

# Chinese Balance of Payment: Disequilibrium and the Influences\*

Xuezhen Kang, Chengwen Kang

22 Bingham Circuit, Kaleen, ACT, Australia 2617

3-102, 138-7 Tongda Street, Daoli District, Harbin, Heilongjiang Province, China.

kchxz1506@163.com

kchw415@126.com

**Keywords:** China; balance of payments; current account; capital and financial account; twin surplus.

**Abstract.** After 21<sup>st</sup> century, the continuous disequilibrium of Chinese balance of payments (BOP) has become a significant issue faced by Chinese macro-economic development. As can be revealed by the research, Chinese BOP was relatively stable and balanced from 1982 to 1993; from 1994 to 2011, it remained continuous “twin surplus” situation; since 2012, Chinese BOP has got rid of “twin surplus” condition. In recent years, BOP disequilibrium has imposed various negative influences on Chinese economic development including trade frictions, CNY depreciation pressure resulting from continuous large reserve asset surplus, severe capital flights, etc. Chinese government shall continue encouraging domestic enterprises to invest overseas and reinforcing foreign economic and trade cooperation, and meanwhile it is expected to strengthen its monitoring on trade, to strengthen curbing capital flights and to improve Chinese economic and financial regime further, so that Chinese BOP can get prone to equilibrium, and therefore Chinese national economy can be guaranteed to develop stably and sustainably.

## 1 Introduction

Since 21<sup>st</sup> century, Chinese balance of payment (BOP) has continuously been maintaining imbalanced. Up till the third quarter of 2016, Chinese BOP met a balance of -US\$130.8 billion, with the reserve asset meeting a balance of US\$294.11 billion, and Chinese BOP disequilibrium has been a crucial issue that is faced by Chinese macro-economic development. Continuous BOP disequilibrium of a certain country is likely to lead to unfavorable issues including appreciation or depreciation pressure of domestic currency, the shortage or surplus of foreign exchange reserves, trade frictions, etc., which then may affect sustainable development of its national economy. Under the circumstance of imbalanced global economy development, it has a vital theoretical and realistic guiding significance to know about how to adjust relevant policies, to improve the current BOP situation and to balance the BOP in order to sustainably develop Chinese economy.

On the fundament of the relationship between BOP and macro-economic equilibrium, this paper is going to analyze the periodical characteristics of Chinese BOP development with the utilization of statistical data, to examine the specialization of Chinese BOP development in accordance to Samuelson’s the Life Cycle of the Balance of Payments theory and to discuss the influences on Chinese national economy development.

## 2 Balance of Payments and Macro-Economy Balance Theory

A country’s balance of payments (BOP) refers to a systematic statement that records all economic transactions between that country and the rest of the world during a certain period, which is a comprehensive reflection of economic condition of that country’s external association. The relationship between BOP and macro-economic balance under the condition of open economy is indivisible. Under the condition of open economy:

$$\begin{aligned}
 Y &= C + I + G + (X - M + \text{NRFIRW}) \\
 &= C + I + G + \text{CA}.
 \end{aligned} \tag{1}$$

In the equation (1), Y represents gross national product (GNP), C represents consumption expenditures, I represents investment expenditures, G represents government expenditures on goods and services, X represents exports of goods and services, M represents imports of goods and services, CA represents current account balance, and NRFIRW refers to net receipts of factor income from the rest of the world. From the angle of total supply:

$$Y = C + S_p + T. \tag{2}$$

In the equation (2),  $S_p$  represents private savings, and T represents net taxes. When a country's BOP reaches equilibrium, there must be:

$$C + I + G + \text{CA} = C + S_p. \tag{3}$$

$$S_p + (T - G) - I = \text{CA}. \tag{4}$$

Let S represent the total domestic savings, then equation (4) will be:

$$S - I = \text{CA}. \tag{5}$$

According to equation (5), when there exists deficit in a country's current account ( $\text{CA} < 0$ ), the country's domestic investment value exceeds its value of total savings that supports its investing activities, the shortage of savings is satisfied by imports of goods and services (trade deficit), leading to domestic capital and foreign debts. Conversely, when surplus occurs in a country's current account ( $\text{CA} > 0$ ), the country's domestic savings is able to support domestic investments with additional surplus, which increases its foreign assets or reduces foreign debts in forms of capital outflows by net exports of goods and services (trade surplus)<sup>[1]</sup>.

