

Ten Years of Response to the Crisis in the USA and PRC

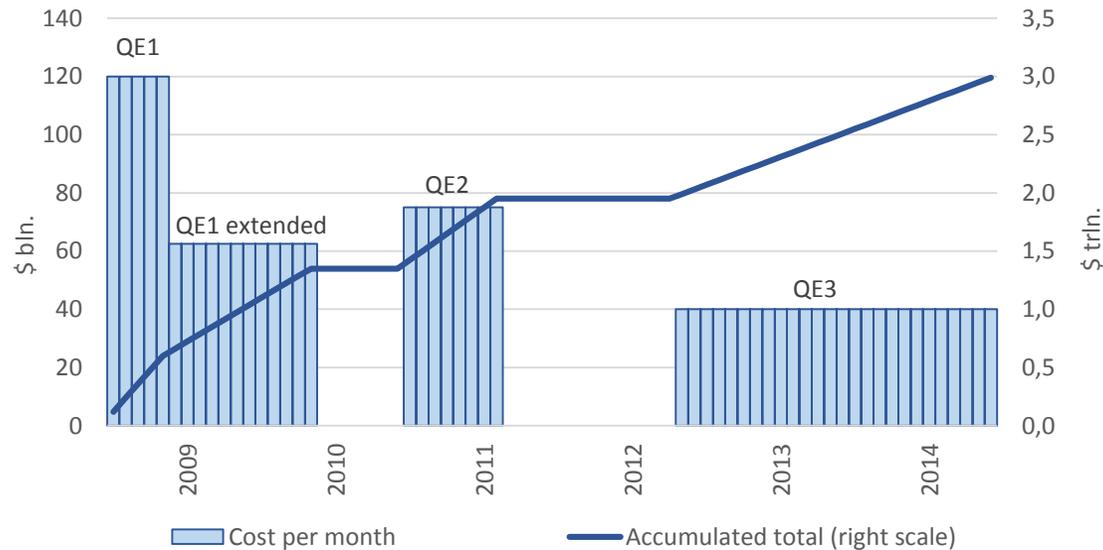
The financial crisis of 2008 had greatly influenced the financial systems of many countries. Many imbalances, accumulated due to the measures to counter the crisis have not been eliminated until now, even a decade after its inception. These imbalances most clearly manifested in the two largest economies of the world - the US and China.

Quantitative Easing in the USA

Like many other Western countries, the United States used the so-called. Non-traditional measures of monetary policy to combat the crisis, in particular the Quantitative Easing (QE) Program. One should resort to non-traditional measures when the key rate reaches its minimum level, and its further reduction entails significant difficulties.

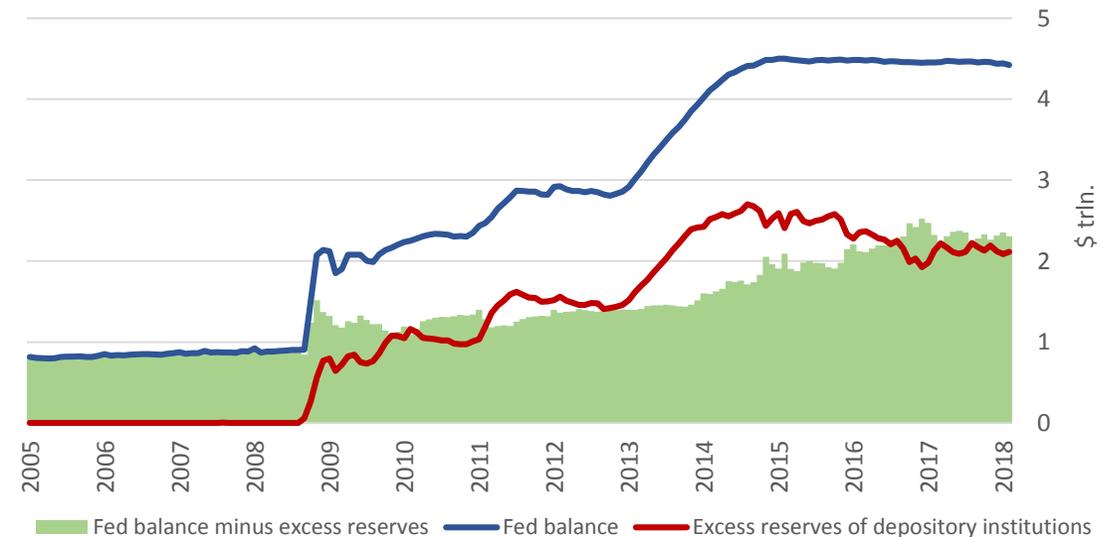
Once started in 2008, almost immediately after the beginning of the acute phase of the financial crisis, the QE in the USA was suspended several times until its end in November, 2014. The QE consisted of five waves (the first wave, the first extended wave, the second wave, "Operation Twist", and the third wave). "Operation Twist" consisted in the purchase of long-term securities by the Federal Reserve System and simultaneous sale of short-term securities for the same amounts, for this reason, it had a little impact on the money supply.

