CAN THE CHINESE YUAN REPLACE THE DOLLAR? LESSONS FROM THE DOLLAR-POUND TRANSITION OF THE 1920'S

by

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ABSTRACT

More than fifty years ago, the dollar superceded the pound as the leading reserve currency, as dollar reserves held by countries around the world surpassed the pound reserves. Today, with its continuous fast-growing development since the late 1970's, China has become the second largest economy in the world. Can China's currency, the Chinese yuan, assume the position of the next major reserve currency? Given that the RMB is still not even a fully convertible currency, it is not possible to answer this question definitively at this time. But it is instructive to review the rise of the U.S. dollar as a reserve currency between 1920 and 1955, with a particular focus on the 1920's, and to consider what lessons can be learned from the replacement of the British pound by the U.S. dollar, and then, to analyze the potential for the RMB to succeed the dollar.

LIST OF ABBREVIATIONS USED

ECB	European Central Bank
GDP	Gross Domestic Product
GNP	Gross National Product
IMF	International Monetary Fund
PBC	People's Bank of China
RMB	Renminbi
SDR	Special Drewing Rights
USD	United States Dollar
WTO	World Trade Organization
WWI	World War I
WWII	World War II

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CHAPTER 1
INTRODUCTION

More than fifty years ago, the dollar superceded the pound as the leading reserve currency, as dollar reserves held by countries around the world surpassed the pound reserves and assured the status of the U.S. dollar as the major reserve currency. (Schenk, 2009) Today, the dollar is still playing the core role in the international monetary system as the major reserve currency, but many countries are seeking a change for a variety of reasons, including the continuous budget deficit of the United States and the U.S. balance of payments deficit, among others. In fact, for both economic and political reasons, some countries have sought a replacement for the dollar since the early 1970's. It was then that the gold exchange standard was abandoned and Special Drawing Rights (SDR) were created. But the SDR failed to gain support as a reserve standard and only accounted for 3.7% in total world reserves by the end of 2009. [1] The Japanese yen became a contender to replace the dollar in the 1980's, but the economic difficulties Japan suffered in the 1990's largely ended that, at least for the present. The Euro was promising when it was born in the late twentieth century, and its share in the total foreign exchange reserves reached 15.26% by the end of 2009. (See Table3.8) However, with the weak presence of the European economy arising from the 2008 financial crisis, and the 2010 European sovereign debt crisis, confidence in the Euro has been seriously eroded. Is there any other candidate for us to look for as the next major reserve currency? Actually, with its continuous fast-growing development since the late 1970's, China has become the second largest economy in the world (Bloomberg News, 2010), and its national currency, the Chinese yuan (also known as the Renminbi, or RMB) has been attracting more and more attention from the world, especially since the 2008 financial crisis.

Can the RMB assume the position of the next major reserve currency? Given that the RMB is still not even a fully convertible currency, it is not possible to answer this question definitively at this time. But, with this interesting question in mind, it is

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[1] IMF Financial Data: Special Drawing Rights (SDRs) Allocations and Holdings

[2] The Tripartite Agreement was an international monetary agreement achieved by the three most powerful economies, the United States, Britain, and France, in 1936. By this agreement, the three countries achieved

instructive to consider what historical lessons can be learned from the replacement of the British pound by the U.S. dollar beginning in the 1920's and ask how these historical lessons might apply, if at all, to the RMB today.

This thesis will attempt to answer these two questions. It will do so by looking at the rise of the U.S. dollar as a reserve currency between 1920 and 1955, with a particular focus on the 1920's, and then examining China today. Lessons drawn from the U.S. experience in the last century will then be applied to today to analyze the potential for the RMB to succeed the dollar as the new reserve currency of the twenty-first century.

CHAPTER 2

HOW DID THE DOLLAR BEGIN TO EMERGE AS THE MAJOR RESERVE CURRENCY IN THE 1920'S?

To examine if it is possible for the RMB to assume the position of the leading reserve currency in the world, it is meaningful to review the history of the dollar-pound transition, especially the history of the 1920's, because that is the time when the United States began to take steps to make the dollar the major reserve currency and New York the world financial center. In this chapter, I will, first, provide a brief review of the history of the dollar-pound transition. Second, I will highlight the beginning of this history in the 1920's, when the United States began to deliberately promote the dollar to become the major reserve currency. I will arrange the second part in three sub-chapters. First, I will discuss the shortage of raw materials in the United States, which can be seen as one of the motivations to promote the dollar as the major reserve currency. Second, I will examine the economic conditions of the United States in the 1920's when it began to promote the dollar to be the major reserve currency. At last, but not least, I will discuss the efforts the United States made to promote the dollar as the major reserve currency in the 1920's and discuss to what extent the history in the 1920's influenced the US dollar assuming the position of a reserve currency.

2.1 A BRIEF HISTORY OF THE DOLLAR-POUND TRANSITION

In the late nineteenth century, the United States emerged as the leading economy in the world. It became more and more involved in international trade, with imports focused on raw materials or primary products and exports on manufactured goods. At this time the British pound was the leading reserve currency in an international monetary system built on the gold standard. By the end of World War I (WWI, 1914-1918), the pound has been severely weakened and the Federal Reserve, established in 1914 as the U.S. central banking system, began to function in peace time. The United States became ambitious to replace the pound by the dollar, but it had to consider the dollar-pound transition's impact on the massive pound reserves in the world. It was important for the overall stability of the system that counties holding pound reserves not incur huge losses. To achieve that goal required the reestablishment of the gold standard and the return of the pound to its pre-war parity of gold.

The United States made efforts to help Britain restore the gold standard by lowering its discount rate in 1924, and to maintain the gold standard by again lowering its discount rate in 1927. On both occasions, the interest rate changes were intended to open up an interest rate gap between the dollar and the pound to shore up the pound. On both occasions, the lower U.S. rates were accompanied by an interest rate rise in the U.K. This helped Britain to return to the gold standard at pre-war parity (1925) and maintain pre-war parity (1927).

Later on, the overwhelming mania in the U.S. stock market drew capital from all over the world, which put increased pressure on the pound in terms of maintaining its convertibility. In August 1929, the Fed approved the New York Reserve Bank's proposal of increasing the discount rate to curb the stock market speculation. But this late action, with just a relatively small increase of the discount rate compared with the high return on the stock market, had little impact on stopping the speculation on the stock market. It did, however, restrict regular business credit and indirectly induced the downturn that led to the Great Depression (1929-1933). The increased discount rate also put more pressure on the pound in the short term, although this was considered a necessary price to pay to mitigate the long run pressure on the pound. But with the stock market crash in October 1929 and the ensuing onset of the Great Depression, Britain could not maintain the convertibility of the pound, and left the gold standard in 1930. Amidst fear that the dollar would also devalue, foreign and domestic depositors significantly increased the conversion of dollars into gold. To curb gold outflows, in the following year, the United States raised its discount rate again to defend the gold standard, but the increased interest rate just intensified the deflation in the economy. So, the United States abandoned the gold standard in March, 1933.

At the London Economic Conference (from June 12 to July 27, 1933) in 1933, France and Britain proposed to re-establish the gold standard system, but the United States rejected their proposals, because it had just floated the dollar several month before and did not want to fix the exchange rate at that time.

In the following year, 1934, the dollar did return to gold on its own terms, which made it the most attractive currency in the world, because it then was the only major currency convertible to gold. The undervaluation of the dollar in 1934 made it coveted; it was deemed relatively riskless for countries to peg their currencies to the dollar rather than gold. A so-called "dollar shortage" began in 1934. Mundell (2003) argues that, although the Bretton Wood System was not established until 1944, the system had already come into existence in 1934 when the dollar devalued. It was just ratified and regulated in 1944. (Mundell, 2003) Later on, in 1936, the United States, Britain and France achieved the Tripartite Agreement[2], which can be seen as a forerunner of the Bretton Woods Agreement. (Mundell, 2003)

Soon, in 1939, WWII (1939-1945) broke out. This did not hinder the dollar from replacing the pound as the major reserve currency, but served as a propeller to push it. The United States economy was enhanced in the war, since its mainland did not get involved in the war and its economic system was kept intact.

Prior to the end of WWII, in 1944, the Bretton Woods System was established, which was a milestone for the dollar being recognized as the major reserve currency. According to Mundell, the Bretton Woods System was neither a gold standard nor a dollar standard. (Mundell, 2003) It was both. On the one hand, all major countries besides the United States fixed their currencies to the dollar and held part of their reserves in dollars. They could intervene in the exchange market using the dollar reserves. On the other hand, countries also held their reserves in gold, and major currencies, including the dollar (1/35

[2] The Tripartite Agreement was an international monetary agreement achieved by the three most powerful economies, the United States, Britain, and France, in 1936. By this agreement, the three countries achieved a consensus on stopping competitive devaluation of their own currencies and maintaining the current exchange rate as long as this did not interfere seriously with the needs of their respective domestic economies.

ounce = 1dollar), were denominated in gold. The United Stated, very importantly, promised the convertibility of the dollar to gold.

With the establishment of the Bretton Woods System, the dollar was recognized as the dominant international currency by the world. Most of the countries pegged their currencies to the dollar, and the dollar valued itself in gold. But, the dollar was still not the leading reserve currency until 1955, more than ten years after the Bretton Woods System was established. (Schenk, 2009, p. 5) In the early post-war years, the IMF estimated that official sterling reserves were four times the value of official dollar reserves and by 1947 sterling was still dominant in amount with an 87% share of global foreign exchange reserves. (Schenk, 2009, p. 5) So, the dethroning of sterling was not complete until 1955.

In the whole long time span for the dollar finally assuming the position as the leading major reserve currency, the 1920's are, in some respects, the most important, as this marked the beginning of the dollar-pound transition. Why was the United States eager to promote the dollar to be the major reserve currency? What economic conditions did the United States have at that time? And what actions did the United States take to achieve its goal? These are relevant questions to ask in terms of potential lessons to be gleaned from the dollar-pound transition relative to adoption of a new reserve currency today.

2.2 MOTIVATION

Why did the United States become eager to promote the dollar to be a reserve currency, and to replace the pound as the leading reserve currency in the international monetary system?

To put it simply, if a country becomes the reserve center for issuing the major reserve currency, it will be very convenient and cheap for it to obtain real resources from other countries just by paying its own currency, which is just pieces of paper and can be easily printed by the monetary authorities' printing machines. As long as the rest of the world is happy with holding these pieces of papers and does not intend to lay claim to real resources in turn from the reserve center country, the country will definitely benefit from being a reserve center. This kind of benefit is also known as seignorage[3]. Besides, the goods price in international trade will be denominated in the major reserve currency, and this will benefit the issuing country as well, since the reserve center can avoid using a third-party currency for transactions, so it avoids the risk of exchange rate fluctuation in exchange markets and it avoids transactions costs for foreign exchange when engaging in international trade.

Second, at the beginning of the twentieth century, the United States was transforming from a relatively closed economy to a relatively open one. It was becoming more and more involved in world trade and capital markets. In other words, if the United States remained an insulated economy, as it was in the nineteenth century and before, the merits of the dollar serving as a reserve currency would not be important. But the United States became a more outward-looking country and the reserve currency issue, therefore, was important. The interest in trade by the U.S. related to a growing relative scarcity of natural resources in the U.S. and a need to have an outlet for manufactured goods in order to maximize economies of scale in the manufacturing sector.

Raw materials shortage was of little moment for the United States before the 1870's, because the United States still had vast territory unexploited and its domestic natural resources seemed abundant and limitless. Entering the last quarter of the nineteenth century, the United States government took steps to control its domestic resources exploitation, through such means as the establishment of the Forestry Division in 1881, the Bureau of Mines in 1908, the enactment of the Alaska Coal Leasing Act in 1914 and the General Leasing Act in 1920.

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[3] In theory, seignorage refers to the gap between the cost of producing a currency, which is negligible, and the value the currency represents, which is more than the cost of minting a coin or printing a paper note. (Lesser, 2009) In other words, seignorage is the revenue that the government makes from the gap between the cost of printing notes and minting coins and their nominal value. (McNeill, 2005)

WWI upgraded Americans' fears of a resource shortage to a higher level, because during the war, the demand for materials increased sharply. There was little preparation for the demand before the United States joined the war. After WWI, the fear of an oil shortage increased sharply and the U.S. government worried they would soon vitally depend on foreign resources. (Feis, 1966, p. 49) So, they began to pay more attention to investing and exploiting foreign natural resources to overcome the raw materials shortage. They also feared British monopolization of foreign resources. (Krasner, 1978, p. 49) Actually, American companies begun to invest in foreign natural resources in several countries and areas, such as Mexico and the Caribbean, around the turn of the century and earlier, but these activities were promoted more strenuously after WWI, and more investments occurred in Latin America and the Middle East during the mid-1920's.

"Between 1919 and 1929 the book value of American petroleum investment increased from $604 million to $1341 million, and those of mining from $876 million to $1127 million." (Krasner, 1978, p. 353) Canada, Chile, Venezuela, and Cuba became the new main targets for investments during the 1920's. From Table 2.1, we can see the investment in raw materials accounted for over 50% of total U.S. investment abroad from 1908 to 1919. Even in the period from 1919 to 1929, when the percentage decreased just below 50%, the total value still increased, which is shown in Table 2.2.

