Research on "De-dollarization" and RMB Development in Central Asian Countries during 2010-2021

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Abstract: At present, as the international monetary system is changing, it is particularly important to choose between "dollarization" and "de-dollarization". In recent years, it is not difficult to find through international current politics and other channels that Central Asian countries, as one of the regions with the highest degree of dollarization, are promoting the relevant strategies of "de-dollarization". Because the accuracy of the research is affected by many unpredictable and inevitable factors, the relevant data of Central Asian countries in the past decade was finally selected as the research direction. This paper will introduce WDI database, National Central Bank Database and so on to observe the trend of countries in combination with linear models, as well as observe and analyze the data with different time dimension information. Finally, it is concluded that the trend of de-dollarization is flourishing, and at the same time, it is a very positive signal for the development of RMB.

Keywords: International finance, Dollarization, De-dollarization, Diversification of national currency system, RMB.

1. Introduction

The research direction of this paper is to observe and analyze the relevant contents of the "de-dollarization" phenomenon under the change of the current international monetary system. The specific research content is "the de-dollarization phenomenon of Central Asian countries". This paper mainly studies the de-dollarization of Central Asian countries under the current trend of diversification of the international monetary system. The detailed contents of the study include the comparative study of policies, changes in the financial market, domestic foreign exchange reserves and the proportion of foreign currency loans in domestic loans in the past decade. By comparing the proportion of foreign currency loans in different periods, this paper tests whether the trend of de-dollarization in Central Asian countries proposed in this paper exists, so as to provide an optimized scheme for de-dollarization in the context of the diversification of the international monetary system and learn from experience for China.

2. Literature Review

After consulting a large number of literatures, this paper finds that according to the view of the international academic circles, at least 10% of the broad currency or domestic public debt of the "high dollarization" economy is denominated in foreign currency, and the proportion of private foreign debt to the total debt is at least 10%. If both conditions are met, it means "high dollarization". If only one condition is met, it means "medium dollarization". If neither condition is met, it means "low dollarization"[1]. Dollarization has become one of the policy challenges faced by financial. [2] At the same time, the proportion of foreign currency in the deposit and loan ratio is listed in the table as the supporting material for the phenomenon conclusion. The debate on dollarization suffers from a lack of relevant experiments to test most of its economic implications empirically. [3] This paper draws on the view that the relevant stages of dollarization in Central Asian countries are divided into four types. From the accumulation of dollarization in Central Asian countries in the 1990s to the soaring stage of dollarization in Central Asian countries in the middle and late 1990s, and then to the period from 2000 to 2009, due to the impact of the economic crisis, the trend of dollarization in Central Asian countries has shown repeated ups and downs. However, from the overall trend, there is a slight downward trend. Finally, from 2010 to now, dollarization has been repeated. However, the government of the Central Asia countries takes various measures to reform the system in order to improve the situation in this sector. [4] With the implementation of policies of Central Asian countries, the effect of "de-dollarization" is more significant. In this paper, it focuses on the last time stage, that is the relevant data of the trend of de-dollarization from 2010 to now, and at the same time, combining with the international current affairs in the past decade, it analyzes the de-dollarization and the development of RMB in the most typical Central Asian countries. To prevent problem with dollarization which is the loss of central banks' capacity to act as the lenders of last resort in situation of extreme need. [5] However, owing to compelling benefits, international financial liberalization is considered largely inevitable and irreversible. [6]

3. Method

The data and statistics are from the annual reports of central banks and bank data disclosure. At the same time, the trend of the percentage of net foreign investment inflows in the country's GDP introduced into the WDI World Bank Database is taken as the supporting material to reflect the trend of the relevant data of the country's de-dollarization. In this study, the Central Asian countries mainly focus on the five Central Asian countries in the traditional definition. However, due to the small number of relevant data samples released by the Central Bank of Turkmenistan, there is no in-depth discussion for the time being, only the big data trend of WDI database and international current affairs are used for research and interpretation.
4. Results and Analysis

