1983	1993	2003	2008
America	13.0	13.9	11.4	12.3	14.3	15.9	16.9	13.5
Canada	4.4	5.5	3.9	4.2	3.4	3.7	3.2	2.6
Europ	45.3	43.7	52.0	53.3	44.2	44.6	45.0	42.3
Among:German	2.2	4.5	8.0	9.2	8.1	9.0	7.9	7.5
France	13.4	11.0	8.5	6.5	5.6	5.7	5.2	4.4
England	5.5	4.9	5.3	6.3	5.3	5.5	5.2	3.9
Asia	13.9	15.1	14.1	14.9	18.5	23.6	23.5	26.4
Among:Japan	1.1	2.8	4.1	6.5	6.7	6.4	5.0	4.7
China	0.6	1.6	0.9	0.9	1.1	2.7	5.4	7.0

India	2.3	1.4	1.5	0.5	0.7	0.6	0.9	1.8
Middle and South America	10.4	8.3	6.0	4.4	3.8	3.3	2.5	3.7
Among:Brzil	1.8	1.6	0.9	1.2	0.9	0.7	0.7	1.1

Source: WTO website.

figure5 capital mobility in developing and emerging countries



Source: IMF website

Apart from the significant changes in trade structure, changes in global capital mobility bring a cluster of new problems. Since 1980s, enormous capital has flooded into emerging and developing countries. In a short break, private capital flight out of emerging market and developing countries in sake of risk aversion, but it recovered soon with larger magnitude(see figure 5). In 1989, private capital flowing into emerging and developing countries was about 15.4 billion dollar. In 1996, this figure reached nearly 226.6 billion dollar. In several years during the crisis(1998-2002), the private capital flowing into emerging and developing countries declined to and preserved about 75 billion dollar, which was much less than that prior to the crisis. As the adverse influence of Asia crisis ebbed away, private capital flowing into emerging and developing countries revigorated quickly, in 2007 and 2008, this capital was 632.8 billion and 528.6 billion dollar respectively. That private capital flowed into emerging and developing countries stemmed from high marginal return duo to low capital in those countries as well as from low interest rate in developed countries. The huge spread of interest rate between developed and developing countries provoked carry trade dashing, it obtained much more return than that in developed economy financial market. In light of Brian Lee's (2009) estimation, the return (the sum of interest rate spread and currency appreciation)of carry trade

invested in emerging Asia countries is 10.7%. A number of private capital flowing into emerging and developing countries has placed profound influence on those countries economy such as asset bubble, over borrowing from oversea by banks and enterprises, pressure of domestic currency appreciation and the crisis shock ensuing.

On the contrary, the official capital mobility in emerging and developing countries is net outflow. Before Asia crisis, except few years, official capital as similar as private capital in those countries was net inflow. However, with the springing up of global foreign reserve in the wake of Asia crisis, more and more private capital flowed into emerging and developing countries, official capital in those countries flowed into developed countries in case of response to shock by private capital mobility and exchange rate skittish. From 2006 to 2008, the total official capital flowed out of emerging and developing countries was 158 billion, 140.7 billion and 158.6 billion dollar respectively. This is correlated and consistent closely with the above phenomenon that foreign reserve in emerging and developing countries surpassed that in developed countries.

Vast private capital inflow and official capital outflow incurs political obstacle in domestic countries. For a long time in the past, saving had been being less than investment and capital shortage in developing countries. In order to lift off their economy, some developing countries began to absorb foreign direct investment based on the double glut model. This could either make up the shortage of domestic saving or induce advanced technology and foster market mechanism and institutional changes. Nonetheless, as the global economy fall into imbalance, unexpected saving surplus pops up in some emerging and developing countries. Private capital from developed economies run after and seizes successfully high yield in developing countries, but that official capital from the latter flooding into developed countries mitigates the adverse results from domestic economy imbalance in central money countries and obtained very low yields. The sharp compare between them provokes the popular with strong nationalism in developing countries hostile to such capital mobility. When central currency depreciates, those immature creditors with tremendous foreign reserve will endure strong consensus pressure on the currency translation loses of official foreign reserve assets. Meanwhile, it is awkward for emerging and developing economies' government that the developed country flowing in official capital often complains this is the root of global imbalance and troubles in face of it. For instance, after the breakout of subprime crisis, some America city father such as Ben Bernanke always stressed on that the underlying roots of the crisis was the high saving in emerging countries and they lent too much money to America (Bernanke, 2005). Based on this argument, it is

indispensable for the rebalance of global economy that emerging and developing countries restructure their economy and they have to undertake tremendous cost of global economy continuous adjustment for rebalance. This would rather corroborate again that international central currency country with monetary power can transfer continuous adjustment cost.

