International Liquidity and the Rapid Digitalization of the World Economy

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Abstract

The global financial crisis of 2007-2009 as well as the COVID-19 pandemic have significantly impacted the growth of international liquidity in response to the slowdown in the growth of the global economy and the challenges of illiquidity. The current global progress of digitalisation in international business opens room for a further increase in international liquidity. This paper aims to analyse the trends of international liquidity in the context of increasing digitalisation. The paper analyses the phases of international liquidity since 2000, focusing on the currency structure using the global liquidity indicators of the Bank for International Settlements. Based on the results of our research, we have emphasised the declining role of the US dollar in international liquidity. In addition, the results of the study show that the swap lines between the US Federal Reserve and foreign central banks, which ensure the dollar's liquidity, are an important source of international liquidity. Advancing digitalisation is accelerating capital flows and creating opportunities to reduce the cost of cross-border transfers. In addition, most major central banks are considering the introduction of digital central bank money, electronic money and crypto-assets, such as global stablecoins. The rapid emergence of digital money may have a significant impact on international liquidity.

Keywords: Global liquidity, dollar, euro, Japanese yen, digital currency.

1. Introduction

Global liquidity refers to the volume of international (cross-border) financial flows in the world, which are mainly realized through the banking system and non-bank financial institutions (Buch and Goldberg, 2024).[2] The volatility of capital flows is related to risk perceptions and the performance of the institutions that provide international finance. Capital flows are also influenced by the regulatory framework, which primarily relates to non-bank financial institutions.

In earlier times, international liquidity was monitored using indicators of a particular country's external debt. More recently, however, the BIS (Bank for International Settlements) indicators of global liquidity have found wider application. In this paper, we will analyse these indicators to examine the dynamics and currency structure of global liquidity. We will apply the BIS methodology to monitor global liquidity using the BIS Global Liquidity Indicators (GLIs). The paper also examines the role and importance of international reserves as an indicator of international liquidity. The potential impact of the creation of e-money on international liquidity is also examined.

2. Methodology

According to the BIS methodology, the term "global liquidity" refers to the ease of funding in global financial markets (Cohen et al., 2017). The concept has various price and non-price dimensions, with foreign currency loans (from the borrower's perspective) being a fundamental indicator. The BIS Global Liquidity Indicators (GLI) capture foreign currency loans to non-banks on a quarterly basis. The data covers the period since 2003 and includes both loans from banks (domestic and foreign) and financing via the global bond market through the issue of international bonds (IDS). The focus of the analysis is on foreign currency loans denominated

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[2] In general, liquidity can be defined as the ease with which assets can be converted into a means of payment (Domanski, Fender, and McGuire, 2011, p. 57).

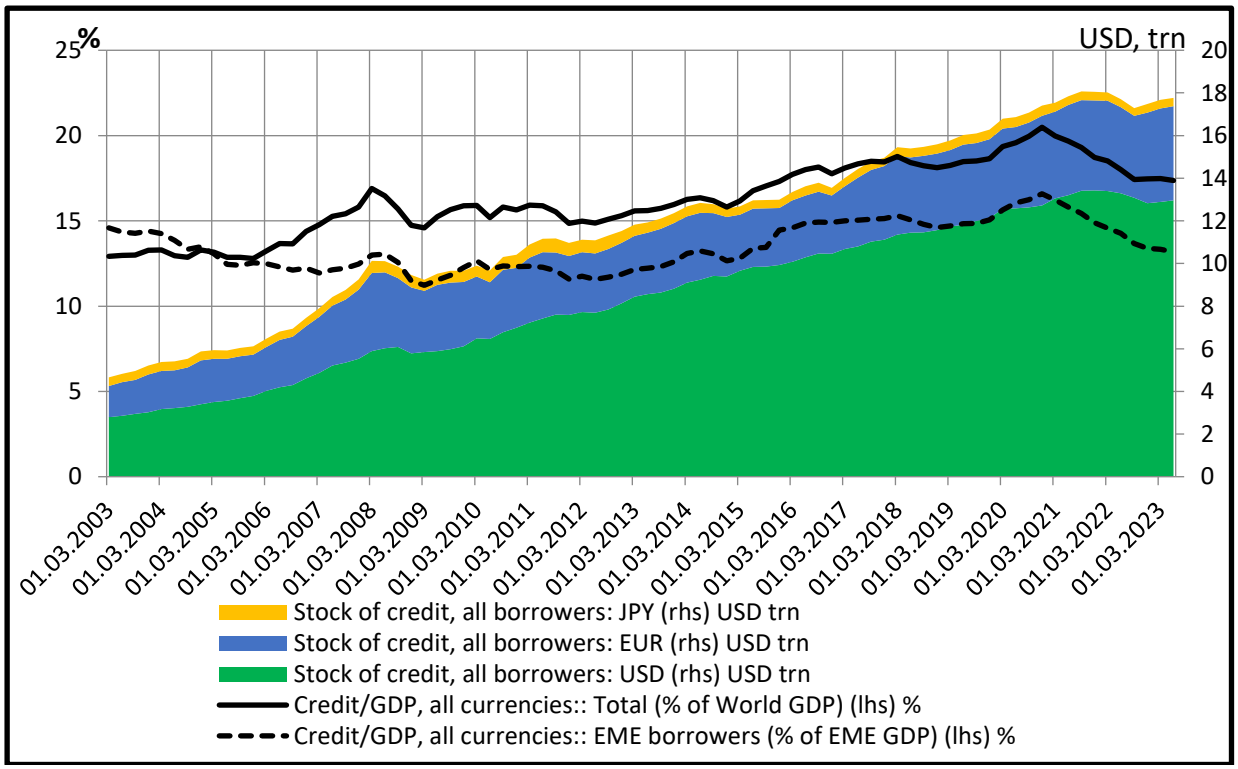
in the three most important reserve currencies (US dollar, euro and Japanese yen) and granted to borrowers outside the respective currency areas.[3]

