

# Brazil: Covid-19 and the road to recovery

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## Abstract

Worldwide, fiscal and monetary authorities responded with unprecedented measures to the Covid-19 crisis, providing lifelines to households and firms, as well as safeguarding the functioning of credit and financial markets. The Central Bank of Brazil lowered its policy rate to a record low and implemented measures to increase liquidity and ease capital requirements. The government implemented a sizeable income transfer programme to households and several credit programmes targeting small and medium-sized businesses, among other initiatives. The Brazilian economy recovered strongly in the second half of 2020 and should continue on its path to recovery as the pandemic recedes.

JEL classification: E52, E58, E62, F42, F3.

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## 1. Introduction

In response to the Covid-19 pandemic, many countries adopted voluntary or mandatory lockdowns to slow the spread of the virus. In Brazil, the pandemic brought a large share of the economy to a near halt by the second quarter of 2020. In response, fiscal and monetary policy measures were quickly put in place. While the response was similar to those implemented in other countries, the policy actions taken by the monetary and fiscal authorities were tailored to fit Brazil's economic characteristics, its social needs and the mandates of responding institutions. The fiscal authority targeted its policies to low-income households, and to small and medium-sized firms by implementing transfers and subsidised credit programmes. The Central Bank of Brazil (BCB) relied on conventional monetary policy, as well as on liquidity provision and temporary adjustments to the regulatory framework. In addition, the Brazilian Congress temporarily expanded the BCB's toolbox, allowing it to buy and sell public and private bonds. Although this new tool was not employed, its availability helped ease market concerns. The economy responded well, recovering strongly during the second half of 2020.

This note focuses on the Brazilian experience and the monetary authorities' responses to the Covid-19 pandemic and their impact in the economy. It also briefly describes the fiscal authority's response to the crisis. As the crisis is still unfolding, the note concludes with a discussion about the challenges ahead.

## 2. International background

In response to the Covid-19 pandemic, several countries adopted voluntary or mandatory lockdowns to slow the spread of the virus. These efforts led to sharp and sudden declines in aggregate demand, as well as unprecedented declines in output, particularly during the first half of 2020. (Graph 1).

The near halt of some economic activities and the uncertainty regarding the evolution of the pandemic caused disruptions in global trade chains, significant contractions in the consumption of goods and services, and a worldwide decline in consumer and investor confidence. The service sector, which accounts for a large share of some countries' GDP, was particularly affected, with significant declines in the transportation, tourism, entertainment and leisure sectors.

Fiscal and monetary policy responses worldwide were large, timely and far-reaching. These policies aimed at providing lifelines to help households and firms weather the lockdowns. Fiscal and monetary authorities acted quickly to restore workers' incomes, preserve jobs, help affected sectors, and safeguard the functioning of credit markets and the financial sector. Fiscal measures included income transfers, health spending and loan guarantees, among others (Graph 2). Monetary authorities announced sizeable liquidity and credit support programmes (Graph 3) and lowered policy rates to historically low levels (Graph 4).

Central banks from both AEs and EMEs built on the experience gained during the Great Financial Crisis (GFC), which showed the importance of acting quickly and boldly. The central banks of advanced economies resorted to both conventional and unconventional accommodative policies. They quickly lowered policy rates, where possible, and announced (and implemented) sizeable asset purchase programmes to

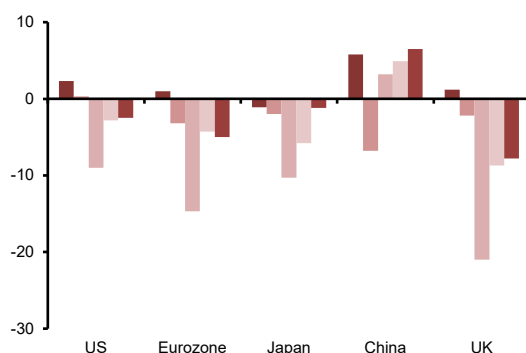
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## Year-on-year GDP growth, advanced and emerging market economies

In %

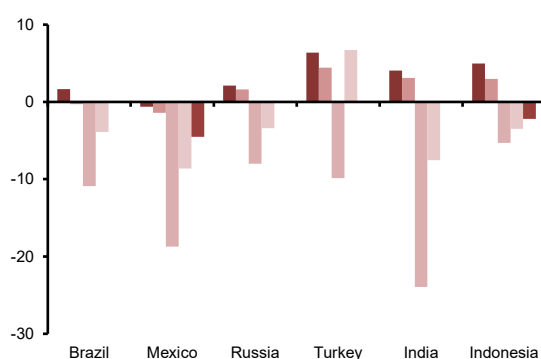
Graph 1

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yoy %

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Source: Bloomberg. 2019Q4-2020Q4

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increase monetary stimulus, expand liquidity or act as a *market maker of last resort*. The nature of this crisis meant that financial systems were better positioned to face it than was the case during the GFC, and moral hazard was less of a concern. Another remarkable difference vis-à-vis 2007–09 was the new Basel framework, which gave regulators scope to ease capital and liquidity requirements. Those conditions allowed central banks to go far beyond their 2007–09 response, allowing the banking system to respond countercyclically to the shock.

Central banks in emerging economies also responded decisively to the economic deterioration caused by the pandemic. Because of the global scope and the nature of the crisis, the response of AE and EME central banks was remarkably similar. Most EME central banks cut their policy rates to historically low levels (Graph 4). Some central banks resorted to unconventional measures to safeguard local market functioning, re-establish adequate liquidity conditions, and mitigate increases in credit costs. EME central banks also offered liquidity lines in local and foreign currencies, in addition to signing currency swap agreements with other central banks, with a view to maintaining the smooth functioning of exchange rate markets. In most cases, despite not having effectively used these swaps, these agreements were considered important in restoring confidence in financial markets. Finally, EME central

