financial economists who chose to move to other institutions. There is some scope for promotion to senior levels through the "guru" track, but numbers are strictly limited, and this track has generally been aimed at specialists rather than financial economists looking to progress to senior managerial positions.

80. The IMF is in the process of developing a new HR strategy that will provide the opportunity to address these issues. As part of this strategy, the institution is considering ways to facilitate recruiting and retaining staff with macrofinancial skills, including by establishing a career track for experts including financial economists. Projections for higher staff turnover in coming years, due to expected retirements, may also provide greater scope for recruitment of staff with expertise in financial economics and related areas.

VII. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

Strategy, priorities, and resources

- 81. IMF financial surveillance has been tasked with a much more expansive role since the GFC in the context of a broad overhaul of the international financial architecture. A series of Board decisions gave the Fund a clearer oversight responsibility over financial sector issues at the bilateral and multilateral levels, including for cross-border spillovers, and made periodic financial stability assessments mandatory for the S29. These decisions reinforced the central role of the IMF in global oversight of macrofinancial developments and in detecting vulnerabilities and promoting resilience. At the same time, a framework was established for an appropriate division of labor and cooperation between the IMF and the FSB and SSBs to develop and promote needed reforms and monitor agreed standards.
- 82. The IMF has worked hard to implement its ambitious 2012 Financial Surveillance Strategy consistent with these increasing responsibilities. The three priorities have been to strengthen the analytical underpinnings of macrofinancial risk assessments and policy advice, upgrade the instruments and products of financial surveillance to foster an integrated policy response to risks, and to engage more actively with international organizations and other stakeholders to improve the traction and impact of financial surveillance. Among other initiatives, in pursuing this strategy, the IMF has invigorated its efforts to integrate financial and macrofinancial analysis in surveillance. These strategic directions are well understood and supported by the membership.
- 83. The IMF has also tried to address the organizational impediments and cognitive biases that hindered its performance in the run up to the GFC. Attention has been paid more systematically to financial stability and macrofinancial risks in both bilateral and multilateral work. And considerable efforts have been made to upgrade financial sector skills of IMF staff.

- 84. While these initiatives have not yet been tested by a major crisis, this evaluation concludes that the IMF's efforts have yielded a substantial upgrade of its financial surveillance work, particularly in areas given institutional priority. The special attention given to systemically important financial sectors in the FSAP program has provided high-quality indepth assessments as countries themselves have strived to make their financial systems more resilient. The Fund has contributed to developing new diagnostic tools (such as a broad range of stress tests) and to explore new policy approaches (such as macro prudential tools), as well as bringing both to the broader membership. Article IV surveillance has stepped up attention to macrofinancial linkages. And the *GFSR* and EWE are increasingly respected as leading sources of insights on the global financial system.
- 85. While recognizing these achievements, this evaluation finds that progress in raising the quality and impact of the IMF's financial surveillance has been uneven. The expansion of products and activities has presented the Fund with difficult trade-offs between bilateral and multilateral surveillance, between S29 and other member countries, and between financial surveillance and other activities, including emerging macro-critical issues. As a result, the mainstreaming of macrofinancial analysis into Article IV surveillance remains a work in progress; FSAP coverage of countries outside the S29 has been reduced as priority has been given to the mandatory FSAPs; lack of integration of Article IV and FSAP work remains a concern; the traction of multilateral surveillance could be enhanced; the Fund is making only a limited contribution in post-reform impact assessments; and the Fund is no longer viewed as a clear leader in developing tools for assessing financial stability and stress testing, as others have raised their game. These are critical issues, given that the IMF is the only international financial institution with the mandate and ability to conduct financial and macrofinancial surveillance over the full range of countries as well as the global economy.
- Resource constraints have been an important factor making it hard for the Fund to fulfill its responsibilities and meet the membership's expectations of high quality and effective financial surveillance. The sustained expansion of financial surveillance responsibilities, products and activities has not been matched by a commensurate increase in resources as the overall resource envelope for financial surveillance is at about the pre-crisis level. While a rising proportion of Fund economists has acquired experience in financial sector issues, the build-up of financial expertise necessary for effective financial surveillance has been limited by challenges in attracting, developing and retaining the necessary talent. Other priorities, such as emerging macro-critical issues, have competed for attention and resources. To be sure, the IMF as an institution needs to live within an overall resource envelope provided by the membership, and there are certainly ways in which financial surveillance itself could be more efficient and value-driven. Nevertheless, it is the IEO's overall judgement that financial surveillance remains under-resourced given its centrality to the Fund's mandate and the membership's desire to strengthen the Fund's capacity for high-quality work in this area.

