



COVID-19 and Global Capital Flows

OECD Report to G20 International Financial
Architecture Working Group

June 2020



This document was prepared by the Organisation for Economic Co-operation and Development (OECD) as an input for discussions in the G20 International Financial Working Group in 2020. The opinions expressed and arguments employed herein do not necessarily represent the official views of the member countries of the OECD.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

© OECD 2020

This report presents recent capital flow developments during the COVID-19 crisis and serves as a background paper to the G20 International Financial Working Group meeting on 24 June 2020, *Part I - Addressing the situation created by a historic level of capital outflows and restoring sustainable flows of capital*. It is based on a note discussed by the Advisory Task Force on the OECD Codes (ATFC) on 20 May 2020.

The COVID-19 outbreak, in addition to dramatic implications for the health of people around the world, has triggered major economic and financial consequences: GDP is now expected to contract by 6% globally in 2020¹; trade could fall by 12% to 32% this year²; FDI flows are expected to fall by around 40%³; equity markets initially suffered sharp sell-offs before recovering somewhat in recent weeks, and financial conditions have substantially tightened.⁴ These developments in turn are significantly impacting global capital flows and countries' external positions.⁵

One global shock ... many different impacts

Sharp currency depreciation for emerging markets and energy exporters ...

The COVID-19 crisis and steep oil price declines have led to sharp swings in foreign exchange markets. As the COVID-19 epidemic has escalated into an unprecedented global crisis, accompanied by plummeting oil prices, exchange rates of key emerging market economies (EMEs) dropped substantially, notably those of the Brazilian real (BRL), Mexican peso (MXN), Russian rouble (RUB), South African rand (ZAR), and later the Indonesian rupiah (IDR) and the Turkish lira (TRY) (Figure 1). The currency depreciation accelerated between end-February and mid/end-March 2020. The currencies of advanced economies (AEs) have generally strengthened over the period, particularly the USD, JPY, EUR, and CHF (Figure 2). After a notable drop in the first half of March, the Canadian and Australian dollar rebounded.⁶

Since April 2020, the hardest-hit currencies have started to recover. This is particularly the case of the IDR, and the RUB, while the ZAR and MXN have stabilised. This rebound, and the heterogeneity in reactions across emerging market currencies, may reflect various developments, including initially the extension by the US Federal Reserve of swap lines, which was coordinated with other G7 central banks and the Swiss National Bank in March⁷, and the opening of a repo facility (see section below) as well as the agreement announced by OPEC+ countries at the beginning of April 2020.

¹ See OECD (2020), OECD Economic Outlook, June 2020. Scenario where the outbreak is contained.

² See WTO (2020), WTO Trade forecast, 8 April 2020.

³ [FDI flows in the times of COVID 19](#), and [UNCTAD \(2020\), World Investment Report](#).

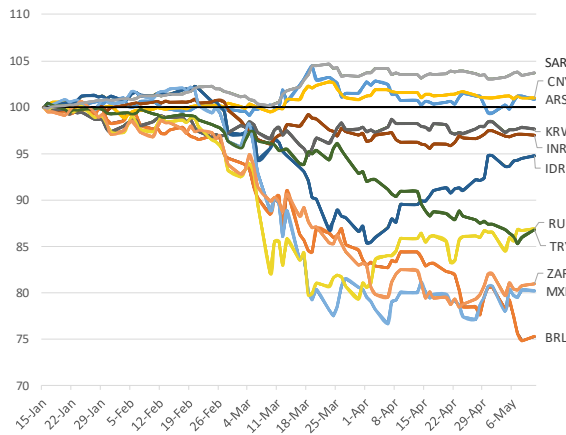
⁴ [Global Financial Markets Policy Responses to COVID-19](#).

⁵ These developments were also highlighted in [Investment policy responses to COVID](#).

⁶ The significant appreciation of the USD, particularly against EM currencies, appears to fit historical patterns of crises - see for instance Corsetti and Marin (2020).

