

# Annual Economic Report 2020: Editorial

## A global sudden stop

The past year has felt like an eternity. It is probably too early to tell, but future economic historians might consider the Covid-19 pandemic a defining moment of the 21st century. When, just over a decade ago, the Great Financial Crisis (GFC) hit the global economy, it was rightly considered such a moment. The pandemic's legacy could be even deeper and longer-lasting.

The economic impact of the coronavirus has been variously described as suspended animation, a hibernation or an induced coma for much of the global economy. These metaphors bring to mind two key features.

First, this sudden stop has been extraordinarily abrupt. Economic activity has collapsed even more steeply than in the Great Depression, to even greater depths than those of the GFC. Many economies shrank by an annualised 25–40% in a single quarter, and some saw unemployment rates soar into the teens within a couple of months. Moreover, and unlike the GFC, the crisis has been truly global, sparing no country in the world. The collapse has elicited a monetary, a fiscal and, for the first time, a prudential response that exceeds in scale and scope the one to contain the GFC. And, again, central banks have acted as the first line of defence, pulling out all the stops in order to stabilise financial markets and the financial system more generally and to preserve the flow of credit to firms and households.

Second – and this is what makes the crisis so unique – it is a policy-induced recession generated by repressing economic activity. It results from efforts to tackle a health emergency and to save lives through containment measures and social distancing – previously obscure terms that have thrust their way into our day-to-day vocabulary. This unprecedented configuration greatly heightens uncertainty about the economy's future evolution.

But, before turning to policy in detail, how has the economic crisis unfolded so far? In particular, what role have financial factors played?

## A real crisis turns financial

The current economic crisis differs starkly from the GFC and previous financial crises. On this occasion, it was not the financial sector that toppled the real economy, but rather the real economy that has threatened to topple the financial sector, with potentially devastating knock-on effects as financial sector problems spill back onto the real economy. Non-financial firms were the first to take a hit, absorbing the full brunt of the blow as activity came to a halt.

The real economy has sustained immense damage. Locking people down has crippled the supply side. It is impossible to produce goods and many services remotely, without a physical presence at the workplace. Technology facilitates working from home, but factories still need workers. Moreover, the impact has been even greater on the demand side. Consumption shrivels when people stay at home all day. Online shopping helps, but the range of goods one might want to buy is limited and that of feasible services minimal. Tourism cannot take place without travel. The widespread loss of jobs and reduced income naturally depress spending.

In addition, investment has taken a hit from heightened uncertainty and supply disruptions, including those to global supply chains. It is as if, from one day to the next, once affluent societies dropped to the subsistence level.

Of course, the lockdowns did not affect all countries and sectors to the same extent.

The timing and stringency of the measures differ. At one end of the spectrum, China was the first to implement tough containment measures. At the other end, as the virus spread around the world, countries such as Sweden and, more hesitantly, the United States took a milder approach, at least initially. That said, the high degree of openness of economies nowadays has reduced, through trade, any local differences in the impact of the lockdowns – a reminder of how integrated the global economy has become.

The structure of production differs. For instance, as demand in China and worldwide ground to a halt, commodity exporters suffered the most. Oil producers were hit hardest, as the collapse of demand coincided with that of the oil cartel, leading to an unprecedented oil glut. Despite a renewed, albeit fragile, agreement among suppliers, by mid-April the oil price measured in nominal terms had reached its lowest level since 1986; in inflation-adjusted terms, it had fallen by around half. Indeed, at one point, the imbalance between supply and demand was so large that the price of WTI futures for near-term delivery turned negative. Countries specialising in sectors such as tourism saw larger drops in output. And so did countries at the heart of global supply chains.

Finally, countries also differ in terms of their exposure to financial factors and structural weaknesses. In this respect, emerging market economies (EMEs) stand to lose more. They have already faced huge pressure, with more no doubt to come. EMEs have experienced a triple sudden stop: in domestic economic activity, in capital flows and, for many, in commodity exports and remittances. Above all, they have faced this storm with much more limited fiscal space than most of their advanced economy peers. For many of them, poorer health systems and large informal sectors have further complicated the policy trade-offs.

Regardless of financial conditions, the shock would have been enormous. But, while not at the origin of the shock, the financial sector has played an important dual role. It has acted as a key transmission channel for the shock back onto the real economy, although central banks have been quick to neutralise this impact (see below). And, less appreciated, it has also helped shape initial conditions, heightening the economy's sensitivity to the shock. Consider each aspect in turn.

