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The decentralised global monetary system requires an efficient safety net

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The safety and stability of the international monetary and financial system has been the subject of intense debate for several years. After the Bretton Woods period, the idea of stabilising the global monetary system with a system of fixed exchange rates has been dismissed. Instead, the focus is on the global financial safety net with the aim of managing financial crises. International reserves are the most important component of the safety net. Swap arrangements between central banks have experienced a renaissance as a crisis instrument. There is definitely a need to further develop the financial safety net because its current makeup provides only inadequate protection, especially for the systemically relevant emerging market economies.

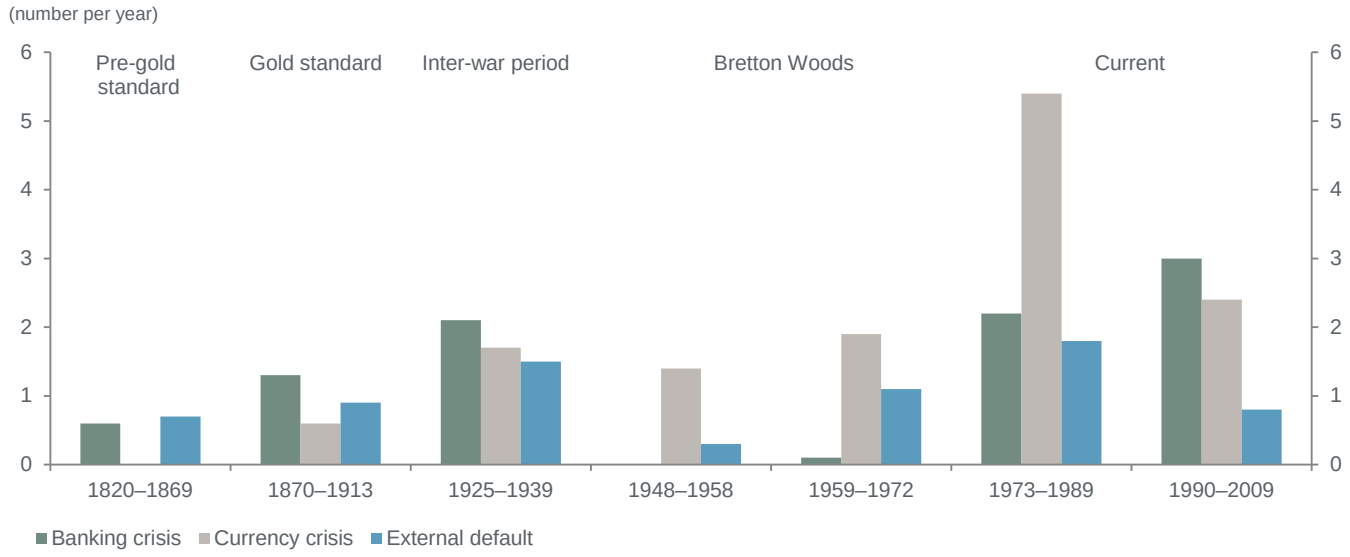
The discussion about how the international monetary system should be designed has become more intense in the past years. The quest for an international financial and monetary system that would combine the advantages of stable exchange rates with the possibility of independent economic policy in a cooperative system began right after World War II. But so far the search has not been very successful, and financial crises have become more frequent. As a result, the focus has shifted to the current design of the global financial safety net which rates the safety and stability of the international financial and monetary system with respect to, among other things, monetary reserves, cooperation between central banks and regional monetary systems. After all, global balance of payments imbalances, exchange-rate distortions, financial market volatility and highly mobile, abruptly changing capital flows have the potential to massively disrupt the global economy.

The Bretton Woods system for stable exchange rates

In July 1944, the representatives of 44 states met in Bretton Woods, New Hampshire, to discuss the future of the international monetary system. After the upheavals of the Second World War, ensuring the stability and safety of the monetary system were the main items on the agenda. The proposal of British economist John Maynard Keynes emphasised the provision of international liquidity and competed with the model of US economist Harry Dexter White, which put more weight on stable exchange rates. The compromise was ultimately dominated by US ideas.