Table 2. 1 The Percentage of Raw Materials in Total U.S. Direct Foreign Investment (%)

Year	Petroleum	Mining	Agriculture	Total Percentage
1897	13	21	12	46
1908	14	27	11	52
1914	13	27	13	53
1919	16	23	15	54
1929	18	16	13	47

Year	Petroleum	Mining	Agriculture	Total Percentage
1940	18	11	6	35
1950	29	10	n/a	
1960	34	9	n/a	
1970	28	8	n/a	

Source: *Defending The National Interest:Raw Materials Investments And U.S. Foreign Policy.1978* (Krasner, 1978)

Table 2. 2 The Total U.S. Direct Foreign Investment in Raw Materials (in millions of dollars)

Year	Total Petroleum	Total Mining	Total Agriculture
1897	85	134	77
1908	224	445	186
1914	343	720	356
1919	604	876	587
1929	1341	1227	986
1940	1277	783	432
1950	3390	1130	n/a
1960	10810	2950	n/a
1970	21710	6170	n/a

Source: *Defending The National Interest:Raw Materials Investments And U.S. Foreign Policy.1978* (Krasner, 1978)

Beside searching for and securing resource supplies abroad, the United States also made efforts to secure foreign markets for manufactured goods exports. For example, it advocated "the Open Door"[4] policy for China. The general purpose of this policy was to make sure any country other than the U.S. with interests in the Pacific did not gain a

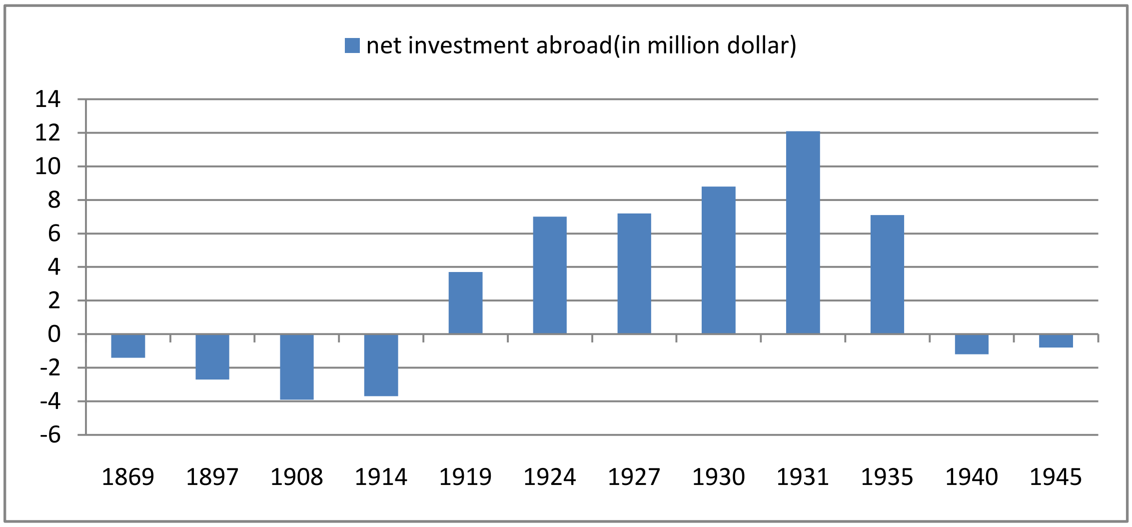
[4] This policy was presented in the Nine-Power Treaty of 1922, which conducted the relationship between China and countries with interest in it.

monopoly or any kind of superiority in China, so the market remained available to the U.S.

The securing of foreign markets and foreign raw materials was the basis of the foreign policy of the United States in the late eighteenth century and early nineteenth century. But before the 1920's, these goals were enforced mainly by military force, such as military intervention in Latin America, China, and the 1898 Spanish-American War.

After WWI, the United States turned to use capital exports, rather than military force, to pursue its policy of obtaining raw materials abroad and securing foreign markets. There emerged "the diplomacy of the dollar". (Feis, 1966) The U.S. government did not only officially invest abroad, but also allowed, even encouraged, private capital to invest in foreign countries, because helping the world recover from the war as soon as possible also helped the U.S. with more goods exports. Besides, the promised high return on foreign bonds and stocks was also attractive to the U.S. public. (Feis, 1966, p. 4) These investments, combined with the war loans from WWI, made the United States a net creditor country after 1919, as shown in Figure 2.1.

Figure 2. 1 International Investment Position of the United States: 1869-1945



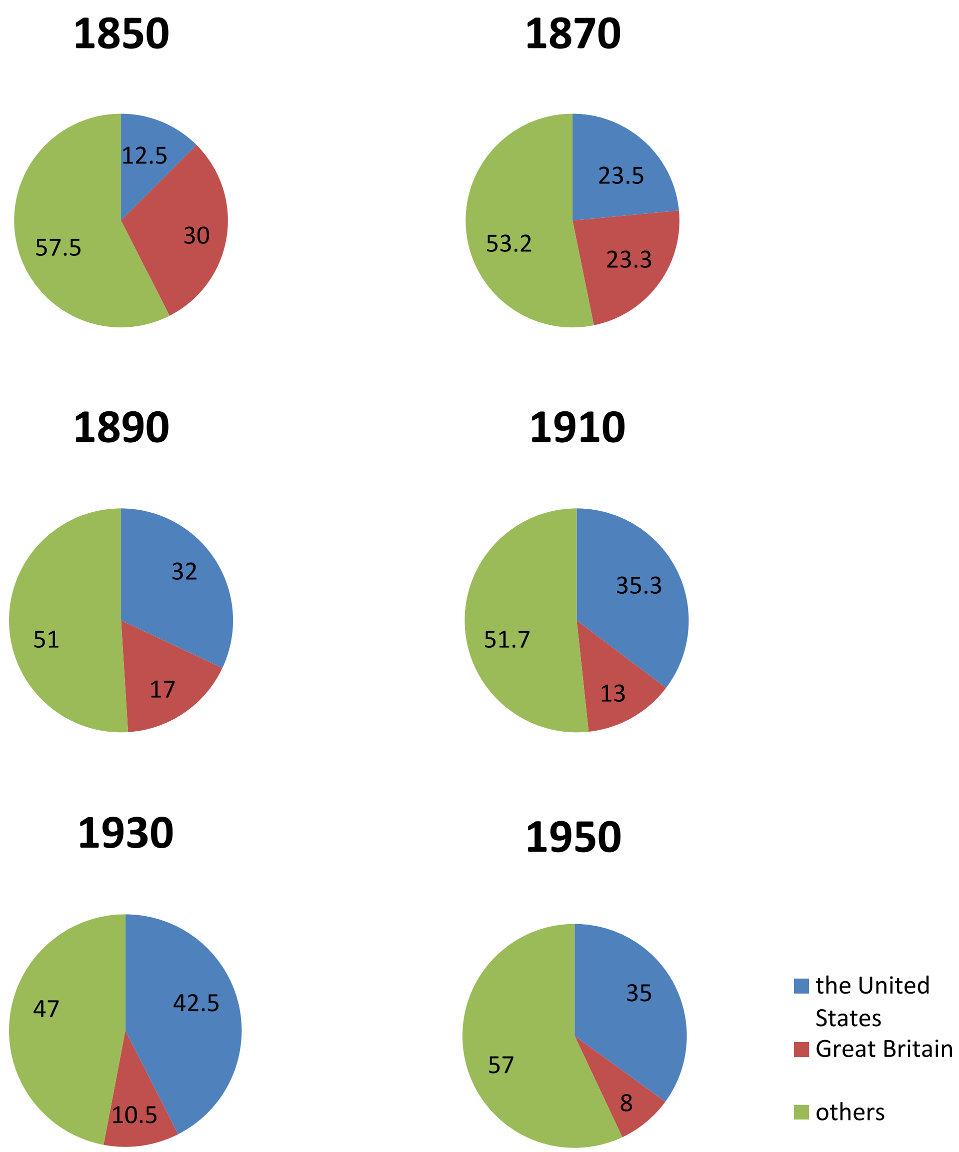
Source: *Historical Statistics of the United States: Colonial Times To 1957* (United States, 1960)

The period of promoting the dollar as the major reserve currency was coincident with the period of "the diplomacy of the dollar". In other word, promoting the dollar as the major reserve currency reinforced "the diplomacy of the dollar" by further increasing the economic leverage the U.S. could impose on other countries.

2.3 PREPARING FOR CHANGE

Before WWI (1914-1918), the British pound was still the major reserve currency, and combined with gold, made up most of the world's reserves. But the United Kingdom's economy, even before WWI, was weakening. Its overseas market was increasingly supplied by products from local industries and other industrial countries, such as the United States and Germany. Its industrial output was even surpassed by the United States before 1900.

Figure 2. 2 Industry Output: Percentage of World Total, the United States and Great Britain, 1850-1950



Source: *Britain and America, 1850-1939: A Study Of Economic Change* (Bagwell, 1970)

From Figure 2.2, we can clearly see that the industrial output of the United States had already overtaken the industrial output of Great Britain by 1870. Besides that, the Gross National Product (GNP) of the United States also surpassed the GNP of Great Britain at least before the 1890's, which can be seen from Table 2.3.

Table 2. 3 Gross National Product of the United States and Great Britain, 1889 to 1945
(5-year periods are annual average, in 1929 Prices, in billions of dollars)

Year	the United States(1)	Great Britain(2)
1889-1893	27.3	15.51
1892-1896	29.6	16.42
1897-1901	37.1	19.09
1902-1906	46.8	20.56
1907-1911	55	21.66
1912-1916	62.5	25.07
1917-1921	71.9	24.01
1919	74.2	23.99
1920	73.3	22.41
1921	71.6	20.38
1922	75.8	21.11
1923	85.8	21.84
1924	88.4	22.52
1925	90.5	23.73
1926	96.4	22.75
1927	97.3	24.33
1928	98.5	24.72
1929	104.4	25.32
1930	95.1	25.29
1931	89.5	23.99
1932	76.4	23.92
1933	74.2	24.37
1934	80.8	26.00
1935	91.4	27.01
1936	100.9	27.84
1937	109.1	28.89

Year	the United States(1)	Great Britain(2)
1938	103.2	29.72
1939	111	30.67
1940	121	34.75
1941	138.7	36.67
1942	154.7	36.89
1943	170.2	37.51
1944	183.6	35.78
1945	180.9	33.57

Source: Column (1) is directly collected from *Historical Statistics of the United States: Colonial Times to 1975* (United States, 1960)*;*Column (2) is collected by calculating the original resource from *National Income, Expenditure and Output of the United Kingdom, 1855-1965* (Feinstein, 1972)

Even if we focus on a smaller field, such as the average gold holdings, the United States also surpassed Britain. The gold reserves in the United States Treasury exceeded the gold reserves at the Bank of England at least by 1878, as shown in Table 2.4. Moreover, the gold holdings of the United States even surpassed the gold held by the ReichsBank, the Bank of England, and the Bank of France put together in 1907 and 1908. In theory, gold holdings are a very important indicator in the gold standard system for judging if a country has the capability to be a reserve center, because in the gold standard system, countries should promise their currencies' convertibility to gold, and the more gold reserve a country has, the more confidence it will provide to its currency holders. From this perspective, the United States had the potential to be the next reserve center even as early as 1881, when it was already holding the largest gold reserves in the world.

Table 2. 4 Average Gold Holdings of the Reichsbank, the Bank Of England, the Bank of France, and the United States Treasury, 1878-1909 (in millions of dollars)

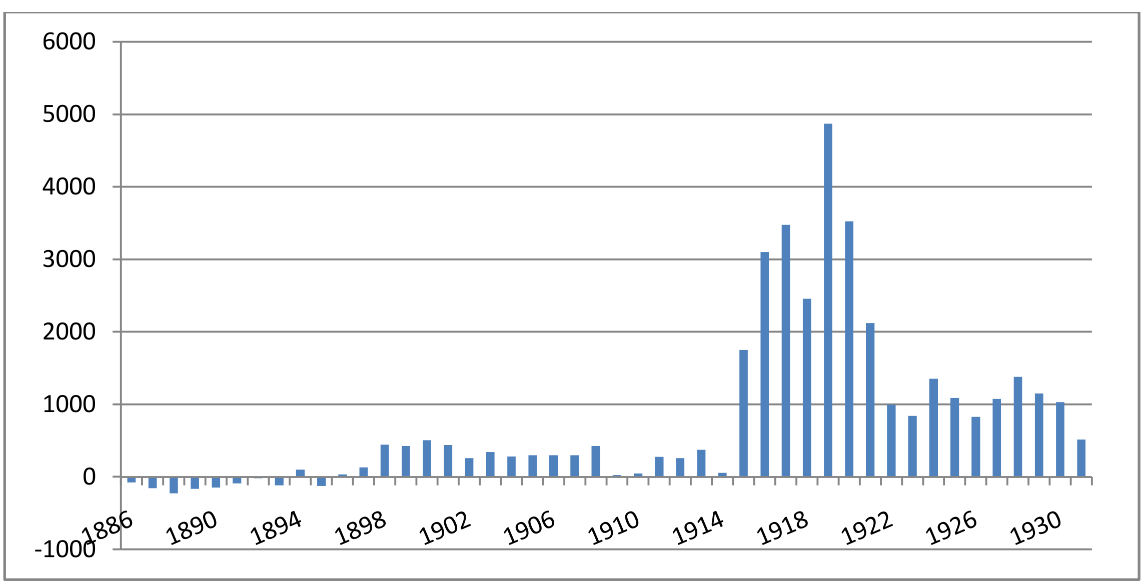
Year	Reichsbank	Bank of England	Bank of France	United States Treasury
1878	49.3	115.5	189.6	130
1879	52.3	156.9	142.9	145.3
1880	53.8	134.7	139.6	139.4
1881	49.2	118.5	116.8	168.6
1882	49.7	105.9	176	158.8
1883	67.2	107.1	189.4	197.7
1884	66.7	110.4	196.9	215.7
1885	65.9	115.9	212.2	246.7
1886	91.6	101.2	251.5	244.5
1887	112.1	105.3	228.8	285.7
1888	144.8	100	209.5	320
1889	139.1	103.1	222.8	314.6
1890	123.5	105.1	242.1	311
1891	140.4	117.6	271	266.5
1892	146.6	123.1	299.8	258.8
1893	125.3	127.6	325	189.3
1894	147.4	165.8	352.1	145.1
1895	167.7	188.4	394.6	137.8
1896	143.3	214.5	381.3	154.6
1897	140.8	171.9	378.5	186.2
1898	138.8	162.2	361	236.2
1899	136.3	155.9	359.8	311.2
1900	135.8	161	406.6	435.1
1901	158	172.9	465.1	510.8
1902	172.6	172.6	491.6	571.5

Year	Reichsbank	Bank of England	Bank of France	United States Treasury
1903	154.9	163.4	479.8	647.6
1904	162.3	163.4	495.6	697.8
1905	177.4	169.5	550.9	719.9
1906	160.6	161.1	555.2	819.8
1907	150.8	165.6	520.9	918.6
1908	186.8	181.2	589	1016.2
1909	193.2	182.1	706.5	1042.5

Source: *Statistics for the United States, 1867-1909* (United States., 1910)

The continuous increase in gold reserves held by the United States from 1895 was partly due to the continuous balance of payments surplus maintained by the United States since the late nineteenth century. This is shown in Figure 2.3.

