

# Analysis of Current Situation of CNY

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## ABSTRACT

From 2018 to 2021, the CNY fluctuates constantly under the combined effect of a series of internal and external factors, but there is no entry-level summary paper in the literature market that makes the change process and results more concise and clear. This article provides a statistical description to the CNY in recent years and other economic indicators of China, such as import and export sales, balance of international payment, structure of export product, USDCNY exchange rate, inflation rate, CPI and GDP. In this paper, current statements of events in recent years are summarized and its impact to CNY is analyzed, such as China's monetary policy, additional tariffs imposed by the United States, the Federal Reserve's QE policy, and a series of changes brought about by the epidemic. The last part is to discuss the influence of factors which will influence the future trend of CNY such as the Fed's interest rate hike and the transformation of China's mainland industrial structure.

**Keywords:** *China's balance of payments, CNY exchange rate, CPI, monetary policy, Federal Reserve, epidemic*

## 1. INTRODUCTION

In order to make the conclusions more scientific and rigorous, firstly, we start with the collection of data of CNY on the current status. The main aspects are: recent sale account, changes of structure of export product, changes in exchange rates of CNY in recent years, China's inflation rate, GDP in recent years of China, and other information. Through official data sources and search engine retrieval, collect accurate data of CNY as comprehensively as possible. Considering the difficulty of collection and the time effectiveness of data, the time range for collecting information is initially set to be between 2012 and 2021, with emphasis on the analysis of the significant changes in CNY between 2020 and 2021.

## 2. RECENT IMPORT AND EXPORT SITUATION

### 2.1. Recent sales of CNY

Analyzing the import and export sales of money could be used to evaluate the performance of currency. According to a report provided by the BIS (Bank for International Settlements), the RMB is the eighth-most traded currency in the world and the largest traded currency in emerging market economies. Figure 1 and figure2 are the import and export data of CNY between 2012 and 2020.

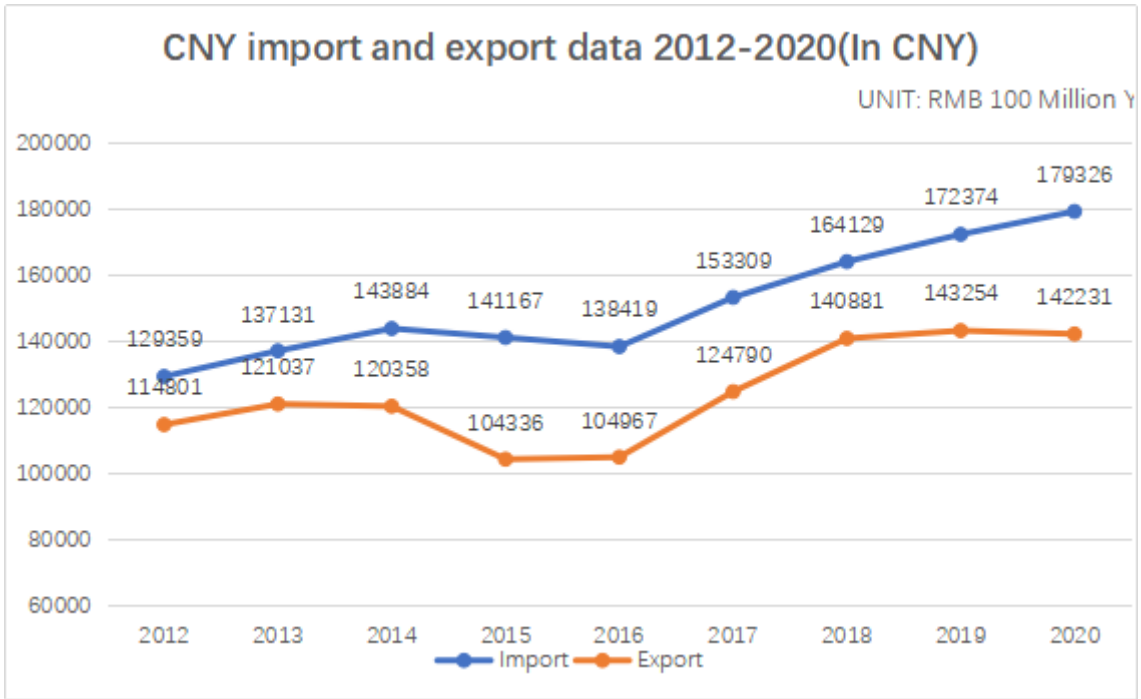


Figure 1. CNY import and export data 2012-2020 (In:CNY)

