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Collaboration in Financial Regulatory Reform: The IMF, the Financial Stability Board, and the Standard Setting Bodies

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Contents Page

ABBREVIATIONS

BIS	Bank for International Settlements
BCBS	Basel Committee on Bank Supervision
BCP	Basel Core Principles for Bank Supervision
CPMI	Committee on Payments and Market Infrastructure
DSGE	Dynamic Stochastic General Equilibrium (model)
EWE	Early Warning Exercise
FSAP	Financial Sector Assessment Program
FSB	Financial Stability Board
G20	A grouping composed of major advanced economies and systemically important developing and emerging market countries
GDP	gross domestic product
GFSR	*Global Financial Stability Report*
IADI	International Association of Deposit Insurers
IAIS	International Association of Insurance Supervisors
IFIs	international financial institutions
IMFC	International Monetary and Financial Committee
IOSCO	International Organization of Securities Commissions
LIC	low-income country
MCM	Monetary and Capital Markets Department (IMF)
OECD	Organisation for Economic Development and Co-operation
OTC	over the counter
QIS	Quantitative Impact Study
RES	Research Department (IMF)
ROSC	Report on Standards and Codes
SCSI	Standing Committee on Standards and Implementation
SME	small and medium-sized enterprise
SPR	Strategy, Policy and Review Department (IMF)
SSBs	Standard Setting Bodies
TLAC	total loss-absorbing capacity
WEO	*World Economic Outlook*

Executive Summary

The IMF has been an important contributor to the analysis informing the post-crisis financial regulatory reform process, directly and in its capacity as a member or an observer in the Financial Stability Board (FSB) and the Standard Setting Bodies (SSBs). The analytical work of the Fund has provided important foundations for the consensus on which the new system of international standards is built. Senior officials at the FSB and the SSBs appreciate the work of the Fund. The analytical work of the Fund, in the form of policy papers, staff discussion notes, working papers, and the *Global Financial Stability Report*, has helped to generate support for the reforms themselves. The IMF should continue to contribute its considerable skills and knowledge to the analysis of the foundations for financial stability policy.

The IMF-FSB relationship is generally working well. There are, however, opportunities to improve planning and coordination. Specifically, the Fund and the FSB could step up efforts to identify areas of the global financial system requiring additional attention. They could strengthen forward-looking processes to coordinate the FSB's various peer review exercises, helping to ensure that information from IMF bilateral surveillance activities is comprehensive and collected in a manner consistent with the needs of future peer reviews. The Fund could further enhance its internal processes to ensure that the full range of staff skills across all relevant departments provide timely input into the FSB's deliberations, evaluations and reports.

In its interactions with the SSBs, the Fund contributes to developing international standards in two main ways. First, it gives voice to those jurisdictions that are not represented, helping to ensure the standards are written in a manner appropriate for everyone. Secondly, as an impartial observer, during the internal negotiations the Fund can advocate for stronger standards.

In the aftermath of the 2007–09 financial crisis, the global standard setting process has evolved into a comprehensive policy development cycle. The FSB and SSBs have main responsibility for: (i) identifying areas where additional regulation or further harmonization is needed; (ii) proposing, assessing, and agreeing on specific standards; (iii) implementing new rules; and (iv) evaluating the regulations' impact prior to proposing refinements. The IMF can contribute to this process by representing the interests of smaller countries, ensuring consistency of data and information, using country experiences to build a bottom-up view, bringing its analytical capacities to bear on a variety of macro-financial questions, and providing an independent voice.

The Fund can thus contribute to the policy development cycle by:

(i) using bilateral surveillance to inform post-implementation impact assessments;

(ii) using macroeconomic models, spillover analysis, and experience with non-FSB members to contribute to assessments of pre- and post-implementation impact;

(iii) using expertise on fiscal policy to help focus on its relationship with financial stability;

(iv) deploying resources to aid in building a coherent financial stability policy framework; and

(v) providing an independent voice to both highlight the needs of the unrepresented and advocate for strong rigorous standards intent on safeguarding global financial resilience.

I. INTRODUCTION

1. In the autumn of 2008, the global financial system came close to collapse. Numerous private sector institutions failed and markets closed or atrophied, prompting public sector rescues. Events showed domestic financial regulations to be grossly insufficient and revealed some international standards to be inadequate. The response has been an extensive reform effort. The IMF has been a large part of this process. It was involved from the beginning, identifying points of failure and proposing solutions. Then, together with authorities, it helped with implementation. As of result of this work—by the Fund, other international organizations, and national authorities—the system today is much more resilient than it was a decade ago.[1]

2. The purpose of this report is to examine the Fund's role in financial regulatory reforms, with a focus on its relationship to the Financial Stability Board (FSB) and the Standard Setting Bodies (SSBs).[2] How did the relationship begin, how has it worked during the reform period starting in 2008, and how can it be improved?

3. I combine information from three sources. First, from October to December of 2017, I interviewed over two dozen current and former officials associated with the IMF, the FSB, the BIS, and the SSBs. Second, I surveyed a broad array of documents from the aforementioned organizations. Finally, I reviewed the biannual reporting to the IMF Executive Board by the IMF Financial Counsellor and Director of the Monetary and Capital Markets Department (MCM).

4. The remainder of this evaluation is composed of seven sections. In Section II, I begin with a general discussion of the IMF's role in the regulatory reform process—the contributions at early stages aimed at identifying faults in the existing system, the work to formulate and organize the necessary remedies into categories, and the mechanisms for cooperation in devising solutions. Next, in Section III, I turn to the specifics of the Fund's relationship with the FSB. In Section IV, I examine the relationship of the IMF with the SSBs, with particular focus on the Basel Committee on Banking Supervision (BCBS). With this institutional background, in Section V, I proceed to describe the policy development cycle that forms the foundation of the work of the FSB and SSBs. The focus is on the nature of the information and skills needed at each stage. In Section VI, I provide a brief discussion of the comparative advantage of the IMF.

5. Then, in Section VII, I bring everything together to answer the following questions: How can the IMF best utilize its comparative advantage in its relationship with the FSB and the SSBs? How can the IMF be most effective in helping to improve the agreed-upon international financial regulatory standards? How can the Fund help to ensure that the global financial system is sufficiently resilient? The final section reiterates the report's main recommendations.

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[1] For a review of the status of regulatory reform, see Cecchetti and Schoenholtz (2017b). See also *GFSR*, October 2018, Chapter 2.

[2] My focus is on the Basel-based organizations.

II. THE IMF'S CONTRIBUTIONS TO THE REGULATORY REFORM AGENDA

6. The IMF has been a strong contributor to the global regulatory reform agenda. Its key contribution is in providing fundamental research and in proposing specific monetary, fiscal and regulatory policy actions aimed at reducing the frequency and severity of crises. These contributions include working papers, staff discussion notes, staff reports, policy papers, and chapters of the semi-annual *Global Financial Stability Report (GFSR)*, among others. These research and policy recommendations are prepared by staff and consultants associated with various departments, including Research (RES); Monetary and Capital Markets (MCM); Fiscal; Legal; Strategy, Policy, and Review Development (SPR); and area departments. In what follows, I survey some of the contributions.

7. The 2007–09 crisis revealed a myriad of limitations of the global financial system. Immediately following the Lehman collapse, the Fund was hard at work identifying flaws in the foundations of the financial system and proposing solutions. The initial set of contributions aimed at identifying the initial lessons of the crisis. A triumvirate of papers examined lessons for financial regulations, macroeconomic policy, and global architecture.[3] Identification of the structural vulnerabilities in the global financial system led to a lengthy and broad list of necessary reforms. On financial regulatory structure (as opposed to ongoing crisis management), the Fund identified five major areas requiring attention: the need to expand the regulatory and supervisory perimeter; the importance of improved market discipline; the desire to reduce the procyclicality of capital requirements and risk management; the need for enhancing the financial safety net and crisis management frameworks; and the significance of addressing data gaps.

8. The Fund's analysis has been an important part of the consensus understanding of the causes of the 2007–09 crisis and the way forward.[4] The priorities of the G20 and the instructions to the FSB reflect the reform agenda that derives from this analysis. At the September 2009 Pittsburgh Summit, the G20 Leaders set out a far-reaching and complex agenda for regulatory reform. The original five elements of the global reform were (See FSB, 2010):

(i) Strengthening bank capital and liquidity standards.

(ii) Addressing systemically important financial institutions and resolutions.

(iii) Improving OTC derivatives markets and core financial market infrastructures.

(iv) Reforming compensation practices to support financial stability.

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[3] See IMF (2009a; 2009b; 2009c). For more recent summaries, see Kodres and Narain (2012) and IMF (2018b).

[4] Written around the same time, and with a very similar diagnosis, are Chapters 1 and 7 of the Bank for International Settlements (BIS) Annual Report (BIS, 2009) (Disclosure: I wrote these). See also Levine (2014).

(v) Strengthening adherence to international supervisory and regulatory standards.

9. By 2011, this list grew to include[5]:

(vi) Strengthening accounting standards.

(vii) Developing macroprudential frameworks and tools.

(viii) Expanding and refining the regulatory perimeter.