Figure 2. 3 Balance of International Payments of the United States, 1886-1930
(in millions of dollars)



Source: *Historical Statistics of the United States: Colonial Times to 1957* (United States, 1960)

All of the figures and tables above indicate that the United States was positioned from the late 19th century on in some aspects (the share of the world industrial output, GNP, gold reserves and the balance of international payment) to be the next reserve center. But until the 1920's, "at the centre of the system was Britain, still a leading industrial power. London was the world's major financial center, and sterling the world's currency." (Clarke, 1967, p. 18)There are at least two reasons for explaining why the dollar did not begin to replace pound as the next major reserve currency before the 1920's.

One explanation comes from the change in financial position of the United States at the beginning of the 20th century. From Figure 2.1, we can see that the United States was a net debter country before 1914, and it became a net creditor country only after 1919, with the war loans in WWI and other cumulative loans before. The change in net financial position gave the United States the opportunity to export dollars to the world. In theory, a country exports its own currency to the world by two means: one is to buy goods and services from other countries, and the other is to invest in other countries directly or make loans to other countries. The latter one was what the United States chose to do in the 1920's. Additionally, from Figure 2.1, we can see that the United States became a net debtor again after around 1935. That is because WWII happened outside the United States mainland and the relatively peaceful environment in the United States attracted investment capital coming from all over the world.

Another explanation comes from Robert Mundell (2003). He says that by the early 1900's, the United States had already become an economy that was larger than Britain, France and Germany put together, but its monetary power was not activated until the Federal Reserve System was established in 1913. The Federal Reserve System was founded in1913 and started business in 1914, when WWI broke out. During WWI, the U.S. economy was a so-called war-time economy, which meant the economy served the needs of the war. Only after the end of WWI, did the Federal Reserve System begin to deliberately make efforts to make the dollar the major reserve currency and New York the world financial center respectively. It is also coincident with the time when the United

States changed from a net debtor to a net creditor country. In other words, the two explanations are not mutually exclusive, but rather are complementary.

Additionally, the war and revolutions (WWI and the Russian Revolution in 1917) that happened in the 1910's "had weakened both the economies and currencies of Europe" (Clarke, 1967, p. 18). So, by the early 1920's, the French franc was devalued, the German mark was destroyed, and even the major reserve currency, the pound, was fluctuating at substantial discounts from its pre-war parity. Of the main currencies, only the dollar maintained its prewar parity to gold.

2.4 ACTIONS

In the 1920's, the Federal Reserve System was nominally controlled by the Federal Reserve Board located in Washington, but actually was dominated by Benjamin Strong, the governor of the New York Federal Reserve Bank. It was Strong's firm belief that the United States dollar should replace the British pound as the major reserve currency and New York should replace London as the world financial center. Although this point of view was not presented explicitly, it was embodied in his support for the re-establishment of the gold standard and return of the pound to its pre-war parity, which formed the foundation of the policy of the Federal Reserve System in the 1920's.

At that time, the world held significant sterling balances. According to Lindert (1969), about 20% of the total reserves were in the world in the form of foreign exchange reserves on the eve of WWI and sterling was "far-and-away the dominant reserve currency" (Eichengreen & Flandreau, 2009, p. 5) with 64 percent of total world foreign exchange reserves, compared with 15 percent for the Deutchmark and 15 percent for the French Franc respectively.[5] The countries that held sterling balances, on the one hand, were looking for a sound substitute for sterling, but on the other hand, were anxious about the devaluation that might occur in the pound if this substitution really happened.

[5] Lindert's figure also includes a substantial unknown or unallocated portion.

In Strong's view, in the transition of the major reserve currency from the pound to the dollar, the international monetary system should be kept stable, so that the sterling holders in the world could avoid massive losses and then the dollar could inherit an orderly system. To achieve that goal required the reestablishment of the gold standard and the return of the pound to its pre-war parity of gold. So, the Federal Reserve lowered its discount rate on two occasions to open up an interest rate gap between the dollar and the pound to shore the pound up. This happened in 1924 and 1927 respectively and helped Britain to return to the gold standard at pre-war parity (1925) and maintain pre-war parity (1927).

2.4.1 Shore up the Pound for the First Time in 1924

Before the first cooperation between the Federal Reserve and Bank of England in 1924, Benjamin Strong thought that shoring up the pound had at least three specific purposes for the United States. (Clarke, 1967, p. 72) First, it would help the pound return to pre-war parity and stabilize the international monetary market, so as to expand the international trade of the U.S. Second, it would help New York to grow as an international financial center. Third, it would help reverse the influx of gold in the early 1920's which put inflationary pressure on the domestic economy[6].

For the British side, although there were some different voices, the mainstream believed that the reestablishment of the pound at its pre-war parity was a prerequisite for the restoration of London's position as the major international financial center. Moreover, central banks around the world urged Britain to resume its historic role.

[6] With the influx of gold, by the end of 1921, the Federal Reserve's gold reserves amounted to 65% of its note and deposit liabilities. Concern about the mounting gold reserve led the Federal Reserve Board to try ways to keep down gold inflow's soar to prevent monetary expansion. For example, the Federal Reserve used gold certificates instead of Federal Reserve notes to pay for gold. Lowering the discount rate was another way to stop or reverse the gold inflows.

Strong and Norman, the governor of the Bank of England, conceived the cooperation between the Federal Reserve and the Bank of England for Britain's return to the gold standard. This cooperation included three parts (Clarke, 1967, p. 75). The first part was to eliminate the price gap between the United States and Britain, more or less. Because, at that time, the lower price level in the United States made its products relatively cheap and created a large trade surplus, which induced the large influx of gold from abroad, including Britain. Strong even wanted to persuade the Federal Reserve to increase the domestic price level so as to fulfill his international goal. The second part was to lower interest rates in the United States versus Britain to help close the gap in the price between the two countries and induce international capital flows to Britain. The third part was to provide credits for Britain, in case excessive gold exports happened in Britain.

Consequently, in April, 1924, the Federal Reserve approved the New York directors' action to reduce the discount rate to 4%. Governor Strong even intended to request the Board, in May, to further lower New York rates to 3.5%. Hamlin, the chairman of the Federal Reserve, thought that this action, even though it might have little or no effect upon the domestic economy, would bring about much borrowing from abroad, and give the United States a great opportunity to be the "money market of the world" (Wicker E. R., 1966, p. 85). On June 12, the New York bank reduced the discount rate again to 3.5%, which was one and a half points below the discount rate of the Bank of England. As a result, the rate of 90-day banker' acceptances in New York fell below the rate on three-month bankers' bills in London, which was intended to stem the short term funds flowing out from London. All of these efforts supported Strong's intention to help London back to the gold standard. As noted by one of Strong's New York associates:

That was the time when in my opinion a great man had a great idea; the man was Governor Strong and the idea was that the Federal Reserve System had a responsibility that went far beyond our domestic situation at that time alone. The idea was further that this country could never hope for a permanent groundwork of prosperity until the world was back on a gold basis, and the world could never get back on a gold basis until we *helped it. One way we had to help was by making conditions here favourable to the return of the world to gold.* (Wicker E. R., 1966, p. 90)

What this statement does not say is that the policy also furthered the U.S. interests. Strong's altruism may have been genuine but the fact that it was also in the self-interest of the U.S. certainly did not hurt.

On May 13, 1925, the Britain Parliament passed the Gold Standard Act of 1925 to announce the return of pound convertibility to gold at pre-war parity. By the end of 1925, thirty-nine countries had returned to par or relative stability with the dollar. (Crabbe, 1989)

2.4.2 Shore up the Pound for the Second Time in 1927

In 1926, France and Germany were recovering from the war and experiencing a heavy inflow of funds. They converted their foreign balances into gold in order to force the gold-losing countries to raise their discount rate to stem the outflow of capital. They also wanted to increase their own gold reserves. The two gold-losing countries, the United States and Britain, experienced different pressures. For the United States, the pressure was very little due to its excessive gold stock. But for Britain, the pressure was huge.

To shore up sterling and maintain sterling convertibility, Strong made a second effort in 1927 by reducing the Federal discount rate to 3.5% and purchasing securities by open market operations. Although these policies exposed the United States to inflationary risks, international considerations still outweighed domestic ones at this time.

Actually, the domestic economy situation in 1927 also permitted such an easy policy, because in mid-1927, the Federal Reserve also felt that a recession was imminent or had already begun (Clarke, 1967, p. 125). There was indeed a recession in 1926-1927: the industrial production fell by 6%, which, though milder than the 18% decline in 1923-1924, (Clarke, 1967, p. 126)was still negative.

The differential between the interests rates of London and New York accelerated the outflow of gold to London and shored up the pound. The Bank of England's reserves reached a six-year peak in July 1928 with a gaining of $111 million in gold and about $70 million in U.S. dollars in the first seven months of 1928. (Clarke, 1967, p. 134) From the decrease in the discount rate in 1927, the United States experienced not only falling foreign investment but also increasing investment abroad. The deficit in the balance of payments grew to $1,047 million, nearly $700 million greater than 1926 and higher than any other year during the 1920's, though there was a slight (6 percent) fall in imports. (Clarke, 1967, p. 128)

Dollars continued flowing out at a very high rate from the second half of 1927 to the first half of 1928, and the volume of foreign capital issues publicly offered in the United States reached its peak for the 1920's in 1928. All these indicated that New York was increasingly becoming a major capital center of the world.

2.4.3 The Fed's Dilemma in 1929

As Clarke writes, "Strong's efforts to foster a shift to the gold standard, without at the same time undermining the position of sterling, had only limited success, and its success endured only as long as the heavy outflow of American capital continued." (Clarke, 1967, p. 136) The situation changed when the high speculative returns in the United States' stock market began to overwhelmingly attract money from all over the world.

From July 1928 to the end of October 1929[7], the sixteen month boom of the New York stock market pulled money from all over the world. The capital outflow from New York decreased greatly. The deficit in the balance of payments dropped to only $53 million in 1929, much less than the over $1000 million in 1927 and the first half of 1928. Gold flows also reversed, from a $500 million sale in 1928 before June to a $300 million purchase in the sixteen month phase ending in October 1929. For Britain, its gold and

[7] It was seen as the first phase of the international economic breakdown by Clarke. (Clarke, 1967, p.174)

dollar reserves fell by $298 million in the sixteen month phase, after it reached its peak in July 1928. (Clarke, 1967, p. 148)

Britain felt the pressure in maintaining pound convertibility when facing such heavy capital outflows. In order to support the pound, the Fed needed to curb the speculation on the domestic stock market, which was drawing funds from all over the world. However, at that time, “few other signs of inflationary pressures were visible in the United States”. (Clarke, 1967, p. 151) As Clarke points out, there was a rapid industrial expansion before July 1929, but wholesale prices remained stable and there was even a significant decline in construction and in new orders of durables, which may be taken as early signs of recession or, at least, a slowdown in the economy.

So, the Fed was facing a dilemma. For the domestic side, the U.S. economy did not need the stock market speculation to be ended per se. No speculative bubble is a good thing in the long run, but the U.S. economy in 1929, showing signs of slowing down, absolutely did not need higher interest rates to put more pressure on regular business credit. For the international side, the speculative bubble was very detrimental to supporting the pound and incisive actions, such as a short term increase of interest rates, was seen as necessary to break the bubble.

The international purposes and the domestic needs conflicted in 1929. When facing such a conflict, what did the Fed choose to do?

2.4.4 International Considerations versus Domestic Considerations

Actually, the Federal Reserve always had both international considerations and domestic considerations. Fortunately, before 1929, especially in the 1924 and 1927 cases, the international considerations coincided with the domestic considerations.

From 1923 to 1929, there were only two periods of mild recession, one from May 1923 to July 1924, and the other from October 1926 to November 1927. (Friedman & Schwartz,

1963) It was 1924 and 1927 when the Federal Reserve lowered its discount rate to shore up the pound and maintain its convertibility to gold. And lowering the discount rate had another function, which was to stimulate the domestic economy with more money supply. So, the international consideration coincided with domestic needs.

In 1924, the domestic economic situation required a decrease in the discount rate besides the international considerations. An official of the New York Fed, George Harrison, thought that the continued imports of gold from abroad posed pressure on domestic price inflation, and a reduction in the discount rate could stem this to some extent. On the other hand, it was estimated that there was 15% to 20% excess capacity in the country, and a reduction in the discount rate could stimulate the "pretty considerable bulge in industry before you have any very considerable price disturbance" (Wicker E. R., 1966, p. 83). Moreover, he even thought the reduction in the discount rate should come earlier, say, in February, rather than in April.

The only minor opposition was some concerns for the speculation on the stock market. In 1925, over 90% of the expansion of bank credit took the form of loans on securities. Specifically, there was over 230 million dollars of increased loans on securities from November to December 1925, compared to a 35 million decrease in commercial loans. (Wicker E. R., 1966, p. 101) The Governor of the Boston Federal Reserve Bank, Harding, said that the decrease in the discount rate would have no effect on stimulating the domestic economy but would encourage speculation on the stock market (Wicker E. R., 1966, p. 83).

However, when the Bank of Boston intended to increase the discount rate from 3.5% to 4%, the directors of the New York Bank opposed it. They thought it would be better to use the direct action or moral suasion to reduce securities loans. This was also a reflection of the determination of Strong to maintain his international considerations. He gave four reasons to support the idea that the discount rate should not be increased:

1) Stock speculation was under control; 2) stock prices were not far from their 1913 level; 3) an increase in the discount rate would put up customer rates and bring about deflation; and 4) it might also result in gold inflows and interfere with Great Britain's efforts to stabilize the new gold value of the pound. (Wicker E. R., 1966, p. 102)

It seemed that, though there were some worries about speculation on the stock market, both the domestic and international considerations required a lower discount rate. And speculation on the stock market could be controlled by means other than the discount rate, they believed.