The GLIs have three main components. This is illustrated by the example of dollar loans to borrowers outside the United States. For the country of a given borrower, the GLI measures dollar loans to residents of that country by combining three series from the BIS statistics: (1) bank loans in dollars from domestic banks; (2) from banks abroad - where (1)+(2) are part of banks' "international claims"; and (3) dollars raised through the issuance of international bonds. The corresponding aggregates exist for the euro and the Japanese yen (see Hardy and Peter, 2023, p. 25, chart A1).

Like other measures, GLIs also have their disadvantages. I should be noted that the GLI and other statistics do not capture the trillions in foreign currency debt that borrowers acquire through currency swaps and forwards (Borio et al., 2022, according to Hardy and Peter, 2023, p. 26)[4].

3. Dynamics and Structure of Global Liquidity

The dynamics and structure of foreign currency loans, which represent the main component of global liquidity, are shown in chart 1. Two different phases can be recognised in this chart. Developments on the global financial market from 2021 onwards, stimulated by the COVID-19 pandemic and geostrategic realignments in the world, could open the third chapter on the path of global liquidity.



[3] The description of the BIS methodology is based on Hardy and Peter (2023, p. 25).

[4] Outright forwards and foreign exchange swaps account for USD 4,973 billion of the total daily turnover on the global foreign exchange market of USD 7,508 billion ("net-net" basis) in April 2022 (BIS, *Triennial Central Bank Survey: OTC foreign exchange turnover in April 2022*, Table 1, p. 9). (By comparison, the value of global merchandise trade in 2022 is USD 24,917 billion) (https://stats.wto.org/ accessed on 17/05/2024). The increasing use of private and official currency swaps reflects the Americanisation of national financial systems – both in developed countries and in many emerging markets (EMEs), whose financial networks are becoming increasingly interconnected.

Chart 1. Foreign currency loans in dollar, euro and yen (Loan portfolio to non-bank borrowers, in % and trillions of USD)

Note: Loans denominated in euros and yen were converted into dollars at the current exchange rate.

Source: Author based on data for chart 1 from Hardy, B. and G. Von Peter, "Global Liquidity: a new phase", ***BIS Quarterly Review***, December 2023, p. 24.

The driving force behind the growth of international liquidity in the first phase (early 2000s) was the banks (Hardy and von Peter, 2023, p. 21). According to these authors, there was dynamic growth in dollar and euro loans, with the beneficiaries of these loans mostly being borrowers from industrialized countries. When the global crisis broke out in 2007-2009, the flow of these loans was interrupted and financial weaknesses emerged in both industrialised countries and emerging market economies (EMEs).[5] Bank expansion before the Great Financial Crisis (GFC) led to a decline in the proportion of loans in the form of bonds (chart 2). Hardy and von Peter (2023, p. 21) point out that soft regulation of bank leverage and loose monetary policy facilitated this expansion and thus contributed to the credit boom that led to the Great Financial Crisis. During this period, the total amount of foreign currency loans in dollars, euros and yen doubled from 5 trillion dollars in the first quarter of 2003 to 10 trillion dollars in the first quarter of 2008, growing from 13% to a maximum of 17% as a share of global GDP (chart 1) (Hardy and von Peter, 2023, p. 23). Dollar loans grew dynamically, despite their high amount in the early days[6]. The rapid expansion of international banking activity has led to this dramatic growth and changed the structure of loans. The proportion of foreign currency loans in the form of bonds fell by 10 percentage points in line with the increase in bank loans. (Chart 2)

