The Response by Central Banks in Emerging Market Economies to COVID-19

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Abstract

The COVID-19 health and economic crisis has severely affected emerging market economies (EMEs). As a result, emerging market central banks have employed a wide range of tools to support their economies and financial systems, many of which have been used for the first time. These measures have helped to support the functioning of domestic financial markets, lower domestic interest rates and facilitate the flow of credit to households and businesses. The scale of monetary easing by EME central banks was larger, and the pace faster, than in some past crisis periods. This was influenced by the sudden and synchronised nature of the COVID-19-induced economic shock and the large scale policy response in advanced economies that occurred alongside the EME response. It also reflects the significant improvements emerging market central banks have made to their institutional frameworks over recent decades and the development of EME financial markets over the same period.

COVID-19 in emerging markets

Emerging market economies faced a severe economic and financial shock following the onset of the COVID-19 pandemic. To contain the spread of the virus, many EME governments implemented public health measures, including quarantines, social distancing and travel restrictions. The significant reduction in economic activity from this response has been compounded by heightened economic uncertainty, weak external demand and

Table 1: Policy Reponses by Emerging Market Economy Central Banks to COVID-19
March 2020 to February 2021

Central Bank[a]	Policy rate	Foreign exchange intervention[b]	Expanded liquidity operations	Secondary market public sector asset purchases	Primary market public sector asset purchases	Term funding scheme
India	5.15% → 4.00%	✓	✓	✓		✓
Indonesia	4.50% → 3.50%	✓	✓	✓	✓	
Malaysia	2.75% → 1.75%		✓	✓		✓
Philippines	3.75% → 2.00%	✓	✓	✓	✓	
Thailand	1.00% → 0.50%	✓	✓	✓		✓
Brazil	4.50% → 2.00%	✓	✓[c]			✓
Mexico	7.00% → 4.00%	✓	✓[c]	✓		✓
Russia	6.00% → 4.25%	✓	✓			✓
South Africa	6.25% → 3.50%		✓	✓		
Turkey[d]	10.75% → 17.00%	✓	✓	✓		

(a)   This group of EMEs is covered because of their economic and financial linkages to Australia as well as their importance for the global economic outlook. The RBA also monitors significant developments in other emerging economies.

(b)   Foreign exchange intervention is announced in some cases, but in others a judgement must be made based on observed movements in reserves levels.

(c)   The central banks of Brazil and Mexico entered into bilateral swap line agreements with the US Federal Reserve.

(d)   The central bank of Turkey reduced policy rates to 8.25% between March and May 2020 before increasing policy rates to 17% between September and December 2020.

Sources: Central Banks

supply disruptions. EMEs dependent on tourism and/or commodity exports were particularly hard hit by travel restrictions and a sharp fall in commodity prices. Financial conditions in emerging markets tightened significantly reflecting the severity of the economic shock and tighter global financial conditions. Government bond yields rose sharply, equity prices declined, there were substantial capital outflows and exchange rates depreciated (which tends to tighten financial conditions in many EMEs).

Central banks in EMEs implemented a broad range of measures to ease financial conditions, restore market functioning and support their economies (Table 1). In contrast to some previous crises, almost all EME central banks significantly reduced their policy rates during the early months of the pandemic. All central banks injected liquidity through market operations, most intervened in the foreign exchange market to limit currency depreci-ation, some launched new facilities to support the flow of credit to business and households (through term funding schemes), and a few entered into

bilateral swap line agreements with advanced economy central banks. A number of EME central banks embarked on asset purchase programs for the first time, while a small number engaged in direct financing of governments.

This article provides an overview of the policy response by EME central banks to the COVID-19 crisis. The first section describes how aspects of the COVID-19 crisis, as well as longer-run improvements in policy design and financial market development in EMEs, have allowed EME central banks to respond forcefully to this crisis. This is followed by a discussion of each of the policy tools implemented, placing particular emphasis on the specific role of each tool and how the considerations faced by EME central banks differ from those of advanced economies.

How has this episode been different from previous ones for EME central banks?