Actually, in early 1925, Strong also considered increasing the discount rate to prevent stock market speculation as a last resort. He had warned Norman that, if necessary, the Federal Reserve would restrain the speculation lured by the high return in capital markets in the United States by increasing the discount rate, and at that time "domestic considerations would likely outweigh foreign sympathies" (Clarke, 1967, p. 106). But, since things went well, he never let that happen.

In 1927, as already noted, the domestic economic situation, specifically a mild recession, also required a decrease in the discount rate, which was consistent with the international consideration of supporting sterling. Of course, anxiety about speculation on the stock market still existed, but hardly influenced the Fed's decisions, since the rampant speculation did not start until mid-1928.

So, in 1924 and 1927, the two considerations are consistent. The domestic economy and the backing of sterling both required a lower discount rate. But, when facing the dilemma in 1929, specifically in the period from July 1928 to the end of October 1929, what did the Fed choose to do? Is the domestic consideration or the international consideration the Fed's top priority?

There are some arguments disputing the Fed's intention to promote the dollar as the major reserve currency by saying the international consideration was only an additional justification when it happened to coincide with the domestic one and it was the domestic considerations that played a more important role in determining the policies instead of foreign considerations. (Friedman & Schwartz, 1963, p. 269)Is that true? It is meaningful to inspect which consideration was on the top priority because it helps to find the real motivation behind the 1920's policies.

As discussed before, the boom in the stock market pulled money from all over the world. When the problem began to emerge, combined with a few other inflationary signs, the Fed intended to use "direct pressure" [8] to curb the stock market boom. The governor of the Federal Reserve, Young, even believed the stock market could break itself without any active intervention on the part of the Fed. (Wicker E. R., 1966, p. 131) There was no change in either discount rates or open market operations between August, 1928, and July, 1929. (Wicker E. R., 1966, p. 126) The fear of using the discount rate to curb the stock market speculation came from two factors. One was the fear of putting more pressure on the pound, because a higher U.S. discount rate would be in favour of the dollar. Another reason was the fear of restricting normal business credit. Even George Harrison, who succeeded Strong as the governor of the New York Federal Reserve Bank in 1928, after Strong's death, and who inherited Strong's goal of replacing the pound with the dollar, told the Federal Reserve Board that the New York Reserve Bank "would prefer not to increase the discount rate until all other means of control had been tried".[9]

But after discussing the situation with Norman, the governor of the Bank of England, in February 1929, Harrison eventually shared Norman's view that the most effective way to stop the stock market speculation was to increase the discount rate incisively for the short term. They both agreed to increase the Fed's discount rate decisively to break the speculative bubble in the stock market and then return the rate to the 1925-1927 level as soon as possible to restore the American capital outflow. Although the increase in the discount rate might have a negative effect on the normal business activities, Harrison

[8] It is a policy for preventing the increase in member banks indebtness for investing on stock market by moral suation. (Wicker E. R., 1966)
[9] It was said on Feb. 5, 1929. (Wicker E. R., 1966, p. 133)

thought the cost to break the bubble was inevitable and it would be worse to leave the bubble for a longer time.

But Harrison did not have the dominant influence with the Federal Reserve Board in Washington that Strong had previously. So, even though Harrison and Norman intended to raise the discount rate as early as February 1929, the Board did not accept this advice until August.

In August 1929, when the pressure on the pound reached to a severe situation, Norman warned that if conditions were kept unchanged, Britain might be forced to abandon the gold standard. (Wicker E. R., 1966, p. 150) It was August 7 when the Fed at last approved the New York Reserve Bank's proposal to increase the discount rate to 6%, a 1% increase, to curb the stock market speculation.

But this late-coming action, with just a relatively small increase in the discount rate compared with the high return on the stock market, had little impact on stopping the speculation on the stock market. But it did restrict the regular business credit and indirectly induced the breakout of the Great Depression (1929-1933). Besides, the increased discount rate also put more pressure on the pound. Consequently, Britain could not maintain the convertibility of the pound for gold in the face of the massive outflow of gold and the inability of the Fed to help in the face of the banking crisis that hit the U.S. early in 1930's. This led Britain to abandon the gold standard in 1930. In 1931, the United States raised its discount rate again to try to prevent gold from flowing out. Finally, the U.S. also abandoned the gold standard in March, 1933.

Having inspected the 1929 case, we can see that, even though the Federal Reserve Board was reluctant to increase the discount rate to curb the stock market boom before August 1929, the New York Reserve Bank's persistence to cooperate with the Bank of England and its determination to break the stock market bubble by increasing the discount rate were obvious. So, at least the New York Reserve Bank held the same principle as before that international considerations were paramount.[10] Actually the Federal Reserve Board eventually approved the increase of the discount rate to break the stock market bubble, which proved the Fed ultimately also gave more priority to international considerations. Wicker points out how the international consideration was over-highlighted in the Fed's actions:

Domestic considerations were significant for the determination of monetary policy only when they happened to coincide or did not conflict with international considerations, namely the maintenance of gold convertibility of European currencies. (Wicker E. R., 1965)

Another explanation from Friedman and Schwartz for the unsound policy in 1929 was the death of Benjamin Strong in 1928. Definitely, Strong's policy of lowering the discount rate before 1928 was sound and that was coincident with the needs of the domestic economy. But considering the change in the domestic policy environment after 1928, even if Strong was alive at that time, it is not clear that he would have acted differently. Harrison followed Strong's goal of making the dollar the major reserve currency in the long run, and gave more priority to the international considerations, and Friedman and Schwartz notwithstanding, it is reasonable to argue that Strong would have done the same.

[10] Wicker says the policy suitable on domestic ground should not conflict with international considerations. (Wicker E. R., 1966, p.134)

CHAPTER 3

CAN CHINESE YUAN EMERGE AS THE NEXT MAJOR RESERVE CURRENCY?

Having inspected the brief history of the dollar-pound transition, especially the history of the 1920's, when the United States began to replace the pound with the dollar as the major reserve currency, we can turn to the situation the Chinese yuan, or renminbi (RMB) is facing today. In the following, I will first discuss the motivations for China to promote the RMB as the major reserve currency, and then give some background of the current economic conditions in China, and finally discuss what China is doing today.

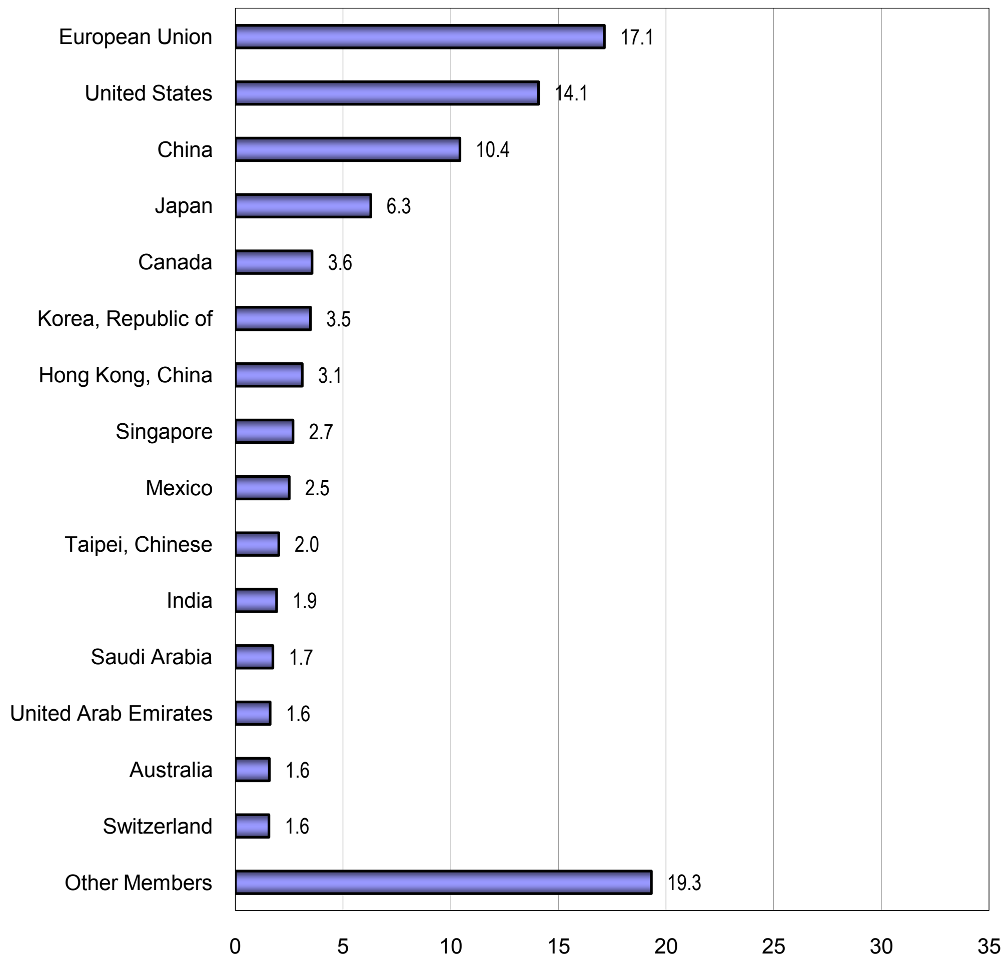
3.1 MOTIVATION

Since China began its economic reform and opening-up in 1978, it has become more and more involved in international trade. According to statistics released by the WTO in 2009, China was ranked as the third largest trade economy in the world in 2009 (See Figure 3.1). More recent reports in the media note that China has become the second largest economy in the world in the first half 2010. (Bloomberg News, 2010) This rapid growth and the simultaneous opening up, or internationalization, of the economy, is the first point of similarity to note between China today and the US in the 1920's.

China's internationalization also mirrors the US experience of the late nineteenth century and early twentieth century in that it reflects a growing demand for imports of raw materials from, and the sale of manufactures goods to, global markets.

With its rapid development, China has experienced a relative shortage of raw materials since the late twentieth century. From Figure 3.2, we can see China has been a net importer country of primary goods[11] since 1995, and from then on, the gap between the need for primary goods and domestic supply has become bigger and bigger.

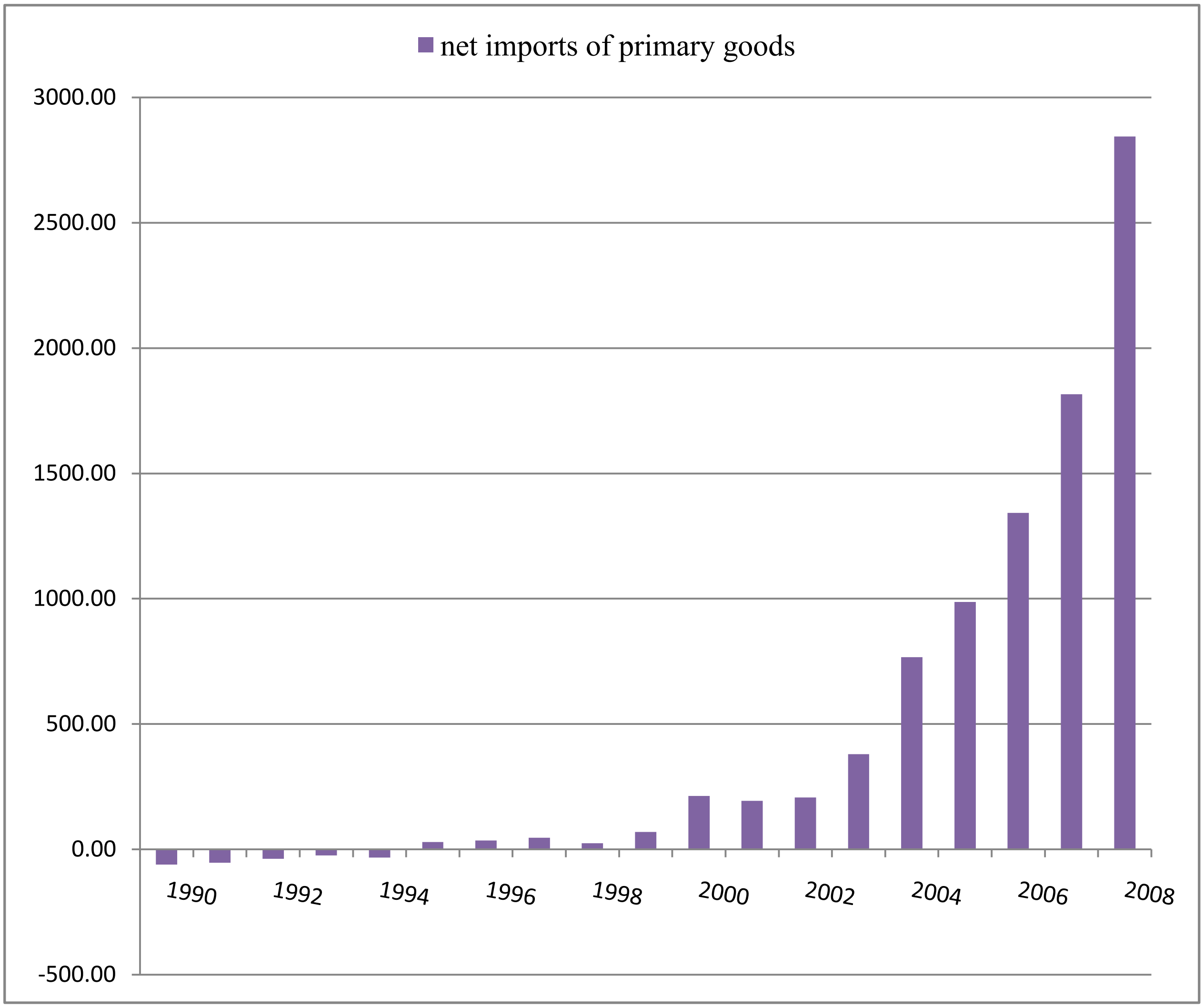
Figure 3. 1WTO Members Share in World Merchandise Trade, Excluding Intra-EU, 2008 (in percentage)



Source: WTO, International Trade Statistics 2009
http://www.wto.org/english/res_e/statis_e/its2009_e/its09_charts_e.htm

[11] "Primary goods" is used in the China statistic year book as raw materials, including food, beverages and tobacco, non-edible raw materials, mineral fuels, lubricants and related materials, live animal and vegetable oils, fats and waxes.

