

Analysis on the Reasons for the Balance of Payments Between China and America from the Perspective of "Elastic Pessimism"

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ABSTRACT

In recent years, the balance of payments of America has maintained a continuous deficit, and on the contrary, China's surplus of international payments has been expanding. In order to explore the reasons for the formation of the balance of payments between the two countries, this paper analyzes the actual situation in China and America from the perspective of Elastic Pessimism, based on the Marshall-Lerner Condition. The research can be concluded as that the actual trade export volume and trade scale of America with high-tech industrial products have been suppressed, resulting in low demand elasticity for exported goods. At the same time, since most of the goods consumed by Americans in advance are essential goods from China, the depreciation of the dollar relative to the renminbi has not reduced demand, but has increased the trade deficit. For China, its abundant resources and cheap and high-quality products allow it to occupy an active position in the world trade market.

Keywords: Elastic Pessimism, J-curve theory, Marshall-Lerner Condition, Balance of payments.

1. INTRODUCTION

The balance of payments between China and America is expanding. As two major countries in the world, it reflects two typical national economic situations to a certain extent. This paper explores the reasons for the formation of the balance of payments between China and America from the perspective of Elastic Pessimism. Through the analysis of the two countries, it can help America realize some problems to a certain extent and give international investors some understanding at the same time.

1.1 Elastic Analysis Theory

Elastic theory originates from Robinson. He joined the local equilibrium on the basis of microeconomics analysis, so as to build the theory of elastic analysis, which is used to study the fluctuations and changes of certain elements of international trade (usually commodity prices) when exchange rates fluctuate. Finally, it is implemented in the two aspects of supply and demand in the market economy analysis, and the

conditions for achieving equilibrium are studied. From this process, the adjustment method for the surplus or deficit in international trade can be obtained. In fact, like other relevant theories, the Elastic theory is inevitably applied on the premise that price changes have a transient and thorough influence on the supply side, which is called the complete price elasticity of supply. At the same time, it is assumed that the price of product is constant. Under these two basic supposes, whether the demand elasticity of commodity trade serves the corresponding conditions directly determines whether the trade balance between the two countries can be significantly affected by currency exchange rate fluctuations [1].

Lerner in America and Marshall in the United Kingdom provided the theory of the relationship between the fluctuation of a country's currency exchange rate and the fluctuation of trade volume in their studies and works, which is called Marshall-Lerner Condition. Specifically, the theory states that if a country's balance of payments needs to be ameliorated, it must serve certain elasticity conditions, that is, the positive influence of exchange rate fluctuations (depreciation) on the

trade balance can be achieved only when the sum of the elasticity of demand for export commodities and the elasticity of demand for import commodities is larger than 1 [2]. In reality, the theory also includes more assumptions, such as employment levels. According to the elasticity theory, if a nation has sufficient employment, it will have no surplus resources to manufacture export commodities and keep its external supply sufficiently elastic. Correspondingly, if it is not, there is a possibility of further discussion. In this context, the degree of demand elasticity determines the possible impact of currency exchange rate fluctuations.

J-curve theory proposes that exchange rate fluctuations bring a certain time delay to the changes of trade balance, also known as the delay effect. The theory behind this impact is as follows: when a country's exchange rate alters (in terms of currency depreciation), a country's trade situation does not immediately ameliorate as expected. Considering the influence of production and consumption process, business habits, delayed response to changes and other factors, the export volume of products did not change significantly, the corresponding import did not fluctuate, and the quantity and currency exchange rate remained basically stable before the change. However, as time goes by, the impact of currency depreciation begins to appear. The income of product export decreases while the amount of product import increases, which leads to the beginning of reversal. At this moment, a country begins to have trade deficit of a specific product, or the surplus advantage is gradually shrinking. Therefore, in the beginning of a specific period of currency exchange rate depreciation, the trade balance will proceed to deteriorate in a specific period of time, while the export of products decreases, while the import of products increases. In the same way, as time continues, because the product price, adjustment of supply and demand, and started to reverse, the original export revenue to reduce is a shortcoming to China, but at the same time the price of product is reduced, the other side of the product demand increased, resulted in the product of one country exports began to recover, export products in disguised forms has the price competitive advantage. Similarly, the original high price of imported products was digested by the demand market of a country, and the need for imported products began to lessen, and the import volume began to narrow. When this happens, the balance of trade of a country is reversed again. After the

unfavorable deficit has been balanced, the trade surplus begins to appear and continues to grow [3]. The existence of this pattern varies from country to country, ranging from months to years. It also should be noted that the Marshall-Lerner condition is a prerequisite for the existence of this effect.

