

BACKGROUND PAPER



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Strengthening IMF Financial Surveillance: Organizational and Human Resource Issues

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Strengthening IMF Financial Surveillance: Organizational and Human Resource Issues

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ABBREVIATIONS

ACES Analytic Costing and Estimation System (IMF)

EP Economist Program

FACTS Financial Administrative Commitment Tracking System (IMF)
FSAP Financial Sector Assessment Program (IMF, World Bank)

FSB Financial Stability Board FSE Financial Sector Expert (IMF)

FSPN Financial Stability Policy Note (IMF)

FSSA Financial System Stability Assessment (FSAP)

FTE full-time [staff] equivalent

GFSR Global Financial Stability Report

HRD Human Resources Department (IMF)

ICD Institute for Capacity Development (IMF)

ICM International Capital Markets Department (IMF)

IEO Independent Evaluation Office (IMF)

IMF International Monetary Fund LEG Legal Department (IMF)

MCM Monetary and Capital Markets Department (IMF)

MCP Mid-Career Program (IMF)

MF Macrofinancial

MFD Monetary and Financial Systems Department (IMF)

MMP Macrofinancial Mobility Program
OBP Office of Budget and Planning (IMF)

OFC Offshore financial center
RES Research Department (IMF)

S5 Five jurisdictions with the most systemic financial sectors

S29 29 financial jurisdictions with systemically important financial sectors

SCS Specialized Career Stream (IMF)

SPR Strategy, Policy, and Review Department (IMF)

STA Statistics Department (IMF)

TIMS Travel Information Management System (IMF)

TRACES Time Reporting for ACES (IMF)
TRS Time Reporting System¹ (IMF)
TSR Triennial Surveillance Review (IMF)

¹ Replaced by TRACES.

EXECUTIVE SUMMARY

This paper assesses the IMF's institutional arrangements for financial surveillance in the IMF since 2010, in particular issues related to the IMF's organizational structure and processes, budgetary resources, and human resource management.

The paper finds that the IMF has continued to adapt its organizational arrangements to support and facilitate financial surveillance, building on earlier efforts. The IMF set out a Financial Surveillance Strategy in 2012 that calls on departments to work together to assure integration of bilateral and multilateral analysis of financial risks. In 2014, the institution launched an initiative to more fully integrate macrofinancial analysis in Article IV surveillance by providing additional support to country teams and learning from their experiences as part of a pilot program.

The IMF also worked to align its budget and human resources to support its financial surveillance objectives. Resources for key financial surveillance activities grew over time, notably the *Global Financial Stability Report*, the Financial Sector Assessment Program, and macrofinancial work in Article IV surveillance through the pilot program. The institution also took steps to enhance the skills of country teams, through training, mobility initiatives, and increased attention to macrofinancial skills in recruitment.

Nonetheless, the IMF's efforts in this area remain a work in progress. Despite increased resources for key financial surveillance activities since FY2010, the overall envelope is little changed from its level in FY2005. There are signs of tension in resource allocation, including how to balance the demands of assessing risks in the most systemically important financial sectors with the importance of analyzing financial sector developments in all member countries, and between macrofinancial and emerging macro-critical issues in surveillance. Further, the IMF is only part way to meeting the challenge of building up its human resources to undertake the variety of work required for financial surveillance. Despite efforts in recruitment, training, and redeploying staff, there are signs of unmet demand by country teams for macrofinancial skills. It is difficult to assess progress in expanding capacity because the Fund does not have a system to track staff skills. At the same time, this assessment found that staff who specialize in financial sector issues or financial economics face limited career opportunities, complicating hiring and retention.

Overall, the paper concludes that there is room for the IMF to take further steps to support its ambitions for financial surveillance and to integrate it fully with the Fund's work. Budget and human resources for financial surveillance need to be aligned with the increasing importance of this function for the IMF's mission. The IMF should act now to plan strategically for the workforce it needs going forward—with financial surveillance as a core element of its work in all member countries.

I. INTRODUCTION¹

- 1. This paper assesses the IMF's institutional arrangements to conduct financial surveillance, and their development since 2010, in particular issues related to the IMF's organizational structure and processes, budgetary resources, and human resource management. It explores the ways in which the IMF has adapted these arrangements to support financial surveillance, particularly macrofinancial surveillance, and what organizational challenges it continues to face. The paper aims to assess whether the resources allocated to financial surveillance align with the IMF's priorities, and to what degree IMF staff has the necessary skills and experience to carry out this work. The paper draws on budget and human resource data provided by IMF staff; internal and public IMF documents; surveys conducted by the IEO and IMF staff; and interviews with IMF staff in functional, area, and support departments.
- 2. The paper is organized as follows. Section II describes the organizational structures and processes in place to carry out financial surveillance and how these evolved during the evaluation period. Section III analyses the budget resources for financial surveillance, including the costs of key outputs and the allocation of resources across countries and country groupings. Section IV explores human resources issues and IMF staff capacity for financial surveillance. Section V offers a few conclusions and suggests potential steps that the IMF could explore to further support its work on financial surveillance.

II. ORGANIZATIONAL STRUCTURE AND PROCESSES

3. The IMF's organizational structure and processes for undertaking financial, and macrofinancial, surveillance have evolved significantly as the institution has stepped up its attention to these issues.

A. Responsibilities and Organization of Work

- 4. Responsibility for financial surveillance is shared across the IMF. The Financial Surveillance Strategy articulated in 2012 ("the 2012 Strategy") laid out objectives and clarified responsibilities and accountabilities (IMF, 2012b). IMF Management and the Executive Board periodically set priorities and budgetary resources. Staff conducted reviews of surveillance and of the Financial Sector Assessment Program (FSAP) in 2014 (IMF, 2014b; 2014c), and an interim review of surveillance in 2018 (IMF, 2018a); a comprehensive review of surveillance and a review of the FSAP are scheduled to take place in 2020.
- 5. The Monetary and Capital Markets Department (MCM) is a primary actor in financial surveillance work. Created from two predecessor departments in 2006, MCM serves as a center

¹ The author would like to thank Joshua Wojnilower, Chris Monasterski, and Alisa Abrams for excellent research assistance, and Arun Bhatnagar for excellent administrative assistance.

of expertise and analytical work within the institution, as well as a key force in the IMF's broader global role on monetary and financial policy.² As specified by the 2012 Strategy, MCM has primary responsibility for financial stability issues (including macro and micro prudential policies and capital markets) and shared responsibility with the Research Department (RES) and Strategy, Policy, and Review Department (SPR) for analytical work on vulnerabilities, macrofinancial linkages, and interconnectedness as well as on related policy issues (IMF, 2012c).³ The Legal Department (LEG) provides legal expertise across the financial sector.

- 6. MCM has lead responsibility for two of the Fund's key financial surveillance products: the *Global Financial Stability Report (GFSR)* and the FSAP.⁴ The FSAP undertakes in-depth assessments of financial stability at the country level and is intended to serve as a complement to higher-frequency macrofinancial surveillance in Article IV surveillance. MCM also provides important support on financial sector and macrofinancial issues to Article IV consultations by providing staff to participate in missions for about 50 countries each year and through the review process. MCM houses experts, for instance on monetary policy and debt and capital market instruments. A Strategy and Planning Unit helps coordinate MCM's work program, clarify policy positions, and promote collaboration within the department.
- 7. Area departments are responsible for Article IV surveillance, including analysis of and policy advice on financial sector and macrofinancial issues and their relationship to the broader outlook. Area departments have different approaches to organizing their efforts on financial surveillance: some departments concentrate financial sector expertise in regional units, which then serve as a resource to all country teams, while others prefer a decentralized approach in which financial sector expertise is located within country teams themselves; several departments have developed staff networks and working groups to advance this work. Area department efforts have intensified with the launch of the 2014 initiative to mainstream macrofinancial surveillance, discussed below.
- 8. Other functional departments support bilateral financial surveillance in both FSAPs and Article IV consultations. Under the 2012 Strategy, as part of its role of reviewing all Article IV staff reports, SPR is responsible for ensuring that Article IV staff reports integrate relevant financial sector issues. In 2018, SPR created a new Macro Financial Unit focused on fintech, macroprudential policy, and macrofinancial surveillance issues. The Research Department (RES)

² Takagi (2018) discusses the multiple external and internal reviews that led to this as well as other organizational changes.

³ Such policy issues included managing capital flows, feedback loops, and exit from extraordinary macrofinancial policies.

⁴ Zettelmeyer (2018) discusses multilateral surveillance, including preparation of the *GFSR* and EWE. Caprio (2018) examines the technical quality, relevance and usefulness of the FSAP. The FSAP is a joint program with the World Bank, which undertakes assessments from a developmental perspective; this aspect of the program is not examined in this paper.

also has a Macro Financial Division, which aims to deepen the Fund's understanding of the functioning of domestic and international financial systems and their implications for financial and economic activity. The Statistics Department (STA) and LEG also provide input and support as needed for financial surveillance.

B. Coordination

- 9. Given the shared responsibilities for financial sector surveillance across different IMF departments, collaboration and coordination of work is critical. The institution-wide Surveillance Committee meets regularly to discuss recent developments and topical issues in the Fund's surveillance work, including on financial sector and macrofinancial issues. In addition, a Financial Surveillance Group, chaired by MCM, meets periodically to promote discussion on financial sector issues in IMF surveillance. According to IMF staff, this group has recently been revamped to focus "more sharply" on macrofinancial surveillance issues and now serves as an "important forum for learning and passing on financial sector expertise."
- 10. Ensuring that analysis and messages are well-connected and consistent is of key importance in bilateral surveillance, which the Fund conducts by means of two different activities/outputs, the periodic FSAP and the Article IV consultation.⁵ As instruments of surveillance, the FSAP and Article IV consultations are intended to complement and serve as inputs to each other, with the former providing in-depth analysis focused on financial stability and the latter undertaking more frequent analysis of financial sector risks and macrofinancial relationships and integrating them with macroeconomic analysis to provide an overall assessment. Several procedures are in place to help foster coordination between these instruments. In particular:
 - **Timing.** Teams make an effort to time FSAP missions so that their analysis remains relevant at the time of the following Article IV consultation. The Financial System Stability Assessment (FSSA) is typically discussed by the Executive Board ("the Board") at the same time as the corresponding Article IV staff report. Some Executive Directors have indicated in Board discussions, as well as in interviews, that they would prefer to separate the discussions to allow for more attention to the FSSA. However, doing so would seem to work against the goal of integrating the FSAP and Article IV messages to provide a synthesized view of financial stability and risks.
 - Cross-fertilization of teams. As noted above, MCM provides participants for select
 Article IV missions, whether to focus on narrow financial sector issues such as insurance or
 pensions or to take the lead on macrofinancial issues. MCM informs each area department
 about what staff resources MCM can make available, and area departments determine
 which teams would benefit from an MCM staff participant. About 30 percent of Article IV

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⁵ Zettelmeyer (2018) discusses multilateral financial surveillance and concludes that the messages related to financial sector risks and policies were largely consistent in the *GFSR* and the *WEO* during the evaluation period.

country teams had an MCM participant each year in the course of FY2010–17; 60 percent of countries were covered at some point in this period.⁶ In addition, the FSAP mission chief generally joins the Article IV mission in the year in which an FSSA is being prepared, and a member of the corresponding area department country team participates in the main FSAP mission.

