INTERNATIONAL MONETARY FUND

THE IMF'S FINANCIAL SURVEILLANCE STRATEGY

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EXECUTIVE SUMMARY

This paper outlines strategic priorities for the IMF's financial surveillance in the coming years. It complements recent discussions on the work agenda in this area. It takes stock of innovations and gaps in financial surveillance by the Fund during the past decade, including in the wake of the current global financial crisis. It proposes concrete and prioritized steps to further strengthen financial surveillance so that the Fund can fulfill its mandate to ensure the effective operation of the international monetary system and support global economic and financial stability.

The strategy builds on and consolidates the progress achieved to date. It is ambitious, but focused, so as to ensure that scarce resources are used efficiently and effectively. A three-pronged strategy is proposed:

(i) *Strengthen the analytical underpinnings of macrofinancial risk assessments and policy advice*. Systemic risk has become ever more complex, with shocks propagating rapidly through highly interconnected financial systems and across economies. The Fund needs to remain at the forefront of international efforts to better identify macrofinancial risks, such as credit booms and busts and balance sheet fragility, in order to inform its policy advice at the national and multilateral levels.

(ii) *Upgrade the instruments and products of financial surveillance to foster an integrated policy response to risk*s. The Fund distills a range of macrofinancial risk assessments in the context of its bilateral and multilateral work, including through its flagship publications. Several ways to better integrate these products are envisaged, such as much closer collaboration between relevant functional and area departments and more frequent FSAPs, both of which will better integrate the Fund's Article IV and multilateral surveillance.

(iii) *Engage more actively with stakeholders in order to improve the traction and impact of financial surveillance*. Through its engagement, the Fund will promote an early diagnosis of systemic risks and encourage a greater willingness to act at the national and global levels.

The Fund will face many challenges in pursuing the above strategy. These challenges reflect the existence of analytical roadblocks, information and data gaps, resource constraints, and limits to traction. While, over the next three to five years, the Fund may not be able to prevent systemic crises, it will continue to improve its capacity to sound alarms early, help policymakers make the global financial system a safer place, and mitigate crises when they do materialize. Importantly, mechanisms are in place that will allow Management and the Executive Board to monitor progress and ensure that changes are in line with the goals and objectives set for the Fund's financial surveillance.

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I. INTRODUCTION

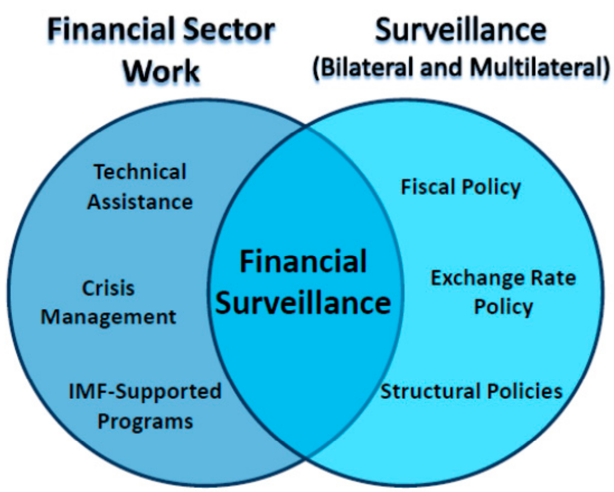
1. **The world has changed.** Only a few decades ago, most national economies were barely connected to the global financial world. Today, cross-border flows are the norm and large financial institutions dominate the global economy. Then, domestic financial systems were small, with banks performing simple deposit-taking and lending functions. Today, domestic financial sectors are often enormous and complex, performing a wide range of financial services and offering products that are sometimes opaque. Capital now moves at lightning speed to advanced and emerging markets alike, reverses suddenly, and spreads shock waves that can be devastating. These seismic changes have inexorably linked national economies to each other, transferring risks across borders in ways that have become increasingly difficult to track. The realization that the failure of one bank in one country can bring the global economy down, transmitting shocks to economies far removed geographically, has fundamentally shaken the contours of our thinking and policy making.

2. **The IMF is innovating to respond to these profound changes.** The IMF is upgrading its knowledge and expertise to better understand the linkages between markets and policy, institutions and governance, and financial and real flows. With the recognition that macroeconomic or finance models are by themselves insufficient to answer a broad range of questions, work is ongoing to integrate the two fields. While still at an imperfect stage, macrofinancial models are being created by Fund staff that help identify the sources of systemic risks, unravel global and within-country linkages, and analyze spillovers across borders. This analytical work is being used to develop new policy frameworks to guide surveillance and bolster risk management. Second, the Fund's instruments and products have adapted to help member countries identify vulnerabilities, enhance institutional capacity, reduce the probability of crisis, and contain the cost of crises when they do occur. Third, the Fund is strengthening its relationships with stakeholders to ensure it plays a leading role in key areas and influences the global policy debate.

3. **As the world continues to evolve, the Fund will remain uniquely placed to respond to new global financial challenges and concerns of member countries.** The Fund's nearly universal membership allows it to build on a wide range of country experiences and discussions with national policy makers and other stakeholders. The Fund's independence provides an impartial, credible, and effective platform for promoting the global good. In addition, the Fund's singular role in crisis management, assisting countries that are hard hit by the global financial crisis, is a critical input to surveillance. Finally, the Fund's diverse staff provides it with the range of perspectives, skills, and policy-relevant experience necessary to meet the emerging needs of its membership. Consistent with the Fund's surveillance mandate and its responsibilities, these factors will allow the Fund to facilitate the effective operation of the international monetary system, promote economic growth, and attenuate the fallout of risks where they materialize.