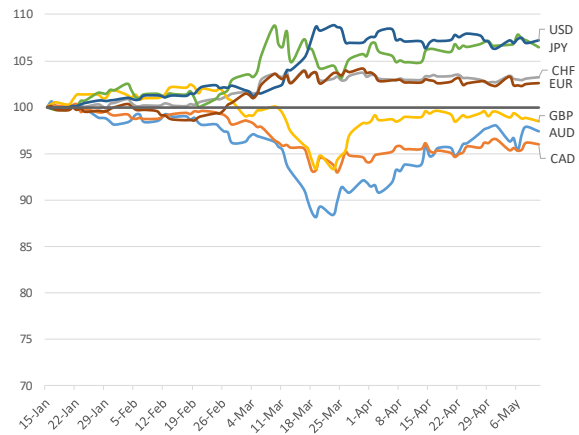
⁷ <https://www.federalreserve.gov/newsevents/pressreleases/monetary20200315c.htm>.

Figure 1. Exchange rates – Selected emerging market economies, Jan-May 2020



Note: Nominal effective exchange rate (broad index), rebased at 15 Jan 2020=100. An increase indicates an appreciation of the economy's currency against a broad basket of currencies.
Source: BIS, OECD calculations.

Figure 2. Exchange rates – Selected advanced economies, Jan-May 2020

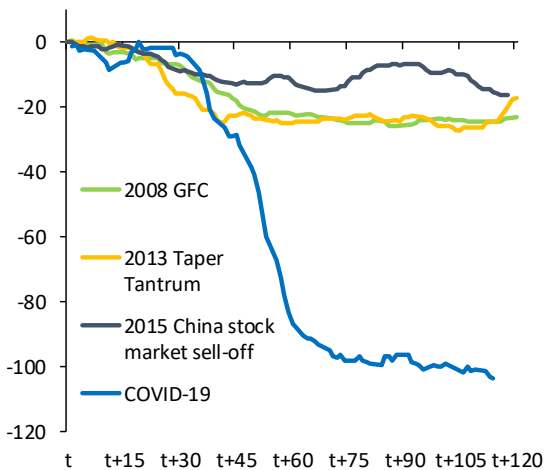


Note: Nominal effective exchange rate (broad index), rebased at 15 Jan 2020=100. An increase indicates an appreciation of the economy's currency against a broad basket of currencies.
Source: BIS, OECD calculations.

... and freezing of portfolio flows ...

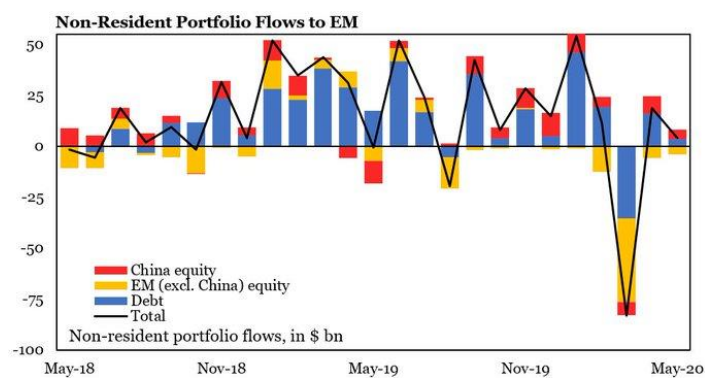
Portfolio investments, typically a volatile asset class, have reacted rapidly to the shock that the pandemic inflicted on the global economy. Economies that had entered the crisis with weaker positions experienced massive outflows of portfolio investments, repeating a familiar pattern whereby international investors transfer capital back home or invest in safer assets during periods of uncertainty.

Figure 3. Portfolio flows to EMEs today vs. past episodes (bln USD)



Note: Cumulative non-resident portfolio flows to EMEs since event start date (t for GFC=9/8/2008; for TT=5/17/2013; for China sell-off=7/26/2015; for COVID=1/21/2020)
Source: Jonathan Fortun, Daily capital flows tracker. ©2020 Institute of International Finance, Inc. All rights reserved.