In one word, in the context of deepening economy and financial globalization and diversification and global foreign reserve mushroom, international monetary system dominated by any monopoly sovereign currency does not accommodate increasingly the intrinsic demand by economy development and dampens itself stability. Therefore, the future international monetary system must diversify in line with the diversification of global economy, trade and investment. At the same time of global economy multi-polarization, those immature creditors countries which are on the peripheral of the existed system and are more and more important in the global economy appeal increasingly strongly for the overhaul of the existed system. Nothing than the announcement by BRIC summit on June 16th 2009: a stable, predictable and more diversified international monetary system must be established.

VI. China's Opportunity and Choice in the Process of International Monetary System Diversification.

The deepening of economy and financial globalization has been altering profoundly the root of the existed international monetary system, the soaring of foreign reserve superficially consolidates central currency monetary power, but it would rather deteriorate the instability of the system. However, it is inconsistent theoretically what is the proper direction of the international monetary system evolve to. Before 25 years ago, Richard W.Cooper(1984) envisions that single ideal international currency would come true. But 25 years pasted, the international monetary system is still apart completely from Cooper's vision. Zhou Xiaochuan(2008), president of People's Bank of China, puts out vision on international monetary system reform, which is similar to Cooper's but differs from the former, that is to set up super sovereign reserve currency. He holds that super sovereign reserve currency can overcome the defects of sovereign currency, SDR is in possession of super sovereign currency's attribute and SDR thus can be reformed to be super sovereign reserve currency, it is in favor of international response to crisis and international financial system stability that IMF is collectively charge of part reserve by member countries. As soon as Zhou puts envisaged super sovereign

currency, America, which is the central country of the existed international monetary system, reacted to this intensively. America president Brack Obama and secretary of Treasure Gathiner presented one after another it was unnecessary to reform the existed system. But Zhou's initiative was applauded actively by other immature creditors. During the BRIC summit in June 2009, Dmitry A Medvedev released his expectation to build up a new international currency for international clearance and settlement.¹ The most intractable obstacle setting up super sovereign currency is that what asset IMF provide for member countries' foreign reserve. Not to mention that the original purpose to set up SDR is to supplement the shortage of dollar(due to gold constraint) supply and to keep Bretton Woods System, Jamacia Conference emphasized on SDR reserve function. Unfortunately, SDR neither savaged Bretton Woods System nor put influential effects on official reserve management in more than three decades Jamacia System. Therefore, diversification of international currency is more popular. Nothing is more than theoretically Mundell(2000) financial stable tri-island which holds that future international monetary system maybe revert to a renewed fixed rate system by way of monetary union and Europe, America and Asia will establish theirselves monetary union. Nothing is more than practically the joint announcement by BRIC summit.

In view of it is impractical to establish super sovereign currency and it cannot accommodate the diversified demand for international currency by global economy diversification, Chinese government would rather take many measures to motivate the diversification of international currency than place officially accent on the establishment of super sovereign currency. During the BRIC summit in June 2009, Chinese president Hu Jingtao emphasized on that it was supposed to consummate international monetary system, to make sounds of control mechanism of reserve currency issuance and to push up steadily the diversification of the system.² In line with Chinese interests, it is indispensable for future international monetary system to strive for RMB internationalization. Not mention that the competitiveness of economy utmost embodies in its currency competitiveness, therefore, those countries which economy sprung up always attempt to elevate its domestic currency competitiveness. Although Eichengreen(2005), Frankel and Chinn(2005) argue that less developed financial market determines that it will take decades RMB to play international role in Asia and more remote to dominate the international arena, this does not mean that China should not and is unable to do its

¹ Refer to <http://finance.cctv.com/20090617/103159.shtml>.

