JANUARY 2019

# Global Opportunity Index 2018: Emerging G20 Countries and Capital Flow Reversal

Jonathon Adams-Kane and Claude Lopez

MILKEN INSTITUTE

# INTRODUCTION

In a letter to the leaders of the 20 largest countries (G20), the chair of the Financial Stability Board highlighted that 2018 was a year of transition for investments in emerging market economies, "from strong capital inflows to emerging market economies to capital outflows from many of them, in some cases significantly so."[1] However, tapping into foreign savings remains vital for many of these countries due to their high investment demand relative to their domestic saving rates. Attracting foreign investors into emerging market economies has always been difficult because of under-developed national capital markets; however, this task has been made more arduous by rising U.S. interest rates and heightened geopolitical risks.

The G20 captures around 85 percent of total global capital inflows, and the G20 emerging countries' share has more than doubled in the last 10 years to 15 percent. As the G20 emerging countries' share of capital inflows grew, these economies also diversified the composition of their inflows away from foreign direct investment (FDI) toward bank and portfolio capital; however, portfolio flows are highly cyclical and this year's drop in inflows reflects a reversal of last year's rise.

Investor appetite for emerging economies' assets has weakened in recent months, but the underlying reasons for this change vary across countries. In this report, we use the Global Opportunity Index (GOI) to identify some of the idiosyncratic country characteristics that matter the most for emerging market economies to attract and retain investors in challenging times. The GOI considers five dimensions: (1) a country's economic performance; (2) the ability for investors to access financial services; (3) the cost of doing business; (4) the level of support a country's institutions provide to businesses; and (5) the extent to which a country's institutions, policies, and legal system facilitate international integration.

These categories are particularly important for global investors assessing the differences among emerging market economies. That is because the composition of foreign investors and the motivations behind their investment decisions are becoming more complex over time. Indeed, moving from mostly FDI flows to a mix of FDI, bank-related, and portfolio flows requires the development of an adequate economic and financial surveillance framework.

[1] Financial Stability Board (2018).

# INTRODUCTION

The required structural reforms to achieve a wide range of policy goals tend to be very similar, whether the goal is to become attractive to a more diversified pool of investors (banks, pension funds, insurance companies, and other institutional investors), to enhance the economic impact of these flows, or to improve the resilience of a country's developing financial system. Ultimately, a country's financial integration into the global economy requires it to adopt and effectively implement global regulatory and disclosure standards and other "financial architecture" found among the developed countries.

In this report, we first gauge a country's attractiveness to foreign investors by its GOI ranking (i.e., their relatively low GOI ranking implies that the G20 emerging countries tend to perform poorly concerning the business perception and the efficacy of their institutional framework). These two categories capture investors' opinions on a country relative to expected international standards.

Second, our analysis of international investor behavior shows that in mid-2018, investors tended to divert capital from countries with acute external financial vulnerability (high external debt combined with low foreign reserves), worsening domestic political risk, and/or significant exposure to risks from protectionist trade policies. More specifically, countries with large fiscal and external imbalances, such as Argentina, Turkey, and Brazil or under tensions related to trade and sanctions, such as Russia, have been under pressure. In contrast, foreign investor interest in Chinese assets has remained strong, helped by the increased ability to access the Chinese domestic market. Furthermore, recent capital inflow reversals have also been concentrated in certain classes of financial instruments, namely portfolio debt and portfolio equity investment. In other words, idiosyncratic factors are important for explaining investors' decision-making processes, and policymakers and regulators can influence some of these factors.

Having strong economic and financial fundamentals in place and having an effective supervisory and regulatory policy framework to attract capital from different types of investors are two key aspects of building deep and stable domestic financial markets. However, the main policy challenge is to design a set of standards appropriate for a specific country's stage of economic development that will promote capital inflows while preserving the resilience of its banking and financial system. Indeed, hosting a foreign-owned financial institution (not necessarily a bank) in an emerging economy facilitates global financial intermediation. However, it creates additional risk management and policy challenges. For example, domestic supervisors and regulators may not have access to adequate information to evaluate the riskiness of a foreign institution's domestic and cross-border behavior. National authorities may not know if the many apparently safe domestic investments made by foreign investors cumulatively may threaten the safety and soundness of domestic and/or regional capital markets. Indeed, international cooperation among regional and global regulators deserves high priority for policy makers in emerging market economies.

In that context, the G20 is an essential platform to discuss and design such cross-border policy frameworks and standards. The diversity of its members, with very different levels of economic and financial development, ensures the representation of a broad range of views. However, the 2008 financial crisis triggered the last comprehensive discussion on financial reforms—a crisis driven by financial activities in the United States and other advanced economies. Officially, 2019 is the final year for the implementation of Basel III, so it is also an appropriate time to make the necessary adjustments to it, so that it can reshape the supervisory and regulatory frameworks for a wider range of countries across the globe.

Given that these issues are rather complex, we will focus our analysis on the following four priorities:

- **An adaptable and flexible global framework**: The global regulatory and monitoring framework needs to be made pertinent for a wide range of economies and financial systems and capable of addressing their specific issues. Rapid advances in financial technology are making available a wide range of tools for developing and modernizing emerging countries' financial systems even when they do not have a well-developed banking system. The existing regulatory and monitoring frameworks must adapt to reflect such development.

- **The generalization of international standards and best practices**: Reliable and standardized sharing of information and data across the globe is key to effective risk monitoring and management. However, many emerging countries need technical support from international institutions such as the International Monetary Fund (IMF) and World Bank to adopt and implement the relevant standards, and to supply the necessary training to develop the required in-house expertise and monitoring infrastructures.

- **A stronger global data depository**: Directly linked to the previous point, it is essential to develop the relevant reporting, supervisory and regulatory infrastructures that will enable the effective and safe sharing of relevant data and analysis.

- **Regulatory and monitoring cooperation**: When an internationally owned financial firm has a local branch or subsidiary that is locally systemic, the local regulators may require help from home regulators for timely and effective action in advance of a crisis. This coordination requires agreement about goals and priorities among advanced and emerging market regulators who may face different incentives. Ultimately, the tools and mechanisms available for coordination need to be explained clearly, and mutually agreed upon, well before the outbreak of any crisis. While effective coordination to pre-empt a crisis is a very ambitious goal, it starts with discussions and negotiations within the G20 framework that will take into account all points of view, among advanced and emerging market policymakers.

The rest of this report is organized as follows: We first describe the countries' relative performance in the Global Opportunity Index and the latest trends in the cross-border investment they have attracted. Then, we identify key issues that may arise in the near future that may influence upcoming cross-border investment and affect the resilience of the financial system. We conclude with policy recommendations.

# THE GOI AND THE G20: A HETEROGENEOUS GROUP

The GOI considers economic and financial factors that influence foreign investment activities as well as key business, legal, and regulatory policies that governments can modify to support and often drive investments. Overall, it tracks countries' performance using five categories:

- **Business Perception** measures explicit and implicit costs associated with business operations such as tax burden, transparency, etc.
- **Financial Services** measure the size and access to financial services in a country by looking at the country's financial infrastructure and access to credit.
- **Institutional Framework** measures the extent to which an individual country's institutions provide a supportive framework to businesses.
- **Economic Fundamentals** indicate the current economic strength of a country vis-à-vis the global economic outlook. The assessment focuses on the country's macroeconomic performance, trade openness, quality and structure of the labor force, and modern infrastructure.
- **International Standards and Policy** reflects the extent to which a country's institutions, policies, and legal system facilitate international integration by following international standards.

The spread of the G20's performance in the overall ranking, as well as each individual category, confirms the level of heterogeneity within the group and two clear clusters among advanced and emerging economies (Table 1).[2]

[2] Throughout the report, countries are grouped as advanced or emerging based on their classification by the IMF at the time of writing. The G20 advanced economies are Australia, Canada, France, Germany, Italy, Japan, South Korea, Saudi Arabia, the United Kingdom, and the United States. The G20 emerging market countries are Argentina, Brazil, China, India, Indonesia, Mexico, Russia, South Africa, and Turkey. The European Union is also a member.