Given their forward-looking nature, global financial markets reacted faster than the real economy. True, when problems appeared to be confined to East Asia, markets hardly moved: in fact, by end-January, equity prices had reached a historical peak. But when news about the surprisingly rapid spread of the virus in Europe hit the wires in late February, equity markets buckled, volatilities spiked and bond yields bottomed. While, at the outset, markets functioned rather well, they continued to dance to the tune of the virus and became increasingly disorderly. Spreads soared on corporate and EME debt securities, which had largely been spared in the first phase. In March, a flight to safety turned into a scramble for cash, in which even gold and US Treasury securities were dumped to meet margin calls. It was precisely at this point that markets threatened to freeze entirely. While the US dollar markets, both on- and offshore, stood at the epicentre, other markets too were roiled to varying degrees.

Just like a virus, the crisis has been evolving. In some respects, the success of central banks in calming markets and shoring up confidence has even helped spark some market exuberance: at the time of writing, equity prices and corporate spreads in particular seem to have decoupled from the weaker real economy. Even

so, underlying financial fragilities remain: this feels more like a truce than a peace settlement. And more fundamentally, what first appeared to be a liquidity problem, more amenable to central bank remedies, is morphing into a threat to solvency. A wave of downgrades has started, alongside concerns that losses might cause widespread defaults.

Equally important has been the role of financial factors in shaping initial conditions. After slowly building up, partly on the back of unusually low and persistent interest rates post-GFC, financial vulnerabilities have exacerbated the impact of the shock on economic activity – and may continue to do so as the crisis unfolds. These vulnerabilities can be summed up as overstretched financial markets and high non-bank leverage.

First, aggressive risk-taking prevailed in financial markets before the pandemic. Valuations were frothy. Credit risk showed clear signs of underpricing in both advanced and emerging market economies. For instance, credit spreads were on the narrow side in the United States and even more so in the euro area. Moreover, as is typical in such cases, market liquidity was fragile. This was reflected in the popularity of illiquid investments financed through short-term funding, investment funds and other such vehicles; or in widespread relative value “arbitrage” trades by hedge funds that ended up causing turmoil in the US Treasuries market.

Second, and closely related, non-bank leverage was high. Corporate debt was elevated in many advanced and emerging market economies. Examples are leveraged loans, collateralised loan obligations and, much underappreciated, private credit – a form of financing for smaller and typically riskier firms that is a locus for highly illiquid investments, almost as large as the leveraged loan market and just as overstretched. Corporate debt levels burgeoned while credit quality deteriorated, as reflected in the rising share of debt rated BBB, just one notch above non-investment grade (“junk”). Household debt was high in several countries less affected by the GFC, typically “small” open advanced economies such as Canada, Australia and the Nordics as well as a number of EMEs, including Korea. Moreover, sovereign debt loomed large in several advanced economies and, above all, in EMEs, partly as a result of the policy response to the GFC. Finally, there was a strong increase in offshore US dollar borrowing, both on- and off-balance sheet, notably via FX swaps.

So far, these vulnerabilities have manifested themselves in various ways. These include the outsize initial market reaction to the first concerns about the virus; the liquidity squeeze on firms and the broad swathe of rating downgrades; the aggravated tensions in US dollar funding markets; and the sudden stop in capital flows to EMEs. But should the crisis not let up, we could see broader strains emerging among households and sovereigns too. Indeed, rating agencies have already started to downgrade some sovereigns or put them on a negative outlook.

A silver lining in this sobering picture is the state of the banking system. In contrast to the GFC, the pandemic found banks much better capitalised and more liquid, thanks largely to the post-crisis financial reforms coupled with a more subdued expansion. Indeed, as discussed further below, policymakers have looked at banks as part of the solution rather than as part of the problem. Huge drawdowns on credit lines have stretched banks’ balance sheets, but not by enough to force them into sharply cutting other lending. Banks have so far absorbed shocks rather than amplified them. In fact, the strains have shown most in the non-bank financial sector, which has grown in leaps and bounds post-GFC and was at the centre of the financial storm.