10. Completing work on even one of these eight items was a nearly Herculean task. As such, there was a need for a division of labor. As outlined in the March 2010 presentation by the IMF Financial Counsellor to the Executive Board, at the outset there was agreement on who would play a leading role in each area, as follows.[6]

- The G20 itself would drive the regulatory reform agenda.
- The FSB would be the key forum for advancement of the agenda.
- The SSBs, including the BCBS, the International Organization of Securities Commissions (IOSCO), the International Association of Insurance Supervisors (IAIS), the International Association of Deposit Insurers (IADI) and the Committee on Payments and Market Infrastructure (CPMI) would be responsible for setting sector-specific standards.[7]
- The BIS would host, convene, and fund related committees.
- The national authorities would implement the agreed, revised standards.
- The IMF would monitor implementation of the standards.

11. In practice, the IMF has contributed well beyond the sole area where it is specifically mentioned. It participated in the FSB and the SSBs; helped to assess the overall impact of the reforms; ensured member countries were informed about the new standards; through technical assistance, built members' capacity to adopt new rules; and through the Financial Sector Assessment Program (FSAP) and Reports on the Observance of Standards and Codes (ROSCs), certified the quality and consistency of the reforms.[8] In addition, as the only institution with a

[5] See FSB (2011a).

[6] See Viñals (2010).

[7] In September 2014, the Committee on Payment and Settlement Systems (CPSS) was renamed the CPMI. I will use the current name throughout.

[8] See Viñals (2010).

universal membership, it falls to the IMF to disseminate the deliberations and decisions of the FSB and the SSBs worldwide appropriate and after suitable adaptation.

12. It is easy to see how there could be tensions in these arrangements. Would the IMF accept the FSB to be the center for the advancement of the G20 regulatory reform agenda? Would the IMF, as a participant in the various SSBs, leave standard setting to the groupings of the national authorities? Can the IMF be both a member of these groups and have an independent voice? Would the IMF cede convening powers to the BIS? How are these all separate from the IMF's treaty-based authority (under Article IV of the Articles of Agreement) to engage in surveillance of its members? How should Fund management and staff relate to bodies such as the FSB and the SSB that exclude most of the IMF membership? All that said, over the intervening years Fund management and staff, through a variety of channels, contributed to the realization of this agenda as all parties adopted a pragmatic approach that circumvented or minimized these tensions.[9] They did this through a combination of mechanisms:

- high-level representation at the FSB and SSB (e.g., the Financial Counsellor attends FSB meetings and an MCM Deputy Director sits at meetings of the BCBS);
- management speeches;
- research and analysis published in various forms; and
- the aggregation of information collected in bilateral surveillance in a manner that identifies country-by-country weaknesses in standards and policies.

13. A few specific examples of how the Fund helped build the foundations for reforms that are the basis for a resilient global financial system include:

(i) Strengthening bank capital and liquidity standards:

- Roger and Vlček (2011) provide an assessment of the global macroeconomic costs of enhanced capital and liquidity standards. A part of the IMF's collaboration with the FSB and BCBS in the Macroeconomic Assessment Group (2010), the work focuses on consistent treatment across jurisdictions and an estimate of the impact of spillovers.
- The April 2011 *GFSR* (IMF, 2011) examines systemic liquidity risk and liquidity regulation.
- In their study of the costs and benefits of capital regulation, Dagher and others (2016) propose that requirements should be well above the Basel III minimum.

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[9] See Appendix 1 in Viñals and others (2010) for a summary of the Fund's early contributions in the early days of the crisis.

(ii) Addressing systemically important financial institutions and resolutions:

- The April 2010 *GFSR* (IMF, 2010a) examines methods for computing capital regulations appropriate for systemic important banks.

- The April 2014 *GFSR* (IMF, 2014a), examines the size of the implicit subsidy to systemically important institutions.

- Ötker-Robe and Pazarbasioglu (2010) look more generally at the impact of regulatory reforms on large, complex financial institutions.

(iii) Improving OTC derivatives markets and core financial market infrastructures

- The October 2009 *GFSR* (IMF, 2009d) explores issues related to securitization,

- The April 2010 *GFSR* (IMF, 2010b) includes a discussion of how central clearing parties can make OTC derivatives markets safer.

- The October 2015 *GFSR* (IMF, 2015b) contains an examination of issues related to bond market liquidity and mutual funds.

- The April 2012 *GFSR* (IMF, 2012) discusses the role of safe assets.

(iv) Reforming compensation practices:

- The October 2014 *GFSR* (IMF, 2014b) examines the relationship between risk-taking and bank executive compensation.

(v) Other aspects of financial regulatory reform:

- An IMF report (IMF, 2015a) studies the relationship between monetary policy and financial stability.

- An IMF Report (IMF, 2016) looks at how tax policy, leverage, and financial stability interact.

- The October 2017 *GFSR* (IMF, 2017c) contains a chapter on GDP Growth at Risk (GaR). As I discuss below, this contribution could end up being one of the IMF's most important yet.

14. These contributions notwithstanding, the IMF naturally (and appropriately) has played a tangential role in the regulatory negotiations themselves. Based on their domestic agendas and constraints, as well as detailed technical knowledge on how to design standards combined with the understanding of the challenges they would face in trying to implement them, national authorities naturally lead that reform process. In fact, when queried, some senior officials were not aware of the IMF contributions, as these often take place in working level discussions.

15. In closing this section, I note two things. First, I find it impossible to assign responsibility or credit for particular regulatory reforms to specific sources. As is normally the case in policymaking, the ultimate outcome—whether a specific policy action, a domestic regulation, or an international standard—is the result of a synthesis of many ideas, from many people, in many places. For the reforms in the aftermath of the 2007-09 financial crisis, tracing the provenance of any particular reform is particularly fraught. What is important is that the IMF helped to lay the foundations and generate acceptance.

16. Second, in assessing the Fund's role on regulatory reforms, it is important to pose a clear counterfactual: Would the FSB and the SSBs have achieved the same level of success if the Fund had done nothing? My answer is clearly no. Without the strong support of all of the international financial institutions (IFIs)—the IMF, the BIS, the World Bank, and others—the FSB and the SSBs would have almost surely accomplished much less than they did. While the Fund did not drive the agenda, I am absolutely convinced that they materially contributed to the effort.

17. This leads me to the following recommendation:

Recommendation 1**:** *The IMF should continue to contribute its considerable skills and knowledge to support the study of the analytical foundations for financial stability policy.*

III. THE IMF AND THE FINANCIAL STABILITY BOARD

18. I now turn to some of the specifics of the relationship between the IMF and the FSB. I begin with a bit of history and a discussion, before considering several minor points of friction.

A. History and General Considerations

19. In April 2009, at the London Summit, the G20 leaders established the FSB as the successor to the Financial Stability Forum. The creation of the FSB put the IMF in an awkward position. Why hadn't the G20 leaders asked the Fund to spearhead the global financial regulatory reform process? Why create an entirely new international organization?

20. It is worth taking a moment to consider the rationale behind the creation of the FSB, why there was a need to create a separate institution rather than simply ask the IMF or the BIS to act as the coordinating body for the advancement of the regulatory reforms.

21. In addition to the failings in the structure of the financial system itself, the crisis made clear the weakness of the governance mechanisms for international financial regulatory cooperation and coordination through the various standard setters and IFIs. The existing constellation of groups was missing two things: an overview of the entirety of the global financial system and a grouping that included all stakeholders. On the first, there was fragmentation: the BCBS set standards for banks, IOSCO was responsible for securities market standards, the IAIS considered insurance, IADI coordinating standards for deposit insurance, and so on. As for the second, there was no place that central bank governors, heads of supervision, market regulators,

and finance ministry officials convened to consider financial regulation. Central bank governors would come together at the BIS, heads of supervision sat around a table when exercising oversight of the BCBS as the Group of Governors and Heads of Supervision, finance ministers and central bank governors met at the IMFC and the G20, and market regulators met only on their own. However, there was no place where all four would come together.

22. Furthermore, there was a clear feeling among the fiscal authorities that, in various combinations, the central bankers, supervisors, and market regulators had caused the crisis, leaving them with the bill. Since finance ministries are the representatives of the public that bears the ultimate cost, and generally are responsible for the public purse, it is natural (and proper) that they participate in future decisions.

23. The new organization's relationship with the IMF reflected the agreement forged in autumn 2008 and recorded in a November 3, 2008 joint letter from Dominque Strauss-Kahn (then IMF Managing Director) and Mario Draghi (then Chair of the Financial Stability Forum) to the G20 Ministers and Governors[10] (reproduced in Annex 1). However, this letter did not resolve the issue of the IMF's membership in the FSB. The question of whether the IMF should join the FSB became a subject of serious study—both substantive and legal (IMF, 2010c). In the end, following more than a year's deliberation, the IMF accepted membership in the FSB in September 2010.[11] As a member, the IMF participates in the Plenary, the Steering Committee, the Standing Committee on the Assessment of Vulnerabilities (SCAV), the Standing Committee on Standards and Implementation (SCSI) and the Resolution Steering Group.

