Rethinking the global financial safety net

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Thank you very much Klaus for the opportunity to join this event today and to speak to this distinguished audience about the lessons from the Covid-19 crisis for the global financial safety net. The institutions represented at this dialogue all play a vital part in maintaining this network. The events of the last 18 months have shown the importance of having a backstop, but also that some adjustments may be necessary.

This afternoon I will talk about the role of the US dollar and the vulnerabilities associated with its dominance on the global financial stage. I will outline the importance of having an international lender of last resort and the increasing importance of non-banks and market-based finance in this constellation.

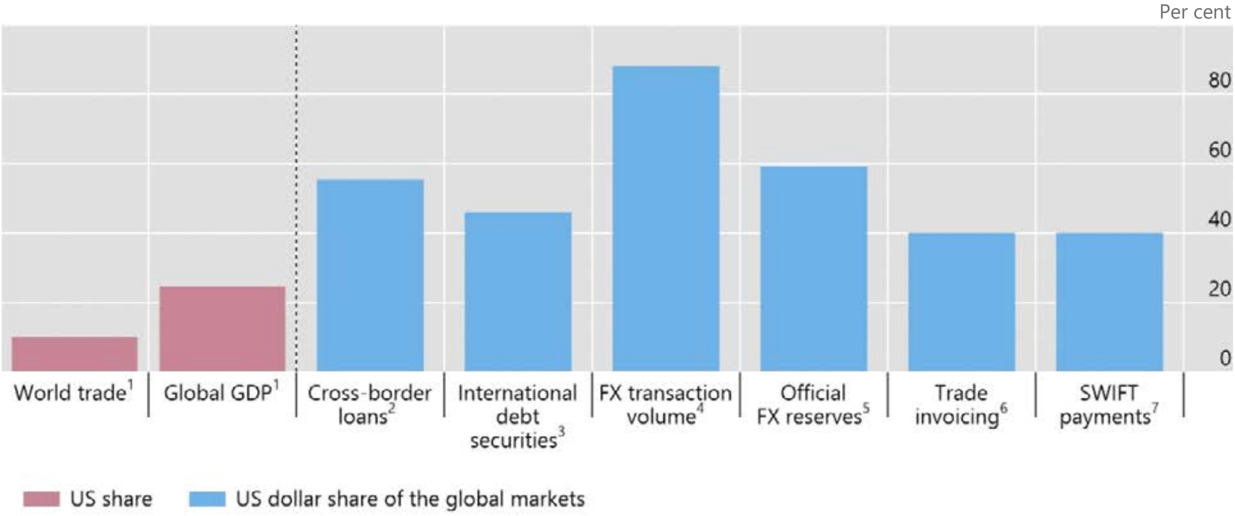
A dollar-based system

The US dollar is *the* dominant currency in international financial markets and trade (Graph 1). The IMF estimates that around 40% of all international trade between 1999 and 2019 was invoiced in US dollars. If this seems low, consider that these figures include trade between euro area countries. Our BIS banking statistics show that the dollar's share in cross-border lending was 55% – higher than its share in trade – in the second quarter of this year.

Its share in cross-border lending to emerging market economies (EMEs) was even higher, at almost 80%. The dollar's share is not much different when we look at securities markets. Our statistics show that, at the end of September, almost half of all outstanding international debt securities was denominated in dollars. And almost 90% of all foreign exchange (FX) transactions involve the dollar, making it *the* vehicle currency in FX markets.

A dollar-based system

Graph 1



[1] Data refer to 2020. [2] US dollar-denominated cross-border loans by banks to counterparties in all countries; data refer to Q2 2021. [3] US dollar-denominated international debt securities by all issuers; data refer to Q3 2021. [4] Data refer to 2019. [5] Data refer to Q2 2021. [6] Average dollar share between 1999 and 2019. [7] Data refer to August 2021.