As ruled by <Balance of Payments and International Investment Position Manual> (BPM 6) issued by International Monetary Foundation, BOP is constituted by current account (CA), capital and financial account (KA) and errors and omissions (E), the sum of which three accounts equals zero<sup>[2]</sup>, and the equation is:

$$\text{CA} + \text{KA} + \text{E} = 0. \tag{6}$$

In equation (6), KA contains the account of reserve assets (RA), and in order to facilitate analysis, RA is separated independently from KA<sup>1</sup>, then equation (6) will be:

$$\text{CA} + \text{KA} + \text{RA} + \text{E} = 0. \tag{7}$$

According to equation (7), when BOP reaches equilibrium with  $\text{RA} = 0$ ,  $\text{E} = 0$ :

$$\text{CA} + \text{KA} = 0. \tag{8}$$

$$\text{CA} = -\text{KA}.$$

However, BOP in reality tends to seldom reach equilibrium, as can be revealed by equation (7), when  $\text{RA} = 0$  or  $\text{E} = 0$ :

$$\text{CA} + \text{KA} = -\text{E}; \text{ or}$$

$$\text{CA} + \text{KA} = -\text{RA}$$

In realistic BOP situation, if surplus balance occurs in both current account and capital and financial account (i.e.  $\text{CA} > 0$ ,  $\text{KA} > 0$ ), this phenomenon is called "twin surplus"; if deficit balance occurs in both current account and capital and financial account (i.e.  $\text{CA} < 0$ ,  $\text{KA} < 0$ ), this phenomenon is called "twin deficit".

The Samuelson's Life Cycle of the Balance of Payments theory believes that the BOP developments of industrial countries often have similar life cycles, which can be divided into four

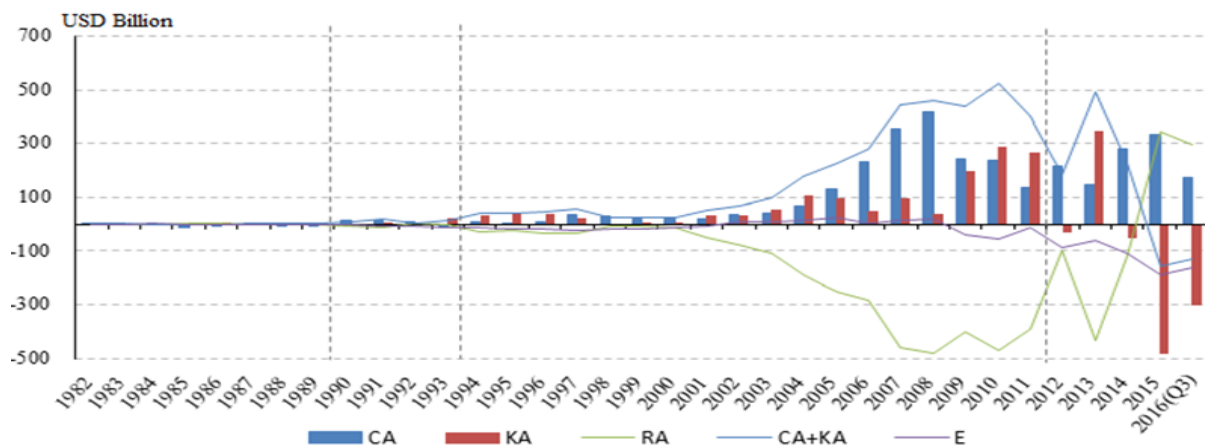
<sup>1</sup> While the official statistical data of KA includes RA, almost all of the current Chinese journal articles analyze KA and RA separately.

phases: the first phase is young and growing debtor nation, during which a country is in a laggard economic situation, with current account deficit ( $CA < 0$ ) and capital and financial account surplus ( $KA > 0$ ) due to large amounts of imports, foreign loans and foreign investment imported; the second phase is mature debtor nation, during which the country gets primarily developed, with current account surplus ( $CA > 0$ ) and capital and financial account deficit ( $KA < 0$ ) due to imports greater than exports, the decrement of foreign loans and investments or the increment of the outbound loans and investments, yet the country is still a debtor nation because the debts owed to other countries and accumulated in previous years have not paid in full, albeit a relatively large quantity of foreign exchanges earned through exports during this phase; the third phase is new creditor nation, during which both export surplus and the country's foreign investment keep ascending, so that its current account maintains surplus ( $CA > 0$ ) and capital and financial account maintains deficit ( $KA < 0$ ); the fourth phase is mature creditor nation, during which the country's enterprises and economic structure are transforming and upgrading, with imports greater than exports resulting from that contaminating manufacturing industries are banned, and high-new-tech industries and industries manufacturing high-end device and high-end precision instruments are developed meanwhile, so that both current account and capital and financial account maintain relatively low deficit<sup>[3]</sup>.

