Covid-19 crisis and capital outflows from emerging economies: global safety nets are effective, but need to be strengthened

The Covid-19 crisis has led to greater capital outflows from emerging countries than those observed in 2008. At the national level, in response to this crisis, countries have implemented effective and unprecedented counter-cyclical policies: fiscal, macroprudential and monetary, often with unconventional asset purchase policies for the first time. There have been numerous but limited foreign exchange interventions, with many countries choosing to float their currencies, and capital controls have been rare. At the global level, International Monetary Fund (IMF) loans were the main instruments used. These responses have resulted in a selective return of capital flows to some emerging countries. Nevertheless, additional support is needed to restore sustainable growth. The IMF’s general allocation of Special Drawing Rights at the end of August 2021 could be an opportunity to implement more durable measures through their reallocation.

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USD 70 billion
outflows from funds invested in emerging economies (excluding China) in just five weeks after the Covid-19 crisis broke out

10 x
growth in resources available through global safety nets since 2008, but mainly for developed countries (swaps between developed countries and the European Stability Mechanism)

USD 118.1 billion
the amount of International Monetary Fund financial support for 88 countries approved between March 2020 and September 2021

Evolution of the global safety net
(billions of special drawing rights – SDR)

Source: International Monetary Fund (IMF); authors’ calculations.
The global pandemic resulted in an exceptional episode of capital flows, with capital outflows from emerging countries higher than in 2008. These massive outflows occurred even though many emerging countries have strengthened their fundamentals since 2008. A rapid return of capital inflows, albeit with differences across countries, followed this episode, but did not offset the consequences of this financial shock.

In response to this financial shock, safety nets were deployed at all levels: national, regional, bilateral and multilateral. At the national level, countries reacted by implementing fiscal and monetary policies, including unprecedented unconventional asset purchase programmes, foreign exchange interventions and temporary macroprudential easing. Unlike in the past, there were few capital controls. Foreign exchange swaps between central banks, mainly conducted by the Federal Reserve (Fed) and the Eurosystem, were used to ensure the provision of foreign currency liquidity, particularly in dollars, in the counterparty countries. However, emerging countries only benefited indirectly (or marginally) from these arrangements. Repo facilities, set up by the Fed and to a lesser extent the Eurosystem, allowed some central banks not covered by the swap network to access foreign currency liquidity. Regional Financial Arrangements were hardly used, but multilateral development banks largely increased their funding arrangements. Lastly, the International Monetary Fund (IMF) has deployed all its instruments, with an exceptional number of loans granted (USD 118.1 billion, for 88 countries as at 7 September 2021). These loans were mainly in the form of rapid credit facilities (especially for developing countries), but also precautionary instruments (for some emerging countries).

All these measures prevented a general crash or default in many emerging countries. However, the financial shock was substantial (USD 70 billion in capital outflows during the first five weeks of the crisis for emerging countries). It also contributed, according to World Bank estimates, to a 77 million increase in the number of people below the extreme poverty threshold from 2019 to 2020, mainly in poor and emerging countries.

1 Significant changes in capital flows over the last 20 years

Gross capital flows\(^1\) are a product of globalisation and increased sharply until the great financial crisis of 2008. In 2007, they reached a peak of 20% of world GDP for inflows, compared to less than 5% in the first half of the 1990s. Then, they adjusted sharply (to less than 10% of world GDP) at the time of the great financial crisis. Emerging countries, especially China, were relatively less badly affected by the great financial crisis. They have attracted a growing share of global flows, between a quarter and half since 2010, with an increase in intra-regional flows.

As regards the type of flows, the role of non-bank financial intermediaries has increased since the great financial crisis, with the decline in the leverage ratios of banks in industrialised countries (CGFS – Committee on the Global Financial System, 2021). Among these intermediaries, of particular note for emerging countries is the development of Exchange Traded Funds (ETFs), whose investments replicate benchmark market indices. ETFs can trigger massive and sudden capital flows, for example, when the composition of an index changes, whereas the fixed component tends to protect countries from idiosyncratic shocks as long as its weight remains stable.