- Inter-departmental review. Both FSSAs and Article IV staff reports are subject to interdepartmental review and clearance. Moreover, both FSAP and Article IV consultation procedures provide for consultation and consensus-building across departments early in the process. In the case of the FSAP, the team prepare a Financial Stability Policy Note (FSPN) with a preliminary assessment of systemic risk and the financial oversight framework, as well as a preliminary policy line; the FSPN is then discussed at an interdepartmental review meeting and cleared by area departments before the team travels to meet with authorities. This is roughly aligned with the process that has long been in place in place for Article IV consultations.
- 11. Overall, however, there are questions about the extent to which coordination across products, particularly the Article IV consultation and FSAP, provides for a sufficiently continuous assessment of financial stability; these issues are explored further in Caprio (2018) and IEO (2018). There is an innate tension in coordinating work across two very different products—one of which delves deeply into technical financial sector issues every five to ten or more years, and the other of which looks at the broader macroeconomic picture annually. Among other things, Article IV teams often have limited technical capacity to engage and follow up on issues discussed in a detailed FSAP. In fact, while the main recommendations from an FSSA are featured in some Article IV staff reports, especially in the year of or following an FSAP, Caprio (2018) found that many FSAP recommendations receive little attention from IMF staff in subsequent years. Further, there is room for FSSAs to provide a more issues-oriented presentation of financial stability risks to help feed into and guide surveillance more broadly.

C. The 2014–17 Mainstreaming Initiative

12. Accomplishing the integration of financial sector issues in Article IV surveillance in particular has been a longstanding challenge for the IMF. As noted in Takagi (2018), the effort commenced in the mid-1990s, as the IMF took on lessons from crises in Mexico and East Asia. Explicit instructions for staff were included in the 1997 operational guidance note, calling for Article IV staff reports to "include assessments of financial market developments and prospects as well as of problems and policy issues in the banking and financial sector" (IMF, 1997) and also a

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⁶ Resource issues related to allocation of MCM staff to Article IV teams are discussed in Sections III B and C.

⁷ In some cases, a scoping mission goes out early in the process. This typically precedes preparation of the FSPN and operates on the basis of an internal MCM note (FSAP Approach and Staffing Note).

dedicated 1998 note on monitoring financial systems in Article IV surveillance (IMF, 1998). Over ensuing years, the IMF undertook multiple efforts to change practices and enhance analysis.⁸ IMF reviews of surveillance documented some improvements over time, including the 2011 and 2014 Triennial Surveillance Reviews. Nonetheless, gaps and shortcomings remained. Of note, the 2014 TSR stated that "financial and macroeconomic analyses remain fragmented" (IMF, 2014b).

- 13. Seeking to reinvigorate the effort and fully integrate financial and macroeconomic analysis, the IMF launched an initiative following the 2014 TSR to mainstream macrofinancial surveillance in Article IV consultations. In addition to the findings of the 2014 TSR, the effort was informed by an internal staff working group that identified impediments and aimed to set out practical ways forward. The initiative sought to tackle what was described as a dichotomy between the "generalist" macroeconomic perspective and the "specialist" financial perspective, which meant that—unlike other issues such as fiscal, monetary, or exchange rate issues—financial sector issues were not seen as part of the "core work" of area department country teams (IMF, 2014a).
- 14. To operationalize the initiative, the IMF launched a pilot program designed to support a small group of country teams in undertaking the mainstreaming, so that other staff could learn from their experiences. The pilot put area departments in the lead in conducting macrofinancial analysis, with guidance and support from SPR and MCM (which also coordinated the pilot program, combining MCM expertise with SPR experience and authority in the review process). The pilot featured brainstorming sessions to support participating area department country teams, initially focused on themes identified by area departments and later, based on experience in the first year of the pilot, focused on individual country cases and how each team would approach macrofinancial analysis in Article IV surveillance. MCM also provided substantial back-stopping to participating country teams as they incorporated macrofinancial analysis in their consultations, and SPR prepared and shared on an internal website examples of best practices for macrofinancial analysis in Article IV staff reports. In addition, SPR and some area departments introduced a dedicated review of macrofinancial issues, and MCM enhanced the nature and amount of feedback provided in its review of Article IVs. The pilot built in peer

⁸ These included convening an external group of experts known as the McDonough Committee (IMF, 2005) and a subsequent internal task force (IMF, 2007); two 2009 staff report on integration of financial sector issues and FSAP assessments into surveillance (IMF, 2009a; 2009b); and a 2010 paper on "Financial Sector Surveillance and the Mandate of the Fund" (IMF, 2010).

⁹ This was not the first pilot program to enhance financial sector surveillance. The pilot approach was used in 2004–05, when MFD (MCM's predecessor department) provided staff participants for some Article IV missions, as well as guidance on how to address financial sector issues in other countries. The African Department (AFR) and MCM also undertook a pilot on enhancing financial sector surveillance in low-income countries (LICs), summarized in a 2012 staff paper (IMF, 2012b).

¹⁰ Brainstorming sessions were discontinued as the pilot wound down in 2017 but were reintroduced in 2018 when staff's assessments showed a decline in the quality of macrofinancial analysis in countries new to the effort.

reviews to assess progress as the pilot proceeded and to learn from the experience of participating country teams. This effort is discussed in Box 1.

Box 1. Macrofinancial Pilot: A Learning Experience

The pilot program to integrate macrofinancial analysis in Article IV surveillance was designed to help Fund staff learn from pilot teams' experiences and enable staff to adapt the approach as the pilot unfolded. The pilot incorporated several rounds of staff self-assessment to support the learning process. Staff conducted peer reviews in 2015, 2016, and 2017 of Article IV staff reports prepared by teams participating in the pilot to assess the quality of macrofinancial analysis and its integration with policy advice. The peer reviews were conducted by SPR and MCM in 2015 and 2016 and by MCM in 2017. The reviews were structured around a detailed set of questions probing, for example, the depth of coverage of the financial sector; discussion of financial risks and macrofinancial linkages, as well as more specific issues such as credit cycles, macroprudential policies, and balance sheet mismatches; and the integration of financial sector issues in policy advice. In parallel with the peer reviews, staff also surveyed mission chiefs about their experience with the pilot. These assessments helped staff share good practices across country teams and also led to adaptation of the pilot approach, for instance the shift of brainstorming sessions to focus on country cases rather than thematic issues. Seminars with area departments created opportunities to disseminate lessons and help staff incorporate them into their work. The lessons also fed into the 2017 staff paper that summarized progress and laid out plans to extend the initiative across the membership (IMF, 2017e).

Staff's decision to assess the work as it proceeded and make adjustments accordingly—rather than waiting for comprehensive surveillance review some years down the road—provided an important example of incorporating self-assessment in staff work, and as such a step in instilling learning as part of the institutional culture. A discussion of lessons from this pilot, as well as several others, was included as an annex to the 2018 Interim Surveillance Review (IMF, 2018a).

- 15. The 2015 Guidance Note for Surveillance under Article IV Consultations added more detailed requirements on macrofinancial analysis. Earlier guidance on financial sector analysis in Article IVs was provided in self-standing notes in 1998 and 2009, which may have reinforced the sense that financial surveillance was a separate undertaking not integral to the work of area department country teams. The 2015 guidance specifies, inter alia, that macrofinancial analysis should be an integral part of both baseline and risk scenarios and should consider both how financial conditions affect the medium-term baseline outlook and how macroeconomic developments impact the functioning of the financial system (IMF, 2015).
- 16. There are signs that the mainstreaming effort is bearing fruit. The 2018 Interim Surveillance Review found considerable progress in the "integration of macrofinancial surveillance ... incorporating lessons from pilot efforts" (IMF, 2018a). Eighty-five percent of mission chiefs responding to a staff survey for the Interim Surveillance Review felt that the IMF's analysis and understanding of macrofinancial linkages had improved to some or a great extent since the 2014 TSR. IEO work also finds that coverage of macrofinancial issues improved for countries whose staff teams participated in the pilot (Takagi, 2018). Staff interviewed for this evaluation credited the ongoing attention of management as providing an important impetus for the initiative.

17. Nonetheless, the integration of macrofinancial surveillance in Article IV consultations continues to face challenges. According to peer reviews conducted by IMF staff, improvements in the quality of macrofinancial analysis in the first two years of the pilot were not sustained in new cases in the third year. Staff determined that this resulted from a reduction in support from MCM and SPR, resource and time pressures from other pilot programs, and less attention to macrofinancial issues in the area department and SPR review process (IMF, 2017e). It seems that the knowledge-sharing ambitions for the pilot, through which initial teams would receive intensive support from MCM and SPR and then pass on their knowledge to other country teams in their department through informal contacts and cooperation between teams, has not worked as well as hoped to promote cross-fertilization of skills within area departments. A number of staff interviewed for this evaluation also noted that senior reviewers in area departments still sometimes questioned attention to macrofinancial issues in Article IV staff reports.

III. BUDGET RESOURCES FOR FINANCIAL SURVEILLANCE

18. In laying out the 2012 Strategy, IMF staff pointed out that pursuing the "full strategy" and meeting "new demands from the membership on financial surveillance" would require looking at how the Fund's operational budget could be augmented or reallocated in the years ahead (IMF, 2012c). Because financial surveillance is not tracked for budget purposes as a separate activity across the IMF, assessing the extent to which this took place is not straightforward. As a proxy, this section looks at trends in MCM's budget for financial surveillance activities, and across country groupings, including before the 2012 strategy, as well as other data where available.

