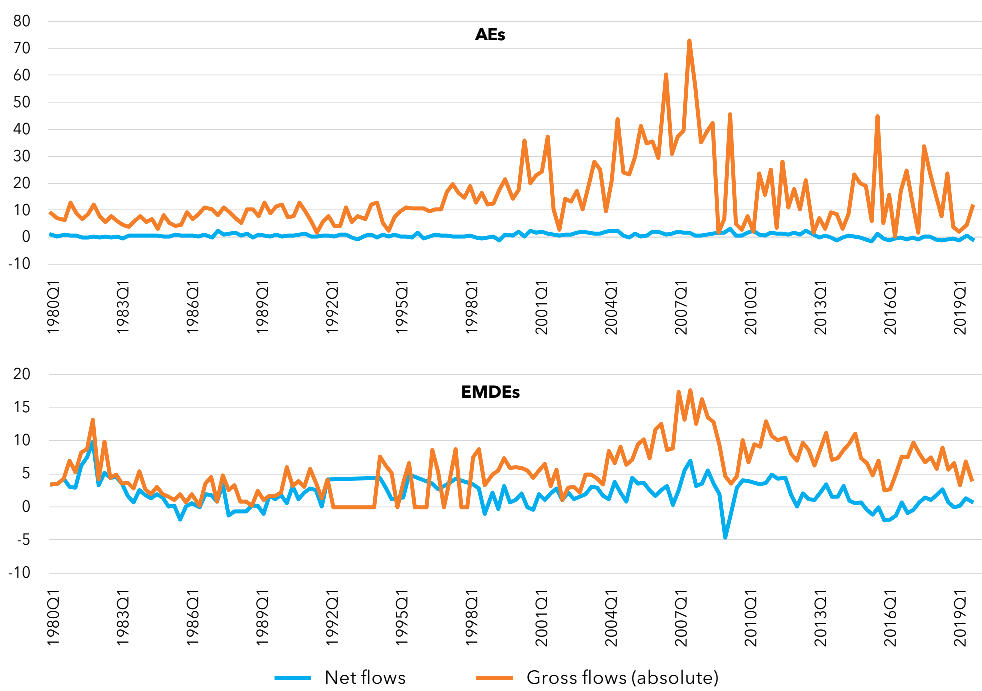
2 CONTEXT

CAPITAL FLOWS AND CAPITAL ACCOUNT LIBERALIZATION SINCE THE GLOBAL FINANCIAL CRISIS[6]

International capital flows have oscillated widely since the GFC. Both AEs and EMDEs saw a sharp drop in gross capital flows at the start of the crisis (Figure 1). Flows to AEs suffered another setback in late 2011 as the crisis in the euro area periphery intensified. For EMDEs, non-resident inflows recovered strongly over 2010–12, responding to the rising confidence in these countries' economic performance and the very easy global liquidity conditions following the adoption of exceptionally loose monetary policies in major advanced-economy central banks. On average, net inflows to EMs have amounted to a similar share of GDP to that before the GFC (Figure 2). However, EMDEs have experienced several episodes of reversals since the GFC, including the "taper tantrum" in 2013, the China risk shock in 2015, and a broader EM stress shock in 2018. Most recently, the COVID-19 crisis in March–April 2020 led to a dramatic reversal of non-resident portfolio flows that was much larger than during the GFC and later stress events, although preliminary data suggest that the overall scale of the capital flow reversal was more in line with previous episodes.

FIGURE 1. GROSS AND NET CROSS-BORDER CAPITAL FLOWS
(In percent of group GDP)