Nevertheless, banks face challenges. This real-life stress test is more severe than the scenarios supervisors adopted in their pre-crisis solvency exercises. One challenge is chronically weak profitability in a number of banking systems, most notably in the euro area and Japan. Profits are important: they form the first line of defence against losses and determine how fast banks can bounce back when they

struggle to obtain external equity and find themselves under pressure to keep paying out dividends, especially where price-to-book ratios languish below one. Both markets and rating agencies have taken notice: bank share prices have underperformed overall indices, credit spreads have widened and rating agencies have put banks on negative watch.

## The policy response so far

What have policymakers done so far? The simple answer is that they have gone “all in” to cushion the blow. The response has generally been swifter, bigger and broader-based than it was for the GFC. The authorities have deployed monetary, prudential and fiscal policies in a concerted way that probably has no historical precedent. Consider each of the policies in turn.

### Monetary policy

Central banks once again reacted swiftly and forcefully to stabilise the financial system and support credit flows to firms and households. The initial interest rate cuts, while called for, were limited in their soothing effect. The impact was much larger once central banks started to act in their time-honoured role of lenders of last resort, supplying badly needed liquidity and addressing dysfunctional markets. By stabilising the financial system and restoring confidence, these measures also prevented the transmission of monetary impulses to the economy from breaking down.

In so doing, central banks tailored their measures to the specific characteristics of both the shock and the financial system.

The size of the shock called for a response on an unprecedented scale. And because no country was spared, the response was truly global.

The nature of the shock required central banks to push harder than in the past. While some central banks could simply extend previously applied measures, others broke new ground. In addition to purchasing government debt on a massive scale, many central banks also bought private sector securities or relaxed their criteria for collateral, venturing further down the creditworthiness scale than ever before. Some extended support to local authorities or bought equities. Outright purchases went hand in hand with backup facilities for bank lending or for commercial paper programmes. Importantly, the funding support reached all the way to small and medium-sized enterprises. In the process, some central banks crossed former “red lines”, resorting to measures that would once have been seen as off-limits.

The rapid growth of market finance since the GFC meant that central banks once again broadened their historical role of lenders of last resort to that of buyers or dealers of last resort. Hence the greater incidence of outright purchases of securities, or commitments to do so, sometimes even open-ended ones. Indirectly, this relieved the pressure on banks, given their symbiotic relationship with markets, not just as dealers but also as suppliers of backup credit facilities. For instance, the Federal Reserve’s purchase of US Treasuries helped clear dealers’ crowded inventories, and its backup facility for commercial paper helped ease the pressure on bank credit lines. Furthermore, a larger number of central banks, in EMEs too, moved to stabilise a dangerous run on money market mutual funds.

The dominance of the US dollar in global finance again required the Federal Reserve to act as the international lender of last resort. Indeed, the Fed granted foreign currency swap lines to as many as 14 central banks, from both advanced and emerging market economies, reactivating many lines that had expired since the GFC. Moreover, it put in place a repo facility, open to all central banks, so that

they could use their Treasury securities to obtain dollar funding off-market. The huge scale of the Fed's actions, when contrasted with the much smaller firepower of international organisations such as the IMF, points to an unresolved vulnerability in the international monetary and financial system.

In addition, the crisis has shown that the development of domestic currency bond markets in EMEs – a priority ever since the Asian crisis of the 1990s – does not fully overcome the external constraints typically associated with foreign currency borrowing. In fact, it has largely shifted currency mismatches from borrowers to lenders, typically foreign investors. The outsize reaction of investors to losses on their domestic currency positions and exchange rate exposures elicited a forceful central bank response. As foreign investors unwound their carry trades, several EME central banks not only intervened in the FX market but also acted as buyers of last resort in their domestic currency markets, very much like their advanced economy peers. In addition, the much improved policy frameworks of EMEs allowed many to cut, rather than raise, policy rates in response to the output drop, as inflation expectations remained stable.

### Prudential policy

In a remarkable development, prudential policy has played a key role in helping sustain credit to the economy and preventing banks from deleveraging. This is yet another illustration of the ground gained since the GFC by the macroprudential or systemic-oriented perspective on regulation and supervision. The banks would not have been able to support lending without the major international efforts to strengthen their balance sheets.