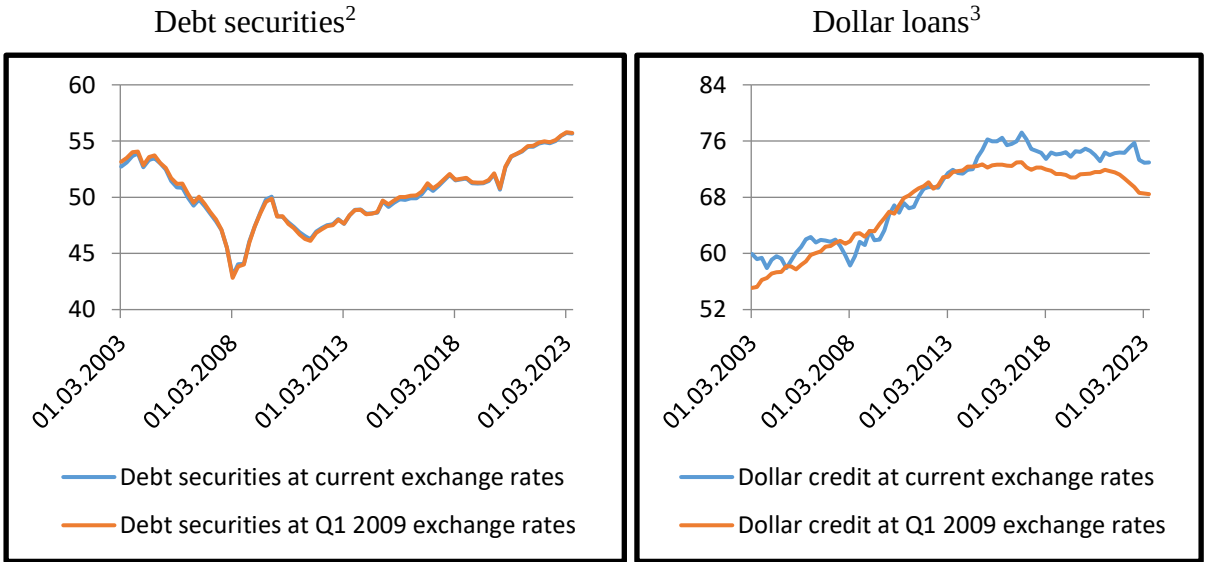


Chart 2. Structure of global liquidity (As a percentage of total foreign currency loans[1] to non-banks)

Note: [1] Dollar, euro and yen credit. [2] All three currencies. [3] All instruments.

[5] Global liquidity can influence domestic financial conditions through various transmission channels, including the monetary policy of industrialised countries and international spillover effects (Cerutti et al., 2017).

[6] In several countries (China, Russia and Turkey), the majority of bank loans in dollars are registered with local banks. In contrast to these countries, cross-border bank loans account for a larger share of dollar-denominated loans in India (McCauley et al., 2015, p. 32).

Source: Author based on data for chart 2 (data in charts) from Hardy, B. and G. Von Peter, "Global Liquidity: a new phase", ***BIS Quarterly Review***, December 2023, p. 27.

The dynamic growth of bank loans in the first phase is linked to economic growth in the industrialized countries, as the banks supported the boom in the property market in the industrialized countries. Falling lending standards contributed to the expansion of bank loans. Banks based in European countries have contributed significantly to the dynamic growth of international bank loans (McCauley et al., 2021). Rather, loose monetary policy in industrialized countries failed to prevent the emergence of financial imbalances through the creation of unsustainable loans and high asset prices, which ultimately shook the global economy (Borio and Disyatat, 2011). The rapid growth of foreign currency loans can become a problem if it also encourages the growth of domestic loans in a country that uses foreign loans (Borio et al., 2011). This can lead to a disruption of the domestic credit cycle and create sufficient conditions for the crisis to erupt, as the events of the GFC have shown. This can be an important channel for the international transmission of the crisis (Bernanke, 2018, p. 274).

The second phase began after the GFC and is characterized by a shift to lending via the bond market (Avdjiev et al., 2017), especially in industrialized countries. In the first year or two after the GFC, foreign lending shrank, then began to grow again. This was followed by the rise of the bond market with strong growth in dollar loans (Maggiori et al., 2018) and loans to users in emerging economies[7]. The proportion of foreign currency loans in the form of bonds rose from 43% in 2008 to over 55% in 2021 (Figure 2) (Hardy and von Peter, 2023, p. 26). Increased bank regulation (Ichiue and Lambert, 2016) contributed to a more moderate growth in foreign currency lending, which was also influenced by the ongoing crisis in the Eurozone. In response to the GFC and the sovereign debt crisis in the eurozone, European banks have reduced their lending abroad.

The fall in the reference interest rate in the US, together with quantitative easing (QE), contributed to the weakening of the US dollar at the start of the second phase. This influenced the dynamic growth of US dollar-denominated bond issues due to the low cost of borrowing. Benchmark interest rates in euros have also fallen, but initially lagged behind dollar interest rates in the first half of this phase. The fluctuations in global liquidity primarily reflect the changes in the monetary policy of the creditor countries[8]. Thanks to the increased capitalization of creditor banks and more favorable conditions for their financing, the volatility of international credit flows declined.

Post-GFC efforts focused on international and systemically important banks, and regulators and supervisors turned their attention to risk mitigation. Higher bank capitalization and lower leverage are likely to have mitigated liquidity volatility. Technological improvements in payment mechanisms led to a rapid increase in global liquidity, especially among non-bank borrowers, while strengthening the role of non-bank financial institutions as generators of global liquidity.

The second phase saw an increase in lending to emerging economies. A particular feature of this phase is the increase in international financing through bonds, which account for a growing share of dollar loans. Rising yields in the emerging economies attracted foreign investors. The

[7] The comparison of bank loans and debt securities obscures the fact that a significant proportion of debt securities are held by banks, which is why they constitute a bank loan (Aldasoro and Ehlers, 2018, p. 22).