### 3 Chinese Balance of Payments Development and Characteristics

Fig. 1 illustrates Chinese BOP development from 1982 to the third quarter of 2016. Chinese BOP development can be divided into four phases. The period between 1982 and 1989 is defined as the first phase. During this period, at the early “reform and opening-up” stage from 1982 to 1984, China began to develop foreign trade gradually and to allow foreign investments to be brought in, but the general scales of foreign trade and foreign capitals were relatively small, so that the current account and the capital and financial account maintained low surplus and low deficit respectively ( $CA > 0$ ,  $KA < 0$ ). From 1985 to 1989, due to the relatively laggard economic foundation, national economic development was at primary stage, and large amounts of funds and resources were needed to develop the domestic economy. During this period, foreign goods and services trading pattern was largely bringing in foreign goods and capital as well as exporting services, and the balance of current account was dominated by that of foreign trade. Except temporary low surplus of current account in 1987, current account generally maintained deficit between 1985 and 1989 ( $CA < 0$ ). In the meantime, Chinese inbound foreign investments and debts in forms of debentures and loans kept increasing, which led to the deficit of capital and financial account ( $KA < 0$ ). Generally, during the first phase, despite temporary “double surplus” in 1987, Chinese BOP accorded with the first phase of the Samuelson's Life Cycle of the Balance of Payments ( $CA < 0$ ,  $KA > 0$ ) i.e. young and growing debtor nation.

**Figure 1 Chinese Balance of Payments from 1982 to the Third Quarter of 2016**



Data source: State Foreign Exchange Administration of the People's Republic of China.

The period from 1990 to 1993 is defined as the second phase, during which China was at the stage

of economic adjustment and transforming from (partially) opening up to all-round opening up, when foreign trade activities got progressively active, and the goods net export, especially industrial product net export, kept increasing year by year, and the current account maintained large surplus broadly except the large deficit in 1993. Capital and financial account fluctuated during the same period, of which the direct investment item had its balance increasing year by year, which means that there occurred continuous foreign investment inflows; the balance of portfolio investment item was in general relatively stable despite slight fluctuations, of which the debt instrument liabilities and the foreign loan liabilities kept increasing and decreasing year by year individually; the balance of the item of other investments fluctuated obviously and generally maintained deficit. In 1990 and 1992, the current account and capital and financial account revealed large surplus ( $CA > 0$ ) and deficit ( $KA < 0$ ) respectively, so BOP generally revealed basic characteristics of mature debtor nation.

The period from 1994 to 2011 is defined as the third phase when “double surplus” phenomenon occurred. In 1994, Chinese government carried out the foreign exchange administration system reform that achieved the unification of official and market exchange rate of CNY with CNY official exchange rate dropping by 50% sharply and long sustaining around CNY 8.7/USD thereafter<sup>[4]</sup>, which attracted more foreign investments than previous years. Accordingly, the surplus of the capital and financial account rose sharply and transcended that of the current account. In December, 1996, China accepted the Article VIII of <Agreement of International Monetary Foundation> and became “Article VIII Member”<sup>2</sup>, realizing current account convertibility of CNY and lowering foreign trade barriers. Stimulated by a series of reforms in areas of finance and taxation, finance, foreign trade and investment, etc., Chinese BOP maintained “double surplus” continuously, so that China became “official creditor nation” and stepped into the new creditor nation phase in advance<sup>[5]</sup>. From 1994 to 2000, except current account surplus ( $CA > 0$ ) and capital and financial account deficit ( $KA < 0$ ) in 1998 affected by Asian financial crisis, both Chinese current account balance and capital and financial account balance maintained surplus ( $CA > 0$ ,  $KA > 0$ ) with the former value higher than the latter value.

From 2001 to 2011, Chinese BOP “twin surplus” condition of current account and capital and financial account got seriously further deepening. After China joined World Trade Organization (WTO) in 2001, because foreign trades got more exoteric and trading scales escalated further with lower trading barriers, the surplus of Chinese current account and capital and financial account revealed saltant increments, together with reserve asset accumulating meanwhile, and the “twin surplus” kept deepening. In 2008, current account balance peaked at US\$ 402.6 billion, while the capital and financial account balance amounted to US\$ 40.2 billion. During this period, the major characteristics are summarized to be: capital account began to show non-zero balance; with capital account surplus balance ascending, the errors and omissions item showed surplus in general, which means that apart from large foreign enterprise investments, individual foreigners also made investments in China; Chinese foreign trading pattern was “exporting goods and importing services” instead of “importing goods and exporting services” during the young and growing debtor nation phase.