Bilateral surveillance

- 87. **Despite significant efforts, there is still considerable room to improve the quality and impact of bilateral financial surveillance.** This evaluation's country case studies show that the Fund's bilateral financial surveillance work is generally well regarded but also fairly uneven. The highest quality work seems to be in FSAPs, particularly for the most systemically important financial sectors, while value-added in terms of influence over authorities' policies is arguably greater beyond the most systemically important. The mainstreaming of macrofinancial work in Article IV consultations has helped to increase attention to these issues, but officials in many countries covered in the case studies still felt that Article IV surveillance did not add much value and emphasized that the integration of Article IV and FSAP work remains limited. Many officials noted that FSAP teams were often not fully on top of domestic conditions and institutions and policy advice sometimes relied too heavily on off-the-shelf approaches that were not necessarily appropriate for their circumstances. Article IV teams, on the other hand, were more knowledgeable of country conditions but did not bring the financial and macrofinancial skills for in-depth financial stability analysis.
- 88. FSAPs are generally well-regarded as a useful tool across the membership, but it is not clear that FSAP resources are appropriately allocated across countries from a risk perspective. FSAPs are appreciated by authorities for providing a useful sounding board to review issues with knowledgeable external advisors, and for providing a public validation of countries' financial stability frameworks. However, officials in many of the S29 found that there were diminishing returns over time, and that the time and resource demands on the home country are quite extensive. For the S5, a regular five-year FSAP would seem to be a fully-justified global public good. Beyond these five, there seems to be merit in dedicating fewer resources to the S29 countries that are relatively stable, and shifting those resources to other countries beyond the S29 perimeter that otherwise may have to wait many years between FSAPs despite quite developed financial systems and potentially serious institutional and market risks. Under the current arrangement, only a handful of the 160 non-S29 countries can be covered each year.
- 89. **FSAP value added could also gain from a more flexible allocation of resources within each FSAP.** In recent years, the IMF has tried to tailor FSAP content to issues relevant to country circumstances, but there is still an observed tendency towards comprehensiveness rather than selectivity. In this connection, IMF stress testing in FSAPs could be more responsive to the evolving capacity and needs of member countries. While IMF staff played a key role in developing and disseminating the use of stress tests, by now most AEs and many EMEs conduct sophisticated stress tests on a regular basis. These tests are tailored to the specific country context and are based on data not available to the IMF. Authorities in some of these countries indicated that they find the IMF conducting its own stress tests in the context of FSAPs onerous and of limited value. A more flexible, tailored approach to stress testing would enhance the relevance of the IMF risk assessment, reduce resource pressures on the authorities and the IMF, and facilitate knowledge exchange.

90. A major challenge for bilateral financial surveillance is to strengthen the integration of Article IV and FSAP work. Country officials interviewed often noted the lack of follow-up of FSAPs in subsequent Article IV reports—beyond checking whether FSAP policy recommendations have been followed. FSAPs are too infrequent to be relied upon to detect fast developing financial stability risks, while Article IV teams do not have the breadth and depth of skills and resources to adequately identify and explore financial stability risks. This issue has been long recognized as a weakness, but a more concrete mechanism to foster tighter integration would seem to be needed.

Multilateral surveillance

- 91. **IMF multilateral financial surveillance has made significant progress in addressing shortcomings prior to the GFC.** The *GFSR* and the EWE are now widely respected by country authorities as providing thoughtful and sometimes pathbreaking analysis of global risks and new issues. They are appreciated for taking a hard look at difficult concerns and are more candid than bilateral surveillance, while generally being sufficiently careful not to heighten market instability.
- enhance the *GFSR*'s traction. Most authorities, and IMF staff outside of MCM, indicated that Chapter 1 of the *GFSR* is a difficult read, with many charts, graphs and tables that are not sufficiently explained and that are difficult to follow. Also, some authorities were unconvinced by the *GFSR*'s analysis on their own country, complaining that it showed a lack of understanding of the institutional context. While retaining the highly appreciated candor of the publication, the *GFSR* could increase its influence on the policy debate by giving greater attention to ensuring that its analysis is rigorous, transparent, and convincing.
- 93. The EWE is thought-provoking and relevant, but its impact is constrained by the very restricted access to its messages and it would benefit from increased synergy between the IMF and FSB contributions. The most common complaint about the EWE comes from those who do not participate in the exercise and find it hard to learn about its substance. This is not an easy problem to solve, since keeping access restricted to the most senior officials in a limited range of countries seems to be critical to its success as a forum for high-level discussion. Also, there could be merit in seeking closer coordination between the IMF and FSB, particularly on topic selection. Participating authorities appreciated the IMF presentation, but some of them would also want to get a more macroeconomic perspective from the IMF on the financial issues covered by the FSB. However, any such effort would need to be careful to avoid compromising the Fund's capacity to raise difficult issues and out-of-the box concerns.