Quantitative Easing Program in the USA



Source: Federal Reserve System

Fed balance, excess reserves of depository institutions and difference between them



Source: Federal Reserve System

The six-year QE Program cost the Fed about \$3 trillion. However, not all the emitted funds got into the real economy. The excess bank reserves increased strongly (actually, from the zero level), having absorbed the bulk of the emission. The banks did not see any attractive targets for crediting, and a Federal Reserve System rate (IOER) was assessed on the excess bank reserves. Correspondingly, all the QE programs had injected approximately \$1,5 trillion in the economy, moreover, less than \$500 billion got into the economy during the post-crisis years.

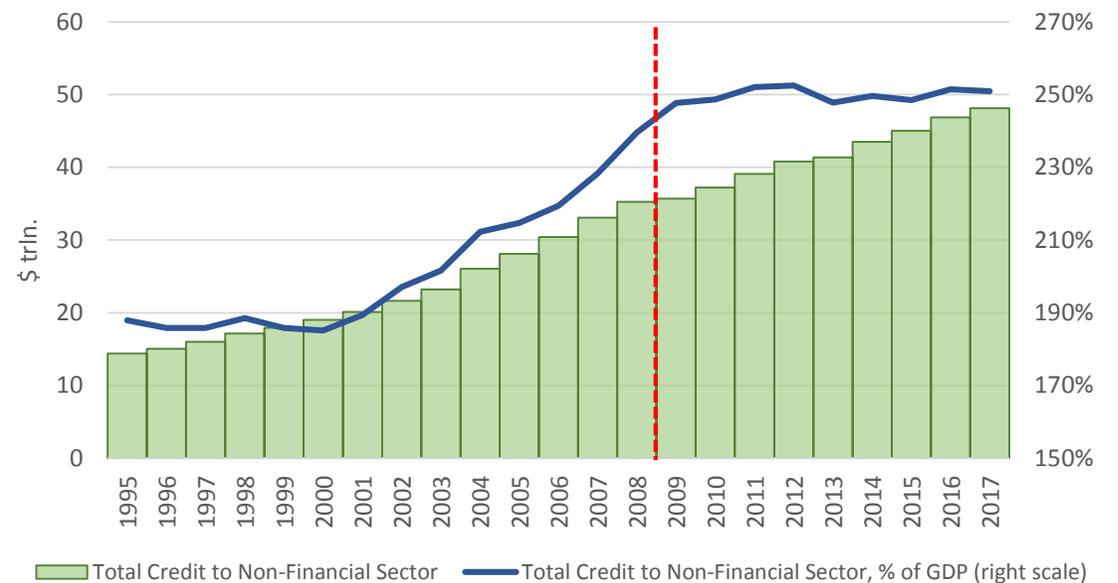
But even not all of these funds got into the real sector of economy. Once the monetary policy of the Fed was eased, there was a long-term growth at the financial markets, which to a certain extent was caused exactly by the large amount of surplus funds available at the financial institutions. Since the beginning of 2009, the S&P 500 index has grown up to the present time more than three and a half times. Although the credit to the non-financial sector¹ has grown in absolute terms, it has remained at the level of 250% of the gross domestic product (GDP).

Dynamics of S&P 500 stock market index after the crisis of 2008



Source: Standart & Poors

Credit to the non-financial sector (USA)



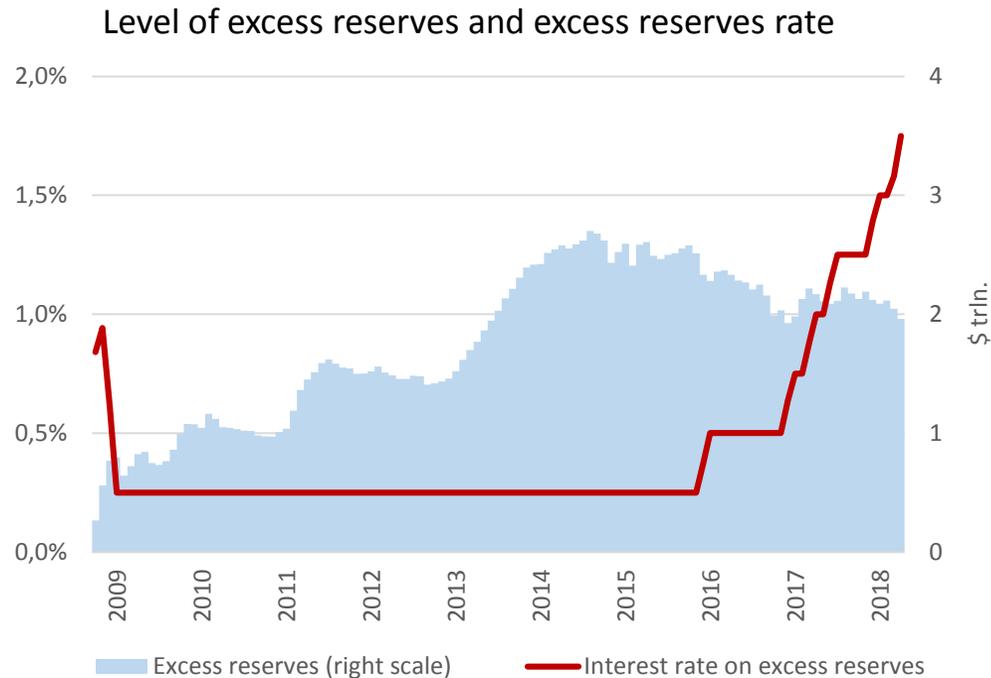
Source: Bank for International Settlements (BIS)