# THE GOI AND THE G20: A HETEROGENEOUS GROUP

**Table 1. GOI Component Rankings for the G20 Countries**

| | Business Perception | Financial Services | Institutional Framework | Economic Fundamentals | International Standards and Policy | GOI Rank 2018 |
|---|---|---|---|---|---|---|
| Australia | 8 | 1 | 14 | 34 | 3 | 4 |
| U.K. | 10 | 5 | 4 | 40 | 7 | 5 |
| Canada | 22 | 2 | 2 | 43 | 12 | 9 |
| South Korea | 3 | 11 | 24 | 20 | 38 | 15 |
| United States | 11 | 17 | 7 | 46 | 22 | 17 |
| Germany | 18 | 39 | 21 | 31 | 4 | 18 |
| Japan | 7 | 4 | 23 | 59 | 23 | 19 |
| France | 15 | 30 | 25 | 64 | 26 | 26 |
| China | 33 | 14 | 73 | 28 | 83 | 40 |
| Italy | 42 | 20 | 77 | 95 | 9 | 43 |
| Saudi Arabia | 89 | 43 | 43 | 53 | 43 | 48 |
| Russia | 54 | 32 | 80 | 47 | 88 | 55 |
| Mexico | 58 | 53 | 72 | 68 | 66 | 61 |
| India | 112 | 65 | 33 | 72 | 44 | 63 |
| Indonesia | 79 | 84 | 56 | 67 | 56 | 66 |
| South Africa | 61 | 9 | 28 | 124 | 120 | 67 |
| Turkey | 71 | 66 | 92 | 62 | 96 | 74 |
| Argentina | 130 | 75 | 101 | 73 | 55 | 86 |
| Brazil | 137 | 29 | 88 | 145 | 69 | 95 |

| Color Key for Numerical Rankings | | | | | |
|---|---|---|---|---|---|
| | 1-34 | 35-69 | 70-99 | 100-134 | ≥135 |

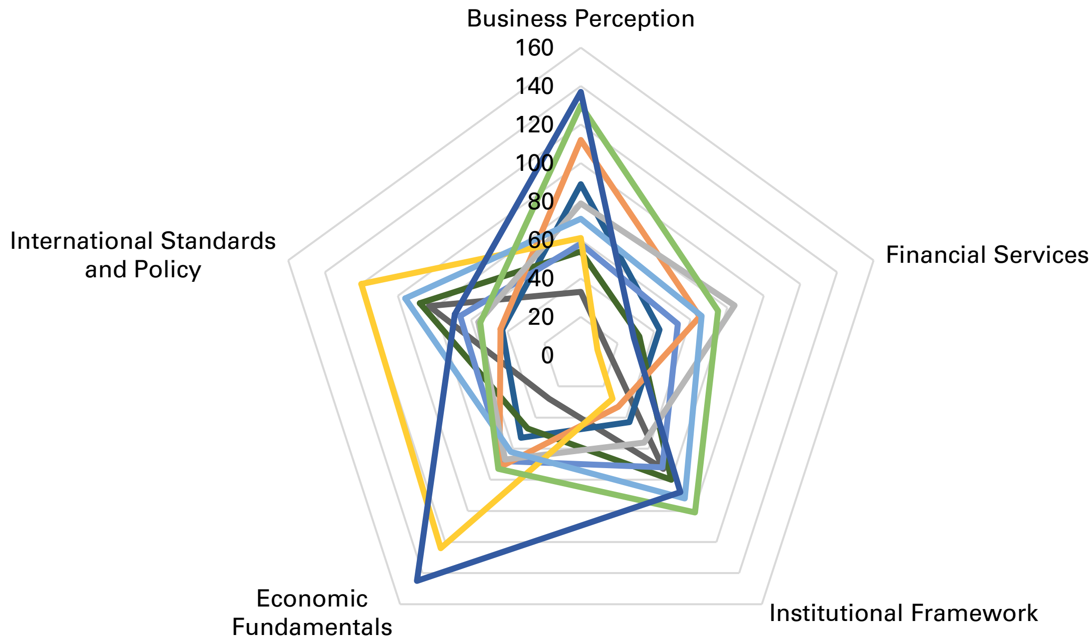
*Source: Milken Institute.*

A close look at the emerging countries' performance shows that there are two dimensions in which they lag behind the advanced economies the most (Figure 1):

- **Business Perception**: Here, key issues center on how costly it is to run a business, the ability and speed with which the legal system enforces contracts, the level of corruption, interference in hiring and firing practices from labor regulations, and the ease of resolving insolvency.
- **Institutional Framework**: This is defined as the availability of relevant and high-quality financial data (e.g., information needed for assessing the creditworthiness and borrowing capacity of domestic companies and the extent to which there is adequate disclosure of company financial data and activities to investors). Also

relevant are the efficacy of the legal system and investor protection rights (e.g., property rights, legal redress rights, and corporate governance).

**Figure 1. Weakest Dimensions for the G20 Emerging Market Countries**




Both dimensions are closely related to longer-run determinants of emerging markets' attractiveness to foreign investors. More specifically, these scores capture investors' perceptions based on their expectations vis-à-vis international benchmarks. Finally, these variables are country-level institutional variables over which policymakers have substantial influence. We discuss potential reforms in the last section.

The heterogeneity in the countries' performance and investors' perception are reflected in the pattern of cross-border investments in these countries.

# TRENDS IN CROSS-BORDER INVESTMENT

Capital inflows, or cross-border financial investments in countries by foreigners, come in different forms including: FDI (mostly direct equity in local firms), portfolio investment (equity and debt securities), or via other instruments (currency and deposits, loans, trade credit, and other accounts payable), which are referred to here as "bank-related" flows.[3]

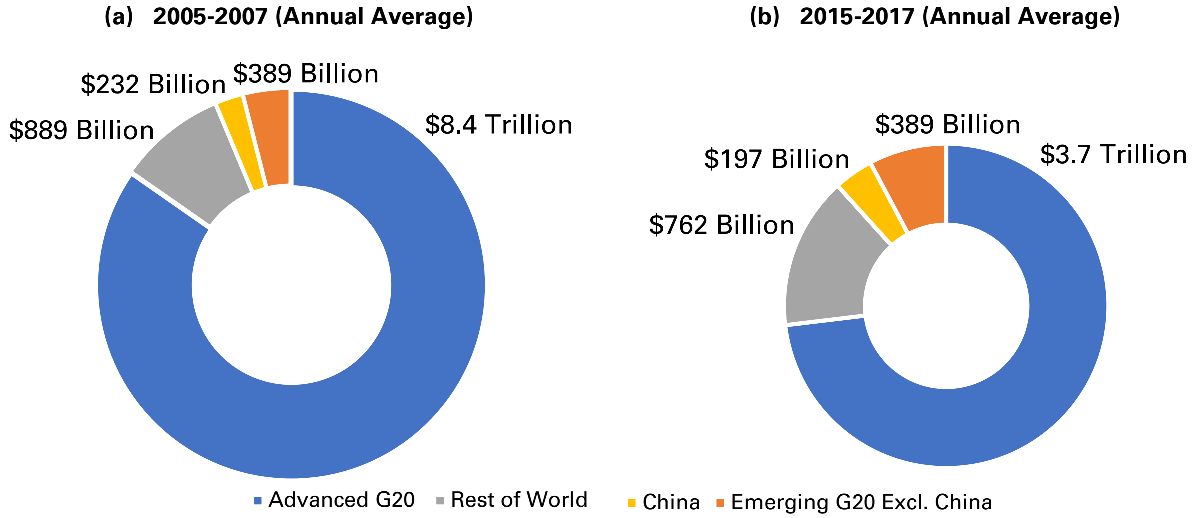
## EMERGING MARKETS ARE ATTRACTING A LARGER SHARE OF GLOBAL CAPITAL FLOWS

Emerging markets have long received a relatively small share of global gross capital flows, but in the last decade this share has grown substantially (Figure 2). This change was due to a dramatic reduction in flows between advanced economies following the global financial crisis, driven largely by European banks retrenching from international activities in the course of deleveraging. As global capital flow volumes normalized relative to the heightened levels of the immediate pre-crisis years, the bulk of the contraction was in North–North flows, especially in the types of cross-border interbank transactions that had accounted for the bulk of the preceding boom.[4] By contrast, emerging market economies had received fewer of these types of inflows, and instead had been relying more on FDI and portfolio investment. Consequently, emerging market economies experienced a smaller decline in total flows compared with advanced economies during this period.