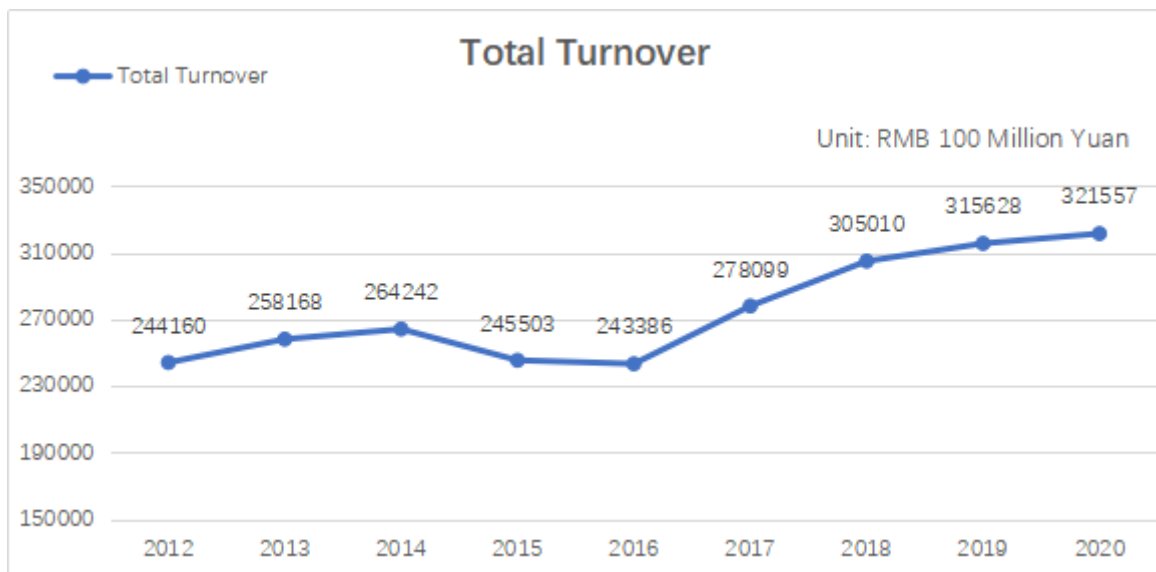


Figure 2. Total Turnover 2012-2020

According to the data of total imports and exports from 2012 to 2020 provided by the General Administration of Customs of the People’s Republic of China, the total imports and exports showed an upward trend in 2012 and 2014, decreased slightly from 2014 to 2015, remained basically flat from 2015 to 2016, and then began to rise sharply. In 2020, China’s total import and export volume reached 32155.7 billion Yuan, an increase of 1.88% compared with 2019, reaching a new high, while its net export reached 3709.5 billion Yuan.

## 2.2. CHINA’S BOP

The balance of payments is a comprehensive reflection of a country's foreign economic activities, which has a direct impact on the change of the exchange rate of past currencies.

With regards of China’s balance of payments, according to the information provided by the State Administration of Foreign Exchange, favorable balance of current account, in 2018, was 188.2 billion yuan, of which Balancing or Settlement Account was 605.3 billion yuan. It is the lowest value in recent years, in 2020, favorable balance of current account was 1,870.9 billion yuan, and the capital and financial account

deficit is -726.6 billion yuan. Table 1 is China's balance of payments statement for 2012 and 2020.

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020
Current account	13,602	9,190	14,516	18,266	12,638	12,685	1,882	7,116	18,709
Capital and Financial account	-8,107	-5,331	-10,394	-5,653	1,951	1,212	9,901	1,800	-7,266

In the first quarter of 2021, the favorable balance of current account was 450.3 billion yuan, and the capital and financial account has a deficit of -450.7 billion yuan, maintaining the pattern of one trade-off in 2020, and the overall balance of payments is in deficit.

### 2.3. Structural change of export product

According to a Bloomberg report on August 3, 2021, Harvard University's Growth Lab highly evaluated China's export trade. Research shows that China ranks 16th in the world, based on the complexity of countries' exports in 2019 (the advancement and complexity of export products), which was up 3 places from the ranking in 2018.