[8] Using BIS statistics on international banking and international debt securities for a large number of countries over a 16-year period, Avdjiev et al. (2017) concluded that the impact of US monetary policy changes on all major types of international financial flows to borrowers increased dramatically after the GFC.

greater interest in investing in these countries was also linked to the loose monetary policy in the industrialized countries, which opened up opportunities for the growth of dollar liquidity.

The macro-financial environment has also changed significantly in recent times, which has had an impact on global liquidity. The expansionary monetary and fiscal policy of industrialized countries, the disruptions on the energy market and the COVID-19 pandemic led to a global surge in inflation. Around the world, there was a reaction in the form of a tightening of monetary policy, which had an impact on the growth of interest rates. The period of low interest rates from phase 2 has thus come to an end. The rise in interest rates for the dollar led to a rise in interest rates for other major currencies. This development increased the motivation of investors from the industrialized countries to invest in their economies, which reduced their interest in investing in the emerging economies. The rise in interest rates in emerging economies was also noted. As inflation spiked in 2021 amid major supply chain disruptions in an international environment characterized by rising geopolitical tensions, central banks around the world began to tighten monetary policy, leaving behind the low interest rate regime associated with Phase 2. Interest rates in the US rose earlier and faster than in the eurozone and Japan in 2022.

The literature asks whether this change in the macro-financial environment has led to a new phase of global liquidity? (Hardy and von Peter, 2023, p. 23). These authors point out that the share of foreign currency loans in global GDP is declining. The decline in dollar loans, which is attributable to the rise in interest rates, has contributed to this. At the same time, lower interest rates for the Japanese yen contributed to a slight increase in the share of this currency in international lending. These trends have led to a decline in foreign currency loans for borrowers from emerging markets[9].

4. Currency Swaps between the Fed and the Central Banks of Industrialized Countries as a Source of International Liquidity

The US dollar dominates international finance as a financing and investment currency. Although the United States accounts for a quarter of global economic activity, around half of all cross-border bank loans and international debt securities are denominated in US dollars (BIS, CGFS, 2020). Deep and liquid US dollar markets are attractive to non-US companies as they offer borrowers and lenders access to a large number of interested companies. The US dollar's advantage as a global reserve currency and in trade invoicing is another reason for its international use.

The central role of the US dollar in international finance means that global economic and financial activity is largely dependent on the ability to finance in this currency, i.e. on the fact that this financing flows smoothly and efficiently between users. This widespread international use of the US dollar brings significant benefits to the global financial system. These benefits result from economies of scale and network effects that reduce the costs and risks of transferring capital within the financial system. The strong dependence on a single currency and the close integration with other financial systems can lead to shocks originating in the US or elsewhere spilling over to the US dollar funding markets around the world.

The status of an international currency is often associated with "exorbitant privileges" and lower costs for external financing. However, during the GFC, the Fed was confronted with requests from other central banks to establish currency swap lines to increase its dollar liquidity. Although this mechanism can increase the resilience of the international monetary system (Bahaj and Reis, 2018), there is no automatic obligation for the Fed to provide this type of dollar

[9] The differences in the growth of loans in dollars, euros and yen reflect their financing costs and the correlation between the exchange rate movements of these currencies. The negative correlation between the exchange rate index and credit growth has recently become noticeable (BIS, 2024, p. 8).

liquidity, but it depends on the interests of the US[10]. There are views in the literature that the FED's currency swaps can strengthen the international status of the dollar (see Gopinath and Stein, 2018), while other studies suggest that this form of dollar promotion is not effective (see Eichengreen et al, 2016).

Based on the prevalence of the US dollar as a security currency and the currency structure of international liquidity, the FED has set up dollar swaps with the central banks of several industrialised countries, taught by the experience of the GFC[11]. At the height of the financial crisis, the Fed set up temporary currency swap lines with several emerging markets. They serve as an important source of global dollar liquidity. The European Central Bank also participated in the currency swap networks[12].

During the GFC, a network of swap agreements was used worldwide. The ECB also entered into this type of agreement with the People's Bank of China in 2013. These networks are an important source of liquidity in times of crisis and reduce the nervousness of market participants. In view of the importance of the US dollar as an international currency, chart 3 shows the dynamics of Fed currency swaps with foreign central banks.