¹ Here and throughout the text, the credit to the non-financial sector includes both bank credits and corporate bonds.

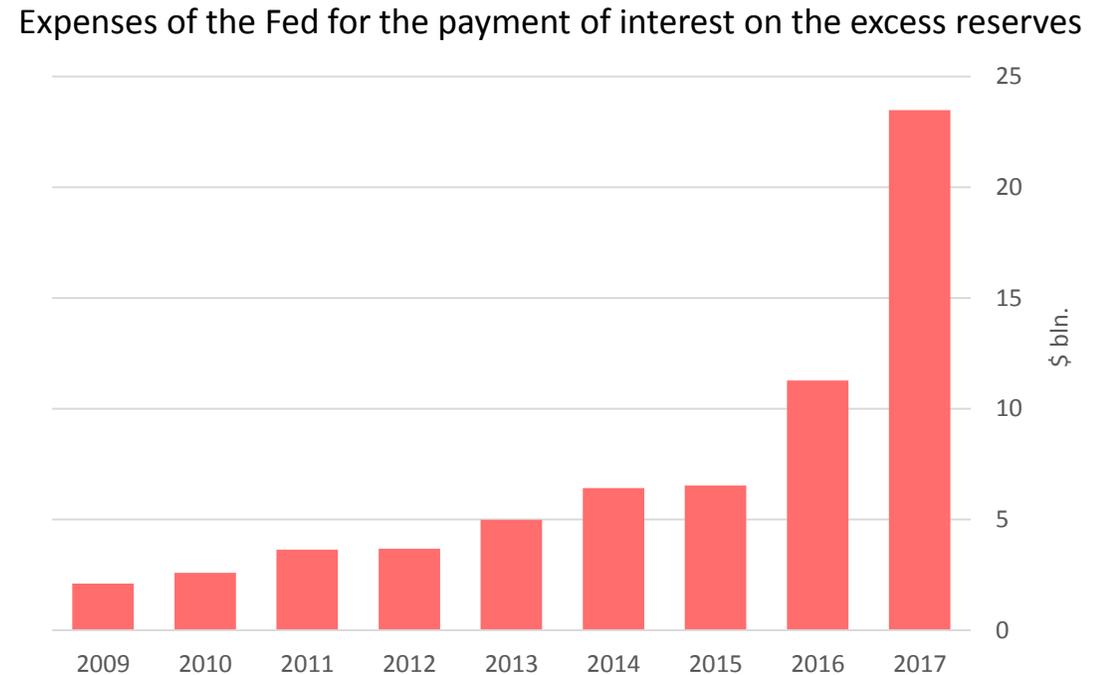
Problem of Release of Reserves

Thus, notwithstanding the large amount of Quantitative Easing, the bulk of the money remained in the excess bank reserves and did not get into the economy. A rate, linked to the key rate of the Federal Reserve System, is assessed on them. The banks were accumulating the excess reserves even when the rate was at its minimum. With the beginning of improvement of the economic situation in the USA, the banks began to gradually reduce the reserves, but the increase in the rate of the Federal Reserve System stopped this trend, and from the late 2016 to the present time, the level of the reserves has been practically unchanged.

The Federal Reserve System is currently in a rather difficult situation. On the one hand, transfer of excess reserves to the economy by the banks poses a threat of sharp increase in the money supply, which may cause high inflation. The Federal Reserve System can prevent this by increasing the rate, but in this case there will be a strong increase in the expenses for the service of excess reserves (they exceeded \$27 billion in 2017).