An international system of fixed but adjustable exchange rates was introduced. The US dollar was declared the reference currency because of the high US gold reserves and pegged to a fixed gold price. While the national central banks agreed contractually to stabilise their currencies within a bandwidth of +/-1 % to the fixed dollar exchange rate,[1] the USA was tasked with keeping the dollar-gold exchange rate steady at USD 35 per ounce of gold. The United States was also obligated to convert the member states' dollar reserves

Figure 1: Frequency of crises



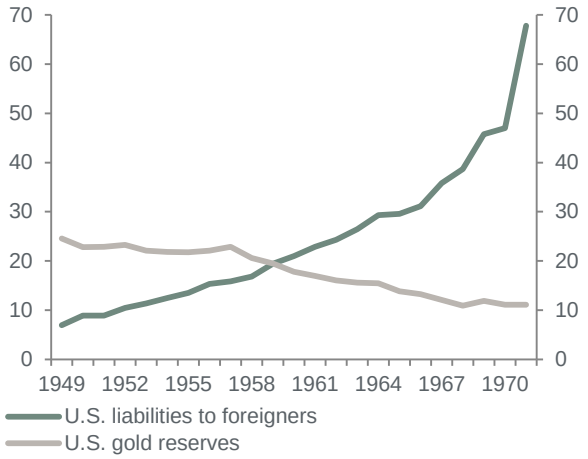
Sources: Bush, O., Farrant, K. and M. Wright (2011): Reform of the International Monetary and Financial System, Financial Stability Paper Nr. 13, Bank of England, p. 7.

Note: This paper contains the opinion of the authors and does not necessarily represent the position of KfW.

into gold at any time. The currencies were intended to be freely convertible for balance of payments transactions,[2] but capital controls were possible and indeed employed by European countries. Overall, the Bretton Woods system permitted individual countries to have their own monetary policy in combination with stable exchange rates. The International Monetary Fund (IMF) was founded as an integral part of the system to manage balance of payments problems. Regular contributions from the member states to the Fund were designed to finance possible borrowings. An adjustment to the fixed exchange rate was also possible to address fundamental balance of payments problems, with adjustments of more than 10 % requiring IMF approval.[3][4]

Figure 2: Worldwide currency reserves 1945–1970

(in USD billions)



Source: Board of Governors of the Federal Reserve System (U.S.), Banking and Monetary Statistics, 1941–1970.

After a good 25 years, the system collapsed because of its structural flaws, the different economic and financial policies of the member states, and the changed macroeconomic situation. The system had a liquidity problem because the international reserves were determined by the gold supply and the size of the US current-account deficit. Large amounts of dollars flowed from the United States to the reconstruction of war-destroyed Europe, both through reconstruction loans and through imports from the United States to stimulate the European economy. This outflow of currency was intensified by the attempt of the European central banks to keep their currencies undervalued to promote exports, leading to high current account deficits in the United States. The United States lost some USD 382 million in gold reserves on average each year.[5] Dollar holdings abroad grew to such an extent that the United States would not have been able to meet its conversion obligation because it simply lacked the gold reserves. Since the system did not include any mechanisms that would have forced the member states to run an economic policy that ensured the stability of the system, the US current account deficit continued to grow.[6] President Nixon suspended the dollar-gold convertibility unilaterally and without consulting with the IMF in 1971, and the Bretton Woods system was officially dissolved in 1973.

Today's monetary system is decentralised

The structure of the global exchange rate system faces the trilemma of monetary policy, which says that the stable exchange rates, independent national monetary policies and free capital movement can hardly coexist. Throughout history, therefore, one of these targets was always sacrificed in designing the global monetary system. In the gold standard system (1871–1914), the states renounced an autonomous monetary policy to be able to ensure fixed exchange rates and free capital movement at the same time. In the Bretton Woods system, autonomous monetary policy at stable exchange rates was possible because capital controls existed.

After the Bretton Woods period, the concept of stabilising the global monetary system with a system of fixed exchange rates was defeated. The international monetary system has since been organised at a decentralised level and no global system based on contractual agreements was able to take hold.[7] The US dollar retained its role as the key currency in the current structure as well. But now the Asian and Latin American countries took over from Europe and Japan the lead role of financing the US current account deficit. Particularly as the Asian markets opened up at the end of the 1980s, these economies established themselves as export countries that were able to meet the import demand generated by the high rate of consumption in the US. In order to keep the exchange rate of their domestic currencies undervalued to promote exports, the central banks of the Asian countries, especially the People's Bank of China, purchased large quantities of dollar reserves.[8] As a result, the dollar exchange rate remained high, and so the US deficit was financed.