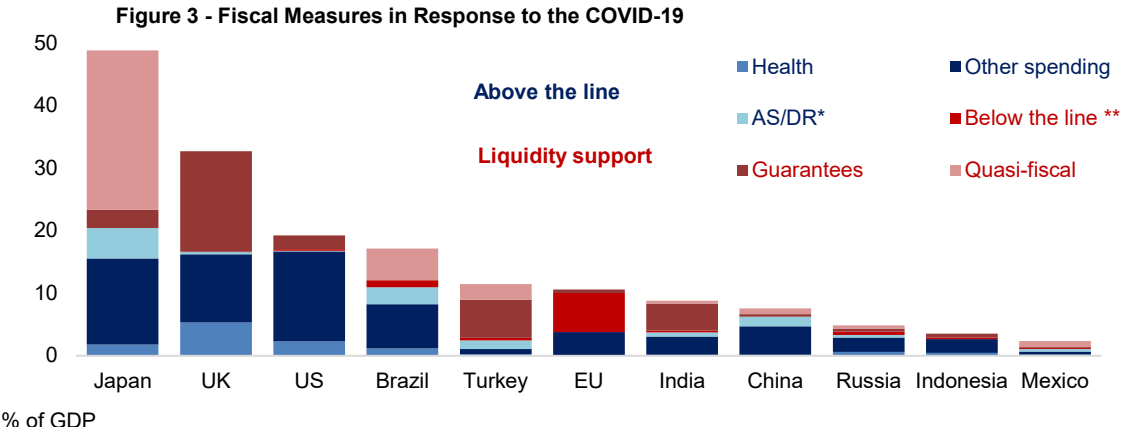
banks and national treasuries also resorted to emergency programmes guaranteeing the flow of credit to small and medium-sized businesses.

Some of the differences in the responses of EMEs and AEs reflected different legal powers and market structures. Some EME central banks had more limited powers to intervene in government bond and capital markets. In addition, financing in some economies depends more heavily on banking credit. As a result, EME central banks relied more heavily on expanding liquidity through conventional tools and funding for bank lending than on asset purchases.

Reflecting the strong response from monetary and fiscal authorities, as well as the partial reversal of some mobility restrictions, the second half of 2020 was marked by a robust, yet uneven, recovery in most economies (Graph 1). The global economy showed a strong rebound in the third quarter, although concentrated in a few sectors, such as industrial and agricultural sectors, led by the consumption of staples and durables. The recovery continued during the last quarter of 2020 but decelerated relative to the third quarter, partially due to new waves of Covid-19 and new mobility restrictions.

Fiscal measures in response to the COVID-19

Graph 2

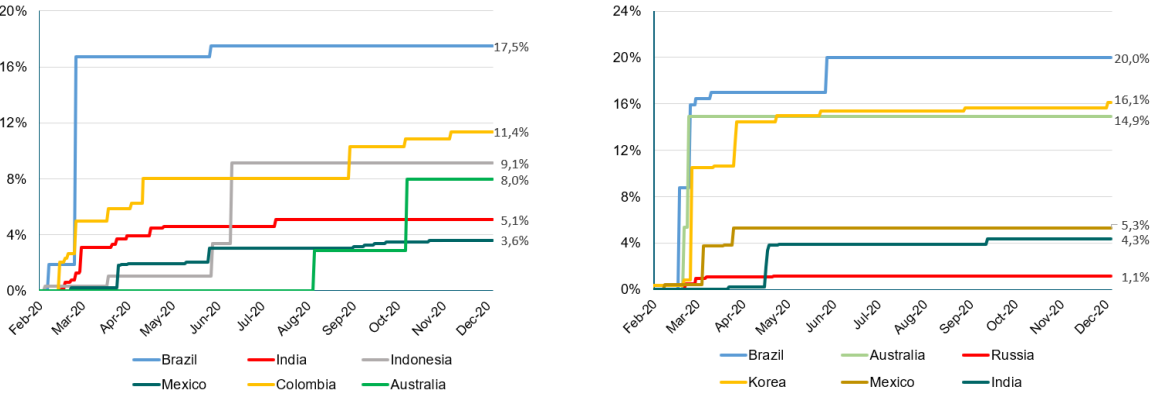


\* Accelerated spending / deferred revenue, \*\* Equity injections, loans, asset purchase or debt assumptions.

EMEs Central Banks liquidity and credit support

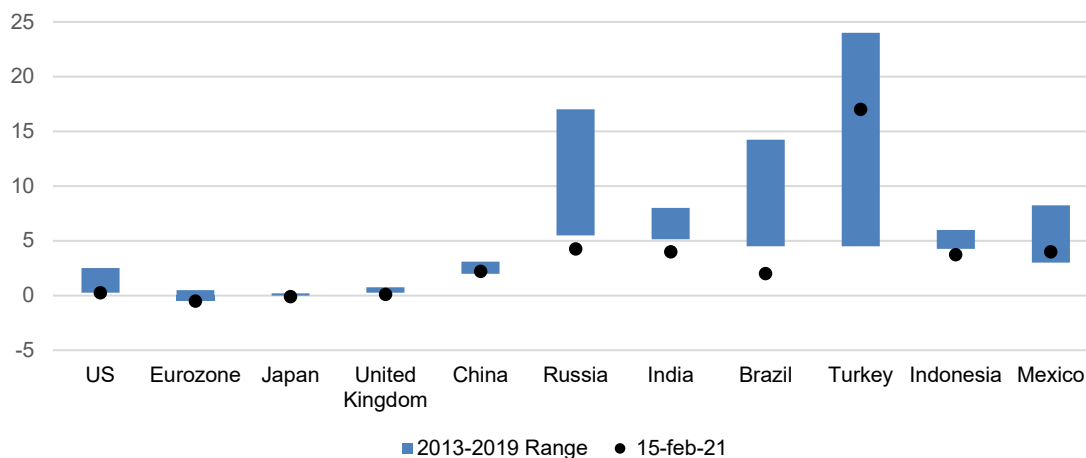
% of GDP

Graph 3



## Policy interest rate since 2013

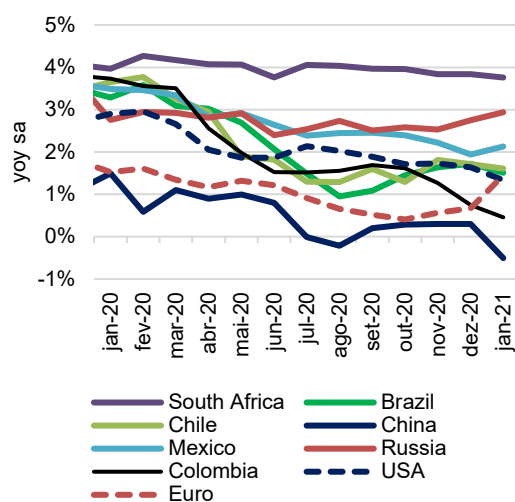
Graph 4



## CPI inflation in services and food

In %

Graph 5



Overall, economic activity ended 2020 below levels observed at the beginning of the year. In addition, the uneven economic recovery was also reflected in the diverging trends of sectoral prices. The second half of 2020 was marked by strong increases in food prices and downward trends in service prices. Some EMEs, in which food items correspond to a larger share of their main price indices, ended 2020 facing somewhat stronger inflationary pressures (Graph 5, right-hand panel).