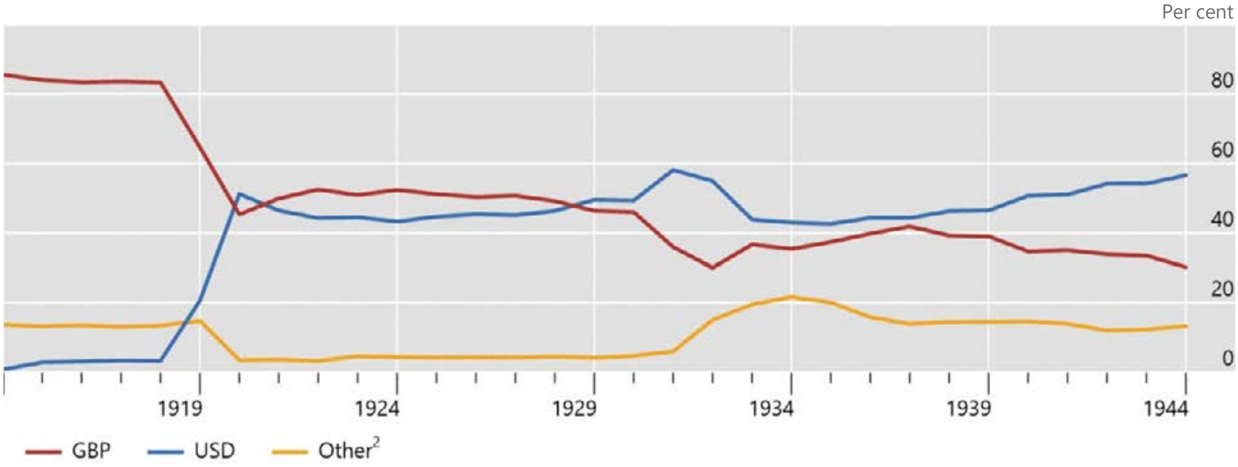
Sources: Federal Reserve; IMF; World Bank; CPB World Trade Monitor; Bloomberg; SWIFT; BIS locational banking statistics; BIS Triennial Central Bank Survey of Foreign Exchange and Over-the-counter (OTC) Derivatives Markets; BIS calculations.

The reasons for the dollar's dominance include the deep and liquid market for dollar assets. It also reflects the solid US economic base, strong property rights and tested legal frameworks that are widely understood, and the Federal Reserve's good record of maintaining the value of the currency. But many of these factors apply to other currencies as well.

A more complete answer must point to the self-reinforcing nature of the dollar's status as the pre-eminent world currency. It has that status, at least in part, because it has been the dominant currency for many decades. Dominant currencies can and do change – the shift from sterling to the US dollar is a case in point (Graph 2) – but these shifts are rare and take a long time.

Dominant currencies can change, but shifts are rare and take a long time

Global foreign public debt – selected currency shares (as a % of total)[1] Graph 2

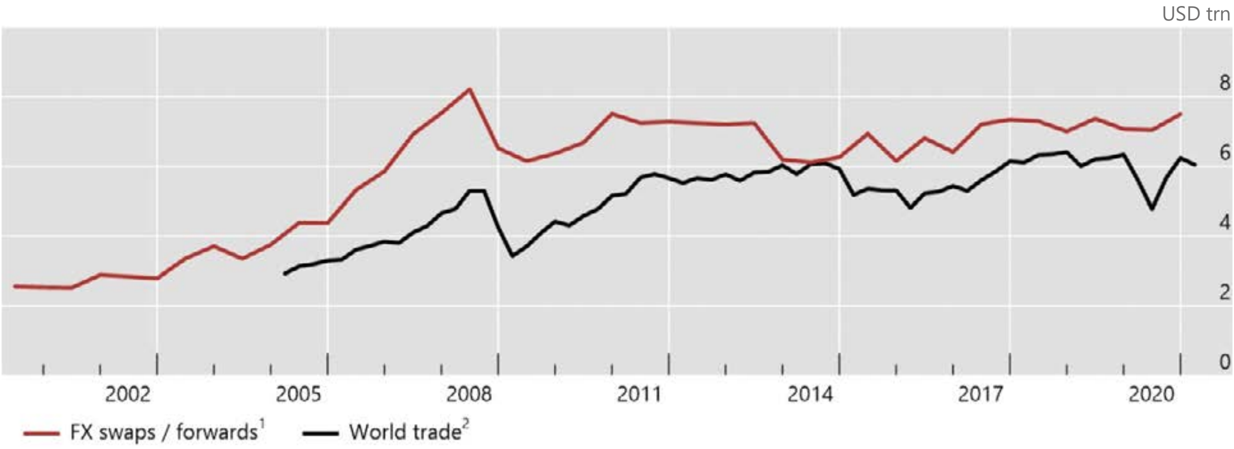


[1] Sample of 28 countries, of which eight AEs and 20 EMEs. Commonwealth countries (AU, CA, IN, NZ and ZA) are not included due to their strong political links with the UK, which constrained their tendency to issue debt in currencies other than GBP. [2] Securities indexed to gold are included.