In Europe the countries opted for monetary integration. The European Monetary System which was established in 1979 still allowed exchange rates to fluctuate within certain bands. It was eventually succeeded by the European Economic and Monetary Union. The euro has not been successful in contesting the dollar's supremacy as a reserve currency, but at the same time Europe was no longer going through a phase of catching up through export-driven growth, as was the case after World War II.

In the current system the focus of interest shifted to free capital flows and more flexible exchange rates that allow countries to make autonomous decisions on monetary policy.[9] Empirical evidence from the industrialised countries shows, however, that they forego an autonomous monetary policy for the sake of financial integration and stable exchange rates. The most prominent example is the European Monetary Union. By contrast, emerging market economies and, to a lesser extent, developing economies have moved towards flexible exchange rates and greater financial openness in order to benefit from a more autonomous monetary policy.[10]

The global financial safety net as a set of protection mechanisms

The current decentralised system also lacks a central authority that is actively integrated and, above all, contractually bound into the maintenance of the monetary system by providing temporary liquidity, such as the IMF in the Bretton Woods system. Instead, various protection mechanisms have evolved because the current system has not led to greater external stability of national economies and the global economy. The problem of volatile capital flows became particularly clear once again in the course of the financial crisis of 2008 and 2009. For emerging market economies, the warning of a sudden reversal of capital flows has been omnipresent ever since the Asian crisis. However, the last crisis has demonstrated that even for industrialised countries their developed financial markets are a significant contagion mechanism for crisis developments.

The following are regarded as key elements of the global financial safety net:[11]

- International reserves. These include official foreign exchange and gold reserves as well as claims on international financial institutions such as the IMF that can be rapidly converted into foreign currency under the countries' own responsibility.

- Bilateral swap arrangements between central banks. In a currency swap two central banks agree to exchange currency amounts, e.g. US dollars for euros. They agree on a fixed date in the future on which they will reverse the transaction applying the same exchange rate. During the term central banks can make foreign currency loans to private banks.

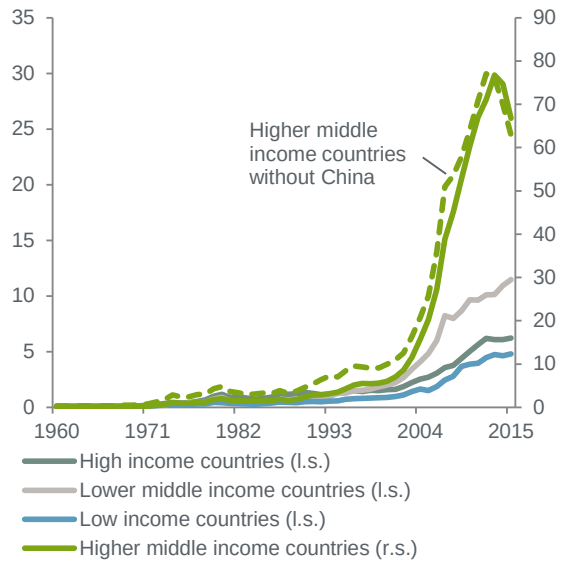
- IMF programmes and regional financing arrangements (e.g. European Stability Mechanism, Chiang Mai Initiative Multilateralisation Agreement, BRICs CRA, Arab Monetary Fund, Latin American Reserve Fund). They make financial resources available to the members to tackle balance of payments difficulties, manage crises and prevent regional contagion effects. Depending on their design, they may impose conditions and requirements for economic policy measures on the recipient countries. Some regional programmes require a combination with IMF funds.

The most important element of the protection mechanisms: international reserves

International reserves are by far the largest element of the global safety net.[12] The lack of predictability and robustness of other elements has led to an over-accumulation of reserves. After the Asian crisis, upper middle income countries in particular built up reserves. While China holds a major portion of the reserves in this group of countries, all other countries also boosted their reserves significantly. As a result of central bank interventions in the foreign exchange market, reserves have decreased since the year 2013. This was prompted by a number of upheavals in the foreign exchange markets in the past three years, such as in May 2013, when the Fed announced its intention to phase out QE, in late 2014, when Russia floated its exchange rate, and in the winter half-year of 2015/2016, when concerns surfaced about China's economy.

Figure 3: Average international reserves by income group

(Index 1960=1)



Country grouping according to the World Bank.

Source: WDI, own calculations.