[3] Here, a given country's "capital inflows" denote transactions that generate changes in nonresidents' financial claims on residents, i.e. nonresidents' net purchases of domestic financial instruments; "capital outflows" are residents' net purchases of foreign financial instruments. These measures, differentiated on the basis of residency, are often referred to as "gross" capital inflows and outflows. Forbes and Warnock (2012) analyze waves of gross capital flows, and provide a helpful introduction to the distinction between gross inflows and outflows and their drivers. Broner et al. (2013) provide an overview of stylized facts about the dynamics of gross capital flows over the business cycle and during financial crises. Adams-Kane, Lopez, and Wilhelmus (2016a, 2016b) document regional trends in gross capital flows for Asia and Europe, and this report is an extension of that work. Detailed background information on the balance of payments accounts used to measure gross capital flows are provided by the IMF (2013). The flows and positions denoted here as "bank-related" are those denoted in the balance of payments as "other investment"—it should be noted that, since classification is based on instrument class as opposed to investor type, not all of these flows are carried out by banks, and some flows in the other categories are carried out by banks (for example, if a foreign bank purchases a bond issued by a resident, this would be classified as a portfolio debt flow, not a bank-related flow).

[4] Milesi-Ferretti and Tille (2011); McCauley et al. (2017).

**Figure 2. Global Capital Inflows by Destination Country Group**




*Source: Authors' estimates based on IMF International Financial Statistics (IFS) data.*
*Note: In the case of the net errors and omissions component of a given country's financial account being negative, its absolute value is included in the measure of total gross capital inflows. Derivatives transactions are excluded.*

Investors also sought to maintain footholds in emerging markets because these economies were perceived to offer relatively favorable demographics and long-term growth prospects. Emerging markets became all the more attractive as the low interest rate environment became prolonged and "search for yield" behavior took hold among investors in the advanced economies.[5] Comparing the G20 emerging markets' volumes of inflows over the 2015-2017 period to the volumes 10 years earlier, they were roughly unchanged, even as North–North flows fell by more than half. Still, over that time, capital inflows to emerging markets did experience three episodes of turmoil—and they are now in the midst of another.

Capital flows to emerging markets contracted during the global financial crisis and again in 2013 and 2015, but ended on an upswing, proving resilient in all three cases. The contraction in their inflows during the global financial crisis was relatively moderate and short lived, mainly because emerging market economies generally were not very reliant on cross-border banking flows.[6] The two episodes in 2013 and 2015 were both partly associated with U.S. monetary policy tightening—first, the "taper tantrum," in which U.S. Treasury yields surged in response to mounting expectations of the Federal Reserve

[5] Fratzscher, Lo Duca, and Straub (2013); IMF (2013).
[6] Milesi-Ferretti and Tille (2011) show that somewhat more international banking is conducted via local affiliates (as opposed to cross-border) in emerging markets than in advanced economies, and that foreign bank claims via local affiliates in emerging markets actually picked up during the Crisis. Adams-Kane, Caballero, and Lim (2017) show that lending behavior of foreign-owned local banks in emerging markets during the Crisis varied by nationality of ownership: banks with owners based in countries that were at the heart of the Crisis contracted their lending relative to other foreign-owned banks.

tapering its balance sheet, and next when the Federal Reserve began raising its policy rate. The sensitivity of emerging markets to these various changes in global liquidity and monetary conditions varied substantially, mainly according to the types of foreign investors relied upon by the country.[7] Moreover, the longer-run determinants of emerging markets' attractiveness to foreign investors are distinct from the factors that determine their sensitivity to global shocks—they are country-level institutional and macroeconomic fundamental variables, such as those in the GOI, over which policymakers have substantial influence.[8]

## THE RECENT REVERSAL HAS BEEN SELECTIVE

Recently—particularly from the spring of 2018 onward—flows to emerging markets have come under pressure yet again, due to a combination of rising U.S. interest rates, dollar appreciation, trade tensions, and idiosyncratic country factors.[9] A reversal of capital inflows became apparent in the second quarter of 2018. There was an overall drop in capital inflows to G20 emerging markets equal to 4.8 percent of GDP relative to the preceding quarter. (Figure 3 shows G20 emerging markets' quarterly capital inflows as a group; Appendix A.2 shows the data at the country level).[10] Thus far, capital flow reversals have been concentrated in the countries with acute external financial vulnerabilities (e.g., high external debt combined with low foreign exchange reserves), worsening domestic political risk, or exposures to mounting trade tensions.[11]

[7] Cerutti, Claessens, and Puy (2017) find that the capital inflows to those emerging markets that rely more on international mutual funds and global banks are significantly more sensitive to global factors, and these features of the foreign investor base are generally stronger determinants of sensitivity than are fundamentals. Aizenman, Binici, and Hutchison (2016) find that financial asset prices in emerging markets with stronger fundamentals were more sensitive to tapering news (in late 2012 and 2013) in the very short run, but that the difference in response essentially disappeared after about one month as a given news shock transmitted gradually to weaker emerging markets. This is consistent with findings by Eichengreen and Gupta (2015) that emerging markets with deeper and more liquid financial markets experienced greater short-run pressure on asset prices and foreign exchange reserves. However, as emphasized by the IMF (2018), deeper financial markets (especially with large domestic investor participation) and more foreign exchange reserves generally improve a country's ability to absorb external shocks even if this may entail more short-run volatility in gross capital flows. One reason for this is that development and international integration of domestic financial markets better enables residents to compensate for reversals in inflows by contracting outflows, thereby limiting the change in net flows (Forbes and Warnock 2012; Agosin, Díaz-Maureira, and Karnani 2017).

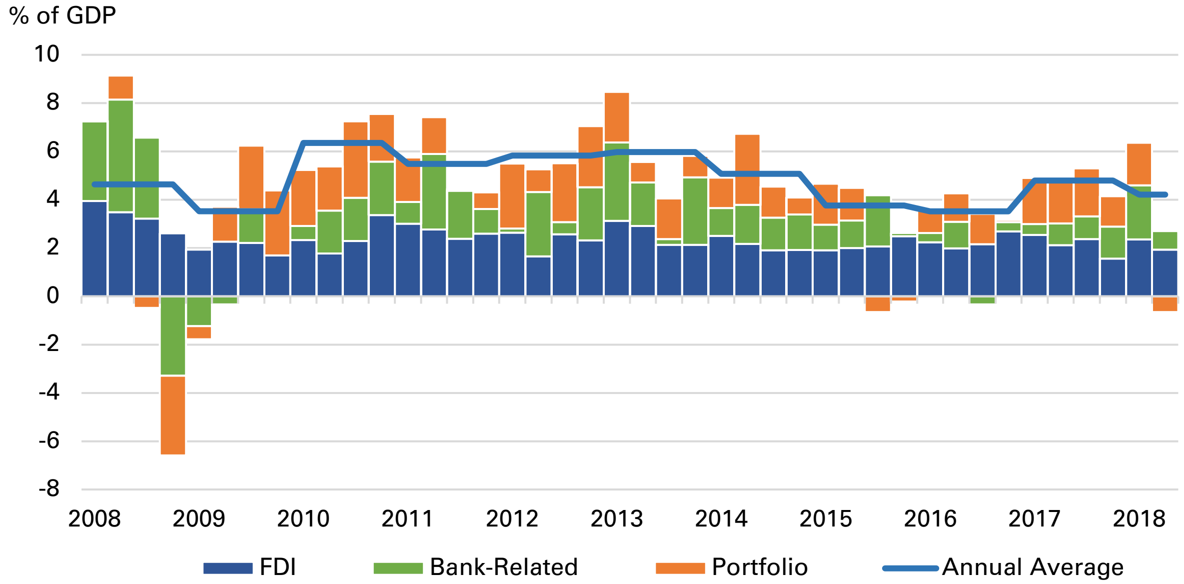
[8] Alfaro, Kalemli-Ozcan, and Volosovych (2008); Cerutti, Claessens, and Puy (2017).

[9] IMF (2018). Cumulative policy rate changes for G20 central banks over the last three years are shown in Appendix A.1. Depreciation rates of G20 emerging market currencies are shown in Appendix A.2, together with these countries' capital inflows.

[10] It should be noted that the preceding quarter saw somewhat greater than usual inflows.

[11] IMF (2018); Mminele (2018).

