Original Paper

The Research on a Currency Board System: The Case of Hong

Kong Region

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Abstract

The Currency Board System is a relatively old topic. But due to the successive increases of interest rates by the US Federal Reserve in 2022, the topic has received attention again. This paper will analyse the Currency Board System through a typical example-Hong Kong region. Firstly, the background of Currency Board System will be described. Then three conditions for the success of the Currency Board System will be analysed in the third part. After that, the suitable types of economy to apply the Currency Board System will be pointed out. Finally, it is recommend that different countries with different economic environment are better rationally implement the suitable exchange rate regime. **Keywords**

Currency Board System, exchange rate, inflation, convertibility, foreign exchange reserves

1. Introduction

With the six times of raising interest rates by the US Federal Reserve in 2022, Hong Kong region's currency board system has been discussed by the public again. In the 20th century, the Currency Board System (CBS) was one of the most essential dominant exchange rate regime all over the world. However, history has shown that not all countries are suitable for such a system in any period of time. The sole purpose of a currency board is to achieve a fully convertible exchange rate. The same institutional arrangement has produced completely different policy effects in different economies. The essay will introduce the origin and development of the CBS The reasons why this system can be successful in a modernization of economy will be stated in this essay. In addition to this, the essay will analysis the suitable types of economy for a Currency Board system.

2. The Background of Currency Board System

Relevant researches show that the CBS originated in 1849, the British designed for the Indian Ocean colony Mauritius pound voucher currency issue in 1849, and promoted it to all colonies. However, with the upsurge of national liberation movements, the British colonies became independent one after another. After that, the CBS, a symbol of the colony disappeared. Even though the colonies contributed to the economic development of the British empire by implementing CBS, the domestic economy of the British was still on a downward path to complete economic collapse due to CBS. According to Enoch and Gulde (1998), there were 38 counties and regions adopting the CBS in the 1960s, and the number decreased to 20 in the 1970s, only 9 countries and regions adhered to the currency board system in the 1980s. According to Jerinic (2021), the reasons behind the decreasing are mainly on two aspects. First, after World War II and decolonization, newly independent states introduced their central banks as an expression of national sovereignty. Second, major international institutions have stressed that all developed countries should have central banks.

In the 1990s, some countries had been suffering from inflation, which again raised the application of the CBS. Because they thought the CBS is better than the ineffective monetary policy. Some countries have succeeded, such as the former Soviet republics in the Baltic region, while others have failed, notably Argentina.

In the late 1980s, Argentina was struggling with a debt crisis, hyperinflation and a prolonged recession. In order to solve the problem, and save the economy. In 1991, Argentina passed an act transforming the functions of the central bank into a currency board, which established a fixed exchange rate of 1:1 between the Argentine peso and the United States dollar and guaranteed full convertibility at that rate. The currency board system was thus established. From the actual operation effect of the monetary board system, because of its strong constraint on the monetary policy, it has played an immediate role in restraining inflation.

After the collapse of the former Soviet Union, Estonia, Lithuania and other Baltic countries were faced with the dangerous situation of economic turmoil and soaring prices. After their independence, these two countries actively moved closer to Europe. One of the important measures was the currency board system. A similar arrangement was made in Lithuania in 1994. First it was pegged to the D-mark, and then when the euro came along it was pegged to the euro. Estonia has fared better, having incorporated its currency, the krone, into the second phase of the European Exchange Rate Mechanism (ERMII) on 28 June 2004 and joined the euro from 1 January 2011, while Lithuania, a weaker performer, is currently in the ERMII. According to the International Monetary Fund (IMF, 2020) classification and data provided in their annual publication, there were 24 countries which adopted hard pegs, and 11 countries applied CBS.

However, there was a financial crisis in Mexico in 1995, followed by the Asian financial crisis in 1998 and financial turmoil in Brazil. Argentina's economy went into recession, but at the same time the U.S. economy was booming and the Federal Reserve had a strong dollar policy. Argentina had to raise interest rates several times to maintain a fixed exchange rate of one to one with the dollar, leaving the peso overvalued and further hurting its economy. Under the monetary board system, the government could only stimulate the economy through more active fiscal policies, which resulted in the increasing deficit scale. During this period, the Argentine government adopted several capital control measures, which eventually led to the economic crisis and forced Argentina to give up the monetary board system. Hong Kong region's linked exchange rate system, which is a special type of currency board system, and it has been in place since 1983. The linked exchange rate system has been effective in many economic cycles, and contribute to maintain the monetary and financial stability in Hong Kong region. Under the linked exchange rate system, the Hong Kong region dollar fluctuates within the 7.75 to 7.85 convertibility guarantee in line with market supply and demand. The Hong Kong region Monetary Authority (HKMA) provides banks with the 7.75 strong side convertibility guarantee and the 7.85 weak side convertibility guarantee. When the Hong Kong dollar exchange rate triggers the "weak Side conversion guarantee", the HKMA will buy Hong Kong Region dollars to sell US dollars at the 7.85 conversion guarantee level at the request of banks. The funds will flow out of the Hong Kong Region dollar system and the upward pressure on the Hong Kong Region dollar interest rate will be increased. This will help offset the incentive of the carry trade and keep the Hong Kong Region dollar exchange rate within the range of 7.75 to 7.85.