Historically, many EME central banks have had less capacity than their advanced economy counterparts to ease monetary policy settings

when economic conditions deteriorate. One concern has been that this could lead to an exchange rate depreciation. While a depreciation typically supports the economy through net exports, it can also lead to large and persistent increases in inflation when inflation expectations are not well anchored. In addition, a depreciation in the exchange rate can cause EMEs' financial conditions to tighten if the depreciation increases the cost of servicing and repaying unhedged foreign currency debt. A third concern is that sharp depreciations can induce large capital outflows if foreign investors with unhedged EME local currency assets sell their holdings in an attempt to limit their losses.

A couple of key developments over recent decades have reduced the relevance of some of these concerns. First, improved institutional arrangements of EME central banks have helped to reduce the risk that monetary easing leads to large and persistent increases in inflation (Aguilar and Cantú 2020). Since the early 2000s, many EMEs have adopted inflation targeting frameworks and central bank independence has been enhanced through legislative changes (Gelos, Rawat and Ye 2020). In the time since, EME central banks have established the credibility of their targets and frameworks. These changes have helped to anchor inflation expectations, such that depreciations induced smaller and less persistent increases in inflation. Central banks therefore faced less need to keep policy rates high during the COVID-19 crisis.
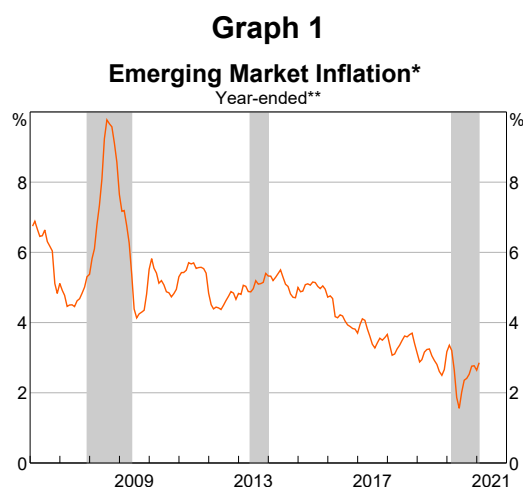
Second, financial market development in EMEs over recent decades has enabled EME central banks to respond more effectively to this crisis. Encouraged by a range of policy decisions by EME authorities, capital markets have grown, local government bond markets have deepened and foreign exchange derivative markets have been established. The size of financial markets in some countries within emerging Asia are approaching those in advanced economies (Alston *et al* 2018). This development has helped EME governments and corporations increase their use of local currency borrowing, enhance their management of foreign exchange risk and gain better access to credit (Alston *et al* 2018). Taken together, these develop-

ments have reduced concerns about the effect of exchange rate depreciations on EME financial conditions, and so reduced the trade-offs associated with monetary policy easing.

Separately to these longer-term developments, the nature of the COVID-19 crisis and the policy response from advanced economies has provided EME central banks with greater scope to ease policy. Unlike some other crisis episodes affecting EMEs, the COVID-19 pandemic has reduced economic activity in a sudden and synchronised fashion across advanced and emerging economies. This has contributed to inflation falling significantly in 2020 in many EMEs, because of the decline in consumer spending and because EMEs entered the crisis with output below its potential (Graph 1). Furthermore, large-scale easing of monetary policy in advanced economies and fiscal policy support globally have helped calm global financial markets, which has meant that interest rate differentials between advanced economies and EMEs have remained more stable even with EME central banks easing policies.[1] These factors have also limited currency depreciation and capital outflow pressures in EMEs.

Policy tools used in response to the COVID-19 crisis

EME central banks responded with multiple policy tools to help address different facets of the crisis. A number of the policy actions were designed to

Graph 1

Emerging Market Inflation*
Year-ended**

* Shaded areas show approximate periods of the Global Financial Crisis, Taper Tantrum and COVID-19
** Simple average across India, Indonesia, Malaysia, Philippines, Thailand, Brazil, Mexico, Russia and South Africa
Sources: Central banks; RBA; Refinitiv

restore the orderly function of financial markets, consistent with the role of central banks in providing emergency assistance to financial institutions and averting a sudden disruption to the flow of finance to the real economy. Short-term funding markets for financial institutions were supported through an expansion in the liquidity provided via central bank market operations, as well as the use of US dollar swap line agreements with the US Federal Reserve. At the same time, central banks intervened in foreign exchange markets to avoid disorderly depreciation, and purchased government bonds to restore liquidity conditions.