According to the data of the National Export Key Commodity Value Table (RMB value) in December 2020 provided by the General Administration of Customs of the People's Republic of China, in 2020, mechanical and electrical products accounted for the highest proportion of exports with a total export

value of 10660.77 billion yuan; In terms of product structure changes, compared with the export product structure in 2019, the export products that have risen the most are medical equipment and textile yarns, fabrics and products. The proportion of medical equipment has increased by 41.5%. Textile yarns, fabrics and products The proportion of the value increased by 30.4%. At the same time, the total export volume of refined oil products, which fell the most, fell by 33.1% compared with last year.

### 3. EXCHANGE RATE CHANGE (VS USD)

Exchange rate movements is related to the depreciation and appreciation of currency. USD is the world's common currency. In order to make a more intuitive judgment on the value change of CNY, USD--which has the most global flow and is the most representative, is selected as the object. Figure 3 is obtained by counting the annual average exchange rate of USD to CNY from 2012 to 2020, provided by China Foreign Exchange system.

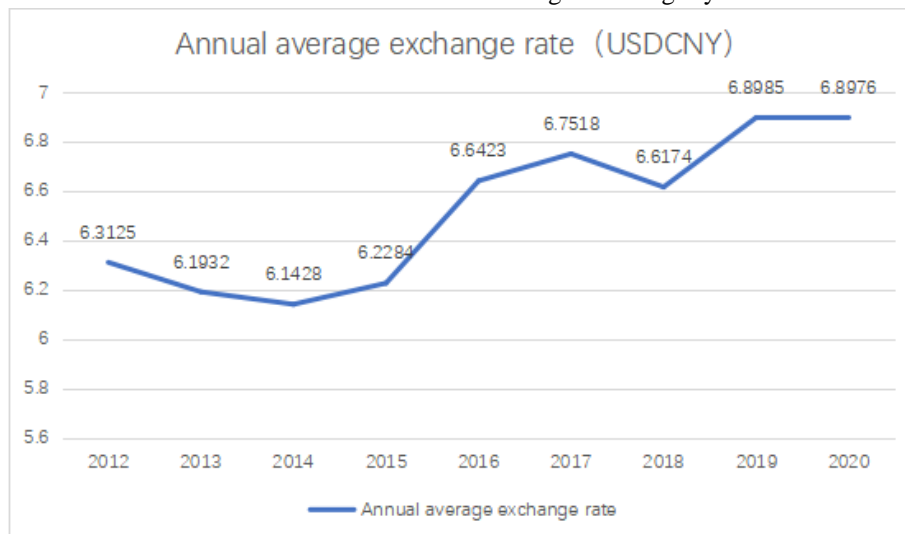


Figure 3. Annual average exchange rate 2012-2020 (USDCNY)

According to the analysis of Figure 3, the average annual exchange rate of the US dollar against the RMB decreased in 2012 and 2014, gradually recovered after 2014, fell significantly in 2018, and then rose and

stabilized at about 6.8. The average annual exchange rate has a small overall change range, maintaining between 6.1 and 6.9, showing an overall upward trend.



Figure 4. Exchange rate 2020.3-2021.9

According to Figure 4, in the second half of 2020, the exchange rate of the US dollar against the RMB began to decline sharply and the RMB appreciated rapidly. As of 1 September 2021, the current exchange rate was 6.4600

#### 4. INFLATION RATE

The inflation rate also reflects the rate of change of prices, the degree of inflation and currency devaluation. A rise in inflation means a decline in the purchasing power of money and is a long-term factor which will affect exchange rate movements. Therefore, analyzing

inflation rate is also an important part of analyzing currency.

In practice, however, the degree of inflation is difficult to calculate directly, so it is generally expressed indirectly by the growth rate of the price Index. Consumer Price Index, hereinafter referred to as CPI, is a Price Index that reflects the change of the price level of consumer goods and services purchased by a household in general, and comprehensively reflects the demand of commodity circulation for money. Therefore, CPI can most comprehensively and fully reflect the price index of inflation rate. At present, most countries in the world use CPI to reflect the degree of inflation.



Figure 5. CPI



Figure 6. The CPI growth rate

Figure 5 and figure 6 are the rise-fall ratio of CPI and CPI, and the data source is the National Bureau of Statistics of China. As shown in the figure, from 2012 to the end of 2019, the growth rate of CPI was stable. At the beginning of 2020, CPI rose sharply and reached its peak in recent years, and began to decline gradually after the second half of 2020. In the first half of 2021, it recovered again.