As the US raises interest rates, the market expects the interest rate spread between Hong Kong Region and the US to widen, and funds will gradually flow from the Hong Kong Region dollar to the US dollar. Therefore, it is expected that the Hong Kong Region dollar exchange rate will weaken from the strong side. Apart from interest rate differentials, the Hong Kong Region dollar is also influenced by other market factors, such as the performance of Hong Kong Region stocks market. The Hong Kong Region dollar exchange rate has been floating within the guaranteed range of 7.75 to 7.85 in line with market supply and demand. With assets worth more than HK \$4 trillion, of which more than 80 per cent are foreign exchange reserves, the Exchange Fund has sufficient capacity to ensure convertibility between the Hong Kong Region dollar and the US dollar. Therefore, Hong Kong Region's financial markets have strong and solid buffers and are strong enough to withstand market shocks caused by external factors. Besides, Hong Kong Region's banking system is sound. Banks have ample capital and liquidity buffers. The liquidity coverage ratio of major banks exceeds 150%, far higher than international standards. Overall bank deposits in Hong Kong Region remained stable, with total deposits in the banking system growing 4.6 per cent year on year in 2021, with Hong Kong Region dollar deposits up 1.4 per cent. The increase was sustained in the first four months of this year, and the two figures were up 0.8 per cent and 1.6 per cent respectively from the end of last year. All the figures shows that Hong Kong Region has the ability to maintain the stability of the exchange rate.

3. The Conditions for the Success of Currency Board System

As discussed above, the CBS has failed in some countries, but there are still some countries and regions

where it can succeed. The reasons behind the results are worthy to be analysed. According to the different situation of the economy policy or government management mechanism in different countries, the success of the Currency Board system requires certain conditions.

The first point is best to have more than 100% foreign exchange reserves for Currency Board which shows in the case of Hong Kong Region. Kamin and Ericsson (2003) suggest that in many countries there already have some related theory and literature to "currency substitution". The large use of foreign exchange usually occurs in countries with high inflation and variable rates. In Hong Kong Region, this has been reflected. On account of adequate foreign exchange reserves are very essential for regulating the balance of payments. Sufficient foreign exchange reserves can guarantee the convertibility of US dollars and Hong Kong Region dollars, when the Hong Kong Region Dollar Exchange rate triggers the "weak Party Conversion Guarantee". On the other side of this subject, entire convertibility is also in a chief role. It can promote efficient allocation of resources in the whole society. Stimulating domestic demand can attract people to consume. On the other hand, parallel exchange rates create the possibility for corruption. Well connected individuals can profit from arbitrage opportunities. Many countries with parallel exchange rate regimes are emerging nations with substantial corruption problems in any case that may be worsened by the extra opportunities afforded by non-convertibility. In addition, convertibility is effective in resisting corruption as parallel exchange rates may increase the degree of corruption.

Implement and maintain a fixed exchange rate is an important condition which differ from central bank. According to Georgiadis and Mehl (2015), the standard macroeconomic theory mentions that if capital cross-border free flow are allowed, domestic interest rates may deviate from foreign exchange rates only if the exchange rate is flexible. If a government insists that the fixed exchange rate does not change and the capital is free to flow simultaneously, the monetary policy will be invalid. At the same time, it will bring the impact of speculative capital. As the fixed exchange rate convert to a floating exchange rate in terms of the central bank is no cost. There are no adverse consequences for them but for the Currency Board is the opposite. This indicates that the currency board will be more creditable than the central bank. Hence convertibility is very significant.