Source: Federal Reserve System



Source: Federal Reserve System

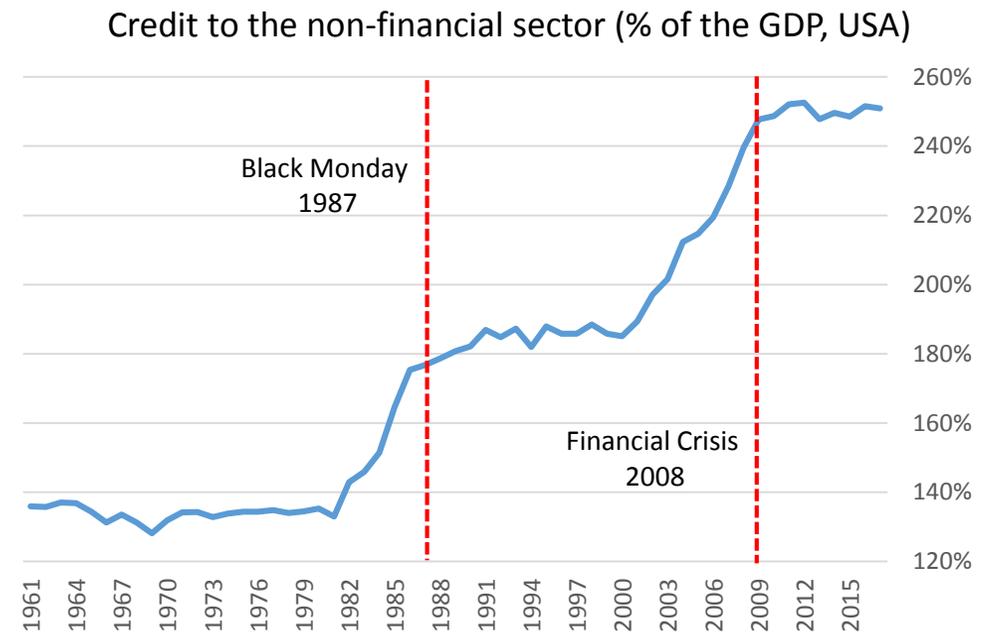
The Japanese scenario of the early 2000s was actually repeated in the USA. Then Japan was the first country in the world to use Quantitative Easing to counter the deflation and stagnation of the economy, having purchased a large volume of the bonds and having sharply increased the monetary base. However, this did not lead to a similar increase in bank crediting and, correspondingly, in the money supply. The banks tended to create additional reserves, rather than to credit the real sector.

Thus, QE actually had no significant effect on the increase in crediting in the USA. The banks did not attempt to credit business within the country, tending to keep the money in the Federal Reserve System, at the financial market or to invest abroad. The ratio of the credits to the non-financial sector with respect to the GDP has already for ten years been remaining at the same level.

Has QE helped the economy of the USA to recover from the financial crisis? Or has the economic recovery taken place due to other reasons? It is not easy to give an unambiguous answer to this question. But it can be said with certainty that the sharp inflation of the balance sheet of the Federal Reserve System created an imbalance between the monetary base and money supply, which has no equivalent in the monetary history of the USA and which cannot be resolved by the Federal Reserve System for already ten years.

If we look at the historical dynamics of the credit to the non-financial sector of the USA as a percentage of the GDP, we can see the two phases when the credit was broken off strongly from the GDP, which inevitably ended with a financial crisis. In the early 80-s, due to the active development of the financial tools, the indicator increased from 135% to 175% of the GDP, which ended with the so-called “Black Monday”, the financial crisis of 1987. And a strong increase in the early 2000-s (also associated with the securitization process), from 185% to 240%, which ended in the crisis of 2008.

There is a similar situation in China today, with the difference that the acceleration in the increase in the amount of the credits in comparison with the GDP took place already after 2008.



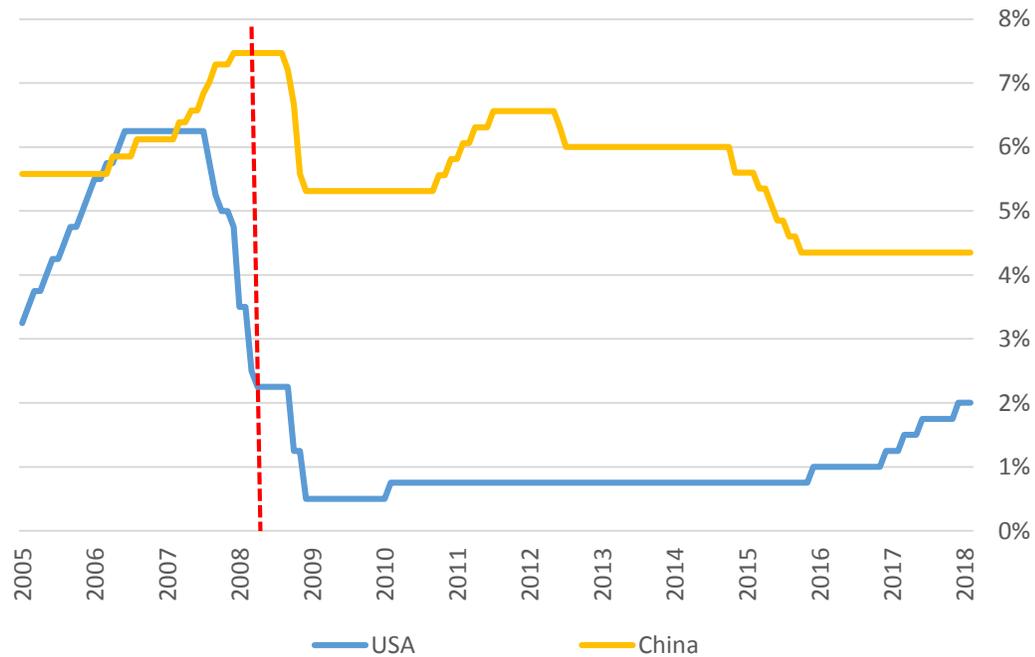
Source: Bank for International Settlements (BIS)