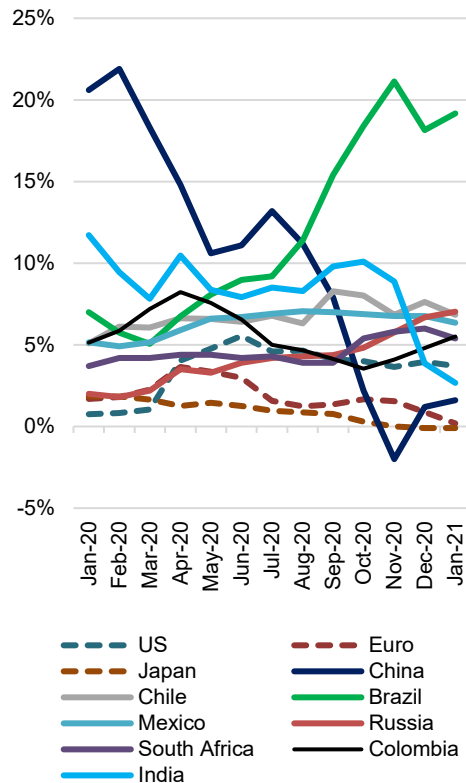
A feature of the Covid-19 crisis was that both AEs and EMEs faced a common threat and that, almost simultaneously, they implemented similar policies, albeit with some differences in their scope, size and other details. Brazil was no exception, as we will outline below.

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## CPI food

% yoy

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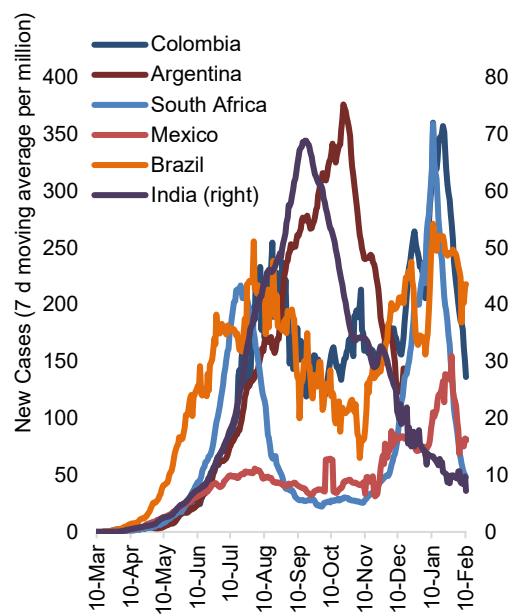
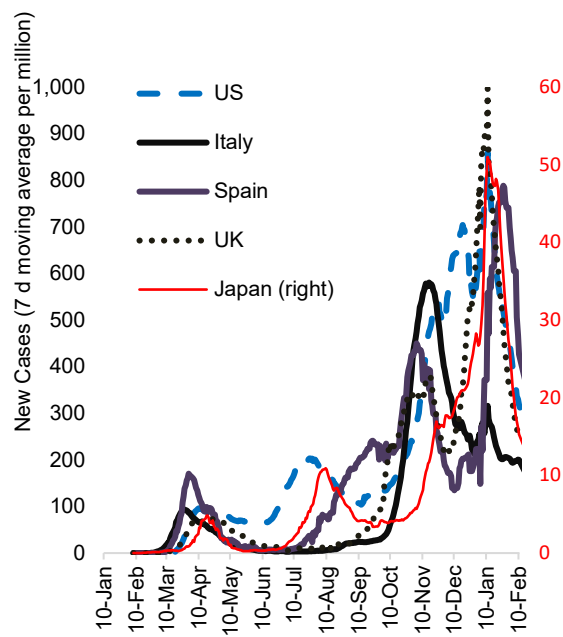
### 3. The pandemic in Brazil

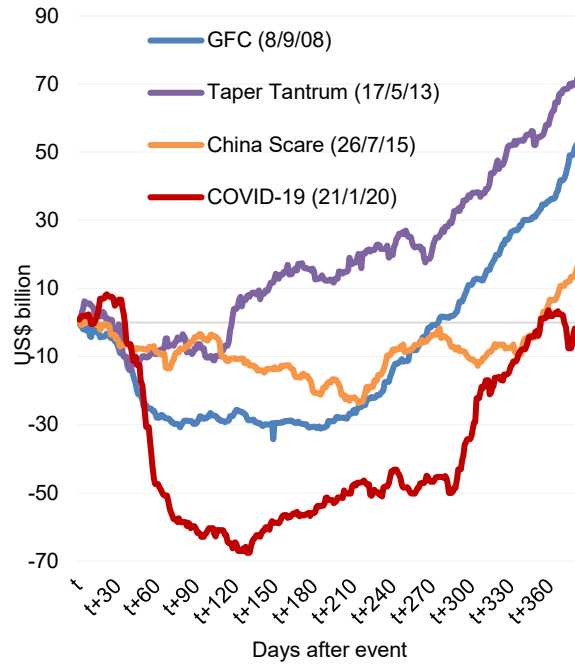
The Covid-19 pandemic arrived in Brazil and in other emerging economies later than in Europe, with the virus gaining momentum only by mid-May (Graph 6). Its effects on the financial sector and the economy, however, were felt much earlier than that. By early March, capital outflows from EMEs were larger than in any other recent crisis, asset prices fell and exchange rates have depreciated sharply (Graph 7).

#### Policy responses

As in other economies, both fiscal and monetary authorities responded quickly to the Covid-19 challenge. As the crisis unfolded and the worldwide risk aversion and uncertainty spiked, Brazil experienced a sudden and widespread increase in demand for liquidity from both households and businesses. Measures to curb mobility and lockdowns in some areas and sectors strongly affected consumer demand and goods supply. As in other countries, Brazil's economy experienced one of the largest output declines in history.