Cooperation with financial regulatory agencies

94. The IMF generally cooperates effectively with partner institutions on issues related to the global financial architecture but could have a larger impact by leveraging its comparative advantages. The FSB and SSBs as well as country officials more generally appreciate the IMF's contributions, including its analytical work, its independent and global perspective, and

its representation of countries that are not members of these organizations, while avoiding getting enmeshed in standards negotiations, which are properly handled by national experts. Nonetheless, there would seem to be significant potential for enhancing IMF contributions particularly in ex post impact assessments of reforms by better leveraging the information it collects as part of bilateral surveillance and its macrofinancial expertise. The IMF would also be well placed to work with partners on global financial stability analysis focusing on cross-border interconnectedness and spillovers, but for this to be most effective the Fund would need greater access to granular data on G-SIFIs. As a general caveat, however, building this workstream would require the IMF to invest considerable resources in an area where the institution has scaled back its involvement in the past few years.

Analytical tools

- 95. Notwithstanding areas of excellence, the IMF has not kept pace with central banks in AEs on macrofinancial modeling and the development of tools to assess financial stability, including stress tests. Following the GFC, central banks in many AEs invested heavily in cutting-edge research on issues related to financial stability, including incorporating financial variables into their macro models and tools for stress testing. The Fund has also contributed in these areas, but its work has been more limited and less influential. It would be difficult for the IMF to keep up with these central banks across the board given the amount of resources they can devote to this research and that they focus on models and tools built for their particular country context. Nevertheless, the IMF should be able to deepen its contribution by focusing its research resources on areas of comparative advantage, such as tools for assessing cross-border transmission of shocks and stress testing tools based on publicly available market data, which may be helpful to sharpen the focus of Article IV consultations.
- 96. Over the past couple of years, the IMF has been working hard to gain expertise in emerging fintech areas and cyber security but is not generally regarded as a cutting-edge source of analysis and expertise. Given the strong demand and relevance, the IMF should continue efforts to develop the necessary expertise to assist member countries in designing policies and regulations, and in monitoring risks focusing on areas of IMF comparative advantage, while leaving the task of setting standards to the appropriate SSBs. Recently, the IMF has worked with the World Bank to lay out a broad agenda of fintech issues relevant to member countries. An important next step would be for the IMF to decide on the areas where it would concentrate its own resources and build capacity to become a valued source of advice to member countries (IMF, 2018b).

Talent management

97. Notwithstanding considerable training and recruitment efforts, there is still a general need to enrich staff knowledge and experience in macrofinancial analysis and to build up a group of top-notch expert financial economists. The IMF has taken steps to provide training for existing staff and recruit new staff with financial expertise, and a significant proportion

of IMF staff responding to an IEO survey self-reported as having macrofinancial skills. Nevertheless, uneven results in mainstreaming macrofinancial work in Article IVs, and the importance of ensuring excellence in related analytical work, suggest that there is still need for more staff with deep skills and expertise in these areas to be able to conduct effective financial surveillance across the membership. In particularly short supply, both in MCM and area departments, are expert financial economists who can contribute cutting-edge work on macrofinancial and macroeconomic stability issues, experts in fintech and cyber security, and staff with private sector and market experience.