Reductions in central bank policy rates were the primary tool used for easing domestic financial conditions more broadly and supporting the economy in EMEs. In some economies, term funding schemes have also been used to provide additional support for the economy by further lowering rates paid on bank loans. In a small number of emerging market economies, central banks have provided finance directly to the govern-ment to assist with financing the fiscal deficit.

Many of the actions taken in 2020 by EME central banks were familiar features of the central banking toolkit in those economies. In contrast, the purchase of government bonds by many EME central banks was a notable innovation.

Policy rate reductions

Central banks in EMEs lowered their policy rates substantially between March and July 2020 to ease financial conditions and support economic growth. The scale of these declines in EME policy rates in 2020 was in contrast to the Asian Financial Crisis, Global Financial Crisis (GFC) and the 2013 'Taper Tantrum' when EME policy rates were generally increased at times when large-scale capital outflows were already causing a tightening of financial conditions for emerging markets (Graph 2).

The reductions in policy rates, as well as expec-tations that rates would remain low for some time, have contributed to lower borrowing costs across EMEs. Local currency government bond yields have declined to historic lows in many EMEs, while financing costs for household and business have
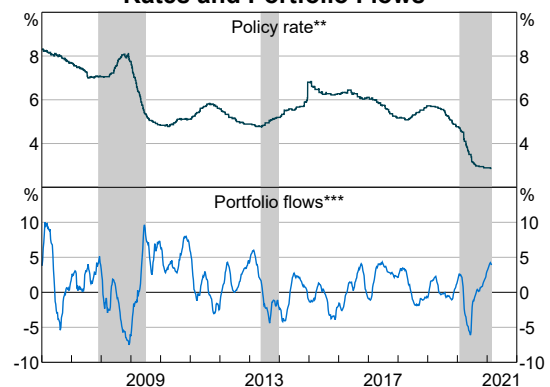
also generally fallen. That said, pass through from central bank policy rates to borrowing rates is generally weaker in EMEs than in advanced economies, in part due to less developed financial markets and weaker banking systems (Mohanty and Turner 2008). The impact of declining financing costs on economic activity can also be more muted in EMEs with underdeveloped financial systems and large informal sectors.

In contrast to the majority experience, a few EMEs such as South Africa and Turkey continue to face borrowing costs that are substantially higher than at the start of 2020, reflecting elevated concerns about their economic outlooks, sustainability of their finances, and the capacity of policymakers in those economies to respond to any further significant shocks.[2]

Since July 2020 most EME central banks have kept policy rates little changed at accommodative levels and this is continuing to provide substantial support to the economic recoveries. Unlike in advanced economies, policy rates generally remain well above zero in most EMEs, and in weighing whether to lower rates further in the time since July 2020, EME central banks have cited a range of concerns (Table 2). The majority of EME central banks have been most concerned about the effects of further rate cuts on the exchange rate. Notwith-standing the improvements in inflation anchoring

Graph 2

**Emerging Market Policy
Rates and Portfolio Flows***

* Shaded areas show approximate periods of the Global Financial Crisis, Taper Tantrum, COVID-19
** Average of India, Indonesia, Malaysia, Philippines, Thailand, Brazil, Mexico, Russia and South Africa
*** One-quarter rolling sum of net inflows to emerging market investment funds; per cent of assets under management
Sources: BIS; EPFR Global; RBA

Table 2: Stated Concerns about Further Policy Rate Cuts[a]

	Last policy rate cut	Exchange rate depreciation	Inflation	Financial stability	Approaching the zero lower bound
India	May 2020		✓		
Indonesia	Feb 2021	✓			
Malaysia	Jul 2020	✓			
Philippines	Nov 2020	✓			
Thailand	May 2020				✓
Brazil	Aug 2020			✓	
Mexico	Feb 2021	✓			
Russia	Jul 2020	✓	✓		
South Africa	Jul 2020	✓			
Turkey	Jul 2020	✓	✓		

(a) The assessment of constraints is based on the authors' interpretation of monetary policy statements released in the period after July 2020.

Sources: Central Banks

and financial market development discussed above, challenges remain with the impact of exchange rate depreciations on financial conditions for some EMEs. For EMEs with substantial unhedged foreign currency debt, like Indonesia and Turkey, a depreciation increases concerns around financial stability as the cost of servicing and repaying debt increases. Relatedly, in EMEs like South Africa and Russia where foreign investors make up a substantial portion of participants in their capital markets, there have been heightened concerns about capital outflows that can arise when there is an exchange rate depreciation.