Figure 4. Monthly portfolio flows to EMEs (bln USD)

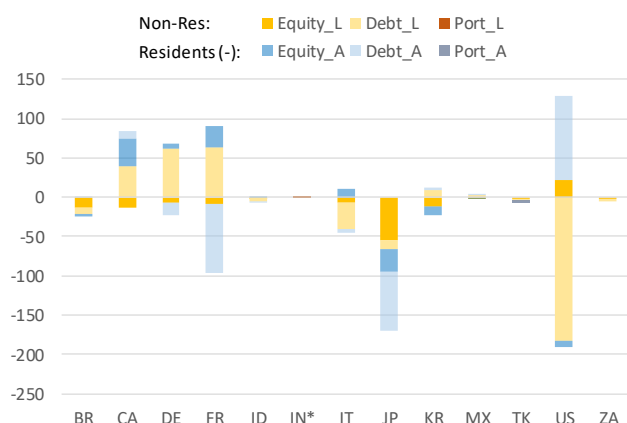


Source: Jonathan Fortun, Monthly capital flows tracker. ©2020 Institute of International Finance, Inc. All rights reserved.

What appears exceptional about capital flow dynamics during the COVID-19 crisis are the scale and speed of the outflows. The Institute of International Finance (IIF) daily flows tracker estimates that around USD 103 billion were drawn from EMEs between mid-January and mid-May 2020, with equity inflows plummeting first, followed by debt flows. This sudden stop in capital flows has been faster and more incisive than observed during similar events in recent years, including during the 2008 Global Financial Crisis, the 2013 Taper Tantrum when the Fed announced a gradual exit to its quantitative easing programme, and the 2015 Chinese stock market sell-off (Figure 3). Non-resident flows to EMEs were back in positive territory in April and May but remain subdued (Figure 4).

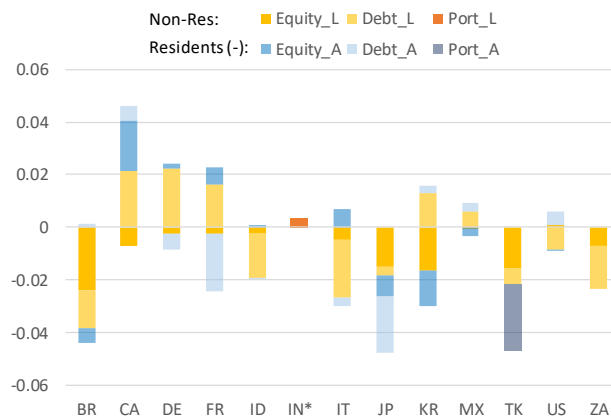
A more complete picture of portfolio flow dynamics is provided by preliminary balance-of-payments data for the first quarter of 2020 (Figure 5 and 6) which show the substantial drop in non-resident portfolio flows to EMEs, both debt and equity, and most strikingly in Brazil. While inflows to AEs generally strengthened in February, Japan and the US also experienced large drops in portfolio debt inflows in March. Portfolio inflows to Italy declined by more than USD 60 billion in March, in contrast to France and Germany, both of which recorded important debt inflows. Resident investors in some cases exacerbated the drop in non-residents flows by investing more abroad (Turkey, Japan), while in other cases they cut foreign investment, repatriating funds back home (Canada, US).

Figure 5. Portfolio flows in G20 countries – 2020Q1 (bln USD)



Note: Non-residents = Net incurrence of portfolio liabilities. Residents = Net acquisition of portfolio assets, entered with a negative sign. Port = debt + equity. India: data not available for March 2020. South Africa: data on resident flows not available. Source : OECD compilation from national sources.

Figure 6. Portfolio flows in G20 countries – 2020Q1 (% total portfolio liabilities, 2019Q4)



Note: Non-residents = Net incurrence of portfolio liabilities. Residents = Net acquisition of portfolio assets, entered with a negative sign. Port = debt + equity. India: data not available for March 2020. South Africa: data on resident flows not available. Flow data scaled by total portfolio liabilities in 2019Q4. Source: OECD compilation from national sources.

... Impacting external funding conditions for emerging market corporates

In parallel, global financing conditions tightened significantly, especially in global US dollar funding markets. The substantial increase in the cost of dollar funding is well reflected in recent movements in the “FX swap basis” - i.e. the difference between the interest rate for USD in the money market and the implied interest rate for USD from the Foreign Exchange (FX) swap market – which widened for most currencies.