4. **Financial surveillance, as defined in this paper, is the intersection between the Fund's financial sector work and its surveillance activity** (Figure 1). While recognizing the strong interlinkages of the financial sector with the rest of the economy, this paper does not intend to address broader surveillance-related issues, such as the Fund's oversight of exchange rate, fiscal, and other policies, nor how this broader surveillance mandate itself is evolving. Also, the paper does not address how financial surveillance interacts with the Fund's lending or technical assistance activities.

Figure 1. Financial Surveillance



5. **This paper takes stock of the Fund's contributions to financial surveillance to date and lays out a strategy for the coming years.** The 2011 Triennial Surveillance Review (TSR), an exercise conducted periodically to assess the effectiveness of IMF's surveillance, called on staff to define the Fund's work in this area in a more strategic manner. Section II highlights recent steps in strengthening the Fund's financial surveillance and also notes the remaining gaps. Section III identifies the Fund's strategic priorities and actions it needs to take in the coming years. Section IV discusses the challenges the Fund will face, and Section V spells out the accountability framework that will apply, in implementing the strategy. The last section proposes some issues for discussion.

6. **In writing this paper, staff has benefited from recent Board discussions and input from stakeholders.** In March 2012, a Board discussion on the Financial Surveillance Work Agenda (http://www.imf.org/external/np/sec/pn/2012/pn1237.htm) set priorities for the year ahead and helped identify areas where the membership felt the Fund's work would be most useful. This paper takes a step back to provide an overview of the Fund's capacity to effectively conduct financial surveillance, identify the gaps, and prioritize broad areas for future work, which remain consistent with the annual Work Agenda. Staff also benefited from discussions with policymakers and academics (Appendix 1).

II. TAKING STOCK

7. **Two watershed events triggered increased emphasis by the Fund on financial surveillance.** Until the early 1990s, the coverage of financial surveillance was rudimentary. The primary focus was on the impact of domestic credit creation on inflation or the exchange rate, basic monetary operations, and the development of market-based monetary policy tools. This narrow focus reflected in part the relatively modest size and simplicity of domestic financial systems and the superficial treatment of finance and credit flows in macroeconomic models of the day. Two defining events were:

- *The explosion of credit growth and the financial crises of the 1990s, which revealed that external and financial stability were closely linked.* The significant interactions between banking and balance of payments crises—especially in Asian and Latin American emerging economies—and contagion to neighboring countries, resulted in a greater focus on financial system stability.

- *The global financial crisis starting in 2007–08, which showed that unfettered financial sector expansion in advanced economies could have destructive effects with global repercussions.* These financial shocks were unprecedented in their magnitude, virulence, staying power, and speed of cross-border transmission, reflecting the internationalization and integration of financial markets and institutions over time.

8. **The emergence of financial stability as one of the central themes of surveillance has led to a range of new policy and analytical challenges.** Policymakers are struggling to better understand sources of systemic financial risk and its propagation, both domestically and across borders. Indeed, policy formulation is constrained by the lack of a unified analytical framework and, often, adequate data. To address this predicament, several streams of analytical and "best practices" approaches are being pursued.

9. **The Fund's response to these challenges is proceeding along three strands:** innovations in analysis, adaptations of the IMF's instruments and products, and engagement with stakeholders. Appendix 2 describes the key innovations and remaining gaps. A summary is below:

- *Analytical approaches have been geared towards strengthening the Fund's policy advice on financial stability.* The Fund's toolkit for systemic risk assessment has been strengthened in the areas of financial sector vulnerabilities, macrofinancial linkages, and cross-border dimensions and global risks. The scope of the Fund's policy advice on financial stability is also expanding, especially in the areas of macroprudential policy and to take into account the cross-border dimensions of financial regulation and supervision.

- *To keep up with the changing world, the Fund's bilateral and multilateral surveillance instruments have been also modernized.* Article IV reports now contain substantive discussions of financial sector issues and deeper analysis of vulnerabilities, and put greater emphasis on cross-border spillovers. The Financial Sector Assessment Program (FSAP) has become more focused with the introduction of modular FSAPs in 2010 and mandatory FSAPs for 25 jurisdictions deemed to have systemically important financial sectors (S25) in 2011, while assessments themselves have deepened their analysis of supervisory issues and crisis management. The Global Financial Stability Report (GFSR) has increased its analytical depth, candor, and reach. The Vulnerability Exercise, which started in 2001 for emerging economies, was extended to advanced economies in 2009 and to low-income countries in 2011. Since 2009, the IMF and FSB have discussed the results of an Early Warning Exercise (EWE) every six months with the Fund's International Monetary and Financial Committee (IMFC), whose membership consists primarily of Finance Ministers and Central Bank Governors. New products, such as Spillovers Reports, have also been introduced.

- *The Fund has forged stronger relationships with key stakeholders.* With the G20 and the Financial Stability Board (FSB) also becoming important players in financial policy reform, the Fund has contributed significantly by bringing its understanding of macrofinancial linkages and cross-country experience to the table, and ensuring that the issues and concerns of all its members are addressed. In particular, the Fund has intensified its contributions to the discussion of global financial issues through its presence in key committees and working groups of the FSB and standard-setting bodies.