- 98. To address the membership's demand for more and deeper financial surveillance, the IMF will need to consider ways to improve incentives to help attract, develop and retain more financial talent. The IMF has been trying to recruit more entry-level and mid-career staff with these qualifications, but progress has been constrained by low staff turnover and stiff competition from central banks, regulators, the private sector, and academia. A significant share of area department economists has attended a dedicated training program, but the impact will only emerge over time, as new skills need to be complemented by on-the-job experience. The IMF has also had difficulties recruiting, developing, and retaining top-notch financial talent, in part because the Fund career path to senior positions normally requires rotations to establish fungibility.
- 99. In some ways, the staffing challenges faced by the IMF in financial surveillance are symptomatic of a bigger institutional issue. IMF staff is mostly composed of fungible macroeconomists, able to move between assignments, which for many years served the institution well. However, increasingly finance and other areas covered by the IMF require deeper expertise as economics as a profession has become more specialized. At the same time, country authorities have staffed themselves with officials recruited from top universities who then advance within more specialist career tracks. The IMF is starting to consider the need for a shift in approach by introducing an "expert track" but it will continue to rely for the bulk of financial surveillance work on a cadre of fungible macroeconomists. This reality reinforces the importance of skilling up the fungible macroeconomists to equip them to conduct macrofinancial surveillance and to increase priority for financial economist skills in hiring at entry and mid-career levels.

B. Recommendations

100. Notwithstanding the very real progress to date, the IMF needs to address a number of challenges to further strengthen the effectiveness of financial surveillance which lies at the core of its mandate. The evaluation recommendations, summarized in Box 2, are complemented by more specific suggestions on how they could be implemented. The recommendations do not call for a major shift in strategy or long-term aspirations. Rather, they aim to combine some new initiatives with sustained efforts to build on ongoing work and a willingness to fine-tune priorities to meet evolving needs. It should be emphasized up front that making concrete progress will require providing significant additional resources, as well as taking steps to use existing resources more effectively.

Box 2. IEO Recommendations for Board Consideration

Recommendation 1— Strengthening financial and macrofinancial analysis in Article IV surveillance: To improve the relevance and traction of bilateral financial surveillance, the IMF needs to deepen financial and macrofinancial analysis, particularly in Article IV consultations, including by taking practical steps to better integrate FSAP analysis in Article IV consultations and by increasing financial skills and expertise among staff.

Recommendation 2—Refocusing FSAP Country Selection and Scope: The IMF should revisit the current approach to allocating FSAP resources to achieve a more flexible, dynamic, and risk-based allocation across countries and issues.

Recommendation 3—Increasing Traction of Multilateral Surveillance: The IMF should continue to work to enhance the impact of IMF multilateral surveillance by increasing rigor and transparency, and by deepening collaboration with international partners.

Recommendation 4—Enhancing the IMF's Analytical Tools: To enhance the value added of its financial surveillance, the IMF should strengthen efforts to be a global center of excellence on financial and macrofinancial research.

Recommendation 5—Building Financial Skills and Expertise: The IMF should intensify efforts to attract, develop, and retain a deeper pool of financial talent, as well as to ensure that area department fungible macroeconomists have the knowledge and support to integrate financial and macrofinancial analysis into Article IV consultations.

Recommendation 6—Increasing Budgetary Resources: To fully meet its responsibilities and objectives, the IMF should consider devoting significant additional resources to financial surveillance.

Recommendation 1—Strengthening financial and macrofinancial analysis in Article IV surveillance: To improve the relevance and traction of bilateral financial surveillance, the IMF needs to deepen financial and macrofinancial analysis, particularly in Article IV consultations, including by taking practical steps to better integrate FSAP analysis in Article IV consultations and by increasing financial skills and expertise among staff.

101. In their planning, implementation and follow up, FSAPs and Article IV consultations should be more systematically conducted as parts of the same process. Article IV teams do not generally have the breadth and depth of skills and resources to conduct financial and macrofinancial analyses and to adequately identify and explore financial stability risks. While FSAP teams are better equipped for these purposes, these assessments are too infrequent to detect fast-developing financial stability risks, and they often lack in-depth country knowledge. Greater integration of FSAP analysis in Article IV consultations would help to increase the synergies between these two processes. In particular, FSAPs could provide a periodic "deep dive" to identify key risks and vulnerabilities, while Article IV consultations could provide annual checkups to track FSAP-identified concerns, using techniques and templates suggested by the FSAP and taking care to adapt in a timely fashion to evolving circumstances. In countries with no recent FSAP, Article IV teams would have to intensify their preparatory work to identify financial and macrofinancial vulnerabilities and develop policy advice, with support from MCM and other departments.