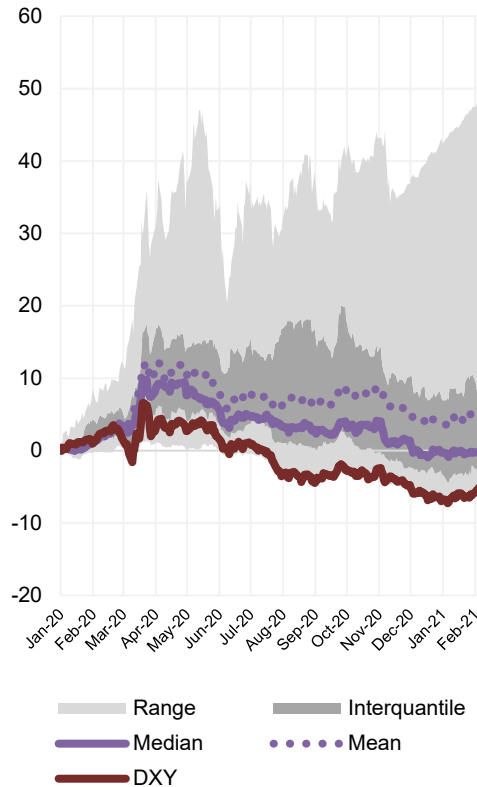
In this context, the BCB adopted a series of measures to provide stimulus for the economy, to ensure the functioning of the financial markets and to safeguard the stability of the financial system.





\* Daily net total flows for Mexico, Korea, Taiwan, India, Indonesia, South Africa, Thailand, Philippines, Sri Lanka, and Vietnam.

EME currencies

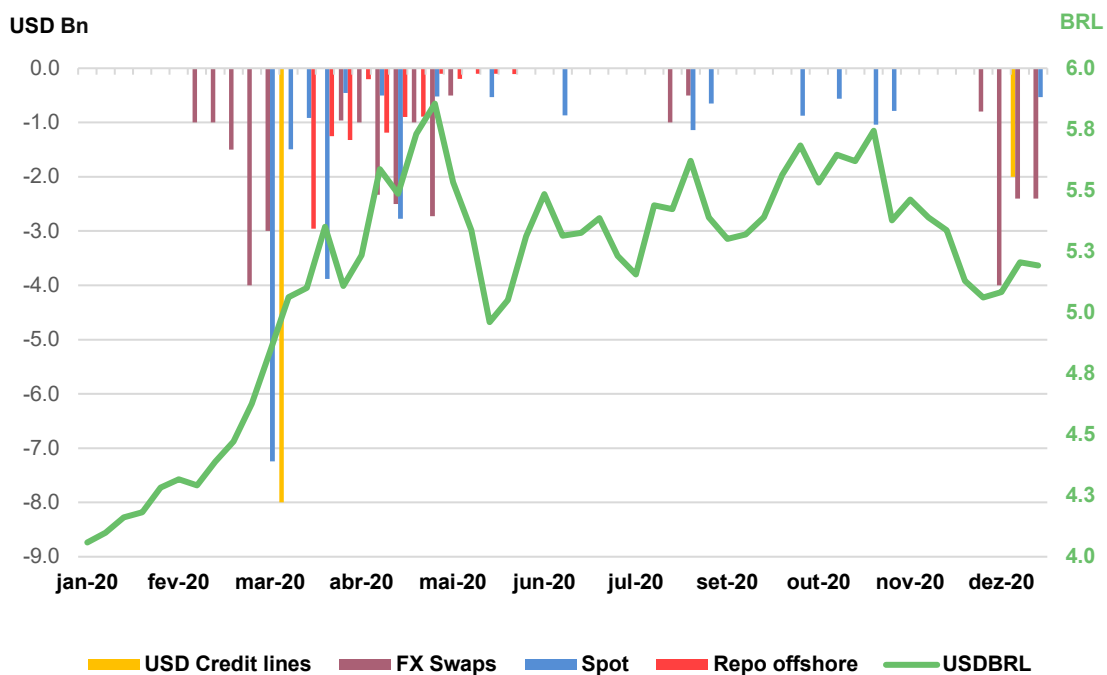




To provide support to the economy during the first half of 2020, the BCB lowered its policy rate from 4.25% to 2%. Furthermore, the BCB used forward guidance to anchor the yield curve from August 2020 to January 2021. In addition, to respond to liquidity and credit needs, the BCB enacted a series of measures. The first set of policies sought to increase liquidity in local currency by easing reserve requirements, opening new liquidity facilities, and creating incentives for this liquidity to be directed to capital markets. The Bank also intervened in currency spot markets to provide liquidity in dollars on onshore and offshore markets and sold dollars through derivatives (Graph 8). The second set of policies aimed at supporting the credit flow to households and firms. Within the Basel framework, the BCB eased regulatory capital requirements to release the balance sheet buffers of financial institutions.

FX interventions

Graph 8



Capital markets have only recently become a significant credit channel in Brazil (Barroso and Nechio (2020)), and this was one of the first financial market segments to be affected by the sharp increase in liquidity demand (Graph 9). After growing fast in the last two years, many investment funds had to sell considerable amounts of their asset holdings in a narrow time window to deal with a record amount of redemptions. This led to a loss of trading reference parameters in the secondary market. Financial institutions, in turn, were responding to strong demand for new loans and were unwilling to buy assets, fearing the same liquidity squeeze that affected investment fund industry.