The authorities – many of which are central banks – adopted a wide array of measures. In particular, they encouraged banks to make free use of the buffers they had accumulated after the GFC. They released, where previously activated, the countercyclical capital buffer; they temporarily eased other capital and liquidity requirements; and they allowed a more flexible interpretation of the newly implemented expected loan provisioning standards or extended the corresponding transitional arrangements. Many also introduced restrictions on distributions, notably dividends, to further bolster banks' lending capacity.

### Fiscal policy

The bulk of the response has rightly consisted of fiscal measures. Some, especially at the outset, were aimed at shoring up liquidity by, for example, postponing taxes or allowing debt moratoriums. But the vast majority transferred real resources to households and firms, either outright or conditionally.

Conditional transfers have taken the form mainly of credit guarantees, which are activated only in the event of default. Their key role has been to back up risk-taking so as to keep credit flowing. In some cases, the beneficiaries have been banks: it is one thing to have the resources to lend, quite another to deploy them without a clear incentive to do so when prospects are deteriorating and uncertainty looms large. In other cases, the recipient has been the central bank itself. Governments have provided full or partial indemnities to insulate central banks from losses, sometimes by taking equity stakes in special purpose vehicles funded by central banks. In a similar vein, some beneficiaries have been the creditors of non-financial firms, such as in rescue operations for airlines or other large businesses.

Outright transfers have focused on jobs, the unemployed and households more generally. Furlough schemes have been quite popular, taking over a certain share of the wage bill to keep people employed. Given the prevalence of safety

nets, many jurisdictions have also chosen to strengthen their unemployment insurance schemes; the need for discretionary measures in this area has naturally depended on the size of automatic stabilisers. Some governments have also made direct cash transfers to households. But many EMEs have faced serious challenges in reaching beneficiaries working in the large informal sector.

Institutional factors aside, the initial room for manoeuvre has strongly influenced the size and shape of fiscal packages. They have tended to be smaller in countries with less fiscal headroom. Here again, EMEs have generally been at a disadvantage.

## Looking ahead

What are the policy challenges ahead? How do they depend on the evolution of the crisis?

To help frame the issues, it is useful to consider the phases that tend to characterise economic crises with strong financial elements, like the current one. There are three possible phases: illiquidity, insolvency and recovery. Importantly, the dividing line between phases is fuzzy and they overlap. In the economy at large, just as it is possible to see insolvencies when illiquidity is still widespread, so insolvencies may well occur as the economy recovers. And since, in the current crisis, the shock has initially hurt the business sector, it is there that the risk of insolvencies is greatest. Relatedly, unless banks run into trouble, it is easier to imagine a recovery even in the presence of bankruptcies. The general configuration and timing of the phases will naturally also depend on the initial financial vulnerabilities, notably the high debt levels, on the evolution of the pandemic and hence on the need for containment measures.

The immediate objectives of policy vary with the phase. When illiquidity is widespread, the objective in a standard financial sector-induced crisis is to stabilise the financial system, to ensure that intermediaries continue to function and to support the economy. In the current crisis, which started in the non-financial sector, the authorities may need to fund households and firms directly, especially if the financial sector is overburdened. If and when insolvencies emerge, policy has two aims. First, to restructure balance sheets – the size as well as the debt and equity mix – so as to deal with a debt overhang. Second, to promote the underlying real adjustment, by reducing excess capacity and helping shift resources from less viable sectors and firms to the more promising ones. If these measures succeed, they can pave the way for a healthy recovery. In that phase, the aim is to support the economy so that it can grow sustainably.

The role of monetary, prudential and fiscal policy differs according to the problem addressed. Monetary policy is critical in addressing illiquidity but is badly suited to dealing with insolvency: central banks lend but cannot spend. The comparative advantage of fiscal policy is to address insolvency, by temporarily transferring real resources to prevent it and by supporting balance sheet restructuring, as needed, once it occurs. Prudential policy's role falls somewhere in between: its primary function is to ensure that banks remain solvent and functional but, subject to that overriding objective, it can also help sustain lending. All three policies, in their own way, can support the recovery. The special feature of this crisis is that standard macroeconomic stimulus can have relatively little impact during the illiquidity and insolvency phases because of the containment measures and the shock to supply.