- 102. As a concrete step to provide an anchor for improved FSAP-Article IV integration, FSAPs could produce a template for financial stability assessment and monitoring to be followed up by Article IV consultations. This template would represent an additional element of the FSSA and would include a new financial vulnerability matrix that would lay out the most salient current vulnerabilities and associated risks, and areas where vulnerabilities could emerge, and it would propose a methodology and specific metrics (including both balance sheet and market based metrics) for the Article IV team to monitor how these vulnerabilities are addressed and the risks mitigated over time.⁴³ In preparing this template, FSAP teams should keep in mind that follow up would take place in the context of Article IV missions, where technical skills may be more limited. FSAP teams should also prioritize their policy recommendations, laid out separately in the FSSA, to facilitate follow-up by Article IV missions, which should continue until all relevant recommendations have been fully implemented.
- 103. In order to achieve significant progress, Article IV teams would need to have access to sufficient financial expertise to allow them to meaningfully pursue financial stability issues. It is not realistic or necessary for all Article IV missions to include such skills uniformly. Nevertheless, strengthening financial surveillance more consistently across those countries where financial vulnerabilities are potentially of serious concern will require a substantial increase in allocation of economists with financial skills, in order to ensure that mission teams include adequate financial sector expertise to discuss financial stability assessments with country authorities and to help integrate macrofinancial and financial stability issues into the overall staff assessment.

104. Other practical steps for better integration could include:

- Using Article IV consultations as an opportunity to discuss with authorities the scope of upcoming FSAPs, and to explore issues that authorities would like to see covered.
- Involving ED offices more fully in the organization of FSAPs, comparable to the practice for Article IVs consultations.

⁴³ The proposed financial vulnerability matrix would identify the key financial vulnerabilities and would serve as a mechanism for monitoring evolution of these vulnerabilities over time. This matrix is different than the Risk Assessment Matrices (RAMs) that are part of the FSAP and Article IVs. The FSAP RAM focuses on tail risks to financial stability. The Article IV RAM covers risks to the country's macroeconomic outlook, including to the financial sector. While different, these RAMs are supposed to be consistent.

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Recommendation 2—Refocusing FSAP Country Selection and Scope: The IMF should revisit the current approach to allocating FSAP resources to achieve a more flexible, dynamic, and risk-based allocation across countries and across issues.

- 105. The current distinction between the S29 countries, which are covered every five years, and the rest of the membership has proven too inflexible. It has led to diminishing returns in some countries with relatively safe financial sectors, while other countries with substantial financial vulnerabilities that fall outside the S29 perimeter have FSAPs very infrequently. There should also be greater scope for tailoring FSAP content to country circumstances to generate greater value added and achieve a more efficient use of FSAP resources.
- 106. As an alternative to the current approach, this evaluation recommends greatly reducing mandatory FSAPs to a very limited number to allow for wider and more risk-based country coverage and greater value added. 44 Specifically, it proposes that only the S5 would continue to be covered by mandatory FSAPs every five years. For the rest of the membership, there would be an expectation that countries would agree to FSAPs on a periodic basis based on a systematic Fund-wide approach to country selection. Such an approach for selection of countries to cover would need to ensure transparency and evenhandedness, as well as effectiveness and efficiency. This could be achieved as part of each year's work program discussions with the Executive Board, when management could propose a rolling list of 30-45 countries for which FSAPs would be initiated during the following two or three years. These countries would be identified based on criteria similar to those currently in place for prioritizing non-mandatory FSAPs, approved by the Board in the context of the 2014 FSAP review, which include financial and macro vulnerabilities and take into account the need to maintain a balance across regions and levels of financial development (IMF, 2014c). This approach would allow wider and more riskbased coverage, although countries with relatively limited financial sectors would still have FSAPs quite infrequently (as is now the case). An expansion of the new FSSR diagnostic tool and closer cooperation with the World Bank could help to meet these countries' demands for advice and support on financial development issues.
- 107. At the same time, the IMF should continue to work towards greater differentiation in scope and focus across FSAPs, to increase value added and make better use of staff and authorities' time and resources. FSAP scope and focus should be tailored to the size and level of development of the country's financial sector, the sophistication of regulatory agencies, and an assessment of risks, vulnerabilities, and regulatory gaps. While some progress has been made in this direction, there would seem to be room to go further, including in the S5, to pay more attention to newly emerging and rapidly changing issues or where the IMF can bring to bear new

⁴⁴ There are many other approaches to achieve these goals beside the one recommended by this evaluation, but the key goal must be to substantially increase the scope for a more risk-based allocation of FSAP resources.