Source: L Chitu, A Mehl and B Eichengreen, "When did the dollar overtake sterling as the leading international currency? Evidence from the bond markets", *Journal of Development Economics*, volume 111, pp 225–45, November 2014.

The various aspects of the global financial system reinforce the dollar's role in several ways. Its role as an invoicing currency for international trade goes hand in hand with the need for trade financing. And for firms that invoice in dollars, it may well make sense to borrow in dollars. This explains why corporates – around the world, not just in EMEs – borrow in dollars. The dollar's role as the funding currency of choice means that the universe of dollar-denominated assets extends beyond the United States. Invoicing in dollars also generates hedging activity in dollars. Indeed, the FX swap and forward positions of non-financial counterparties track world trade (Graph 3).

Non-financial firms' hedging demand tracks world trade — Graph 3



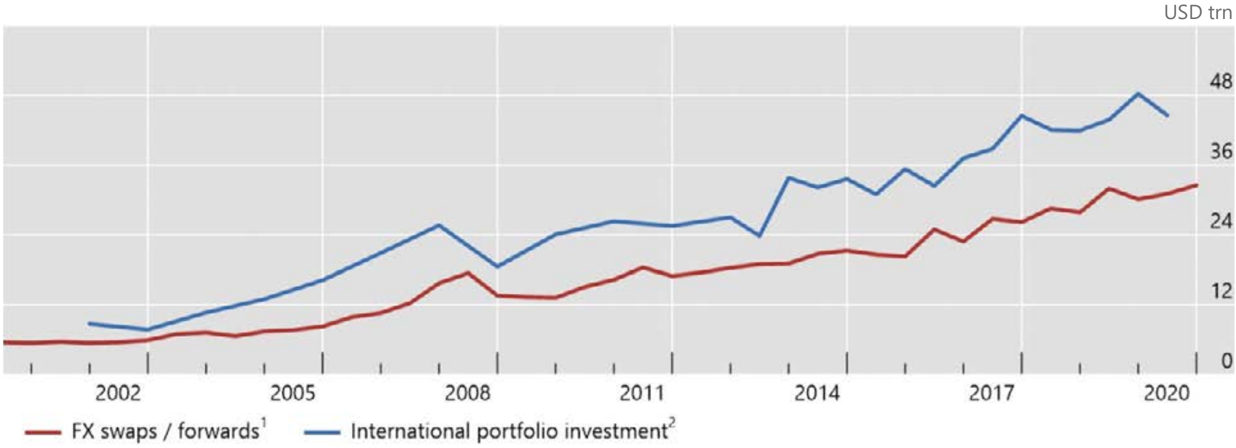
[1] Notional amounts outstanding on a net-net basis. [2] Exports of goods and services, quarterly flows.

Sources: IMF, Coordinated Investment Portfolio Survey; World Trade Organisation; BIS OTC derivatives statistics; BIS calculations.

Yet another factor explains the role of the dollar. Large institutional investors with a global portfolio of assets tend to face a currency mismatch between the assets they hold and their commitments to their domestic stakeholders, for example pension fund beneficiaries or insurance policyholders. These obligations are denominated in domestic currency – in euros, yen or Swiss francs – and not necessarily the currencies in the diversified portfolio of global assets.

These investors may want to hedge that risk. Indeed, the external portfolio investments of non-bank financial intermediaries (NBFIs) move together with their FX swap and forward positions (Graph 4). The hedging counterparty is typically a bank. The bank in turn hedges its own currency risk by borrowing dollars. That way, dollar claims or credits are counterbalanced by dollar debts. The upshot is that banks take on dollar-denominated liabilities as they provide hedging services. As a result, the global banking system runs on dollars.