24. After nearly a decade, my conclusion is that the division of responsibility in the 2008 letter has worked well. There is a lengthy record of important collaboration between the FSB and the IMF. Among other things, these include:

- A project aimed at strengthening data collection based on FSB and IMF (2009). Phase 1, completed in 2015, focused on the monitoring of risk, international connectivity, and sectoral data, including collection of key granular data from global systemically important banks (FSB, 2011b; 2014b). Phase 2, expected to be completed by 2021, broadens the analysis of the Phase 1 topics and adds new subtopics such as derivatives and data sharing.

- A report on identifying systemically important institutions, markets and instruments undertaken with the BIS and the FSB (BIS, FSB, and IMF, 2009), which provided the

[10] The letter predates the founding of the FSB in April 2009 as the successor to the Financial Stability Forum but remains in force for the FSB.

[11] The FSB became an association under Swiss law in January 2013 (see www.fsb.org/wp-content/uploads/pr_130128.pdf?page_moved=1) (FSB, 2013). In March 2013, the IMF Executive Board approved the IMF's acceptance of membership (see IMF, 2013).

foundation for the metrics used in the annual designation of Systemically Important Banks (G-SIBs).[12]

- Work aimed at enhancing supervision of systemic institutions (FSB, 2010).

- "Design of the Key Attributes of Effective Resolution Regimes for Financial Institutions" (FSB, 2011a; 2014a).

- The BIS, FSB, and IMF worked together to produce "Effective Elements of Macroprudential Policies" (IMF, FSB, and BIS, 2016), a comprehensive report taking stock of the lessons learned from experience in the development and implementation of macroprudential policies (FSB, IMF, and BIS, 2011); and

- "Financial Stability Risks During Policy Normalisation," a background note for the April 2018 meeting of G20 ministers and central bank governors (BIS, FSB, and IMF, 2018).

25. This joint work, together with the Fund's active participation in numerous FSB-initiated working groups, refutes any initial doubts about the effectiveness of IMF-FSB collaboration. While the FSB leads on matters involving regulatory reform, the IMF has at least four separate roles at the FSB:

(i) as a global institution with universal membership, it speaks for those who are not present;

(ii) it provides an overview of global financial risks;

(iii) it shares its independent views on the regulatory reform process;

(iv) and, it helps FSB member countries reach consensus, particularly when some advanced country delegation is pushing towards diluting and weakening standards.

26. Senior IMF staff point to a number of areas where, drawing on its analytical capacity and its broad country coverage, they believe the Fund has been particularly influential. These include: the development of the Basel Core Principles; implementation of bank resolution regimes; examination of linkages between sovereign fiscal positions and bank risk-taking; adapting standards to circumstances in emerging market and developing countries that are proportional to the complexity and inter-connectedness of their financial systems; and development of macro-prudential frameworks.

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[12] The most recent list (FSB, 2017c), published on November 21, 2017, is available at www.fsb.org/wp-content/uploads/R211117-1.pdf.

27. People outside the IMF knowledgeable about the relationship were broadly positive on the Fund's contribution to the FSB. They emphasized that the Fund is a strong supporter of the FSB in public, in private, at the G20 and at the IMFC. As a member of the FSB, the IMF is constrained on the degree to which it can be critical of decisions and recommendations in official public statements. Nevertheless, my reading of the reactions of members of the FSB secretariat and others is positive. That is, the Fund goes beyond avoiding voicing disagreement; they are actively supportive.

28. Thus far, this is all constructive. I now turn to several areas where there is room for further improvement of the coordination between the Fund and the FSB: the Early Warning Exercise (EWE), the FSB country peer reviews, and the analysis of correspondent banking activities.[13]

B. The Early Warning Exercise[14]

29. In the November 3, 2008 letter, the IMF and the FSB agreed to collaborate in an early warning exercise. The EWE has now taken place every April and October since autumn 2009 as a session with highly restricted attendance at the time of the IMF/World Bank meetings.[15] In the exercise, the IMF has tended to focus on evaluating low probability, high severity events. From the perspective of the Fund, this naturally fits with a division of labor in its multilateral surveillance: the *WEO* discusses the central tendency/forecast for the global economy; the *GFSR* examines the downside risks; and the EWE focuses on the lower tail.

30. The overall view of the EWE is generally positive, although there are differing views about the IMF-FSB collaboration and the focus of their respective presentations.[16] As one interviewee who has participated in the EWE meeting from the beginning put it, "the EWE works reasonably well. The presentations identify risks and prompt discussion of practical issues among ministers."

31. How well does the collaboration on the EWE work? There is reason for skepticism. The FSB is a consensus-based, member-run organization. As a result, while their part of the

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[13] At one point, the coverage of shadow banking had raised concerns on the communication and collaboration between the IMF and FSB, as the IMF considered publishing a shadow banking monitor (Adrian, 2017) that risked duplicating the annual *Global Shadow Banking Monitoring Report* that the FSB has published since 2012. However, this issue became moot once, starting in April 2018, the MCM chose to integrate its monitoring of shadow banking into the *GFSR*.

[14] I will be brief since the IEO already evaluated the EWE several years ago (IEO, 2014), and it is covered again in Zettelmeyer (2018) which discusses mechanisms that might enhance the EWE.

[15] It is important to understand the EWE as one element in a two-day sequence of events that include finance ministers and central bank governors, some involving the FSB and some not. This begins with the presentation of the *WEO* and the *GFSR* by IMF senior staff. Next comes the EWE, with a very restricted audience. The following morning there is a breakfast with an even more restricted attendance. And, finally, there is the official (and highly choreographed) meeting of the IMFC, with several hundred people in attendance.

[16] See Zettelmeyer (2018).

presentation is the responsibility of the Chair of the SCAV who makes the presentation, it is necessarily the result of a consultation process. While this enables the FSB to draw on the breadth of perspectives of its diverse membership, it makes it difficult for the SCAV chair to say anything that is very surprising (or controversial). By contrast, the Fund staff has more latitude to present views that have not been ratified by the full membership, so their part of the presentation can cover more "outside the box" material.

32. The stark differences between these two organizations make it difficult to see how to proceed to strengthen collaboration. Suggestions that the FSB secretariat and IMF staffs prepare a joint background paper and presentation for the EWE will necessarily run up against both governance and resource constraints. To be clear, the FSB secretariat facilitates discussions and the drafting of reports in response to member requests, often through the G20 process. It does this using resources—including staff and information—that the members provide. In other words, the FSB secretariat has limited independent resources or data that it could contribute to the EWE. Nevertheless, to ensure that the EWE remains relevant and effective, it will be important that the IMF and the FSB find ways to further enhance their collaboration.

C. FSB Country Peer Reviews and IMF Financial Surveillance

33. Started in 2010, the originally stated purpose of the FSB peer reviews is to provide an in-depth check on issues of particular importance related to implementation of regulators policies. These peer reviews are intended to complement the IMF's country FSAPs.[17] By way of background, it is important to keep in mind that FSAPs are mandatory for the majority of FSB members. The goal of these assessments is to gauge the stability and soundness of the financial sector, focusing on systemic risk, and to assess the contribution of a country's financial sector to real growth.

34. The FSB's Standing Committee on Standards Implementation (SCSI) is responsible for management of two types of peer reviews, country and thematic peer reviews. The IMF participates in these peer reviews as a member of the SCSI.[18] The FSB describes the peer reviews as "an important institutional mechanism to promote complete and consistent implementation of agreed G20/FSB financial reforms and are a means of fostering a race to the top by FSB member jurisdictions. They provide an opportunity for FSB members to engage in dialogue with their peers and to share lessons and experiences."[19]

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[17] See Caprio (2018).

[18] The SCSI membership list is available at www.fsb.org/members-of-standing-committee-on-standards-implementation/.

[19] See http://www.fsb.org/what-we-do/implementation-monitoring/peer_reviews/.

Country peer reviews

35. The FSB Handbook for post-implementation evaluation describes the purpose and focus of country peer reviews as follows:

> *[c]ountry reviews focus on the implementation and effectiveness of regulatory, supervisory or other financial sector policies in a specific FSB member jurisdiction. They examine the steps taken or planned by national/regional authorities to address IMF-World Bank Financial Sector Assessment Program (FSAP) and Reports on the Observance of Standards and Codes (ROSCs) recommendations on financial regulation and supervision as well as on institutional and market infrastructure.... Country reviews can also focus on regulatory, supervisory or other financial sector policy issues not covered in the FSAP that are timely and topical for the jurisdiction itself and for the broader FSB membership. Unlike the FSAP, a country review does not comprehensively analyze a jurisdiction's financial system structure or policies, nor does it provide an assessment of its conjunctural vulnerabilities or its compliance with international financial standards* (FSB, 2017a).

36. Between September 2010 and February 2018, the FSB completed country peer reviews for all 24 of its members,[20] intended to be complementary to the IMF's FSAPs. Some current and former Fund noted that, because completing FSAPs can be delayed for a variety of technical and political reasons, the timing of a country peer review can result in the two taking place very close in time—making the peer reviews both less useful and more burdensome.

37. FSB secretariat members knowledgeable about the details of country peer reviews from their inception, as well as Fund staff, noted that the process of country peer reviews has evolved. Today, there is extensive consultation between the FSB and the Fund staff on the choice of topics to ensure that there is complementarity with the FSAPs. Furthermore, the focus of the reviews has shifted somewhat. Going forward, peer reviews will focus on the G20's eight priorities listed in Section II of this report, with each peer review focusing on two of these eight. For example, the SCSI might choose to review progress on OTC derivatives reforms and compensation practices.