5. GDP IN RECENT YEARS

The rise of GDP symbolizes the development of the national economy and the increase of NI, and it also means the strengthening of residents' consumption capacity as well. As a result, banks will raise interest rates and tighten the money supply. Good economic performance and rising interest rates will increase the

attractiveness of a country's currency. Therefore, GDP is also one of the important links in the analysis of money. China's GDP has been maintaining a high growth rate, but in the first half of 2020, due to the serious impact of the epidemic, the growth rate of GDP dropped sharply or even showed negative growth. In late March, the local epidemic was blocked and enterprises began to resume work in an orderly manner. Subsequently, the GDP growth rate rose sharply, from negative to positive, and gradually stabilized at the previous rate. China's GDP grew by 2.3% in 2020, the lowest since China released quarterly GDP data in 1992, but it is the only major economy that is growing in the world, according to China's National Bureau of Statistics.

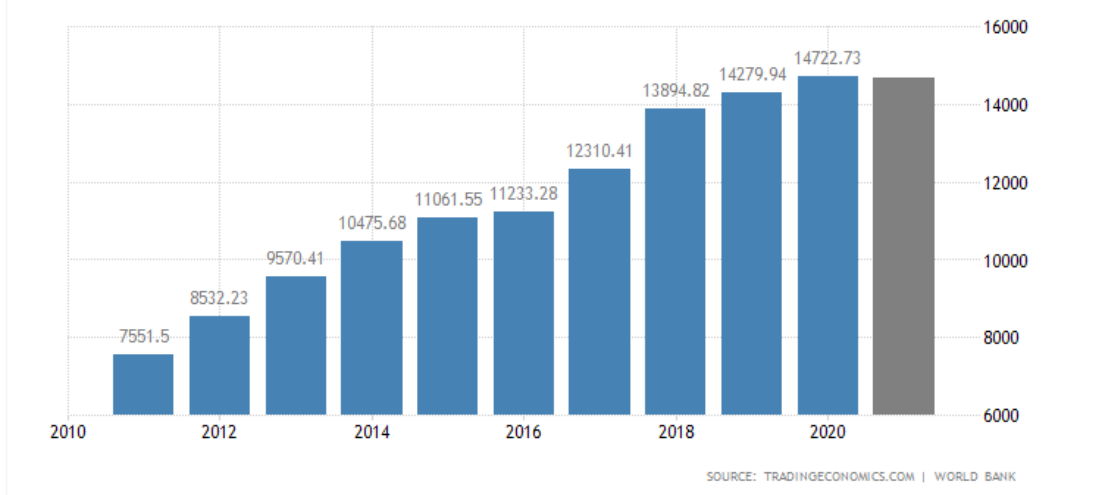
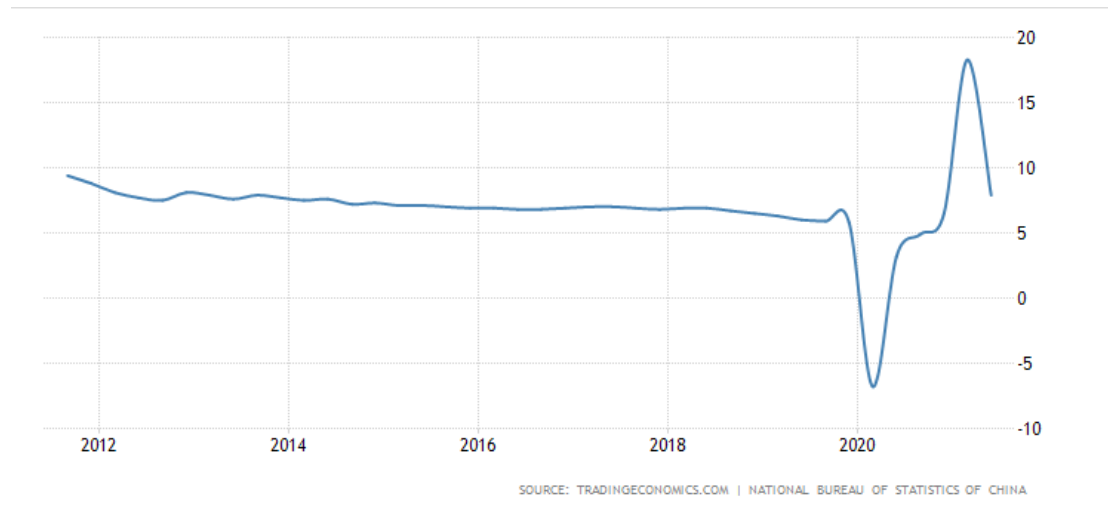


Figure 7. GDP (Unit: USD 1 Billion)



**Figure 8.** Annual GDP growth rate (Unit: %)

## 6. INFLUENCING FACTORS

Using PESTEL method, starting with political, economic, social culture, technology, environment, legal and other elements, focusing on the period from 2018 to 2021 to find and analysis the possible factors affecting CNY.