NBFIs' hedging demand moves with external portfolio investments Graph 4



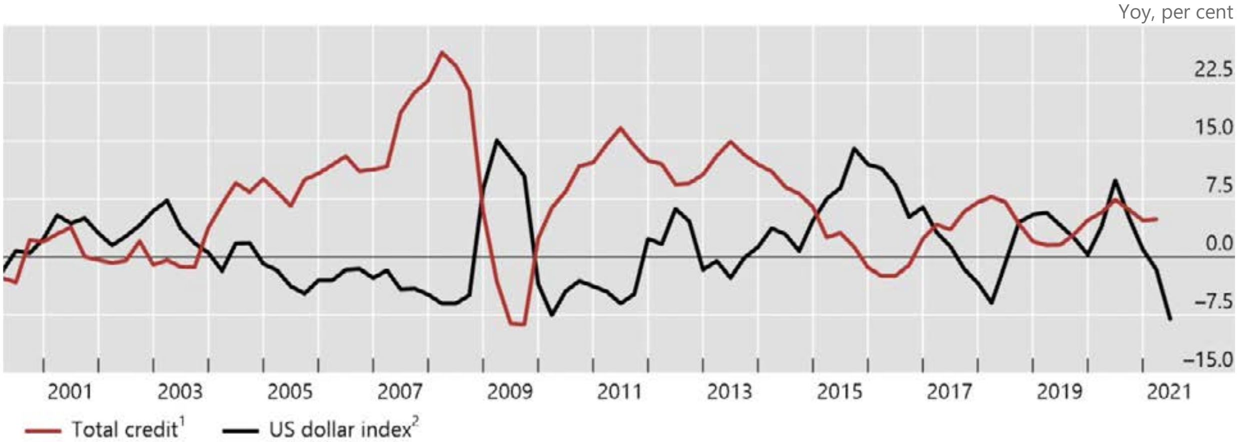
[1] Notional amounts outstanding on a net-net basis. [2] Portfolio investment by NBFIs in CPIS-reporting countries.

Sources: IMF, Coordinated Investment Portfolio Survey; World Trade Organisation; BIS OTC derivatives statistics; BIS calculations.

The dollar's dominance creates vulnerabilities. The most obvious one is that it leads to currency mismatches on the balance sheet of the borrowers who tap international markets. This is an issue particularly for large corporate borrowers in EMEs. Since few EMEs have deep domestic currency corporate bond markets, even firms without export revenues tend to issue debt denominated in foreign currency. Such currency mismatches are often accompanied by maturity mismatches driven by heavy reliance on short-term bank borrowing.

Vulnerabilities continue to exist for EMEs that have been able to partly shift to local currency, long-term borrowing. The reason is that most global investors continue to think and account in US dollars or other major currencies. Local currency borrowing does not therefore eliminate currency mismatches, it just shifts them to the balance sheet of lenders or investors. This introduces exchange rate risk into their return calculations and makes the dollar exchange rate a major determinant of international capital flows. The negative relationship between the US dollar index and US dollar credit to EMEs has held remarkably well for the last two decades (Graph 5).

US dollar credit to EMEs fluctuates with US dollar index — Graph 5



[1] Annual growth of US dollar-denominated credit or loans to non-banks in EMEs. [2] Annual growth of the trade-weighted nominal dollar index based on trade in goods and services, major EMEs. An increase indicates a stronger US dollar.

Sources: Federal Reserve Bank of St Louis, FRED; Datastream; Dealogic; Euroclear; Thomson Reuters; Xtrakter Ltd; national data; BIS locational banking statistics; BIS effective exchange rate statistics; BIS calculations.

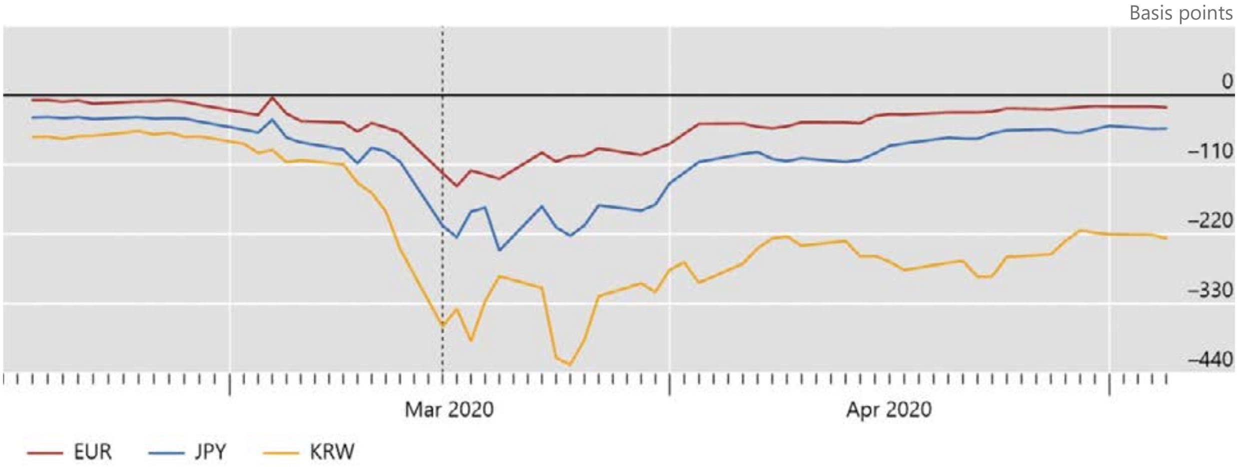
This mechanism works in two directions, with an amplification effect. When global conditions are good, the US dollar tends to weaken, making foreign currency investments more attractive, particularly in EMEs. Capital flows into EMEs, lifting their currencies and pushing up bond prices. But when markets switch to a risk-off mode, the whole process goes into reverse: EME currencies depreciate and local currency bond yields increase. This leads to steep losses for foreign investors – much steeper than those for domestic investors.