The BCB reduced required reserves on term deposits, from 31% to 17%, unfreezing BRL 205 billion (3% of GDP), and allowed systemically important institutions to operate with liquidity coverage ratios (LCR) temporarily below the regulatory level of 100%. In addition, the BCB developed a Special Temporary Liquidity Facility to supply extraordinary liquidity, backed by a basket of loans and securities, focusing on financial institutions (FIs) that did not access liquidity through

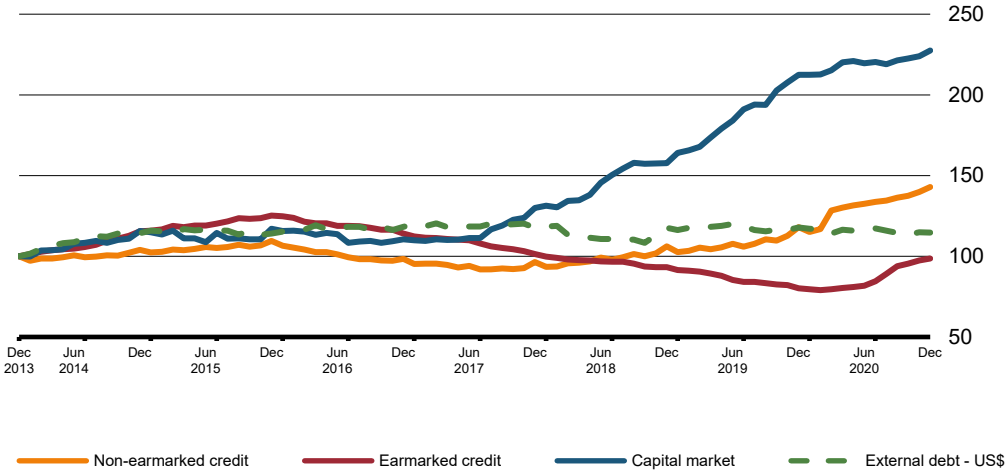
the easing of the reserve requirement.<sup>3</sup> Finally, to tackle the liquidity squeeze in the capital markets, the BCB designed incentives for FIs to purchase corporate debt or repurchase their own issuances of long-term Financial Letters. This measure sought to increase the demand for private sector debt, thereby preventing the effects of a fire sale of these assets by investment funds. After the implementation of the liquidity-enhancing measures, the trading value of private securities in the secondary market increased and the spreads stabilised.

Although common in other jurisdictions, the BCB’s lending facilities, collateralised by the credit portfolios of banks, played a pivotal role during this crisis. For historical reasons, the BCB’s role as a lender of last resort was dormant for nearly 25 years, as institutions feared a misperception of their financial soundness, among other reasons. During this 25-year period, lowering reserve requirements was the main instrument used to enhance financial institutions’ liquidity and to direct credit. In 2020, however, partly in anticipation of a project scheduled for the end of 2021,<sup>4</sup> the BCB regained its effectiveness as a lender of last resort, supplying liquidity to 51 FIs. By comparison, a reduction in reserve requirements was most effective for the five largest banks in Brazil.

Corporate indebtedness

Dec 2013 = 100

Graph 9



To secure temporary liquidity in foreign currency, the BCB went beyond the regular offering of dollar lines and carried out repo transactions with dollar-denominated Brazilian sovereign bonds as collateral during the most critical period of the crisis. This made it easier for Brazilian banks to hold these bonds, providing an alternative source of funding in the place of foreign FIs (counterparties), which were also facing liquidity constraints. In total, about US\$ 9.3 billion were borrowed in foreign currency through this facility. In addition, to reduce volatility and to deal with

<sup>3</sup> Reserve requirements are held mostly by systemically important institutions. The six largest banks hold 92% of the total balance of term deposits and savings reserve requirements.

<sup>4</sup> The Agenda BC# includes the establishment of a permanent liquidity support mechanism to financial institutions. The initiative is scheduled to be implemented by end-2021.

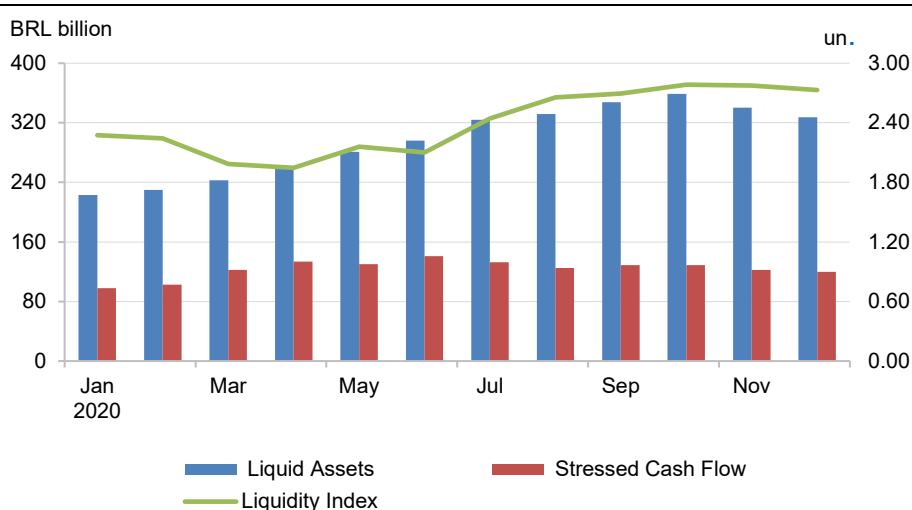
dysfunctionalities in the local foreign exchange market, the BCB intervened through spot and derivatives sales in the amount of about US\$ 57.4 billion by the end of 2020 (Graph 8).

To ease prudential regulatory capital requirements, the capital conservation buffer was temporarily reduced, and its re-establishment period was set to take place gradually during 2021. In addition, the risk-weight factor for loans granted in 2020 to certain SMEs was reduced from 100% to 85%, anticipating the Basel III framework. To ensure that the capital released with these measures was used to absorb losses and maintain the flow of credit, the BCB also imposed a temporary restriction on discretionary capital payouts, such as dividend payments, interest payments on equity capital, share repurchases, and higher management compensation. Finally, the BCB allowed FIs to postpone the due dates of loans for viable debtors whose payment capacity was temporarily affected by the pandemic. These measures allowed firms and households to postpone loan payments and to bridge the most acute phase of the crisis (Graph 10, left-hand panel).

Before the end of June, the BCB announced a new round of measures focused on redistributing liquidity in the banking system and the business sector. The BCB allowed smaller FIs to raise funds through Term Deposits with Special Guarantees (DPGE) by the Deposit Insurance fund, aiming to redistribute liquidity within the banking system.<sup>5</sup> Taking the view that credit was not flowing adequately to small businesses, the BCB allowed FIs to deduct up to 30% of their savings account reserve requirement balances to fund new credit to finance working capital for small businesses. Because the yield on this type of reserve requirement is 70% of the base rate, this measure was similar to a funding-for-lending scheme, generating almost BRL 60 billion (0.8% of GDP) in new loans. This initiative was designed to reduce frictions and direct liquidity to smaller financial institutions and businesses. With these new funding instruments, there was an increase in the balance of liquid assets of small and medium-sized financial institutions (Graph 10, right-hand panel), as well increased credit for micro, small and medium-sized companies (see below).