10. **While a number of milestones have been reached in strengthening the IMF's financial surveillance, several gaps remain.** The recent TSR (2011) and Independent Evaluation Office Report (2011) shed light on continuing shortcomings in Fund surveillance and why crises in member countries were not averted.[1] Both reports flagged that the analytical underpinnings of financial sector surveillance and related risk assessments needed further bolstering to ensure that it kept pace with market innovations.[2] *This clearly calls for strengthening staff's risk analyses going forward*. In other cases, the Fund may have identified the key material threats to macrofinancial stability through sound analysis, but did not deliver sufficiently clear, consistent, and candid messages on these risks or their policy implications.[3] *This points to the need to increase the quality of the Fund's products and instruments and sharpen their messages*. Finally, in certain instances, accurate risk assessments and appropriate alarms may have been produced by the Fund, but were

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

[2] In the United States, for example, Fund surveillance did not discuss, until the crisis had already erupted, the deteriorating lending standards for mortgage financing, or adequately assess the risks and impact of a major housing price correction on financial institutions (IEO, 2011).

[3] While surveillance in emerging markets often issued consistent warnings about specific vulnerabilities (for example, related to overheating, large current account deficits, credit booms, and unsustainable debt buildups), in most of these countries (including some of the most crisis-prone), the overall messages were overly positive (IEO, 2011).

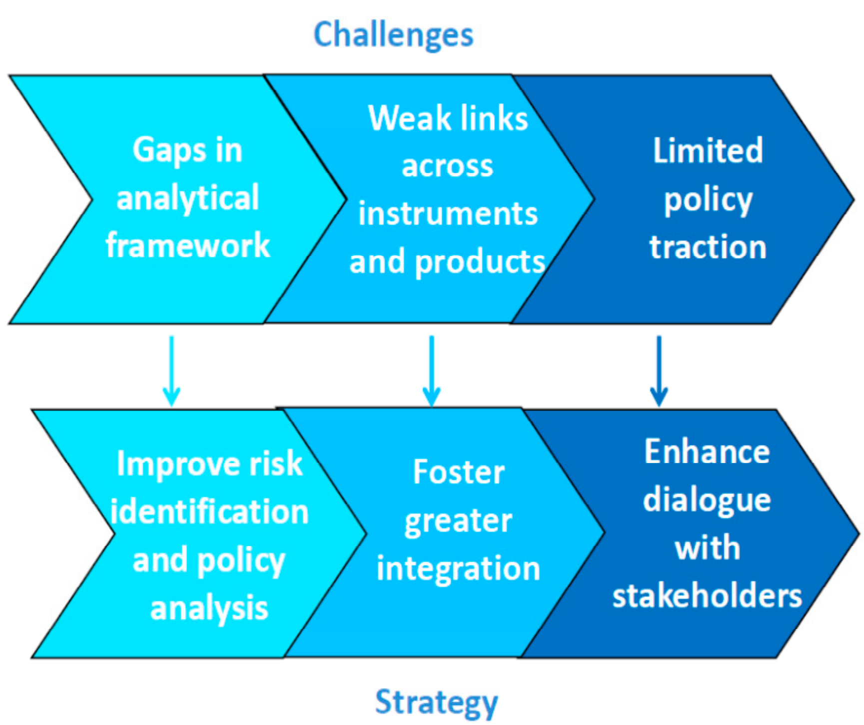
not acted upon by policy makers.[4] *This indicates that traction with national authorities, and other stakeholders, needs to progress hand in hand to lessen the probability of crises*.

III. STRATEGY AND ACTIONS GOING FORWARD

11. **The goal of the proposed financial surveillance strategy is ambitious, but focused, so as to ensure that scarce resources are used efficiently and effectively.** In that context, the aim is to build on and consolidate the progress achieved to date. The strategy has been designed to provide consistency in its overarching approach—that is, analysis, instruments and products, and increasing traction with stakeholders. Thus, it strikes a balance between ensuring continuity in areas of strength, while providing the required direction and scope to bridge identified gaps.

12. **Staff proposes a three-pronged strategy** (Figure 2): (i) improve risk identification and macrofinancial policy analysis, (ii) innovate further in the Fund's bilateral and multilateral instruments and products to foster an integrated perspective on financial risks, and (iii) increase traction by engaging more actively with stakeholders.

Figure 2. Financial Surveillance Strategy: A Three-Pronged Approach



[4] The 2011 TSR findings suggest that the traction of surveillance is indeed uneven: it is higher for program than non-program countries, declines with income level, and is lower for G20 than for non-G20 countries—a source of concern given the more systemic nature of the former.

Action 1: Improve risk identification and macrofinancial policy analysis

13. **Advance the frontiers of analysis.** The in-house macroeconomic monetary model developed by Polak and others has been the workhorse of the IMF's surveillance and lending activities for well over 50 years. It is still used for many purposes, and remains an inspiration for Fund staff. However, today macrofinancial feedback effects have reached a level of complexity that has become difficult to capture in such models, requiring new analytical frameworks to be developed that explore the interdependencies of real-financial sectors within and across countries. This will help to better identify and mitigate systemic risks. This includes analyzing cross-risk correlations, default dependencies, and other non-linearities in times of stress. While efforts to build a unified macrofinancial framework are ongoing, developing "best practices" on policy responses, institutional frameworks, and their implementation will remain center stage in the interim.