Since the beginning of April, USD funding pressures have abated significantly, partly thanks to the introduction of Fed swap lines.

These developments regarding dollar funding and the broader tightening of financing conditions have important implications for the corporate sector. The sharp reversals in profits and earnings expectations for companies triggered by the COVID-19 crisis comes after several years of corporate debt and leverage build-up, driven by historically low borrowing costs and various (including tax) incentives favouring debt over equity. In addition, a substantial part of this debt increase took risky forms.⁸ High indebtedness creates important vulnerabilities, as short term difficulties to service the debt – a liquidity issue – will over time transform into a solvency issue the longer business activity gets disrupted.⁹

Corporates face additional risks in the context of substantial currency depreciation. In recent years, EME corporates have increasingly been able to issue bonds in their local currency, with FX issuance now representing only 18% of total issuance.¹⁰ On the other hand, the share of foreign ownership has increased. A drop in a currency's value against the USD will increase debt-servicing costs for FX bond issuers, likely amplifying liquidity issues. Local currency bond issuers may not be spared from the shock, either. A depreciation of EME currencies tightens AE investor risk constraints and may trigger sales and exit.¹¹ This is apparent in the ongoing sudden stop in portfolio flows described above, which may reflect portfolio reallocation in the context of falling EME asset returns.

Corporates are not alike in terms of their funding needs and vulnerabilities.¹² Differences relate to the types of instruments (loans or bonds), the share of foreign ownership of these instruments, and the nature of the indebted sector (banks, non-bank financial, or corporate). Loans are substantially larger than bonds only in China, India, Russia and Turkey. Chinese corporates have limited external debt,¹³ and a large share of their FX debt, as well as that of Russian and Turkish corporates, is with resident banks. Indonesia and the Philippines largely rely on resident USD deposits to fund FX loans, while Indian corporates rely on cross-border bank loans, and Turkish banks tend to borrow abroad to fund domestic FX loans. In Mexico and Turkey, FX debt has mostly been raised by non-financial corporations (NFCs). Non-bank financials have tended to rely less on FX borrowing, with the exception of Malaysia where they have held a large share of FX debt.

⁸ Such as lower-rated credit issued in the form of BBB bonds, non-investment grade bonds, and leveraged loans: see [Global Financial Markets Policy Responses to COVID-19](#).

⁹ The OECD highlighted in 2019 that corporations in both AEs and EMEs were facing record levels of repayment requirements, with AE and EME companies needing to pay or refinance USD 2.9 tr and 1.3 tr, respectively, within 3 years, and warned that an economic downturn may increase the rate of downgrades in the BBB rated corporate bond segment. See Çelik, S. et al. (2019).

¹⁰ Çelik, S. et al. (2019), *ibidem*.

¹¹ See for instance Hofmann, B., I. Shim and H. Shin (2020) and Hofmann, B., I. Shim and H. Shin (2019).

¹² See McCauley, R., P. McGuire and V. Sushko (2015), and Aldasoro, I. and T. Ehlers (2018) for further analysis of FX debt across sectors and countries.

¹³ Foreign ownership is estimated at around 1 to 1.6% of the total value of outstanding bonds, and the share of FX-denominated bonds represents only 6.4% of Chinese non-financial companies' issuance. See Cerutti E. and M. Obstfeld (2018); IMF (2019); and Celik et al. (2019) for data.

Current policy responses

Against this background, policy makers have relied on a wide range of policy tools to cope with the COVID-19 crisis and the associated financial shocks. Until now, governments have relaxed policies across the board¹⁴ and have made use of an array of fiscal and monetary policy tools. In particular, they have so far: eased monetary policy, conducted asset purchases, boosted USD liquidity through international swap lines, introduced fiscal stimulus, offered credit guarantees, relaxed prudential policies and engaged in regulatory forbearance. This section highlights selective measures that have a currency or residency dimension.¹⁵

FX intervention has been a first line of defence...