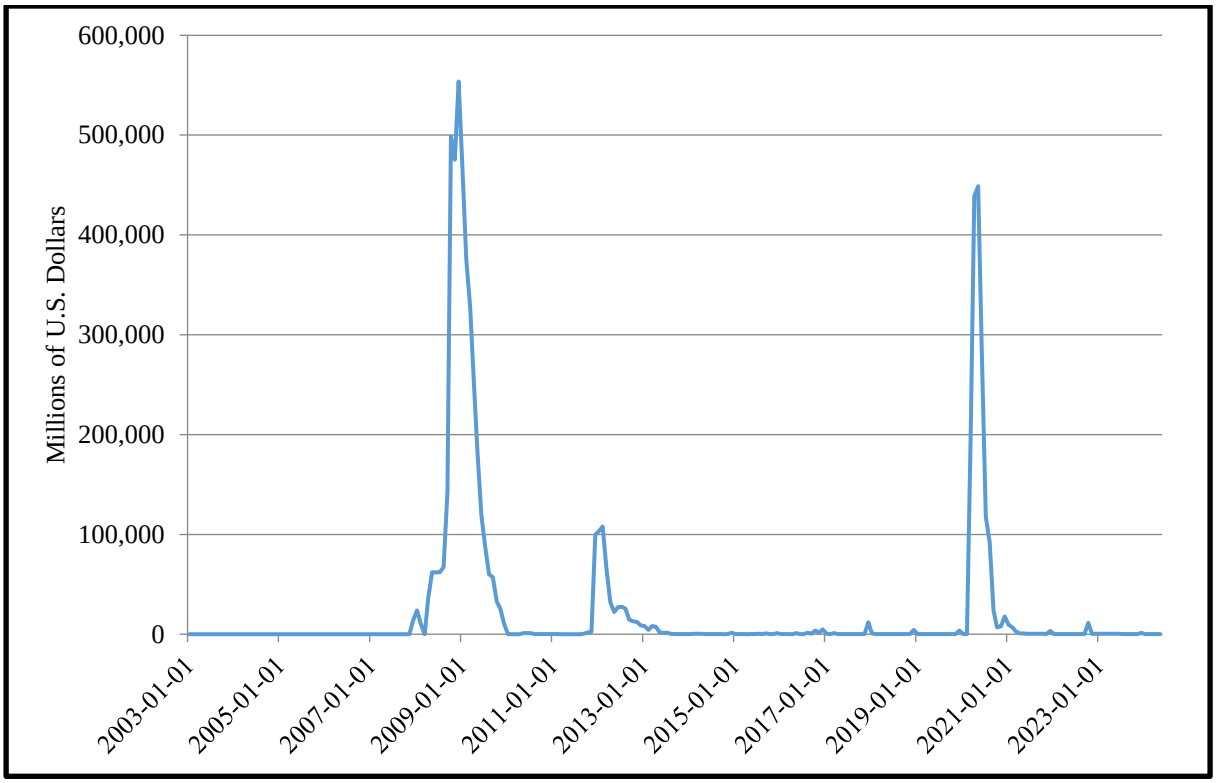


Chart 3. Assets: Central Bank Liquidity Swaps: Wednesday Level, Millions of U.S. Dollars, Monthly, Not Seasonally Adjusted

Source: FRED, Federal Reserve Economic Data, https://fred.stlouisfed.org Accessed on 05/20/2024.

[10] It is considered more likely that the Federal Reserve will extend the swap lines to the major international financial centres and developing countries where US banks had large exposures (see Allen, 2012).
[11] The swap lines with these countries were converted into permanent agreements in October 2013.
[12] The dollar liquidity swaps have maturities ranging from overnight to three months. The currency exchange between the central banks takes place at the market exchange rate. The central banks exchange currencies in the opposite direction at the same exchange rate. The central bank that requests dollars from the Fed via a swap agreement pays interest at the market rate at the end of the period for which it uses the funds.

Given the speed and potential volume of money transfers, currency swaps could be expected to play an increasingly important role as the ultimate source of international liquidity in the future. This could also support the dollar as the world's dominant reserve currency (see Rana, 2012). Recently, the number of countries involved in bilateral currency swaps has increased. During the COVID-19 pandemic, the FED's swap arrangements allowed international dollar liquidity to be maintained at a satisfactory level and mitigated the recessionary trends in the world.

5. Foreign Exchange Reserves as a Source of International Liquidity

The traditional reasons for holding foreign exchange reserves lie in the desire to ensure regular international payments in connection with imports and the proper repayment of national foreign debts. In the event of difficulties in borrowing on the international capital market, foreign exchange reserves represent "buffer stocks" to make up for the shortfall in capital inflows (see Jones, 2018). In addition, foreign exchange reserves should provide banks with liquidity in foreign currency in stress situations and mitigate volatility on the foreign exchange markets.

After the Asian financial crisis, there was a tendency to increase foreign exchange reserves in emerging and developing countries. The growth in foreign exchange reserves in this group of countries is primarily attributable to China. Global foreign exchange reserves continued to rise after the global financial crisis of 2007-2009, as some countries were reluctant to spend their reserves, fearing that this could send a negative signal about potential pressure on the exchange rate. The possibility of a sudden interruption in capital inflows prompted some countries to increase their foreign exchange reserves. Others want to avoid having to draw on the resources of the International Monetary Fund (IMF) and the World Bank in the event of a crisis. The accumulation of foreign exchange reserves also includes the cost of holding тхесе ресервес[13] (Chitu, 2016; Levy-Yeyati and Gomez, 2019). The possibility of a sudden interruption in capital inflows is an important reason for holding foreign exchange reserves. The increase in FX reserves in emerging markets after the Asian financial crisis of 1997 and the GFC of 2007-2009 is mainly due to insurance motives arising from the possibility of a sudden interruption in capital inflows.