14. **Specific policy areas identified for in-depth analysis in the period ahead are:**

- *Make strides in understanding the interactions between macroprudential, macroeconomic, and microprudential policies, as well as potential costs and side effects*. Macroeconomic policies (monetary/exchange rate and fiscal) aim to achieve price stability and economic growth, and microprudential policies address idiosyncratic risks in individual institutions. Recent experience, however, has demonstrated that financial stability cannot be assured without a macroprudential approach, that is, one targeted at systemic risks to, or stemming from, the financial sector (Figure 3). A unified approach will enable the Fund to advise its membership on the most appropriate and effective macroprudential policy tools, depending on country circumstances and the stage of the credit cycle. The policy agenda includes: (a) enhancing the complementarity between monetary, macroprudential, and microprudential policies; (b) identifying policy tools that also minimize potential side effects and negative spillovers; and (c) proposing options with regard to institutional arrangements to assure adequate governance and accountability.

- *Develop a comprehensive, balanced, and flexible approach to managing capital flows*. Drawing on earlier papers discussed by the Executive Board, the approach will cover the management of inflows and outflows, the liberalization of capital flows, and the multilateral dimensions of policies affecting capital flows. As called for by the IMFC, an institutional approach will be proposed on the basis of existing analysis as well as country experiences.

Figure 3. Objectives and Policies

- *Advise on policies to contain the sovereign-bank feedback loop and prevent excessive global deleveraging*. The recent crisis has highlighted significant negative macrofinancial feedback loops, such as those witnessed in the United States between low house prices and weak bank balance sheets in 2008–2009 and between weak banks and fragile sovereigns in the ongoing euro area debt crisis. An area of immediate attention is to help restore financial stability in the euro area, including by assisting efforts to diagnose and repair financial sector balance sheets, helping restructuring, and providing analytical support for efforts to build a banking union. In addition, the Fund can advise on policies to facilitate an orderly deleveraging and a return to a more sustainable and growth-enhancing level of financial intermediation, limiting adverse spillovers to other regions.

- *Assess the implications of ongoing global regulatory reforms on its membership*. Although the lead responsibility for managing the global financial regulatory reform agenda lies with the FSB, the Fund has a key role in this process. In particular, the Fund can, through its mandate, provide independent advice on, and assessment of, ongoing and planned reforms and their impact on the international monetary system. The Fund can also identify and monitor unintended regulatory spillovers and arbitrage, especially in emerging market and developing economies. This analysis can then be leveraged, through its membership of the FSB, to ensure that the concerns of the full Fund membership are appropriately taken into account. Important issues to be addressed going forward include shadow banking, "too-important-to-fail" financial institutions, and OTC derivatives reform.

- *Deepen the understanding of the nature and implications of cross-border linkages and spillovers*. This includes building on the existing spillover work and its underlying analytical techniques, including event studies and model simulations, to quantify how macroeconomic or financial shocks can transmit across borders and sectors. It will also explore cross-border linkages from various perspectives, such as analyzing interlinkages between countries that belong to the same "cluster" of closely interconnected financial economies. In this respect, the surveillance of offshore financial centers or global financial hubs could be undertaken in a systematic way.

- *Explore more fully the role and effectiveness of monetary policy in the current economic downturn*. The persistence of financial sector and sovereign vulnerabilities in advanced economies coupled with very low (or even negative) interest rates, low or negative growth rates, and very high unemployment rates, pose serious and immediate challenges for the conduct of monetary policy in many advanced economies. Further analysis is needed to identify which policy tools would be most effective if further monetary easing is necessary.

- *Facilitate sustainable financial deepening in countries with shallow financial systems to support economic growth and stability.* Well-managed financial deepening in emerging market and low-income countries can engender greater resilience and capacity to cope with external shocks, enhance policy effectiveness, and support strong, durable growth. At the same time, as has become apparent in advanced economies, the process of deepening itself can create new risks—such as those that arise from growing financial interconnectedness, unregulated financial innovation, and "too-important-to-fail" financial institutions—which need to be effectively managed. In collaboration with the World Bank, the focus will also be on fostering financial development that contributes to growth and poverty alleviation, as well as stability.

- *As the global crisis unwinds, assist in the exit from extraordinary macrofinancial policies*. Extraordinary measures (such as quantitative monetary easing) have provided important support for stability during the crisis, but, if not well managed, prolonged use of these measures could give rise to new distortions and vulnerabilities that could sow the seeds for the next crisis. Equally, ill-timed exit from such measures may extend recessionary conditions. Although exit is not currently on the table in many countries, the Fund should be prepared to advise its membership on exit strategies as the crisis begins to abate, with the objective of avoiding damaging spillovers to other countries.

Action 2: Innovate further in the Fund's bilateral and multilateral instruments and products to foster an integrated view of financial sector risks

15. **Risk assessments within the Fund should be systematically integrated.** The 2011 TSR called for more attention to be paid to risks and their transmission channels, while the 2012 Integrated Surveillance Decision enables a closer integration of multilateral and bilateral surveillance. To this end, advances on risk analysis should be increasingly reflected and better integrated in the Fund's products and instruments such as the GFSR, WEO, Fiscal Monitor, Article IV reports, FSAPs, spillover reports and others. To ensure consistency and form an integrated view on risks across these products and instruments, staff proposes to:

