ACTA TEHNICA CORVINIENSIS – Bulletin of Engineering
Tome VII [2014] Fascicule 3 [July – September]
ISSN: 2067 – 3809

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# THE IMPACT OF USD-DOMINANT INTERNATIONAL RESERVES ON THE CHINESE ECONOMY

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***Abstract:*** *This paper is going to analyses the advantages and disadvantages of the U.S. dollar based international reserves, describes the challenges faced by China in the "dollar standard system" and then tries to disclose the severe challenges caused by the endogenous defects of dollar standard system to China's international reserve, advantages in foreign trade and allocation of assets. Considering that in current international currency system it is not possible to challenge the dominant role of the U.S. dollar, this paper also makes tentative analysis regarding the strategic deployment for China's capital security.*

***Keywords:*** *International Reserves; Foreign Exchange Reserve; Financial Security; American dollar*

## INTRODUCTION

After WWII, backed up by the powerful political, economic and military strengths of the United States, the U.S. dollar has been the standard currency for international reserves and settlements. From Bretton Woods to Jamaica, faced with the Triffin dilemma, the American government has always started from its own interests and introduced multiple monetary policies in its own favor. China, the largest creditor of the United States, also uses the U.S. dollar in its foreign exchange accounting, and is inevitably challenged by risks of huge assets loss. The strategic security of our economy is therefore greatly endangered.

## ANALYSIS ON ADVANTAGES AND DISADVANTAGES OF U.S. DOLLAR BASED INTERNATIONAL RESERVES

### A. The Inevitability of Dollar Standard System

The end of World War II ushered in a new era featured by the fact that the sovereign credit based currency was adopted in the international reserves when the US dollar replaced the British pound as the new leader in the international currency system. Although the dominance of the U.S. dollar was not what all the countries had hoped for, from the establishment of the Bretton Woods system to the Jamaica system, all the stories told pointed to both the historic and economic inevitability of present global currency status of the dollar.

First of all, the United States has strong economic power to guarantee the value of the dollar. In the Bretton Woods system, with the absolute advantage by holding three fourths of global gold reserves, the United States established the "double hook" exchange rate system based on dollar-gold convertibility, assuring the world of the reliable value of the U.S. dollar. At that time, American dollar was unparalleled as a sovereign credit currency. Later with the collapse of the Bretton woods system, the United States gave up the "gold exchange standard" under the Jamaica system led by American dollar. However, relying on its dominance in global food, crude oil, mining, technology, medicine and military industries, the United States provided strong support for the value of dollar with its financial capital in all those fields. The value of the US dollar was widely acknowledged and various national governments began to hold their international reserves in dollars.

*Secondly, the United States of America boasts that it is the largest economy in the world. With its highly open financial sector, the dollar is able to satisfy the liquidity requirements from all the other countries. The huge scale of U.S. economy enables the export of the dollar to every corner of the world through multiple channels such as merchandise trade and completely free money market, meeting the international liquidity needs of various countries. Although the exchange rate of the dollar is also volatile to some degree, America's relatively independent monetary policy and great capacity to intervene in the international affairs make the value of the dollar relatively stable in domestic market, resulting in a separation of volatility of its nominal rate and the change of its actual rate, which helps assure the stability of real purchasing power of the dollar. That the United States government has effectively curbed the inflation in subprime crisis can serve as a convincing argument in that case. The large economic scale, open financial market and independent money policy, have given the dollar natural and actual advantages in its functions as both a medium of exchange and a measure of value.*

***B. Endogenous Defect of the Dollar Standard System***

*From Bretton Woods to Jamaica, the United States has made more open and loose adjustments with the exchange rate regime without diminishing the dominant international status of the dollar. Given the context that sovereign credit currency has been used in international reserves, the Triffin Dilemma has never been relieved. As the issuing country of the mainstream currency for international settlement and reserves, the attitude of the U.S. government towards the dollar is based on the commitment to economic development by the political parties. Therefore, starting from this consideration for the interests of itself, it has caused great shocks to the world economy in its decision to adopt what kind of money policy.*