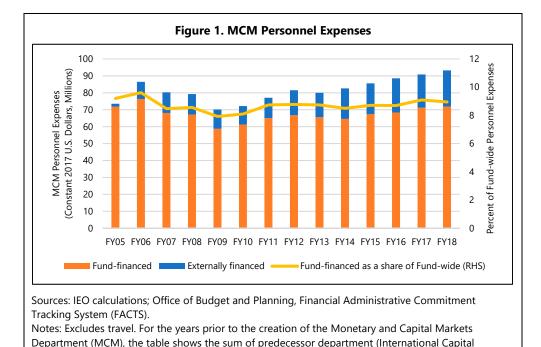
A. MCM Resources

19. The pattern of resources provided to MCM provides one perspective on prioritization of financial surveillance activities in resource allocation.¹¹ After declining during the IMF downsizing and early phase of the crisis (2007–08), MCM personnel expenditures—including work on surveillance as well as lending, capacity development, and policy work—began to expand again in FY2010.¹² Excluding external financing (which is largely directed to capacity development), the level of Fund-financed MCM personnel expenditures is now about the same as it was in the mid-2000s. Specifically, measured in constant FY2017 U.S. dollars, such spending fell from

¹¹ The 2005 McDonough Report focused on resources for MCM predecessor departments (MFD and ICM) as a measure of resource allocation for financial surveillance. However, the data used at that time are not readily comparable with that used here.

¹² All data on personnel expenditures in this paper exclude travel costs.

\$72 million in FY2005 (9.2 percent of Fund-wide personnel spending) to a low of \$59 million (7.9 percent) in FY2009 before recovering to \$72 million (8.9 percent) in FY2018 (Figure 1).¹³



20. A more detailed breakdown of MCM personnel spending is available since FY2010.¹⁴ MCM resources focused on surveillance-related activities consumed about two-thirds of Fund-financed MCM resources in this period.¹⁵ Overall, MCM spending on surveillance expanded from

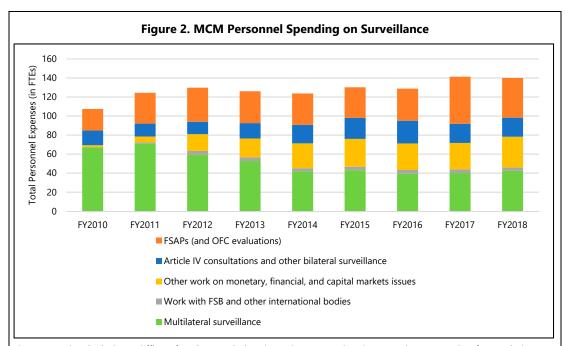
¹³ Including external financing, total MCM personnel expenditures in constant 2017 U.S. dollars grew from \$74 million (9.3 percent of the Fund-wide total) in FY2005 to \$93 million (10.3 percent) in FY2017, largely reflecting expenses for long- and short-term experts mostly engaged in capacity development in the field.

Markets Department and Monetary and Financial Systems Departments) expenses.

¹⁴ In FY2010, the IMF introduced a redesign and simplification of its time reporting system (TRS). The new system, known by the acronym TRACES, aimed to improve time entry and capture more accurately the level of effort devoted to Fund outputs, as part of the IMF's overall Analytic Costing and Estimation System (ACES). Detailed information about resources devoted to outputs is not available prior to FY2010. Higher level data on IMF and MCM personnel expenditures prior to FY2010 (without a breakdown by outputs) that is included in this background paper was provided by the Office of Budget and Planning on the basis of expenditures and comes from the IMF Financial Administrative Control Tracking system (FACTS). FACTS data are available from FY2005 forward.

¹⁵ For this calculation, the following line items are considered to represent surveillance-related activities: multilateral surveillance; work with the Financial Stability Board (FSB) and other international bodies; other work on monetary, financial, and capital markets issues; and bilateral surveillance (FSAP, Article IV, and other). Line items in the MCM budget that were not deemed to be related to surveillance include capacity development and lending. The share of total MCM surveillance-related activities is calculated in dollar terms. In FY2017, \$46.7 million of MCM's total Fund-financed resources of \$71.2 million focused on these activities.

about 110 FTEs in FY2010 to 140 FTEs in FY2018, with some fluctuation. Within this total, as shown in Figure 2, allocation of MCM staff to bilateral surveillance has increased substantially, from 39 FTEs in FY2010 to 62 FTEs in FY2018 (70 in FY2017), or from 23 percent to 32 percent of MCM personnel spending in dollar terms. Well over half of MCM's personnel expenditures on bilateral surveillance focused on FSAPs. MCM has shifted resources away from multilateral surveillance as a whole since FY2010, reining in spending on analytical work (such as vulnerability and other cross-cutting analysis) and inputs to multilateral forums while increasing resources devoted to the *GFSR*. At the same time, work on "oversight of global systems" expanded, including to address emerging issues such as macroprudential policies, fintech, and correspondent banking.¹⁶ Capacity development consumed about 25 percent to 30 percent of Fund-financed resources throughout the period.¹⁷



Sources: IEO calculations; Office of Budget and Planning (Time Reporting System, Time Reporting for Analytic Costing and Estimation System).

Notes: Personnel spending (excluding travel) on Fund-financed activities identified by IEO as related to surveillance. Fund-financed capacity development comprised about 65 FTEs, and lending work about 7 FTEs in FY2018. FSAPs = Financial Sector Assessment Program exercises; FSB = Financial Stability Board; FTE = full-time [staff] equivalent; OFC = Offshore financial center.

¹⁶ In addition, the accounting for work on multilateral forums such as the FSB was moved from "multilateral surveillance" to "oversight of global systems."

¹⁷ When external financing is included, capacity development consumed 46 percent of MCM personnel spending in dollar terms in FY2018, compared to 24 percent for bilateral surveillance. Including external financing, resources devoted to capacity development grew from 92 FTEs in FY2010 to 124 FTEs in FY2018. (Most of external resources were ear-marked for capacity development.)

B. Resources for Key Financial Surveillance Activities

21. Looking at detailed information across the IMF shows that resources for key financial surveillance activities have generally increased since FY2010, with some fluctuation, although there is continued excess demand for MCM support for Article IV teams.

GFSR

22. Fund-wide personnel spending on the *GFSR* increased from 18 FTEs in FY2010 to 30 FTEs in FY2018, representing about 5-6 percent of spending on multilateral surveillance across the Fund. Consistent with MCM's leading role in the *GFSR*, most of this was in MCM, growing from 16 FTEs in FY2010 to 27.7 FTEs in FY2018. This reflects some prioritization of resources for the *GFSR*, which consumed 11 percent of Fund-financed MCM spending in FY2018, up from about 9 percent in FY2010. In May 2018, as part of an ongoing cost cutting effort, the IMF limited future *GFSRs* to one analytical chapter of 15-25 pages.

FSAP

23. Fund-wide spending on FSAPs has fluctuated over time, depending on the number and intensity of assessments underway each year. On average, FSAP work represents about 9-10 percent of Fund-wide personnel spending on bilateral surveillance. (Caprio, 2018 examines the FSAP comprehensively.) In the period FY2010–17, the IMF produced 119 FSSAs, with a total direct personnel cost of 286 FTEs. Direct personnel spending on FSAPs, based on the year of their origination as determined by MCM, has been on an upward trend since FY2014 and reached an annual cost of 55 FTEs in FY2017 (Figure 3). During this period, the number of FSAPs initiated annually peaked at 20 in FY2011 and levelled out at 12-13 over FY2014–17. The confluence of relatively resource-intensive FSAPs in both jurisdictions with systemically important financial sectors (the S29), of which China, India, Japan, and Spain had FSAPs in FY2017, and other jurisdictions (Bulgaria, Indonesia, and New Zealand) led to sharply higher costs in FY2017, even as the number of FSAPs held steady. IMF staff expects the costs of the FSAP program to remain at

¹⁸ According to the IMF's Office of Budget and Planning (TRACES), based on Fund-wide personnel spending.

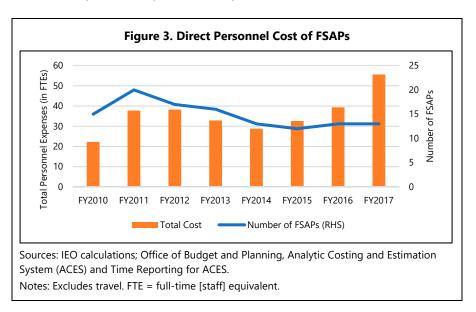
¹⁹ Data for FY18 are not included because of the 12 FSAPs officially started in FY18 only 5 were completed as of August 2018. These figures include personnel costs across the IMF, although most of the costs were within MCM (88 percent in FY2013–17, with 91 FTEs expended by MCM, 7 by LEG, and 4 by area departments together). The figures do not include World Bank expenditures for FSAPs undertaken jointly. The figures also exclude travel.

²⁰ The IMF undertook 25 FSAPs or FSAP Updates in FY2008.

²¹ The S29 are: Australia, Austria, Belgium, Brazil, Canada, China, Denmark, Finland, France, Germany, Hong Kong SAR, India, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, Poland, Russian Federation, Singapore, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States. FSAPs are mandatory for these jurisdictions every five years. For purposes of this paper, the Euro Area is included in this group and related calculations/figures.

least somewhat elevated in FY2018, given a similar confluence of relatively resource-intensive FSAPs, including the Euro Area's first assessment; costs are expected to moderate in FY2019. In 2018 management set a cap of six FTEs for spending on mandatory FSAPs, while allowing for exceptions with prior management approval (IMF, 2018d). Since 2010, eight FSAPs have exceeded the ceiling: the latest FSAPs in the five jurisdictions with the most systemically important financial sectors (China, the Euro Area, Japan, U.K., and the U.S., referred to in this paper as the "S5"), which would be the most likely to receive an exception, and the 2017 FSAP for Spain.