4.1. Research on Kazakhstan

| Year | Proportion of foreign currency deposits in broad money | Proportion of private external debt in total external debt | Proportion of foreign currency deposits in total deposits | Proportion of foreign currency loans in total loans |
|------|-------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------|
| 2010 | 21.25%                                                 | 95.54%                                                 | 42.65%                                                 | 42.26%                                           |
| 2011 | 17.08%                                                 | 95.97%                                                 | 36.68%                                                 | 35.30%                                           |
| 2012 | 17.71%                                                 | 96%                                                    | 35.85%                                                 | 29.29%                                           |
| 2013 | 23.63%                                                 | 96.16%                                                 | 42.82%                                                 | 29.71%                                           |
| 2014 | 35.70%                                                 | 94.74%                                                 | 65.04%                                                 | 29.25%                                           |
| 2015 | 47.36%                                                 | 92.04%                                                 | 78.74%                                                 | 33.72%                                           |
| 2016 | 34.94%                                                 | 92.15%                                                 | 61.37%                                                 | 32.49%                                           |
| 2017 | 28.85%                                                 | 92.24%                                                 | 52.79%                                                 | 27.04%                                           |
| 2018 | 24.78%                                                 | 92.18%                                                 | 46.84%                                                 | 24.60%                                           |
| 2019 | 88.55%                                                 | 44.24%                                                 | 18.33%                                                 |                                                  |
| 2020 | 88.45%                                                 | 42.37%                                                 | 15.81%                                                 |                                                  |
| 2021 | 86.05%                                                 | 35.84%                                                 | 11.75%                                                 |                                                  |

These trend charts in figure 1 and figure 2 can be obtained by combining the data in the above table 1. From the perspective of the academic circles, Kazakhstan has been a highly dollarized country in the past decade. From 2010 to 2014, there was a steep upward trend. However, since 2016, Kazakh economy minister Dosayev has led domestic financial institutions with the official voice to carry out the actual action of de-dollarization, which means that the priority goal of the Central Bank of Kazakhstan is no longer to maintain the stability of the exchange rate, and is willing to bear exchange rate fluctuations while implementing de-dollarization. In this way, the harm of external shocks to their economy can be reduced due to the change of the international monetary system. The proportion of foreign currency will further drop.

Since 2008, China has signed bilateral local currency settlement agreements with Kazakhstan and other Central Asian countries. In 2014, in line with the trend of
Kazakhstan's de-dollarization, China cooperated with the Central Bank of Kazakhstan on the bilateral local currency swap agreement with a data scale of 7 billion yuan / 200 billion Kazakh tenge, and actively promoted transactions in relevant financial fields between RMB and tenge, developing RMB into the market of the country. And in 2018, it signed a large-scale agreement again to counter the trend of de-dollarization in the country, occupy part of the market and promote the development of RMB.

At present, according to the latest data, in the past two years, the Central Bank of Kazakhstan has chosen to complete the process of de-dollarization in a gradual manner. The proportion of foreign currency loans in total loans has further decreased, close to 10%. At the same time, the net inflow of foreign investment has dropped precipitously since 2014. In the future, the country will complete the transformation from a high dollarization country to a medium dollarization country.

### 4.2. Research on Kyrgyzstan

| Year | Proportion of foreign currency deposits in broad money | Proportion of private external debt in total external debt | Proportion of foreign currency deposits in total deposits | Proportion of foreign currency loans in total loans |
|------|------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------|--------------------------------------------------|
| 2010 | 25.63%                                                | 37.86%                                                 | 52.06%                                               | 55.78%                                           |
| 2011 | 24.36%                                                | 40.76%                                                 | 50.10%                                               | 55.25%                                           |
| 2012 | 24.10%                                                | 42.02%                                                 | 46.84%                                               | 53.73%                                           |
| 2013 | 27.17%                                                | 46.73%                                                 | 48.78%                                               | 53.60%                                           |
| 2014 | 37.34%                                                | 46.05%                                                 | 56.34%                                               | 57.64%                                           |
| 2015 | 47.15%                                                | 46.01%                                                 | 65.61%                                               | 55.07%                                           |
| 2016 | 33.32%                                                | 45.20%                                                 | 51.04%                                               | 44.52%                                           |
| 2017 | 32.66%                                                | 42.56%                                                 | 50.97%                                               | 38.72%                                           |
| 2018 | 29.60%                                                | 49.52%                                                 | 45.30%                                               | 37.62%                                           |
| 2019-2021 | Missing data, incomplete data of Central Bank of Kyrgyzstan |