In the context of fleeing foreign capital and rapidly depreciating currencies, countries tend to rely on FX reserves to defend their currencies and provide FX liquidity to domestic sectors. FX interventions intensified significantly since February 2020, reaching magnitudes comparable to those of the 2008 crisis, amid considerable turbulence and volatility in the FX market. Countries have differed in their capacity to use international reserves, reflecting the size of buffers built up over time, as well as their funding needs.

Brazil has conducted interventions in the spot currency and derivative markets, to support the BRL, which had depreciated by 15% since mid-February 2020. The magnitude of Brazil's intervention amounted to USD 23 billion, corresponding to 6.4% of Brazil's gross reserves, as of April 2020 (IMF, 2020). The Bank of Indonesia conducted a "triple intervention", directly intervening to stabilize the depreciation of the IDR in the spot and domestic non-deliverable FX markets, and in the domestic government bond market. Russia's Central Bank used several facilities to sell FX under the fiscal rule: from 10 March to 28 May 2020 the aggregate FX sales based on the fiscal rule totaled USD 9.7 billion. Other countries like India and Mexico have also recently intervened in the FX market, although full data are not yet available in all cases.

... "with a little help from my friends"

A few multilateral initiatives have been launched to prevent a dry-up of FX liquidity. On 15 March, the Fed established swap lines with four AE central banks – the Bank of Japan, the ECB, the Bank of England and the Swiss National Bank. And on 19 March, it also announced a temporary USD liquidity arrangement with the central banks of Australia, Brazil, Denmark, Korea, Mexico, Norway, New Zealand, Singapore, and Sweden, resuming a practice which was last used during the Global Financial Crisis. The Bank of Japan and the Bank of Thailand have also agreed on a bilateral swap agreement on 31 March, and the ECB agreed on swap lines with the Croatian National Bank and the Bulgarian National Bank on 15 and 22 April, respectively. In addition, on 31 March 2020, the Fed took the unprecedented step of establishing a new temporary repo facility for foreign and international monetary authorities, allowing them to enter into repurchase agreements with the Fed using US Treasury holdings as collateral. This would provide liquidity for central banks that have not been part of the swap agreements, but depends on the size of US Treasury holdings.

¹⁴ See OECD Policy tracker : <https://oecd.github.io/OECD-covid-action-map/>

¹⁵ This note does not cover [acquisition- and ownership-related policies to safeguard essential security interests](#), some of which have recently been tightened in a number of countries.

EMEs have relaxed CFMs, mainly on inflows to make regulations less stringent and ease liquidity...

Beyond FX intervention, the policy mix has so far not relied too much on Capital Flow Management (CFMs) measures. Argentina has relaxed CFMs on outflows; China and India have, however, relaxed CFMs on inflows.

In Argentina, the central bank has added an option to allow withdrawals abroad in foreign currency using local bank accounts in local currency, subject to the limits for the purchase of foreign currency (USD 200, per month per person). The possibility of withdrawing foreign currency in cash through local credit or purchase cards, using overdrafts from the card issuer, was extended to USD 200 per transaction in non-bordering countries. Remittances to accounts abroad have been allowed from local accounts in foreign currency, up to USD 500 per month. The measures aim at helping Argentinian residents who are using foreign currency abroad, during the current emergency.

China has relaxed some controls on inflows by raising the macro-prudential adjustment coefficient of full-caliber cross-border financing from 1 to 1.25. China also removed restrictions on the investment quota of foreign institutional investors.

India raised the limit for foreign portfolio investors' investment in corporate bonds to 15% of outstanding stock for 2020-21, a measure aiming at injecting liquidity into the Indian corporate bond market. Earlier in January, India had increased the investment cap of the Voluntary Retention Route (VRR) for investment in Indian debt by foreign portfolio investors, as well as increased limits on short-term investments by foreign portfolio investors. Secondly, India fully opened selected categories of government securities to non-resident investors, who were previously facing investment ceilings, in an additional move to support the bond market. Thirdly, the Reserve Bank of India extended the realisation period of export proceeds and repatriation, in order to allow domestic exporters to realise their receipts and repatriate funds within a longer time-frame, in view of their trading partners affected by the COVID-19 lockdown.

...while CBMs have been eased to relieve pressure on the forex market...