The current crisis is evolving rapidly. It is generally on its way out of the illiquidity phase: now the risk of insolvencies is looming while the timing of the

recovery is uncertain. And so is the shape of the possible recovery. It could be relatively swift if the containment measures are relaxed quickly and successfully, and if only limited sectoral adjustments are needed. It could falter, or stutter, if renewed lockdowns are implemented to deal with new waves of infection. It will be weaker if the shock is prolonged, scarring both corporate productivity and the consumer psyche, thus weighing on both demand and supply for a long time. In a slow or faltering recovery, debt overhangs could act as a major drag unless they are promptly dealt with. As time passes, it is likely that the authorities will be able to better calibrate their containment measures, thereby improving the near-term trade-off between saving lives and supporting the economy. Even so, policy choices are greatly complicated by the non-economic nature of the underlying forces, which are both unfamiliar and impervious to economic remedies.

The impact of uncertainty on policy is already clear. Two effects stand out: on the policies designed to help reallocate resources, and on the utilisation of policy buffers.

The post-crisis pattern of demand could be quite different from the pre-crisis one, with significant implications for resource reallocation. Some of the hardest-hit sectors and firms may have no viable future; others could thrive. Heightened uncertainty makes it harder to distinguish between insolvent but viable firms, which require restructuring, and insolvent, unviable ones, which should be liquidated. Complicating matters further are the initial vulnerabilities in the non-financial sector and the size of the shock. In the fog of battle, unviable firms may ask for protection and get it. Meanwhile, bankruptcy proceedings and the other mechanisms usually used for reallocating resources may prove ill-suited to dealing with large-scale problems. Governments could play a useful but delicate role. This could range from setting some broad directions for restructuring to introducing some abbreviated, less granular, processes, or possibly taking equity stakes in firms. Of course, this would raise governance issues of its own. The worst outcome would be failing to address the debt overhang altogether and allowing a persistent misallocation of capital, which, aggravated by low-for-long interest rates, would sap aggregate productivity.

Uncertainty as to how the pandemic will evolve raises especially tricky challenges for the use of policy buffers. After all, the buffers are limited in size. At some point, if credit quality continues to deteriorate, banks will need to replenish their buffers, not draw them down further. At some point, central banks may face the unpalatable choice of nudging even deeper into negative interest rates, and increasing their already outsize ownership of financial assets in the economy. And at some point, fiscal policy will need to change tack in order to prevent fiscal positions from becoming unsustainable. For some countries, the limits of sustainability are already in sight, particularly but not only for EMEs. All this puts a premium on taking a measured and targeted approach – just as with the policies designed to contain the pandemic. This would also make it easier to exit policies when needed – an absolute must. All this is a further reminder that precautionary cushions in all policies, far from being a luxury, are absolutely essential, regardless of how unlikely any adverse outcomes may appear. On this occasion, the exogenous shock started out in the form of a pandemic – which was very much on the radar screen of epidemiologists, albeit far less expected by others. Future shocks could come from climate change or less foreseeable hazards.

As the future unfolds, monetary policy will face serious challenges. This is so whether it is disinflationary or inflationary pressures that come to the fore. In either case, exit difficulties combined with limited policy space are likely to play a role.

While the future course of inflation is uncertain, disinflationary pressures are likely to prevail for some time. To be sure, the pandemic shock has tended to reduce

productivity. Unable to accommodate the usual number of customers because of social distancing rules, airlines, restaurants and hotels will face cost pressures. Global value chains are likely to sustain long-lasting damage, which may be partly irreversible. Even so, precautionary saving and the limited pricing power of firms and labour will probably persist, limiting any second-round effects. Indeed, the experience with previous pandemics is consistent with this picture. This scenario would rather closely resemble the pre-pandemic shape of things. It is a world in which central banks test the limits of their expansionary policies and struggle to push inflation up.

But as we peer further into the future, a quite different picture could emerge. In this case, we would be speaking not of inflation evolving within the current policy regime, but of a more fundamental change. Here the economic landscape would, in some respects, look like the one that materialised immediately after the Second World War. This scenario could come into being if a lengthy pandemic were to leave a much larger imprint on the economy and the political sphere. In this world, public sector debt would be much higher and the public sector's grip on the economy much greater, while globalisation would be forced into a major retreat. As a result, labour and firms would gain much more pricing power. And governments could be tempted to keep financing costs artificially low, allowing the inflation tax to reduce the real value of their debt, possibly supported by forms of financial repression. At that point, it would be critical that central banks should be able to operate independently to pursue their mandate in order to resist any possible pressures not to increase interest rates.