### 6.1. Political

The PBOC issued regulations in August 2019, linking the LPR that the loan costs which commercial banks gave to the real economy with MLF that capital costs which The PBOC gave to commercial banks. It has been perfect in quotation methods, maturity varieties, participants, and quotation frequency, as well as Introducing competition and penalty mechanisms. According to Wang Zhipeng [1], the new reform of LPR makes the monetary policy change from a quantity-based to a price-based, which had broken away from the rough development model of stimulating economic growth by issuing a large amount of money; the reform of LPR also means that every loan interest rate is closely related to Policy interest rates as well, and monetary policy will have better transmission efficiency.

Since the announcement of the new LPR reform measures, the central bank has lowered the LPR interest rate several times, from 4.25% for one year and 4.85% for more than five years which announced in the first issue on August 2019, changed into 3.85% for one year and 4.65% for more than five years in April 2020, and has maintained this interest rate standard for 17 consecutive months. The reduction of loan interest rate means that the financing cost of enterprises will be reduced, which will help stimulate the loan demand of people and enterprises, promoting economic development.

From 2020 to 2021, the RMB appreciated by nearly 7%, and the exchange rate of the US dollar against the RMB fell significantly. In order to slow down the appreciation rate of RMB, the central bank lowered the Macro Prudential adjustment parameters of cross-border financing of financial institutions. State Foreign Exchange Administration and the People’s Bank of China, on December 11,2020, issued a notice announcing the policy of lowering the macro-Prudential adjustment parameters of financial institutions' cross-financing. From the original 1.25 to 1. The downward adjustment has reduced the rate of foreign currency leverage of financial institutions, adjusted the foreign currency asset-liability structure of financial institutions, and reduced the amount of foreign debt settlement of financial institutions [5].

At the same time, measures have also been taken to reduce the foreign exchange risk reserve ratio of forward exchange business from 20% to 0, and the "counter-cyclical factor" has faded out of the middle price model. Judging from the results, the USDCNY exchange rate fluctuated smoothly in 2021. A series of measures taken by the central bank have successfully cooled the excessive appreciation rate of the RMB and stabilized the RMB exchange rate.

### 6.2. Economic

#### 6.2.1. US tariff increase

On June 15,2018, the U.S. Government announced that it would impose a 25% import tariff on 50 billion U.S. Dollars of goods originating in China, resulting in the loss of price advantages for Chinese exports to the United States. Foreign trade enterprises were forced to raise prices in order to safeguard their own interests and thus lost their market competitiveness in the United States. The United States is China’s main exporter. The tariff increase has caused a huge impact on China’s

s exports. In 2018, China's balance of payments surplus was 188.2 billion RMB, of which goods and services were 605.3 billion RMB, the lowest in years.

### *6.2.2. Impact of QE policy of Fed*

Under the impact of the 2020 COVID-19 pandemic, U.S. GDP fell 3.2% for the whole year, and it was the first decline since 2009. In order to solve the problems caused by the past economic policies, reduce the impact of a large amount of capital outflow, overcome the difficulties that banking institutions cannot adjust and affect the liquidity transmission of monetary policy, and avoid the financial crisis, the United States has once again adopted quantitative easing monetary policy, such as reducing the personal income tax rate, reducing the corporate income tax rate to 21%, and increasing the exemption amount of inheritance tax. QE monetary policy will mainly have the following effects on China:

The first is the increase of the difficulty of exchange rate adjustment. The United States, as the most important export country to China, whose implementation of QE monetary policy has increased the pressure on the appreciation of the RMB, while severe domestic inflation in China has put the RMB in a situation where it appreciates externally but depreciates internally. At this time, if the exchange rate is over-adjusted, it will inevitably lead to a large amount of speculative capital arbitrage and a sudden change in trade conditions will increase the difficulty of China's exchange rate adjustment [2].