Figure 3. 2 Net Imports of Primary Goods of China, 1990-2008
(in millions of dollars)



Source: China Statistical Year Book 2009
http://www.stats.gov.cn/tjsj/ndsj/2009/indexeh.htm

To look closer at the import value of primary goods, from Table 3.1, we can see that from 2003 to 2008, the annual rate of increase of primary good imports always outweighed the growth rate of imports of manufactured goods. The percentage of primary goods in the total value of imports has increased continuously since 2002. In 2008, the percentage was up to 32%, almost a 7% increase compared to 2007, and a 16% increase compared to 2002.

Table 3. 1 Imports Value in Primary Goods and Manufactured Goods of China, 1990-2008 (in millions of dollars)

Year	Total Imports (1)	Primary Goods Imports (2)	Manufactured Goods Imports (3)	Percentage of Primary Goods in Total Imports (4)	Annual Rate of Increase of Imports Of Primary Goods (5)	Annual Rate of Increase of Imports of Manufactured Goods (6)
1990	533.45	98.53	434.92	18.47%		
1991	637.91	108.34	529.57	16.98%	9.96%	21.76%
1992	805.85	132.55	673.30	16.45%	22.35%	27.14%
1993	1039.59	142.10	897.49	13.67%	7.20%	33.30%
1994	1156.14	164.86	991.28	14.26%	16.02%	10.45%
1995	1320.84	244.17	1076.67	18.49%	48.11%	8.61%
1996	1388.33	254.41	1133.92	18.32%	4.19%	5.32%
1997	1423.70	286.20	1137.50	20.10%	12.50%	0.32%
1998	1402.37	229.49	1172.88	16.36%	-19.81%	3.11%
1999	1656.99	268.46	1388.53	16.20%	16.98%	18.39%
2000	2250.94	467.39	1783.55	20.76%	74.10%	28.45%
2001	2435.53	457.43	1978.10	18.78%	-2.13%	10.91%
2002	2951.70	492.71	2458.99	16.69%	7.71%	24.31%
2003	4127.60	727.63	3399.96	17.63%	47.68%	38.27%
2004	5612.29	1172.67	4439.62	20.89%	61.16%	30.58%
2005	6599.53	1477.14	5122.39	22.38%	25.96%	15.38%
2006	7914.61	1871.29	6043.32	23.64%	26.68%	17.98%
2007	9559.50	2430.85	7128.65	25.43%	29.90%	17.96%
2008	11325.62	3623.95	7701.67	32.00%	49.08%	8.04%

Source: China Statistical Year Book 2009 http://www.stats.gov.cn/tjsj/ndsj/2009/indexeh.htm ; Columns (4) (5) (6) are calculated from (1) (2) (3).

Not only has China been importing more primary products but China has been attempting to acquire secure sources of raw materials overseas, as the United States did at the beginning of the twentieth century. For example, Chinese energy companies have been searching for and making huge investments in raw materials aggressively in the Americas, including Canada, Venezuela, Brazil and Argentina. (McCarthy, 2010) For instance, in 2009, the Canadian government approved a Chinese state-controlled company's, PetroChina, purchase of a stake in Athabasca Oil Sands Corp.'s MacKay and Dover oil-sands project for 1.9 billion CAD. (Klump, 2010) And in the same year, China Petrochemical Corp., another Chinese state-owned company, spent 8.3 billion CAD to buy Calgary-based Addax Petroleum Corp. to enlarge its oil reserves. (Klump, 2010) In 2010, Sinopec, a subsidiary company of China Petrochemical Corp., paid $4.65 billion for the third-largest U.S. oil company's, ConocoPhillips, 9 percent stake in Syncrude Canada Ltd. (Klump, 2010) As noted by Van Bantenburg, head of equity research at Louis Capital Markets LP in New York, "China is moving more and more and more toward wanting to, and having a desire to, secure natural resources". (Klump, 2010)

China has also consolidated its cooperation with Africa by holding the Beijing Summit in 2006[12] and promising the establishment of the China-Africa development fund in the annual meeting of the African Development Bank in 2007. This cooperation has the purpose to ensure a stable raw materials supply from Africa. The Chinese government "foresee[s] an era where African minerals and genetic resources will be more worthwhile than U.S. treasury Bills" (McCarthy, 2010, p. 93). This may be an early example of the Chinese equivalent of the U.S. "diplomacy of the dollar" of the 1920's.

On the export side, China has, in fact, relied on an export growth strategy as the primary engine of economic growth over the last 25 years. Thus, maintaining access to foreign markets has become very important to China. In this respect, there are both similarities and difference from the US experience 100 years ago that will be examined in the next chapter.

[12] The meeting between the Chinese leaders and representatives of 48 African countries was held in Beijing, November 2006.

3.2 BACKGROUND OF THE CURRENT ECONOMIC CONDITIONS IN CHINA

Although China has the motivation to foster the RMB as the next major reserve currency, does the background of the current economic conditions in China support that ambition?

3.2.1 The GDP

China has been developing at a high speed for over 30 years since the implementation of the economic reform and opening-up policy in 1978. As indicated in Table 3.2, China's GDP reached almost 5 trillion dollars by the end of 2009, nearly 5 times its GDP 10 years before, putting it just behind the United States, the Euro Area, and Japan in the world. Since then, as previously noted, China has moved into second place, behind only the United States.

Nevertheless, China's position in the overall global economy today is not as dominant as the United States position was in the 1920's. As shown in Table 3.3, in 2008, China's share in global GDP was just 7.15%, much less than the United States' 23.27%, and a little less than Japan's 7.15%. China just surpassed the United Kingdom in 2006 with respect to GDP total, but has still been behind Japan and the Euro Area until 2009 (surpassed Japan in the first half of 2010). But, as discussed before, the U.S. industrial output had already accounted for 32% of the world total by the 1900. (See Figure 2.2) So, China does not have as dominant a position in the world economy as the United States did in the 1920's.

On the positive side, with its consecutive years of fast development, the gap between China and other main economies has narrowed. As shown in Table 3.3, its share in the world GDP increased from 3.74% in 2000 to 7.15% in 2008, while the share of United States decreased from 30.48% to 23.27%, the share of Japan decreased from 14.57% to 8.11%, and the share of United Kingdom and Euro Area kept almost constant. China has the prospect to become the dominant global economy in the future but is not there yet.

Table 3. 2 The Gross Domestic Products of Main Economies, 2000-2009
(in millions of dollars)

	2000	2001	2002	2003	2004
World	32,036,590.30	31,810,907.70	33,070,283.10	37,207,132.60	41,916,995.90
United States	9,764,800.00	10,075,900.00	10,417,600.00	10,908,000.00	11,630,900.00
Euro Area	6,253,077.70	6,340,608.30	6,902,821.80	8,527,649.20	9,765,862.10
Japan	4,667,448.30	4,095,484.30	3,918,335.10	4,229,096.90	4,605,937.90
China	1,198,480.30	1,324,804.80	1,453,827.70	1,640,959.30	1,931,640.20
United Kingdom	1,477,580.60	1,470,891.00	1,612,056.40	1,860,809.80	2,198,086.80
	2005	2006	2007	2008	2009
World	45,292,293.50	49,021,521.70	55,117,261.20	60,557,010.00	..
United States	12,364,100.00	13,116,500.00	13,741,600.00	14,093,309.90	14,256,300.00
Euro Area	10,148,194.00	10,743,647.50	12,319,396.50	13,581,626.70	..
Japan	4,552,117.60	4,362,552.00	4,380,507.90	4,910,840.00	5,067,526.00
China	2,235,914.00	2,657,881.20	3,382,262.20	4,326,996.40	4,909,280.00
United Kingdom	2,280,183.90	2,435,710.30	2,803,463.00	2,674,056.70	2,174,530.00

Source: World Bank, World development Indicators,
http://databank.worldbank.org/ddp/home.do

Table 3. 3 Shares in the World GDP of Main Economies

	2000	2008
China	3.74%	7.15%
United States	30.48%	23.27%
Japan	14.57%	8.11%
Euro Area	19.52%	22.43%
United Kingdom	4.61%	4.42%

Source: calculated from Table 3.2

3.2.2 Trade Surplus and Foreign Reserves

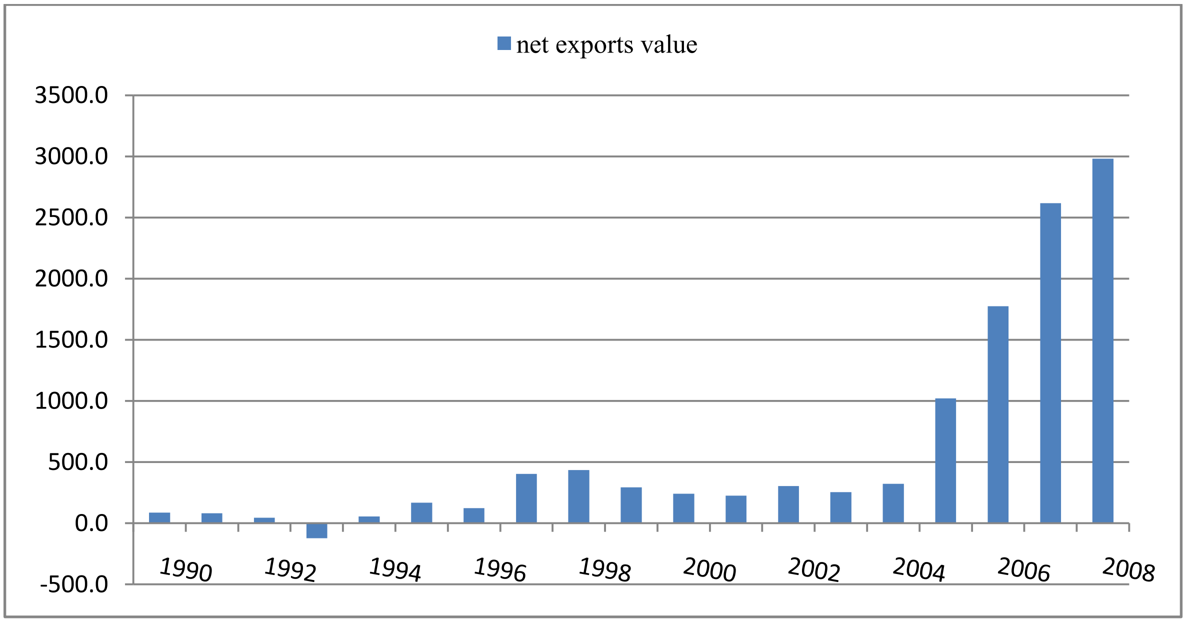
China's economy also benefits from its huge trade surplus, as the United States did at the beginning of the twentieth century. As indicated in Figure 3.3, the surplus has increased sharply since 1997, and reached nearly 3 billion dollars in 2008.

With its trade surplus, China has accumulated huge foreign exchange reserves. In 2006, China became the largest total reserves holder in the world (see Table 3.4) and the largest foreign exchange reserves holder in the world (see Table 3.5).

As indicated in Table 3.5, the United States, the United Kingdom and the Euro Area do not have relatively large foreign exchange reserves because they are the main reserve currency issuers. However, of the rest of the world, China held foreign exchange reserves that were almost 2.5 times Japan's reserves by the end of 2009 and about 30% of the world total.

Although China is not the largest economy yet, as the United States was in the 1920's, its continuous trade surplus and its dominant position in foreign exchange reserves resemble the situation of the United States in the 1920's. The main difference in this regard is that China's reserves are held in the form of foreign exchange, whereas the United States' reserves were held mainly in the form of gold in the 1920's.

Figure 3. 3 Net Exports of China, 1990-2008 (in millions of dollars)



Source: China Statistical Year Book 2009
http://www.stats.gov.cn/tjsj/ndsj/2009/indexeh.htm

Table 3. 4 Total Reserves (Including Gold) of Main Economies, 1999-2009
(in millions of SDRs: end of period)

	1999	2000	2001	2002	2003	2004
World	1409280	1589190	174425.	1893540	2158210	2525110
China (1)	115364.	129600.	172124.	214815.	275345.	396358.
Japan	209893.	273251.	315292.	340088.	447229.	537813.
Euro Area (2)	201652.	200377.	201176.	195986.	164185.	150346.
United Kingdom	24979.5	30308.	27604.	27973.	24141.	26071.
United States	53238.	52598.	55030.	59160.	59555.	58022.

	2005	2006	2007	2008	2009	
World	3022600	3490670	4239440	4763930	5208730	
China (1)	572930.	708817.	967093.	1263430	153037.	
Japan	579886.	581585.	600130.	651622.	635939.	
Euro Area (2)	116948.	122330.	128580.	131126.	124161.	
United Kingdom	25086.	25850.	30057.	26976.	24256.	
United States	26474.	27216.	28985.	32192.	32226.	

Source: IMF, Currency Composition of Official Foreign Exchange Reserves, http://www.imf.org/external/np/sta/cofer/eng/index.htm ; (1) only includes mainland of China; (2) includes European Central Bank.

Table 3. 5 Foreign Exchange Reserves of Main Economies, 1999-2009
(In Millions of SDRs: End of Period)

	1999	2000	2001	2002	2003	2004
World	1298310	1486120	1630880	1771200	2035750	2413610
China(1)	112695.	127080.	168823.	210668.	271372.	392742.
Japan	202336.	266490.	308521.	332072.	439302.	530753.
Euro Area (2)	166111.	167804.	165363.	158741.	126633.	116674.
United Kingdom	20039.7	26221.	22951.	22787.	19277.	21946.
United States	23448.	23976.	23061.	24875.	26731.	27507.

	2005	2006	2007	2008	2009	
World	3022600	3490670	4239440	4763930	5208730	
China(1)	572930.	708817.	967093.	1263430	1530370	
Japan	579886.	581585.	600130.	651622.	635939.	
Euro Area (2)	116948.	122330.	128580.	131126.	124161.	
United Kingdom	25086.	25850.	30057.	26976.	24256.	
United States	26474.	27216.	28985.	32192.	32226.	

Source: IMF, Currency Composition of Official Foreign Exchange Reserves, http://www.imf.org/external/np/sta/cofer/eng/index.htm ; (1) only includes mainland of China. (2) includes European Central Bank.