**Figure 3. Capital Inflows to G20 Emerging Market Countries (Excluding China)**

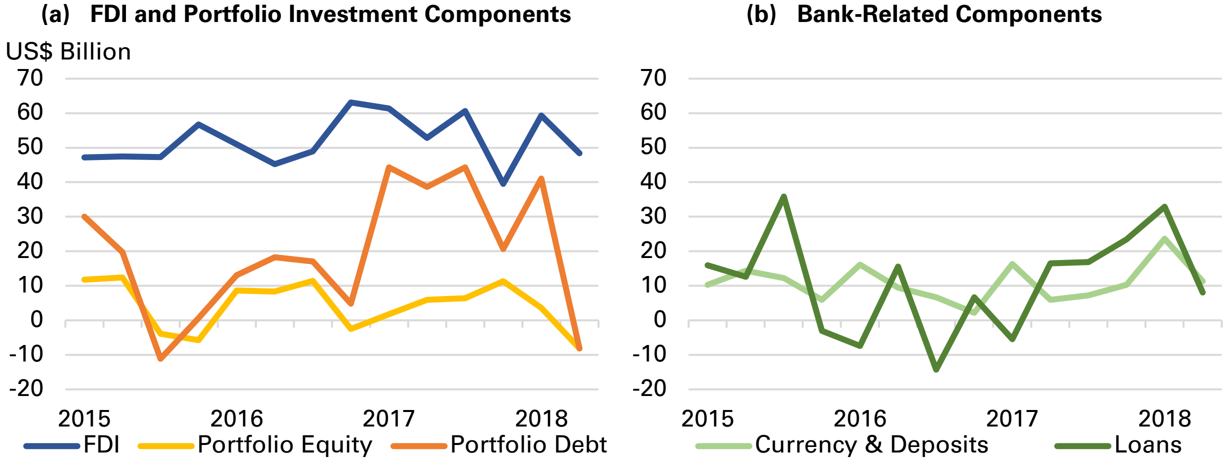



*Source: Authors' calculations based on IMF IFS.*
*Note: Appendix A.2 shows a more detailed breakdown of capital inflows for each G20 emerging market, including China.*

The reversal has also been concentrated in certain classes of financial instruments. Although inflows via all types of instruments fell in the second quarter of 2018, only portfolio debt and portfolio equity investment had true reversals (i.e., switched from positive to negative) for G20 emerging markets as a group (excluding China). Most notably, a handful of countries had large drops in portfolio debt inflows following a surge in portfolio debt inflows throughout 2017 and the first quarter of 2018 (Figure 4 and Appendix A.2).[12] This bond sell-off occurred mainly in Argentina and Turkey. South Africa shows a similar pattern but without its portfolio debt inflows quite falling below zero. India and Russia experienced reversals but of smaller magnitudes (relative to GDP).

[12] The relationship between surges in the various types of capital inflows and subsequent financial meltdowns is explored in detail by Caballero (2016). Surges in net debt inflows are found to destabilize financial systems mainly by exacerbating the effects of credit booms, but, interestingly, surges in equity inflows are found to increase the probability of a crisis as well, and do so even when they occur in the absence of a credit boom.

**Figure 4. Capital Inflows to G20 Emerging Market Countries (Excluding China) by Component**




*Source: Authors' estimates from IMF IFS and Balance of Payments Statistics (BOPS).*
*Note: Here, the "loans" category of inflows includes trade credit and accounts payable and is estimated by subtracting currency and deposits from total bank-related inflows. Appendix A.3 shows the complete breakdown of bank-related inflows for those G20 emerging markets (excluding China) and for those quarters that have data available.*

The absence of widespread contagion signifies that investors are continuing to differentiate between emerging markets thus far, even as financial conditions tighten. This illustrates that institutional and policy variables, such as those included in the GOI, matter not only for attracting capital in good times but also for retaining access to capital when foreign investors are becoming more cautious. This is especially true when increased investor caution is driven largely by idiosyncratic country developments, as seems to be the case in the current episode.

Moreover, the concentration of the flow reversal in certain asset classes highlights the relationship between the long-term attractiveness and diversity of investors with a wider mix of investor types enhancing the country's resilience in the case that one group disinvests. In 2018, the IMF noted that the current reversal began with retail funds and institutional flows have been relatively stable, just as in past episodes. Having the fundamentals and policy framework in place to attract capital from institutional investors (especially local and regional ones) is key for building deep and stable domestic financial markets. The fact that the sell-off was partly in sovereign bonds also highlights that sound fiscal policy may enhance resilience. When a government borrows heavily in hard currency at a time when external financial conditions are easy, this behavior typically will increase that country's vulnerabilities and compromise its ability to roll over the borrowing when global financial conditions inevitably tighten.[13]

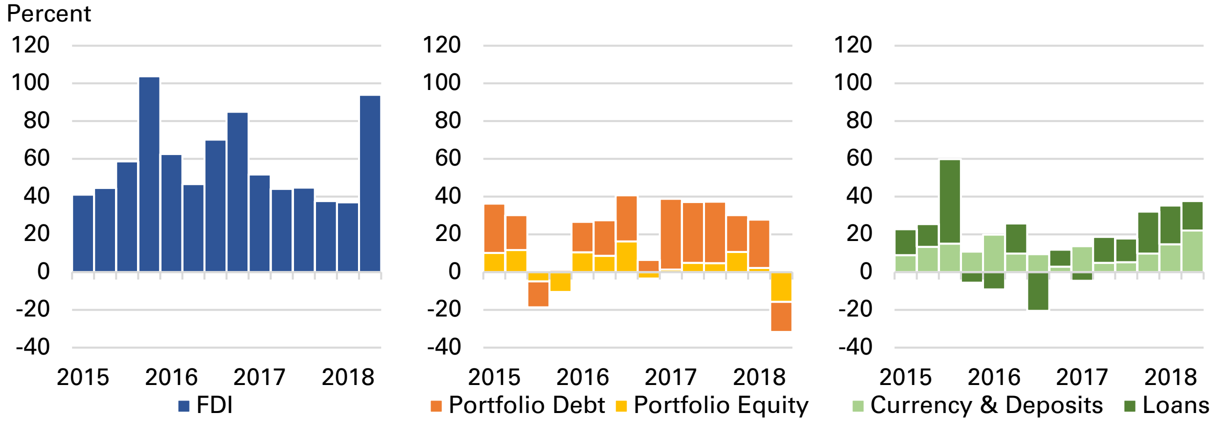
[13] Sovereign bonds typically account for a large fraction of portfolio debt inflows to emerging markets. However, the IMF (2018) notes that relatively few emerging market governments currently have both high levels of public debt and high shares of their debt linked to foreign exchange; these are generally smaller emerging countries—Angola, Jamaica, Tunisia,

Several countries did not show any unusual change in their capital inflows in the second quarter of 2018, underlining the fact that investors were selective in their pullback. Indonesia, Mexico, and China continued to attract portfolio investment that quarter. Although capital flows to China are not particularly large relative to its GDP, they are quite large in absolute dollar terms compared to the other G20 emerging markets. Thus, China tends to skew aggregate statistics for emerging markets. Moreover, when global investors selectively reverse their flows to some emerging markets, China is large enough to potentially absorb a substantial share of available funds if viewed as a suitable alternative destination. Including China, G20 emerging markets had aggregate capital inflows of 2.8 percent of GDP in the second quarter of 2018, compared to 1.5 percent of GDP with China excluded (as in Figure 3).

## THE COMPOSITION OF INTERNATIONAL INVESTMENT POSITIONS SHEDS LIGHT ON EXTERNAL VULNERABILITIES

As illustrated in Figure 5, the composition of quarterly capital inflows is quite volatile. The disproportionate drop in portfolio investment inflows in the second quarter of 2018 caused the overall composition of the G20 emerging markets' capital inflows to change markedly, with FDI's share of the group's total (excluding China) more than doubling that quarter and accounting for nearly all aggregate inflows for the group.