24. As noted in the organizational section above, FSAP teams include external experts, for instance from member country central banks or supervisory institutions. From FY2013–17, external experts composed about one-quarter of FSAP teams (223 of 819 members) and accounted for about 10 percent of personnel expenditures (in FTE terms).²²



Article IV surveillance

25. This paper can only partially illuminate the picture about resources devoted to financial or macrofinancial analysis in Article IV surveillance because the IMF does not separately track the costs of financial and macrofinancial work undertaken as part of Article IV surveillance activities. Two available sources of information point to some increase in resources for macrofinancial surveillance: estimates of spending associated with the pilot program to mainstream macrofinancial surveillance launched in 2014; and MCM personnel expenditures on Article IV surveillance. However, data are lacking on resources that other departments devoted to financial surveillance as part of Article IV work, other than support for the pilot program. In any case, it

²² External experts represent a small share of the personnel costs; they typically join the teams primarily for the mission and are often not involved in the preparatory and follow-up work.

seems unlikely that these resources have increased significantly since area departments' overall budgetary envelopes have declined slightly since FY2012 even as these departments have participated in pilots on emerging issues, in addition to integrating macrofinancial surveillance.²³

- 26. Costs of the macrofinancial pilot. IMF staff estimated the additional cost of the pilot program at about 30 FTEs in FY2016 and projected this cost at 34 FTEs in FY2017 and FY2018. About half of these resources were expended by area departments, one-quarter by MCM, and the other quarter by RES, SPR, the Institute for Capacity Development (ICD), and STA. In area departments, the additional resources reflected activities undertaken by macrofinancial teams or working groups to support country teams, such as brainstorming and enhanced review, but not the work done by individual country teams participating in the pilot. In functional departments, these costs reflected analytical work and tools, direct support to area department teams, and training development and delivery. Costs related to the pilot were expected to drop off in FY2019 as start-up activities diminished (IMF, 2018b).²⁴
- 27. Most mission chiefs reported that the additional staff time required for participation in the pilot was less than four person-weeks, or about 0.08 FTEs. The 2018 Interim Surveillance Review asked mission chiefs to estimate the additional resources (in person-weeks) required to participate in the macrofinancial pilot. One-quarter (26 percent) of mission chiefs indicated that participation required more than an additional four person-weeks; 39 percent reported two to four person-weeks, 18 percent reported less than two person-weeks; and 11 percent reported no change (IMF, 2018a).²⁵
- 28. MCM resources for Article IV surveillance. As discussed in Section II, MCM participates in Article IV surveillance in several ways—by providing staff to participate in Article IV country teams, by serving as a resource for country teams (e.g., brainstorming about key issues, providing back-up for teams in the field ("backstopping"), and offering other support on specific technical issues), and by reviewing staff reports. Allocation of MCM staff to country teams is based on

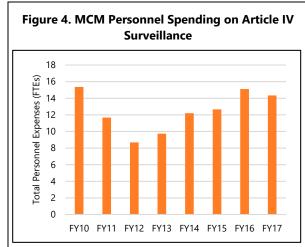
²³ Area department personnel spending fell from \$235 million in FY2012 to \$230 million in FY2018, after peaking at \$245 million in FY2015. (These figures represent Fund-financed spending in constant 2017 U.S. dollars, excluding travel). Area department personnel resources also fell off slightly as a share of the Fund-wide total, from 31 percent in FY2012 to 29 percent in FY2018, after reaching 32 percent in FY2015.

²⁴ The IMF Medium-Term Budget prepared in March 2018 noted that "as emerging issues are incorporated into existing work, the pattern of resource use is often hump-shaped, with some start-up investments needed in the initial years, often covered by transitional resources, tapering off as expertise is accumulated and shared" (IMF, 2018b).

²⁵ Five percent did not answer. Among the other pilots, the macrostructural pilot and gender pilots were more resource intensive for teams that participated. For the macrostructural pilot, 50 percent of mission chiefs whose teams participated reported that more than four additional person-weeks were required and 19 percent reported that two to four additional person-weeks were required. For the gender pilot, 14 percent of participating mission chiefs reported that more than four additional person-weeks were required; 57 percent reported that two to four additional person-weeks were required.

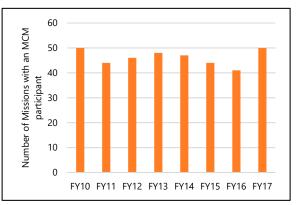
consultations between MCM and each area department, with MCM setting resource envelopes and area departments determining priorities and needs.²⁶ MCM also leads the Financial Surveillance Group, which staff sees as an important forum for learning and sharing of expertise.

29. MCM personnel spending on Article IV surveillance averaged 12.5 FTEs per year over the period FY2010–17 (Figure 4), according to the IMF's time reporting data system (TRS/TRACES).²⁷ This spending includes participations in missions, review of staff reports, backstopping of country teams, and meetings with authorities when they travel to Washington. During this time, MCM participated in 370 Article IV missions covering 123 different countries (or jurisdictions, including for example Hong Kong SAR). MCM participation in Article IV missions overall averaged 46 missions per year (Figure 5), about 30 percent of the total. MCM reviewed an average of 54 Article IV staff reports per year in FY2013–17, about 36 percent of the total; the list of countries covered each year overlaps with but is distinct from those in which an MCM participant joined the Article IV mission.²⁸ Going forward, MCM plans to increase the number of countries it reviews to 100—about three-quarters of the total—by shifting its focus toward policy notes prepared in advance of missions and only reviewing full Article IV staff reports when there are controversial or difficult issues.



Sources: IEO calculations; Office of Budget and Planning, Time Reporting System, and Time Reporting for ACES. Notes: Excludes travel. FTE = full-time [staff] equivalent.

Figure 5. MCM Participation in Article IV Missions



Sources: IEO calculations; Monetary and Capital Markets Department.

²⁶ The pattern of assignments within area departments appears to raise questions in some cases. For instance, seven Article IV missions for Myanmar and six for Vietnam had an MCM participant from FY 2010–17, while there were no MCM participants on the Thailand Article IV team in the same period.

²⁷ As discussed above, MCM also has an output labelled "other bilateral surveillance," which includes the broader costs of the pilot program, along with several cross-cutting projects. Including these resources, MCM spending on non-FSAP bilateral surveillance declined less sharply from FY2010–12, and to 24 FTE by FY2016 before dropping off in FY2017.

²⁸ MCM reviewed 268 Article IV staff reports for 117 jurisdictions in this period.

30. Adequacy of resources. There is evidence that the adequacy of resources has been a constraint in addressing financial/macrofinancial issues as part of Article IV surveillance. In reviewing progress in implementing the Financial Surveillance Strategy in 2013, staff indicated that resource constraints had impeded progress in some areas, noting that some "requests for MCM support had not been fully met (IMF, 2013). Further, when asked in 2018 about the "main challenges" mainstreaming macrofinancial integration, more than half (54 percent) of mission chiefs saw "other priorities" as one of the "main challenges" for mainstreaming macrofinancial integration—suggesting resource pressures as other newly emerging issues have received increased attention (although word limits on staff reports may also pose a constraint). Resource constraints were also mentioned in interviews with IMF staff conducted for the evaluation.²⁹ Within a flat budget envelope, the cycle of resource-intensive mandatory FSAPs could be expected to constrain resources available for other work, including MCM support for Article IV consultations. More broadly, IMF staff concluded in October 2017 that area departments were approaching the limit of their ability to accommodate new initiatives through reallocation of resources, while non-TA functional departments still appeared to have room to accommodate new demands (IMF, 2017c).

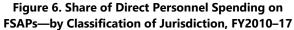
C. Allocation of Resources Across Countries and Country Groupings

- 31. The IMF has indicated its intent to allocate resources using a risk-based approach, including for financial surveillance. The 2008 TSR stated that financial expertise "should be deployed in priority according to the criteria of systemic/regional importance, importance of vulnerabilities, and importance of financial development issues for present or prospective macroeconomic or external stability" (IMF, 2008). The 2011 TSR further recommended that an MCM expert participate in every S29 Article IV mission (IMF, 2011a) and the Managing Director included this step in her subsequent Action Plan to follow up on the TSR (IMF, 2012a). IEO evaluations in 2011 and 2014 also recommended prioritizing attention to financial surveillance in countries that pose greater risks to the global financial system (IEO, 2011; 2014).
- 32. Staffing and budget data analyzed for this evaluation point to prioritization of resources for financial surveillance in the S29—both with respect to FSAPs and Article IV surveillance work.³⁰
- 33. FSAPs for the S29 accounted for 56 percent of expenditures for the program as a whole in FY2010–17 (Figure 6). Resources were further concentrated in the S5 cases—which consumed 20 percent of the resources expended on FSAPs in this period. The timing of country cases led to substantial variation by year (Figure 7).

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²⁹ On the other hand, only 15 percent of respondents to the IEO survey for this evaluation reported that their team faced time constraints that limited the attention to financial and macrofinancial issues.

³⁰ Resource constraints impeded efforts as part of the 2012 Financial Surveillance Strategy to increase the frequency of FSAPs to non-S29 countries (IMF, 2013).



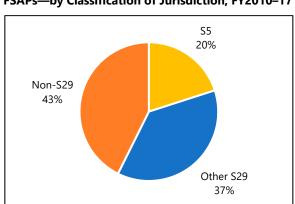
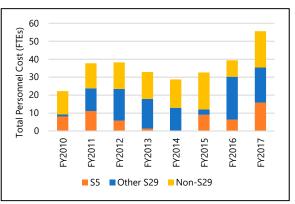
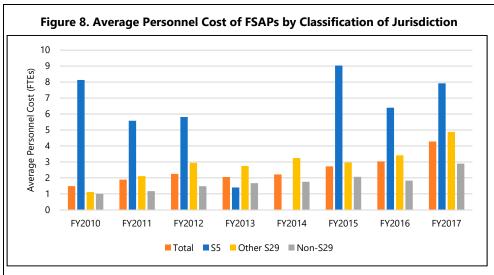


Figure 7. Direct Personnel Spending on FSAPs—by Classification of Jurisdiction



Sources: IEO calculations; Office of Budget and Planning, Time Reporting System and Time Reporting for ACES. Notes: Excludes travel. FTE = full-time [staff] equivalent.

34. The IMF personnel cost per FSAP also shows a concentration of resources in the S29 financial sectors, as well as an overall trend of increasing costs over time. The average IMF cost of FSAPs for the S5 financial sectors in FY2010–17 was 6.5 FTEs, far exceeding the average across all countries of 2.4 FTEs (Figure 8).³¹ The average cost of FSAPs for the full S29 was 3.75 FTEs. The average cost of FSAPs for non-S29 financial sectors also rose over time, from one FTE in FY2010 to nearly three FTEs in FY2017.



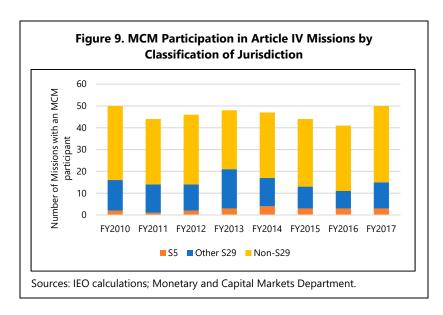
Sources: IEO calculations; Office of Budget and Planning, Analytic Costing Estimation System, Time Reporting for ACES.