However, these market trends have not heightened the volatility of capital flows to emerging countries (CGFS, 2021). The improvement of the structural features of their economy is a first explanatory factor. The development of local currency capital markets, which now account for 35% of GDP, up from 25% in 2010 (CGFS, 2021), has also contributed to the resilience of capital flows to emerging countries. The problems of revenue and cost currency mismatches, which are a source of financial instability, have thus been limited. Nevertheless, investors in these markets are mainly non-residents, who have their own balance sheet constraints. These constraints may cause them

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\(^1\) Gross capital inflows correspond to the amount of acquisitions minus sales of domestic assets by non-residents. They are sometimes referred to as “inward” capital flows. Capital flows are “net” if outflows (so-called “outward” capital flows) are subtracted.
to reduce their exposure to these emerging countries and thus contribute to the volatility of these markets. In this respect, the behaviour of resident investors would be far more stable (Hofmann, Shim and Shin, 2020).

These trends have led to greater discrimination in times of financial stress (push factors, see Box 1). Ahmed et al. (2017) show that since the great financial crisis, investors have exhibited less herd behaviour and tend to differentiate between emerging countries according to their fundamentals. During the crisis, this observation was partially confirmed (see Part 2, “Global safety nets that cushioned the shock of the crisis but will have to be strengthened in the long term”). Capital outflows affected all emerging countries during the first few weeks of the crisis, followed by a rapid but uneven return of capital across countries according to their fundamentals.

Indeed, global factors, such as investors’ risk appetite, the level of financial stress, global liquidity or commodity prices (“push” factors, see Box 1), remain the main drivers of the volatility of capital inflows to emerging countries (Eller et al., 2020). They are also the main triggers of extreme episodes of strong inflows or outflows (Eguren-Martin et al., 2020). These factors play an important procyclical role in these countries, affecting financial stability and economic activity (Obstfeld, 2012).

The recent example of Argentina illustrates these risks (Carluccio and Cezar, 2021). Expansionary policies in advanced economies, particularly in the United States, tend to ease financial conditions and foster inflows, sometimes excessively (Koepke, 2019). Conversely, unexpected changes in monetary policy in such economies often trigger episodes of massive capital outflows in the event of monetary tightening. The 2013 taper tantrum episode is one of the most significant recent examples.

Box 1

The determinants of capital flows: “push” and “pull” factors

The determinants of capital flows can be broken down into “push” and “pull” factors (Fratzscher, 2012). The former refer to global features, common to all countries. Pull factors are idiosyncratic and refer to the characteristics of a country that attract capital to its domestic market. In addition to these two factors, there are the ‘pipes’ that constitute the infrastructure through which capital flows circulate, such as the different types of financial intermediaries and the rules and practices they follow (Carney, 2019).

To determine the role of push and pull factors in capital flows to emerging countries, we estimate the following equation (see Committee on the Global Financial System, 2021):

\[ K_{iq} = \beta_1 \text{push} + \beta_2 \text{pull} + \omega_y + \omega_i + \epsilon_{iq} \]

Where \( K_{iq} \) represents EPFR\(^1 \) inflows to country \( i \) in quarter \( q \) divided by GDP. Push is a matrix of variables representing factors common to all countries. It includes the VIX\(^2 \), which measures investors’ risk appetite, commodity prices, the US interest rate and the global economic cycle. Pull measures all domestic factors also in ratio to GDP, specifically the level of external reserves, the trade balance, the government deficit and debt and the economic growth rate. \( \omega_y \) and \( \omega_i \) are the time (push) and country (pull) fixed effects respectively. The estimates are based on a sample of 33 emerging and developing countries between 2011 and 2020. The residuals are attributed equally to the two push and pull factors.

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1 The Emerging Portfolio Fund Research (EPFR) data provides capital flows calculated from the granular data of investment funds (including UCITS – Undertakings for Collective Investment in Transferable Securities and ETFs – Exchange-Traded Funds).
2 Volatility Index, an indicator of volatility in the US financial market.
Over the past decade, push factors have been the main determinants of portfolio flows to emerging countries during crisis or sudden stop episodes, such as the 2013 taper tantrum or the 2015 China shock (see chart). These factors also explain the massive outflow of capital in March and April 2020 during the Covid crisis and the return of capital as from the second half of 2020. The push factor has also fuelled flows during expansionary periods, when international liquidity was abundant (2012, early 2013 or 2016, early 2018).

Pull factors are particularly important during times of stress, when international investors are more selective (Ahmed et al., 2017). The most vulnerable countries are thus worse affected than countries with better macroeconomic fundamentals. In 2013, these factors were prominent throughout the taper tantrum episode.

As regards “pipes”, the development of non-bank financial intermediaries has had a significant impact on the determinants of capital flows. In particular, passive management strategies, which are based on replicating indices, can lead to abrupt adjustments that are not correlated with fundamentals or push factors (see Lalanne and Peresa, 2019, for the case of the inclusion of China in the benchmark index).