- *Strengthen Article IV Consultation process and reports*. There are several aspects, some of which are novel and some of which mark a strengthening of existing practice. First, the analytical work underpinning bilateral policy recommendations is increasingly incorporating analysis from multilateral products, such as the GFSR, WEO, Fiscal Monitor and an enhanced assessment of global risks. A list of key global risks and their probabilities, which distills findings from multilateral analyses, is being prepared, and country teams will be encouraged to systematically consider how these risks might transmit to the domestic economy and generate further spillovers. Second, surveillance guidance has been amended to ensure that FSAP recommendations are followed-up and reported consistently in Article IV consultations. Third, in low-income countries, pilot studies will be conducted to focus attention on the linkage between financial deepening, macroeconomic policy effectiveness, and volatility. Fourth, in line with the recommendations of the 2012 Review of Data Provision to the Fund for Surveillance, there will be greater follow-up on the quality and coverage of financial sector data for surveillance. Fifth, closer cross-departmental cooperation in the context of the global risk analysis will help better leverage Fund's financial sector expertise by minimizing duplication and facilitating dissemination of tools and know-how, including through the assignment of financial sector experts to all S25 teams. Sixth, as a consequence of the recently adopted Integrated Surveillance Decision, the coverage of financial spillovers in Article IV consultations will be increasingly enhanced.

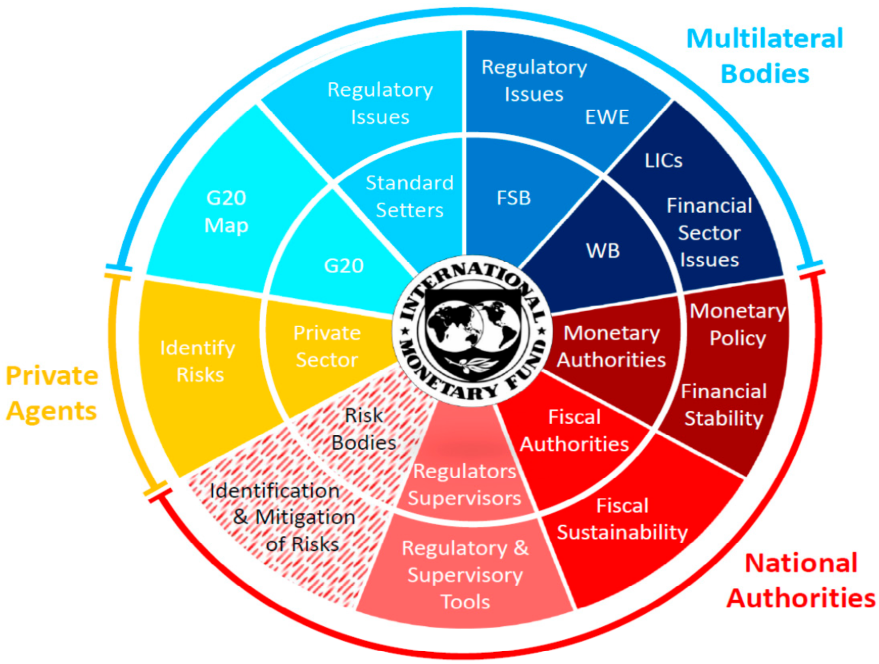
- *Conduct more frequent FSAPs for vulnerable countries and enhance synergies with Article IVs*. Particularly in non-S25 countries, the current periodicity of FSAPs is still too low to capture risks that can build up quickly, especially in a highly interconnected world. FSAP recommendations could get better traction in Fund's bilateral surveillance by: (a) conducting higher frequency FSAPs or FSAP stability modules for those countries that request them and are deemed as having vulnerabilities including those flagged in the Fund's vulnerabilities exercises, and (b) considering, where appropriate, dedicated discussions of the FSSA issues in the Article IV board discussions (and their associated Public Information Notices) for the S25 countries to ensure adequate prominence of financial sector issues in Article IV work.
- *Deepen the culture of integrated risk analysis.* This could be done by providing a systematic structure to discuss financial surveillance risks and monitor vulnerabilities across member countries. The objective would be to build on current vulnerability analyses and draw from the wide range of ongoing financial sector surveillance work, to identify the build-up of risks wherever they emerge. Consideration could be given to developing a global risk map which would more thoroughly consider the transmission of financial surveillance risks. This would help to operationalize the two-way integration of multilateral and bilateral risk analysis, and sharpen our understanding of global interconnectedness and emerging risks across sectors, borders, clusters, and time.
- *Move towards more cluster-level financial surveillance.* Network analysis by Fund staff has shown that there are clusters of countries that are financially interconnected, with offshore financial centers or global financial hubs often serving as "gatekeepers." To this end, more financial sector surveillance could be conducted at the cluster-level, as vulnerabilities in one "gatekeeper" have important stability implications for the other countries in the cluster, regardless of their geographical proximity to the gatekeeper.

Action 3: Increase traction by engaging more actively with stakeholders

16. **Greater traction with stakeholders is multi-faceted and no single action is likely to be a game changer.** Even though financial globalization is here to stay, the architecture for safeguarding financial stability remains predominantly national. This means that the capacity of country authorities to cope with global or multi-country shocks is severely constrained. The Fund, with its global membership, is uniquely placed to mobilize peer pressure and collective action. Achieving such traction requires translating analytical findings and country experiences into actionable policies and best practices, promoting policy dialogue on issues of systemic importance, "speaking truth to power" in a variety of fora, and closely engaging with a wide spectrum of stakeholders (Figure 4). The range of stakeholders in the international architecture is wide and includes national authorities, multilateral bodies, the private sector, and the expanding number of macrofinancial risk bodies.[5] A more effective and continuous dialogue by the Fund with these bodies could help promote a more effective and timely policy response to emerging policy challenges and risks. In particular, the Fund should aim to:

[5] Macrofinancial risk boards that have already been established by national authorities include the U.S. Financial Stability Oversight Council, the European Systemic Risk Board, and the U.K. Financial Policy Committee.