*While there have been reforms in the international monetary system, its innate endogenous defect still exists, which refers to the dilemma between international liquidity provision and currency confidence. All of the reforms including diversification of exchange rate regimes, the demonetization of gold as well as the increase of IMF shares, can only loosen the control of the dollar in the exchange rate regime and relieve the imbalance between supply and demand of the dollar. But at the current situation when sovereign credit currency is still the main international reserve currency, these relief measures relying on other foreign exchanges, reserve position in the IMF and SDR to enrich the international reserves have not substantively addressed the endogenous defect of the dollar. Real diversified development will inevitably undermine the international status of U.S. dollar, and of course will not get the support it needs from the United States. The supplies of international reserve assets and transactions in international trade of most countries are still greatly affected by the supply of the dollar, which is still the major currency of international reserves. The change of the American economy has its direct influence on the dollar, and ends with a greater influence on the world economy. This constitutes the asset impairment risk for every country that holds dollars as their international reserves.*

## ***CHALLENGES FACED BY CHINA IN THE USD-DOMINATED INTERNATIONAL MONETARY SYSTEM***

*The sudden rise of Chinese economy after its reform and opening-up policy has resulted in a powerful emerging economy which is further boosted in the international trade during recent years. Through the continuous trade surplus, China has accumulated large foreign exchange reserves. As America's largest creditor, as of December 2012, China holds as high as 1.2028 trillion dollars in American government debt. The huge Chinese holdings offer not so much guarantee for the stable value of RMB as the risks for the decrease in foreign exchange value due to the continuing depreciation of the U.S. dollar. The US government has further constrained the usage of foreign reserves in dollars, which limited the scope of China's investment by using its foreign exchange to some extent.*

***A. The Causes and Effects of the Depreciation of the U.S. Dollar***

*Faced with high current account deficits, American government, relying on its unique position in* *controlling the dollar, has deliberately caused the depreciation of U.S. dollar time and again through independent monetary policy. And other countries that have held dollar reserves become the final payer of the bill. Americans have exploited the real economies in various countries by using the tool of U.S. dollar, snatching the achievements of economic development of the world economy to some extent.*

***a. Causes of Devaluation of the U.S. dollar against RMB***

*In the process of globalization, the world economy has developed too much dependence on the U.S. market. The United States is playing the role of ultimate consumer, footing the bill for the surplus of international payments of other countries. The imbalance of its current account has forced the government to resort to every means to improve the trade deficits. According to Keynesianism, there are but two ways to do this. One is to curb domestic demand through regulatory policies at the expense of dropping national income growth, for example, to reduce demands of imports, so as to improve the international payments situation. The other is to adopt quantitative easing policy to achieve orderly devaluation of the U.S. dollar, which will help boost the exportation and narrow the trade deficit. The American government will certainly not sacrifice economic development which is in accordance neither with the core interests of America itself nor with the requirements on the ruling party's administrative achievements. No wonder that the devaluation of the dollar becomes the magic weapon for the American government to improve its international payments.*

*In the process of realizing the devaluation against RMB, on the one hand, the US government affects the supply of dollar through quantitative easing policy, leading to the increase of base money and a proactive devaluation of the dollar. On the other hand, it forces the Chinese government through political means to raise the value of RMB. Just like the requirement of Federal Reserve for the appreciation of Japanese yen through Plaza Accord in 1985, in 2005, faced with the huge $ 15.8 billion trade deficits, the US government put pressure on China through various trade acts and sanctions on the ground that RMB had been undervalued, forcing China to float its exchange rate on July 21st. The effects are obvious. Within eight years, RMB has appreciated by 20% at an unprecedented speed.*

***b. Discussion on the Devaluation of U.S. Dollar and Loss of China's Foreign Reserve***

*Reserve assets, representing the capabilities of a country in terms of external liquidity abroad and monetary exchange rate adjustment at home, are both the "reservoir" and "balancer" to achieve the equilibrium of international payments. Generally speaking, there two approaches to analyze the impacts of the devaluation of the dollar on the foreign reserve of our country: one is to determine its book value from the perspective of accounting; the other is to determine its real purchasing power from the perspective of economics.*

***(1) Accounting Approach***

*This approach is based on accounting theories. It calculates the actual exchange loss based on the book value of reserve assets in the domestic currency. In the middle of May, 2011, according to the "Answers to Frequently Asked Questions about Foreign Reserve" edited by the State Administration of Foreign Exchange, the exchange rate changes of RMB against the U.S. dollar will directly result in changes to the book value of foreign reserve when converted to RMB. This change of value is not real loss, and does not affect the real purchasing power of the foreign exchange reserve. The exchange changes can be seen only when it is converted back to RMB. In this regard, the formula to examine the gains and losses of foreign exchange reserve is:*