The Covid-19 crisis highlights the risks from a dollar-centric financial system. The financial shock in March 2020 led to a sharp increase in dollar funding costs in global markets, reflecting both demand and supply factors. This came at an awkward time because demand for dollar funding has grown in recent years. This reflects the currency hedging needs of corporates and portfolio investors outside the United States. The financial market turbulence in March 2020 also constrained the supply of dollar funding by financial intermediaries. As a consequence, EME currencies depreciated sharply as investors repatriated capital and repriced risks. The FX basis – a good measure of US dollar shortages – in various currencies widened substantially in March 2020 as the US dollar appreciated.

Central banks globally were the first to respond to the Covid-19 crisis, as they did in the Great Financial Crisis (GFC). This time, they acted as the lenders and market-makers of last resort in their respective domestic markets, providing massive amounts of liquidity. Major advanced economy central banks also conducted cross-border operations to provide liquidity to the market and loosen global financial conditions. Federal Reserve swap lines played a key role. Announcing the enhancement of the Fed swap lines was an important factor in easing pressures in international dollar funding markets (Graph 6).

Federal Reserve swap lines were very effective in reducing stress

FX swap basis (OIS) against the US dollar (three-month)[1] Graph 6



The vertical dashed line indicates 15 March 2020 (the announcement of the enhancement of swap lines between the Federal Reserve and five central banks).

[1] Defined as the spread between OIS and FX swap-implied US dollar rates.

Sources: Bloomberg; BIS calculations.

What does all this imply for the global financial safety net?

The events of 2020 have a number of implications for the global financial safety net.

These events showed that strong fundamentals are important, but they are not enough. The dollar shortage in March 2020 affected almost all economies, both advanced and emerging, irrespective of their fundamentals. This is not to say that fundamentals don't matter – quite the opposite – but in this case having one's house in order was not enough.

Last year's events vindicate the strategy of reserve accumulation followed by many EMEs during the last 20 years. It is not just that international reserves allow central banks to provide dollar liquidity in times of need. Perhaps even more important is that they give credibility to central banks' provision of FX hedges. Brazil has used such swaps for some time, and others, including Mexico, have followed. They do not involve any exchange of foreign currency. In technical terms, they are non-deliverable forwards, or NDFs. This means that even countries without any international reserves could do such operations. But I doubt that this would calm markets unless investors knew that the central bank had the foreign currency to back them up.

The events of 2020 have also shown how important it is for a country to have a swap line with the Fed. It is hard to overplay the stabilising role of these swap lines. Already at the time of the GFC, Fed swaps had been arguably more effective in calming market conditions than EME central banks drawing on their FX reserves to provide US dollars. But not everybody has a swap line with the Fed. Countries without one can still obtain dollar liquidity at the Fed's FIMA facility, but – and this is the crucial point – they must have eligible collateral.