Notes: Excludes travel. FTE = full-time [staff] equivalent.

³¹ The divergence in average cost between S29 and non-S29 jurisdictions would diminish if World Bank costs were taken into account.

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35. MCM participation in Article IV missions also focused more on the S29. MCM participated in half the Article IV missions for the S29 countries during FY 2010–17, compared with about 20 percent in the non-S29 countries (Figure 9). Of country cases reviewed by MCM in FY2013–17, on average 60 percent were non-S29, covering about two-thirds of S29 staff reports each year (and 100 percent of S5 staff reports). On the other hand, only 22 percent on average of staff reports for non-S29 countries were reviewed by MCM. While AFR received the least MCM support, both in participation in mission teams and in MCM review, AFR countries received substantial technical assistance from MCM.³²



IV. HUMAN RESOURCES FOR FINANCIAL SURVEILLANCE

36. Enhancing the IMF's human capital for carrying out the institution's work on financial and macrofinancial surveillance has been an ongoing theme at least since 2000. The 2001 report of a panel of external experts (known as the "Lipsky Report") emphasized the need to enhance the level of expertise on financial sector and capital markets issues, as well as the focus of work and the support provided to area departments (IMF, 2001). Despite some progress, the 2005 McDonough Report (IMF, 2005) highlighted the importance of strengthening further the understanding of finance among Fund staff, attaching greater value to such skills, and making better use of these skills in the Fund's mainstream surveillance activities. Nonetheless, the 2008

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³² Over the course of FY2010–17, 36 AFR missions included an MCM participant, and 63 Article IVs were reviewed by MCM. This compares to 76 participants and 83 countries reviewed in the Asia-Pacific Department (APD); 136 participants and 131 countries reviewed in the European Department (EUR); 45 participants and 53 countries reviewed in the Middle East and Central Asia Department (MCD); and 77 participants and 77 countries reviewed in the Western Hemisphere Department (WHD). Although AFR had more Article IVs reviewed than MCD, the coverage was lower relative to the number of countries in the department. Forty percent of MCM technical assistance in 2014–17 went to AFR countries, amounting to about 30 FTEs each year, as countries sought IMF expertise in areas including financial supervision and regulation (IMF, 2017d).

TSR concluded that "demand for financial expertise exceeds current supply" in the institution and that "macrofinancial expertise must be further built and used strategically," including through training programs to develop capacity, HR policies facilitating training assignments and swaps, and recruitment of financial sector specialists (IMF, 2008).

- 37. The IMF needs to staff three broad interrelated but distinct activities: technical work on specific financial sector activities (such as banking, insurance, or pensions) and financial markets; macrofinancial and financial stability analysis at the country and global level; and analytical work on financial economics (including research, development, implementation, assessment tools, and the training of fungible economists). Financial sector experts (FSEs) have typically shouldered much of the technical work.³³ Financial stability and macrofinancial analysis, at the country and global level, is for the most part conducted by fungible macroeconomists, some of whom have also developed expertise and contribute in technical areas such as stress testing, macrofinancial analysis, and macroprudential issues. Although not designated by a separate category or title in the IMF, staff trained as financial economists would ideally carry out deeper cross-country analytical work, as well as advising on difficult country issues. Some staff straddle more than one skill set, and some tasks require more than one type of skill.
- 38. Recognizing the need for enhanced financial surveillance, the 2011 TSR shifted attention from relying on financial experts to enhancing the financial skills of fungible macroeconomists working on country teams in area departments, noting that "a key question is how best to build up financial sector capacity in Article IV mission teams" (IMF, 2011a). In following up on this TSR, the Managing Director's action plan called for increased training for teams conducting Article IV surveillance.³⁴ The 2012 Strategy further emphasized the importance of developing greater expertise within country teams (IMF, 2012c), and the 2014 TSR identified ongoing concerns about the adequacy of staff skills and argued that mainstreaming of macrofinancial surveillance "requires ... gradually shifting the profile of Fund economists to ensure they have adequate macro financial skills through training and personnel policies" (IMF, 2014b).

³³ The IMF also draws on short-term experts to fill specific roles, for instance on FSAP teams or to provide technical assistance in member countries.

³⁴ "In the absence of sufficient support [in the Executive Board] for increasing the frequency of mandatory FSAPs for systemic economies, we need alternative modalities to ensure progress. A financial expert will be assigned to each Article IV team involving systemically important financial sectors. Additional resources will be mobilized for these countries as well as others as needed.... Coverage of financial issues in Article IVs will be further strengthened by (i) stepped-up training and dissemination of vetted tools (e.g., stress-tests) and good practices, including on LIC-specific issues, so that they can be effectively used by country teams and (ii) cross-country thematic studies (e.g., on interconnectedness and the role of financial deepening). Staff will also intensify efforts to draw cross-country lessons from FSAPs" (IMF, 2011b). These steps were also part of follow-up on recommendations made by the IEO in its evaluation of *IMF Performance in the Run-Up to the Financial and Economic Crisis*, as detailed in the subsequent Management Implementation Plan (IMF, 2012a).

- 39. Subsequently, the IMF launched a new effort, as part of the broader initiative to mainstream macrofinancial surveillance in Article IV surveillance, to enhance macrofinancial skills of fungible macroeconomists, while acknowledging the continued need for "specialists" in MCM.³⁵ An internal working group enumerated the necessary skills: a basic understanding of banking, corporate finance, asset pricing, and risk management; an ability to analyze the balance sheet of the banking system and identify key interactions with the macroeconomy; a capacity to identify major sources of financial sector risk and quantify their potential impact on the real economy, public finances, and balance of payments; and a facility for high-level dialogue on policies to mitigate these risks. The Fund set out to develop these skills through training, mobility initiatives, and increased attention to macrofinancial skills in recruitment (IMF, 2014e).
- 40. Despite these efforts, there are ongoing concerns both inside the IMF and beyond about the adequacy of IMF financial and macrofinancial expertise. More than half of mission chief respondents to a summer 2017 survey for the Interim Surveillance Review indicated that "lack of financial expertise on country teams" was among the "main challenges for mainstreaming macrofinancial integration" (IMF, 2018a).³⁶ Thirty percent indicated that hiring more staff with financial expertise would help increase Fund staff understanding of macrofinancial linkages. Authorities in a number of emerging market and developing economies perceive staff expertise and experience on financial sector issues to be not as well-qualified as their own staff (Takagi, 2018). Half of respondents to the IEO survey of the Executive Board for this evaluation reported that IMF staff were "well-qualified to analyze financial and macrofinancial issues," but one-third found that IMF staff was only "minimally qualified" to perform this function (Monasterski, 2018).

A. Taking Stock

- 41. The Fund does not have an inventory of skills of IMF staff that would allow it to assess staff expertise, for instance in macrofinancial analysis, and to track changes over time. MCM maintains a skills database that acts as a *de facto* locator for financial sector expertise, and the Human Resources Department (HRD) has also tapped into travel data to undertake broad-brush skills assessments.
- 42. The IEO surveyed IMF staff about their background, experience, and their own sense of their skills on macrofinancial issues (Box 2). The results of this survey suggest greater capacity

³⁵ The strategy also recognized the need to maintain "specialist" financial skills within MCM to backstop surveillance teams, provide advice on implementation, and deliver technical assistance where needed (IMF, 2014a).

³⁶ A shortage of skills may not be most important challenge for macrofinancial surveillance. Other "main challenges" cited by mission chiefs were "data availability" (67 percent) and "other priorities" (54 percent). As in section III B above, number of IMF staff interviewed for this evaluation also expressed the concern that resource constraints and competing priorities, at least as much as staff skills, constrained the ability of desks/mission teams to give adequate attention to macrofinancial issues and fully integrate them in Article IV staff reports.

than would be suggested by the views of mission chiefs and authorities in paragraph 41 above, perhaps because those that responded to the survey were more interested in financial sector issues than the average economist.

Box 2. How Do IMF Staff Assess Their Own Capacity for Macrofinancial Surveillance?

Several aspects of IMF staff assessments of their own macrofinancial skills in the survey for this evaluation were reassuring. However, these self-assessments also suggest that a considerable distance remains to achieve the IMF's goal of making macrofinancial analysis a fundamental skill for all IMF economists.

An IEO survey for this evaluation asked staff to describe their background and experience before coming to the IMF and to assess their own skills in key aspects of macrofinancial surveillance. About 30 percent of the 1,368 A11-B4 staff who received the survey responded; about 80 percent of respondents were fungible macroeconomists. In considering the results, it is important to recognize that those who responded may be more likely to have experience, or be interested, in financial sector issues, so that the snapshot of skills and experience provided may not be representative overall.

Training and prior experience. Thirty percent of respondents reported that they had an academic degree either in finance or in macroeconomics with a specialization in finance. Twenty percent of respondents had experience working in a private financial institution. Half of respondents considered themselves to be macroeconomists with significant financial sector expertise, while 6.5 percent classified themselves as financial sector experts with macroeconomic expertise, and 3.5 percent as financial sector experts with little or no macroeconomic expertise.

Skills. More than half of IMF staff respondents reported that they were adequately qualified or expert in four of the five macrofinancial skill sets that the IEO survey addressed. Two-thirds of respondents assessed themselves to be adequately qualified or expert in integrating financial variables in baseline projections and quantifying the possible macroeconomic impact of financial sector risks. Eighty percent believed that they were adequately qualified or expert for interacting with authorities in a dialogue on relevant financial sector issues. Staff had less confidence on analysis of bank balance sheets, where about half believed they were adequately qualified or expert, while 30 percent assessed themselves to be minimally qualified, and nearly 20 percent considered that they were not qualified. Staff were least comfortable with their skills related to simple stress testing for banks: 63 percent judged themselves minimally or not qualified, while 29 percent believed they were adequately qualified and 8 percent believed they were expert.

Incentives. Encouragingly, 72 percent of respondents felt that financial and macrofinancial skills contribute significantly or to some extent to career advancement in the IMF.

43. The distribution of staff across IMF job functions provides a basic profile of professional staff competencies. The IMF has two career streams—the economist stream and the specialized career stream (SCS).³⁷ Within the economist stream, there are two-subgroups, fungible macroeconomists and specialists.