*Real Exchange Loss=Foreign Exchange Assets Converted Back into RMB × (the Exchange Rate of RMB against USD on Exercise Date – Exchange Rate of RMB against USD on Contract Signing Date)*

*This theory has its emphasis on the loss of book value of the foreign exchange. It separates foreign exchange reserve from the domestic currency system and determines the gains and losses of assets based on actual exchange operations. Regardless of the appreciation or depreciation of the dollar, there will be no real change in foreign exchange assets unless there are actual exchange operations.*

***(2) Economics Approach***

*This approach starts from the economic theories. It derives from the purchasing power parity theory, and determines the actual change of foreign exchange reserve by the change of the real purchasing power of the dollar. Since the birth of Bid Mac Index, more and more economists are turning to the real purchasing power of a currency to determine the change of exchange rate. According to the theory, the price level has influences on the exchange rate and in turn, the exchange rate also has influences on the price level. That is to say, the real purchasing power of the dollar can have substantial impacts on the reserve assets. Based on the link between the change of real purchasing power of the dollar and the life cycle of the foreign exchange reserve, the change of foreign exchange reserve can be shown through the following two equations:*

*Decline of the Real Purchasing Power of USD=1-1/(1+ International Commodity Price Index Bought in USD×Corresponding Weight + American Domestic Consumption Price Index×Corresponding Weight)*
*Loss of USD Reserve Assets = Total Value of Foreign Exchange Reserve×Proportion of USD Assets×Decline of the Real Purchasing Power of USD*

*This approach reflects the characteristics and rules of changes in the life cycle of reserve assets, and reveals the main driver for the loss of USD reserves – the decline of the real purchasing power of the dollar. However, speaking of the actual operability of the theory, the Big Mac Index alone cannot accurately reflect the true evaluation of purchasing power. There are still quite complex technical problems in practice.*

***c. Impacts of USD Devaluation of on the Chinese Economy***

***(1) Impacts on Foreign Trade***

*Relying on its international reserve currency status, America has injected large sums of U.S. dollars into the international market for great profits in international trade and acquired the reserve assets of monetary authorities in other countries with low interest rates. Essentially it is to snatch away the benefits of world economic development and taking other countries' export commodities by overprinting U.S. dollars. For example, suppose China exports 100 tires (worth $10000) to the United States, if the value of the U.S. dollar depreciates by 10%, China will earn only 90% of the real purchasing power and America can get a free tire. This is a plain exploitation of China's real economy. In addition, in more cases, the devaluation of the dollar directly influences the relative prices of commodities in the Sino-US trade, leading to the rise of American exports and decline of Chinese exports, which further exacerbates the situation of China's foreign trade.*

***(2) Impacts on China's Domestic Prices***

*Under the present sovereign credit currency system dominated by the US dollar, the inflationary pressure on the domestic market brought about by the reflux of overseas money capital is diverted externally with the export of capital by the U.S. government. Thus the economic bubbles caused by overprints of U.S. dollars spread to other countries, bringing a new wave of global inflation and huge threats to developing countries with high economic developing speed and frequent international trade transactions. With the quick emergence of Chinese economy, the over expansion of investment in fixed assets in recent years has given rise to heavy demand for raw materials. However, the devaluation of U.S. dollar has forced the rise of prices of raw materials in the international market, leading to the imported inflation brought about by primary commodities and raw materials.*

***B. Risks Faced by China's International Reserve under USD Hegemony***

*The USD hegemony shows the asymmetric rules in the international market unilaterally controlled by the U.S. capital market on the financial front. The hegemony is manifested internally as the complex and cumbersome interference with the domestic capital, externally as the intervention in the economic and financial affairs of other countries relying on its international status and financial prowess. The Chinese government has implemented various reforms in the foreign exchange policies and further opened the financial market to show the image of a responsible power. Under the pressure of declining export competitive edge, China still affirms the continued unilateral appreciation of RMB. Nevertheless, the U.S.*

*government has been accusing China of manipulating the exchange rate. And it is very irresponsible and turns a blind eye to the shrink of international reserves of other countries subject to the quantitative easing policy. Instead, the United States puts the blame on China and has been putting pressure on RMB for further appreciation, which raises the expectation for the appreciation of RMB in the foreign exchange market, leading to greater risks in China's financial market and intensified impacts on the domestic real economy by short-term venture capitals.*