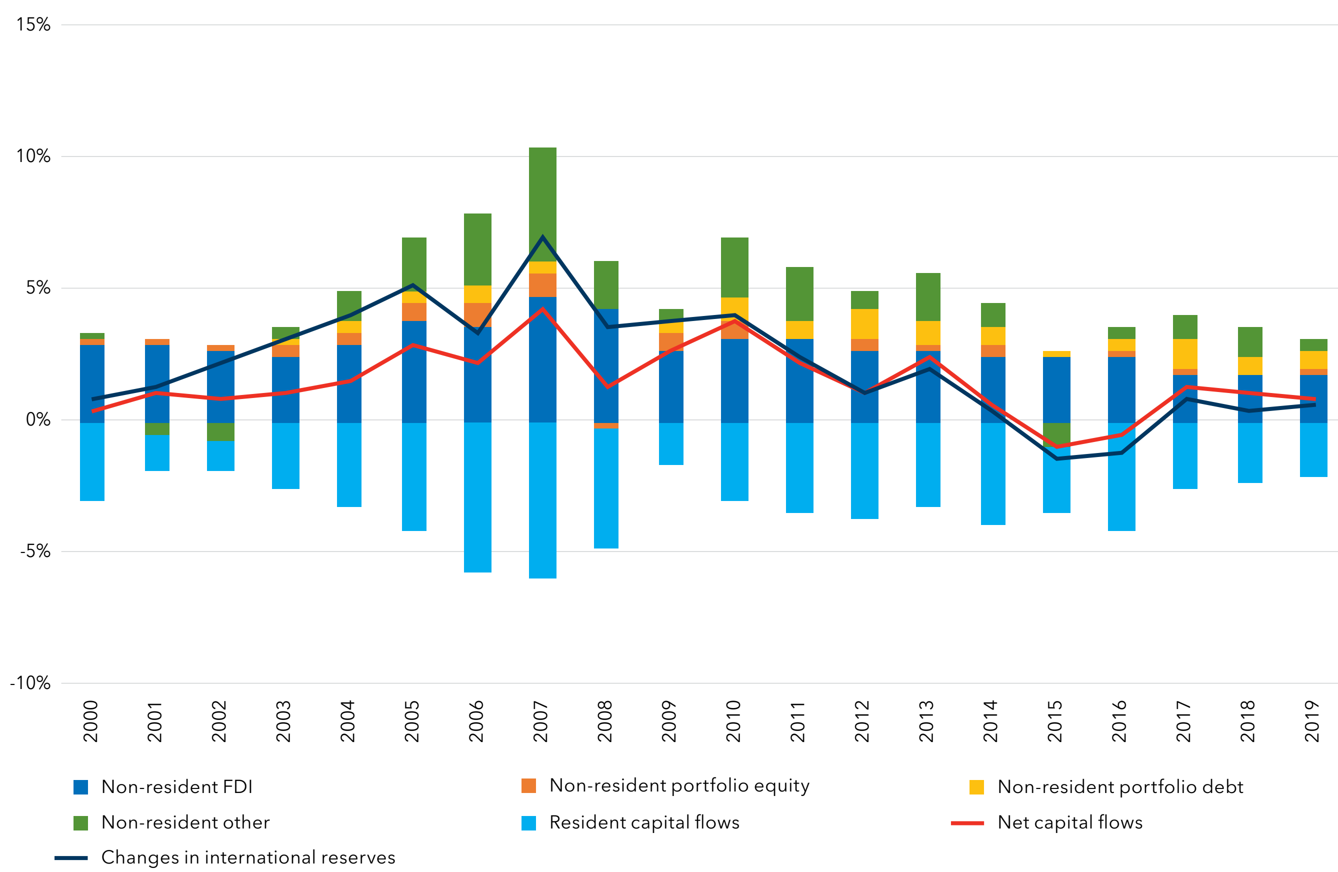
Source: IMF, *International Financial Statistics*.

[6] This chapter draws on Batini and Durand (2020) and Batini (2020).

Capital flow dynamics have been affected by shifts in the composition of flows to EMDEs as portfolio flows and "South-South" flows—particularly flows from China—have grown in importance. Bank-intermediated flows to EMs have fallen, as large global banks have deleveraged and curtailed their cross-border operations in response to the sweeping overhaul of banking regulations under Basel III (Figure 2). For many countries, portfolio flows into equity and debt markets have become an increasingly important source of financing, facilitated by the rising role of institutional investors and the widespread use of index funds and exchange-traded funds and encouraged by the search for yield in a sustained low interest rate environment, all of which have helped to expand the investor base for EM assets beyond a narrow niche product. This shift has meant that capital flow shocks have been channeled increasingly through shifts in investor risk aversion rather than in bank behavior. While FDI has remained the largest source of external financing, it has increasingly included flows driven by treasury management and tax considerations as well as greenfield investments. Capital flows to EMDEs continue to be dominated by exchanges with AEs but transactions within the group ("South South" flows) have increased. The rise in Chinese outward FDI and related external lending since the launching of the Belt-and-Road Initiative has been particularly striking but intra-regional flows have also become increasingly important (see background papers by Patnaik and Prasad, 2020; Balasubramanian and others, 2020).