During the financial crises of the last twenty years, including the global financial crisis, countries with larger foreign exchange reserves have been more successful in averting financial market panics and preventing sudden reversals of capital flows. Therefore, the accumulation of foreign exchange reserves is a popular self-protection strategy used by many emerging and developing countries. The opening of the global economy, deglobalisation and the fragmentation of the global financial market have strengthened the motivation of developing and emerging countries to increase foreign exchange reserves as a guarantee of liquidity. Holding foreign exchange reserves for precautionary purposes reduces the likelihood of a balance of payments crisis and helps to maintain the country's financial stability in times of external disruption. They are therefore an extremely important factor for global liquidity today.

The last twenty years have seen a diversification of foreign exchange reserves in favour of non-traditional reserve assets such as corporate bonds and equities. In addition, a larger share of non-traditional foreign exchange reserve currencies (Canadian and Australian dollar) can be observed, with a simultaneous decline in the share of the US dollar and the euro[14]. (chart 4)

[13] The return on foreign exchange reserves is lower than the interest rate on long-term foreign debt. It is therefore important for each country to determine the optimum level of its foreign exchange reserves. In practise, a country's foreign exchange reserves are divided into a liquidity tranche and an investment tranche. Empirical studies show that a larger share of liquidity tranches compared to investment tranches is associated with a greater influence of trade invoicing and foreign debt on the currency structure of reserves than the influence of yields (Lu and Wang, 2019).

[14] The currency structure of the portfolio is certainly influenced by the role of the respective currency in trade invoicing as well as by the currency denomination of the country's foreign debt.

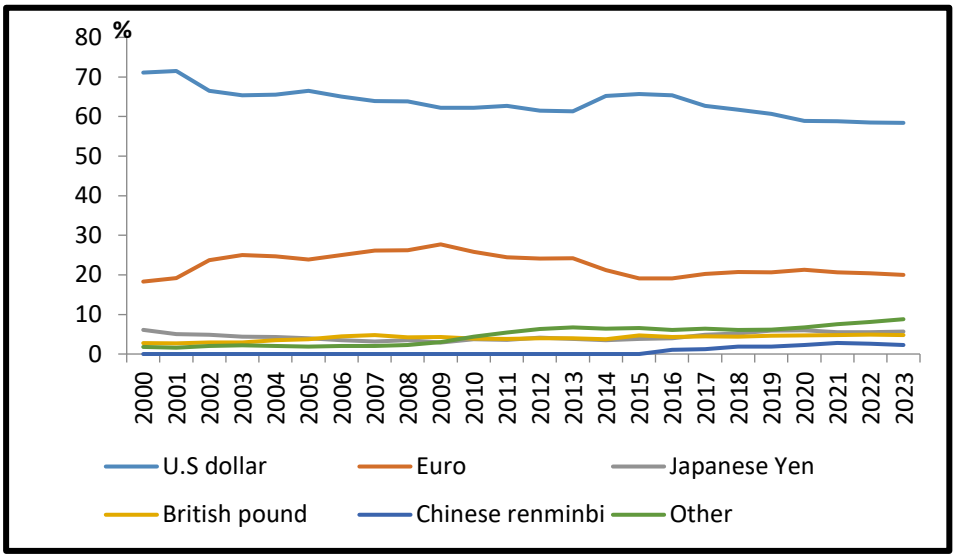


Chart 4. The currency structure of foreign exchange reserves, in per cent

Note: Share of foreign exchange reserves recognised worldwide. At current exchange rates. The data are annual and range from 2000 to 2023. The entries in the legend appear in graphical order from top to bottom. Chinese renminbi is 0 to 2015-Q2.

Source: https://www.federalreserve.gov/econres/notes/feds-notes/the-international-role-of-the-u-s-dollar-accessible-20211006.htm#fig2 za razdoblje od 2000 do 2020. Za period 2021-2023 podaci su iz IMF, COFER, https://data.imf.org/regular.aspx?key=41175 Accessed on 05/24/2024.

Although the share of the US dollar in the structure of global foreign exchange reserves is declining noticeably, global liquidity continues to be supplemented by another channel of issuing this currency. The growth of US government debt increases the global availability of the dollar as the world's dominant reserve currency (chart 5).

In the period after the GFC, the growth trend in US government debt continued. Government debt held by foreign and international investors also increased, albeit at a much slower rate than the growth in total US government debt. Federal debt held by foreign and international investors amounted to around 24% of gross federal debt in 2023 (chart 5), compared with around 31 in 2009. The remainder of government debt is held by US citizens. In the structure of foreign ownership of US securities in 2023, government bonds account for 28.3%, agency debt 4.8%, corporate bonds around 15.8% and equities 51.1%. A significant decline in the share of government bonds can be observed. The proportion of government bonds held by foreigners was 52.7% of total US government bonds in 2008 and only 33.3% in 2023. At the same time, the proportion of equities held by foreigners rose from 11% in 2008 to 17% in 2023[15].

[15] The data from Department of the Treasury, Federal Reserve Bank of New York, Board of Governors of the Federal Reserve System, "Foreign Portfolio Holdings of U.S. Securities" (April 2024), Table 3, p. 8. https://ticdata.treasury.gov/resource-center/data-chart-center/tic/Documents/shla2023r.pdf Accessed on 05/24/2024.