The period from 2012 till now is defined as the fourth phase. Under the direction of “Going Global” and “Attracting Foreign Investments” policy and “the Belt and Road” strategy, Chinese current account balance keeps the tendency of upward developing, but the capital and financial account balance broadly maintains deficit that tends to keep growing, and “twin surplus” condition has been broken. After 2012, with capital account surplus decreasing, the surplus of direct investments, portfolio investments and other investments declining and financial derivative investments emerging during the same period, capital and financial account has shown deficit. From the perspective of reserve assets, because of particular decrement of foreign exchange reserves, reserve asset deficit has also been descending, and surplus has even existed in this account. These facts illustrate that when foreign trades keep expanding, China has transformed from importing and utilizing foreign investments into aggressively investing overseas, leading to large surplus of current account ( $CA > 0$ )

<sup>2</sup> As ruled by IMF, if a country achieves current account convertibility of its currency, its currency will be classified as convertible currency. Because the terms of convertibility occur intensively in <Agreement of International Monetary Foundation> Article VIII, those countries with currency convertibility are also referred to as “Article VIII Member”.

and large deficit of capital and financial account ( $KA < 0$ ). Chinese BOP is still at the phase of new creditor nation.

## **4 Influences of Chinese Balance of Payments Imbalances**

**4.1 Trade Frictions of Enormous Exports** For a long period, relying on the comparative advantage of labor-intensive industry, China has been aggressively developing manufacturing industry as well as processing trade and exporting industrial products in abundance with relatively lower producing costs and trading prices<sup>3</sup>. The Chinese foreign trade escalation, on the one hand, contributes to the long-period imbalanced trading situation where Chinese current account has maintained huge surplus balance in comparison with huge deficit balance of current account of major trading partners including US, Britain, Australia, etc. This, on another, impacts the market and economy of western countries that import Chinese commodities abundantly. Consequently, China frequently encounters anti-dumping investigations from US-led WTO members. Also, although China has been a WTO member for over 16 years, various developed countries such as US and Japan have declared in succession that Chinese market economy status is not admitted, adding additional barriers for Chinese foreign trade.

**4.2 Excessive FDI Preempting Domestic Market Resources** As “Attracting Foreign Investments” strategy being implemented, foreign investments in China increase year by year, and China has become the greatest developing country utilizing FDI. During the “twin surplus” period from 1994 to 2011, FDI brought in was basically dominated by export-oriented FDI in processing trade industry. As Chinese economy developing, Chinese inbound FDI has diversified, and “market-seeking FDI” with the goal of seeking for and exploiting markets have also increased. Market-seeking FDI has the goal of seeking for consuming markets of products and market potentials instead of exports. Once its productivity forms, the majority of profits are remitted out with tiny portion of the profits “flowing back” to the investments in China, which creates decrement of foreign exchange reserves, so market-seeking FDI lacks the capability to earn foreign exchanges. If FDI of this kind<sup>4</sup> was accumulated excessively, not only Chinese domestic market resources could be preempted, but Chinese trading pattern would also be probably affected indirectly, and there even exist high risks that China may face debt crisis<sup>[7]</sup>.

**4.3 Depreciation Pressure on CNY** After 2015, Chinese BOP is still imbalanced seriously with huge deficit balance although it has been out of “twin surplus” condition.<sup>5</sup> Chinese BOP had a balance of –US\$154.7 billion in 2015 and –US\$130.8 billion by the end of September, 2016. There exist various factors causing reserve asset account surplus. From the perspective of foreign investments, Chinese enterprises in recent years have been frequently investing overseas increasing foreign exchange outputs and escalated the demand for foreign exchanges. Moreover, CNY becoming SDR in 2016 also creates CNY depreciation pressure. If reserve asset account maintains long-term surplus, the lack of foreign exchange reserve will reduce the capability of fulfilling obligations on foreign loans and interfering foreign exchange market and then affect Chinese foreign financial strength, which reduces the CNY credit and the national credit<sup>[8]</sup>.

### **4.4 Increasingly Serious Capital Flights**

Theoretically, if a country’s BOP reaches equilibrium, errors and omissions shall be zero ( $E=0$ ). However, in reality, the item of errors and omissions generally maintains non-zero balance because of limitations of financial regime, illegal activities of investing individuals and/or enterprises, etc. A surplus balance implies undervalued BOP, and a deficit balance may reveal capital flights caused by actions like fund smuggling apart from overvalued BOP. Errors and omissions have been maintaining increasingly huge deficit in recent years. This implies increasingly serious capital flight phenomenon

<sup>3</sup> In 2015, the industrial product export took up 95.43% of total export.