Capital flows to EMDEs have remained as volatile as in the pre-GFC period. While gross capital flows remain volatile for both AEs and EMDEs, net capital flows to the latter have typically shown larger swings, because in the AEs resident flows tend to offset non-resident flows. After a spike in the aftermath of the GFC related to a sharp retrenchment in

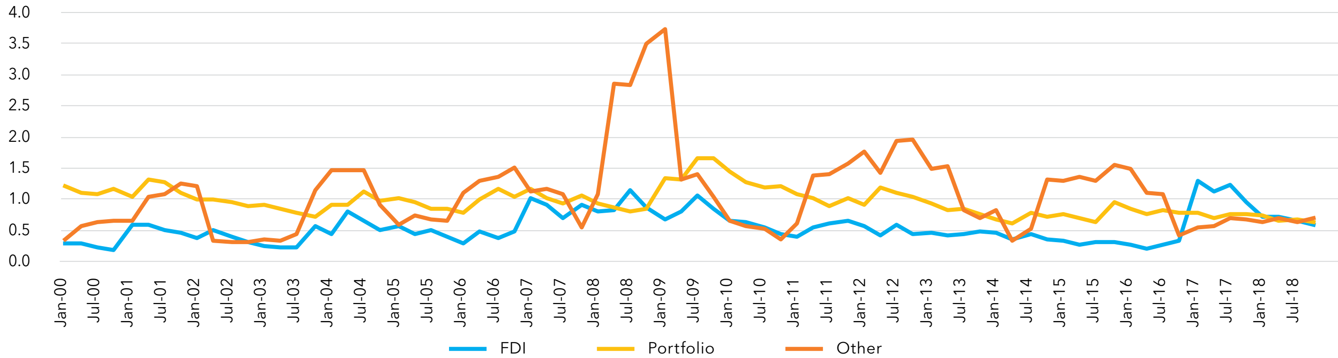
FIGURE 2. CAPITAL FLOWS TO EMERGING MARKETS
(In percent of group GDP)



Source: IMF, *International Financial Statistics*.

FIGURE 3. VOLATILITY OF NON-RESIDENT CAPITAL INFLOWS FOR EMDES BY COMPONENTS

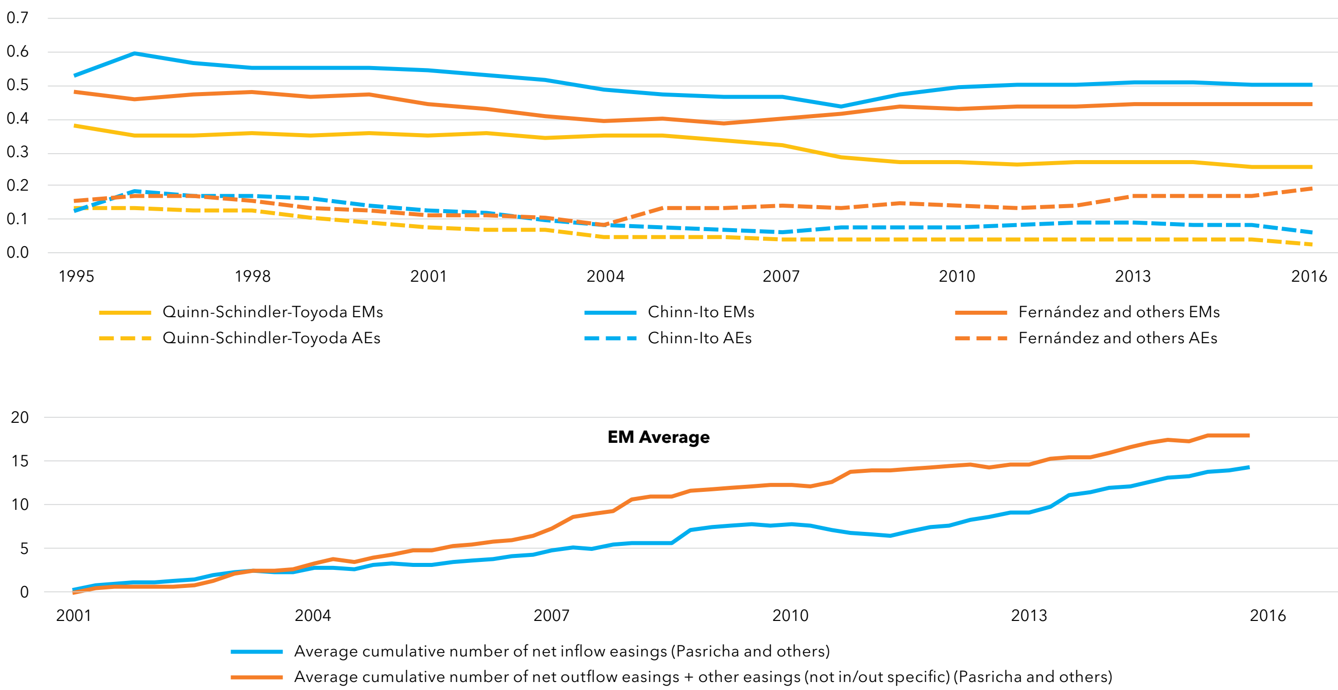
(In percent of group GDP)