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techniques to investigate risks that may have received too little attention in the past, and pay less attention to issues that have already been thoroughly considered and where little has changed.

- 108. As part of efforts to tailor coverage to country circumstances, in countries now conducting regular sophisticated stress tests, FSAPs could focus on designing risk scenarios, reviewing the authorities' models, and discussing the test results and critical stability risks. In these countries, FSAPs should limit detailed stress tests to areas not covered by authorities' tests. Such an approach would limit the resource burden on the IMF and authorities, while focusing on providing value added. More generally, FSAP stress tests would be more valuable if they were designed as joint exercises with country authorities, allowing for two-way knowledge exchange, on models and techniques. Also, FSAP teams should provide advice that is fully anchored in the local circumstances and not overly reliant on off-the-shelf "international best practice."
- 109. Recommendation 3—Increasing Traction of Multilateral Surveillance: The IMF should continue to work to enhance the impact of IMF multilateral surveillance by increasing rigor and transparency, and by deepening collaboration with international partners.
- 110. **IMF work on multilateral financial surveillance is generally well regarded and influential but there is room to enhance impact.** Traction could be increased by building on recent efforts to strengthen analytical rigor, by ensuring adequate recognition of country circumstances, by providing more transparency, and by seeking to take greater advantage of its comparative advantages in working with international partners.
- 111. While retaining its candor, which is generally appreciated by the membership, the *GFSR* needs to be more rigorous and transparent in order to be more persuasive to relevant policymakers, particularly when identifying country specific vulnerabilities. Recent efforts to ensure that analytical and empirical approaches underlying the *GFSR* are carefully developed and made publicly available should continue. It should also make more details and data available online in the interest of full transparency. The *GFSR* should make better and earlier use of area department teams to ensure that country references are factually correct and reflect an adequate understanding of country circumstances and institutions. The *GFSR* should adapt its presentation to make it an easier read for busy country officials, its main audience.
- 112. While preserving its independent perspective, the IMF should aim at coordinating more closely with the FSB on the choice of topics for the EWE, particularly focusing on financial and macrofinancial risks. Closer coordination would support deeper analysis of macrofinancial and stability risks and help point to potential policy steps that participants could pursue to mitigate the identified vulnerabilities and risks. This should be done in a way that draws on the strengths of the two institutions, while taking care to avoid compromising the IMF's capacity to raise out-of-the box issues. The EWE key messages should be disseminated more

broadly among senior authorities in member countries, while respecting the strict confidentiality of the EWE meeting and the need for care in communicating official views about tail risks.

113. Intensified cooperation with the international regulatory agencies could contribute to advancing the global reform agenda, particularly by drawing on the IMF's comparative advantage in analyzing cross-border risks and in bilateral surveillance. Thus, the IMF could scale up its work with the FSB, SSBs, and BIS in the area of assessing the impact of reforms, at the country and global levels. At the country level, the Fund could extend its work on post-reform impact assessment in the context of FSAP or Article IV missions. At the global level, together with partner institutions, the Fund could deepen work on developing cross-border global stress tests. The value added from such work would, however, depend on greater access to granular data from G-SIFIs. This could be achieved by developing working arrangements to conduct the analysis by pooling efforts while preserving the necessary data confidentiality.

Recommendation 4—Enhancing the IMF's Analytical Tools: To enhance the value added of its financial surveillance, the IMF should strengthen efforts to be a global center of excellence on financial and macrofinancial research.

- 114. The IMF should intensify efforts to enhance its analytical tools for financial and macrofinancial surveillance, as central banks and other official agencies have done. While the IMF cannot be expected to be at the cutting edge on all topics, it should expand research on issues within its comparative advantage, particularly improving its models to analyze cross-border macrofinancial linkages, and tools to identify and assess financial vulnerabilities and risks. Its pioneer role in developing stress tests, and its recent development of the Growth-at-Risk approach provide good examples of how this can be achieved. Concrete suggestions in this area include:
 - Developing global stress tests, an area of IMF comparative advantage that could be pursued in partnership with the FSB and the BIS, as mentioned in Recommendation 3.
 - Partnering with the largest and most advanced central banks to learn about their tools and frameworks for analyzing financial stability and macrofinancial linkages and disseminate this knowledge among the membership at large.
 - Streamlining and simplifying existing tools to make them user-friendly which would allow FSAP and Article IV teams to make greater use of them. The experience with the macrofinancial pilot suggests that more hands-on training and inter-departmental support could improve the quality of IMF surveillance.
 - In the rapidly evolving area of fintech, delineating the Fund's role, designing a strategy that focuses on its comparative advantage, and developing the necessary expertise.