38. The fact that coordination with the IMF is improving and that country peer reviews are becoming more focused is surely a good thing. However, this leaves open the question of the quality of the reviews. The very nature of the exercise, carried out by FSB members on their peers, encourages logrolling. Regulators that participated in peer reviews acknowledge that they are lenient in their assessments, based on an understanding that when their turn comes, they will receive similarly lenient treatment.

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[20] See http://www.fsb.org/about/leading-by-example/schedule/.

Thematic peer reviews

39. For thematic peer reviews, the FSB chooses a specific topic and then examines the degree to which member jurisdictions have implemented recommendations. Since 2010, there have been 12 of these, including reviews of resolution (twice), corporate governance, OTC trade reporting, and executive compensation. Views of the thematic reviews are more positive than those of the country reviews. As a senior Fund official put it: "These make much more sense. The Fund does not have the ability to convene an array of experts from a number of jurisdictions to do a cross-country examination of a specific regulation or set of regulations. The thematic reviews play to the strength of the convening powers of the FSB and BIS."

40. While I could make a number of suggestions for how the FSB might enhance the peer review process, my purpose here is to assess the performance of the Fund in its cooperation with the FSB and suggest how the Fund could help improve the peer reviews. The key recommendation is to enhance coordination and advanced planning, so that the IMF contributions are available when the peer reviews start. For example, for country peer reviews, the IMF should ensure that the timing and the substance of the FSAPs and peer reviews work in a way that benefits the member country in question. I would go so far as to suggest that the Fund should structure the FSAPs with the peer review in mind. For the thematic peer reviews, I believe the Fund can bring the information it collects in its bilateral surveillance to bear. For example, when the FSB plans a peer review on a particular topic, the upcoming FSAPs and Article IV consultations should collect relevant facts.

D. Analysis of Correspondent Banking Activities

41. While correspondent banking is not on the list of priority areas specified in the G20 agenda, a number of jurisdictions have expressed concern that the financial regulatory reforms are responsible for a decline in this critical activity. With this in mind, in January 2015 the FSB agreed to coordinate work that examines the extent and causes of banks' withdrawal from correspondent banking activities, and in particular to evaluate the impact of regulatory reform on correspondent banks.[21]

42. Over the past two years, the FSB has issued a number of progress reports, most recently on July 4, 2017. While the Fund was involved in this effort, it published its own papers generally after the FSB's. A cursory scan of public documents reveals several IMF publications: a staff note, a policy paper and three working papers released between June 2016 and October 2017 and written by staff from several IMF departments.[22] The timing of these publications highlights the need for improved communication between the IMF and the FSB, and raises questions on

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[21] Carney (2015) mentions the desire to examine the impact of regulatory reforms on correspondent banking.

[22] These are Erbenová and others (2016), IMF (2017a), Alwazir and others (2017), Alleyne and others (2017), and Grolleman and Jutrsa (2017).

whether the IMF was able to contribute its expertise and research into FSBs workstreams in a timely and effective manner.[23]

E. Recommendations

43. My assessment of the relationship between the Fund and the FSB leads me to the following recommendation:

Recommendation 2**:** *The division of labor articulated in the 2008 letter between the IMF and FSB is generally working well. Within that framework, to improve its efficiency and effectiveness, the IMF should:*

(i) Step up efforts to work with the FSB to identify areas requiring additional attention, especially regarding nonbank intermediation.

(ii) Strengthen forward-looking processes to coordinate with the FSB, helping to ensure that, as much as possible, information from bilateral surveillance activities be collected in a manner that takes into account future peer reviews and implementation assessment.

(iii) Aim to ensure that skills and information from across relevant IMF departments feeds in a timely manner into the FSB's deliberations, evaluations and reports.

IV. THE IMF AND THE STANDARD SETTING BODIES

44. The IMF's relationship with the SSBs takes two forms. First, the Fund participates in the standard setting process as an institution. It is a member of the IAIS, an associate member of IOSCO, a partner of IADI and an observer in the BCBS.[24] Second, the standards play a role in FSAPs. In the cases of the BCBS, the IAIS and IOSCO, IMF (2017b) recently made this explicit. That is, in cooperation with the SSBs, the Fund has integrated the Basel Core Principles for Effective Banking Supervision, the Insurance Core Principles and the Objectives and Principles for Securities Regulation into the FSAP process.[25]

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[23] Difficulties in coordination on this topic may arise from the fact that the goals and interests of FSB members may not always coincide with those of other IMF members.

[24] The differences in status across SSBs may be inevitable since each offers different types of association. While some observers have asked about the optics of these differing arrangements, since different status could imply different obligations, in practice the IMF role has been similar in all of them. It operates as a non-voting observer, contributing analytical work, raising the concerns of IMF members that are not present, and helping monitor implementation.

[25] References to the principles for the BCBS are available at www.bis.org/list/bcbs/tid_25/index.htm; for the IAIS, at www.iaisweb.org/page/supervisory-material/insurance-core-principles; and for IOSCO, at www.iosco.org/about/?subsection=display_committee&cmtid=19&subSection1=principles.

45. Turning to the involvement of the Fund in the SSBs' processes, interviewees were quick to point out positive contributions. These include participation in the formulation of the Core Principles of Effective Deposit Insurance Systems, issued by IADI in June 2009; the highlighting of the deficiencies in the BCBS's Core Principles for Effective Banking Supervisions (see the discussion below); contributions to the CPMI-IOSCO Principles for Financial Market Infrastructure; and support for the revision of the IAIS Core Principles.[26]

46. When asked for a specific example of how the Fund has contributed to the BCBS in recent years, one national official and BCBS member pointed to a form of the standards known as the "standardized approaches." There are several of these, the best known is the one used for capital.[27] The idea of a standardized approach is to produce an international standard that works for smaller and less complex financial intermediaries. It turns out that this covers all but several dozen banks in the world. Among other things, this means that all of the banks in jurisdictions not represented on the BCBS itself will be using the standardized approach to compute their capital adequacy ratios (among other things). During the formulation and negotiation of these standardized approaches, the IMF represents those not in the room and provides information on what is desirable and feasible. In other words, through the combination of its universal membership, the knowledge it obtains through bilateral surveillance, and continuous contact with national authorities worldwide, the Fund can help ensure that international standards are in fact fit to purpose for all the countries of the world, not just for those privileged to participate in the SSBs.

47. On the specifics of the BCBS, the IMF relationship began in the 1990s with the core principles for effective banking supervision. These played an important role in financial sector assessments under the FSAP from their inception in 2000.[28] Since then, the Fund has been active in the Core Principles Liaison Group, participating in their periodic review and refinement.[29]

48. This dual role, as a participant in the development of the standards and as an assessor, raises the clear potential for a conflict of interest. In meetings of the BCBS, for example, will country representatives be willing to make candid statements about what works and what does not in their jurisdiction? Or will they fear that self-criticism will feed into subsequent IMF assessments, and refrain from speaking? Some very senior SSB participants have indicated that

[26] For documents related to the IADI core principles, including recent revisions, see www.iadi.org/en/core-principles-and-research/core-principles/. For the most recent version of the Basel Committee's Core Principles for Effective Banking Supervision, see www.bis.org/publ/bcbs230.htm. And, for the CPMI-IOSCO Principles for Financial Market Infrastructure, see www.bis.org/cpmi/info_pfmi.htm.

[27] There are also standardized approaches for market risk, operational risk, the computation of credit risk for securitization, and counterparty credit risk, to name a few.

[28] The first FSAP on the IMF's website is for Iceland. Published on April 10, 2001, it includes an assessment of observance of the Basel Core Principles for Banking Supervisions. See www.imf.org/en/Publications/CR/Issues/2016/12/30/Iceland-Financial-System-Stability-Assessment-4099.

[29] See various documents available at www.bis.org/list/bcbs/tid_25/index.htm.

IMF representatives are seen as outsiders, and that some participants may be concerned that the IMF representatives could share what they hear at the SSB meetings with their colleagues involved in bilateral surveillance. One stated that "whatever a national authority says can be used against them… the IMF cannot be both a confessor and the police."

49. I should note that neither Fund staff, current or former, nor SSB secretariat members believe this to be a serious issue. One IMF official commented that FSAP teams regularly include external experts, and that these are often former national representatives to the SSBs. So, even if the Fund did not participate in the SSBs, the same information would get into the process. However, given the seniority and experience of those that raised this issue—they were among the most experienced and highest-level interviewees—I believe that it is important to take this concern seriously.[30] It is difficult to know whether this risk has ever materialized. Nevertheless, it is important that the Fund be sensitive to whether its presence is having a chilling effect on the discussions. One way to address this concern could be by explicitly agreeing on the appropriate "Chinese walls" between those IMF staff attending in the SSB meetings and those involved in bilateral surveillance and FSAPs.