A few EME central banks have framed the downsides of further monetary easing in other ways. The central bank of Thailand has stated that they are maintaining rates unchanged – at a level a little above zero – so as to preserve some policy space in case conditions deteriorate further. A few EME central banks such as India and Turkey have cited high inflation as their major concern with further rate cuts, because inflation is above central bank targets in both economies. In contrast to other EMEs, Turkey's central bank has raised its policy rate above pre-pandemic levels because Turkey experienced a large depreciation of the exchange rate and high inflation.

Foreign exchange intervention

EME central banks intervened extensively in the foreign exchange market during the most acute phase of the COVID-19 crisis. EME currencies faced substantial depreciation pressure, though without the concurrent monetary policy easing in advanced economies it may have been even greater (Graph 3). Central bank interventions dampened financial stability risks that can arise from sudden increases in the value of unhedged foreign currency obligations, and supported financial conditions more broadly by limiting the portfolio outflows that are commonly associated with sharp depreciations. Since capital markets in EMEs are not as deep as those in advanced economies, EMEs are more sensitive to outflows that can significantly tighten financial conditions.

Estimates from the International Monetary Fund (IMF) suggest that, while the scale of intervention in March was the largest in US dollar terms since the GFC, the accumulation of reserves over the past decade meant that it was a less significant event when measured relative to the total stock of available reserves (IMF 2020a) (Graph 4). As conditions in emerging markets stabilised, intervention to support currencies was scaled back, while some EMEs, particularly in the Asian region have been intervening to limit the appreciation of

their currencies, resulting in an expansion of their foreign exchange reserves.

A key motivation for the expansion in reserve holdings over recent decades was to give central banks more capacity to intervene and mitigate the financial stability risks described above (Kohlscheen, Moreno and Domanski 2016). The experience of many EMEs during the GFC and Taper Tantrum episodes suggests that having relatively large reserves resulted in smaller exchange rate depreciations (Arslan and Cantú 2019).

Despite experiencing large scale capital outflows during the COVID-19 crisis, most EME governments did not rely heavily on measures to restrict the flow of capital. In the past, some EMEs have placed restrictions on capital outflows to reduce currency depreciation pressures but these measures can also reduce the availability of external financing over the longer term.
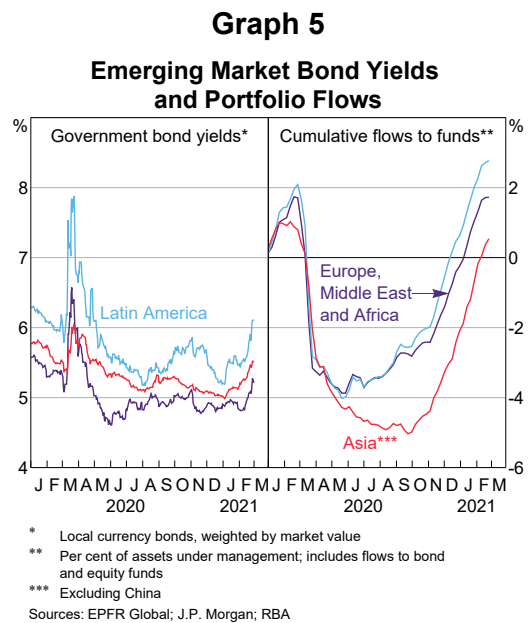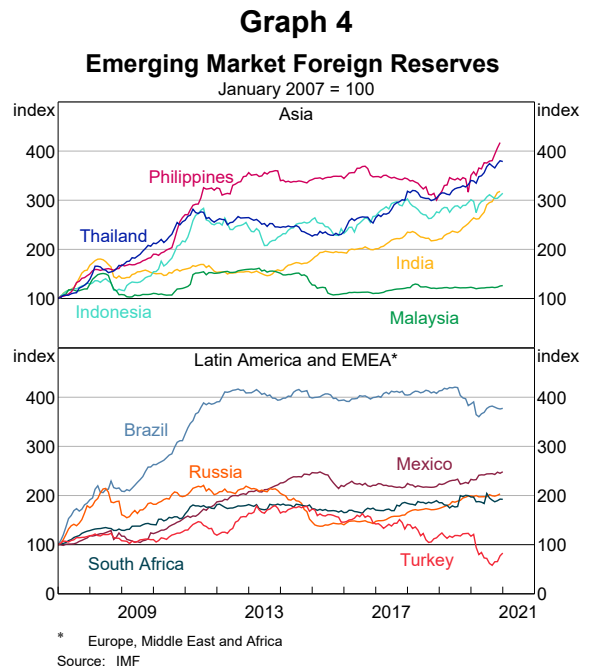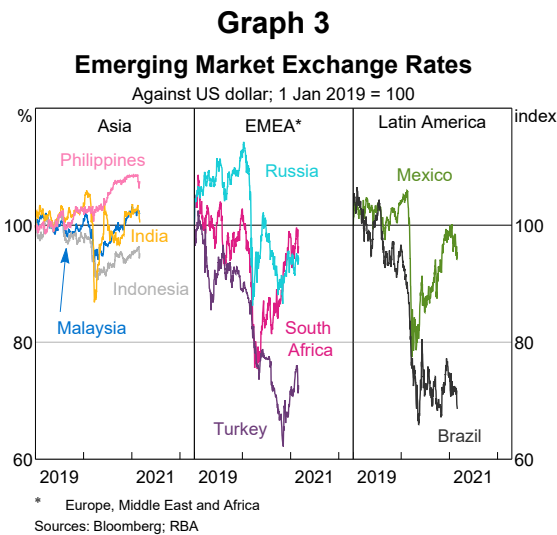
Policy tools to support domestic market functioning