Recommendation 5—Building Financial Skills and Expertise: The IMF should intensify efforts to attract, develop, and retain a deeper pool of financial talent, as well as to ensure that area department fungible macroeconomists have the knowledge and support to integrate financial and macrofinancial analysis into Article IV consultations.

- 115. Staff members with cutting-edge financial and macrofinancial knowledge and experience are key to meeting the membership's demands for high quality financial surveillance. Efforts to equip and support country teams to carry out this work should be reinforced.
- 116. **Most important, the IMF should be prepared to compete harder to attract staff with high-level macrofinancial skills.** To recruit more entry-level and mid-career financial economists, the IMF should offer career paths for them (and other specialized economists) that allow for promotion to senior managerial levels without requiring fungibility and mobility. Greater flexibility could also be provided to offer attractive compensation for a group with special skills that are in high demand. Other initiatives to improve management of IMF financial talent could include the following:
 - Stronger incentives could be put in place to encourage rotations of fungible economists in MCM and outside the IMF, including in central banks and the private financial sector.
 - Consideration should be given to making macrofinancial courses in the structured curriculum mandatory for all fungible macroeconomists.
 - The IMF should develop and maintain a skills inventory, including of staff's financial and macrofinancial expertise to more easily and continuously be able to assess gaps.

Recommendation 6—Increasing Budgetary Resources: To fully meet its responsibilities and objectives, the IMF should consider devoting significant additional resources to financial surveillance.

- 117. Resources allocated to IMF financial surveillance are under strain, and significant additional resources will be needed to increase the IMF's capacity to fulfill its responsibility for high quality and effective financial surveillance. The IEO recognizes that the IMF's overall resources are limited, and that many different needs must be balanced. Nonetheless, in the IEO's view, financial surveillance deserves top priority treatment given its centrality to the IMF's mandate, and the reality that efforts to reinforce the Fund's financial surveillance work will continue to fall short unless adequately resourced.
- 118. While it is beyond the IEO's remit to provide detailed costing of the various initiatives proposed here, some comments on priorities would seem relevant.
 - The highest priority for additional resources is to strengthen financial and macrofinancial surveillance in Article IV consultations along the lines of Recommendation 1. To have an

impact, the IMF should consider a budgetary increase commensurate with the resources expended on the mainstreaming pilot, allocated mainly to MCM and area departments with the proportions depending on choices regarding allocation of responsibilities.

- Strengthening financial surveillance in Article IVs would also require augmenting the pool
 of financial and macrofinancial talent, as laid out in Recommendation 5. Expanding
 recruitment, training and retention of financial economists may require financial
 incentives, in addition to offering better career prospects.
- Enhancing the IMF analytical toolkit, Recommendation 4, would require a modest, but fully dedicated, increase in resources.
- It should be possible to expand coverage and increase the value added of FSAPs by reassigning resources across countries and activities, but this would require a willingness to greatly reduce the number of jurisdictions covered by mandatory FSAPs every five years, as suggested in Recommendation 2.
- Multilateral surveillance could achieve greater traction through a refocusing of efforts without necessarily requiring substantial additional resources, along the lines described in Recommendation 3.
- Conducting post-implementation impact assessments, as suggested under
 Recommendation 3, could be a major contribution to reviewing the current regulatory
 system and designing future reforms. However, realistically this work would require very
 large investments, which the IMF should undertake only if there is clear support from the
 membership, both in terms of providing additional resources and ensuring access to the
 needed data.
- 119. **A final remark on the institutional culture**. This evaluation concludes that the IMF is now better prepared to detect financial vulnerabilities and risks, and that it has contributed to global reforms that should strengthen resilience if a crisis were to emerge. But the past few years have been characterized by easy financial conditions and highly accommodative monetary policy, which facilitated recovery, albeit as public and private debt burdens rose. The robustness of the reformed global and national financial systems will be tested as monetary and financial conditions normalize and memories of the crisis recede. It is impossible to anticipate all vulnerabilities and risks, and certainly to predict all crises. Thus, the IMF needs to cultivate a culture that is proactive in constantly scanning for emerging vulnerabilities and risks, while continually promoting reforms that will increase resilience of financial systems to the crises that will inevitably occur.