50. As an aside, it is worth noting another potential pitfall in the Fund's direct participation in the SSBs. By its very nature, the standard setting process involves compromises. The result may not accord with what authorities of some of the jurisdictions, the IMF, or other independent observers and analysts believe to be best. Some might question whether, as participant in the discussion, the Fund will feel constrained in future assessments by the agreement reached, and whether it will be co-opted by having taken part in the process.

51. On the other hand, the Fund is in a good position to identify flaws and gaps in the standards. Given the propensity for the industry to capture their national regulators, there is an inevitable tendency toward weak standards. Using staff research—working papers, staff discussion notes and the like—the Fund, together with the other IFIs, should advocate inside of SSB discussions for standards that are likely to guard the resilience of the global financial system at risk. While they will be obligated to support the final agreement, integrating the completed regulations into their surveillance activities, it is important that the Fund push against efforts to dilute the standards during the course of SSB negotiations.

52. A more specific issue directly related to the IMF's surveillance activities concerns the fact that some of the SSBs are engaging in implementation monitoring of their core members. For example, in 2011 the BCBS began monitoring the implementation of the Basel III standards. In addition, since 2012, the CPMI has monitored implementation of the *Principles for Financial Market Infrastructures*. These activities are highly technical, requiring experts capable of checking whether national legislation and regulation is compliant with the agreed international standards and principles. Furthermore, the assessors have to determine when deviations are material and

[30] These issues also arise in the context of FSB country peer reviews, which is one reason to be skeptical of their usefulness.

when they are not. Jurisdictions largely accept the conclusions of the monitors—negotiating changes during the process of the assessments. Furthermore, given the nature of the exercise, they occur once. My conclusion is that the SSBs should do the initial round of implementation monitoring, with the Fund integrating the newly agreed standards and principles into its ongoing surveillance activities to check for continued compliance.

Recommendation 3*: Regarding its relationship with Standard Setting Bodies, the IMF should:*

(i) Be conscious of the potential chilling effect of the Fund's presence in the SSBs.

(ii) Identify and draw attention to deficiencies in international standards that put the resilience of the financial system at risk.

V. THE POLICY DEVELOPMENT CYCLE

> *The FSB, in close collaboration with the standard-setting bodies, and informed by work carried out by its members and other stakeholders (including through a public consultation), has developed a framework for the post-implementation evaluation of the effects of the G20 financial regulatory reforms* FSB (2017b).

53. Today, the regulatory reform process is different from what it was even a decade ago. Prior to 2007, standard setters would convene national authorities, consider proposals, negotiate, agree and then go home. While the parties had committed to abide by the agreement, whether they did or not was up to them. It was the honor system.

54. In the aftermath of the crisis, there has been a dramatic change in the approach to standard setting. In place of the honor system, we now have the policy development cycle.[31] The cycle, intended to facilitate continuous improvement, has the following essential elements:

(i) Identify a market failure, externality or systemic risk that requires attention.

(ii) Propose a policy response.

(iii) Assess the impact and adjust the proposal.

(iv) Reach consensus and adopt a standard.

(v) Implement the policy and monitor implementation.

(vi) Evaluate the effects of the policy.

(vii) Propose refinements and enhancements to the standard.

[31] See the discussion in FSB (2017b).

55. In looking at this list, each part requires a somewhat different set of skills and analytical capabilities. Identification of market failures is a largely theoretical exercise that is the job of researchers, albeit ones with substantial institutional knowledge. These can be either in academia or in the official sector. Proposing feasible policy responses requires that theorists get together with practitioners. Assessment, both pre- and post-implementation, requires detailed empirical work. In addition, refinements to the standards follow naturally from the evaluations.

56. The policy development cycle faces a number of daunting challenges. To understand what they are, consider traditional fiscal and monetary policy aimed at macroeconomic stabilization. Over the past century, economists and statisticians created a set of metrics with agreed international standards—gross domestic product, industrial production, employment, unemployment, consumer price indices and the like—that allow us to monitor activity. During this same period, policymakers refined their tools—including interest rates, lending programs, tax policies, and public insurance schemes. Finally, researchers have created a set of models that link the tools to the objectives, and in the process helped to refine the policy instruments themselves.

57. For financial stability policy, we have no such framework. While there is a growing consensus that we should state the overall objective in terms of the resilience of the financial system, we have no clear metrics.[32] We have no standard set of tools. In addition, we have no generally agreed upon models linking the two.

58. Fixing this is likely to take decades. Moreover, as researchers develop what we need, it will feed into the development cycle. In the meantime, however, policymakers cannot and will not wait. This leads to the following question: Where in the policy development cycle can the IMF contribute most effectively and appropriately?

VI. THE COMPARATIVE ADVANTAGE OF THE IMF

59. A basic principle of economics, management and public policy is that specialization based on comparative advantage results in the most efficient allocation of resources. So, when compared with the SSBs and the FSB, what is the IMF's comparative advantage? What should the Fund be doing, and what should it leave to others?

60. At various points, interviewees mentioned a number of key attributes of the Fund. I will focus on four: organization structure, universal membership, the data and experiences collected in bilateral surveillance, and knowledge of fiscal policy issues.

[32] See Tucker (2016) for a general discussion.

61. Starting with organizational structure, the Fund currently has a staff of over 2,500, including about 300 in MCM and other financial specialists deployed around the Fund.[33] Because of the nature of its work, the IMF attracts highly skilled macroeconomists and people who build econometric models that provide a consistent and comprehensive global perspective. This structure has a number of advantages, including the ability to ensure continuity. While small organizations are flexible, big ones have institutional memories and rigidities that slow the pace of change. The Fund can and should embrace this as an advantage.

62. At this point, I should note that the Fund's comparative advantage is not about size, per se. It is about structure. Numbers themselves are misleading. While the IMF does hire a large number of consultants and individual collaborators to help with its surveillance and analytical work—a casual look at FSAPs and *GFSR* chapters reveals the almost constant presence of external experts—the IMF's own staff does the core work.

63. By contrast, the FSB and SSB secretariats (as well as the BIS) have a different organizational configuration (and less than 50 staff each). The staffs of the secretariats act as facilitators for the collaboration among representatives of the members. The working process is to form issue-specific technical working groups composed of staff drawn from member organizations, chaired by a senior official. The secretariat members—usually only one or two per working group—play a coordinating role. The resulting reports are joint products designed to provide a foundation for a consensus on the way forward. Furthermore, because participants in projects come from different cultural institutional and educational backgrounds, the conclusions are less prone to groupthink. The collaborative nature of the FSB and SSB process incorporates diverse experiences and a multiplicity of views and serves to inform discussions and helps generate consensus.[34]

64. The second important attribute of the IMF is that, with 189 members, it has nearly universal membership that includes all of the small countries of the world. By contrast, the FSB includes 24 countries, plus the European Central Bank, the European Commission, the OECD, and the IFIs (BIS, IMF, and World Bank). While the IAIS and IADI both have large numbers of members, the BCBS mirrors the FSB, and the CPMI is smaller still. Granted the FSB does have a set of regional consultative groups that include 84 countries, but these play an ancillary role. This means that IMF is in a good position to speak for the large number of small countries that do not have direct representation.

65. It is important not to take this too far. Universal representation is obviously important, but some jurisdictions are more important than others are, especially when considering finance.

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[33] See http://www.imf.org/en/About/Factsheets/IMF-at-a-Glance (IMF, 2018a).

[34] The problem of groupthink is particularly pernicious in an institution like the IMF, where much of the staff has the same training. See the discussion in the IEO evaluation report on the run-up to the global financial and economic crisis (IEO, 2011).

The FSB's 24 members account for more than 80 percent of global GDP, roughly 90 percent of global credit to the non-financial sector, and three-quarters of IMF voting rights.[35]

66. Third, through its surveillance activities and technical assistance, the IMF collects information on a broad range of country-level experiences. This includes the collection, organization and processing of copious amounts of publicly available data, as well as the reporting associated with Article IV and FSAP activities.[36] The BIS and the SSBs also collect large amounts of data but they rely on voluntary agreements of reporting jurisdictions and neither of these other organizations spends time on the ground in the countries.[37]

67. Fourth, among international institutions participating in financial surveillance and work on regulatory reform, the IMF is the only one with the capacity to examine linkages with fiscal policy issues. The BIS has the analytical capacity and the composition of its membership allow it to look at monetary policy. The OECD specializes in structural policies. In addition, the FSB coordinates work on financial stability policy. On fiscal policy, however, none has the technical expertise and access of the Fund. The Fund can also bring its considerable analytical resources to bear on issues such as analysis of macro-financial linkages, financial stability, and identifying potential cross-country spillovers.

68. Finally, I come back to the point about the Fund having an independent voice. As I mentioned earlier, financial institutions and the industry often capture their national authorities. Captured regulators are, by definition, lax regulators. The IMF and the other IFIs involved in the process are less likely to be captured by financial institutions and therefore more able to be objective in their analysis of the requirements for financial stability and resilience.

69. Taken together, these lead to the tentative conclusion that the comparative advantage of the IMF is in:

(i) representing the interests of smaller countries;

(ii) ensuring consistency of data and information;

(iii) using knowledge from bilateral surveillance to build a global view from the bottom up;

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[35] The BIS reports that, in 2016, total credit to the non-financial sector for the FSB member jurisdictions totaled US$146 trillion of a total of US$160 trillion.