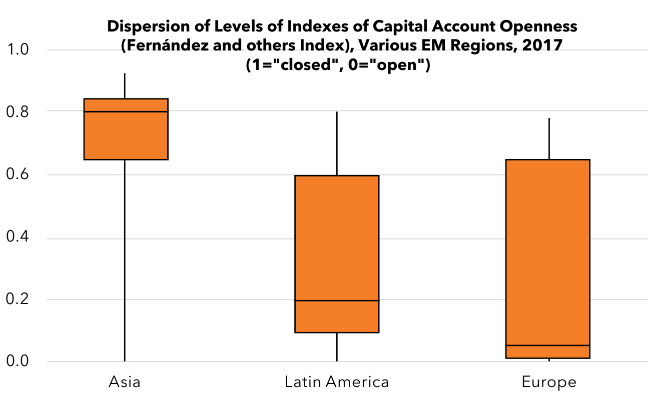


Source: Updated version of a figure in Pagliari and Hannan (2017) using IMF, *International Financial Statistics*.

Note: Estimated standard deviations expressed in percent of group GDP.

FIGURE 4. MEASURES OF CAPITAL ACCOUNT OPENNESS IN EMERGING MARKETS





Sources: Chinn and Ito (2008); Fernández and others (2015); Pasricha and others (2018); and Quinn, Schindler, and Toyoda (2011).

Notes: (i) Emerging market economies: Argentina, Brazil, Chile, China, Colombia, Egypt, India, Indonesia, Malaysia, Mexico, Morocco, Peru, Philippines, Russia, South Africa, Thailand, and Turkey. Advanced economies: Australia, Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hong Kong SAR, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Malta, Netherlands, New Zealand, Norway, Portugal, Singapore, Slovenia, Spain, Sweden, Switzerland, United Kingdom, and United States. (ii) In panel (3), the horizontal line indicates the median aggregate level of controls in each region as measured by the Fernandez and others (2015) index. The top of the box indicates the third quartile, while the bottom of the box indicates the first quartile of the regional distribution.

bank cross-border flows, capital flow volatility in EMDEs has gone through several cycles related to periods of international market exuberance and stress, although on average volatility has been similar to pre-crisis levels (Figure 3). Reflecting these cycles, capital flows to EMDEs have continued to be subject to surges and reversals in recent years (Eichengreen and Gupta, 2018). Reversals have been particularly challenging especially at times of high stress when non-resident and resident flows are reinforcing rather than offsetting. FDI flows have generally remained less volatile than other flows, though as the composition of FDI shifts, these flows appear to be becoming more volatile.

Capital account liberalization has continued since the GFC, but at a more gradual pace overall and with periods of selective tightening. Though measuring the openness of capital accounts is challenging, taken together various indexes suggest that EMDEs have continued to liberalize since the GFC, though the overall pace has been much slower than before the GFC, and these countries still remain much less open on average than AEs (Figure 4, first panel). Opening has been more pronounced for resident outflows, and there have been periods in which limits on inflows were tightened, particularly during the 2010–12 surge (Figure 4, second panel). It is noteworthy that, while comprehensive data are not yet available, policy trackers suggest that countries made relatively little use of capital account measures in responding to the COVID-19 crisis; some countries eased limits on capital inflows, but recourse to tightening restrictions on outflows was rare. Within EMDEs, capital accounts appear more closed in Asia than in Latin America, while these in turn appear more closed than those in emerging Europe, though there is important heterogeneity within each group (Figure 4, third panel).

THE EVOLUTION OF IMF POLICIES ON CAPITAL ACCOUNT ISSUES

The Fund moved to advocate a sequenced approach to capital account liberalization in the early 2000s. Through the 1990s, the IMF generally encouraged countries that wanted to move ahead with capital account liberalization, and even acted as a cheerleader, especially before the East Asian crisis (IEO, 2005). While Fund documents had generally included the caveat that liberalization should be carefully paced and sequenced, this more cautious advice became more prominent in word and deed after the East Asian crisis in 1998. A policy paper discussed at the Board in 2001 (IMF, 2001) stressed the importance of an integrated approach that considered capital account liberalization as part of a more comprehensive and coordinated program of economic reform, particularly by strengthening the domestic financial system ahead of opening the capital account.