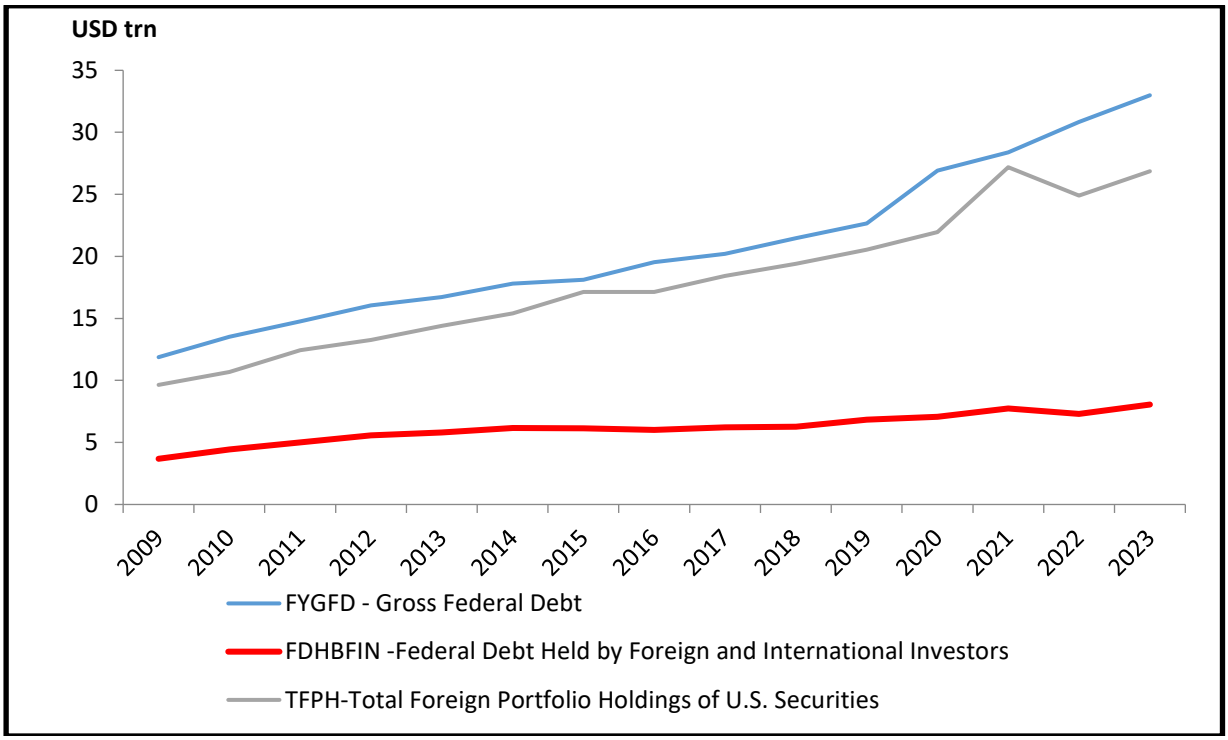


Chart 5. US gross federal debt and federal debt held by foreign and international investors, in trillions of dollars

Note: Note: Gross Federal Debt [FYGFD]- Dates represent the end of the fiscal year, not Seasonally Adjusted; Federal Debt Held by Foreign and International Investors [FDHBFIN] - End of Period, not Seasonally Adjusted.

Source: a) Council of Economic Advisers (US), Gross Federal Debt [FYGFD], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/FYGFD, May 21, 2024. b) U.S. Department of the Treasury. Fiscal Service, Federal Debt Held by Foreign and International Investors [FDHBFIN], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/FDHBFIN, May 24, 2024. c) https://ticdata.treasury.gov/resource-center/data-chart-center/tic/Documents/shlhistdat.html for TEPH, May 24.

Of the total amount of public debt in the hands of foreigners totalling USD 7,613.2 billion in 2023, USD 3,852 billion is in foreign private ownership and USD 3,762 billion in foreign public ownership. This means that 49.4% was state-owned. This actually means that foreign countries held their foreign exchange reserves mainly in US government securities. By selling these securities (increasing government debt), the USA increased the liquidity of its own economy. In recent years, foreign investment in both long-term and short-term US government bonds has declined. However, the total amount of foreign portfolio holdings of US securities grew almost in parallel with the growth in US federal debt until 2021. This was followed by a significant decline in 2022, but the upward trend was restored in 2023, mainly thanks to the increase in foreign investment in US equities. These developments illustrate the continuing great privilege of the US as the issuer of the world's reserve currency to respond to global liquidity trends[16]. The growth in the foreign exchange reserves of developing and emerging countries is partly converted into US government bonds. The great depth of the US financial market and the security of these investments are often a stronger motive for these investments than the yield motive. However, it should be noted that the opening up of the deglobalisation process of the world economy and the fragmentation of the global financial market are encouraging the restructuring of foreign exchange reserves in many countries (BRICS countries and other

[16] During the GFC and the COVID-19 pandemic, central banks around the world have increased their balance sheets many times over, buying both government and private assets. These includes the FED and the European Central Bank. Interest rates on these assets were low, leading to an increase in central bank losses as interest rates skyrocketed due to the fight against inflation (Cecchetti and Hilsher, 2024).

developing countries with significant trade with these countries). This may open the process of creating a global liquidity divided into two blocks of countries.