¹ Perform bank balance sheet analysis (53 percent); perform simple stress tests for banks (37 percent); integrate financial variables in baseline projections (65 percent); quantify possible macroeconomic impact of financial sector risks (63 percent); interact with the authorities in a dialogue on relevant financial sector issues (80 percent).

³⁷ The SCS includes lawyers, accounting and audit staff, and a wide range of administrative staff (human resources, financial operations, information management and technology, etc.).

- Fungible macroeconomists compose the largest share of IMF staff carrying out operational work and are expected to have a broad range of skills in order to conduct core functions of the institution. In FY2017, according to HRD data, about three-quarters of economists on Fund staff (1,264 of 1,743 total economists, including long-term contractuals) were fungible macroeconomists. More than half (about 700) fungible macroeconomists worked in area departments and about 100 in MCM. As part of the 2014 TSR follow-up, the IMF added macrofinancial skills to the basic qualifications expected of this group (as noted in paragraph 40 above). Nonetheless, depending on their background, training, and experience, they may or may not be well qualified on financial and macrofinancial issues.
- Specialist economists focus on particular areas of the Fund's work; FSEs fall within this group, along with fiscal and statistical experts.³⁸ Specialist economists on average have shorter tenure than fungible macroeconomists.

Staff trained as financial economists may be found in either function, depending on their background and experience as well as their particular role in the institution.

44. The number of FSEs in the IMF has increased more than three-fold in the last decade, although they still represent a relatively small group of Fund staff. There were 25 FSEs on IMF staff in FY2007, split evenly between MCM and LEG; by FY2017 this number had grown to 90, 80 of which were in MCM (Figure 10).³⁹ By FY2017, there were three FSEs for every four fungible macroeconomists in MCM (Figure 11).⁴⁰ Unlike for fungible macroeconomists, there is no explicit description of a job ladder for FSEs.⁴¹ While some FSEs may have training in macroeconomics, and as discussed below may seek to transition to fungible macroeconomist status, many are specialists who came to the Fund with relevant experience in central banks, regulatory agencies and occasionally the private sector but who are not necessarily well-qualified to carry out macrofinancial work in Article IV surveillance (IMF, 2014a).

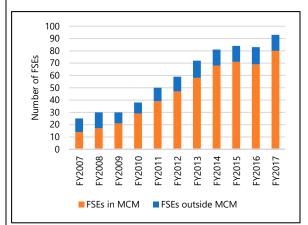
³⁸ Also included in the specialist stream are some economists/senior economists, managers (from deputy division chiefs up to department directors). IMF staff note that the specialist label becomes less binding at higher grades.

³⁹ This includes: FSEs, Senior FSEs, Lead FSEs, who were employed as IMF staff; and contractual employees based at headquarters to provide technical assistance (HQTA FSE/Senior FSE).

 $^{^{40}}$ In FY2017 MCM had 108 fungible macroeconomists on staff. MCM's 80 FSEs included 52 specialist economists on staff and 25 contractual employees. Three fungible macroeconomists had the FSE title.

⁴¹ Such career ladders are on the IMF intranet.

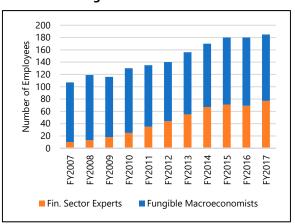




Sources: IEO calculations; Human Resources Department, Travel Information Management System.

Notes: FSEs = Financial Sector Experts; MCM = Monetary and Capital Markets.

Figure 11. MCM Staff Composition: Number of Financial Sector Experts and Fungible Macroeconomists



Sources: IEO calculations; Human Resources Department, Travel Information Management System. Notes: MCM = Monetary and Capital Markets.

B. Efforts to Enhance IMF Staff Capacity

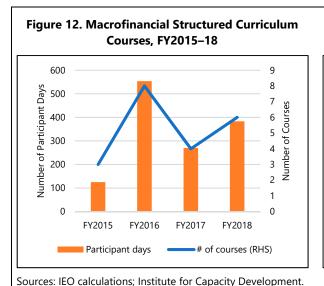
45. As part of the initiative to mainstream macrofinancial surveillance in Article IVs, the IMF set out to develop a macrofinancial training program, encourage internal mobility and take macrofinancial skills into account in recruitment policies (IMF, 2014e).⁴²

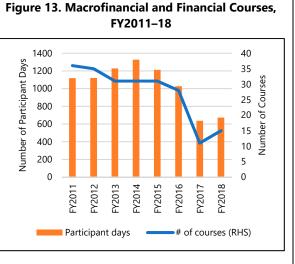
Training

- 46. To support the mainstreaming effort launched in 2014, ICD created a structured curriculum for macrofinancial analysis. The curriculum was initially designed as a sequence of five courses but was adjusted to be more flexible to allow for staff time constraints, as well as needs or interests. This was part of a broader structured curriculum intended to equip A11-14 staff with a standard and credible set of skills, concepts, and tools, and to help get managers on board with allowing time for training. Other internal training outside the structured curriculum also continued, designed to complement the structured curriculum courses, for instance to bring in market perspectives on financial and macrofinancial issues.
- 47. Macrofinancial training via the structured curriculum was initially met with strong demand, with a sharp increase in participant days in FY2016, reflecting staff interest. Participation in the structured curriculum reached 553 participant days in FY2016, representing over half of

⁴² This step built on earlier work to strengthen financial sector expertise in the IMF through training, including as part of the follow-up to IEO recommendations. In the latest review of the status of implementation, IMF staff indicated that action to strengthen coverage of financial issues in Article IVs through stepped-up training remains ongoing (IMF, 2018f).

training in financial and macrofinancial issues, but fell back to 270 in FY2017 as a result of fluctuating demand before partially rebounding to 383 in FY2018 (Figure 12). Participation in training events addressing both macrofinancial and financial issues overall, however, began to decline in FY2015 and recovered slightly in FY2018 (Figure 13).





- 48. ICD staff indicate that they ramped up the structured curriculum courses quickly, doubling up on the courses offered in FY2016, as part of the follow-up to the 2014 TSR, and to help prepare staff for the macrofinancial surveillance pilot program. This effort was scaled back in FY2017, reflecting a fall from the unusually high level of demand in FY2016 due to the pilot, as well as a shift of resources and attention to macrostructural issues in support of the pilots in those areas (IMF, 2018f). The rate of oversubscription in courses in the structured curriculum for macrofinancial issues did not increase in FY2017 despite the fall in the number of courses, and under-enrollment (shortfall in attendees relative to capacity offered) was slightly higher on average in FY2017 than FY2016.
- 49. There is limited evidence of the impact of training on staff skills and performance of macrofinancial surveillance, and on how much impact training has had on the mainstreaming of macrofinancial surveillance. Most respondents to the IEO survey of IMF staff for this evaluation who participated in the training reported that it was "very" or "somewhat useful." However, the share of economists (A11-B3) who have attended at least one macrofinancial structured curriculum course in CY2015–17 remains relatively small, 15 percent overall and 25 percent in area departments. Indeed, IMF staff respondents to the IEO survey for this evaluation indicated that on-the job-experience had been more helpful than training in developing their macrofinancial skills and expertise. Nonetheless, it appears that training such as that offered by

⁴³ Of 386 respondents to the IEO survey, 223 had participated in the training; 25 percent of these found it very useful, 57 percent found it somewhat useful, and 18 percent found it minimally or not useful (Monasterski, 2018).

the structured curriculum is still considered valuable: mission chiefs surveyed in mid-2017 for the Interim Surveillance Review were of the view that more training in use of analytical toolkits, finance and financial sector issues could help strengthen IMF staff understanding of macrofinancial linkages.⁴⁴

Hiring/recruitment

- 50. The IMF has also sought to enhance staff capacity for financial surveillance by hiring new staff, whether fungible macroeconomists with financial skills or financial sector experts.
- 51. Fungible macroeconomists. The IMF has taken several steps to emphasize financial sector and macrofinancial skills in the recruitment of fungible macroeconomists. There are two routes for such hiring: the Economist Program (EP) serves as the vehicle for annual recruiting and hiring at the entry level, primarily recent PhDs, while the Mid-Career Panel (MCP) targets candidates with some prior experience.⁴⁵ Past internal studies have expressed concerns about whether advertisement and recruitment sufficiently sought out candidates with experience or training in financial economics or macrofinancial skills (IMF, 2014a). As part of the mainstreaming initiative, HRD indicated that it has taken steps to broaden screening through both the EP and MCP to include individuals with financial sector experience.
- 52. Nonetheless, according to internal HRD data, hiring has yielded only a modest flow of new of fungible macroeconomists with identifiable macrofinancial skills or experience—on average six EPs and seven MCPs each year, representing about one-quarter of total hires in each category. Holder the EP, one-third of applicants for the 2017 and 2018 cohorts had specialized in financial economics; while these applicants were interviewed at a higher rate than the full group of applicants, the share who received offers as well as the rate of acceptance were lower (Figure 14). On the other hand, MCP applicants with macrofinancial experience from mid-2013 through mid-2017 were more likely to be hired than the overall group of applicants. However, these macrofinancial hires were concentrated in the earlier part of this period: after surging to

⁴⁴ Half of mission chiefs responding to the 2017 Interim Surveillance Review survey conducted by SPR expressed this view, although it was not the factor most frequently selected. Greater dissemination of analytical toolkits and best practices were identified by 60 percent of mission chiefs; half also thought that greater involvement by MCM would help in this respect (IMF, 2018a).

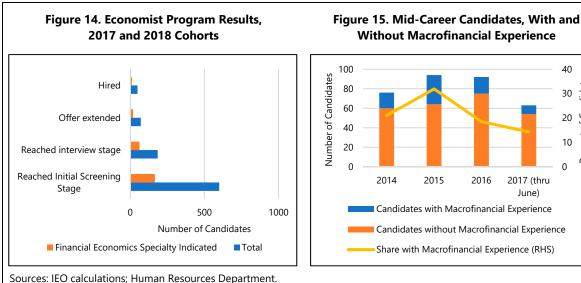
⁴⁵ Mid-career applicants take a written test and participate in a panel interview; those who pass are included in a pool of approved candidates from which departments select when they have a vacancy. The panel process is conducted three times each year.

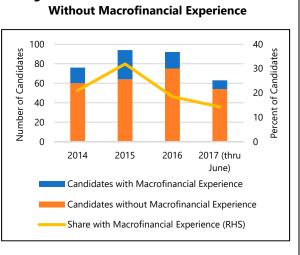
⁴⁶ The 2017 Risk Report comes to a similar conclusion, noting that macrofinancial skills acquired through hiring of mid-career economists dropped off sharply between CY2015 and CY2016, and that the number of EPs hired with these skills dropped as well (IMF, 2017c).