The second aspect of success is about market. It is flexible for products and factor market which can be affected by the economy structure. And a high degree of flexibility in the labour and product markets are conducive to economic adjustment. In the absence of an independent central bank and government debt, Hong Kong Region takes the Currency Board system is advantageous to a certain extent. Whether the Asian financial crisis of 1997-1998 or the Eurozone crisis, the rise in government bond yield will lead to higher interest rates, which will lead to deflation in Hong Kong Region and related areas to reduce interest rates. This move regains confidence from market depends on the stable cost under the macroeconomic. Under the Currency Board system, the interest rates are adjusted according to inflows and outflows, not exchange rates. When the US dollars are sold to the currency board, the monetary base will increase and vice versa. The expansion or contraction of the monetary base will result in the

falling or rising of Hong Kong Region dollar interest rates respectively, while the exchange rate remains unchanged.

The third aspect revolves around the balance sheets. The balance sheets involves two aspects: assets and liabilities. Difference between financial assets and financial liabilities (debts of the Central Bank in this case) here it reflects anything in the economy that could be converted to cash (could be sold on markets) this would include the value of all shares in the economy which could in principal be sold for cash but also other assets such as houses or the human capital. The Chinese government has exercised prudent fiscal policy as well as Hong Kong Region. And will provide domestic liquidity, making the currency relatively free flow. The bank's financial regulation should be extremely strong to ensure a sound mechanism that makes the reorganization of capital. Besides, company departments and families also make a corresponding contribution to the success of the currency board system. By manipulating the leverage to regulate the ratio of housing to commercial mortgages, the greater the ratio for the family and the corporate sector, the more the mortgages of the same value can be obtained. Therefore, controlling this balance is one of the conditions.

4. The Suitable Types of Economy for a Currency Board System

The central bank policy in the implementation process also has some performance is the Currency Board system does not have. As mentioned by Obstfeld (2015), in the classical monetary policy trilemma reflects that those which use monetary policy than those who can exchange rate flexibility in the use of new market economics to be worse. Although there are many superiorities of practicing this kind of exchange rate mechanism, some countries are not suitable for it. The system has two fundamentals. To hold a strong currency and to establish contact with it, and to ensure that the foreign exchange reserves of foreign currency sufficient to any time in accordance with the fixed exchange rate against the exchange rate. If other countries also plan to copy the implementation of the Currency Board system in Hong Kong Region, it seems to be necessary to abandon investment in various public facilities such as schools, public transport and hospitals. This is not a sensible choice.

When an economy satisfies the following characteristics, the currency board system is good at this country or region. The first feature is a small and open economy. According to Lixue and Qinghua (2016), small economies have small economic volume, simple economic structure, strong dependence on big economies, and are the recipients of world commodity and factor prices. Once external prices are determined, economic equilibrium can be easily realized through rapid adjustment of internal prices. By giving away monetary policy autonomy, small economies can better achieve other macro-policy objectives, such as controlling inflation and improving capital account convertibility. Therefore, it is a relatively cost-effective choice for small economies to use the monetary board system. Secondly, dollar debt is an indispensable sector. The next one is lack of credibility, especially in the countries or regions which have a history of high and even malignant inflation or new unions. Moreover, according to Cavallo, Neiman, and Rigobon (2014), micro economic efficiency will be greatly improved if the

monetary union is generated by the additional benefits through the price of coordination. In this view is after the monetary union and complete dollarization. Cristina and Jonathan (2010) point out that as the dollar's debt will make the credit lower and the impact will spread out. This fact which takes Latvia as an example can also confirm the second point.

In addition, many countries and regions meet other conditions such as dollar liabilities mentioned above, but there is no sound financial regulatory system that is still not suitable for the implementation of the Currency Board system. Garicano and Santos (2013) demonstrates that the asset bubbles generated by assets and sovereign debt can be prevented by financial integration and strong political institutions. More importantly, the central government has played a key role. In Hong Kong Region, as of October 1983, financial regulation in order to be better respond to shocks of capital and absorb interest rates, the authorities asked banks to have a high capital ratio.

5. Conclusion

The Currency Board system is one of the three leading monetary systems of the 20th century, and has been implemented in Hong Kong Region and other countries and regions. Combined with the actual situation, Hong Kong Region as a typical example to explain how to implement this system successfully, including the balance of payments, the balance of foreign exchange reserves, complete convertibility, flexible products and markets, excellent financial regulation, and currency able to free flow besides other vital conditions. In other words, this system is not suitable for every country and region, so it is also appropriate for which the economy to do an analysis. The results illustrate that a small and open economy is critical. Meanwhile, many countries do not have a sound financial regulatory system that is not sufficient to deal with the risks. The economy system is not good or bad, countries should be based on their own reality to choose what kind of system is the rational one. Only in this way can the world economy develop smoothly and harmoniously.

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