3 The importance of each factor depends on the type of flow. In contrast to portfolio flows, pull factors are the most significant determinants of foreign direct investment, in particular productivity growth (De Vita and Kyaw, 2008).
affected and accounted for around 75% of withdrawals from specialised investment funds, according to Emerging Portfolio Fund Research (EPFR).

Investors shifted into highly liquid instruments in the US money markets. Gross flows into very short-term government securities thus reached over USD 800 billion in March. Emerging equity markets remained stressed (foreign sell-offs, volatility) until May 2020. They only returned to relative stability as of June. Over the same period, emerging currencies depreciated by an average of almost 15% against the dollar, while the cost of external financing in dollars reached record highs.

Large-scale national responses

Due to the exogenous nature of the shock, emerging countries found themselves in a broadly similar situation in the early weeks of the crisis. However, investors rapidly became selective, pulling out of economies with established external vulnerabilities (foreign currency debt, insufficient foreign exchange reserves, low institutional credibility, etc.), and avoiding Covid waves that were often regional.

An exceptional crisis called for exceptional measures. Massive fiscal and tax schemes to support businesses and, to a lesser extent, households, were pursued in most emerging countries. At the same time, national monetary authorities provided significant support, implementing an unprecedented countercyclical policy (92% of the 50 emerging market central banks cut their key rates), intervening in the foreign exchange market (58%), adjusting their macroprudential ratios (52%) and, in some cases, introducing ambitious asset purchase programmes (34%). These measures, which were exceptional for many emerging countries and often unprecedented, helped to calm the markets. They were also able to limit, or even contain, pressures on their interest rate spreads when market participants considered that these decisions had been implemented in a credible manner.

Currently, the IMF’s institutional view and the implementation of its Integrated Policy Framework (IPF; see IMF, 2020) are being revised. Against this backdrop, the very limited use of capital control measures in 2020 is noteworthy. Despite the unprecedented drop in financial flows in March and April 2020, emerging economies tended to ease certain restrictions to bolster inflows.

Foreign exchange interventions were massive at the height of the crisis, in March and April 2020, but quite limited in the months that followed. With some exceptions (Turkey in particular, but also Indonesia), the authorities decided to let their currency absorb the financial shocks, thereby signalling that there was less fear of floating.

However, it appears ex-post that despite these exceptional monetary measures, expansionary policies are still necessary. Nonetheless, their implementation is difficult in emerging economies. For instance, according to the IMF (IMF, 2021b), fiscal support from spring 2020 to spring 2021 (government spending, guarantees and loans) amounted to only 1.9% of GDP in developing economies, 6.7% in emerging economies, and 27.8% in advanced economies.

2 Instead, monetary institutions that have engaged in asset purchase programmes have had a significant impact on long-term bond yields, which has tended to increase with the credibility of the institution, and the clarity of the implementation announcements (Fratto et al., 2021).

3 The IMF’s institutional view, adopted in 2012, provides a macroeconomic framework for managing and liberalising capital flows (Cabrillac et al., 2020).

4 Only the number of new regulations on foreign direct investment increased significantly during the crisis. They were generally implemented for national security reasons, particularly in advanced countries.
2 The role of global safety nets in the crisis

The global safety net has been strengthened, mainly to the benefit of advanced countries

Faced with the risks of economic and financial crises linked to global shocks, a global financial safety net (GFSN) was gradually put in place. Until the great financial crisis of 2008, the IMF’s resources (quotas and borrowed resources) accounted for 80% of the GFSN, making the Fund the linchpin of the GFSN. Today, these resources account for less than 25% of the GFSN. The IMF does offer almost universal coverage, which makes the institution indispensable especially for emerging and developing economies. However, changes in the GFSN reflect the inclusion of new resources that can be mobilised in the event of a financial crisis in advanced countries. These resources comprise additional items related in particular to the European sovereign debt crisis, such as regional financial agreements and currency exchange networks, in the form of permanent swap lines and repos.

- Regional Financing Arrangements (RFAs) were developed in 2008. These arrangements between groups of countries, often in the same region, make it possible to pool leveraged resources to finance a country in crisis. They are very different in nature, such as the Arab Monetary Fund, the BRICS Contingent Reserve Arrangement, the Chiang Mai Initiative, the Eurasian Fund for Stabilization and Development, the European Stability Mechanism and the Latin American Reserve Fund. In practice, the RFAs have been used modestly: the Europe arrangements have not been implemented, while the other arrangements have only been implemented to a limited extent (around USD 2 billion).