3.2.3 Financial Position

Due to the growth in its foreign exchange reserves, China has maintained a positive and increasing net asset position, but its investment abroad is still less than the inflow of foreign investment; the gap in inflows and outflows of capital was $447,190 million by the end of 2008, as shown in Table 3.6. Considering that the United States changed from a net debtor country to a net creditor country in 1919, China may not yet be ready to play the role as the United States played in the 1920's.

On the other hand, its huge reserves position means that it has the ability to reverse this position if it chooses to do so. Initially it will need to draw down its dollar holdings and it must do this at a rate the market can absorb without witnessing a huge depreciation of the dollar. But the potential is there.

Table 3. 6 International Investment Position of China, 2004-2008
(in millions of dollors, end of each year)

	2004	2005	2006	2007	2008
International Investment Position (+ Net Assets)	**297,151.00**	**428,363.00**	**653,380.00**	**1,161,910.00**	**1,519,010.00**
Assets	**934,272.00**	**1,228,440.00**	**1,688,090.00**	**2,374,440.00**	**2,920,300.00**
Direct Investment Abroad	52,704.10	64,492.90	90,630.00	115,960.00	169,431.00
Portfolio Investment	92,028.00	116,739.00	265,179.00	284,620.00	251,880.00
Equity Securities	0.00	0.00	1,454.00	19,642.60	20,760.20
Debt Securities	92,028.00	116,739.00	263,725.00	264,978.00	231,120.00
Other Investment	166,589.00	215,713.00	251,519.00	426,544.00	532,792.00
Reserve Assets	622,950.00	831,491.00	1,080,770.00	1,547,320.00	1,966,200.00
Liabilities	**637,121.00**	**800,077.00**	**1,034,710.00**	**1,212,530.00**	**1,401,290.00**
Dir. Invest. in Rep. Economy	368,970.00	471,549.00	614,383.00	703,667.00	876,342.00
Portfolio Investment	56,622.50	76,617.30	120,715.00	146,648.00	161,209.00
Equity Securities	43,290.20	63,636.20	106,497.00	129,013.00	143,989.00
Debt Securities	13,332.30	12,981.10	14,217.40	17,635.30	17,219.50
Other Investment	211,529.00	251,911.00	299,612.00	362,218.00	363,737.00

Source: IMF, International Financial Statistics; http://www.imfstatistics.org/imf/

3.2.4 The Institution

The People's Bank of China (PBC) was founded on December 1, 1948, and has functioned as the central bank since September 1983, when the State Council gave it central bank status, although this status was confirmed legally only after the adoption of the Law of the People's Republic of China on the People's Bank of China on March 18, 1995.

Thus the PBC has served as the central bank for almost 27 years. So, unlike the Federal Reserve which only had a few years' experience in operating as the central bank when it began to make an effort to restore the gold standard system in 1924, the PBC has abundant experience. But, this experience does not necessarily mean a better financial system than the United States had in the 1920's. Actually, China's financial system is still a relatively "repressed" one. As Dorn has argued, "capital controls limit freedom of choice, the exchange rate is undervalued and distorted by massive government intervention, interest rates are heavily regulated, the private sector is discriminated against in favour of state-owned enterprises (SOEs), banks and security firms are mostly government owned and controlled, and corruption is rampant." (Dorn, 2006) This is a compelling list of "problems" in China's financial system which will need to be corrected if the RMB is to eventually become a major reserve currency.

Although China has taken some steps towards financial liberation, including more lenient treatment of qualified institutional investors, a gradually relaxation of the exchange rate, and reform of state-owned financial institutions, there is still a long way to go for China.

China has the most restricted financial market in Asia (Dorn, 2006), so it is unlikely that one of China's cities will emerge any time soon as one of the financial centers of the world, as New York began to do in the 1920's. And with the heavy controls on capital account, the RMB is not a fully convertible currency. This is also a negative factor for RMB to be as attractive as the dollar was in the 1920's.

However, China has expressed its long run intention to make the RMB fully convertible, to allow the exchange rate to float freely, and to have interest rates formed by the market. (Dorn, 2006) These, and other reforms in the financial system, are prerequisites for the RMB ultimately to become a major reserve currency.

3.3 THE SUPPORT FOR THE DOLLAR

The US explicitly adopted a strategy as of the 1920's of working toward the dollar replacing the pound as the major reserve currency in the world and New York replacing London as the major financial capital of the world. Is China doing the same? To finish this review of China's economic conditions, I will turn to inspect what China is doing right now.

In the 1920's, most of the foreign exchange reserves in the world were held in pounds, which meant the United States had to support the pound if it was to inherit an orderly international monetary system. Nowadays, China is confronting the same situation. As indicated in Table 3.7 and Table 3.8, the global official claims in U.S. dollars summed up to 2.8 trillion by the end of 2009, and accounted for 34.74% of the global official foreign exchange reserves. The second highest share was the Euro at 15.26%.

Although China does not publish its foreign reserves composition, it is estimated that around 70% of its foreign exchange reserves are in dollars. (Morrison, 2009) If this is correct, its dollar holdings were approximately1.49 trillion as of June 2009. (Morrison, 2009, p. 5) So, if China has the intention of making the RMB as the next major reserve currency, it is necessary for China to support the dollar's value as the United States did in the 1920's in order to inherit an orderly system. As the largest dollar reserve holder in the world, China has to do this both to prevent a huge loss in its massive dollar assets and to maintain a stable system for other countries.

Table 3. 7 Currency Composition of (Global) Official Foreign Exchange Reserves, 1999-2009 (in millions of dollars)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total foreign exchange holdings	1781947	1936282	2049580	2407978	3025071	3748358	4320117	5251371	6699373	7337734	8165667
Allocated reserves	1379705	1518244	1569488	1795915	2223110	2655070	2843541	3315483	4119284	4209961	4563286
Claims in U.S. dollars	979783	1079916	1122431	1204673	1465752	1751012	1902535	2171075	2641671	2698423	2836997
Claims in pounds sterling	39,827	41,798	42,401	50,537	61,655	89,457	102,243	145,205	192,675	168,793	195,574
Claims in Japanese yen	87,939	92,078	79,190	78,145	87,608	101,787	101,769	102,051	120,480	131,901	137,515
Claims in Swiss francs	3,172	4,087	4,372	7,314	5,016	4,419	4,143	5,685	6,395	5,799	4,941
Claims in Euros	246950	277693	301026	427327	559246	658531	683809	831947	1082286	1112206	1245780
Claims in other currencies	22034	22672	20069	27919	43833	49865	49041	59520	75778	92839	142479
Unallocated reserves	402242	418039	480092	612063	801961	1093288	1476576	1935888	2580089	3127773	3602380

Source: IMF, Currency Composition of Official Foreign Exchange Reserves; http://www.imf.org/external/np/sta/cofer/eng/index.htm

Table 3. 8 The Share of Each Kind of Claims in the Total Foreign Exchange Holdings, 1999-2009

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Total foreign exchange holdings	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Allocated reserves	77.43%	78.41%	76.58%	74.58%	73.49%	70.83%	65.82%	63.14%	61.49%	57.37%	55.88%
Claims in U.S. dollars	54.98%	55.77%	54.76%	50.03%	48.45%	46.71%	44.04%	41.34%	39.43%	36.77%	34.74%
Claims in pounds sterling	2.24%	2.16%	2.07%	2.10%	2.04%	2.39%	2.37%	2.77%	2.88%	2.30%	2.40%
Claims in Japanese yen	4.93%	4.76%	3.86%	3.25%	2.90%	2.72%	2.36%	1.94%	1.80%	1.80%	1.68%
Claims in Swiss francs	0.18%	0.21%	0.21%	0.30%	0.17%	0.12%	0.10%	0.11%	0.10%	0.08%	0.06%
Claims in Euros	13.86%	14.34%	14.69%	17.75%	18.49%	17.57%	15.83%	15.84%	16.16%	15.16%	15.26%
Claims in other currencies	1.24%	1.17%	0.98%	1.16%	1.45%	1.33%	1.14%	1.13%	1.13%	1.27%	1.74%
Unallocated reserves	22.57%	21.59%	23.42%	25.42%	26.51%	29.17%	34.18%	36.86%	38.51%	42.63%	44.12%

Source: calculated by Table 3.7

3.3.1 Purchase of U.S. Securities

Part of China's effort to support the dollar has been to buy U.S. securities (including long-term Treasury debt, long-term U.S. agency debt, long-term U.S. corporate debt, long-term U.S. equities, and short-term debt). According to Table 3.9, from June 2002 to June 2009, China's holdings of U.S. securities increased by almost $1.3 trillion in value, far more than the increment of any other country, and China surpassed Japan to become the largest holder of U.S. securities in 2009.

As shown in Table 3.10, in 2008, China also became the largest foreign holder of U.S. Treasury securities (surpassing Japan in September), which are issued for funding the U.S. federal budget deficit.

Table 3. 9 Top 3 Holders of U.S. Securities, 2002-2009
(by June of each year, in millions of U.S. dollars)

	2002	2003	2004	2005	2006	2007	2008	2009
China	181,478	255,497	340,972	527,275	698,929	922,046	1,205,080	1,464,027
Japan	636,940	771,446	1,019,124	1,091,430	1,106,396	1,196,536	1,250,415	1,269,291
United Kingdom	367,547	390,392	491,471	559,838	639,587	920,630	863,893	787,887

Source: Department of the Treasury, Treasury International Capital System, Foreign Portfolio Holdings of U.S. Securities; http://www.treas.gov/tic/fpis.shtml

Table 3. 10 China's Holdings of U.S. Treasury Securities, 2002-2009
(by end of each year)

	2002	2003	2004	2005	2006	2007	2008	2009
China's holdings(billions of U.S. dollars)	118.4	159.0	222.9	310.0	396.9	477.6	727.4	894.8
Holdings as a percentage of total foreign holdings	9.60%	10.40%	12.10%	15.20%	18.90%	20.30%	23.60%	24.24%

Source: Department of the Treasury, Treasury International Capital System, Major Foreign Holders of U.S. Treasury Securities; http://www.treas.gov/tic/ticsec2.shtml

China's purchase of U.S. securities can be explained in three ways:

First, rather than holding dollars which earn no interest, investing in U.S. securities is a good opportunity for China to earn some revenue.

Second, it has helped to finance the U.S. budget deficit and maintain the U.S. ability to import. As a country with a low savings rate, the United States relies heavily on foreign capital to finance its huge budget deficit and promote economic growth. China's economy benefits from exports to the United States in turn.

Third, and more direct for supporting the dollar, this prevents the Chinese yuan from appreciating against the dollar. Why? Because China's purchase of the U.S. securities and holding them gives the market confidence in the dollar in order to support the dollar exchange rate. If China sells U.S. securities, the effect on the U.S. exchange rate will depend on a) what they sell them for and b) who else knows they are selling. If they sell U.S. securities for U.S. dollars, then the short term impact may be to actually cause an appreciation of the dollar, since the demand for the dollar will go up due to the Chinese demand. But if they sell for some other currencies, then the short-term effect is less certain and may depend on b), i.e., who knows. If the market recognizes that China is engaged in a huge sell-off of U.S. securities, then this is likely to create a general loss of confidence in the dollar and lead to a depreciation of the dollar. If the sell-off is small, and/or not known to the rest of the market, then there may be no exchange rate impact of the securities sell-off. So it is not a simple question and there is no simple answer. But for sure, China does not want the RMB to appreciate against the dollar, at least not too fast.

China does not want the dollar to depreciate against the Chinese yuan for at least two reasons. One is that the depreciation of the dollar would make goods produced in the U.S. cheaper and those produced in China more expensive than before, so the U.S.'s imports from China would be lessened. China's economic growth relies heavily on its exports, especially to the U.S., and if the dollar depreciates, China would face a series of problems such as unemployment and deflation. Another is that the depreciation of the dollar would make China suffer big losses in its foreign exchange reserves, as China is the largest foreign reserve holder in the world, and most of the reserves are held in the form of the dollar and dollar-denominated assets.

In the 1920's, the British pound was under depreciation pressure as well. The U.S. Federal Reserve decreased the discount rate to restore and maintain the pound's prewar parity. The purposes for the U.S. to do that also included stabilizing the international monetary system and enlarging its exports (such as exports of agricultural products). In the gold standard system, the U.S. Federal Reserve could supply its reserves, gold, to support Britain to restore and maintain the gold-sterling parity. In the foreign exchange system, China could supply its reserves, dollars, to finance the U.S. by buying U.S. securities and supporting the market's confidence in the dollar to maintain the dollar's valuation.

3.3.2 China's Dilemma

Supporting the dollar by financing the U.S. through purchase of U.S. government debt is untenable in the long run. The large U.S. current account deficit cannot be sustained indefinitely because the U.S. net foreign debt cannot rise faster than GDP indefinitely. If, at some point, foreign investors view the level of U.S. debt as unsustainable, they will shift away from U.S. assets, and that will cause serious problems for the U.S. (Morrison, 2009) For China, if it continuously accumulates U.S. securities, the loss coming from a devaluation of the dollar, if it happens, will be huge.

Like the U.S. Federal Reserve had a dilemma in 1929, China also has a dilemma right now, though a different one. On the one hand, to prevent a shortage of capital in the U.S., China has to keep purchasing U.S. securities. During her visit to China on February 21, 2009, Secretary of State Hillary Rodham Clinton stated her appreciation for Chinese government's continuing confidence in United States Treasury Bills, and she urged the government to continue to buy U.S. debt.

On the other hand, China is concerned about the eventual devaluation of the U.S. dollar. As expressed by Wen Jiabao, the Chinese premier, "we're concerned about the security of our assets", and even "a little bit worried". (Xinhua News, 2009) Apart from that, the United States is pressing China to allow the RMB to appreciate against the dollar, and by that to reduce the large U.S.-China trade imbalance. If the RMB appreciates and the dollar depreciates, China's dollar holdings and dollar-denominated assets would suffer losses. And that would, in turn, undermine the determination to purchase and hold U.S. securities. Morrison and Labonte (2009) suggest a "gradual" sell-off of U.S. securities by China, without causing a precipitatious decline in the dollar exchange rate, would be a solution. But that is contrary to U.S. interests, at least in the short term.