Credit Incentives in China

Unlike the developed countries, China did not have to resort to non-traditional methods of monetary policy. The key rate plays a minor role in China; the monetary authorities influence the policies of the banks using other tools.

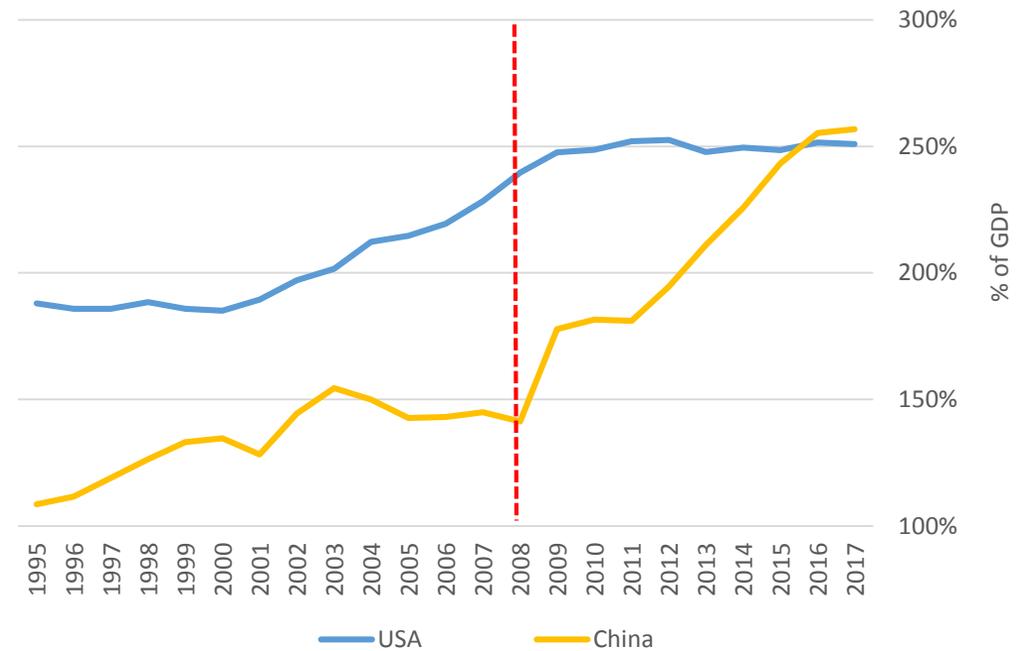
In addition, due to the major presence of the state in the economy, China was able to provide incentives for crediting directly. Money was not kept for a long time on the accounts of the banks, but was immediately directed to the economy. After 2008, there was a sharp increase in the amount of the credits to the non-financial sector, which exceeded the similar indicator in the USA in 2016.

Key rates of the US Federal Reserve System and People's Bank of China



Source: US Federal Reserve System, People's Bank of China

Credit to the non-financial sector (% of the GDP)

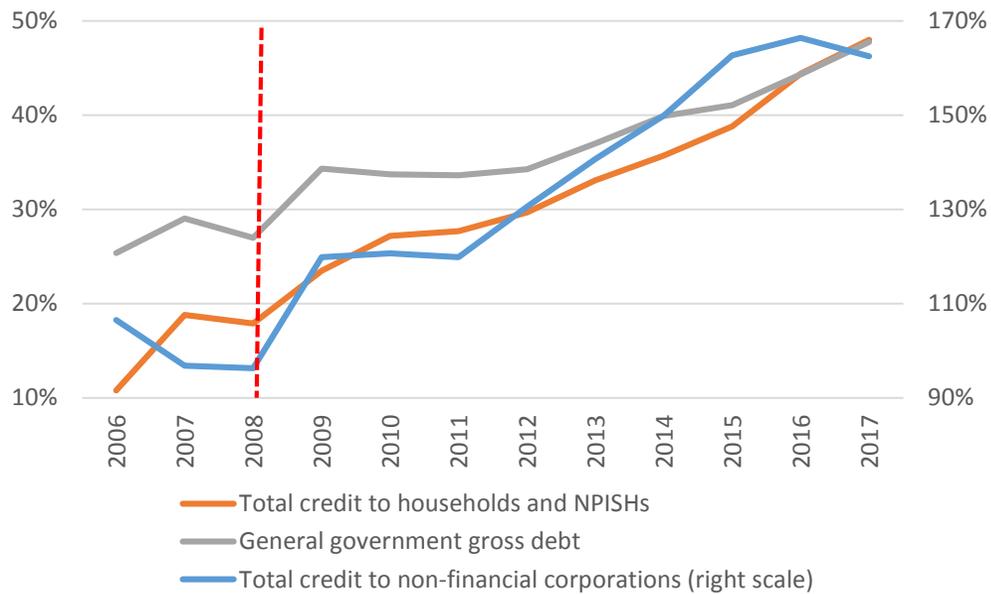


Source: Bank for International Settlements (BIS)