Loan modifications and liquidity in small and medium sized banks

Graph 10

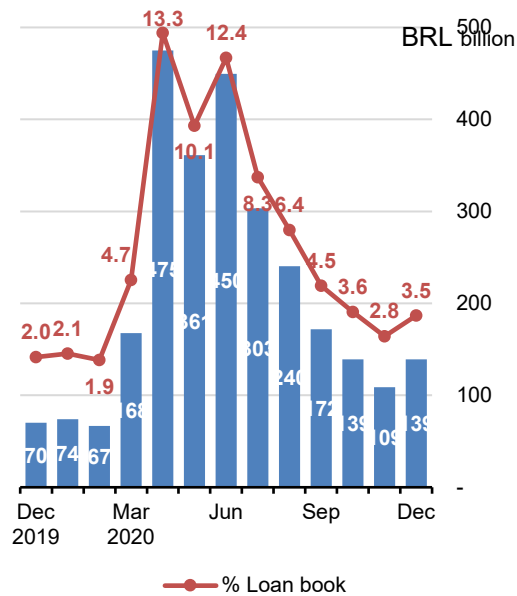


<sup>5</sup> DPGE is a term-deposit instrument for funding small and medium-sized financial institutions. It grants its holder a right of credit against the issuer with cover from the Deposit Insurance Fund (FGC, in Portuguese) up to BRL 20 million, for any given investor or conglomerate.

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## Loan modification flow

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The BCB's package of measures had the potential to increase liquidity by about BRL 1,274 billion, equivalent to about 17.5% of GDP. Similarly, the measures adopted to temporarily alleviate capital requirements of financial institutions had the potential to increase credit supply by BRL 1,348 billion, about 20% of GDP (Graph 3). Table 1 lists the measures taken by the BCB and their effective use. Additional details and updates to these numbers are available on the BCB's webpage. Detailed accounts on measures are provided by the Central Bank of Brazil, (2020a, 2020b).

While the focus of this article is on the measures taken by the BCB in response to the crisis, it is worth highlighting some of the key measures taken by the government and treasury. In addition to the measures put in place to address the pandemic's health challenges, the government implemented one of the largest direct income transfer programmes in the world with a disbursement of about 4.5% of GDP, reaching more than 60 million Brazilians in need. The sizeable fiscal package also included measures to facilitate and subsidise credit to small and medium-sized firms (0.7% of GDP), as well as programmes aimed at retaining workers (0.8% of GDP), postponing loan payments and others. For its part, the treasury adjusted its bond issuance and repurchased a record amount of government bonds in moments of distress, as outlined below.

	Potential	Implemented
<b>Liquidity Release</b>		
Required Reserves + Liquidity Coverage Ratio (LCR)	R\$ 135 bi	R\$ 135 bi
Release of Additional Required Reserves	R\$ 70 bi	R\$ 70 bi
LCA Flexibility	R\$ 2,2 bi	R\$ 2,2 bi
Loan Backed by Guaranteed LF	R\$ 670 bi	R\$ 105,1 bi
Repurchase of Brazilian Sovereign Bonds	R\$ 50 bi	R\$ 23,2 bi
New DPGE	R\$ 200 bi	R\$ 24,2 bi (ongoing)
Loan Backed by Corporate Bonds (Debentures)	R\$ 91 bi	R\$ 3 bi
Change in Required Reserves on Savings Accounts	R\$ 55,8 bi	R\$ 64,4 bi
Total	R\$ 1.274 bi	R\$ 491,5 bi
% of GDP	17.5%	
<b>Capital Release</b>		
Overhedge	R\$ 520 bi	R\$ 520 bi
Reduction in ACCP <sup>Brasil</sup>	R\$ 637 bi	R\$ 637 bi
Reduction in capital requirement for credit operations to SMEs	R\$ 35 bi	R\$ 35 bi
Reduction in capital requirement for small financial institutions	R\$ 16,5 bi	R\$ 16,5 bi
Reduction in capital requirement on DPGE exposures	R\$ 12,7 bi	R\$ 2,3 bi (ongoing)
Capital Optimization (CGPE)	R\$ 127 bi	R\$ 14,4 bi
Total	R\$ 1.348 bi	R\$ 1.225,2 bi
% of GDP	18.4%	
Provisioning exemption for loan modifications	R\$ 3.200 bi	R\$ 971,5 bi
<b>Other Measures</b>		
Dollar Swap line with the Fed	USD 60 bi	active, but not used
% of GDP	4.1%	
Creation of a special credit line for SMEs (PESE)	R\$ 40 bi	R\$ 8 bi
% of GDP	0.5%	
Property as collateral for more than one loan	R\$ 60 bi	Limited impact, around R\$ 0,2 bi
% of GDP	0.8%	
<b>Purchase of Assets in the secondary market</b>		
Purchase of assets in the secondary market by the BCB	N.D.	There were no purchases

Source: Banco Central do Brasil.

## Asset purchases

In contrast to the response to the 2007–09 GFC, many EMEs resorted to unconventional policies in response to the pandemic.

Graph 11 shows that several EME central banks implemented some type of asset purchases during 2020 (Drakopoulos et al (2020)). These central banks purchased both private and government bonds. However, differently from AEs, these interventions were carried out mainly on an ad hoc basis, and focused on addressing specific disruptions in their markets, rather than providing additional monetary stimulus (Arslan et al (2020)).