The second is the large inflow of international capital. During the implementation of QE policy in the United States, the federal funds rate of the Fed fell to zero in a row. Zero interest rate signifies the decreases of the exchange rate of the US dollar and the investment value of international capital in the United States. In order to seek a high rate of return, so as to make international capital outflow. As the fastest growing emerging market economy and the excellent prospect of expectation on RMB appreciation, China has led to a large inflow of international capital, account surplus and appreciation of RMB [2].

### *6.3. Social Culture, Technology and Environment*

During the period from 2019 to 2021, the most important influencing factor that cannot be ignored is the impact of the COVID-19 pandemic. The epidemic situation and the implementation of anti-epidemic policies have a direct impact on the development of social Culture and Science and Technology, so these three points are discussed together.

The first is the change of people's living habits. Take diet as an example. Because of the strict isolation

measures implemented in the early days of the epidemic, people took eating at home as the main way of eating, which directly affected the catering industry. According to the "panoramic Development Report based big data of China's catering in the first half of 2020," the overall scale of China's catering industry in the first half of 2020 reached 1460.86 billion Yuan, down 32.8% year on year. The decline in revenue has forced merchants to raise the price of goods and services; at the same time, the epidemic has also affected the links of grain production and transportation and the links of consumption, and the rise in costs has pushed up food prices, which is also the main factor in the rise in prices [3].

In the second half of 2020, as the epidemic situation slowed down, CPI began to decline as well. Compared with the same period last year, CPI falling by 0.5%, of which food prices were the main reason leading to the change in CPI. Food prices fell 2.4% month-on-month, with the recovery in agricultural production and adequate supply of food. In non-food area, the prices of air tickets, Tourism and Hotel Accommodation decreased by 15.6%, 4.4% and 3.4%, respectively, due to the decrease in travel demand in the off-season tourism.

At the same time, the epidemic has also played a certain role in promoting medical technology, such as the research and development of new corona virus vaccine. Technological progress has thus promoted the export of medical equipment. Compared with the export of products in 2019, the structure of medical equipment exports increased by 41.5% in 2020.

The epidemic also has brought changes to China's balance of payments, mainly due to the total supply impact caused by the epidemic, which is mainly reflected in the following aspects: The export of commodities related to the "home economy" grew by 22% year-on-year in 2020; Increase of the demand and technical requirements of productive services, such as transportation services; Demand of the diversification in supply chain of multinational companies caused by the risk of disruption in supply chain. These changes have led to the following changes in China's balance of payments: firstly, the expansion of the import and export surplus; secondly, the narrowing of the service trade deficit; thirdly, the growth of the ratio of the current account surplus to GDP; fourthly, the significant expansion of the direct investment surplus; and fifth, the increase of other investment deficits [6].

## **7. CONCLUSION**

Based on the previous study, the following conclusions are drawn:

(1) China's total import and export sales have increased year by year.

(2) The structure of China's export product is rich, the industrial chain is complete, and the resistance to impact is strong.

(3) On the whole, the exchange rate of the US dollar against the RMB fluctuates and falls, the RMB maintains an appreciation trend, and the purchasing power increases, which is conducive to commodity imports.

(4) The epidemic situation gradually stabilized and the inflation rate was under control.

(5) GDP grew steadily.

The following factors may have an impact on the future trend of CNY:

(1) The Taper of the Federal Reserve is gradual, it is trying to shift to a policy of raising interest rates. Raising interest rates in the U.S. dollar means the return of assets and the appreciation of the U.S. dollar, which will directly affect the increase in the exchange rate of the U.S. dollar against the RMB in the future. In the sixth round of interest rate hiked by the Fed, China's balance of payments has changed from "double surplus" to "one". "Advance and adversity", the deficit of the non-reserve financial account continues to expand, and the RMB gradually depreciates [4].

(2) British FTSE Russell announced on September 25, 2020 that bonds of Chinese government will be included in the FTSE World Bond Index (WGBI) in October 2021, which is expected to bring in inflows of US\$100 billion to US\$120 billion.

(3) China is gradually recovering from the impact of the new crown epidemic. With the development of sustained and stable economic, demand in the production and consumption is gradually being released. The CPI index will keep a moderate increase in 2021 [3].

(4) With the gradual disappearance of population advantage and the transformation and upgrading of domestic industries, foreign low-end manufacturing industries will choose other countries with low tax rate and low labor cost, China's favorable balance of current account in the future balance of payments will be reduced, and it will mainly rely on capital and financial accounts to support.

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