In March, global financial markets became severely dislocated as foreign investors rapidly reduced their exposure to riskier assets in favour of highly liquid and low-risk instruments (Vallence and Wallis 2020). This led to sharp declines in liquidity and significant increases in local currency bond yields in EMEs (Graph 5). In some cases, EME government bond auctions were cancelled due to limited demand.

Liquidity and lending operations

EME central banks intervened in money markets to help meet the sharp increase in demand for liquidity. Most EME central banks expanded short-term open market repurchase operations and some lengthened the duration of repurchase agreements to ease stresses in longer-term funding markets (IMF 2020b).

Against the backdrop of capital outflows, exchange rate depreciation and stresses in US dollar funding markets, a couple of EME central banks also entered

Graph 4

Emerging Market Foreign Reserves

January 2007 = 100

* Europe, Middle East and Africa
Source: IMF

Graph 3

Emerging Market Exchange Rates

Against US dollar; 1 Jan 2019 = 100

* Europe, Middle East and Africa
Sources: Bloomberg; RBA

Graph 5

Emerging Market Bond Yields and Portfolio Flows

* Local currency bonds, weighted by market value
** Per cent of assets under management; includes flows to bond and equity funds
*** Excluding China
Sources: EPFR Global; J.P. Morgan; RBA

into bilateral swap lines with the US Federal Reserve during March to gain access to US dollar liquidity. Under the facility the central banks of Mexico and Brazil could request up to US$60 billion from the Federal Reserve in exchange for an equivalent amount of their domestic currencies. The US dollars could then be distributed to help cover current account deficits, repay external borrowing and provide liquidity to the banking system. Only the central bank of Mexico used the facility.

Asset purchases in the secondary market

Many EME central banks launched asset purchase programs for the first time, purchasing mainly local currency government bonds.[3] The main purpose of these programs has been to support local market functioning although, in a few cases, central banks have used these programs to help their governments finance substantial fiscal support packages. EME asset purchase programs have differed from those in advanced economies, both because they have been conducted with policy rates mostly well above zero and, for the most part, they have not been used to provide a broader easing of financial conditions by lowering longer-term risk-free interest rates. Government bond purchases by EME central banks have generally been small (in most cases between 0.5–1.5 per cent of GDP; Graph 6) relative to advanced economy central bank purchases (in most cases between 2–15 per cent of GDP).[4]