So far, the objectives of central banks and governments have coincided. Cooperation has come naturally. Central banks have not deviated from the pursuit of price and financial stability. But should inflationary pressures emerge at some point, tensions could arise. Then, the main institutional safeguard against such pressure would be central bank independence – a safeguard that raises the bar for successful government intervention. In this context, growing calls for “monetary financing”, regardless of their motivation, raise the risk of inching economies down that path. If taken far enough, this process could over time dent confidence in a country's monetary institutions, exacting a high price in the pursuit of ephemeral short-run output gains. After all, the hard-won anti-inflation credibility of central banks has been instrumental during the recent crisis in allowing them to cross a number of previous “red lines” to stabilise the financial system and the economy.

This analysis underlines once more the importance of striving to raise growth sustainably, while maintaining price and financial stability. The policy mix has been discussed in more detail in previous Annual Economic Reports. Today, more than ever, a premium needs to be put on keeping fiscal policy on a sustainable path through timely consolidation. The limits of monetary policy need to be recognised, as well as the importance of preserving and extending the post-GFC gains in strengthening the financial system's resilience. Finally, renewed efforts are needed to implement the necessary structural economic reforms, a path that has proved quite elusive both before and after the GFC. This calls, above all, for taking a longer-term view than hitherto. It means avoiding shortcuts and not being tempted by policies that, while beneficial in the short term, may raise significant costs in the long term. After all, however distant it may appear, the future eventually becomes today.

## Central banks and payments in the digital era

That banks were in better shape than during the GFC was not the only silver lining in this crisis. Less appreciated perhaps, but no less important, financial market

infrastructures and payment systems withstood the shock remarkably well. They rode out episodes of market dysfunction and provided critical support for the smooth functioning of the financial system.

This puts the spotlight on a central bank function often taken for granted. This function does not make headlines as the central bank's role in crisis management or macroeconomic stabilisation does. Nevertheless, it is essential for any economy: serving as the foundation of payment and settlement systems.

At their heart, payment systems are a partnership between the private sector and central banks. The private sector plays the more visible role. It provides most of the payment instruments used by the public and it spearheads innovation, applying its ingenuity and creativity to serve customers better. The central bank supplies only one visible, if invaluable, means of payment to the public (cash), but it supplies the ultimate medium in which banks settle claims against each other (bank reserves). Moreover, and more fundamentally, the central bank ensures trust in the value of money and the payment system more generally – a core public good. And it is a discrete actor that, typically behind the scenes, promotes the efficiency of payments by encouraging competition and innovation.

This role has become more important than ever at a time when technology is transforming payments. New payment methods and consumer interfaces, including web- and mobile-phone-based payments, are flourishing. The Covid-19 crisis has accelerated the trend towards contactless payments. Large non-bank providers, such as big tech firms, have started to enter payment services, both improving them but also threatening to become monopolies themselves. There is little doubt that the digital revolution has helped reduce costs, improve convenience and broaden access to payments. That said, there is still considerable room for improvement, both for domestic and, above all, for cross-border payments. And many of these improvements will not just arise spontaneously; they require wise interventions that steer powerful private sector forces towards the public interest.

In this context, central banks play a key triple role as catalysts, operators and overseers. While most of the building blocks and policy imperatives for these roles have not changed, the new developments have changed their relative significance. In their role as operators and catalysts, central banks play a key part in fostering interoperability. This can help level the playing field, fostering competition and innovation. As operators, they can also pursue similar goals by directly providing public infrastructure, as in an increasing number of fast retail payment systems in recent years. In their role as overseers, central banks can safeguard the payment system's soundness and integrity, as well as boost its efficiency by directly altering private sector incentives and influencing market structure, not least by helping to shape laws and regulations that tackle anti-competitive practices.

Central banks can and should stand at the cutting edge of innovation themselves, not least when directly providing services to the public. Central bank digital currencies (CBDCs) are a prime example. CBDCs could represent a new, safe, trusted and widely accessible means of payment. They could also spur continued innovation in payments, finance and commerce. For CBDCs to fulfil their potential and promise as a new means of payment, their design and implications deserve close consideration, especially as they could have far-reaching consequences for the structure of financial intermediation and the central bank's footprint in the system.

Technology opens up exciting future opportunities for payment systems. It is up to central banks to harness those forces for the common good.