The credit to the non-financial sector demonstrated a more or less even increase with respect to the three main components – companies, government and households. The latter segment demonstrated the most impressive increase in relative terms – from 20% to 50% of the GDP. The crisis of 2008 provided a good opportunity for China to switch the focus of its economy from export to the domestic market. In particular, this meant incentives for the consumer crediting.

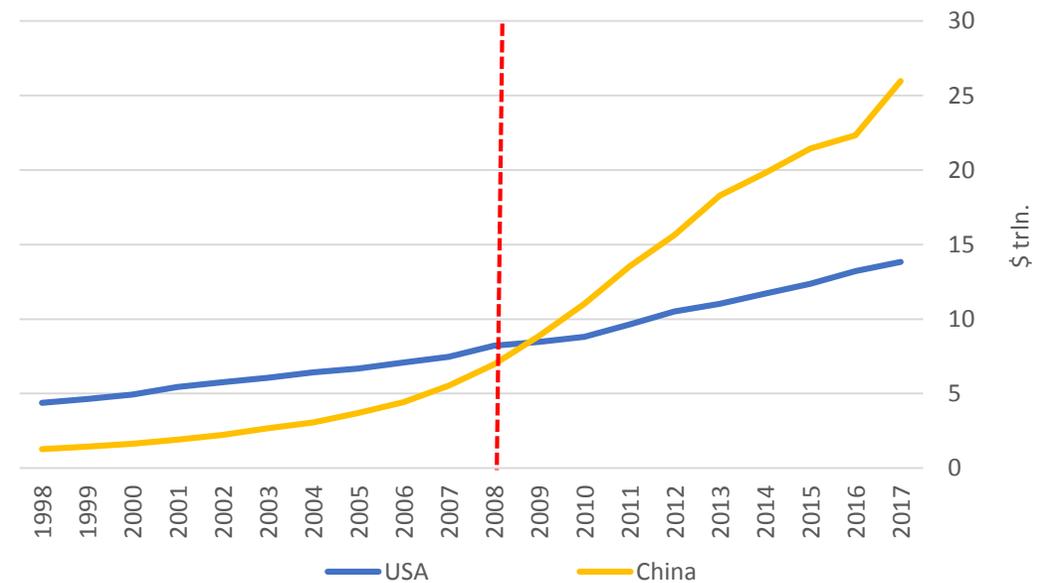
As was already said earlier, the anti-crisis measures did not actually lead to the increase in the money supply in the USA, while in China, due to the fact that the influence took place directly through the credit mechanism, there was an exceedingly strong inflation of the money supply. As of 2017, it was almost twice as large as the American money supply. This increase is to a certain extent explained by the peculiarities of the financial system in the PRC (where the bulk of the money flows goes through the banks), but, even with a consideration of this fact, the amount of the money supply looks disproportionately immense. Such a strong increase in the money supply exercises significant influence on the Chinese economy on the whole, in particular, on the outflow of capital and on the inflation.

Credit to the non-financial companies, households and government
(% of the GDP, PRC)



Source: Bank for International Settlements (BIS)

Absolute amount (US dollars) of the money supply (M2)
in the USA and in the PRC as of the end of the year