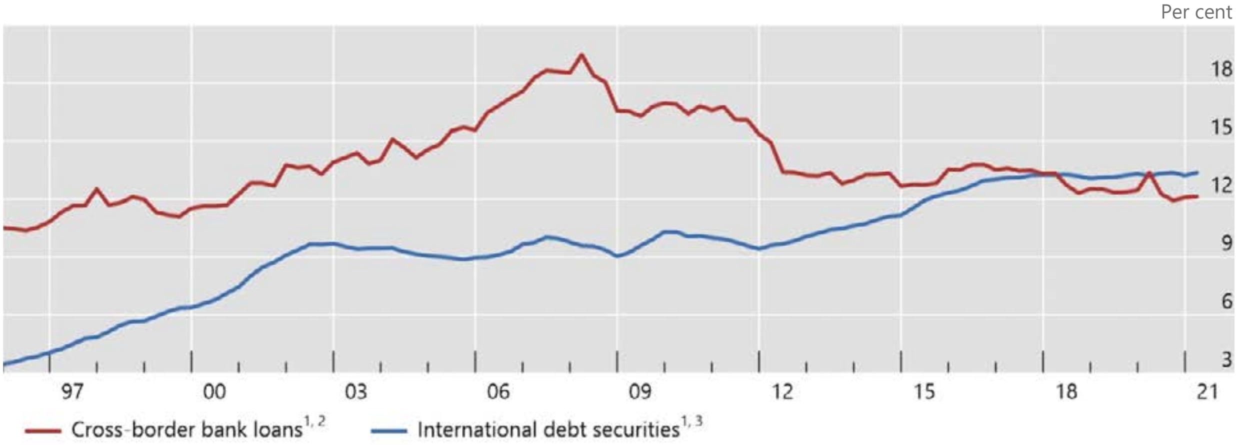
All this points to the importance of an international lender of last resort. We cannot rely solely on the Fed providing dollar liquidity but need strong regional and global arrangements, including a strong role for the IMF.

What is crucial is that the policies of this lender of last resort keep up with the changes in financial intermediation. An important trend in the last decade was the rise in US dollar-denominated international debt securities. This trend echoes the increasing role of NBFIs and market-based finance and the decline of US dollar-denominated cross-border bank loans as a share of global GDP (Graph 7).

Increasing role of market-based finance

Share of global GDP at current prices

Graph 7



[1] US dollar-denominated. [2] Cross-border loans extended by banks in all reporting countries including those in the US; include interoffice loans. [3] International debt securities (IDS) are issued outside the local market of the country where the borrower resides. They capture issues conventionally known as eurobonds and foreign bonds and exclude negotiable loans. Instruments such as bonds, medium-term notes and money market instruments are included; includes issuances by entities in the United States.

Sources: World Bank; BIS locational banking statistics (by residence); BIS international debt securities statistics; BIS calculations.

The Covid-19 crisis tells us that the global financial safety net needs to consider the enhanced role of NBFIs and adjust their facilities if necessary. First of all, national and international authorities need to better understand how NBFIs induce systemic risk. Common exposures, concentrated markets, dominant investors and interlinkages between banks and NBFIs remain among the suspected root causes of systemic risk. Other factors include how risks fluctuate over time, for instance procyclical investment behaviour and margining practices, and the amplification among asset prices, investor flows and exchange rates.

Second, we need to adjust our tools. During the Covid-19 crisis, some central banks introduced new facilities directly supporting NBFIs. Central banks face the broader policy challenges of ensuring that dollar funding markets remain resilient, and that central bank liquidity is channelled beyond the banking system. Here, the global financial safety net will need to consider how to provide liquidity in a timely manner to the sectors and economies in need of dollar funding.

The next test?

The events of March 2020 highlighted that the global financial system can be vulnerable to tail events, but international lender of last resort policies and global coordination are powerful tools in our toolkit. The shock of March 2020 is now behind us, and the role that the dollar plays in our international monetary and financial system is as important as ever. The Covid-19 crisis shone a spotlight on the risks from a financial system centred around the dollar.

Strengthening the global financial safety net lost some of its urgency in the public debate when advanced economy central banks made it clear that normalisation would be a gradual and very predictable process. However, we should welcome the fact that eventually, conditions will be ripe for ending asset purchases and lifting rates.

The question is what the next test will be. The global financial system and international lender of last resort policies have proved resilient in the face of the Covid-19 crisis, but we cannot rest on our laurels. As economies reopen and start a new chapter, the international monetary and financial system will naturally evolve. The landscape will change further, and new vulnerabilities will arise. When the next test comes, we cannot rely on the Fed stepping in and providing massive liquidity support as it did in March 2020. We need strong regional and global backstops, and we need to make sure that lender of last resort policies take account of the changes in financial intermediation, particularly the increasing importance of non-banks and market-based finance. We need to work on strengthening the global financial safety net today.