[36] The IMF also collects data as part of its large financial technical assistance program, representing about 70 person-years (IMF, 2017d). However, the circulation of technical assistance reports is limited as they are not generally published.

[37] On the other hand, because they have access to detailed, confidential, institution-level data, national authorities are better placed to contribute analysis related to market behavior or post-implementation impact.

(iv) bringing high-level analytical capacities to bear:

(a) linking the macro and financial stability narratives;

(b) examining the consistency of monetary, fiscal and financial policy;

(c) identifying cumulative imbalances and spillovers; and

(v) providing an independent voice for rigorous standards that safeguard global financial resilience.

70. This is an impressive list. How can the Fund be most effective in bringing these attributes to bear on the work of the FSB and the SSBs?

VII. CONTRIBUTING TO THE POLICY DEVELOPMENT CYCLE

71. I see six areas where the Fund can further exploit its comparative advantage, bringing the results of the appropriate work into the policy development cycle where it will have the most impact and be the most helpful. In order of importance and impact, these are:

(i) post-implementation impact assessment using information from bilateral surveillance;

(ii) pre-implementation impact assessment using its analytical tools;

(iii) monitoring of the implementation of the standards through bilateral surveillance;

(iv) proposing refinements based on knowledge of interactions between regulatory and fiscal policy;

(v) helping to build a financial stability policy framework using research capacities; and

(vi) formulating and advocating an independent view on standards based on its analytical work and taking into account the views of its wider membership.

72. Before describing each of these, I should emphasize that some national authorities and SSB secretariat members were quite clear about the implications of the fact that the IMF staff is not composed of what they called “plumbers.” Interviewees noted that senior Fund staff’s primary training is typically in macroeconomics, or in financial economics with a macroeconomic perspective.[38] Only a limited number of people have detailed practical knowledge of regulation and supervision. This makes sense given the role the Fund has played since its inception, but it

[38] In interviews, IMF senior staff suggested that this is a consequence of the fact that internal advancement requires the ability to contribute across many areas (what the IMF calls “fungibility”). Thus, staff with macroeconomic tools are the most mobile within the organization. See Stedman (2018).

has important consequences when it comes to regulatory policy development and supervisory standards. To paraphrase an interviewee with wide experience: technicians, especially experienced financial regulators and supervisors, want to speak to other technicians. They can tell immediately if someone does not have their depth of knowledge and experience and will ignore them. This as a caution: unless the IMF plans to shift the structure of its staff fairly dramatically to employ former bankers, securities traders, asset managers, risk managers, actuaries, insurance experts, and real estate investment professionals—and those who with experience regulating and supervising them—they should leave the technical aspects of the policy development cycle to the technicians. Let the plumbers do the plumbing; do not send an architect to fix the pipes.

73. The stark distinction between SSB regulators and IMF macroeconomists has two implications. First, it is important for the Fund representatives to limit any tendency they might have to intervene in negotiations over technical details. Second, macroeconomists can and will add value, informing SSB discussions about the macroeconomic consequences of their actions at the national and global level. However, they need to do it in a language that SSB regulators will understand. That is, Fund macroeconomists need to understand their audience, presenting their analysis in terminology that is generally accessible to those less fluent in the nomenclature, models and culture of economics Ph.D. programs.

74. Before continuing, it is worth pointing out that, compared to the SSBs, the FSB operates at a higher level of seniority. The plenary, the steering committee and the standing committees are all composed of principals—they are executives, not technicians. Because oversight of the regulatory reform process is the FSB's core function, it is essential that representatives be economic policymakers. Therefore, the problem does not arise there.

75. I now turn to the six areas where I believe the Fund can and should contribute.

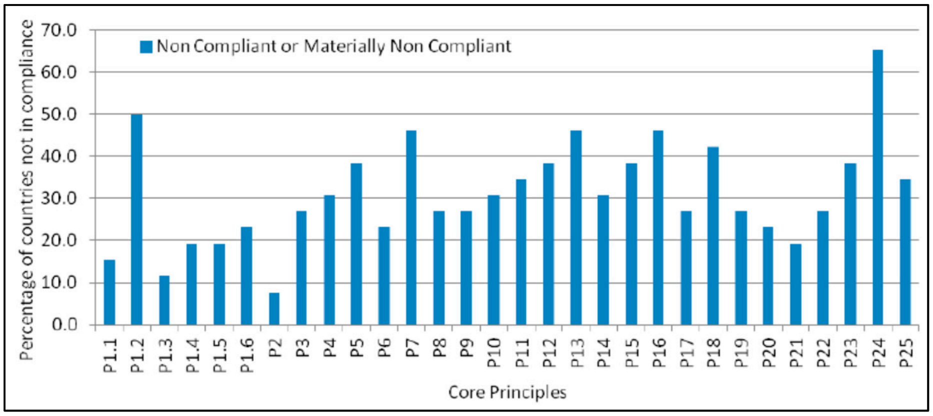
(a) Post-implementation impact assessment

76. Looking at the policy development cycle, the place where the Fund's comparative advantage is clear is in the assessment of the impact of policies following implementation. To date, however, the IMF has had limited involvement in this area. For example, using confidential supervisory data to which the Fund does not have access, the BCBS performs periodic Quantitative Impact Studies (QISs) of specific rule changes. And, the FSB's work program includes examination of broader issues such as the impact of the new regulatory structures on infrastructure financing and SME financing. But, the Fund's involvement has been marginal so far in part because, according to MCM staff, these particular topics have not been in the Fund's core areas of interest or expertise.

77. That said, there remains significant potential for Fund staff to complement work being done by the SSBs and the FSB. Through its bilateral surveillance and technical assistance, the IMF has information on virtually every country in the world. This cross-sectional data can and should be merged into a consistent data set and used to address issues arising in post-implementation

impact assessment. Viñals and Fiechter (2010) provides an example of this sort of work. Drawing on the history of FSAPs, the authors examine the degree to which country supervisory regimes follow the BCBS's Core Principles for Effective Banking Supervision. Figure 1 below, with the 25 core principles along the horizontal axis and the percentage of countries in compliance on the vertical axis, comes from the paper. (There are similar figures for the IOSCO Objectives and Principles of Securities Regulation and the IAIS Core Principles.) Another example of leveraging the FASP is the analysis in the recent Peru FSAP of the impact of Basel 3 capital adequacy framework on the supply of bank credit.

Figure 1. Basel Core Principles of Banking Supervision (2006 Revision)



Source: Viñals and Fiechter (2010), p. 10.

78. Going forward, I see a number of possible avenues for the IMF to contribute. For example, Fund staff could use aggregate data to study the impact of regulations on financial systems—a sort of "meta-QIS." With access to the necessary information, the IMF could prepare periodic "streamlined global FSAPs," performing global stress tests. That is, Fund researchers could assess the impact of shocks and reforms on aggregate capital levels, as well assessing their impact on domestic and cross-border lending. My suggestion is that MCM consider making this a regular part of the multilateral monitoring and risk assessment exercise that forms the core of the *GFSR*.

79. These examples are indicative of the sort of work the Fund could do. Using this style of analysis, the Fund could contribute to post-implementation impact assessment of virtually every regulatory reform, providing data and analytical tools to help design refinements and enhancements of the standards (leaving the negotiation on proposed changes to the SSBs). This would include addressing questions like:

- What is the impact of capital requirements on various types of bank lending?
- Has the liquidity coverage ratio made certain securities scarce?

- Does tighter bank regulation lead to an increase in shadow banking?
- To what extent is central clearing reducing the systemic risk from derivatives?
- Is micro-prudential supervision doing a proper job of evaluating the vulnerabilities of individual firms or are supervisors merely doing rules-bound compliance checking?
- What are the macro-financial consequences emerging from regulatory changes?

80. More generally, the Fund should organize its bilateral financial surveillance with two overarching principles in mind. First, collect and compile information with an eye toward *future* assessments. Be forward looking. Second, use data from across all jurisdictions to help identify places where the regulatory perimeter is either too strong or too weak. That is, where are regulations hampering desirable activity and where are they causes of migration that creates systemic risk? In addition, together with the World Bank, the Fund should be able to identify consequences of regulatory reforms for those jurisdictions not directly represented on the FSB and the SSBs. Are the regulations having the intended effects? Are they creating positive or negative spillovers for the global financial system?

81. Importantly, to the extent practically possible, the Fund should make this sort of data available to researchers. The BIS publication of property prices and credit data is a model for this. Put the information on the Fund's website and ensure easy access.

(b) Pre-implementation impact assessment

82. A critical part of the policy development cycle is the assessment of the potential impact of proposed regulations. Prior to an agreement, SSBs now engage in an exercise in which they look at both the firm-level impact and the macroeconomic impact. The BCBS's ongoing quantitative impact assessment exercises (QIS) is an example of the former,[39] while the work of the Macroeconomic Assessment Group (2010) is a case of the latter.

83. The IMF played a constructive, albeit modest, role in the Macroeconomic Assessment Group (MAG), which I chaired. It supplied a single staff member who used in-house models of the global economy to provide consistent estimates of the potential impact of changes in capital and liquidity requirements on all of the jurisdictions represented on the MAG. As a check, we were then able to compare these estimates with those reported by national authorities and based on models maintained inside of central banks. In addition, Fund models were able to provide estimates of the spillover effects associated with implementing new regulatory policies globally.