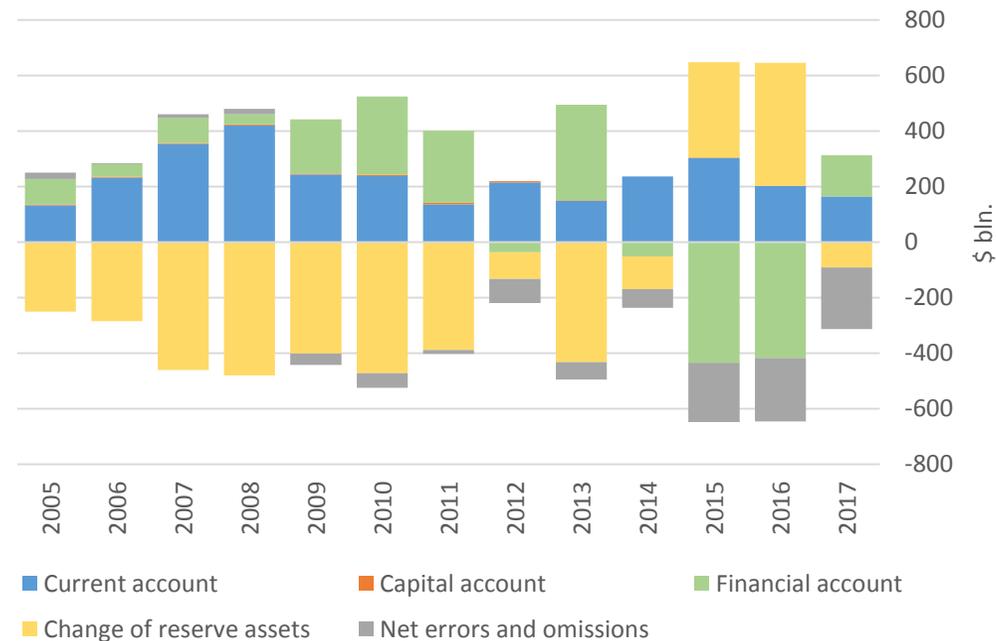
Source: IMF

The outflow of capital manifested itself particularly in 2015 – 2016. Official information on this indicator is not available, but the extent can be assessed by means of the current account balance – the net negative change of the financial account during two years amounted to USD 850 billion; it could also be added with the item titled “Net Errors and Omissions”, which became suspiciously large (more than USD 200 billion annually) exactly in 2015. This makes up a total of USD 1.3 billion during two years. The People's Bank of China had to balance these dramatic changes in the current account balance through the divestiture of the reserve – almost USD 800 billion during two years.

The outflow of capital was stopped; in 2017, at least according to the official information, the financial account appeared to be positive, USD 150 billion. However, the Net Errors and Omissions remained at the same level – minus USD 220 billion, which could mean that the outflow of capital is still in place, but, in any case, its extent is different (in the USA, Net Errors and Omissions are also rising in recent years).

However, the outflow of capital was stopped with the application of drastic administrative measures, which, certainly does not address the problem itself.

Balance of payment (PRC)

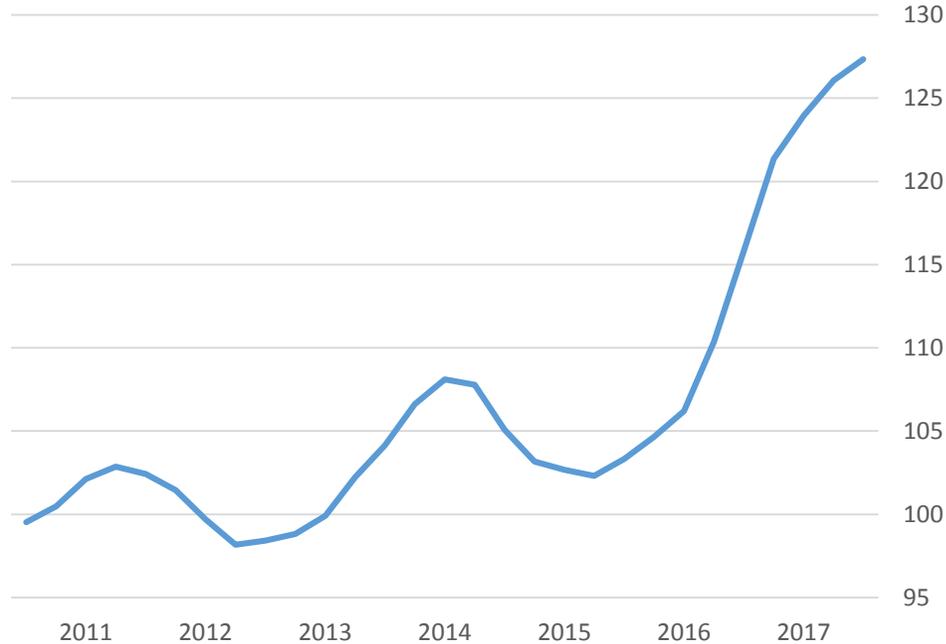


Source: People's Bank of China

Once the ways for the outflow of capital were closed, the prices for real estate, which the Chinese came to consider as one of the most promising assets for long-term investment, resumed their increase. The authorities implement a wide range of measures to counter the increase of the real estate prices, up to the establishment of a maximum price for one square meter. The increase of the prices has not yet been stopped, but, most probably, the Chinese authorities will cope with it, having a broad arsenal of administrative measures.