6. The Potential Impact of Digital Money on International Liquidity

The development of digital technologies is being rapidly applied in international finance. We are seeing the emergence of distributed ledger technology (DLT) and network connectivity fueling the creation of private and public digital money and wealth (DM). In addition, many central banks are considering the introduction of central bank digital currencies, electronic money (e-money), crypto-assets such as global stablecoins (GSC))[17], as well as security and utility coins (BIS, 2020a). On 18 September 2024, the market capitalization of crypto-assets was approximately USD 2.06 trillion.[18]

The introduction of a digital currency (DC) could speed up cross-border payments and increase the efficiency of existing international payment mechanisms. In addition to the benefits resulting from lower transaction costs and greater financial connectivity, DCs could promote greater risk diversification and strengthen trade relations between countries. Furthermore, new DC technology has the potential to promote greater integration with international payment systems. If these benefits increase the acceptance and use of DM for cross-border transactions, the question arises as to whether the introduction of digital money would affect the build-up of global reserves and to what extent the impact on global liquidity would be felt.

Recent changes in the monetary system, characterized by the growing importance of digital payments and a decline in the use of cash, have led to a shift from central bank money to commercial bank money in current financial transactions (Auer et al., 2022). Large private technology companies are increasingly strong competitors of non-banks in the payments market and in the provision of private money. Cryptocurrencies and stablecoins are increasingly seen as an alternative to central bank fiat currencies and commercial bank money. Uncontrolled use of digital money could jeopardize the stability of the monetary system. Dwindling confidence in central bank money could lead to holders abandoning domestic money in favor of alternatives such as cryptocurrencies and stablecoins.

The US dollar was the predominant currency for international payments for many years in the post-war period. It also plays an important role in the invoicing of international trade (Gopinath and Stein, 2021). However, technological innovations in payment systems could reduce its role and encourage the use of currencies other than the dollar as they are available at a lower cost, which could lead to a gradual increase in the use of these currencies for international payments (Brunnermeier, James and Landau, 2019).

The reduction in the cost of transferring funds is already having an impact on the diversification of the portfolio of foreign exchange reserves (Arslanalp et al., 2022). Geoeconomic fragmentation in the world may prompt countries to review the currency structure of their foreign exchange reserves to reduce dependence on the US dollar (Aiyar et al., 2023). The results of the empirical research by Kim et al. (2024) point to the great importance of the inertia effect and financial linkages as the main drivers for holding reserve currencies. This is in line with the findings of Iancu et al. (2020). The decline in the dollar's share of international reserves may be influenced by the deepening of the financial market for non-traditional reserve currencies (Arslanalp et al., 2022, p. 6).

[17] Stablecoins, like other cryptoassets, have the potential to improve the efficiency of financial service delivery, but they can also pose risks to financial stability. The widespread adoption of digital currencies in cross-border transactions could increase the volatility of capital flows, leading to new crises. The official acceptance of privately issued digital currencies as legal tender could undermine the financial integrity of the country (see Adrian and Weeks-Brown, 2021).

[18] https://coinmarketcap.com/ Accessed on September 18 2024.

7. Conclusion

The driving force behind the growth of international liquidity in the first phase (early 2000s) was the banks. There was dynamic growth in dollar- and euro-denominated loans, with the beneficiaries of these loans mostly being borrowers from industrialised countries. When the global crisis broke out in 2007-2009, the flow of these loans was interrupted and financial weaknesses emerged in both the industrialised countries and the emerging markets.

In the second phase, lending to emerging markets increased. A characteristic feature of this phase is the increase in international financing through bonds, which account for a growing share of dollar loans. Rising yields in the emerging markets attracted foreign investors. The greater interest in investing in these countries was also linked to the loose monetary policy in the industrialised countries, which opened up opportunities for the growth of dollar liquidity.

The sharp rise in inflation around the world in 2021 amid the fragmentation of the global financial market has forced central banks to raise key interest rates. This was preceded by a phase of low interest rates and expansionary monetary policy. This was followed by the tightening of foreign currency loans with uncertain effects on global liquidity. Geopolitical reasons have become entangled in global financial flows and put pressure on the existing international monetary system. The US dollar's share of global foreign exchange reserves is declining and the BRICS countries are looking for ways to further reduce the dollar's role as an invoicing currency while reducing assets denominated in this currency. Ongoing geopolitical uncertainty could further complicate lending conditions for emerging and developing countries. High interest rates make foreign currency loans more expensive and servicing foreign debt in this currency is a major burden for indebted countries.

The great uncertainty regarding the development of global liquidity is caused by digital technology in the financial sector. Although digitalisation has become an unstoppable process, its benefits and risks in financial transactions are highlighted. The creation of digital currencies appears to be on the verge of realisation, although the impact on the development of global liquidity and the functioning of the international monetary system is difficult to predict today.

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