- The 2008 crisis resulted in the development of more flexible solutions than institutional interventions, such as bilateral swap arrangements. These arrangements allow central banks in developed countries to exchange currencies with each other in order to relieve pressure on foreign currency liquidity and reduce possible contagion effects. They were used extensively during the two crises of 2008 and 2020 and proved to be both effective and responsive instruments. Unlike the IMF’s range of instruments, however, they cover only a limited number of countries, which are usually advanced and international currency issuers. Moreover, their implementation remains at the discretion of the central banks and must be in line with

C2 Global financial safety net

a) Evolution of the global financial safety net (GFSN) (billions of special drawing rights – SDR)

Source: International Monetary Fund (IMF); authors’ calculations.
Note: The amounts of the unlimited swaps are estimated based on the maximum past drawdown of these lines.

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5 The Global Financial Safety Net (or GFSN) is a set of institutions and mechanisms that provide financial support to prevent and mitigate the effects of economic and financial crises. It includes several tools, including foreign reserves available to national authorities and other tools requiring bilateral or multilateral agreements, mainly swap lines between central banks, regional financial arrangements and IMF resources.

6 Brazil, Russia, India, China and South Africa.
their domestic mandate. The European Central Bank (ECB), together with the Bank of Canada, the Bank of Japan, the Bank of England, the Swiss National Bank and the Federal Reserve, established a network of temporary swap lines, which became latter unlimited in amount (2008) and permanent (2013). During the crisis,repo facilities were added to this network to cover certain emerging countries (see above). China has also stepped up its swap agreements since 2009. These cover more than thirty countries exceeding over USD 500 billion. However, these lines can serve other purposes, such as fostering trade and investment, but they seem to have been little used.

Through these instruments, the size of the external resources available through the GFSN has increased tenfold, to almost SDR 3 trillion, in ten years. However, only a small proportion of these resources are accessible to emerging countries. At the same time, the stock of international reserves, which remains the first line of defence for these economies, has more than doubled since 2008 (SDR 10 trillion at the end of 2020).

Global safety nets that have cushioned the shock of the crisis but will need to be strengthened in the future

Given the limitations of national responses in some emerging and developing countries, the GFSN, mainly through the IMF, has provided a rapid and large-scale financial response. It helped to quickly stabilise the financial markets and contain the economic crisis. However, probably due to the exogenous and common nature of the Covid crisis, not all components of the GFSN were used. Despite being gradually bolstered in the 2010s, regional funding arrangements were not, or only marginally, mobilised in 2020.

Countries experiencing urgent financial needs, without reasonable access to markets, turned to the IMF. The latter increased the number of loan agreements with little or no conditionality, mainly through emergency and precautionary facilities (see Chart 3). For example, between March 2020 and September 2021, USD 118.1 billion in financial support was approved for 88 countries through increased access to existing or new financing arrangements. During the first months of the crisis, countries made massive use of the Fund’s two emergency financing instruments, before the pace of lending slowed considerably as of July 2020. Until then, 69 countries had made use of the Fast Track Facility, compared to an average of three applications per year in the period 2019-20. Between March and December 2020, 83 countries had received emergency funding. The annual and cumulative access limits for these facilities were increased from 50% to 100%, and from 100% to 150% of quotas in April 2020 until the end of 2021. However, due to the persistence and severity of the pandemic, the limits were quickly reached. Indeed, these instruments proved insufficient to meet the needs of many countries, which had to apply for other IMF financing instruments. Against this backdrop, the Fund raised its annual access limits to resources. In an innovative development, “precautionary” facilities to prevent crises were stepped up, with good results for Latin American countries. And a new precautionary instrument was created (see Appendix).

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7 Among these “rapid” instruments, the rapid financing instrument (RFI) was financed from the general resources account, and the rapid credit facility (RCF) from the resources of the Poverty Reduction and Growth Trust.
The IMF has also provided unprecedented support to low-income countries by doubling its outstanding loans and providing debt relief through its Catastrophe Containment and Relief Trust (CCRT). These initiatives were supplemented by the introduction of the G20 initiative to suspend debt servicing for the poorest countries from May 2020.\(^8\)

However, in view of the amounts involved, the central banks of the advanced countries played a crucial role, with massive monetary injections as of March 2020. The resumption and ramping up of swap lines helped to support liquidity in international markets. They significantly eased financial conditions for the global economy as a whole. In a few cases only (e.g. Brazil, Mexico, Bulgaria and Croatia), emerging markets benefited directly from the exceptional and discretionary implementation of Federal Reserve\(^9\) and ECB swaps. In contrast, an unprecedented number of emerging countries benefited from extraordinary repo facilities set up by these same institutions. Indeed, refinancing lines were extended and new ones were created in the spring, such as the Federal Reserve’s Foreign and International Monetary Authorities (FIMA) repo facility or the Eurosystem repo facility for central banks (EUREP). The amounts of these new lines were increased and their conditions were modified (eligibility of collateral, backstop rate, duration of agreements, etc.).