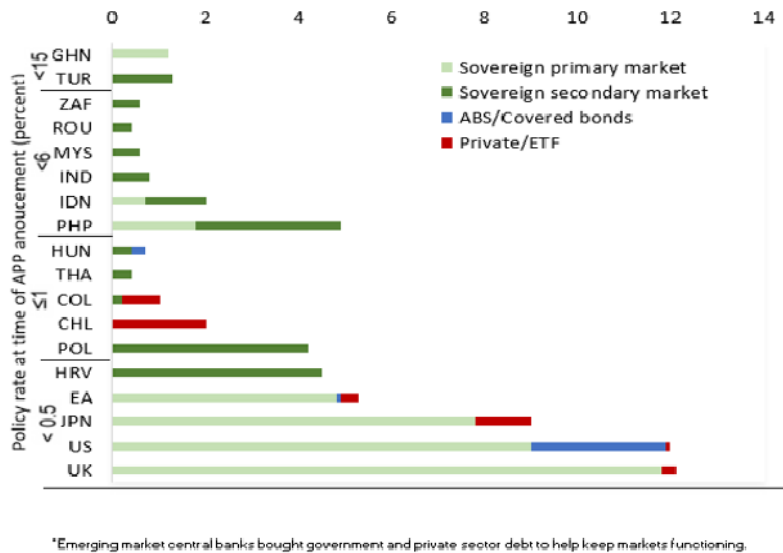
In Brazil, it is the National Treasury (NT) that acts as a market-maker of last resort for the government bond market. The BCB has a mandate to buy or sell government bonds, exclusively, to execute monetary policy. This means that, historically, the NT needs to maintain a relatively sizeable balance at the BCB (of about 5% to 10% of GDP) to be used in moments of financial stress. The NT can dispose of this balance to adjust its issuances and also to repurchase bonds as needed. This market maker of last resort role has been played by the NT in many past crises and this time was no different. The NT repurchased the largest amount of bonds ever, amounting to BRL36 billion (0.5% of GDP), and avoided auctions for seven weeks (Graph 12).

Unfortunately, during 2020 the fiscal packages demanded a sizeable increase in new bond issuance which, along with the disruptions caused by the crisis, significantly reduced the NT balance, reducing the market's confidence in the treasury's ability to sustain its role as market-maker of last resort.

## Central bank asset purchases

% of GDP

Graph 11



\* Emerging market central banks bought government and private sector debt to help keep markets functioning.

Source: IMF.

Against this backdrop, in May 2020, the Brazilian Congress approved an amendment to the constitution, valid through 2020, which, among other things, allowed the BCB to buy and sell public and private bonds in the secondary market to counter the financial stability effects of the pandemic.<sup>6</sup> While the option to intervene in the public bond markets was not used by the BCB, it increased market confidence that the bond market had a shield beyond the NT's depleted balance.

In addition, as demand for liquidity increased and volatility spiked, the NT had to shorten the maturity of its new issuances, to terms closer to those used in open market operations. Since this measure started to compete with the BCB's actions to a certain extent, the BCB also shortened the terms of its open market operations. Eventually, the National Monetary Council (CMN)<sup>7</sup> authorised, as an exception, the transfer by the BCB of part its foreign exchange rate profits to the Treasury in the middle of the year, instead of by the year-end.<sup>8</sup> All these actions required a high degree of coordination between the NT and the BCB.

In the end, the BCB did not need to resort to purchases of public or private bonds. The first set of measures announced by the BCB to increase overall liquidity and capital availability to the financial sector, the fiscal measures adopted by the government to support the economy, and the actions taken by the NT, as well as the BCB's assurance that it would act to stabilise public and private bond markets, if needed, were enough to stabilise local markets in Brazil (Graph 13).

<sup>6</sup> While Brazilian legislation already allowed the BCB to purchase public bonds for monetary policy purposes, the amendment to the constitution allowing for the purchase of private assets and public assets for financial stability purposes gave the BCB new potential instruments for use during the crisis.

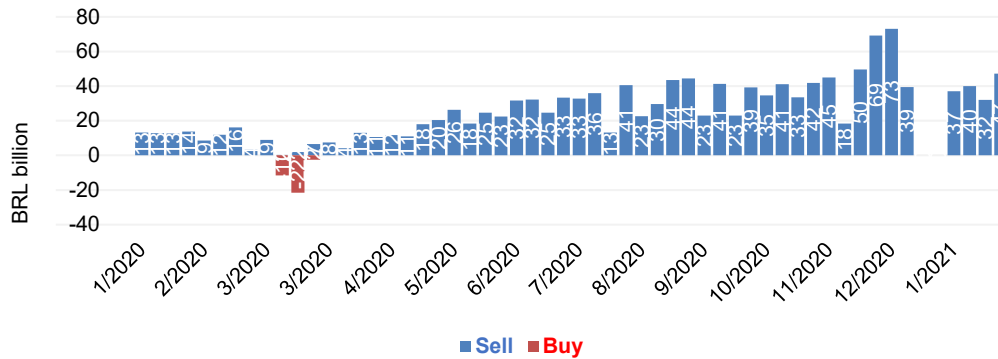
<sup>7</sup> The CMN comprises the Finance Minister (president), the BCB's Governor and the Finance Minister's Special Secretary.

<sup>8</sup> Amounting to BRL 325 billion (4.5% of GDP).

Finally, the timely and strong response of central banks in AEs were key to restoring market confidence and to reverse the risk-off sentiment towards EMEs.

Buy and sell auctions – National Treasury

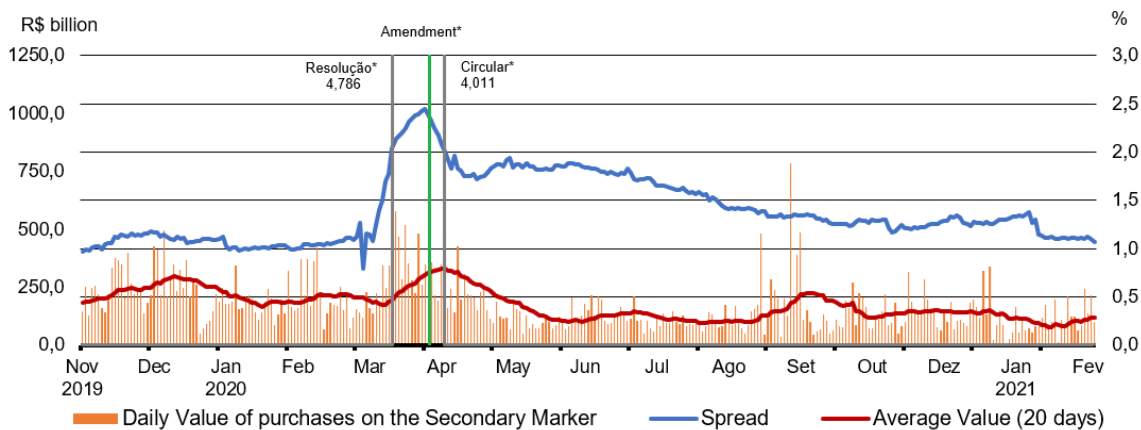
Graph 12



As a result of all these unprecedented measures, markets in Brazil stabilised and the financial system was able to withstand the peak of the crisis. Most importantly, credit continued to flow in the banking system reaching both businesses and households in need. Graph 20 shows that, during 2020, credit increased substantially, particularly to the corporate sector. Graph 21 shows that the measures implemented during that period also allowed for a continued decline in credit costs. Graph 22 shows that the increase in credit reached not only large but also small and medium-sized businesses.