<sup>4</sup> Yu and Tan (2006) classified Chinese FDI as three types: “tech-oriented FDI”, “export-oriented FDI” and “market-seeking FDI”, and they reckoned that after “tech-oriented FDI” forming its productivity, investments tend to gradually decrease or maintain only at a certain level of profit reinvestment. Despite the current account surplus at early stage due to strong export competitiveness, it is elusive to make a theoretical judgment about whether this current account surplus can last for a long term. Therefore, this is not discussed in this paper.

<sup>5</sup> The majority of journal articles analyze the influences that huge Chinese reserve asset deficit has on Chinese economic development during “twin surplus” period. As can be revealed by the latest data, the reserve asset account has revealed huge surplus, and a new situation has formed.



and also exposes blind spots existing in current Chinese financial and economic regime. Therefore, Chinese government shall improve the BOP reporting mechanism, strengthen the supervision on trade and curb fraud, evasion and illegal transactions of foreign exchanges.

## 5 Conclusion

In accordance to realistic Chinese BOP development, on the fundament of theories regarding BOP and macro-economic equilibrium, this paper analyzes the characteristics, causes and influences of imbalanced Chinese BOP. China started to record BOP in 1982. Observed from the perspective of the Samuelson's Life Cycle of the Balance of Payments theory, the characteristic of Chinese BOP are: from 1982 to 1989, Chinese BOP was at the stage of young and growing debtor nation; from 1990 to 1993, Chinese BOP revealed short-term characteristics of mature debtor nation phase; from 1994 to 2011, except 1998, "twin surplus" phenomenon occurred in Chinese BOP; since 2012, Chinese BOP has stepped out of the "twin surplus" condition but still at the new creditor nation stage. Nonetheless, Chinese BOP is still seriously imbalanced with huge deficit.

Although Chinese foreign trade development has got greatly promoted, long-period current account surplus brings inevitable trading frictions and then influences further expansion of Chinese foreign trade negatively. Besides, within continuous influx of large quantities of foreign investments, there still exist FDI without capability of earning foreign exchanges like market-seeking FDI. In addition, the increasing reserve asset surplus resulting from increasingly huge surplus of BOP has created CNY depreciation pressure. The deficit of errors and omissions has also maintained an upward tendency, implying blind spots existing in Chinese financial and economic regime.

In the long term, with "reform and opening up" deepening, the trading and investing interactions and cooperation between China and other countries will be increasingly frequent. China will still maintain the status of major export nation of industrial goods. When it keeps bringing in foreign investments, Chinese enterprises, especially Chinese private enterprises, will be motivated to invest overseas further. Thus, current account and capital and financial account will still have huge surplus and deficit individually. In order to reduce the surplus of reserve assets, Chinese government shall properly broaden imports from overseas and increase foreign exchange reserves and meanwhile strengthen the supervision on trade, curb capital flights as well as other illegal financial actions and improve economic and financial regime further, so that Chinese BOP can be prone to equilibrium and the domestic national economy can be guaranteed to develop stably and sustainably.

## Acknowledgement

This paper is supported by the National Social Science Fund General Project (16BJL039) and the Social Science Fund General Project of Heilongjiang Province (15GJD03).

## References

- [1] W. Jiao, *Research on the Disequilibrium of China's Balance of Payments*, edited by China's Finance Publishing House, Beijing, 2013.
- [2] International Monetary Foundation, *Balance of Payments and International Investment Position Manual (BPM 6)*, edited by International Monetary Foundation, 2009.
- [3] P.A. Samuelson and W.D. Nordhaus, *Economics*, edited by Posts & Telecom Press, Beijing, 2011.
- [4] N Xu, *Regression and Identity*, edited by China's Finance Publishing House, Beijing, 2011.
- [5] L. Yang, The Premature Structure of China's International Balance of Payments, *World Economy*, Vol. 11, pp. 11-18, 2002.
- [6] F. Lu, Twin Surplus in China: Reflections on China's One Trillion Dollar Foreign Exchange Reserves, *World Economy*, Vol. 11, pp. 3-10, 2006.

- [7] Y. Yu and D. Tan, Chinese Double Surplus: Characteristics, Origins and Resolutions, *World Economy*, Vol. 3, pp. 31-41, 2006.
- [8] X. Peng, *Principle of Finance*, Gezhi Press, Beijing, 2013.