1.2 Elastic Pessimism

According to the Marshall-Lerner Condition, whether currency depreciation can ameliorate a country's trade depends on the elasticity of supply and need of imported and exported goods. The specific meaning of this condition is that when a country depreciates its currency, if the demand price elasticity of imports is bigger than 0 and that of exports is larger than 1, the country's trade situation will be ameliorated. In any case, not only the trade situation will not be improved, but the domestic economy will also be seriously deteriorated. In other words, only when the sum of the price elasticity of need for exports and the price elasticity of demand for imports is bigger than one can a country's trade position improve, as elasticity pessimism suggests.

2. THE BALANCE OF PAYMENTS BETWEEN CHINA AND AMERICA

Balance of payment represents a situation in which a country's foreign economic situation and its changing international position on a global scale occur. The reason is that each auditor appearing in a recurrent item has a corresponding author in the capital item and vice versa. If a country exports an item (current account transaction), it effectively imports foreign capital when it pays for that item (capital account transaction). If a country cannot fund its imports through capital output, it must do so by depleting its reserves. This situation is often referred to as the balance of balance deficit, using a narrow definition that excludes capital accounts for central bank reserves. In reality, however, the generalized balance of balance must add up to the definition of zero. In practice, statistical differences occur because of the difficulty in accurately counting each transaction between one economy and the rest of the world, including the difference due to foreign currency conversion. In principle, the state's balance of balance should either be no surplus or a deficit, and a state of balance for the balance of balance should be achieved. However, the balance of payments of America tends to show a positive deficit, and China's balance of payments also shows a surplus all year round. Therefore, the

following will introduce the balance of payments of America and China.

2.1 U.S. Balance of Payments

The history of the United States balance of balances can be divided into five stages: Stage 1: the United States is a young debt nation (1770-1870) - the inability to produce many exported goods because of the need to import most of the current account deficit in the United States. The United States has a capital account surplus due to substantial foreign investment in the highway, agricultural, cattle farm, railway, and canal sectors of the United States. Stage 2: the United States is a well-established debt nation (1870-1920) - the current account remains disadvantaged because investment in stage 1 returns large investment returns to foreign investors. Commodity accounts are surplus export > import. Stage 3: the United States is a young nation of claims (1920-1945) - with massive CISS in current accounts as a result of massive exports after the war (WWI) - Capital accounts are now in deficit because of the considerable US investment in postwar reconstruction in Europe. Stage 4: the United States is a well-established nation of claims (1945-1980) with frequent projects experiencing commodity adversities and exports < imports, but with anterograde investment returns and an overall slight net disadvantage - The deficit in capital accounts was mainly due to the post-war (WWII) reconstructions in Europe and Japan. Stage 5: (1980-present) there is a large and growing deficit in the good account with a slight surplus in the return on investment account. Capital accounts are largely surplus, in part to remedy the aforementioned commodity deficit (foreign individuals and banks borrowing money from us individuals), in addition, the United States has been a good place for investment relative to the rest of the world because of its low inflation since 1982 and continuous economic growth [4]. However, the current influx of capital investment may eventually lead to substantial investment return payments in the future.

2.2 China's Balance of Payments

China's current account surplus in 2020 is approximately US\$332 billion. Calculated on the basis of the rolling sum of the fourth quarter, this will be the highest level since 2015. China's surplus will reach the highest level since the global financial crisis in the first half of 2021, which

mainly reflects the shrinking of the service deficit (for example, tourism) and the sharp expansion of the goods surplus (for example, foreign demand and trading conditions). The acceleration of portfolio debt inflows in 2020 is particularly noticeable, with approximately US\$170 billion in foreign capital inflows into RMB-denominated bonds in China [5]. This acceleration of foreign bond inflows is the first time, and its scale and sustained speed provide meaningful support for China's overall balance of payments. Attractive yields, stable currencies and uncorrelated returns should continue to make Chinese bonds attractive to foreign investors who desire yields.

Since 1994, with the exception of 2007 and 2008, initial operating income has been in large deficits. From 2013 to 2018, China's secondary investment income experienced a short-term deficit, and the average income experienced a long-term surplus before 2013, indicating that China has become the country with the most foreign capital in net asset transfer payments since 2013.