[39] See, for example, the quantitative impact assessment of total loss absorbing capacity (TLAC) in Basel Committee on Banking Supervision (2015).

84. I believe that, as one of the few institutions that maintains the analytical capacity to examine the impact of reforms on a global scale, the Fund should build on the MAG experience to further enhance support for pre-implementation impact assessment.

85. Beyond contributing to these working groups, the Fund has analytical capabilities that it can and should bring to bear on the specific topics in the pre-implementation impact assessment exercise. To be a bit more specific, financial innovation has an impact on the resilience of the system. This means that the evolution of financial institutions and financial markets has social costs and benefits. The Fund should devote resources to ensuring that it is constantly evaluating these costs and benefits, so that it can provide an informed answer to the question: what is the long-run macroeconomic impact of regulating a specific activity?

(c) Implementation monitoring

86. This work has two distinct parts: technical assessment of whether laws and rules comply with standards and principles, and the ongoing monitoring of the effectiveness of the prudential regulatory system. Through its FSAPs, ROSCs and Article IV consultations, the IMF contributes to these activities. In coordination with the SSBs, this work should continue.

(d) Fiscal policy and financial stability

87. The Fund has a wealth of knowledge, an abundance of data, and a large staff with expertise on fiscal issues. This puts them in a unique position to examine the relationship between financial stability and fiscal policy. As one senior official at a national authority put it, "[o]n fiscal issues, the IMF is better prepared than others, and can add value."

88. As far as I can tell, there is no consistent effort to address these challenges at the international level. The Fund can and should develop a framework for modeling the interaction between fiscal trajectories and financial stability. This means understanding how the need for safe assets feeds back on public debt management, and how the contingent liabilities of the government influence financial institution and market structure.

(e) Building a financial stability policy framework

89. It is my strongly held view that the crisis has made clear the need to build a financial stability policy framework akin to the inflation-targeting framework used to inform monetary policy. Such a framework requires measurable financial stability objectives that are akin to a price index, policy tools comparable to an interest rate, and dynamic models that help us to understand the link between the two.

90. In my view, the concept of GDP at risk introduced in the October 2017 *GFSR* is a potentially decisive step forward for policymakers. As discussed in Cecchetti and Schoenholtz (2017a), GDP at risk has four useful characteristics: it is directly associated with social welfare; based on a widely

understood concept, it aids communication; it allows us to translate the machinery of inflation targeting into financial stability policy; and it disciplines discussions of policy tradeoffs.

91. Completing this agenda requires a massive effort from the entire economics profession. With its ability to marshal resources both to do top-down global analysis and bottom-up country-level analysis, the Fund is in a unique position to contribute to support this effort both internally and externally. This means providing the appropriate resources, including competitive salaries, to hire more financial sector specialists who can engage in appropriate research. Creating an internal environment that nurtures research into modelling financial-real interactions (not just more DSGE models).[40] The ongoing MCM efforts in this direction are welcome and resources for this should be forthcoming.

(f) Providing an independent voice

92. As some of the prior discussion suggests, it is important for the Fund to formulate and advocate an independent view on standards based on its analytical work and taking into account the views of its wider membership, pushing against the inevitable attempts by some national authorities to weaken the standards. The IMF is well placed to balance the imperative of promoting financial stability and resilience, and the need to develop an environment that is conducive to favorable macroeconomic outcomes. As discussions occur inside the SSBs, the Fund should deliver analysis both privately and publicly that supports their view. Furthermore, the IMF should work together with other international institutions to enhance their influence. That is, the Fund should promote rigor privately, publish analysis justifying their position publicly, and coordinate with other neutral observers.

Recommendation 4: *The IMF could contribute to the policy development by:*

(i) *To the extent possible, collect and compile information from bilateral surveillance in a manner that makes it useful for future post-implementation impact assessments. In addition, where possible, the Fund should make this sort of data easily accessible to researchers.*

(ii) *Use global macroeconomic models of aggregate activity and spillovers, as well as analytical capacities more generally, and knowledge and experience with non-FSB members to contribute to pre- and post-implementation impact assessments.*

(iii) *Harness expertise on fiscal policy to help focus on its relationship with financial stability.*

(iv) *Employ research resources in a continuing effort to aid in building a coherent financial stability policy framework.*

[40] For a discussion of the current state of the relevant IMF modelling efforts, see Jeanne (2018).

(v) *Provide an independent voice to both highlight the needs of the unrepresented and, in internal discussions, advocate for strong rigorous standards that will not jeopardize global financial resilience.*

VIII. SUMMARY OF RECOMMENDATIONS

93. My evaluation of the relationship between the IMF on the one hand, and the FSB and the SSBs on the other, leads to four sets of recommendations:

Recommendation 1**:** *The IMF should continue to contribute its considerable skills and knowledge to support the study of the analytical foundations for financial stability policy.*

Recommendation 2**:** *The division of labor articulated in the 2008 letter between the IMF and FSB is working well. Within that framework, to improve its efficiency and effectiveness, the IMF should:*

(i) *Work together with the FSB to identify areas requiring additional attention, especially regarding nonbank intermediation, and coordination work to ensure flaws are rectified.*

(ii) *Strengthen forward-looking processes to coordinate with the FSB, helping to ensure that, as much as possible, information from bilateral surveillance activities be collected in a manner that takes into account future peer reviews and implementation assessment.*

(iii) *Strengthen forward-looking processes to coordinate with the FSB peer review exercises, helping to ensure that information from bilateral surveillance activities is both comprehensive and collected in a manner consistent with the needs of future peer reviews.*

(iv) *Coordinate internal Fund processes to ensure that the full range of staff skills across all relevant departments provide timely input into FSB deliberations, evaluations and reports.*

Recommendation 3*: Regarding its relationship with Standard Setting Bodies, the IMF should:*

(i) *Be conscious of the potential chilling effect of the Fund's presence in SSBs.*

(ii) *Identify and draw attention to deficiencies in international standards that put the resilience of the financial system at risk.*

Recommendation 4: The IMF could contribute to the policy development by:

(i) *To the extent possible, collect and compile information from bilateral surveillance in a manner that makes it useful for future post-implementation impact assessments. In addition, where possible, the Fund should make this sort of data easily accessible to researchers.*

(ii) *Use global macroeconomic models of aggregate activity and spillovers, as well as analytical capacities more generally, and knowledge and experience with non-FSB members, to contribute to pre- and post-implementation impact assessments.*

(iii) *Harness expertise on fiscal policy to help focus on its relationship with financial stability.*

(iv) *Employ research resources in a continuing effort to aid in building a coherent financial stability policy framework.*

(v) *Provide an independent voice to both highlight the needs of the unrepresented and, in internal discussions, advocate for strong rigorous standards that will not jeopardize global financial resilience.*

Annex 1. Joint Letter from Dominique Strauss-Kahn and Mario Draghi

November 13, 2008

Dear Ministers and Governors:

The financial crisis has underscored the importance of international coordination both in responding to the crisis and in developing and implementing policies for a sounder financial system.

Coordination is important as well across the international financial institutions and bodies that support the efforts of national governments, including the IMF and the FSF.

In view of the ongoing financial crisis and against the background of the upcoming G20 Leaders' Summit on Financial Markets and the World Economy, we have decided to enhance our collaboration and would like to clarify how we see the roles of our respective bodies in that regard.

1. Surveillance of the global financial system is the responsibility of the IMF.

2. Elaboration of international financial sector supervisory and regulatory policies and standards, and coordination across the various standard setting bodies, is the principal task of the FSF. The IMF participates in this work and provides relevant inputs as a member of the FSF.

3. Implementation of policies in the financial sector is the responsibility of national authorities, who are accountable to national legislatures and governments. The IMF assesses authorities' implementation of such policies through FSAPs, ROSCs and Article IVs.

4. The IMF and the FSF will cooperate in conducting early warning exercises. The IMF assesses macro-financial risks and systemic vulnerabilities. The FSF assesses financial system vulnerabilities, drawing on the analyses of its member bodies, including the IMF. Where appropriate, the IMF and FSF may provide joint risk assessments and mitigation reports.

Our shared goal is to strengthen the international financial system. To that end, the IMF and the FSF stand ready to support the work of the G20.

Sincerely yours,

Dominique Strauss Kahn
Managing Director
International Monetary Fund

Mario Draghi
Chairman
Financial Stability Forum

References

Adrian, Tobias, 2017, "Shadow Banking and Market Based Finance," September 14 (Washington: International Monetary Fund).

Alleyne, Trevor, and others, 2017, "Loss of Correspondent Banking Relationships in the Caribbean: Trends, Impact, and Policy Options," IMF Working Paper No. 17/209, August (Washington: International Monetary Fund).

Alwazir, Jihad, and others, 2017 "Challenges in Correspondent Banking in the Small States of the Pacific," IMF Working Paper No. 17/90, April (Washington: International Monetary Fund).

Bank for International Settlements, 2009, "79th Annual Report, 1 April 2008–31 March 2009" (Basel, Switzerland: Bank for International Settlements).