**Figure 5. Components' Shares of Capital Inflows to G20 Emerging Market Countries (Excluding China)**

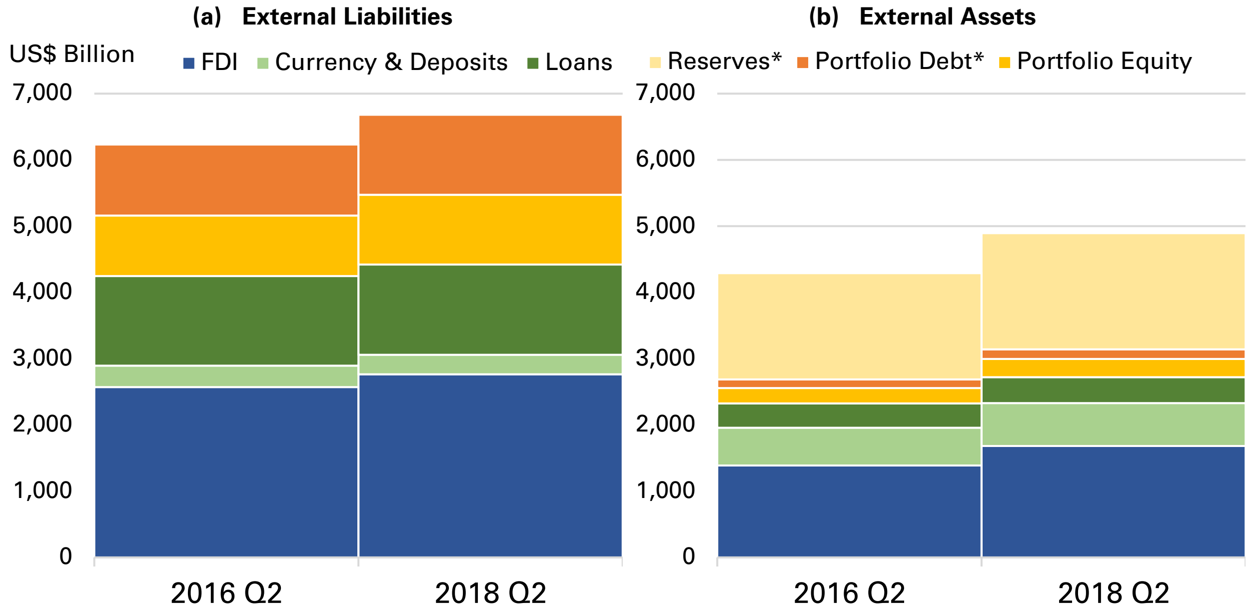



*Source: Authors' calculations based on IMF IFS and BOPS.*
*Note: Here, the "loans" category of inflows includes trade credit and accounts payable (see note to Figure 4).*

and Ukraine—although Argentina has a high share of foreign-exchange-linked debt and is also fairly close to the IMF's threshold for high overall public debt. A larger number of countries have the combination of high external debt and low levels of foreign exchange reserves, including Argentina, South Africa, and Turkey.

The composition of emerging markets' international investment positions (IIPs) provides a longer-term picture of how foreigners invest in these countries and how residents invest abroad (Figure 6).[14] As a group, G20 emerging markets appear to have a fairly balanced mix of external liabilities, albeit with a relatively small role played by currency and deposits, which is unsurprising given that international banking is generally conducted in hard currencies among a handful of major financial centers in advanced economies. The assets side is dominated by bonds—which are mainly held in an official capacity in the form of foreign exchange reserves—along with FDI, hard currency, and deposits held abroad.

**Figure 6. International Investment Positions of G20 Emerging Market Countries (Group, Excluding China)**




*Source: Authors' estimates from IMF IFS and BOPS.*
*Note: Here, the "loans" category includes trade credit and accounts payable (see note to Figure 4). *Foreign reserves are held largely in the form of sovereign bonds, so this component is similar to portfolio debt assets regarding instrument class.*

The IIPs of the G20 emerging market group as a whole, however, obscure the fact that the positions of individual emerging markets vary widely in their composition. Especially notable is the weight of external debt liabilities, comprised of loans together with portfolio debt instruments. Figure 7 shows the G20 emerging markets ranked by the share of debt in their external liabilities (external assets are shown in Appendix A.4 with the same ordering as in Figure 7). Some countries, such as Argentina and Turkey, have a large and growing reliance on external debt. This is a key source of vulnerability, as

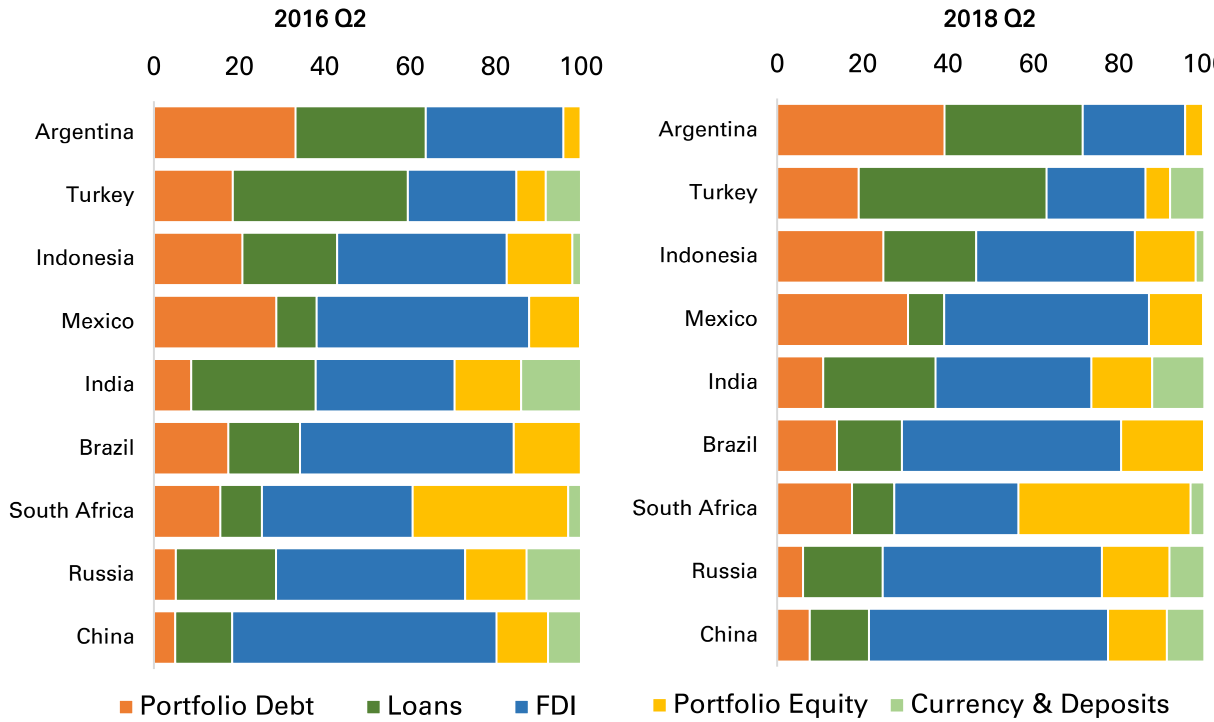
[14] IIPs are measures of stocks of external liabilities and assets, reflecting cumulative past capital flows together with valuation effects from changes in exchange rates and changes in local currency asset prices, so their composition is naturally much more stable than that of flows.

surges in external debt can exacerbate credit booms and are subject to sudden stops or reversals.[15] Argentina's high reliance on external debt is combined with a low share of foreign exchange reserves on the assets side, which instead is dominated by currency and deposits (Appendix A.4). Although Turkey has greater reserves as a share of its external assets, they are still below the threshold used by the IMF in which reserves are measured against potential foreign exchange liquidity needs in adverse circumstances.[16]

However, these two countries are extreme cases. Most of the G20 emerging markets have gone into the current episode with fairly strong fundamentals. So far, economies with strong fundamentals and strong external positions have been rewarded by foreign investors.

**Figure 7. International Investment Positions of G20 Emerging Market Countries, External Liabilities**

**Component's Share of Country's External Liabilities (%)**




*Source: Authors' estimates from IMF IFS and BOPS.*
*Note: Here, the "loans" category includes trade credit and accounts payable (see note to Figure 4).*

[15] There is a large literature on capital flows and "sudden stops"; for example, seminal work was done by Calvo (1998); an informative literature review, and analysis of the effects of different types of capital inflows and their interactions with credit booms, are provided by Caballero (2016).
[16] IMF (2018).

# LAGGING REGULATORY ADJUSTMENTS

Investors' perceptions and behavior corroborate that they discriminate among emerging countries in assessing and reacting to external shocks, such as the U.S. fiscal easing and monetary tightening. Hence, it is important for a recipient of these investments to strengthen its financial regulatory framework to reassure international investors and regulators. In addition, such measures ultimately will stabilize capital inflows and enhance the resilience of the economy.

The need to strengthen the regulatory framework as investment inflows grow is not solely an emerging market issue. The more capital flows a country attracts, the more it is integrated into the international financial system and the more impact it can have on the rest of the global financial system—directly or indirectly. The resilience of the domestic and international financial system depends in part on countries' ability to adopt and effectively implement the relevant international regulatory and supervisory policies and standards while their financial system deepens.

As the composition of capital inflows diversifies, the presence of foreign financial institutions will grow, including non-banks and banks. This evolution has greatly expanded the scope of financial intermediation and lowered the cost of financial services in emerging markets. Such increased foreign presence in the domestic financial system also brings challenges that are more complex for regulators in the emerging host countries as well as the home countries of the foreign financial institutions.