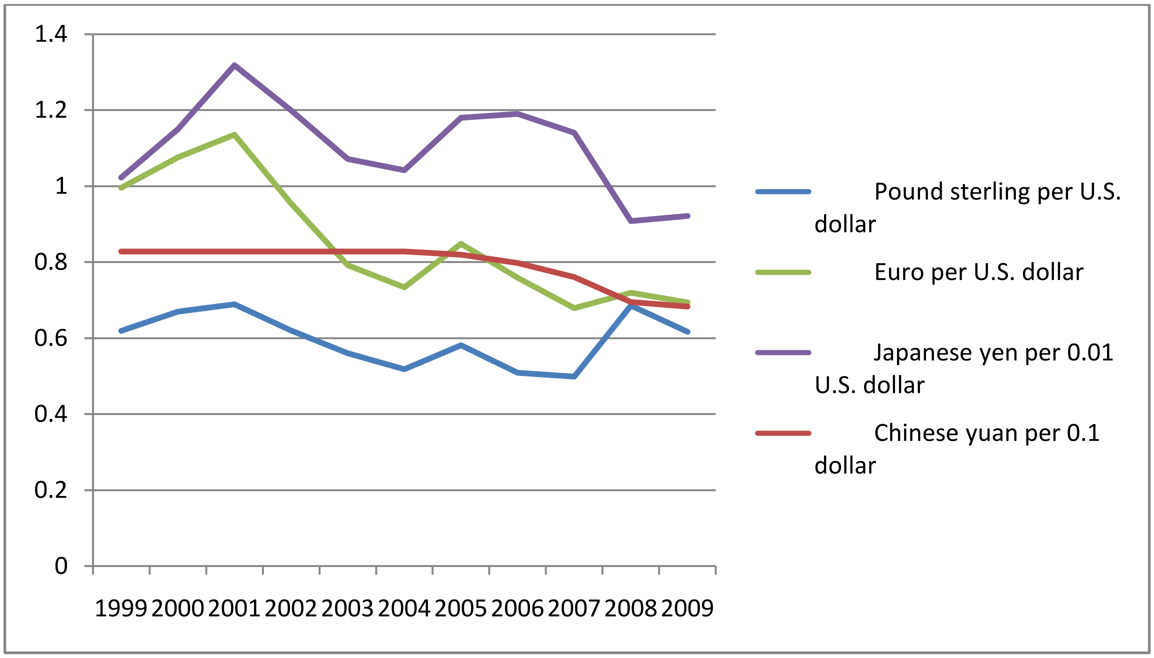
The Chinese government has also considered a more profound revolution in the international monetary system to deal with this dilemma. On March 24, 2009, the governor of the People's Bank of China, Zhou Xiaochuan, published a paper calling for the replacing of the U.S. dollar as the international reserve currency with a new super-sovereign currency controlled by the International Monetary Fund, such as the SDR. (Anderlini, China Calls for New Reserve Currency, 2009) But this suggestion seems a little idealistic and cannot be realized in the short future. Besides, this was essentially what the SDR was created for in the 1970's and almost 40 years later, it still has not happened.

It may, in fact, be more reasonable to think that China's real intention is to replace the dollar with the RMB, not the SDR, as the next leading reserve currency. Besides supporting the dollar by purchasing US debts, China has also begun to take steps to liberate its financial system and to allow the RMB to appreciate against the dollar gradually.

3.3.3 The Gradual Appreciation against the Dollar

As shown in Figure 3.3, the Chinese yuan appreciated against the dollar from 2004 to 2008. This followed a policy decision in 2004 to peg the yuan against a basket of currencies rather than just the dollar. But in 2008, when the economic crisis started, China went back to a dollar peg, which can be seen clearly in the graph in Figure 3.3

Figure 3. 4 Exchange Rates of Main Currencies to the Dollar, 1999 to 2009



Source: Exchange rate of the Chinese yuan is from the Federal Reserve, Exchange Rates and International Data;
http://www.federalreserve.gov/econresdata/releases/statisticsdata.htm;
And other countries are from IMF, Exchange Rates Data;
http://www.imf.org/external/np/sta/cofer/eng/index.htm.

3.4 STERILIZATION

To maintain its exchange rate against the dollar, China has to buy dollars by selling RMB, and then, to control the excess supply of RMB, the PBC has to sell securities to commercial banks for sterilization. This sterilization process has two outcomes. One is upward pressure on domestic interest rates, which, in China's case, is controlled by administrative means. The other is the huge accumulation of foreign exchange reserves, mainly in the form of U.S. dollars; the longer the system continues, the more dollars China will accumulate and the more pressure there will be on the RMB to appreciate against the dollar.

The cost of holding such a huge amount of foreign exchange reserves is very high. According to Dorn (2006), it makes no sense for China, a capital-poor country, to accumulate such massive foreign exchange reserves and suffer the risk of possible devaluation in reserve currencies, especially the dollar. China's National Bureau of Statistics has recommended that the PBC accelerate the pace for diversification of its foreign reserves. (Dorn, 2006)

In the 1920's, the United States sterilized gold outflows to prevent the undesirable deflation that may be caused by a decrease of the money supply. China's sterilization has been to prevent inflation that may be caused by an increase of the money supply. In both cases, there are both external goals and internal goals being pursued simultaneously. For the U.S., the external goal was to support the pound's convertibility, and for China, the external goal is to maintain a stable exchange rate and hence, to maintain the value of its dollar assets and not hurt exports. But in the 1920's, the United States did not need to sterilize the gold outflow for long, because of the massive capital inflow in the late 1920's. China, however, faces a greater dilemma. It has to sterilize the dollar inflow to prevent domestic inflation, but the longer the regime remains, the more dollars it will accumulate and the more losses it will suffer if the dollar ultimately depreciates against the RMB.

CHAPTER 4

COMPARISON BETWEEN CHINA TODAY AND THE UNITED STATES IN THE 1920'S

To compare the United States in the 1920's, when it began to replace the pound with the dollar as the major reserve currency, with China today, we can find some similarities and some dissimilarities. I will discuss them in four categories, including motivation, economic preparation, actions, and external environment. I will put them all in a small table for comparison at the end.

4.1 MOTIVATION

Both countries had/have motivation to promote their own currencies to be the major reserve currency. In the early twentieth century, the United States was more and more involved in international trade and changing to be a more outward-looking country. Its relative shortage of raw materials and eagerness for overseas markets both urged it to promote its own currency to be the major reserve currency and benefit its trade and economy. After WWI, with the weakness of other reserve currencies, the increased worldwide demand for the dollar also gave the United States the opportunity to change its ways to obtain raw materials and secure foreign markets from military interventions to the so-called "the diplomacy of the dollar".

With respect to China, it has been an outward-looking country for decades since its reform and opening-up in 1978, especially when it joined the World Trade Organization (WTO) in 2001 and became the third largest trade country in 2008. Moreover, it is a more material-poor country than the United States in the early twentieth century because it has a much larger population to dilute its resources per capita. Also, it relies more on foreign markets than the U.S. because of its relatively low domestic demand. As discussed in the previous chapter, China has been importing more and more natural resources from foreign suppliers recently and has made a lot of effort to enlarge its overseas raw materials supply, including direct investment abroad, and in creased cooperation with foreign governments.

If the RMB can be promoted as the main reserve currency, in the process of trading or investing abroad, using the RMB would be better than using the dollar for its issuing country, China. The benefit is the same as the United States got in the past century.

But motivation is not everything. In particular, the choice of a reserve currency is not a unilateral decision of China alone. The rest of the world must be willing to accept the RMB as a reserve currency, regardless of how much China desire the RMB to become a reserve currency.

4.2 ECONOMIC PREPARATION

Even if China really wants to replace the dollar with the RMB, is it ready to do that when considering the economic conditions it has so far?

4.2.1 Gross National Products

First, with respect to the Gross National Product, China seems not ready yet. As discussed in Chapter 2, the United States had already outweighed the United Kingdom in industrial output by 1870 and in total GNP by at least 1890. Considering the United States did not take steps to promote the dollar as the major reserve currency until the 1920's, the time span from the United States emerging as the leading economy to when its currency was ready to emerge as the major reserve currency was at least thirty years.

Right now, China accounts for around 7% of the world GDP total as of 2008. Although it is not necessary for a country to be the leading economy first and then a major reserve currency issuer, since the pound was not fully dethroned until 1955, even though Britain was not the leading world economy for a long time before that, China still seems to have a long way to go with just a 7% share in the world GDP total. However, according to Zhang Weiying, “as long as China sticks to reform towards market economy, China will become the largest economy in the world in the next 20 to 30 years and RMB will become a major currency.” (Zhang, 2009)

4.2.2 Continuous Trade Surplus and Huge Reserve Holdings

Both countries experienced a continuous trade surplus and accumulated huge reserve holdings. The United States experienced a trade surplus before the 1920’s and so did China in the past decades. China’s trade surplus was not only coming from economic efficiency, but also coming from having a relatively undervalued currency. One obvious outcome of this continuous surplus in both countries was/is the accumulation of huge reserve holdings.

There is a difference, however, in the form of their reserve holdings. In the 1920’s, the United States held the largest gold reserves in the world. Gold is a metal currency, not a fiat currency. But, China right now is holding the largest foreign exchange reserves in the world, mainly dollars, which is fiat currency. In the gold standard system, the Fed’s gold reserve had its own value and could back up the dollar’s spread to the world. Other countries besides the United States were willing to acquire and hold dollars because they knew they could lay claim to the Fed’s gold if they needed to (this was not the case since 1970, when the Bretton Woods system broke down). Of course, there was a default risk, but with the Fed’s huge gold reserves, this risk was limited. Gold reserves can be seen as a kind of intermediary in the transition of the major reserve currency from the pound to the dollar.

The present monetary system is a system in which the major reserve currency issuing country does not promise any gold convertibility of its currency. Other countries are willing to obtain and hold the major reserve currency because they know they can lay claims to the issuing country’s real resources. So, to what extent can China’s dollar reserves help the spread of the RMB to the world? If countries are willing to hold the

RMB as a reserve currency, is it because they can lay claims to China's real resources or its dollar reserves? When the RMB begins to replace the dollar as the major reserve currency, the value of the dollar reserve will shrink. So, the willingness of the rest of the world to acquire the RMB as a reserve currency must be based more on potential claims against China's real resources. There is no need for China to accumulate more dollar reserves. On the contrary, in order to give the world more confidence, China needs to keep developing the economy persistently, and diversify its dollar reserves to other currencies. But it must do this, at least initially, without causing a major dollar devaluation, both for its own sake and that of other dollar reserve holders.

China has already done a lot concerning the diversification of its dollar reserves. First, China has used its dollar reserves to help its State-owned companies make overseas investments and acquisitions, especially in the field of "natural and energy resources" (Anderlini, China Calls for New Reserve Currency, 2009). Second, China is pursuing commodities, especially oil, for reserve diversification. At the beginning of 2009, China signed deals with Russia and Brazil for securing a long term oil supply; in turn it will lend dollar reserves to them. In August, China also signed a similar deal with Ecuador. Third, China is spending its dollar reserves to increase its Strategic Petroleum Reserves (SPR). In February 2009, it was announced by the National Energy Administration that China will increase its total SPR by 8 bases to 12 bases by 2011. (Sun, 2009) Fourth, China has also increased its gold reserves and other forms of precious metal reserves. In April 2009, China's gold reserves reached 1054 metric tons, a 454 metric ton increase since 2003, making China the fifth largest gold reserve holder in the world. (China Daily, 2009) According to the State Reserve Bureau (SRB), China still intends to enlarge its aluminum, copper, zinc, and lead reserves in the coming years, though these are only strategic metals, not financial reserves. (China Mining, 2009) Fifth, China intends to buy more SDR-denominated bonds (as much as 50 billion dollars) (Reuters, 2009)issued by the IMF.

4.2.3 Financial Position

Both countries had/have positive financial positions but with different character. For the United States, its financial position changed in 1919 from a net debtor to a net creditor. By the diplomacy of the dollar, it began to export dollars to the world and promoted the dollar's share in world total reserves. But, for China, though it has positive net assets as well, it is still a capital-poor country, and its investment abroad is far less than the foreign investment coming into China (See Chapter 3, Table 3.6). The positive net assets position comes mainly from the huge reserve holdings (See Chapter 3, Table 3.6), which is different from the United States' case in the 1920's.

In theory, a country's currency can be obtained by the rest of the world in two ways. One is for the country to invest abroad, and the other is for it to purchase foreign commodities. The change in the US financial position in 1919 gave it an opportunity to export its currency, i.e. for the rest of the world to acquire dollars, without reducing its trade surplus. For China, reversing its trade surplus would take a huge increase in imports if it cannot enlarge its investment abroad. Either route will take a long time to produce a significant flow of RMB to the rest of the world.

4.2.4 Financial Institutions

The Federal Reserve System was established in 1913, and then WWI broke out in 1914 and ended in 1918. So, when the Federal Reserve first decreased its discount rate to support the pound in 1924, it only had five years of peace time experience operating as a central bank. By contrast, the People's Bank of China has already run as a central bank for at least 27 years, and thus has abundant experience.

Besides the central banks' different experiences, the capital markets in each case are also organized differently. The United States uses the direct financing method based on the common law system[13] to organize its capital market. But China uses the indirect financing method based on the civil law system[14] to organize its capital market. Compared with the former, the indirect method provides less mobility for the currency and currency-based bonds, and hence lessens their attraction to investors. Japan's failure to internationalize the Japanese yen by more than it has is an example of this; Japan also has a capital market based on the civil law system. Its capital market proved too naive compared with the financial markets in London and New York. (Murphy & Yuan, 2009)

Lastly, China regulates its financial system heavily, often being accused of financial repression. Especially, the RMB is still not a fully convertible currency and restrictions on capital account are still in place. These are also different from the US case in the 1920's.

However, China has already expressed its long run desire to make the RMB fully convertible and make the exchange rate and interest rate more flexible. If this goal is realized in the future, the RMB will become more attractive as a reserve currency.

4.3 ACTIONS

4.3.1 Support of the Existing Major Reserve Currency

Both countries made efforts to support the major reserve currency, though by different means.