Graph 6

Emerging Market Central Bank Government Bond Purchases

Since March 2020; per cent of GDP*

* End dates vary due to data availability
Sources: Central Banks; RBA

Event studies suggest that EME central bank announcements of government bond purchase programs have reduced longer-term government bond yields but have not been associated with exchange rate depreciations. Longer-term local currency yields were found to be 20─60 basis points lower over the week following a program's announcement (Arslan, Drehmann and Hofmann 2020; IMF 2020d; Hartley and Rebucci 2020).[5] The lack of impact on the exchange rate perhaps reflects the small size of the programs and the sterilisation of purchases in many cases (Hartley and Rebucci 2020).
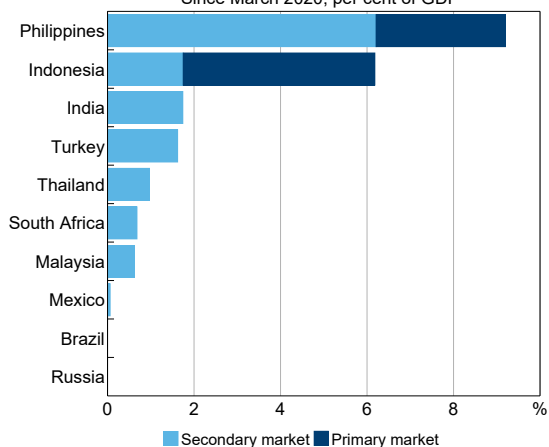
If EMEs were to reach the lower bound of policy rates and pursue monetary easing via large scale asset purchases, they would likely face greater obstacles relative to advanced economies.

- Some EME central banks face restrictions in purchasing government bonds because of clauses in legislation or constitutions. In Brazil and Indonesia, however, legislation was temporarily changed in 2020 to relax restrictions on their respective central banks.

- Bond markets in EMEs are generally smaller and less liquid than those in advanced economies. This could potentially make bond yields more sensitive to increased participation of EME central banks in government bond markets, particularly for EME central banks that already own a large share of bonds outstanding.

- The channels through which a reduction in government bond yields passes through to broader financial conditions and economic activity are often weaker in EMEs. In part, this is because, in EMEs government bond yields are not used as often as a pricing benchmark for other domestic interest rates and the use of financial services is lower which can reduce pass-through from funding costs to lending rates.

- Central bank asset purchases could place significant downward pressure on the exchange rate if foreign investors shift from EME government bonds to foreign assets as a result, which could cause financial conditions to tighten.

- Prolonged use of asset purchases associated with worsening fiscal positions in EMEs could erode perceptions of central bank independence and credibility, which may de-anchor inflation expectations and cause bond yields to rise (World Bank 2021a). This is particularly the case for central banks purchasing government bonds in the primary market.

Purchases of government debt at issuance

Some EME central banks have purchased government bonds in the primary market with the explicit intention of assisting their governments to finance large fiscal deficits. The scale of the fiscal response to the COVID-19-induced economic crisis has been larger than any previous crises and this response has generally been funded by EMEs issuing local currency debt. In 2 cases, central banks began purchasing government debt at issuance or providing funds directly to the government, despite the deepening of their local currency debt markets in recent years.

In July 2020 Bank Indonesia announced a deficit burden-sharing arrangement with the Indonesian Ministry of Finance in which it would purchase government bonds in the primary market to assist in financing the government's fiscal response to the COVID-19 crisis. The central bank's purchases have been split into 3 parts and directly linked to components of the government's fiscal response to the COVID-19 crisis including health and social security spending, and support for businesses. 2 of the 3 parts concluded in 2020, with 1 part still ongoing and scheduled to run until the end of 2021. The value of bonds purchased under the arrangement was around 4 per cent of GDP by December 2020.

In the Philippines, the central bank directly purchased government bonds through a pre-existing 'provisional advance' facility with the Philippine fiscal authority. In September the limit on the size of this facility was increased to 30 per cent of average government revenues over the previous 3 years (from 20 per cent), and will remain at the higher level for 2 years. Direct purchases in 2020 were equivalent to 3 per cent of GDP.

Direct central bank financing generally raises concerns about central bank independence and the long-run ability of the central bank to meet its legislated objectives (IMF 2020c). Some previous episodes of large scale financing of government spending by EME central banks in the 1980s and 1990s led to periods of persistently high inflation, prolonged output contractions and macroeconomic instability (World Bank 2021b). However, many circumstances are different for the countries that have engaged in direct financing since the COVID-19 crisis. In particular, they have developed stronger monetary and fiscal policy frameworks and have lower external debt on average (World Bank 2021b; Cantú, Goel and Schanz 2020).