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8 This initiative, supported by all G20 countries, allowed 73 countries to request a temporary suspension of debt service payments to their official bilateral creditors until the end of 2021 (see https://www.banquemondiale.org/fr/topic/debt/brief/covid-19-debt-service-suspension-initiative). The establishment of the Common Debt Management Framework should provide further support for this initiative.

9 Recent literature has highlighted the significant impact of the introduction of swap lines for Brazil and Mexico (see IMF, 2021a and Aizenman et al., 2021).
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Appendix
The effectiveness of the global financial safety net (GFSN) in Latin America during the Covid-19 crisis

The example of the IMF precautionary lines, a powerful signalling effect combined with the Fed’s support

Unlike previous crises, International Monetary Fund (IMF) programmes played a limited role during the Covid-19 crisis. This is due to the nature of the health shock, which does not warrant policy adjustments to address macroeconomic imbalances, and the availability of alternative sources of financing, such as private capital flows and public fiscal support.

The Covid-19 crisis led to an increased use of IMF precautionary instruments and the opening of a new short-term precautionary line. Above all, these measures have had a powerful signalling effect on the markets, whereas these instruments had been little used until then. The IMF traditionally focuses on crisis resolution. However, it also has two effective tools at its disposal to prevent or mitigate them, and thus bolster market confidence in times of risk: the Flexible Credit Line (FCL) and the Precautionary and Liquidity Line (PLL). The latter is designed to meet the liquidity needs of member countries whose economies are fundamentally sound, but which are exposed to some vulnerabilities that prevent them from using the FCL. In this respect, between March 2020 and June 2021, four Latin American countries benefited from IMF precautionary facilities amounting to USD 54.6 billion. Three new agreements were concluded for Chile (FCL), Panama (PLL) and Peru (PLL), while the agreement for Colombia (FCL) was renewed and increased. Out of all of these credit lines, the fact that Colombia was the only country to use USD 4 billion illustrates that these are precautionary instruments.

In addition, the IMF has created a new short-term liquidity line (SLL) as part of the response to the Covid-19 crisis. The aim is to provide a liquidity net over a period of twelve months and to avoid the risk of contagion effects in other countries. Used as a precautionary measure and with equivalent access amounts, this facility is less expensive than the FCL and has the same eligibility criteria. In the case of Latin American countries with an FCL, the transition to an SLL, currently considered to be a post-FCL tool or a tool to be used in combination with the FCL, would strengthen the post-Covid GFSN for these countries. Indeed, the SLL is designed to have “innovative features” that reduce the stigma associated with IMF support. For example, a single signatory (the central bank) is sufficient rather than a double signature (central bank and minister of finance). At the end of June 2021, the IMF’s financial support to Latin America through its emergency and precautionary instruments amounted to USD 87.2 billion from March 2020, i.e. four times more than that provided to sub-Saharan Africa (USD 20 billion).

At the same time, the Federal Reserve set up swap lines in March 2020 with fourteen countries, including two emerging Latin American countries: Brazil and Mexico. As soon as they were introduced, these lines made it possible to significantly relax the conditions for financing these economies, even though they were not, or hardly, drawn upon afterwards. This visible signal to the market was highlighted by the IMF in its April 2021 World Economic Outlook (see Chapter 4).

These tools were removed from the GFSN on 31 December 2021 for the Fed swap lines, after several extensions, and in the second quarter of 2022 for the IMF lines, unless extended. This poses a real risk to the financing conditions in Latin America, where regional arrangements remain limited in financial terms, whereas they are an essential part of the safety net in Asia, for example (via the Chiang Mai Initiative).

1 Only four countries had benefited from the precautionary instruments, created at the beginning of the 2010 decade: Poland, Mexico, and, with a lower access threshold, Morocco and North Macedonia.

2 Access to these facilities amounted to 1000% of quota for Chile, 500% for Panama, 600% for Peru and was kept at 417% of the quota for Colombia.

3 Mexico has drawn down USD 6 billion on its swap line (of the USD 60 billion available to it) and Brazil has not used it.
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