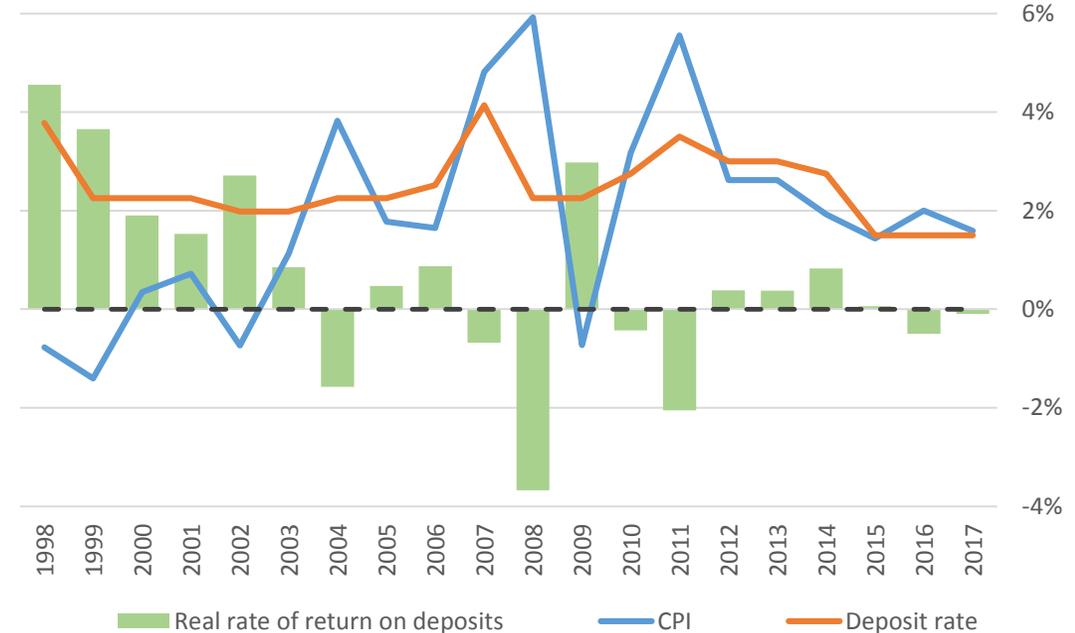
The situation is exacerbated by the fact that the Chinese authorities hold the rates on deposits close to the inflation rates, which reduces the value of bank credits. In addition, low rates on deposits make the Chinese search for alternative ways to invest the money.

Index of real estate prices (real, 2010 = 100, PRC)



Source: OECD

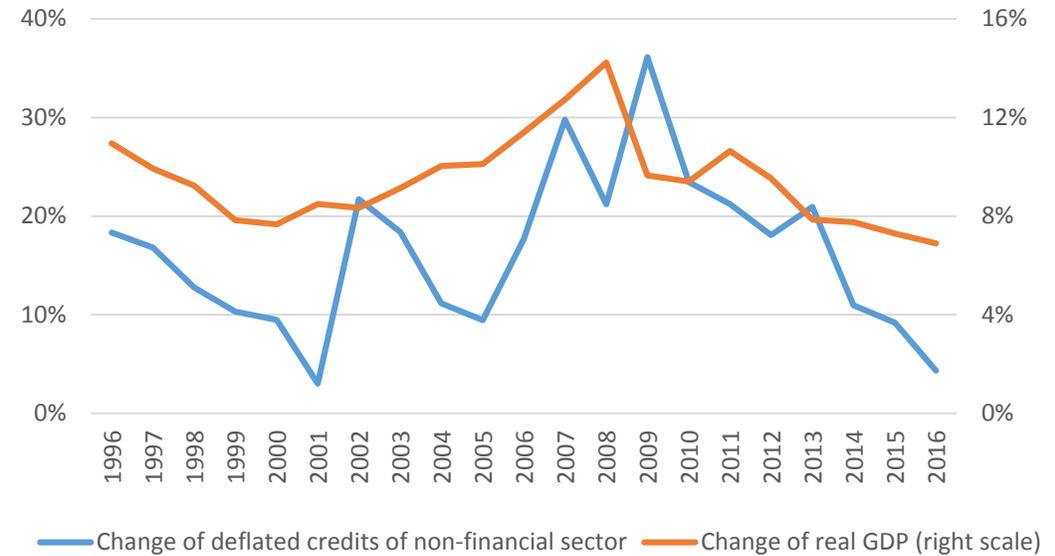
Rate on deposits, inflation and difference between them (PRC)



Source: IMF, OECD

The abundant crediting may have yielded its returns as an anti-crisis measure – after 2008, notwithstanding the decline in the Chinese GDP growth rates, they remained sufficiently high. But the problems they have caused may have serious consequences for the Chinese economy – the immense money supply has already been creating strong imbalances in the Chinese economy. The government reverses the consequences, but is not yet able to cure the problem itself.

Rates of changes of deflated amount of credits to the non-financial sector and real GDP (PRC)



Source: IMF, Bank for International Settlements (BIS)

Since 2014, there is a widespread opinion in Russia that it is quite possible to accelerate the economy by increasing the supply of cheap credits to the real sector. At the same time, the examples of the USA and PRC indicate that the attempts to “feed” the economy with credits in excess of its actual needs create additional problems – money either do not go to the real sector (as in the USA) or lead to irrational investments and other imbalances in the economy (as in China). Especially since in Russia, there is no such a receptive domestic financial market in comparison with the USA, and such strict government control over the economy in comparison with China.