Bank for International Settlements Committee on Payments and Market Infrastructures and the International Organization of Securities Commissions, "Principles for Financial Market Infrastructures (PFMI)." Available at www.bis.org/cpmi/info_pfmi.htm.

Bank for International Settlements, Financial Stability Board, and International Monetary Fund (BIS, FSB, and IMF), 2009, "Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations," Report to the G20 Finance Ministers and Governors, October.

__________, 2018, "Financial Stability Risks During Policy Normalisation," Background Note for G20 Ministers, April.

Basel Committee on Banking Supervision, 2015, "TLAC Quantitative Impact Study Report," November (Basel, Switzerland: Bank for International Settlements).

Basel Committee on Banking Supervision and International Association of Deposit Insurers, 2009, "Core Principles for Effective Deposit Insurance Systems," June. Available at www.iadi.org/en/coreprinciples-and-research/core-principles/.

Caprio, Gerard, 2018, "Assessing the FSAP: The Quality, Relevance, and Utility of the IMF's Program," IEO Background Paper No. BP/18-02/02 (Washington: International Monetary Fund).

Carney, Mark, 2015, "FSB Chair's Letter to G20 on Financial Reforms–Finishing the Post-Crisis Agenda and Moving Forward," February 4 (Financial Stability Board).

Cecchetti, Stephen G. and Kermit L. Schoenholtz, 2015, "The Mythic Quest for Early Warnings," April 13. Available at www.moneyandbanking.com.

__________, 2017a, "GDP at Risk," November 26. Available at www.moneyandbanking.com.

__________, 2017b, "Regulatory Reform: A Scorecard," CEPR Discussion Paper No. 12465, November (Washington: Center for Economic Policy and Research).

Cecchetti, Stephen G. and Paul M. W. Tucker, 2015, "Is there macroprudential policy without international cooperation?" in Glick, R. and M. Speigel, eds., "Policy Challenges in a Diverging Global Economy," Proceedings of the Asia Pacific Policy Conference, Federal Reserve Bank of San Francisco, November.

Dagher, Jihad, and others, 2016, "Benefits and Costs of Bank Capital," IMF Staff Discussion Note (SDN/16/04), March (Washington: International Monetary Fund).

Erbenová Michaela, and others, 2016, "The Withdrawal of Correspondent Banking Relationships: A Case for Policy Action," IMF Staff Discussion Note (SDN/16/06), June (Washington: International Monetary Fund).

Financial Stability Board, 2010, "Overview of Progress in the Implementation of the G20 Recommendations for Strengthening Financial Stability," June.

__________, 2011a, "Key Attributes of Effective Resolution Regimes for Financial Institutions," October.

__________, 2011b, "Understanding Financial Linkages: A Common Data Template for Global Systemically Important Banks: Consultation Paper," October.

__________, 2013, "Meeting of the Financial Stability Board in Zurich on 28 January," FSB Press release, Ref no: 06/2013, January 28.

__________, 2017a, "Handbook for FSB Peer Reviews," March 31.

__________, 2017b, "Framework for Post-Implementation Evaluation of the Effects of the G20 Financial Regulatory Reforms," July 3.

__________, 2017c, "FSB publishes 2017 G-SIB list," FSB Press release, Ref no: 43/2017, November 21.

Financial Stability Board and International Monetary Fund (FSB and IMF), 2009, "The Financial Crisis and Information Gaps," Report to the G-20 Finance Ministers and Central Bank Governors, October 29.

Financial Stability Board, International Monetary Fund, and Bank for International Settlements (FSB, IMF, and BIS), 2011, "Macroprudential Tools and Policy Frameworks: Progress Report to G20," October 27.

Grolleman, Dirk Jan and David Jutrsa, "Understanding Correspondent Banking Trends: A Monitoring Framework," IMF Working Paper No. 17/216, October (Washington: International Monetary Fund).

Independent Evaluation Office of the IMF (IEO), 2011, *IMF Performance in the Run-Up to the Financial and Economic Crisis: IMF Surveillance in 2004-07* (Washington: International Monetary Fund).

__________, 2014, *IMF Response to the Financial and Economic Crisis* (Washington: International Monetary Fund).

International Association of Deposit Insurers, 2014, "IADI Revises its *Core Principles for Effective Deposit Insurance Systems,"* IADI Press Release, November 21.

International Monetary Fund, 2001, "Iceland—Financial System Stability Assessment," IMF Country Report No. 01/85, June (Washington).

__________, 2009a, "Lessons of the Financial Crisis for Future Regulation of Financial Institutions and Markets and for Liquidity Management," February 4 (Washington).

__________, 2009b, "Initial Lessons of the Crisis," February 6 (Washington).

__________, 2009c, "Initial Lessons of the Crisis for the Global Architecture and the IMF," February 18 (Washington).

__________, 2009d, "Restarting Securitization Markets," Chapter 2 in *Global Financial Stability Report*, October (Washington).

__________, 2010a, "Systemic Risk and the Redesign of Financial Regulation," Chapter 2 in *Global Financial Stability Report*, April (Washington).

__________, 2010b, "Making Over-the-Counter Derivatives Safer: The Role of Central Counterparties," Chapter 3 in *Global Financial Stability Report*, April (Washington).

__________, 2010c, "IMF Membership in the Financial Stability Board," August 10 (Washington).

__________, 2011, "How to Address the Systemic Part of Liquidity Risk," Chapter 2 in *Global Financial Stability Report*, April (Washington).

__________, 2012, "Safe Assets: Financial System Cornerstone?" Chapter 3 in *Global Financial Stability Report*, April (Washington).

__________, 2013, "IMF Membership in the Financial Stability Board," Public Information Notice (PIN) No. 13/33, March 22 (Washington).

__________, 2014a, “How Big Is the Implicit Subsidy for Banks Considered Too Important to Fail?” Chapter 3 in *Global Financial Stability Report*, April (Washington).

__________, 2014b, “Risk Taking By Banks: The Role of Governance and Executive Pay,” Chapter 3 in *Global Financial Stability Report*, October (Washington).

__________, 2015a, “Monetary Policy and Financial Stability,” August 28 (Washington).

__________, 2015b, “Market Liquidity—Resilient or Fleeting?” Chapter 2 in *Global Financial Stability Report,* October (Washington).

__________, 2016, “Tax Policy, Leverage and Macroeconomic Stability,” October (Washington).

__________, 2017a, “Recent Trends in Correspondent Banking Relationships—Further Considerations,” March 16 (Washington).

__________, 2017b, “Use of Supervisory Standards in the Financial Sector Assessment Program—Understandings with Standard Setting Bodies,” July (Washington).

__________, 2017c, “Financial Conditions and Growth at Risk,” Chapter 3 in *Global Financial Stability Report*, October (Washington).

__________, 2017d, “Technical Assistance Strategy Update 2014-17,” October (Washington).

__________, 2018a, “IMF at a Glance,” IMF Factsheet, April 19 (Washington).

__________, 2018b, “Regulatory Reform 10 Years after the Global Financial Crisis: Looking Back, Looking Forward,” Chapter 2 in *Global Financial Stability Report*, October (Washington).

International Monetary Fund, Financial Stability Board, and Bank for International Settlements (IMF, FSB, and BIS), 2016, “Elements of Effective Macroprudential Policies Lessons from International Experience,” August 31.

Kodres, Laura and Aditya Narain, 2012, “Fixing the System,” *Finance and Development*, June, pp. 14-16 (Washington: International Monetary Fund).

Levine, Ross, 2014, “Aspects of IMF Financial Sector Surveillance During the Crisis,” IEO Background Paper No. BP/14/08 (Washington: International Monetary Fund).

Macroeconomic Assessment Group, 2010, “Assessing the Macroeconomic Impact of the Transition to Stronger Capital and Liquidity Requirements,” December (Basel, Switzerland: Bank for International Settlements).

Ötker-Robe, Inci and Ceyla Pazarbasioglu, 2010, "Impact of Regulatory Reforms on Large and Complex Financial Institutions," IMF Staff Position Note (SPN/10/16), November 3 (Washington: International Monetary Fund).

Roger, Scott and Jan Vlček, 2011, "Macroeconomic Costs of Higher Bank Capital and Liquidity Requirements," IMF Working Paper No. 11/103, May (Washington: International Monetary Fund).

Tucker, Paul M. W., 2016, "The Design and Governance of Financial Stability Regimes," CIGI Essays on International Finance, Vol. 3: September 2016 (Waterloo, Canada: Centre for International Governance Innovation).

Viñals, José, 2010, "A Regulatory Revolution is in the Making…" Presentation, March 29.

Viñals, José and Jonathan Fiechter, 2010, "The Making of Good Supervision: Learning to Say 'No,'" IMF Staff Position Note (SPN/10/08), May 18 (Washington: International Monetary Fund).

Viñals, José, and others, 2010, "Shaping the New Financial System," IMF Staff Position Note (SPN/10/15), October 3 (Washington: International Monetary Fund).

Zettelmeyer, Jeromin, 2018, "IMF Multilateral Financial Surveillance," IEO Background Paper No. BP/18-02/03 (Washington: International Monetary Fund).