The Fund's policy advice on policy options to deal with capital flow volatility has also evolved over time. Traditionally, the Fund emphasized the use of standard macroeconomic tools such as fiscal, monetary, and exchange rate policies to respond to external shocks. However, it has long recognized that policymakers have often found textbook prescriptions to deal with surges to be insufficient, and have thus turned to other tools including capital account measures and prudential measures (IMF, 1993). In practice, the IMF staff was usually supportive of the countries' choices "whatever they may have been," including sympathy for the use of capital account measures (IEO, 2005).

The IV consolidated the evolution in IMF advice on capital account issues. As the GFC unfolded, many countries started to use capital account and prudential measures more extensively, initially to limit capital outflows during the crisis and then to dampen inflows during the subsequent resurgence of flows to EMDEs. This led the Fund to attempt to clarify its advice and ensure greater coherence, especially as some members were concerned that capital account measures could be distortionary and used instead of needed macroeconomic adjustments. The Fund's work included several policy papers that aimed to identify circumstances in which capital account measures could be justified as part of the broader policy toolkit to manage inflows (see Ostry and others, 2010; 2011). This effort culminated in Board approval of the IV in December 2012, covering advice regarding both capital account liberalization and responding to capital flow volatility. The IV noted that there is "no presumption that full liberalization is an appropriate goal for all countries at all times" and reiterated that the degree of liberalization appropriate for a country at a given time depends on specific circumstances, notably the country's level of financial and institutional development.

The IV supports measures designed to limit capital flows—which it labeled capital flow management measures or CFMs—under carefully circumscribed conditions. The IV recognizes that CFMs can be useful in certain circumstances as part of the policy response for countries faced with a surge in capital inflows or disruptive outflows but warns that "they should not substitute for warranted macroeconomic adjustment." The IV emphasizes that "appropriate macroeconomic policies to respond to inflow surges would include rebalancing the monetary and fiscal mix consistent with inflation and growth objectives, allowing the currency to strengthen if it is not overvalued, and building reserves if these are not more than adequate" (IV, para 30).[7] Circumstances where introducing inflow CFMs can help support macroeconomic policy adjustment and safeguard financial system stability include:

(i) when the room for adjusting macroeconomic policies is limited, for example if an economy is overheated, the exchange rate is overvalued, and accumulating additional reserves would be unduly costly;

(ii) when the needed policy steps require time to implement, or when the macroeconomic adjustments require time to take effect; and

(iii) when an inflow surge raises risks of financial system instability.

When inflow CFMs are used, the IV prescribes that their use should be "transparent, targeted and temporary, and preferably non-discriminatory," while being tailored to the country-specific context (IV, para 33). The IV cautions that only rarely would CFMs be the sole warranted policy response to an inflow surge and that, even when desirable, their likely effectiveness should be carefully examined. Moreover, they should not be used to influence exchange rates to gain unfair competitive advantage. Thus, while the IV does not necessarily restrict CFMs to being only "a measure of last resort," it nevertheless cautions that they should not be used preemptively but only in the face of an inflow surge and when certain conditions are met and then should be phased out when the inflow surge abates.

Similarly, the IV gives guidance on when and how outflow CFMs should be used. Capital outflows should usually be handled primarily with macroeconomic, structural, and financial policies, since outflow CFMs have potential domestic and multilateral costs and could damage investor confidence. However, in crisis situations or when a crisis is imminent, there could be a temporary role for CFMs on outflows to provide breathing space or avert a full-blown crisis, if they are implemented as part of a broader policy package to address the fundamental causes of the crisis (IV, paras 44–46). Again, measures should be transparent and as far as possible non-discriminatory, although the IV recognizes that to avoid circumvention and remain effective, CFMs need to be comprehensive and adjusted on an ongoing basis (IV, para 50).

In parallel with the IV, the IMF has developed a macroprudential framework to guide policy advice on using such tools for financial stability purposes, including dealing with capital flow volatility. As noted by IEO (2019), the Fund "has been at the forefront of international efforts" to track the deployment of MPMs by various countries and to assess the effectiveness of these measures in safeguarding financial stability (Alam and others, 2019).