⁴⁷ In hiring seasons for 2017 and 2018, candidates were asked to identify the primary area of economic specialty covered during their PhD work. They were permitted to choose two or three areas. Earlier data are not available.

one-third of MCP hires in CY2015, the share of individuals with these skills declined to 15 percent of total MCP hires in 2017 (Figure 15).48

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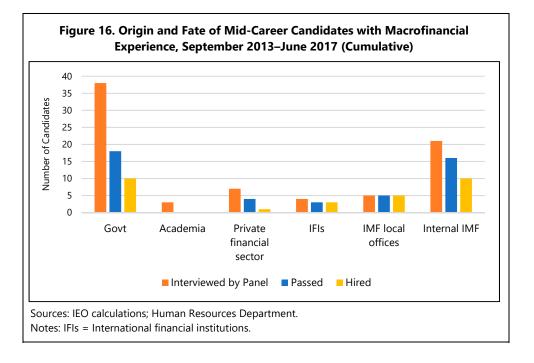


- 53. Most mid-career hires with macrofinancial skills come from member country central banks or finance ministries, or from limited appointments within the IMF, for instance as financial sector experts (Figure 16). The IMF attracts very few candidates from the private financial/banking sector to the mid-career pool: there were only 12 such candidates in the period from September 2013 through June 2017; seven of these candidates passed the panel stage and three were hired.⁴⁹ The pass rate for private sector candidates was about the same as that for the overall population (58 percent), but a smaller share of those who passed the panel stage were hired (42 percent compared to 60 percent for all those who passed the panel stage).
- 54. Beyond the recruitment and screening process itself, a number of other factors influence the characteristics of individuals hired by the IMF. Area and functional departments are free to select MCP candidates from the pool that pass the panel. According to some IMF staff interviewed for this evaluation, area departments in particular tend to focus on generalist macroeconomists and have been slow to shift to include individuals with financial sector expertise. Further, some staff reported that interest shifted after 2015 to focus on MCP candidates with expertise or experience in fiscal and macrostructural issues. In general, low turnover of IMF staff has tended to limit the impact of hiring in boosting financial skill sets in the

⁴⁸ Fourteen took a position in area departments, six in MCM, and the remaining went to ICD, the Fiscal Affairs Department, SPR, and RES.

⁴⁹ Candidates with expertise in financial and macrofinancial areas may be more likely to come to the Fund as FSEs; see below. Of the twelve candidates from the private financial sector, seven were identified by IMF recruiters as having macrofinancial skills/experience, four passed the panel stage and one of these was hired.

short to medium term.⁵⁰ However, current projections indicate a rising retirement rate among fungible macroeconomists, meaning there may now be more potential to shift the balance.⁵¹

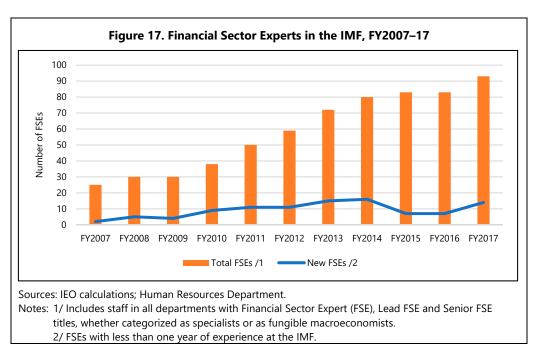


- 55. In addition, there is some evidence that well-qualified private sector economists with financial sector experience looking at mid-career entry find it hard to obtain a position which they think is appropriate for their experience and responsibility—even when they are prepared to accept a considerable reduction in compensation. Further, mid-career hires may find it harder to achieve promotions, compared to staff hired early in their careers through the Economist Program who have had more opportunities to build up Fund-specific skills and networks.
- 56. Specialists: Financial Sector Experts. Departments hire specialists on an as-needed basis. In these cases, HRD facilitates the advertisement of positions and processes applications, while individual departments including MCM screen resumés, interview applicants, and make selections. Specialists are hired in one of three capacities: as regular staff, on term appointments, or on a contractual basis, depending on the nature of their role.
- 57. The number of FSEs has increased markedly since 2007, as noted above, even as these specialists continue to represent only a small share of IMF staff. During the period FY2012–17,

⁵⁰ After declining somewhat following the downsizing, average tenure of fungible macroeconomists in the IMF has been on an upward trend since 2011. The tenure of fungible macroeconomists in the IMF declined from 11.2 years in FY2007 to 10.7 in FY2010; by FY2017 it had risen to 12.8 years.

⁵¹ HRD projections show the retirements rising from 19 on average in FY2013-16 to 20 in FY2017, 30 in FY2018, and 39 in FY2019.

the IMF brought on board 70 FSEs, 64 in MCM.⁵² Hiring of new FSEs slowed in FY2015 and FY2016 (Figure 17); some staff interviewed for this evaluation suggested that this occurred as the institution reached saturation of FSEs, with the perceived right amount of expertise. In addition to public advertisements, MCM relies on its network of existing and past experts to get the word out; each advertised position reportedly can attract as many as 100 applicants. On the other hand, there were also reports of long search periods due to challenges in recruiting experts with both technical expertise and policy experience—particularly in cybersecurity and fintech. Potential underlying factors include the IMF's practice of hiring such experts on a temporary or contractual basis and, for those with financial market experience, difficulties in competing with private sector salaries.



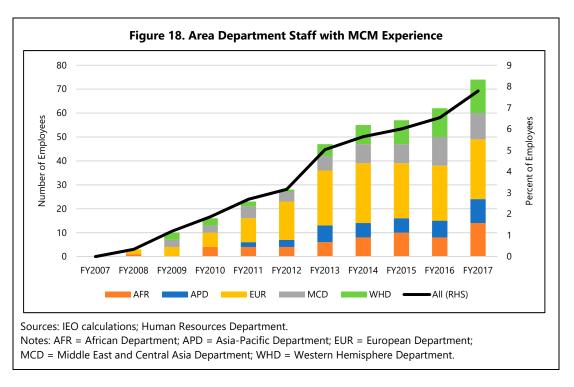
Deployment and mobility

- 58. Beyond training and hiring, the IMF has worked to deploy talent within the institution to help enhance staff capacity for financial and macrofinancial surveillance. Staff with financial or macrofinancial skills can bring their skills and experience to bear directly in their work and can also impart knowledge and skills to other staff in their new department.
- 59. The IMF has made significant progress in dispersing expertise across the institution. The number of fungible macroeconomists working outside MCM that had experience in MCM increased from 5 in FY2008 to 97 in FY2017. The number of area department staff with MCM experience more than doubled from FY 2012 to FY 2017, reaching 8 percent of area department economists (Figure 18). All area departments saw some increase, but EUR had the largest share

⁵² These figures represent the number of FSEs with less than one year of tenure at the IMF in any one year or period, rather than a specific accounting of new hires.

of staff with MCM experience, at 12 percent in FY2017. In interviews for this evaluation, the IEO heard reports of valuable contributions made by MCM staff who took positions on teams or networks focusing on macrofinancial surveillance, as well as cases in which area department staff rotated to MCM and returned bringing additional skills and experience.

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60. However, targeted mobility programs designed to advance these goals have had limited impact themselves. In FY2016, HRD and MCM launched a Macrofinancial Mobility Program (MMP) to help enhance expertise as part of the effort to mainstream macrofinancial surveillance. This program was voluntary, aimed to attract A13-A14 and A15 economists and financial sector experts in MCM and area departments to make temporary or permanent lateral transfers. It yielded only half of its goal of six swaps (12 staff moves); all of the participants were fungible macroeconomists, as no FSEs volunteered. A 2016 MCM/HRD analysis of the limited results pointed to the time-intensive process involved in arranging swaps and competition with the more agile internal vacancy system, which IMF staff concluded may be a more effective tool for facilitating moves between MCM and area departments (IMF, 2016).⁵³ Three additional swaps were completed in FY 2017 and one transfer was completed in FY2018. MCM continues to explore transfers through this program on an ongoing basis.

⁵³ The MMP was originally conceived as a three-way swap amongst new external hires, MCM staff, and area department staff, to promote infusion of new skills and experience from outside, transfer of skills from MCM to area departments, and movement of area department staff into MCM to enhance skills and experience. Reportedly, Fund-wide budget constraints meant that no new external staff were hired for the MMP, which then became a bilateral swap between area departments and MCM and "could not fully succeed as anticipated."

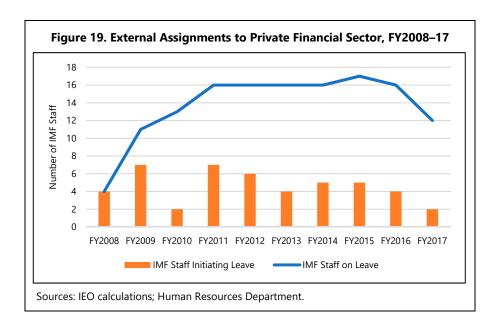
61. More broadly, the dichotomy between financial specialist and fungible macroeconomist, which the mainstreaming strategy sought to break down, has posed ongoing challenges for mobility. Financial sector experts are not always well-equipped to carry out the work of macrofinancial surveillance as part of an Article IV team. In fact, some experts have a deep knowledge of a particular subject such as pensions or insurance that makes them valuable resources for teams but does not suit them to step in as a member of a country team expected to cover a much broader set of issues, nor to become a fungible macroeconomist with a wider array of career options in the Fund. Further, the IEO heard the comment that gaining specialized knowledge and experience in MCM could limit future options for fungible macroeconomists by undermining their perceived value as generalists. It is reportedly difficult for MCM staff who are fungible macroeconomists to successfully compete for mission chief positions in area departments, a rotation that is important to satisfying mobility requirements for promotion. Some suggested that this may be because area departments, given resource pressures, tend to prefer proven generalists who can immediately pull their weight on core country desk responsibilities, sometimes for multiple countries. Relatedly, while MCM economists can benefit from building broader skills by rotating to country desks, area departments may miss an opportunity to draw on their macrofinancial skills if these economists are tasked solely with more traditional surveillance analysis.