² Refer to *Economy reference*, June 17th 2009.

best to break away from the rein by monetary power enjoyed by the existed monopoly central currency. Without any doubt, it will be long march to internationalize RMB and diversify international monetary system. China should utter ceaselessly its appeal for reforming of international monetary system as well as propel domestic financial system reform substantially in order to pave for RMB's internationalization.

The process of RMB internationalization can be investigated roughly in perspective of both regional and functional expansion. As far as RMB regional influence is concerned, it should extend from neighbor countries to the rest of the world. Such process works in concert with China's trade structure. For example, although china has vast trade surplus as a whole year after year, china has been lasting deficit to Asia countries, in particular to Northeast Asia and ASEAN. Figures from Chinese Commercial Minister show that China's trade deficit to Asia(excluding Chinese Hong Kong, Taiwan and Macao) is 72 ,71.8,74.1,70.9 and 39.4 billion dollar from 2004 to 2008. In 2009, that China's zero tariff to some ASEAN countries came into force facilitates trade and investment between China and ASEAN. As a result, transaction demand for RMB by those countries will objectively surge. In term of function, as international currency, it is nothing more than money basic function expands and deepens in its used regions, as far as this is concerned, RMB must have the functions such as value standard of international economy transaction, transaction media, payment means and then acts as value storage. Naturally, RMB internationalization should be promoted gradually from settlement currency to investment and reserve currency. However, it is deserved to accent on that the process of RMB internationalization is not separated phrases functionally because money functions cannot be dissevered physically.

The steps taken by Chinese government comply roughly with the above order. Firstly, agreement on bilateral trade invoiced and settled by domestic currency was reached between China and other eight countries central bank such as Vietnam, Mongolia, Laos, Nepal, Russia, Kirghiz, North Korea and Kazakhstan. As the trade surging between China and neighbor countries, it appetites for that domestic currency settlement extend from bilateral trade to general international trade. In December 2008, Chinese State Council made decision on test on RMB settlement of commodities trade between Guangdong, Yangzhi River delta and HongKong and Macao region, between Guang Xi and Yunnan and ASEAN. In April 2009, it decided RMB settlement test on cross border trade in four cities such as Shanghai, Guangzhou, Shengzheng and Zhuhai. This marks that RMB settlement kicked off to extend from border trade fields to general trade. Secondly, on the occasion of

proliferation of subprime crisis at the end of 2008, China enforced currency swap agreements one after another with eight central banks such as South Korea, Chinese Hong Kong, Malaysia, Belorussia, Indonesia and Argentina, which is totally 650 billion RMB, in order that swap become an important mechanism to strengthen regional liquidity mutual aid. According to those currency swap agreements, China supports that the funds from swap is used for trade finance and central banks pump swap funds into domestic financial system. Domestic enterprises can borrow counterpart money and pay for imported commodities from the counterparts. Hence, export enterprises can receive payments for goods denominated by domestic currency, exchange rate risk can be averted and costs of currency translation diminish effectively (PBC, 2009). Thirdly, in June 2007, People's Bank of China and National Development and Reform Commission released *Regulation on Financial Institution Issuance Bonds denominated in RMB in Hong Kong*. On September 28th 2009, Chinese Minister of Finance issued 6 billion treasure bond denominated in RMB in Hong Kong Special Administrative Region and tried to make RMB act as value storage in international financial market. It is good for RMB regionalization, in favor of RMB off shore business and RMB bonds market development in Hong Kong, motivation of RMB settlement and circulation in the neighbor countries to issue bonds denominated in RMB.

All of the above are just tentative trial of RMB internationalization. This process must face a lots of thrusts, it is impractical illusion to allege that RMB internationalization will come true quickly. Learning from the process of international monetary system's development and consolidation, I hold that China have to strive and explore in all aspects in the process of RMB internationalization, diversification of international currency and redistribution of international monetary power.