Measures that are judged as designed to limit capital flows and used to safeguard financial stability are termed CFMs/MPMs and subject to both the IV framework and the Fund's macroprudential policy framework. For a measure to be classified as a CFM/MPM, there must be a potential source of systemic financial risk stemming from capital flows that has to be addressed and a path of transmission through which the measure can reasonably be expected to reduce such risks. For example, such a measure could be an unremunerated reserve requirement on short-term external borrowing. Under the guidelines, the use of CFMs/MPMs should take into consideration whether other available MPMs that are not CFMs could achieve the same objective. There should be a reasonable expectation that the CFM/MPM measure is more effective, efficient, and less distortionary than pure MPMs, in addressing financial risks. Even a CFM classified as also an MPM is subject to the requirement that it not be used preemptively, though "there may be scope to maintain CFMs/MPMs for longer

[7] The IV generally supports exchange rate flexibility in the face of an inflow surge but recognizes a role for foreign exchange intervention if reserves are inadequate or if FXI can limit excess exchange rate volatility and smooth the impact on balance sheets.

even after capital inflow pressures have abated" since such measures "may continue to be useful for managing systemic financial risks after the inflow surge is over," subject to a continuing assessment of "whether there are alternative measures to address the systemic risk that are not designed to limit capital flows" (IMF, 2017, paras 52 and 53).

Since the adoption of the IV, the Fund staff has worked to clarify its application and review experience with implementation. Since the 2012 document, the Fund has published guidance notes for its use by staff (IMF, 2013a) and discussed further operational considerations in managing outflows (IMF, 2015b). In 2016, the Fund reviewed countries' experiences with handling capital flows in the period since the introduction of the IV, concluding that practice had generally been in line with IV-implied guidance (IMF, 2016c). The Fund has also sought to clarify the treatment of measures that are classified as both CFMs and MPMs (IMF, 2017), made efforts to clarify how the IV is applied in particular circumstances (G20, 2018), and published a Taxonomy of CFMs (IMF, 2019d) that lists measures that have been assessed as CFMs in Article IV reports since the IV was issued, to help explain which measures receive this classification. Technical assistance has been geared up to help countries better understand and implement advice consistent with the IV.

In addition, the Fund has upgraded other related frameworks that are relevant to capital account issues and advice. The External Sector Report (ESR) was launched in 2012 to provide assessments of the extent to which external positions among the major advanced economies and large emerging market economies (EMs) were mutually consistent and to identify external imbalances, providing the basis for the IMF to assess exchange rate valuation. The staff has worked to strengthen the analytic support for ESR assessments through an external balance assessment (EBA) tool (IEO, 2017) and its update (Cubeddu and others, 2019), and developed a metric for the assessment of reserve adequacy (ARA). Both these methodologies include a measure of capital account openness, which is important because Fund advice on whether the use of capital account measures and FXI is justifiable relies partly on assessments of exchange rate overvaluation or undervaluation and the adequacy of foreign exchange reserves (Towe, 2020).

The Fund has also taken several initiatives to strengthen its framework for multilateral surveillance over risks posed by spillovers from cross-border capital flows. While the IMF has limited legal jurisdiction over capital account policies under the Articles of Agreement, it is tasked with analyzing capital account developments and advising on policies as part of its multilateral surveillance mandate to oversee international monetary stability. The 2012 Integrated Surveillance Decision (ISD) significantly expanded expectations regarding the Fund's multilateral oversight in this area. It required the Fund to cover "spillovers arising from policies of individual members that could significantly influence the effective operation of the international monetary system," with explicit refence to "policies respecting capital flows." Consistent with this requirement, Article IV consultations with individual members are tasked to focus on policies that may significantly influence the effective operation of the international monetary system, albeit still without any obligation on members to amend their policies in response as long as the member is promoting its own stability. This was reiterated in the IV, with the guidance note instructing that Fund multilateral surveillance products "assess the extent of push factors and structural changes in global capital flows." The Fund has also focused greater attention on strengthening its understanding and analysis of financial spillovers, initially under the auspices of a stand-alone report—the Spillover Report—and more recently through renewed initiatives to support this work.[8]

[8] In part, the renewed attention to financial spillovers responds to Board-endorsed recommendations of the IEO evaluation of *IMF Advice on Unconventional Monetary Policies*, as noted in the Management Implementation Plan (IMF, 2020c). As part of this work stream, Juvenal and Hale (forthcoming) have assembled a data set on the currency composition of cross-border debt positions to help better tracking of financial spillovers.