As highlighted in the ranking of countries by the GOI, emerging countries need to continue to improve their institutional framework as well as their best practices in doing business. However, there is a clear lag between the speed of change in emerging countries' financial system landscape and in their regulatory and monitoring oversight. There is potential for increasing global systemic risk because the large international lenders become a channel of transmission of shocks between countries. More specifically, the following must be considered:

**Underestimating a build-up in credit risk**: Emerging countries tend to have fatal institutional weaknesses, such as inadequate company accounting, auditing, financial reporting, and disclosure, as well as the absence of an adequate credit bureau or register. While the local authorities may have a better understanding of local conditions, it is difficult to share that knowledge with a foreign institution or regulator effectively. Indeed, the foreign-owned institution's risk management and measurement systems might not work well due to the poor quality of economic and financial data on borrowers, misleading the institution as well as its home country regulators.

**Dollar liquidity risk**: As expected, rising U.S. interest rates and appreciation of the dollar increases the liabilities of dollar borrowers outside the U.S., which makes it harder to service and repay the debt. Furthermore, the new tax law that encourages U.S. corporations to repatriate cash, the increased issuance of U.S. Treasuries, as well as the U.S. money market reforms and stricter banking regulations potentially push up dollar funding costs. The combination of all of these factors may lead to a dollar liquidity crunch and create extra pressure on foreign dollar-denominated debt.

**Regulatory arbitrage**: The greater presence of foreign-owned financial institutions increases the scope for regulatory arbitrage lending via subsidiaries, branches, non-bank financial institutions owned by foreign banks, or direct cross-border loans. Hence, regulators in emerging countries with a large presence of foreign financial institutions tend to have difficulties in preventing the emergence of a credit boom or to bring it under control without the help of foreign regulators.

**Implementing the current policy framework**: Basel III is the most recent effort in a series of attempts to enhance and expand international regulatory standards, especially for banks. Ultimately, the goal is to help countries' financial system resilience by addressing structural weaknesses such as those in capital adequacy; liquidity positions; lending standards; risk management systems; bank governance; supervisory and reporting frameworks; and licensing, competition, and bankruptcy arrangements. The treaty was a direct response to a crisis that originated in the advanced economies. Given the large differences in the degree of financial market development between advanced and emerging economies, some of the recommendations face difficulties in implementation.

**International vs. national regulators**: The presence of global financial institutions—especially banks—in less developed countries may lead to a mismatch in policy priorities between international and national supervisors and regulators, especially when a local crisis emerges. For instance, host authorities may be concerned about local financial instability risks (such as boom–bust cycles in domestic asset prices or demand and external balance pressures resulting from rapid credit growth). They may not have the tools or authority to mitigate them because foreign institutions may be outside of local authorities' jurisdiction. The evolution of separate institutional responsibilities in many countries has complicated this matter. The central bank is usually responsible for financial stability and macroeconomic policies, while a financial supervisory authority is primarily concerned with the safety and soundness of individual financial institutions.

**Prudential supervisors' conflicts**: If a foreign-owned subsidiary or branch is systemically important locally and runs into problems, what would happen? Here, the incentive effects flowing from crisis resolution arrangements play a key role. During times of acute problems, the host and home supervisors may have different incentives. The primary concern of the parent institution's home country supervisor is to prevent the subsidiary from bringing into question the solvency of the entire firm. In contrast, the host country's main concerns are to mitigate liquidity and solvency problems at the subsidiary level and to maintain overall lending and capital inflows to the country.

## CONCLUSION

Attracting foreign investors requires a flexible surveillance framework and coordinated financial policies that lower the cost of doing business while promoting financial stability.

The different challenges brought about by a broad range of international investors for local and international authorities share some common factors which form the basis of our policy recommendations. National financial monitoring and regulatory policies should promote a wide range of business activities by lowering costs, ensuring legal certainty, and promoting financial stability.

The ongoing process of diversifying the types of international (and domestic) investors and their investment strategies is key for building deep and stable domestic financial markets that will facilitate economic growth. However, policies for deepening and broadening capital markets must be complemented with the appropriate supervisory oversight. Furthermore, in the presence of foreign-owned lenders, that oversight needs to be integrated into the global supervisory and regulatory framework. On the one hand, this framework needs to accommodate different degrees of economic and financial market development within the same system. On the other hand, financial market integration requires international coordination and cooperation to function effectively.

These are very ambitious goals. Achieving them requires that the discussions and negotiations within the G20 framework take into account all point of views, advanced and emerging. We believe that these discussions should first focus on the following four priorities:

- **An adaptable and flexible global framework**: The global regulatory and monitoring framework needs to be continually modernized to keep pace with financial innovations, remain pertinent for the needs of the local economy, and facilitate the matching of investment opportunities with the supply of savings.
- **The generalization of international standards and best practices**: The continuation of existing coordination efforts is essential because the availability of reliable and standardized data across the globe is key to effective monitoring of incipient risks. Adequate surveillance also requires countries to build the necessary in-house expertise and monitoring infrastructure.
- **A stronger global data depository**: Developing the relevant reporting, supervisory, and regulatory infrastructures will enable the effective sharing of relevant data and analysis essential for preserving financial stability.
- **Regulatory and monitoring cooperation**: The interaction between the different domestic and international regulators needs to be clarified and formalized, especially when a crisis emerges in a host country that is not deemed to be globally systemic.

# REFERENCES


Adams-Kane, Jonathon, Julián A. Caballero, and Jamus Jerome Lim. 2017. "Foreign Bank Behavior during Financial Crises." *Journal of Money, Credit and Banking* 49, no. 2-3 (March-April): 351-392.

Adams-Kane, Jonathon, Claude Lopez, and Jakob Wilhelmus. 2016a. "Global Opportunity Index 2016: Beyond FDI: Lessons from Asia." Milken Institute.

Adams-Kane, Jonathon, Claude Lopez, and Jakob Wilhelmus. 2016b. "Cross-Border Investment in Europe: From Macro to Financial Data." Milken Institute.

Agosin, Manuel R., Juan Díaz-Maureira, and Mohit Karnani. 2017. "Sudden Stops of Capital Flows: Do Foreign Assets Behave Differently from Foreign Liabilities?" *Working Papers*, no. 436, University of Chile, Department of Economics.

Aizenman, Joshua, Mahir Binici, and Michael M. Hutchison. 2016. "The Transmission of Federal Reserve Tapering News to Emerging Financial Markets." *International Journal of Central Banking* 12, no. 2 (June): 317-356.

Alfaro, Laura, Sebnem Kalemli-Ozcan, and Vadym Volosovych. 2008. "Why Doesn't Capital Flow from Rich to Poor Countries? An Empirical Investigation." *Review of Economics and Statistics* 90, no. 2 (May): 347-368.

Caballero, Julián A. 2016. "Do Surges in International Capital Inflows Influence the Likelihood of Banking Crises?" *Economic Journal* 126, no. 591 (March): 281-316.

Calvo, Guillermo. 1998. "Capital Flows and Capital-Market Crises: The Simple Economics of Sudden Stops." *Journal of Applied Economics* 1 (November): 35–54.

Cerutti, Eugenio, Stijn Claessens, and Damien Puy. 2017. "Push Factors and Capital Flows to Emerging Markets: Why Knowing Your Lender Matters More than Fundamentals." *ADB Economics Working Paper Series*, no. 528. Manila: Asian Development Bank.

Eichengreen, Barry, and Poonam Gupta. 2015. "Tapering Talk: The Impact of Expectations of Reduced Federal Reserve Security Purchases on Emerging Markets." *Emerging Markets Review* 25 (December): 1-15.

Financial Stability Board. 2018. FSB Chair's letter to G20 Leaders meeting in Buenos Aires, November 27. http://www.fsb.org/2018/11/fsb-chairs-letter-to-g20-leaders-meeting-in-buenos-aires/.

Forbes, Kristin, and Francis E. Warnock. 2012. "Capital Flow Waves: Surges, Stops, Flight, and Retrenchment." *Journal of International Economics* 88, no. 2 (November): 235-251.

Fratzscher, Marcel, Marco Lo Duca, and Roland Straub. 2013. "On the International Spillovers of U.S. Quantitative Easing." *ECB Working Paper Series*, no. 1557. Frankfurt am Main: European Central Bank.

# REFERENCES

International Monetary Fund. 2013. “Global Impact and Challenges of Unconventional Monetary Policies.” IMF Policy Paper.