Whether a country's international reserves are appropriate is assessed with the aid of threshold values. However, these have come to be perceived as a floor below which the reserves should not fall, not even in times of balance of payments difficulties. Countries may hence be unwilling to employ their reserve buffers. Besides, building up reserves also comes at a financial cost. On average, between 2001 and 2009 the loss was around 200 basis points, as the difference between the interest costs of the necessary sterilisation instruments and the interest income on the reserve assets, and the costs increase with the level of the currency reserves. Furthermore, international reserves contribute to maintaining global imbalances because one country's reserves represent another country's liabilities.

Another aspect is the availability of internationally liquid and safe assets to enable building up reserves because of a precautionary motive. After all, private sector stakeholders, particularly banks, also demand safe assets for international transactions. Whether these assets are scarce is as much a subject of controversy as the features that make up a safe asset. It is true that government bonds in euros and renminbi have a certain potential for expanding the supply of international liquidity. But in order to realise it, the renminbi would have to be freely convertible and China would have to open and further develop its financial markets. In Europe, bonds from the Federal Republic of Germany alone represent too small a market to be able to act as a global alternative. Other European countries would have to be

regarded as a safe alternative again, for example when countries regain their investment-grade ratings. According to Barry Eichengreen, one way to augment the supply of liquidity again would be to allow the IMF to borrow on private capital markets and issue additional special drawing rights with the proceeds.

The renaissance of bilateral swap arrangements

Bilateral swap arrangements were used by the US Treasury as early as in 1936 to supply developing countries with bridging loans. During the Bretton Woods period, the Fed introduced a network of swap lines known as reciprocal currency arrangements to prevent a sudden and substantial withdrawal of gold by official foreign institutions.[13] A swap protected foreign central banks from the exchange rate risk when they had obtained excess and unwanted dollar positions. It allowed them to dispense with the temporary conversion of dollars into gold.

Between 1973 and 1980, the swap lines were used instead of US currency reserves to finance interventions by the Fed in the foreign exchange market. Gains and losses were shared with the other central bank when the Fed drew on a line. However, the G10 central banks could try to use the swap arrangements to influence the US foreign currency market interventions, so the Fed stopped using them in the mid-1980s. All existing swap lines except those with Canada and Mexico were ended in 1998.

After the terror attacks of September 11, 2001, the Fed established swap lines with the European Central Bank and the Bank of England for 30 days and expanded the existing line with the Bank of Canada. Currency swaps were used here for the first time to restore liquidity in financial markets. During the global financial crisis, the Fed then financed the lender-of-last-resort actions of other central banks in industrialised and emerging market economies, with the latter assuming the credit risk. The international reserves of many central banks at the start of the crisis were smaller than the amounts they borrowed under the swap lines. In 2013 the swap arrangements between the six most important central banks were converted into standing arrangements.

All these swap arrangements have one thing in common: they signal the central banks' willingness to cooperate with each other, whether it be in defence of the parities under the Bretton Woods system, to avert speculative attacks on the Fed, or with the aim of providing dollar liquidity during the financial crisis. China has also set up a far-reaching system of swap arrangements, mainly with the aim of pushing ahead with the internationalisation of the renminbi. But from the perspective of these central banks, the agreements with the Bank of England, the Monetary Authority of Singapore, the Reserve Bank of Australia and the ECB also serve the goal of being able to provide renminbi liquidity in their area of responsibility when needed.

Swaps represent a powerful and flexible tool of central banks that issue reserve currencies to regulate international capital flows. Central banks are the only institutions capable of changing their balance sheets quickly enough to keep pace with the volatility of international capital flows. Swaps are unsuitable, however, for longer-lasting crises, sovereign debt crises and to finance balance of payments imbalances. That is why they would be the most suitable tool for emerging market economies, as they are more likely to face abrupt changes in capital flows. Nevertheless, so far only the most important central banks that issue reserve currencies have been able to access unlimited swaps. Granting them is determined by the mandate of the central banks and they represent contractual, not institutional agreements. Accordingly, the central banks are able to choose their contractual partners, and there is no central independent authority to supervise swap arrangements. The swap arrangements for central banks in industrial countries that do not issue a reserve currency can therefore be expected to be reinstated in the event of a global shock, while they are less likely to be employed in case of a regional shock. Their use is even less predictable for systemic emerging market economies.

