

The Relationship and Trend of Current Account and Budget Deficit: a Case Study of China

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ABSTRACT. This article introduces the concept and development of the twin deficit hypothesis. There are three explanations to the twin deficit hypothesis, which are the traditional Keynesian Model, the Mundell-Fleming Model, and the Ricardian Equivalence Theorem. Studies on budget deficits and current account deficits have not yet reached a unified conclusion, but they all provide new ideas and reference significance for the research of this hypothesis. In the context of global current account imbalances, using China as an example, we collected data of China's current account from 2007 to the present. We analyzed the development trend of China's budget deficit and current account deficit over some time. From an internal perspective, analyze the root causes of China's current account deficit decline. Preliminary research results show that the change in the surplus of commodity accounts, savings-investment gap reduction, and significant changes in the real effective exchange rate are the reasons why China's current account deficit has fallen. At this stage, the Chinese government should be alert to the potential risks behind the evolution of the current account, continue to deepen economic structural reform, prevent and resolve domestic financial risks, and minimize the adverse impact of the current account reversal on the Chinese Economy.

KEYWORDS: Twin deficit hypothesis, Current account, Budget deficit

1. Introduction

The global economic slowdown and the intensification of trade frictions in some regions have brought the double deficit hypothesis back to people's perspective. The double deficit hypothesis means that the fiscal deficit (or budget deficit) and the current account deficit co-occur. After the currency crisis in 2008, most of the countries witnessed both budget deficits and financial crises. Two well-known theories discuss the relationship between current account deficits and budget deficits. The first theory is based on the traditional Keynesian method, which assumes that the current account deficit is positively related to the budget deficit. This means that

an increase in the budget deficit will result in a current account deficit, while a budget surplus will cause a reduction in the current account deficit. Another base of the twin deficit hypothesis is the Mundell-Fleming model; it believes that an increase in the budget deficit will also lead to an increase in interest rates and exchange rates. Rising interest rates make foreign investors more attractive to invest in the domestic market. This increased demand, resulting in currency appreciation, which in turn lead to lower import prices and higher export prices. In contrast, the Ricardian Equivalence Hypothesis is different from the Keynesian method. It points out that there is no connection between the budget and the current account deficit. Taking the case of China's current account decline from 2007 to present, this article analyzes the relevance of the budget and current account. Because of the change in the surplus of commodity accounts, savings-investment gap reduction, and high real effective exchange rate, China's current account declined to a surplus of 40.5 USD bn in Dec 2019. From the decline of China's current account, policymakers may find some new ideas.

2. The Development of the Twin Deficit Hypothesis

The chairman of the U.S. National Bureau of Economic Research, Martin Feldstein, in the 1980s, proposed the twin deficits hypothesis, which means that budget deficits and current account deficits co-occur. Budget deficits will lead to higher interest rates, foreign investment inflows, and appreciation of the currency, resulting in a trade deficit. According to the hypothesis of twin deficits, there are three explanations.

In the 1960s, the Mundell-Fleming Model proposed that in the context of free capital flows, expansionary fiscal policies have turned mainly into current account deficits. This is because an increase in a country's budget deficit will lead to the country's rising interest rate, which will then cause the inflow of foreign investment, and exchange rate rise and the final current account deficit (Shastri, 2019).

Before the Mundell-Fleming Model, the traditional Keynesian Model emphasized the squeeze effect of expansionary fiscal policies on domestic investment, which in turn led to a current account deficit. According to the traditional Keynesian method, increasing the fiscal deficit means an increasing demand, which will lead to a higher amount of imports and a negative impact on current accounts (Banday & Aneja).

In the late 1970s, whether traditional expansionary fiscal policies caused current account surpluses or current account deficits was doubted, which lead to the Ricardian Equivalence theorem. The Ricardian equivalence theorem states that the increase in private savings reduces the economic impact of budget deficits. The impact of the increasing fiscal deficit on the current account will be offset (Bird et al., 2019). Even though the Roosevelt reform that occurred in the United States proved that the theory had no practical value, it opened up new research ideas.

3. The Trend of the Current Account and Budget Deficit

After the financial crisis in 2008, China's current account surplus has dropped significantly (Banday & Aneja). This can be attributed to a series of efficient and effective economic rebalancing adopted by China. Before 2012, China's current account and non-reserve financial accounts have maintained a pattern of surpluses for many years, and this pattern was broken this year. Although part of the reason for the sharp decline in 2018 was cyclical, the trend over the past decade has been mostly structural.

The reason is that, first of all, the continuous expansion of service scope, the increase in the service trade deficit. China's total value of imported services is higher than the full amount of exported services. The second is the decline in the commodity trade surplus. The trade surplus with the United States and the European Union decreased; the deficits with Japan, South Korea and Taiwan Province of China decreased. As China's economic growth model shifts from export to consumption, China is moving towards a broadly balanced trend, with a small surplus or even a small deficit, which may have a profound impact on China and the rest of the world. The friction between China's trade with the United States and the global economic slowdown may have an uncertain impact on China's current account surplus again in the future. Once the account surplus disappears, China's economic composition may be under significant downward pressure. In the long run, this may also lead to increased volatility of domestic assets. The monetary policy of the People's Bank of China will also be affected.