International Monetary Fund. 2018. *Global Financial Stability Report October 2018: A Decade after the Global Financial Crisis: Are We Safer?* Washington: International Monetary Fund.

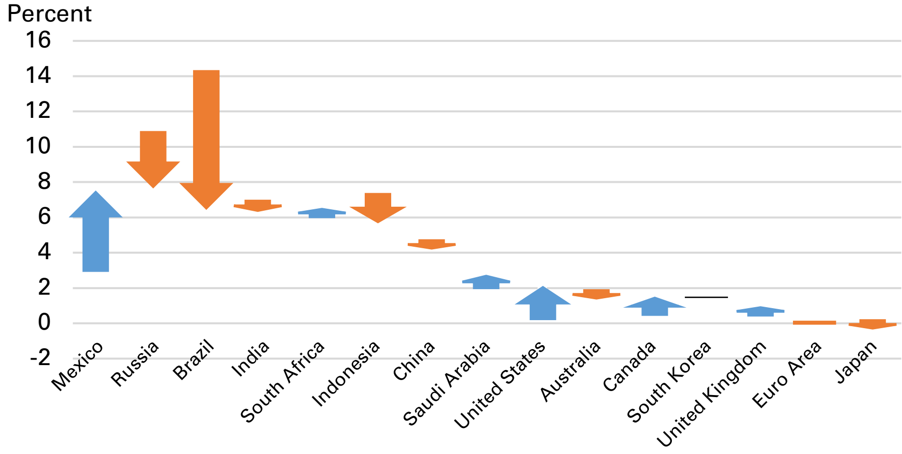
McCauley, Robert, Agustín Bénétrix, Patrick McGuire, and Goetz von Peter. 2017. “Financial Deglobalisation in Banking?” *BIS Working Papers*, no. 650. Basel: Bank for International Settlements.

Milesi-Ferretti, Gian-Maria, and Cédric Tille. 2011. “The Great Retrenchment: International Capital Flows during the Global Financial Crisis.” *Economic Policy* 26, no. 66 (April): 285-342.

Mminele, Daniel. 2018. “Recent Developments in Emerging Economies’ Foreign Exchange Markets.” Keynote address at the Bloomberg FX’18 Johannesburg: South Africa Economy in Focus event, Johannesburg, November 28.

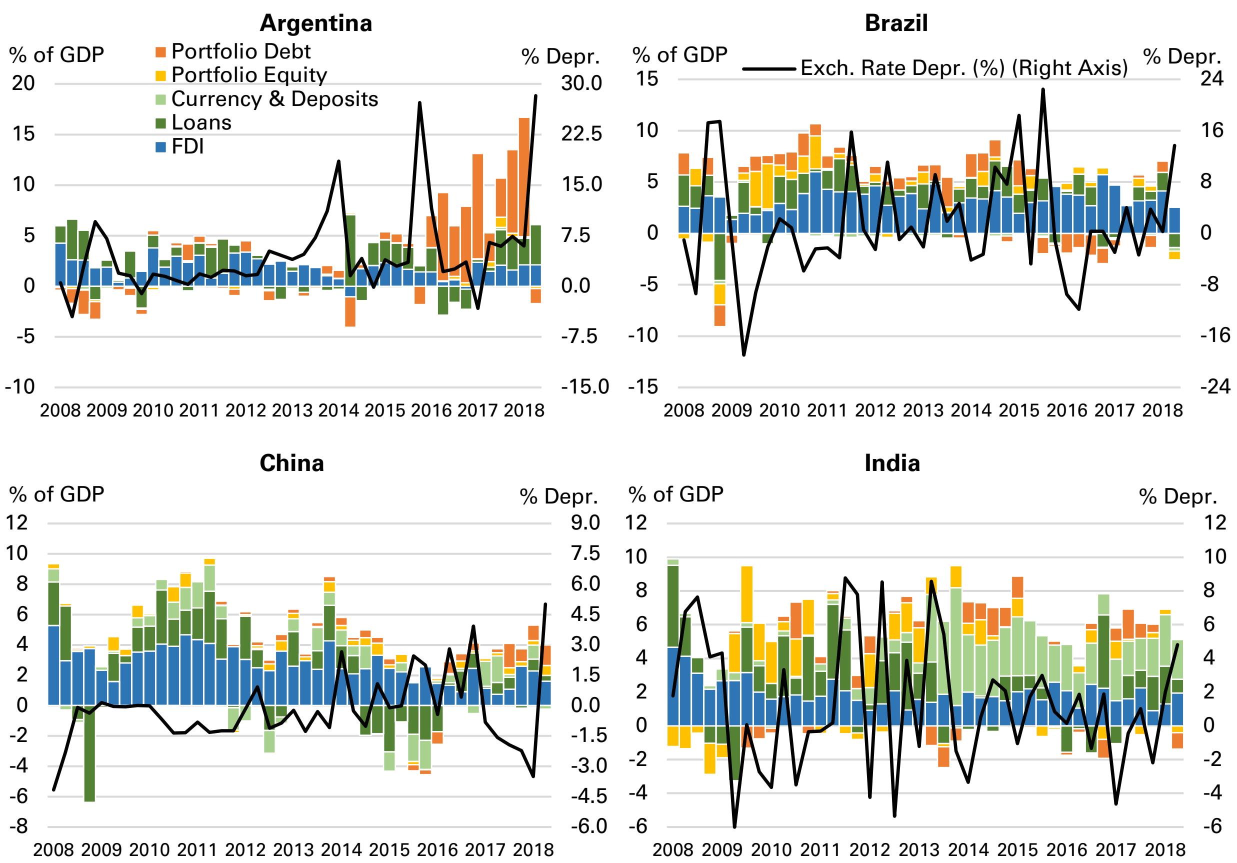
# APPENDICES

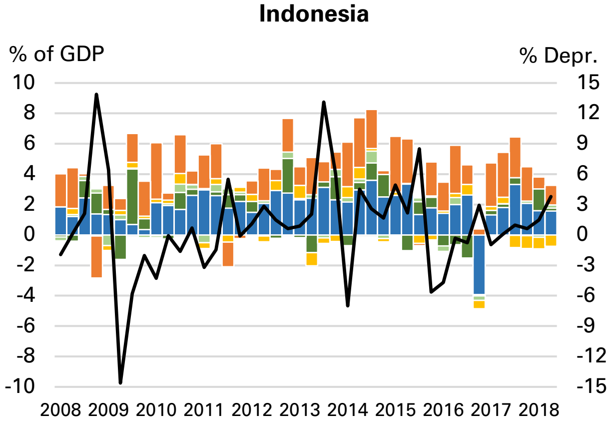
**A.1. Policy Rate Changes, G20 Central Banks, 2015 Q3–2018 Q3 (Cumulative)**

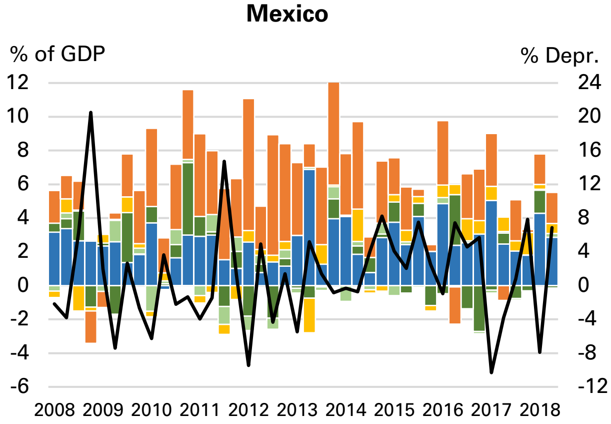


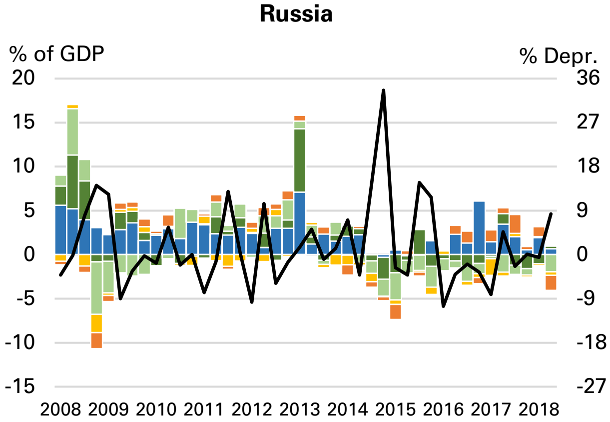

*Source: Authors' calculations based on data from the BIS.*

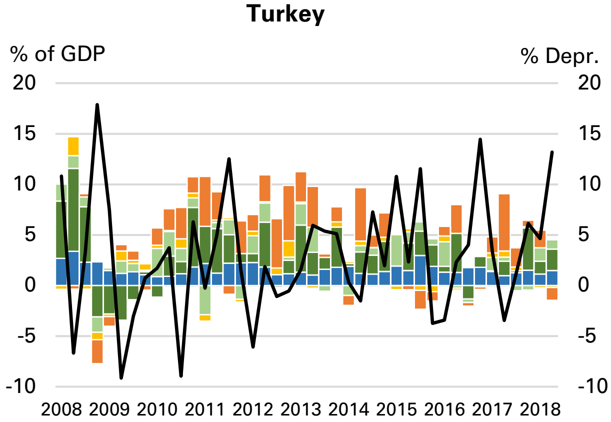
**A.2. International Investment Positions of G20 Emerging Market Countries, External Liabilities**