Figure 4. Fund Engagement with Stakeholders



- *Serve as the global facilitator on macroprudential policy.* The Fund should regularly convene academics, practitioners, and macro- and microprudential authorities to discuss evolving themes, share experiences, and promote more consistent and early policy responses to emerging risks. This could be done at a formal level (for example, high-level meetings) or at a more technical level (for example, working groups or taskforces). There is also a need for better coordination between macroeconomic policy makers and microprudential supervisors to ensure that both take into account the implications of their actions for the stability of their domestic financial systems. The Fund's bilateral and multilateral work will place a priority on facilitating this process.

- *Contribute to the global regulatory reform agenda.* The Fund's experience in standards assessments and its nearly universal membership gives it a unique perspective to assess the impact of the global regulatory reforms. The Fund's membership in the FSB and staff's frequent participation in several committees and working groups in standard-setting bodies provides a timely opportunity to influence the ongoing debate, especially as the FSB widens its ambit through its regional consultative groups.[6]

- *Deepen collaboration with the World Bank on financial sector work, especially in low-income countries (LICs).* The Financial Sector Liaison Committee (FSLC) has proved to be an effective mechanism to plan and manage the joint Fund-Bank FSAP work program, and provides a platform for better leveraging Bank and Fund resources and mandates for financial sector

[6] The Fund's membership in the FSB will need to be reaffirmed once the FSB's new legal status is fully defined in the coming months.

work, especially on standards assessments, analysis, and operational work relevant to LICs. Given the Fund's resource constraints and the expanded set of financial sector standards, the FSLC could take an enhanced role in coordinating the institutions' work and helping to cover gaps in FSAP coverage and frequency for less systemically important countries.

- *Maintain and deepen the momentum for filling data gaps in a broad range of areas***.** These include financial soundness of financial institutions and their counterparts, and national and cross-border financial interconnectedness. The Fund, together with the FSB, has—in the context of an interagency group (IAG) involving the BIS, ECB, Eurostat, OECD, UN, and World Bank—been in the lead on meeting the commitments under the 2009 G20/IMFC Data Gaps Initiative (DGI). The Fund is also engaged with the FSB in developing a framework for better monitoring the activities of global systemically important financial institutions (G-SIFIs) (Box 1). The Fund is urging the support of global stakeholders to ensure continued progress in these initiatives.

- *Engage proactively with newly created systemic risk authorities and develop a role for the Fund as a global systemic risk advisor* (Figure 5). By partnering with key global bodies (for example, the FSB) and fostering a closer dialogue between national authorities, the Fund could promote a mindset geared towards early diagnosis of systemic risks and a greater willingness to act. Informed by its global risk analysis and supported by the unique perspective provided by its near universal membership, the Fund would help promote a global perspective on risk analysis and collective risk mitigation. In turn, as indicated in Figure 5, this enhanced dialogue should guide the Fund's future analytical work and inform financial surveillance priorities, thereby securing greater buy-in.

Figure 5. Global Risk Advisor

17. **While the three-pronged strategy outlined above will guide the Fund's work agenda in the next 3–5 years, immediate priorities will focus on strengthening financial surveillance to minimize the costs of the ongoing global crisis.** In this regard, along with deepening the analysis of the immediate policy challenges in the euro area, priority will be placed on developing the macrofinancial and risk analysis frameworks, products, and instruments that help ensure an integrated view of financial sector risks and supports the Fund's role as global facilitator on macroprudential policy. Table 1 outlines key actions and their respective priorities and delivery time horizons, where short-term indicates a period of up to two years and medium-term indicates a period of up to five-years.

Box 1. Addressing Data Gaps for G-SIFIs

The G20/IMFC Data Gaps Initiative underscored the critical importance of timely and accurate information on global systemically important financial institutions (G-SIFIs). Shortfalls in this area were an important factor in the buildup of systemic risks ahead of the global financial crisis, and filling this gap was deemed an essential part of the effort to safeguard global financial stability going forward.

In response, the FSB has established a working group in this area, in which the Fund participates. The group is developing templates to improve the data collected on the interconnectedness of G-SIFIs and their common exposures to different financial sectors and national markets. The group will also address confidentiality issues and other legal considerations that arise in the collection and sharing of information.

Progress to date:

Final templates are targeted for completion by end-2012, including on the institution-to-aggregate (I-A) data, incorporating feedback from ongoing consultation with the industry.

A Memorandum of Understanding is expected to be signed by participating authorities by end-2012, which will include governance arrangements for data sharing.

The first phase of data collection and sharing among supervisors is to begin in March 2013.

Fund access to G-SIFI data:

Although the Fund's Articles of Agreement require members to provide information necessary for the Fund to fulfill its surveillance mandate, they are not obliged to do it "in such detail that the affairs of individuals or corporations are disclosed."

Member countries frequently share confidential supervisory data with the Fund in the context of FSAP assessments; however, the data are provided on a voluntary basis and well-established modalities exist for ensuring confidentiality.

