7 MONITORING, ANALYSIS, AND RESEARCH ON CAPITAL ACCOUNT ISSUES

The Fund has continued to do important work to understand the drivers of capital flows and consider policy tools. The extent to which changing market structures and regulation can impact cross-border capital flows has received considerable coverage, especially in the *GFSR*. Recent issues have covered the growing role of retail investors in portfolio flows to EMs and to advanced-economy mutual funds in EM debt markets, and the spillover risks from investment activities of large insurance companies (IMF, 2019e). The Fund has also explored the implications of post-GFC financial reform for capital flows (e.g., implications of the U.S. Dodd-Frank legislation (IMF, 2011) and illuminated some "dark corners" through its work on capital flows through offshore financial centers and FDI channeled through low-tax destinations (Damgaard, Elkjaer, and Johannesen, 2019).

The Fund has been engaged in multilateral initiatives to fill data gaps to strengthen monitoring of international capital flows. In the aftermath of the GFC, there was broad recognition of the need to address data gaps to strengthen the monitoring of capital flows. In 2009, the G20 called on statistical agencies, led by the IMF and the FSB, to address these deficiencies under the Data Gaps Initiative. While continued data generation and dissemination by member countries remain key to supporting effective monitoring and analysis of capital flows, this initiative has led to better monitoring of international capital flows, including in the context of revamped balance sheet and flow-of-funds data, and to better data on cross-border derivatives exposures and direct investment. Key elements of the Fund's work in this area include:

- *Coordinated Portfolio Investment Survey (CPIS) and Coordinated Direct Investment Survey (CDIS)*: Led by the IMF, the CPIS is a global survey of cross-border portfolio investment holdings since 2013 for 83 countries. To enhance cross-border financial interconnectedness and balance sheet analysis, the Fund is upgrading the CPIS infrastructure to move from securities information across countries toward "from-whom-to-whom" financial information of portfolio stocks by sector of issuers and holders. The IMF has also led efforts to improve the tracking of countries' inward and outward foreign direct investment positions through the CDIS, conducted since 2009.

- *International Investment Position*: The IMF has led efforts to improve the measurement of the stocks of assets and liabilities held by residents vis-à-vis other countries, reported quarterly for more than 120 countries. Efforts are under way to enhance the coverage of offshore financial centers and to require data on the currency denomination of financial assets and liabilities.

In addition, the Fund staff continues to help maintain the External Wealth of Nations database (Lane and Milesi-Ferretti, 2018), which contains detailed cross-country information on the stock of domestic and foreign assets and has been widely used in academic and policy circles, including the Fund's assessments of capital account openness and the effects of financial market integration.

The Fund has also been an important partner in other multilateral initiatives to improve the monitoring of capital flows.

- As part of a broader IMF effort to enhance the use of balance sheet analysis in its bilateral and multilateral surveillance, the Fund has been actively engaged in multilateral efforts to establish a global flow of funds database.
- With the FSB and BIS, the IMF helped launch the initiative to track detailed, institution-to-institution funding exposures for global systemically important banks (GSIBs). Given the confidentiality of the data, the Fund's role has been to assist in the design of reporting templates and to define the data needed for effective multilateral surveillance of financial stability. In addition, a joint public and private initiative was established to define a system of global legal economic identifiers that can now uniquely identify legal entities engaging in financial transactions; the IMF participated in the development of the system and has observer status in the regulatory oversight committee.

The Fund has long been an authoritative source in monitoring and disseminating information on countries' use of capital account measures. Since 1950, the Fund's *Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER)* has provided detailed information on countries' restrictions on current international transactions, capital account restrictions (since 1952), exchange rate arrangements, and monetary policy frameworks. The *AREAER* is based largely based on annual self-reporting by member countries, but is often augmented to reflect information gathered by IMF Article IV missions. Data from the *AREAER* provide the building block for most analyses of de jure measures of openness. Some of these indexes have been prepared by the IMF staff—e.g., the index constructed by Schindler (2009) and subsequently extended by Fernández and others (2015)—but the Fund has not established or disseminated a globally recognized measure of capital account openness (Batini and Durand, 2020). As a result, the most widely used indexes are those prepared by outside researchers, such as those based on the approaches of Chinn and Ito (2008) and Quinn, Schindler, and Toyoda (2011).

As noted above, the IMF has also provided a Taxonomy of CFMs (IMF, 2019d).

Knowledge sharing within the Fund on capital flow issues has improved. A Capital Flows Group established in 2010 provides a forum for disseminating research on capital flow issues—including through a regular seminar series that features cross-departmental presentations on key topics as well as outside speakers—and provides regular reports to Fund management. MCM prepares several internal monitors that cover capital flows: the daily Global Market Monitor covers global capital developments; a monthly EM Capital Flows Monitor tracks monthly cross-border portfolio flows to and from emerging markets, albeit partly based on secondary sources (such as the Institute of International Finance); and a monthly Fintech Update aggregates news and data on the fintech sector.

Assessment

While the IMF is widely regarded as a source of key data and intellectual contributions on capital account issues, efforts have not always been well sustained or followed through. Following a burst of attention at the time that the IV was developed, there has been a tendency toward one-off efforts, putting together data sets and analytic frameworks but not maintaining them adequately, particularly after the responsible staff members rotated off to other tasks. The IMF has certainly worked hard to fill important data gaps, but in some areas the Fund has relied on other sources. For example, capital account openness indexes are largely compiled outside the Fund even though the raw data comes from the Fund, while the IIF's high-frequency monitoring of flows sets the industry standard and is extensively used by Fund staff.

The staff's efforts are handicapped by several factors. One is that staff resources are spread across multiple departments and are stretched thin. Research and analysis of capital flows is carried out by MCM, RES, SPR, and STA, among others, plus the Capital Flows Group—without a clear sense of who has responsibility for ensuring that key issues are covered in a systematic and timely manner. The division covering capital account issues in MCM has to cover both research and operational work, and macroprudential policies as well as capital account measures. The *GFSR* team has the capacity to do a periodic deep dive into an issue

but not to sustain attention to any particular issue over time. In addition, the staff's research and analysis efforts are constrained by lack of access to some confidential data (e.g., on the cross-border counterparty exposures of GSIBs) and lack of adequate access to commercial databases due to budgetary constraints.

The *AREAER* represents an important public good that clearly merits greater investment by the Fund. The Fund staff deserves great credit for providing this report to IMF members despite only a skeleton crew being devoted to the task, alongside additional responsibilities such as building up the macroprudential database. Greater investment in the *AREAER*'s ongoing maintenance would improve its timeliness, reduce reputational risk, and give greater scope for the experts involved to provide needed support for Fund policy advice and analysis on capital account policies. For similar reasons, there would seem to be merit in constructing and publishing in-house the indexes of capital account openness that are used for core surveillance benchmarks, including EBA, rather than leaving this task to others.

The recent IPF work program provides an opportunity to develop a more sustained and broader research agenda. This workstream has meant a substantial increase in resources for research and analysis of capital account issues as part of a Fund-wide effort to analyze the broad set of measures for handling external shocks. Without expecting that this degree of attention can be fully maintained, it would seem desirable to find a way to ensure that research and analytical work in this area are sustained with a medium-term agenda to ensure that the Fund remains a clear center of excellence in an area at the core of its mandate. To be most useful for guiding advice and influencing policy decisions, this agenda should cover a broader set of issues beyond the immediate focus of the IPF, including, for example, how source country policies and regulations affect the dynamics of capital flows and how the short-term use of different instruments can affect longer-term market and institutional developments.