Policy makers have eased their stance on regulations targeting banks' operations in foreign currency, falling into the category of Currency-Based Measures (CBMs).¹⁶ They have mainly relaxed CBMs that were already in place, and most of these measures are related to inflows, with few exceptions such as Turkey, which tightened some CBMs on outflows. The relaxation of measures intended to be used counter-cyclically has generally been welcomed. The most common instruments that countries have used include the following:

- *Differentiated reserve requirements*: Countries that have reduced foreign-currency reserve requirements, or otherwise relaxed regulations related to FX reserve requirements include Indonesia and Turkey. Indonesia reduced the FX reserve requirement ratio of all commercial banks from 8% to 4%, and lowered the local-currency denominated reserve requirement by 50 basis points for banks that finance import-export activities. Both measures aim at increasing forex liquidity and improve

¹⁶ See De Crescenzo et al. ([2015](#), [2017](#)) for a detailed description of CBMs, defined as regulations discriminating on the basis of the currency of an operation – in other words, measures that apply a less favorable treatment to operations by financial institutions in a particular currency, typically foreign currencies.

banks' liquidity. Turkey also cut its FX reserve requirements by 500 basis points for banks, in all liability types and all maturity brackets for banks that meet real credit growth conditions within the context of the reserve requirement practice.

- *Differentiated liquidity ratios:* Several countries have relaxed regulations on currency-differentiated liquidity ratios for banks. Sweden, for example, has temporarily allowed banks to fall below the required Liquidity Coverage Ratios (LCRs) for individual currencies and total currencies. Korea has also lowered its foreign-currency denominated LCR from 80% to 70% until May 2020. Hungary, on the other hand, tightened its Foreign Exchange Coverage Ratio (FECR) from 15% to 10%.
- *FX derivatives limits:* Korea and Turkey took action in this area, the former with an easing stance directed at capital inflows, and the latter with a tightening move toward capital outflows. Korea relaxed the cap on FX forward positions for local banks, from the current 40% to 50% of their equity capital, and for foreign banks from the current 200% to 250%. In a tightening move, Turkey cut the ceiling for FX swap, forward and option transactions local banks can conduct with foreign entities from 10% to 0.5% of the lender's regulatory capital, and cut the limit on TRY-denominated sell-side FX swaps, forwards and other derivatives with non-residents with a seven-day maturity to 1% of banks' regulatory capital (2% for 30-day maturity)
- *Tax/levies on FX liabilities:* Korea suspended its stability levy on financial institutions' non-deposit FX liabilities from April to June 2020, and some instalments will be available for payments of the levy due in 2020. The relaxation of the measure is expected to increase financial institutions' reliance on short-term FX funding.
- *Risk weightings for FX loans:* Russia reduced to zero its risk weight add-ons for FX loans granted to pharmaceutical and medical supplies companies, in order to support the financing needs of these sectors, which may need to conduct operations in FX. In addition, it introduced a reduced risk ratio of 70% on bank's RUB-denominated exposures to such companies.
- *Limits on FX operations of brokers and dealers:* Brazil relaxed its limit on FX operations performed with clients by securities and stocks brokerage societies, securities and stocks dealer firms, and foreign exchange brokerage firms, from USD 100,000 to USD 300,000 USD.

Conclusions

The COVID-19 outbreak has led to unprecedented capital outflows from EMEs, driven by sales of portfolio assets by foreign investors. The scale and speed of outflows in the current crisis have been about four times larger than during the 2008 financial crisis. As of Q2 2020 there are some signs of stabilisation, although the outlook remains fragile and global uncertainty continues to weigh on global investor confidence.

In the face of global dollar liquidity shortages, some EMEs central banks intervened in the FX market to support depreciating currencies, and several central banks have established or expanded swap lines. Countries have so far not seen a need to resort to capital controls on outflows, with responses in the area of capital flows by EMEs largely focused on relaxing rules on inflows, easing liquidity, and increasing access to foreign funding. Currency-based measures have become an important part of EME's policy toolkits, with a variety of tools used, including differentiated reserve requirements and liquidity ratios, and FX derivative limits.