According to the data in the above table 2, these trend charts in figure 3 and figure 4 can be drawn. From the perspective of the academic circles, Kyrgyzstan has been a highly dollarized country in the past decade and ushered in a turning point in 2015. In the 2017 document, *Letter of Intent and Technical Memorandum of Understanding*, Kyrgyzstan made a positive statement on promoting "de-dollarization". In 2015, under the background of the turning point of dollarization in Kyrgyzstan, the People's Bank of China and the National Bank of the Kyrgyz Republic signed an agreement of intent to strengthen cooperation, which sowed the seeds for the development of RMB with the goal of countries along the "the Belt and Road" in the future.

With the data evolution trend in recent years, we can see...
Kyrgyzstan's determination to de-dollarize after the turning point in 2015. According to the trend of net inflow of foreign investment accounting for Kyrgyzstan's GDP in the past decade, it is self-evident that the country has attached importance to de-dollarization since 2015. We can no doubt confirm that the process of de-dollarization in Kyrgyzstan is a certainty.

4.3. Research on Tajikistan

| Year | Proportion of foreign currency deposits in broad money | Proportion of foreign currency deposits in total deposits | Proportion of foreign currency loans in total loans |
|------|------------------------------------------------------|--------------------------------------------------------|---------------------------------------------------|
| 2010 | 42.37%                                               | 57.77%                                                 | 48.9%                                             |
| 2011 | 47.16%                                               | 63.26%                                                 | 54.65%                                            |
| 2012 | 46.76%                                               | 67.32%                                                 | 59.56%                                            |
| 2013 | 44.44%                                               | 68.34%                                                 | 59.47%                                            |
| 2014 | 48.20%                                               | 65.49%                                                 | 60.07%                                            |
| 2015 | 55.51%                                               | 69.54%                                                 | 63.08%                                            |
| 2016 | 39.01%                                               | 62.41%                                                 | 61.63%                                            |
| 2017 | 28.53%                                               | 55.36%                                                 | 58.91%                                            |
| 2018 | 27.05%                                               | 54.10%                                                 | 56.12%                                            |
| 2019 | 18.87%                                               | 26.99%                                                 | 58.27%                                            |
| 2020 | 10.95%                                               | 52.92%                                                 | 61.05%                                            |

According to the data in the above table 3, these trend charts in figure 5 and figure 6 can be drawn. From the perspective of academic circles, Tajikistan has been a highly dollarized country in the past decade. Since 2016, it has shown an obvious downward trend. According to the current political news, Tajikistan government documents and other relevant materials, we can find that since the first ten days of 2017, the Central Bank of Tajikistan has clearly stated that it will take the financial initiative of de-dollarization as one of the most important financial objectives.

In 2015, the domestic de-dollarization of Tajikistan has started, the people's Bank of China cooperated with Tajikistan on the swap agreement with the scale of RMB 3 billion / 3 billion somoni. Under the background of de-dollarization in Tajikistan, the proportion of RMB in foreign currency in Tajikistan was increased in the reverse direction. This move also reflected that the development momentum of RMB in China is full. In the future, China's relevant RMB construction in the countries along the "the Belt and Road" is in a benign environment.

With the changes of relevant domestic data of Tajikistan in recent years, it can be seen that although the central bank's financial report of Tajikistan does not disclose the relevant data in 2020, it is still in a clear trend of de-dollarization. Although the relevant data of foreign currencies have been repeated in recent years, most of the reasons are due to the
epidemic, which hinders the de-dollarization process of Tajikistan. However, from the overall background of the past decade, Tajikistan's goal of de-dollarization is firm.