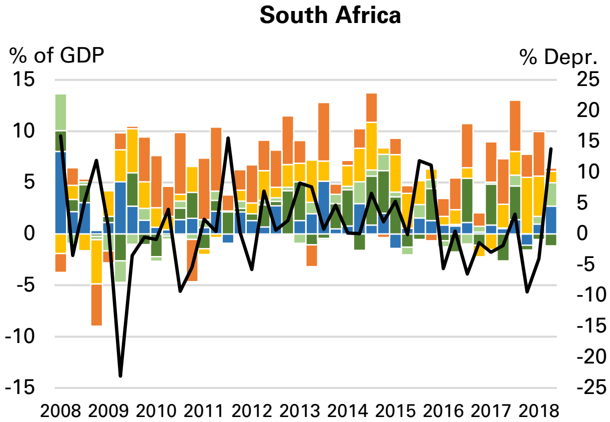




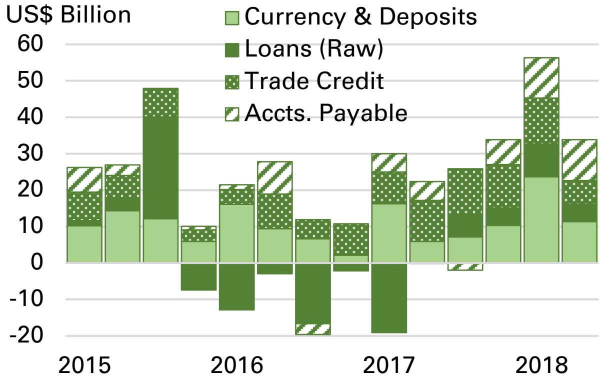




*Source: Authors' estimates from IMF IFS and BOPS, and end-of-period exchange rates from the BIS.*
*Note: The depreciation rates depicted are quarterly percent changes (not annualized) in the exchange rate vis-à-vis the U.S. dollar. The "loans" category of inflows includes trade credit and accounts payable, and is estimated by subtracting currency and deposits from total bank-related inflows. Appendix A.3 shows the complete breakdown of bank-related inflows to G20 emerging markets (excluding China), and for those quarters, that have data available.*

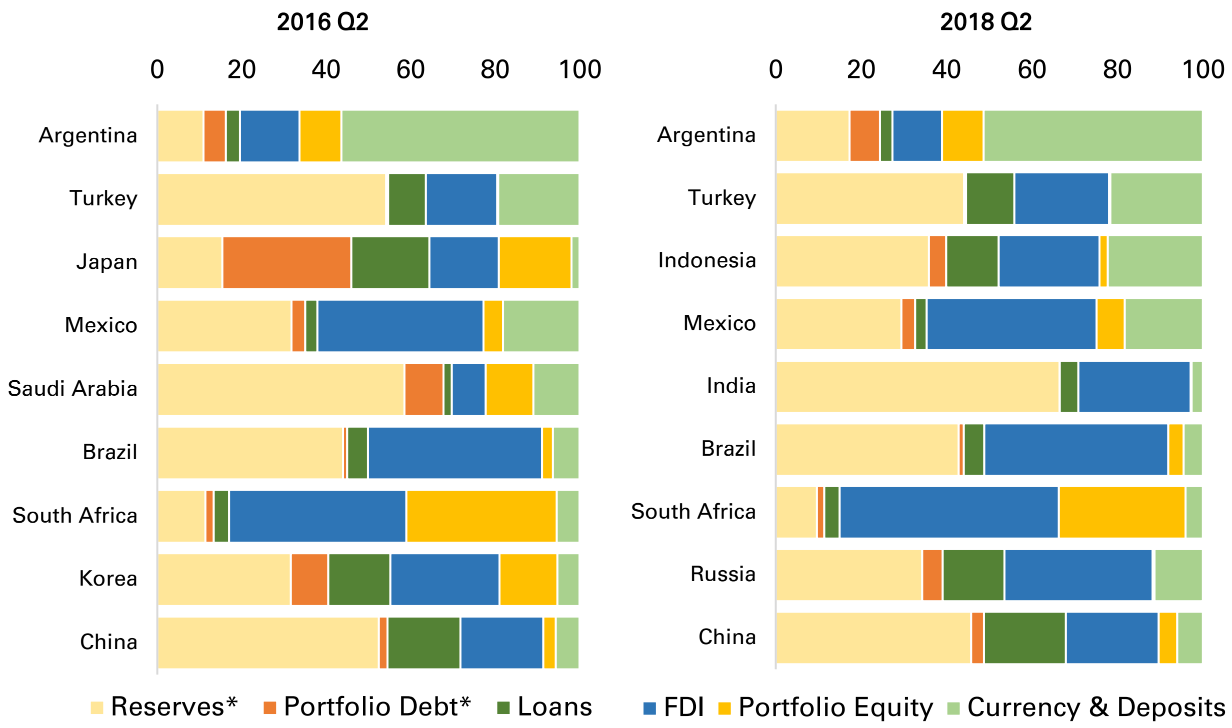
**A.3. Detailed Composition of Bank-Related Inflows, G20 Emerging Market Countries Excluding China and Brazil*, 2015 Q1-2018 Q2**




*Source: Authors' estimates from IMF IFS and BOPS.*
*Note: *Brazil is excluded due to lack of data. Periods after the first quarter of 2018 are also excluded due to lack of data.*

**A.4. International Investment Positions of G20 Emerging Market Countries, External Assets**

**Component's Share of Country's External Assets (%)**




*Source: Authors' estimates from IMF IFS and BOPS.*
*Note: Here, the "loans" category includes trade credit and accounts payable (see note to Figure 4). *Foreign reserves are held largely in the form of sovereign bonds, so this component is similar to portfolio debt assets in terms of instrument class.*

# ABOUT US


## ACKNOWLEDGMENTS

The authors thank William Lee, Cesar Servin, and Jakob Wilhelmus for useful comments. The views expressed here are those of the authors and do not necessarily reflect the view of the Milken Institute or its affiliates. This paper was approved to distribute by William Lee, chief economist at the Milken Institute.


## ABOUT THE AUTHORS

**Claude Lopez, Ph.D.,** leads the international finance and macroeconomic research team at the Milken Institute. She investigates linkages between the financial sector and the real economy, focusing on systemic risk, capital flows, and investment. She brings expertise and experience on topics including exchange rates, capital flows, commodities, inflation, and time-series econometrics. Before joining the Institute, Lopez spent several years as a central banker at the Banque de France, leading teams of economists and analysts to produce economic analysis and policy recommendations on macroeconomics and international finance issues. Prior to that, she was a tenured professor of economics at the University of Cincinnati. Lopez works at the Institute's Santa Monica office.

**Jonathon Adams-Kane, Ph.D.,** is a research economist with the international finance and macroeconomics team at the Milken Institute. His research is mainly on international capital flows and financial stability, with a focus on analyzing structural changes in the international financial system, how crises spread among countries through international banking, and how financial crises affect firms and households. Adams-Kane has worked as a consultant economist at the World Bank and has held teaching appointments at Humboldt State University and Pacific Lutheran University. He works at the Institute's Santa Monica office.

## ABOUT THE MILKEN INSTITUTE

The Milken Institute is a nonprofit, nonpartisan think tank determined to increase global prosperity by advancing collaborative solutions that widen access to capital, create jobs, and improve health. We do this through independent, data-driven research, action-oriented meetings, and meaningful policy initiatives.