External experience

62. While rotations to the private financial sector might be another potential means for enhancing skills and experience, the number of Fund staff seeking such opportunities has declined. The IMF opened up the opportunity for staff to take leave without pay for external assignments to the private financial sector in 2008. It also nearly doubled leave without pay slots to promote external mobility; a staff report indicated that "significant proportion of staff on secondment has taken positions in the financial private sector, which should contribute to build up the Fund's skills in this area" (IMF, 2014d). However, in November 2014 the IMF acted to preclude "external assignments in the interest of the Fund" in the private sector for staff at A15 level and above.⁵⁴ The number of staff initiating leave for external assignments to the private sector ticked up accordingly in FY2008 but has retrenched since FY2011; since the assignments typically last more than one year, the number of staff on leave to the private sector has declined more slowly (Figure 19).

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⁵⁴ Leave without pay for external assignments to the private financial sector was banned in December 1996. These external assignments were re-opened to Fund staff in 2008, "in light of the financial crisis." Parameters for granting such leave were then clarified in 2012. Staff are required to return to the Fund for three years following a two-year external assignment or face a payback requirement (IMF, 2018e).



Retention

- 63. The IMF also faces challenges in retaining expertise, once specialist staff with financial or macrofinancial skills have been hired or trained. Staff classified as financial sector experts, whether they have broader macrofinancial skills and experience or deeper expertise in a narrower set of financial sector issues, face limited promotion opportunities. Most positions in the IMF are open only to fungible macroeconomists. As a result, most FSEs are generally confined to MCM (or LEG) unless another department is able to create a specialist position for them.⁵⁵ While the majority of MCM managerial vacancies are open to FSEs, they compete against fungible economists from throughout the institution for these promotion opportunities. FSEs who do not gain promotion under their existing status within MCM face the choice of remaining at a constrained grade level within MCM, applying to convert to fungible macroeconomist status through the mid-career hiring process, or seeking opportunities outside the IMF.⁵⁶
- 64. While conversion can offer FSEs the potential to compete for a wider range of positions outside MCM, offering them greater mobility and promotion potential, the conversion is not always attainable or desirable. Mid-career hiring data show that 12 FSEs sought to convert to fungible macroeconomists in the four years from mid-2013 to mid-2017; 10 passed the panel and 5 were hired.⁵⁷ For those who passed the panel and were eligible to convert but were not

⁵⁶ This issue is not limited to FSEs; in 2017, 50 percent of separated employees cited limited career advancement as their reason for resigning (IMF, 2018c).

⁵⁵ A few FSEs are classified as fungible macroeconomists.

⁵⁷ While FSEs from MCM were more likely to pass (86 percent compared to 71 percent for all IMF internal candidates and 59 percent for the full population), they were hired less frequently than others (41 percent compared to 68 percent for all IMF internal candidates, 63 percent for all those with an MF tag, and 55 percent for the full population).

hired as fungible macroeconomists, it appears that several forces were at play. Some FSEs who passed the panel and were eligible to be hired for fungible macroeconomist roles reportedly had difficulty finding suitable positions, perhaps because hiring managers in area departments were concerned that they lacked the breadth of knowledge and experience to immediately carry their weight on a country team. Other FSEs who passed the panel reportedly chose to continue to develop their expertise rather than to pursue mobility to help gain promotion.

- 65. These issues likely contribute to retention challenges. HRD data show that FSEs on average have shorter careers at the IMF than fungible macroeconomists, although this is at least in part due to the fact that they enter the IMF at a later stage in their careers. The departure of a few well-regarded economists, who chose to leave the IMF rather than satisfy mobility requirements that would have turned their attention away from financial sector issues, were mentioned by a number of staff interviewed for this evaluation. The IMF has experimented with a Technical Track Initiative (also known as the "guru" track) to help retain such experts by offering them promotion opportunities outside of traditional managerial positions, but only a handful of guru positions were available across the IMF, and only two of them in MCM. This initiative was under review at the time of this evaluation.
- 66. Against this background, the IMF also appears to face a morale issue among FSEs, and perhaps A13-14 economists in MCM more generally. The issue is evident in the 2017 IMF staff survey, which revealed more negative sentiments among MCM staff than the rest of IMF staff with respect to career potential. Of particular note, only 15 percent of MCM staff had favorable view about their opportunity for advancement—10 percentage points lower than for all IMF staff and down sharply from 31 percent in the previous staff survey in 2014—while fifty percent had an unfavorable view and 35 percent were neutral. Relatedly, many MCM staff perceived that the IMF did not do a good job of promoting the most competent people, while 42 percent responded unfavorably and 36 percent neutrally and only 22 percent answered favorably; additionally, a third responded unfavorably when asked if the Fund developed people to their full potential. Only 41 percent of MCM staff were positive about achieving their professional/career objectives by remaining at the IMF, compared to 51 percent for all IMF staff. MCM staff were also less convinced than other IMF staff that internal mobility practices were fair (24 percent compared to 31 percent for all IMF staff) and took into account employee preferences (28 percent compared to 33 percent for all IMF staff).
- 67. These issues are not unique to the IMF but rather are rather common for any large, multiproduct organization. Ongoing work on a new Human Resources strategy reportedly includes consideration of an expert track to allow specialization as well as promotion potential and greater attention to workforce planning (IMF, 2017b), and also aims to address risks posed to the institution by staff morale and motivation (IMF, 2017c).

⁵⁸ The FY2017 average tenure for FSEs in MCM was 7.6 years, while the average tenure of fungible macroeconomists was 12.8 years.

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C. What Could the IMF Do Differently?

- 68. Despite ongoing efforts, there remains considerable room to enhance hiring, career development, and retention in the IMF to build the expertise needed for financial and macrofinancial analysis throughout the institution. Some central bank officials interviewed for this evaluation, particularly in S5 institutions, suggested that they have been more successful in skilling up through recruitment of recent graduates with financial training and people with market experience. This is likely due in part to the fact that the Fund has had less scope to shift the skill profile through hiring, given the low staff turnover and budget constraints. This reality underscores the importance in the IMF of enhancing skills of current staff, through training and on-the-job experience—a necessarily gradual process. Looking ahead, the expected higher retirement rates over the coming years, will create the opportunity to expand hiring of economists with financial, but this would require ensuring compensation that is competitive at least with major central banks also seeking to recruit from the same pool. Including a Fund staff with a finance background in recruitment missions may also help.
- 69. The work of financial and macrofinancial surveillance calls for staff with a variety of skills and experience. To help achieve the right balance, the institution would benefit from knowing better what skills it has on hand, both to help identify expertise when needed and to assess whether it is making progress in spreading some level of macrofinancial skills throughout the staff over time. The IMF is currently pursuing a number of initiatives that may address the gaps in information. HRD began a practice of preparing workforce analysis notes in 2017, focusing on a range of job functions including fungible macroeconomists and financial sector experts. These notes considered issues including anticipated vacancy rates and skill needs. In future, such analysis could be undertaken for fungible macroeconomists with financial sector experience this would require collecting and analyzing information on skill and experience. The new HR strategy provides an opportunity to develop a talent inventory including on financial and macrofinancial skills (IMF, 2017b). In addition, a proposal to create an electronic repository of economist staff skills, a "skills shed," received the top recognition in a recent internal innovation competition and will be developed into a prototype. 59 These efforts are still in progress, and the IEO is not in a position to assess what contribution they could make.
- 70. There also appears to be room to enhance the incentive structure related to financial skills and experience. For fungible macroeconomists, this means encouraging and rewarding staff to deepen their financial skills and experience. Several avenues would be worth exploring:

⁵⁹ The Knowledge Sharing Challenge was launched by the Managing Director in October 2017. The Challenge solicited IMF staff to innovate and submit solutions on how to improve knowledge sharing at the Fund. IMF staff submitted 57 ideas. An interdepartmental committee evaluated the entries and selected the top five ideas. The winner was announced in early March 2018. The "skills shed" would create the capacity to compile in a single place and make easily accessible key information on staff specific abilities so that multiple groups of users can find economists with certain skills and "pick Fund brains" according to their needs. Users might include mission chiefs, researchers, and departments assembling teams for Board papers, peer reviews, or analytical projects.

- Making completion of the structured curriculum in macrofinancial topics a requirement for promotion. Introducing competency exams to help motivate staff, including mission chiefs, to continually update their skills.
- Increase opportunities for on-the-job training. For example, MCM could increase the size
 of its surveillance review division to facilitate one- or two-year rotations that could help
 staff quickly upgrade skills.
- Facilitate and encourage secondments in central banks and financial markets and give completion of such assignments greater weight in the promotion review process.
- 71. To help to facilitate hiring, grooming, and retention of top-notch talent, the IMF could enhance the potential for financial economists and others interested in specializing in financial issues to build a career in the institution. This might be achieved by providing career paths for experts that would not require fungibility to gain promotions to senior levels and responsibility, as in the guru track initiative. Such experts would clearly have a natural home in MCM but should also be deployed in area departments to help them upgrade financial skills. We understand this approach is now under consideration as part of the new HR strategy.

V. CONCLUDING THOUGHTS

- 72. This paper has documented considerable strides on the part of the IMF to adapt its structure and practices to enhance financial surveillance. During the period under evaluation, the IMF has continued to make organizational changes and worked to align its budget and human resources to support and facilitate efforts to enhance financial surveillance.
- 73. Nonetheless, the IMF's efforts in this area remain a work in progress. Key financial surveillance activities have received additional resources, but there are tensions in resource allocation, including how to balance assessing risks in the most systemically significant financial sectors with analyzing financial sector developments in all member countries, and between macrofinancial and emerging macro-critical issues in surveillance, as well as excess demand for MCM support and financial expertise.
- 74. Further, the IMF has not resolved how to effectively staff the variety of work required for financial surveillance. There has been limited progress in enhancing skills of country teams, and questions remain about whether there are sufficient incentives for fungible macroeconomists to actively enhance their skills, whether via training or on-the-job experience. Even as country teams gained greater skills and experience in macrofinancial analysis and advice, there remains persistent unmet demand for MCM staff to support Article IVs, with limited resources to do so. Experts who could provide such support given their specialization in financial sector issues or financial economics face limited career opportunities within the institution, complicating hiring and retention. There is still no mechanism to track progress in building capacity for financial surveillance, but efforts have now started in this direction.

75. Overall, this paper concludes that there is room for the IMF to take further steps to support its ambitions for financial surveillance and to integrate it fully with the Fund's work. Budget and human resources for financial surveillance need to be aligned with the increasing importance of this function for the IMF's mission. The IMF should act now to plan strategically for the workforce it needs going forward—with financial surveillance as a core element of its work in all member countries.

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