Volume and spread of debentures with rating AA or A traded on the secondary market

Graph 13



Source: Central Bank of Brazil

\*Resolução 4,786/2020 and Circular 4,011/2020 established the Special Temporary Liquidity Facility. On April 3rd, the Amendment to the Constitution was approved by the House of Representatives.

## 4. Conclusion

In response to the pandemic shock, the BCB lowered its policy rate to a record low level and implemented measures to release liquidity and ease capital requirements,

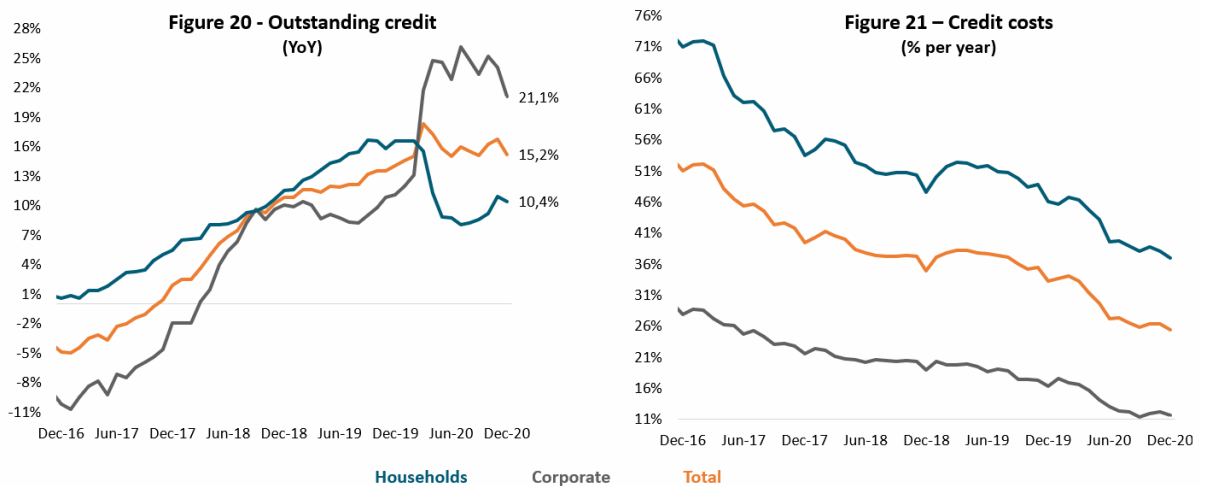
amounting to about 17% and 20% of GDP, respectively. The government also initiated a sizeable income transfer programme and several credit programmes targeting small and medium-sized businesses, among other initiatives.

Following a sharp decline in demand and output during the first half of 2020, Brazil recovered strongly in the third and fourth quarters and should continue its path to recovery as vaccination programmes make progress.

Further ahead, countries will need to face the challenges posed by the fiscal deterioration spurred by the pandemic. Before the shock, Brazil was in the initial phase of a long fiscal adjustment process, with the Spending Cap rule<sup>9</sup> as its main anchor. The measures taken during 2020, which were passed by Congress as an emergency exception to the spending cap, increased the government's gross public debt by almost 15% of GDP, limiting its scope for responding to any future crisis. With such an increase in indebtedness, investors have questioned whether the spending cap, by itself, is able to guarantee public debt sustainability. Therefore, it will be vital to reduce the uncertainty surrounding debt sustainability if the recovery is to be sustained and a painful increase in the neutral rate of interest avoided, which would make the path to recovery harder.

Outstanding credit and credit costs

Graph 14



Source: BCB

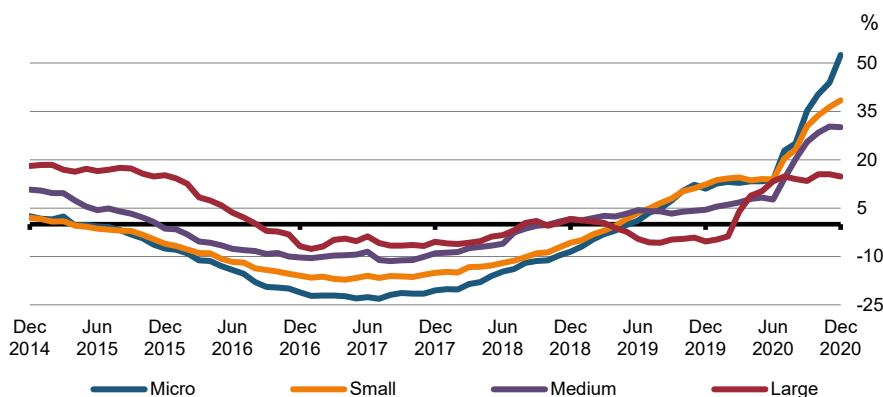
<sup>9</sup> The Spending Cap's constitutional amendment, from 2016, limits expenditure growth to realised inflation.



## Credit growth (yoy)

By company size

Graph 15



## Central bank bond purchases in EMEs

Graph 16



Source: BIS Bulletin 20 "Central bank bond purchase in emerging markets  
Central Banks: Chile, Colombia, Hungary, India, Indonesia, Korea, Mexico, Poland, Romania, Philippines, South Africa, Thailand, Turkey

## References

Arslan, Y, M Drehmann and B Hofmann (2020): "Central bank bond purchases in emerging market economies", *BIS Bulletins*, no 20, Bank for International Settlements.

Central Bank of Brazil (2020a): "Financial Stability Report", October.

——— (2020b): "Financial Stability Report, April.

Barroso, J and F Nechio (2020): "Financial market development, monetary policy and financial development in Brazil", in "Financial market development, monetary policy and financial stability in emerging market economies", *BIS Papers*, no 113, pp 55–65.

Drakopoulos, D, G Goel, F Natalucci and E Papageorgiou (2020): "Emerging and frontier markets: policy tools in times of financial stress", *IMF Blog*, October.