4. The Association of the Current Account and Budget Deficit

For countries with frequent account imbalances, whether fiscal adjustment can help solve external imbalances is an essential issue in macroeconomic research. The twin deficits hypothesis theory states that budget deficits and current account deficits, but this hypothesis has caused much controversy. Studies on budget deficits and current account deficits have not yet had a unified conclusion. At the same time, a majority of scholars suggest that the budget deficit is linearly related to the current account deficit. Keynesians believe that the budget deficit will lead to an increase in the price level or the residents' actual income, which will increase the demand and quantity of imported products, accompanied by a decline in the demand and quantity of exported products. The empirical results obtained by Vamvoukas (1999) and many other scholars through measurement methods support Keynesian views.

However, there is another opinion, Ricardo's equivalence theorem, it states that budgetary policies have little effect on the Economy, and the expansion of the budget deficit will not impact on the current account. Residents foresee that the present value of future tax increases is consistent with the current government fiscal deficit. That future personal income and permanent income will decrease, so labor supply rises, and private consumption declines. Expansionary fiscal policies have no significant impact on consumption. So, there is no significant correlation; this is what be known as the Ricardo equivalent effect.

Ricardo's equivalent determination has undoubtedly had a considerable impact

on Keynesian theory, and many scholars have also researched it. In recent years, some scholars have used nonlinear estimation methods to prove that the state of government debt has a distorting effect on the effects of fiscal policies on the original macroeconomic mechanism. The empirical analysis of Nickel and Vansteenkiste (2008) suggests that the state of government debt distorts the influence of the budget deficit on the current account through the consumption path. The change in personal savings comes from many factors, and the budget deficit is only one of the reasons for its change. Because the amount of personal savings, investment, budget deficit, and current account affects each other, the connection between current accounts and budget deficits cannot be explained simply. However, previous studies by scholars can provide a reference value for thinking about the main framework for changes in current projects.

5. The Reasons for the Patterns

The current account is composed of three categories: trade balance, labor costs, fund transfers (unilateral transfers). The reduction of China's current account deficit can be attributed to the following reasons:

From the aspect of the balance of payments (BOP), commodity items and service items dominate the adjustment of China's current account size. This article believes that the change in the surplus of commodity accounts is caused by the interaction between import and export, while imports mainly dominate the change in service accounts. These factors have led to a trend of further adjustments in China's current account. The merchandise trade surplus has been a crucial reason for China's current account surplus. In March 2020, China's trade balance surplus was the U.S. \$ 19.9 billion, compared with a deficit of U.S. \$ 7.1 billion in the previous month. From January 1981 to March 2020, the average value was \$ 2.1 billion. The data reached a record high of USD 63.3 billion in January 2016 and reached a record low of USD 31.5 billion in February 2012 (Figure 1). Also, the adjustment of China's current account is reflected in the dynamic changes of major trading partners. In the last ten years, China's trade dependence with the United States and ASEAN has become closer and closer, and the growth rate of imports to the United States has increased. Quickly, the relative size of the trade surplus with the E.U. has declined, and trade with Japan has declined overall. The proportion of imports and exports between China and trading partners has become more and more fragmented, correcting the pre-crisis situation of over-concentration of trade with troubled countries. These changes have explained, to some extent, the improvement of China's current account surplus.



Fig.1 Trade Balance of China

They are analyzing from an industry perspective. Based on the International Trade Standard Classification (SITC), foreign trade goods can be categorized into two majors: primary products and industrially manufactured goods. From a broad perspective, the primary trade-in products have been in a deficit state, while industrially manufactured goods have maintained a trade surplus. Among them, the elasticity of the import scale of primary products is more excellent, and the elasticity of the export scale is smaller. The fluctuation of the deficit mainly comes from imports. As far as the service industry is concerned, compared with the adjustment of the service export structure, the change in the service import structure is more dramatic, mainly manifested by the significant increase in the scale of the import of travel services and the rapid increase in the proportion. Zhang and Tan (2015) argue that the increase in the scale of the import of the travel services in Chinese might expand the service trade deficit and result in a reduction in the current account surplus. China's outbound travel has led to a rising proportion of the U.S. service trade deficit, offsetting the high surplus in merchandise trade, and helping China address the total trade surplus.

They are analyzing from the perspective of saving-investment and real effective exchange rate (REER). Savings-investment gap reduction and real active exchange rate appreciation drive the restructuring of China's current account internally and externally. The difficulty of getting enough healthcare services, affordable price of the house, and financial services has contributed China's saving-investment gap to narrow (Yalta & Sivrikaya, 2018). In March 2020, China's real effective exchange rate was 149.5 and 149.9 in February. The rising of the RMB's REER has weakened the international competitiveness of China's merchandise exports and stimulated enterprises to import cheaper goods overseas, which has created massive resistance to the continued expansion of China's merchandise trade surplus; on the other hand, the export of services trade has stalled Under the condition that service trade innovation is unsustainable, higher REER has reduced the cost of Chinese residents' overseas travel consumption, overdrawn the national purchasing power of overseas, and to a certain extent promoted the expansion of the service trade deficit.



Fig.2 Real Effective Exchange Rate of China

6. Conclusion

The study proves that there is a linear relationship between the budget deficit and the current account deficit. In China, the decline in the current account deficit validates the impact of lowering the surplus of commodity accounts, savings-investment gap, and increasing the prices in REER on current account imbalances. In order to achieve China's balance of payments, the adverse effect of the current account deficit on the Chinese Economy should be minimized.

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