*The international reserve holdings should have been directed at foreign investment for further increase of values while maintaining international liquidity. However, as the largest creditor of the United States, China's foreign reserve in the form of the U.S. dollar has been greatly restricted. China's economic scale might be comparable to that of the United States. But in terms of financial market operations, the United States can be said to have an absolute advantage, which is shown not only in its developed and prosperous financial market, but also in its great strength demonstrated in fighting against the financial crises time and again. The United States is quite familiar with the financial derivatives, and has extensive experience in speculation in financial derivatives market, which can be proved forcefully by the incident that incurred huge losses to China Ocean Aviation when it was attacked by international speculators in Singapore futures market.*

*Domestically, the US government enters the financial market with its huge dollar reserve, restricts China's investment in the real economy in America by invoking national security. Reserve assets are loaned out in low interest rates, neither satisfying the domestic needs of loans, nor obtaining stable economic returns. Under the joint influences of opportunity cost and impairment risks, the economic efficiency of the reserve assets is further lowered.*

## CHINA'S STRATEGIC DEPLOYMENT FOR CAPITAL SECURITY

*Given the global status of the U.S. dollar, it is not possible for China to commit itself to large-scale reduction of the dollars holdings in its foreign reserve. To protect the foreign exchange assets, we must make strategic deployment from three aspects: to reduce our reliance on the dollar in the international market, to promote the process of RMB internationalization, and to effectively manage the international reserve assets.*

### A. Actively Push forward Reform of the International Monetary System

*If Chinese foreign exchange is to be more secure, it must search for a more independent, reliable non-sovereign credit currency that is not influenced by the monetary policies of other countries. This fundamental change is only possible by reforming the current international monetary system. According to "Reflections on the Reforms of International Monetary System" by Zhou Xiaochuan (2009), given the endogenous defect and systematic risk of the current international monetary system, we should make active efforts to adjust the current special drawing right (SDR) currency basket, promote SDR reform, and establish super-sovereign credit currency so as to finally change the current situation of international reserves.*

### B. Gradually Open Up the Financial Market

*To maintain the security of international reserves, we cannot just put our hopes on the reforms from other countries or organizations. We must take the initiative. The root reason for the Chinese economy to be hijacked by the United States is the irreplaceability of the international status of the United States.*

*Therefore, if the Chinese government is to protect its domestic capital, it should, first of all, make the risks manageable and gradually open up the financial market. It should also take the chance of liberalizing capital market to strengthen the image of a responsible China and encourage other countries to have confidence in RMB. Meanwhile, China should learn from the failure of Japan at the end of the 1980s when it was undergoing similar economic development to that of present China, and take cautious reactions against the financial intervention of the United States. During the gradual opening up process, there also should be well-organized expansion of external trade and investment to realize the penetration of RMB into the global market.*

### C. Achieve Effective Management of Foreign Exchange Reserve

*We should first achieve effective management of foreign reserve exchange in the short term to reach the goal of capital security. We should perfect relevant laws and establish a unified system of reserve management. We should change the structure of foreign exchange reserve, expand the investment scope of reserve assets, and increase the investment in the foreign real economy, especially in the emerging economies, so as to enhance the risk control ability for the assets. If the reserve assets are to be truly safe, liquid, and profitable, we cannot just focus on the foreign national debts. We should take advantage of our strong foreign exchange reserve to help the Chinese enterprises enter the international market. Thus our reserve assets will not only be able to gain profits at abroad, but also can provide adequate foreign exchange credit to the domestic enterprises, which will increase both the efficiency of resource allocation and economic welfare of the whole society.*

**ACKNOWLEDGMENTS**

*We would like to thanks to Sun Honghong for giving us this opportunity to attend ICOAS and to Wen Bin, Chen Haitao and Zhou Meng for their valuable suggestions. We would like to extend thanks to our brother Li Gaozhe for keeping the birds for our research. We would like to dedicate this dissertation to our parents, Li Chongyou and Li Junying, to thanks to their blessings and emotional support during this whole time. Finally, we are indebted to our aunt Li Xinying and uncle Huang Changming for without them this research would not have been possible.*

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ACTA Technica CORVINIENSIS
BULLETIN OF ENGINEERING
ISSN:2067-3809