In the 1920's, when facing huge foreign exchange reserves in the world, mainly in the form of the pound, the United States took actions to support the pound in order to inherit

[13] Common law system means lenders and borrowers can make their deals individually in the financial market without the interference of commercial banks.
[14] Civil law system means using commercial banks as the intermediary to connect the lenders and borrowers, and regulating with restrict regulations and supervisions.

an orderly system and avoid huge losses by the pound reserve holders. So, the Fed lowered its discount rate in 1924 and 1927 respectively to support the pound.

Today, the major reserve currency is no longer the pound but the dollar. However, the stock of dollar reserves is far greater than the stock of pounds in the 1920's, when the gold standard system prevailed. So, if China wants to inherit an orderly system, it also has to consider how to support the dollar to prevent the dollar reserve holders (including itself) from big losses. China has supported the dollar by purchase of U.S. securities, which is different from the Fed's action of decreasing the discount rate in 1924 and 1927, but has the same purpose.

4.3.2 Dilemma

Both countries faced a dilemma when they took these actions.

For the United States, the dilemma was that, when the stock market bubble became serious, the Fed had to make a decision on whether or not to increase the discount rate to break the bubble. Increasing the discount rate might help break the stock market bubble and help restore capital outflows from the U.S., but would restrict business credit.

For China, the dilemma always exists when it accumulates U.S. securities. To support the dollar, China has to hold and accumulate U.S. securities. But this exposes China to huge risk of loss if the dollar devalues. To reduce the risk, China has to lessen its holdings of U.S. securities and diversify its dollar reserve balance. But it has to do this so as not to spark a panic in the exchange market and cause the dollar to dramatically depreciate, which is what it wants to avoid in the first place.

4.3.3 Cooperation with Other Central Banks

In the 1920's, the Federal Reserve cooperated with other central banks frequently, especially the Bank of England. With its huge gold reserves and being the dominant economy, the United States usually had the leading position in this cooperation. For China, if it wants to replace the dollar with the RMB as the next major reserve currency, cooperation with the United States is inevitable. But considering they are not close friends in history, and given their different political institutions, different lauguages, different cultures, and so on, how successful this cooperation will be is in doubt. Besides, as only a new emerging economy in the world for less than thirty years, it is more difficult for China to gain the leading role in the international monetary cooperation as the United States did in the 1920's.

4.4 EXTERNAL ENVIRONMENT

4.4.1 A Weak Major Reserve Currency

Both countries faced a weak major reserve currency. The British pound was weak at the beginning of the twentieth century, especially after WWI, while the beginning of the twenty-first century also witnessed the weakness of the dollar, as indicated in Chapter 3, Figure 3.3. Actually, as early as in late 1960's, the world began to look for a substitute for the dollar because of its perceived weakness.

4.4.2 Different International Monetary System

The international monetary system is different. In the 1920's, the system was that of a gold standard and fixed exchange rates, and in the transition of the major reserve currency from the pound to the dollar, gold played the role of intermediary. Within the gold standard system, the pound reserves outside Britain could be converted to gold, unless

Britain gave up its sterling convertibility and moved sterling off gold. Actually, when facing massive demand for converting sterling to gold, the pound did move off gold in 1930, and the reserve holders who still had pounds did suffer losses.

In the current monetary system, gold is largely irrelevant. It no longer serves as a means of settlement between countries, and currencies are no longer convertible to gold. In the transition of the major reserve currency from the dollar to RMB, if there will be such a transition in the future, how to prevent the dollar reserve holders from losses is a more difficult issue than before. If the intention of the RMB-USD transition is recognized, the speculation on the dollar and Renminbi will make the value of the dollar plunge and the value of the Renminbi rocket. But, in addition, the number of dollars held as reserves far outweighs the pounds held as reserves in the 1920's. And, the fact that China is the single largest holder of dollar reserves means that it also stands to be the single largest loser in the event of a decline in the U.S. dollar. This could however be offset by the rising value of the RMB which will increase China's purchasing power for the RMB the rest of the world will now want.

4.4.3 Competitors

For the United States, there were no competitors for the next major reserve currency other than the dollar in the 1920's. But today, the RMB is not the only candidate to replace the dollar as the next major reserve currency. The Euro is the second leading reserve currency in the world with a 15.26% share of the world total foreign reserve holdings at the end of 2009. Besides, the Japanese yen, the Russian ruble, the Indian rupee and even the pound may also be competitors. And proposals for a new international currency, à la, the SDR, are still a possibility.

4.4.4 Economic Crisis

At the end of the 1920's, we had the Great Depression. Today, we have a financial and economic crisis induced by the sub-prime mortgage markets in the U.S. Both crises are relevant to the stock market and started in the United States. However, these two crises are also different in many ways. First, the Great Depression was not primarily caused by the stock market crash, although it did, as discussed in Chapter 1, originate in financial markets and more specifically, Federal Reserve policy decisions in 1929 and early 1930. The actual crash of the stock market in 1929 only mattered in affecting the confidence of business and consumers. The 2008 economic crisis was definitely because of the burst of the bubble in the housing-based securities market. Second, the decline in the stock market in 2008 had a much greater impact on business and consumer confidence than in 1929, because with a more mature financial market, many more people were involved in the stock market, directly or indirectly, than before.

Another notable point with these two crises is their timing. Before the 1929 crisis, there was a weak major reserve currency and the US had already taken steps to replace it with the dollar by shoring it up in the 1920's. Before the 2008 crisis, there was also a weak major reserve currency and China was helping to shore it up by purchase of U.S. securities. The difference is that the pound lost support in the crisis year, while the dollar gained strength in the crisis year of 2008, appreciating against most other currencies except the Japanese yen and the RMB.

Table 4. 1 Comparison between China Today and the United States in the 1920's

	The United States in the 1920's	China, today	Similar or not
Motivation: eager for raw materials and foreign markets	Yes.	Yes.	√
GDP leading in the world	Yes.	No, but growing fast.	×
Continuous trade surplus	Yes.	Yes.	√
Huge reserve holdings	Yes, mainly in gold.	Yes, mainly in foreign exchange reserves.	√
Positive net international capital account	Yes, with net investment abroad positive.	No, but with outward investment growing.	×
Fully founded financial institutions	Yes, with fully convertible currency.	Yes, but with financial repression.	×
Support for counterpart currency	Yes, by lowering the discount rate twice to support the pound.	Yes, with purchase of the U.S. securities.	√
Sterilization operations	Yes.	Yes.	√
Cooperate with other central banks	Yes.	Limited	×
Facing a weak major reserve currency	Yes.	Yes.	√
International monetary system	Gold standard system.	Managed exchange rate system (with mixture of management regimes across countries)	×
Competition	No.	Yes.	×
Faced major economic crisis	Yes.	Yes.	√

CHAPTER 5
CONCLUSIONS

5.1 LENGTH OF TRANSITION

A notable feature of the dollar-pound transition is how long it took for the dollar to finally replace the pound as the major reserve currency. It took almost 30 years, from the Fed's first effort in 1924 to the first time dollar reserves exceeded sterling reserves in 1955. (Schenk, 2009) Considering the United States had already been the biggest economy in the late nineteenth century, it took more than half a century for the top economy to have its currency become the major reserve currency. Even though there was a global depression and a World War I in this period, the transition is nevertheless lengthy. The long time span tells us at least three things.

First, it is not easy for a new reserve currency to be accepted by the world. In the 1920's, although the United States was the most powerful economy on the earth and had the largest gold reserve holdings in the world, it was still seen as a relatively new phenomenon to the world. The traditional economies were not willing to grant the United States, a "Johnnie-come-lately" (Schenk, 2009) such a coveted position, using its national currency as the major reserve currency, in the field of world power. But, twenty years later, after continuously occupying the dominant position in the world economy and with its leadership role in WWII, the United States, as well as the dollar, gained acceptance.

Second, it is also hard for the old currency to be dethroned. "The demise of the sterling was widely predicted but the process was more gradual than was anticipated..." (Schenk, 2009, p. 4) The reasons were complex. The most crucial one was the huge stock of sterling reserves that could not be replaced in a short time, because massive conversion of the sterling reserve would cause huge losses in their value. In the 1920's, the United States tried to restore the gold standard system to avoid disorder in the transition of the world reserve currency from the pound to the dollar, but this effort finally failed. With the breakdown of the gold standard system, the lessening of the sterling reserves became more gradual by exchange controls and bilateral agreements. “Sterling’s role was prolonged both by the structure of the international monetary system and by collective global interest in its continuation.” (Schenk, 2009, p. 6)

Third, the transition cannot be without pain, but the pain can be eased. When Britain abandoned sterling convertibility in 1930, pound reserve holders suffered from that default. According to Schenk(2009), “the shift from sterling to the USD and the elimination of sterling as a major international currency did result in periodic crisis, international tensions and conflict over British domestic economic policy”(p.6), and “it was thus not a painless transformation” (p.6). But she suggests that “rising international liquidity, inflation, geographical redistribution and international cooperation were the cornerstones that eased the retreat of sterling from global to national status.” (p.6)

It is meaningful to inspect the timeframe of the dollar replacing the pound as the major reserve currency before we discuss whether the RMB can replace the dollar as the next leading reserve currency, because we should keep in mind that even if the RMB can make it, the procedure will take time. But China needs time to do a lot of things (as previously noted) and the RMB needs time to gain more acceptance as an international currency, and then the major reserve currency. And the dollar needs time to retreat. And the world needs time to adapt a new currency emerging and the old one fading out, and to absorb whatever pain comes with the transition.

5.2 THE RMB HAS POTENTIAL BUT IS NOT READY YET

From the comparison in the last chapter, we can see that China is not ready to challenge the dollar right now. Although China has the same motivation as the US had in the 1920’s to promote its own currency to be the major reserve currency, its GDP, its investment position, and its financial institutions are not yet ready. Of course China has large reserves as the US did in the 1920’s, but its reserves are in a different form, foreign exchange, not gold. China is also making efforts to support the dollar, as the United States did for the pound in the 1920's. But this support may not be sustainable, because China is sitting on a dilemma. On the one hand, it needs to support the dollar by purchase of U.S. securities and on the other hand, it needs to be careful of the exchange risk that the accumulated U.S. securities will expose it to.

However, China has the potential to challenge the dollar in the future. First China is the second largest country economy in the world with respect to GDP, and will play a more important role in the world economy in the future. Second, China has been taking steps to push the Renminbi's internationalization as well as to diversify its dollar reserves. Third, the Renminbi's competitors have their own weaknesses. Even though the Renminbi cannot replace the dollar immediately, or even in the near future, it still has the potential to replace the dollar in the longer term.

5.3 POLICY RECOMMENDATION

Murphy and Yuan (2009) depict a three stage process for the RMB becoming the next major reserve currency. These are: experiencing currency internationalization; then, obtaining a reserve currency status; and finally, becoming the leading reserve currency. With the first stage, there are some more specific sub-steps. As Kelly (2009) demonstrates "the internationalization of a currency is a multi-stepped and prolonged process that involves: first, becoming a settlement currency; second, a vehicle currency for third-party trade or foreign exchange transactions; third, a unit of account in commodity pricing; and finally, acting as a reserve currency." Put more simply, in the process of internationalization, the RMB will undergo three scenarios, first, as a settlement currency, then as an investment currency, and finally, as a reserve currency. (Shanghai Securities News, 2009)

Right now, China has been making some efforts to promote the Renminbi as a settlement currency. Such efforts include expanding the use of the Renminbi as a settlement currency in the cross-border trade, and signing a series of high-profile currency swap agreements [15] with Argentina, Belarus, Hong Kong, Indonesia, Malaysia, and South Korea, respectively, in 2008 and 2009. Another step toward becoming an investment currency is to help to develop an offshore currency market by issuing renminbi-denominated bonds in Hong Kong. (Wang, 2008) But considering its relatively rigid exchange rate regime and that the Renminbi is still not fully convertible, the impact of these efforts is limited to this point.

Because of the possible disability and even turbulence the economy would suffer in the process of the Renminbi's internationalization, China has to take the reform step by step, and implement new policies continuously, cautiously and gradually through a series of pilot experiments. "The content, scope, and pace of renminbi internationalization remain very much up for debate." (People Daily, 2009)

To achieve the goal of becoming a settlement currency, China has to continue reforming its exchange rate regime. The current exchange rate regime of pegging to the dollar makes the Renminbi an infiltrated currency, but not an anchor currency. If the Renminbi wants to replace the dollar, it needs to become an anchor currency, which requires China to allow a floating exchange rate regime. The exchange rate started to become more flexible in 2005[16], but the economic crisis of 2008 brought this to a halt. Right now, some flexibility returned in June 2010.[17]

But before China can allow the exchange rate to float by more, it has to reform its economy more fundamentally, because right now, China is too reliant on exports for

[15] In theory, the currency swap agreement involves the exchange of principal and interest in one currency for the same in another currency. It is considered to be a foreign exchange transaction and is not required by law to be shown on the balance sheet.
[16] China has moved into a managed floating exchange rate regime based on market supply and demand with reference of a basket of currencies since July 1, 2005. (China Daily, 2010)
[17] In June 2010, the People's Bank of China has decided to proceed further with the reform of the Renminbi exchange rate regime to enhance the RMB exchange rate flexibility. In further proceeding with the reform, continued emphasis would be placed on reflecting market supply and demand with reference to a basket of currencies. The exchange rate floating bands will remain the same as previously announced in the inter-bank foreign exchange market. (China Daily, 2010)

economic growth. China has to transform its economy from an export-led one to a domestic demand-led one, and build up domestic consumption.

China also has to consider opening its capital market by allowing the Renminbi's full convertibility. The Renminbi is still not fully convertible, which makes it have only limited mobility and make it impossible for it to be accepted as an investment currency.

China needs to transform its capital market from one based on the civil law system to one based on the common law system. Combined with the Renminbi's full convertibility, this would give the Renminbi more mobility and Renminbi-denominated assets would be more attractive to investors. Besides, domestic financial institutions need reform, if they are to face more fierce competition when the capital market is opened up more.

Some of these changes will have, or could have potential implications in a country where political liberalization has not yet progressed very far. This may, ultimately, become a decisive factor for the Chinese government in deciding how vigorously to pursue making the Renminbi the new world reserve currency.

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