Within the FSB initiative, the extension of data sharing to other official sector bodies (for example, macroprudential authorities, some host authorities, and international financial institutions) will be decided in early 2013. Addressing issues of legal authority to share data and questions by national supervisory agencies regarding the confidentiality of these data will be important to enable access by these bodies, which include the Fund.

Table 1. Financial Surveillance: Strategic Priorities

	Priority	Time Horizon	Additional Resource Needs[1/]	Lead Responsibility
Action 1: Improve risk identification and Macrofinancial policy analysis[2/]				
Deepen analysis of macroprudential policies	High	Short-term	None	MCM and RES
Develop a comprehensive approach to managing capital flows	High	Short-term	None	SPR, with MCM and RES
Advise on policies to contain sovereign-bank feedback loops	High	Short-term	None	MCM, SPR, and (where relevant) FAD
Deepen analysis of cross-border linkages	High	Short- to medium-term	None	MCM, RES, and SPR
Assess implications of regulatory reform	High	Short- to medium-term	None	MCM with RES
Explore effectiveness of monetary policy in current economic downturn	Medium	Short-term	None	MCM and RES
Advise on financial deepening in countries with shallow financial systems	Medium	Short- to medium-term	None	ADs, with MCM, RES, and SPR
Assist in exit from extraordinary macrofinancial policies	Medium	Medium-term	None	ADs, with MCM, RES, and SPR
Action 2: Innovate further and foster an integrated view of financial sector risks				
Strengthen financial surveillance within Article IV consultations	High	Short- to medium-term	Yes	ADs with MCM
Ensure through the review process integration of financial risks and consistent follow-up of FSAPs in Article IV consultations	High	Short- to medium-term	None	SPR
Conduct more frequent FSAPs for vulnerable countries and LICs, assess more complex standards, strengthen review process	High	Short- to medium-term	Yes	MCM
Deepen the culture of integrated risk analysis	High	Short- to medium-term	None	FAD, MCM, RES, and SPR
Move towards more thematic, cluster-level financial surveillance	Medium	Medium-term	Depends on modalities	MCM, SPR, and ADs
Action 3: Increase traction by engaging more actively with stakeholders				
Serve as the global facilitator on macroprudential policy	High	Short-term	Marginal	MCM and RES, with EXR
Contribute to the global regulatory reform agenda	High	Short- to medium-term	Marginal	MCM, with LEG
Deepen collaboration with World Bank	High	Short- to medium-term	None	MCM, SPR, and ADs
Address data gaps and improve data provision for surveillance purposes	High	Medium-term	Depends on modalities	MCM, SPR, and STA
Function as global risk advisor and expand contacts with stakeholders	Medium	Medium-term	Depends on modalities	MCM, RES, SPR, and ADs, with EXR

1/ "None" means existing resources will be reprioritized, or processes or products will be streamlined.
2/ Area departments (ADs) play a key role in shaping policy lines given their operational experiences.

IV. IMPLEMENTATION CHALLENGES

18. **There are many challenges that the Fund will face in implementing the financial surveillance strategy.** First, developing a unified theory for macrofinancial linkages is likely to be a long-term endeavor; in the meantime, the Fund will need to continue to build on a variety of analytical approaches. Second, Fund staff faces enormous challenges in conducting empirical analysis on systemic risk due to data gaps. Third, the Fund relies predominantly on a cooperative approach and persuasion to gain traction in surveillance. Fourth, demands on the Fund's services are high but resources are limited. And fifth, without greater traction with key stakeholders the Fund cannot perform its role effectively.

19. **Progress on a unified framework to guide financial surveillance hinges on the development of a better understanding of how macrofinancial linkages operate.** While partial equilibrium models and sectoral studies offer important insights that can be helpful for surveillance and policy making, there is as yet no comprehensive "model" that properly takes into account the complex linkages between the real and financial sectors. And empirical estimates of these linkages are similarly uncertain. As a result, providing quantitative guidance for the design of economic policies is difficult. This is a challenge not just for Fund staff, but for the economics profession at large.

20. **Making further progress on financial surveillance depends critically on filling information gaps.** The G20/IMFC Data Gaps Initiative included 20 recommendations to address these gaps. Important progress has been made by the IAG, including in defining templates (which are posted on the Fund's website) for reporting country-level sectoral data to help identify strains in the household and corporate sectors. The proposed introduction of the SDDS Plus will also help. However, maintaining and deepening the momentum of these efforts will be critical for better systemic risk identification at both the national and multilateral levels.

21. **The recent adoption of the Integrated Surveillance Decision has clarified the scope of multilateral surveillance, but does not alter members' obligations.** This Surveillance Decision is a significant step forward as it makes the analysis of all types of financial spillovers a more central part of surveillance and a primary focus of Article IV consultations. Even so, the Fund will need to continue to rely on a collaborative approach and persuasion, fortified by candor and evenhandedness.

22. **While the Fund has dedicated more resources to financial surveillance, demands are large and have risen sharply since 2008.** As a consequence of the global crisis, demand for rigorous analysis and global and member country monitoring has increased sharply, even as staff financial expertise has had to be diverted to crisis management. As a consequence, coverage in Article IV discussions of financial sector issues has risen, as well as the number and complexity of FSAPs with greater inclusion of advanced economies. As noted earlier, a number of new products

and Board papers focusing on vulnerabilities, spillovers, capital flows, and macroprudential policies have been produced. The rapid proliferation of global initiatives on regulatory reform has meant significant resources have been devoted to supporting this effort, both in terms of policy work and an almost a doubling of staff attendance at the FSB and standard-setting agencies since 2007.