Judging from the analysis of the surplus in the foreign trade import items of main imported goods in 2019, an important issue is that the surplus rate in the trade of imported goods has shown a trend of sharp decline in 2019. In recent years, due to the current weak growth in global trade external demand and the joint efforts of domestic foreign trade and other emerging industries to promote the transformation and structural upgrading, the average annual growth rate of China's total import trade of goods is gradually increasing, and the export of goods has a surplus. The rapid growth momentum has also been significantly slowed down. From 2015 to 2019, the export surplus in goods trade dropped rapidly from the highest annual average of nearly 600 billion US dollars to more than 400 billion US dollars, reducing the total export volume by more than a quarter, and the dependence on foreign trade also dropped rapidly from 35.88%. By reaching 31.85%, the situation in which the rapid development of the domestic market economy relies on foreign economies has been greatly improved. The supply of domestic demand instead of external demand has gradually become a growth agent that promotes the sustained and rapid growth of China's domestic economy in 2019 [6]. The second is the long-term deficit of investment income. Since China's international foreign exchange reserves have always held a large market share in foreign trade assets so far, and most of China's foreign exchange reserves are mainly invested in foreign assets with high security but low

long-term yields, such as US long-term Treasury bonds. However, the rate of return of foreign funds on the debt side to invest in China has always been relatively high, leading to a passive long-term deficit in the return of Chinese investment. Fourth, the scale of mobile cross-border payments in bank current accounts has increased significantly. In 2019, cross-border RMB net income was as high as 6 trillion yuan, an increase of 18% year-on-year [7]. The most important point is that Chinese companies that use cross-border RMB to directly make foreign exchange payments to companies can obtain higher profits, so as to reduce the purchase of foreign exchange by enterprises, save the cost of using RMB for exchange, and make it more convenient and faster for enterprises to pay for foreign investment.

2.3 RMB Exchange Rate Situation

After China's accession to the WTO, its economy has grown rapidly and its international status has become more and more important. China's competitiveness has become stronger and stronger, although no one will ignore the impact of economic globalization on developed countries led by America. Especially American manufacturing hollowing out, rust belt to form, which is now trump the government to rethink the reasons of American trade policy, not only for China, and Mexico and Canada and the European Union have reached a new trade agreement, since China's WTO accession, the US Treasury officials have repeatedly said the yuan is undervalued, both finance officials have repeatedly to discuss currency issues. In July 2005, China decided to open up further to the world, including further reforms to the exchange rate system, making the RMB exchange rate system more international as well as marketised, in order to better reach the international community and to better deliver on WTO commitments. Based on the national and international circumstances at that time, the central decision was made to establish a "market regulation based, regulated, floating exchange rate system with reference to a basket currency". The RMB exchange rate during the ten-year period 1994-2014 was very smooth, with little fluctuation and fluctuation, and China achieved a steady year to year appreciation after the exchange rate system reform in 2005. In recent years, the RMB exchange rate has again started to fall and broke rapidly from 6.3 to 6.9 once after the United States added a 10%

tariff on a huge amount of goods in China due to the effects of the US-China trade war, but this event belongs to a special economic event, whether or not it resulted from government policy, We all exclude the changes in RMB exchange rates since the opening of the 2018 China trade war. By the second quarter of 2015, the Yuan had appreciated by 35% since the exchange rate regime was reformed in 2005. Under the trump administration, the US government implemented tax cuts to stimulate the economy. The Federal Reserve raised interest rates four times to prevent the economy from overheating, and the RMB steadily depreciated. However, President Trump soon criticized the Fed for doing wrong, and the Fed announced that it would not raise interest rates again in 2019 under the pressure of President Trump.

2.4 The Exchange Rate of RMB Against US Dollar

From 2000 to 2020, the Yuan against the US dollar as shown in "Figure 1", by the graph, it can be noted that the first five years of the 21st century, the Yuan against the US dollar has been in relatively high slight fluctuations, after the central bank introduced a new exchange rate system in 2005, the Yuan against the US dollar began to enter the stage of accelerated decline, compared with the previous year fell percentage increase year by year, It reached a peak of 9.5% in 2008. After 2008, the exchange rate of Yuan against US dollar was still in a downward trend, but the rate of decline was no longer increasing, which in a state of fluctuation. Until 2012, the exchange rate of Yuan against the US dollar increased for the first time. After that, the exchange rate of Yuan against the US dollar depreciated for five consecutive years, namely from 15 to 19 years. The depreciation rate in 16 and 19 years was 6.65% and 4.25% respectively. The trend of depreciation in the past five years is obvious [8].