Conclusion

International financial markets have not been spared from globalisation, and free capital flows are a major feature of the current international financial and monetary system. But this also makes the system vulnerable to contagion during crisis periods, as demonstrated by the global financial crisis of 2008. An effective financial safety net that permits countries and the global economy to manage crises successfully therefore is becoming increasingly important. The main instruments available at the moment are crisis mitigation tools such as international reserves and the option of swap arrangements between central banks, along with IMF programmes and regional financing arrangements. Each of these instruments has benefits and drawbacks. They usually score well on speed and predictability, but their financial and political costs (such as the stigmatisation effect of an IMF programme) can be substantial, and the incentives for economic-policy measures to combat the factors that trigger a crisis can be negative. Besides, the resources of the safety net are too limited to mitigate a widespread shock.[14] Systemically relevant emerging market economies, in particular, would be inadequately protected. But there is no agreement either as to which elements can be improved and how big the net should be. One proposal, for example, is to expand swap arrangements to allow systemically relevant emerging market economies to participate as well. Another possibility would be to target capital flows themselves. Capital controls such as taxes or limits give developing countries and emerging market economies a chance to protect themselves against the volatility of capital flows. In this field the IMF could act as an adviser on the introduction and supervision of capital controls. ■

[1] Triangular arbitrage caused the cross rates to move within a band of 2 % on either side of parity. Bordo, M. D. (1993), The Bretton Woods International Monetary System: A Historical Overview, in: Bordo, M. D. and B. J. Eichengreen (Hrsg.), A Retrospective on the Bretton Woods System: Lessons for International Monetary Reform, University of Chicago Press, p. 49.

[2] A transitional period of three years was agreed for currencies to achieve free convertibility. An IMF review was scheduled after five years and repeated annually, requiring the country to justify why its currency was not yet floated. Full currency convertibility for the main industrialised countries was not achieved until 1958.

[3] After the currencies of the industrialised countries became fully convertible in 1958, the system evolved from fixed but adjustable exchange rates into a fixed-rate system.

[4] Cf. Bordo, M.: The Bretton Woods international monetary system: a historical overview, p. 3–98 in: Eichengreen, Barry J. (Hg.): A retroperspective on the Bretton Woods system, Chicago III.: Chicago University Press, 1993, p. 39.

[5] Cf. Bordo, M. D. and O. F. Humpage: Federal Reserve Policy and Bretton Woods, Federal Reserve Bank of Cleveland working paper no. 14-07, 2014, p. 3.

[6] Cf. Garber, P. M.: The Collapse of the Bretton Woods Fixed Exchange Rate System, in: Eichengreen, B. J. (Hg.): A retroperspective on the Bretton Woods system, Chicago III.: Chicago University Press, 1993, p. 461–484; Eichengreen, B. J.: Epilogue, in: Eichengreen, B. J. (Hg.): A retroperspective on the Bretton Woods system, Chicago III.: Chicago University Press, 1993, p. 624–626, p. 644–652; Gavranić, K. and D. Miletić: Rise and Fall of Bretton Woods, In: Journal of International Scientific Publications, Vol. 9, 2015, p. 343–351.

[7] Cf. Dooley, M. P., Folkerts-Landau, D. and P. Garber: The Revived Bretton Woods System: The Effects of Periphery Intervention and Reserve Management on Interest Rates and Exchange Rates in Center Countries, NBER Working Paper Series No. 10332, 2004.

[8] Cf. Eichengreen, B.: Global Imbalances and the Lessons of Bretton Woods, NBER Working Paper No. 10497, 2004, p.3.

[9] Cf. Obstfeld, M., Shambaugh, J. C. and A. M. Taylor: The Trilemma in History: Tradeoffs among Exchange Rates, Monetary Policies, and Capital Mobility, NBER Working Paper No. 10396, 2004.

[10] Eichengreen, B. J. (2016), Global Monetary Order, prepared for the ECB's annual research conference on "The International Financial Architecture," Sintra, 28–29 June 2016.

[11] Among the elements of the financial safety net, the IMF also includes market-based insurance instruments for states such as commodity price hedges. IMF (2016), Adequacy of the global financial safety net, IMF Policy Paper, March 28, 2016.

[12] Cf. IMF (2016), Adequacy of the global financial safety net, IMF Policy Paper, March 28, 2016. Bush, O., Farant, K. and M. Wright: Reform of the International Monetary and Financial System. In: Bank of England (Hg.): Financial Stability Report No. 13, 2011.

[13] Bordo, M. D., Humpage, O. F. and A. J. Schwartz (2014), The Evolution of the Federal Reserve Swap Lines since 1962, NBER Working Paper No. 20755.

[14] IMF (2016), Adequacy of the global financial safety net, IMF Policy Paper, March 28, 2016.