It may be too early to assess the effectiveness of such easing actions, although the impact of such measures in previous crisis could provide a first indication. More comprehensive assessments should be conducted once the full nature of the current crisis becomes clearer, taking into account each country's situation, and including a rigorous cost/benefit analysis of each measure, weighing the positive effects on domestic variables against the risks of externalities such as distortions, regulatory arbitrage, and fragmentation.

Countries should continue to closely monitor developments and risks, including collectively at the G20 and other relevant *fora* such as the ATFC, as the intensity of the pandemic varies across countries and regions, and as the impact of the crisis on the economies becomes clearer during the second half of 2020. The high level of non-bank FX debt, in light of expected downgrades in the near future, may need particular attention as a potential source of vulnerability in the coming months. In the longer term, local capital market development, including the development of a domestic investor base, may help increase resilience to outflows.

International co-operation will continue to be key. As some countries will continue to review and adjust their policy measures, they may learn from the successes (or failures) of their peers in using particular measures in different situations. International Organisations, and specialised groups such as the ATFC on the OECD Codes, could be further leveraged as a platform to exchange experience and conduct more in-depth analysis on the effectiveness of measures.

In today's global financial markets, co-operation may also be helpful to avoid, as much as possible, negative spill-overs of one country's measures on other countries. As unintended market fragmentation could make it more difficult for businesses to raise funding, countries have a strong interest in cooperating to find the most appropriate tools to address the crisis, without compromising the prospects for recovery. Adherence to the recently revised Capital Movements Code, as encouraged by the G20, can help to serve the collective interest of maintaining an open investment environment to support the economic recovery from the Covid-19 crisis.

References

- Aldasoro, I. and T. Ehlers (2018), "[Global liquidity: changing instrument and currency patterns](#)", BIS Quarterly Review.
- Çelik, S., G. Demirtaş and M. Isaksson (2019), "[Corporate Bond Markets in a Time of Unconventional Monetary Policy](#)", OECD Capital Market Series.
- Corsetti E. and M. Obstfeld (2018), "[China's Bond Market and Global Financial Markets](#)", IMF Working Paper.
- Corsetti and Marin (2020), "[The dollar and international capital flows in the COVID-19 crisis](#)", VoxEu.
- De Crescenzo, A., M. Golin and A. Ott (2015), "[Currency-based measures targeting banks - Balancing national regulation of risk and financial openness](#)", OECD Working Papers on International Investment.
- De Crescenzo, A., M. Golin and F. Molteni (2017), "[Have currency-based capital flow management measures curbed international banking flows?](#)", OECD Working Papers on International Investment.
- Hofmann, B., I. Shim and H. Shin (2019), "[Bond risk premia and the exchange rate](#)", BIS Working Papers.
- Hofmann, B., I. Shim and H. Shin (2020), "[Emerging market economy exchange rates and local currency bond markets amid the Covid-19 pandemic](#)", BIS Bulletin No 5.
- International Monetary Fund (IMF) (2019), "[The Future of China's Bond Market](#)".
- IMF (2020), "[Policy responses to COVID-19](#)".
- McCauley, R., P. McGuire and V. Sushko (2015), "[Dollar credit to emerging market economies](#)", BIS Quarterly Review.
- OECD (2019), "[Acquisition- and ownership-related policies to safeguard essential security interests](#)", March 2019.
- OECD (2020), "[Global Financial Markets Policy Responses to COVID-19](#)", March 2020.
- OECD (2020), "[FDI flows in the times of COVID 19](#)", May 2020.
- OECD (2020), "[OECD investment policy responses to COVID-19](#)", June 2020.
- OECD (2020), "[OECD Policy tracker](#)", June 2020.
- OECD (2020), "[OECD Economic Outlook](#)", June 2020.
- UNCTAD (2020), "[World Investment Report](#)", June 2020.
- WTO (2020), "[WTO Trade forecast](#)", April 2020.

Contacts

Winfried BLASCHKE (winfrid.blaschke@oecd.org)

Annamaria DE CRESCENZIO (annamaria.decrescenzio@oecd.org)

Etienne LEPERS (etienne.lepers@oecd.org)

Find the OECD Code of Liberalisation of Capital Movements online at
www.oecd.org/investment/codes.htm