Firstly, it is an important institutional precondition and safeguard for realization of RMB internationalization to deepen market oriented reform. Stiff economy system regulated strictly by government not only restricts itself ability to rehabilitation response to various of exogenous shocks and reduces economy flexibility and vigor, but also constraints innovation and depresses productivity growth. In this domain, Greenspan(2007) and Robert • Shapiro(2007) conduct comparable analysis on Europe, Japan and the United States. They argue that there are more regulation in Europe and Japan than that in the United States, therefore European and Japanese economies are lack of flexibility, America economy enjoys more innovative spirits and vigor thanks to more sufficient competition and full of constructive destroy. It is observed that the competitiveness of sovereign currency in

the system, international economy and monetary affair is highly related to the country's economy vigor. Yen got a wild goose chase in its internationalization probably closed to the shape and outburst of Japan bubble and aftermath long run recession. Of course, economy market oriented reform and deregulation should not be confined in real economy. Market oriented reform in financial system is comparable importance. The root of dollar dominated completely central bank reserve currency after War II is that New York is the only financial market with depth and liquidity and the United States is the exclusive country that capital can shield from regulation (Barry Eichengreen and Marc Flandreau, 2008). The negative case is no more than Japan. Although it was early 1980s that Japan fought for internationalization of Yen, Japan obtained little due to closely its financial regulation. Japan deregulated its capital account until 1998, it is helpless because Japan had fallen into so called losing decade, Yen thus said good-bye to the greatest opportunity for its internationalization. Therefore, China must deepen market oriented reform, deregulate (including deregulation on foreign exchange), make RMB convertible in capital account and build up economy flexibility in order to internationalize RMB and make RMB enjoy prominent position in the upcoming diversified international monetary system.

Secondly, china's bonds (treasure bond in particular) market development should be pushed up. Government bonds and bill markets with depth, width and liquidity are vital premises for the currency in possession of international currency. There is secure habitat for holder of reserve to invest denominated in this currency only if those markets exist and are well-functioned. Just as emphasized by Dooley Michael (2009) and Eichengreen (2009), despite of subprime shock, America still take in place of central currency because it is the unique country with highest liquidity, best depth government bonds markets, high liquidity bonds markets cement network externalities and afterwards liquidity increase, dollar's international position thus be cemented. Some scholars point out Euro already possessed reserve currency status, but it has not oscillated dollar as international central currency, one of the reasons is that government bonds markets are segmented although the unification of money geared up commodity factors and financial markets integration. The sovereign bonds in euro area have very distinguished credit and liquidity risk because different country has different fiscal and real economy status. This restricts to large extent on the depth and width of different sovereign bonds in the area. Therefore, other countries allocate their colossal foreign reserve in euro sovereign bonds, they will incur at least liquid scrape. The latest Greece government debt crisis verifies this well. China intent to internationalize RMB, China also must

provide abroad governments and commercial institutions with high liquid holdings. That means that make promotion of the development of China's government is an essential premise for RMB internationalization. It should pay attention to that development of government bonds does not mean that the more of the government bonds the better it is. It is only necessary condition for RMB internationalization, not the sufficient condition. An example as following, the ratio of debt balance to GDP in Japan is much more than that in America. As far as euro is concerned, the government debt problems occurred in 2009 in Greek and Spanish had placed substantial effects on the exchange rate between dollar and euro in the wake of the crisis, and thereafter adverse effect on euro's competition against dollar in international monetary arena take place.

Thirdly, develop RMB derivatives market. It must be freely convertible for currency's enjoyment of international reserve currency. Freely convertible requires more flexible exchange rate system, otherwise, speculative shocks will happen if stiff exchange rate regime combines with freely currency convertible. Flexible exchange rate system itself is one of the instruments for carrying out monetary power inherited from currency internationalization. However, flexible exchange rate will induce new rate risk to all players making use of the currency. If the mechanism of rate risk aversion is absent, the attraction for the traders and holders will dampen just as the results of absence of liquid and deep government bonds market. That proves that the development of RMB derivatives markets is also vital market system for RMB internationalization.

Lastly, improve the ability of domestic financial institutions to services and develop RMB off shore markets. In order for RMB's internationalization, domestic financial institutions should have to provide services of timely and efficient funds settlement and custody for international economy transaction and asset investment. Otherwise, more transaction costs and liquidity risk will incur for foreign firms, financial institutions and governments to take advantage of RMB as an instrument to payments, clearance and value storage. The development of perfect off shore financial markets of RMB will facilitate RMB transaction and settlement by abroad institutions. However, although thanks to the financial crisis, domestic financial institutions elbowed in the line of 800 pounds gorilla in international banks, their abilities to production innovation, risk control and governance have not sound and strong enough to supply RMB internationalization with good financial supportive system. Thus, RMB internationalization and international currency diversification make a renewal and challengeable requirements for domestic financial institution and market system.

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