### 4.4. Research on Uzbekistan

#### Table 4. Detailed data on de-dollarization in Uzbekistan

| Year | Proportion of foreign currency deposits in broad money | Proportion of foreign currency deposits in total deposits | Proportion of foreign currency loans in total loans |
|------|-------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------|
| 2013 | 19.67%                                                | 26.31%                                                 | 38.04%                                          |
| 2014 | 16.55%                                                | 22.61%                                                 | 37.37%                                          |
| 2015 | 14.34%                                                | 19.18%                                                 | 39.81%                                          |
| 2016 | 16.77%                                                | 22.45%                                                 | 41.39%                                          |
| 2017 | 35.10%                                                | 47.79%                                                 | 60.55%                                          |
| 2018 | 29.69%                                                | 41.21%                                                 | 55.38%                                          |
| 2019 | 21.71%                                                | 43.90%                                                 | 47.70%                                          |
| 2020 | 20.97%                                                | 43.30%                                                 | 49.12%                                          |
| 2021 | 21.80%                                                | 38.60%                                                 | 49.50%                                          |

**Figure 7.** The trend chart of Uzbekistan (2010-2021)

**Figure 8.** The trend chart of Uzbekistan's foreign direct investment (2010-2020)

These trend charts in figure 7 and figure 8 can be obtained by combining the data in the above table 4. From the perspective of academic circles, Uzbekistan has been a highly dollarized country in the past decade. In 2017, the dollarization trend of Uzbekistan has changed significantly. In 2017, the dollarization phenomenon in Uzbekistan showed a different retreat from the previous data. According to the current international political information, Uzbekistan does not regard de-dollarization as the first goal of its development in the financial field.

As early as 2011, China and Uzbekistan had high-value agreements related to bilateral local currency swaps. In China's 2021 annual report, China is Uzbekistan's second largest trading partner. However, as the domestic initiative of de-dollarization in Uzbekistan has become more and more intense, while the proportion of foreign currencies continues to decline, the trade volume between China and Uzbekistan has shown a rising trend. With the continuous mutual benefit and win-win situation, China has become an important partner in Uzbekistan's financial trade and many other aspects.

By introducing the relevant data of Uzbekistan into the linear model, it can be clearly observed that Uzbekistan has undoubtedly begun to favor the de-dollarization in terms of data. Although foreign currencies still frequently occupy the market of Uzbekistan, Uzbekistan will also join the wave of de-dollarization under the predictable trend.
4.5. Research on Turkmenistan

The country has special national conditions and limited reference data, so only relevant data are analyzed. At present, Turkmenistan does not clearly mention the relationship between de-dollarization and its national fiscal goals, and the development of RMB has little intersection with the country. However, from the perspective of the net inflow of foreign direct investment in the past decade, Turkmenistan is also taking certain measures against the domestic dollarization trend in figure 9, which has greatly reduced the proportion of net inflow of investment in the past decade.

5. Conclusion

After studying the relevant data of the traditional five Central Asian countries, the following conclusions about de-dollarization were drawn.

Firstly, although most of the Central Asian countries are still high dollarization countries according to the classification conditions of the international academic circles, some countries have listed de-dollarization as the main goal, whether from the perspective of government appeals or actual actions, and even spared no effort to adopt a stable economic policy based on stable exchange rate. At present, the attitude of Central Asian countries is not completely unified on this issue of "being unable to put down and bear", and they are still at the stage of their own development.

Secondly, de-dollarization is not a thorough de-dollarization. The relevant pricing and settlement functions of international currencies represented by foreign currencies such as US dollars have always occupied a dominant position. Similarly, de-dollarization does not mean that development can be unimpeded without foreign currencies such as US dollars. More importantly, it is better to choose appropriate macro-control methods for improvement. De-dollarization is a double-edged sword, which is difficult to solve and perfect in a short time.

Thirdly, the development of RMB in the international position has always been in a positive direction. Under the current situation that the proportion of foreign currencies continues to decline, it will rise against the current and the future is foreseeable.

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