Nevertheless, concerns remain about the programs implemented in 2020 and there has been increasing discussion among academics and policy-makers about how direct financing episodes can be best managed. The consensus view is that direct financing programs should include safeguards that reduce concerns regarding central bank independence and persistent periods of high inflation. Risks will be lower when the central bank can clearly communicate that it has control over the direct financing and that the objective of the program is consistent with its objectives (IMF 2020d). Direct financing could be consistent with central bank objectives during periods of market dysfunction where it may be difficult for the government to access sufficient funding via financial markets, or where other monetary policy tools are exhausted and inflation is forecast to fall short of target over the policy horizon (Bartsch *et al* 2019). Ideally, fiscal and monetary authorities must clearly define and communicate whether the direct financing arrangement is to be a permanent or temporary policy tool.

Term funding schemes

A typical response of financial institutions during periods of elevated risk is to tighten lending standards and reduce the supply of credit to households and businesses. This response can inhibit economic activity and slow economic recovery. This is particularly the case for EME

financial institutions which have had a larger share of loans become impaired relative to advanced economies during previous banking crises (BIS 2020). The lockdown measures imposed by governments to contain the spread of COVID-19 have made financing difficult for many firms, particularly small and medium-sized enterprises (SMEs) (IMF 2020c). As a result, many firms have been unable to access credit to meet their financial commitments and working capital requirements, or to invest in projects that support economic activity.

In response to these concerns, a number of EME central banks launched term funding schemes in 2020 to address constraints on non-financial firms' access to bank credit, and to improve the transmission of monetary policy. Typically, these have been funding-for-lending arrangements, where the central bank provides low-cost funding to participating banks on the condition that credit is extended to firms most affected by the crisis, often SMEs. In some cases, the credit provided is guaranteed by the central bank or government. This is particularly important for EMEs, which generally have weaker banking systems and a larger informal sector, placing additional constraints on SMEs' ability to access banking credit (IMF 2020c). The size and scope of the schemes implemented by EMEs vary but are much smaller relative to GDP than schemes launched by advanced economy central banks. Like in advanced economies, some EME schemes have also been complemented by additional government support programs for SMEs as well as a loosening of some regulatory measures that help to promote the supply of credit more broadly, however the scale and breadth of the

programs have been much smaller than those launched by advanced economies (OECD 2020).

Conclusion

EME central banks responded decisively to the COVID-19 pandemic in order to restore orderly market functioning, ease financial conditions and support both financial stability and the economic recovery. An array of policy tools have been used by EME central banks in this pursuit, including purchases of local currency government debt which appear to have successfully contributed to a normalisation of EME financial conditions. Nevertheless, policy rate reductions remain the primary tool for easing broad monetary conditions in EMEs (in contrast to many advanced economies where policy rates have been close to effective lower bounds for some time). The scale of the policy rate response to the COVID-19 crisis was larger, and the pace faster, in EMEs than in some past crisis periods. This was influenced by the sudden and synchronised nature of the COVID-19 induced economic shock and the large scale policy response in advanced economies that occurred alongside the EME response, without which capital outflows and exchange rate depreciations in EMEs would have been more severe. It also reflects the significant improvements emerging market central banks have made to their institutional frameworks over recent decades, which has improved the stability of inflation, and the development of foreign exchange hedging and local currency capital markets in EMEs over the same period. ⋌

Footnotes

[*] The authors are from International Department.

[1] See Vallence and Wallis (2020) for a detailed discussion of the policy response to COVID-19 by advanced economy central banks.

[2] The International Monetary Fund (IMF) has approved a large number of funding arrangements since March 2020, with the vast majority relating to emergency financing for low-income countries and smaller EMEs. Some larger EMEs including South Africa have also received rapid financing loans from the IMF.

[3] The central banks of Brazil and Thailand also launched programs to purchase corporate bonds. However, data on the use of these programs are unavailable, which could suggest that these central banks have not purchased any assets so far.

[4] To address a lack of liquidity in longer-term government bonds, a few central banks, including in India, Mexico and Brazil, conducted 'Operation Twists' where longer-term government securities are purchased and the same amount of short-term government securities are sold.

[5] Estimated impacts varied, in part, because of differences in the other influences on bond yields that the studies controlled for; the impact remained significantly different to zero when controls for global financial conditions and other domestic and foreign policy adjustments were included in some studies.

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