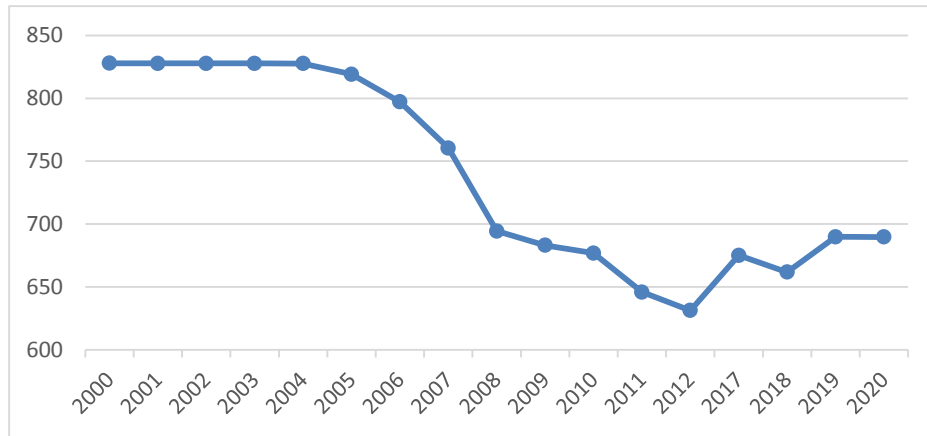


Figure 1 The exchange rate of the RMB to the dollar over the years.

3. ANALYSIS OF THE BALANCE OF PAYMENTS BETWEEN CHINA AND AMERICA FROM THE PERSPECTIVE OF "ELASTIC PESSIMISM"

The Marshall-Lerner condition states that only when the sum of the demand elasticity of a country's exports and the price elasticity of its imports is greater than 1, currency depreciation can also bring improvement to the national economy and foreign trade. In the early economic studies, there was "elasticity pessimism". Scholars generally believed that many emerging regions and developed countries were very tight in the supply of domestic import and export commodities and lacked economic flexibility at all, so even currency devaluation could not balance the trade balance.

For America, the depreciation of the U.S. dollar against the renminbi has also failed to reverse the increasing U.S. balance of payments deficit. Explore the reasons for this. First, the U.S. exports to overseas countries are mainly technology-intensive industrial products and high-tech industrial products. Among them, the U.S. government often has stricter restrictions on the international exports of high-tech industrial products exported by America. This directly makes the actual trade export volume and trade scale of U.S. high-tech industrial products exported to a certain extent restrained, leading to a certain degree of export Demand elasticity is not high. Second, Americans tend to have strong daily life and commodity consumption demands. They even tend to consume commodities in advance. A large number of them come from China. Most of these commodities are necessities, and demand elasticity

is not high. The decrease in demand has instead increased the trade deficit.

For China, first of all, due to China's abundant cheap and high-quality labor and mineral resources, as well as various policy-related economic preferential policies of the Chinese government, it has reduced the daily economic operating costs and social burdens of a large number of private enterprises in China, making China's main exports of similar products at present The selling price of the products in the global international trade market is lower than that of other developed countries, and the products are more competitive in the international market.

4. CONCLUSION

This paper analyzes the reasons for the balance of payments between China and America from the perspective of "Elastic Pessimism Theory". First, it gives a brief introduction to the theory of elasticity analysis, and then introduces the relevant content of the balance of payments between China and America and the exchange rate of RMB. Finally, from the perspective of "Elastic Pessimism", this paper explains why the US balance of payments is still in deficit when the US dollar depreciates relative to RMB. The conclusion is that the demand elasticity of export goods is not high, and the demand elasticity of import goods is not high, which belongs to the condition proposed by "elasticity pessimism theory", so the balance of payments deficit of America continues to increase. The trade imbalance problem between China and the U.S. should be from the perspective of trade structure analysis, only consider the exchange rate, by trying to reduce its currency exchange rate to achieve the balance of payments is not realistic,

besides its currency devaluation may cause some of the other economic problems, so their trade structure should be paid great attention to the problem, in this way can America fundamentally ease the balance of payments deficit.

AUTHORS' CONTRIBUTIONS

This paper is independently completed by Qi Zhang.

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