23. **Some of these additional demands could be accommodated within the current budget envelope for financial surveillance work, but pursuing the full strategy will require difficult decisions to reallocate work or augment resources** (Table 1). Consolidating and streamlining existing in-house vulnerability exercises will foster a more integrated view on financial sector risks. Similarly, there may be scope to work with the World Bank to improve the efficiency of the institutions' delivery of financial sector advice to low-income countries. To pursue the full strategy proposed in this paper and meet new demands from the membership on financial surveillance, Fund Management in consultation with the Board will need to decide on how the Fund's operational budget can be augmented or reallocated in the years ahead (the Board has not come to a view on this in the context of this paper but will take it up in the context of budget discussions).

24. **The costs to implement the proposed actions in three specific areas would be as follows:**

- *Strengthening and mainstreaming financial surveillance in Article IV consultations*. This would require the development of greater expertise within country teams. The initial cost would be higher, with skills further built through on-the-job learning, training, and new hires, and could be of the order of 20–30 FTEs, at a cost of about $7–10½ million per annum, before falling back to a steady-state level of around 10-15 FTEs (or $3½–5¼ million) per annum.
- *Increasing the frequency of FSAPs to vulnerable countries*. This would require additional resources to avoid reducing coverage of other member countries.[7] Assuming three to five additional assessments per annum, and also taking into account the higher costs of stability and standards assessments in the post-crisis environment, additional resources needed could amount to approximately $4–6 million per annum.
- *Increasing traction by engaging more actively with stakeholders*. Finally, scaling up outreach activities to improve traction will also entail more resources, including for travel. This could be of the order of up to an additional $1 million per annum.

25. **Increasing traction will be an important challenge**. Success in preventing future crises cannot rest only on strengthening the Fund's analytical toolkit or sharpening its policy advice. It will require commitment on the part of authorities—both at the national and multilateral levels—to engage proactively with the Fund and support its independence in conveying tough messages. It will also require statesmanship on the part of authorities to look beyond national interests towards

[7] Presently, the Fund has the capacity to undertake 15–20 FSAP assessments per annum. Increasing the number of FSAPs by an additional three to five per annum would allow an increase in the frequency of assessments for non S25 countries from (on average) once in every 11–16 years to once in every 8–13 years.

the global good, as well as fortitude to tackle powerful vested interests that played a pivotal role in the build-up of the global crisis in their own national economies.

26. **Given these tremendous challenges, the Fund may not be able, in the next 3–5 years, to prevent systemic crises, but it will improve on its role to sound the alarms early, make the financial world a safer place, and mitigate the costs of crises when they do materialize.** It is not possible to identify with confidence the crises that have already been averted by the Fund's advice nor to measure the benefits of the Fund's advice to countries already in crisis. It is evident, however, that the Fund has come a long way in highlighting global and country-specific vulnerabilities, providing early warning signals in its products and discussions with authorities, and contributing to the ongoing global regulatory reform agenda. The road ahead is long and difficult, not just for the Fund but for the global community that encompasses international and regional official bodies, national policy makers, regulators, and supervisors, as well as the private sector.

V. ACCOUNTABILITY

27. **Responsibility and accountability for financial surveillance is shared across the Fund, with the lead responsibilities as follows**:

- *Improving risk identification and macrofinancial policy analysis*: The Monetary and Capital Markets Department (MCM) takes the lead on issues related to financial stability, including macroprudential and microprudential policies, and in assessing capital market developments. MCM, the Research Department (RES) and the Strategy, Policy and Review Department (SPR) lead the analytical work on vulnerabilities, macrofinancial linkages, and interconnectedness. The Legal Department (LEG) provides expertise on legal issues relating to the financial sector. Policy issues such as managing capital flows, sovereign/financial feedback loops, and exit from extraordinary macrofinancial policies are the joint responsibility of MCM, RES, and SPR (and the Fiscal Affairs Department (FAD) where relevant), and are informed by area departments' insights given their operational experience.

- *Fostering an integrated view of financial sector risks*: Area departments are responsible for bilateral surveillance, which MCM supports by providing financial expertise to Article IV teams and by conducting FSAP assessments. SPR is responsible for ensuring that Article IV reports integrate relevant financial sector issues, including consistent follow-up on FSAP recommendations, and for the development of financial surveillance modalities. Achieving an effective integration of bilateral and multilateral financial risks is a shared responsibility of MCM, RES, SPR and area departments.

- *Engaging more actively with stakeholders*: Achieving traction requires effective communication of risks and Fund policy advice at both the bilateral and multilateral levels. The External Relations Department (EXR) provides support with this. Area departments, with the support of relevant functional departments (including EXR), have the primary responsibility to liaise with national authorities, while MCM (FSB and standard-setting bodies), RES (G20 MAP), and SPR (G20) take the lead at the multilateral level, with the Statistics Department (STA) in the lead in closing key data gaps for effective surveillance.

28. **The assessment of progress in implementing the financial surveillance strategy will have several elements, most of which build on existing mechanisms**. Fund Management has established a new accountability framework for departments, which will allow Fund Management to review the extent to which departments' objectives are in line with the goals and objectives contained here. The Executive Board will be able to review implementation through a brief progress report for the Triennial Surveillance Review at the time of the 2012 Annual Meetings, periodic reports to IMFC and the semi-annual work program, the 2014 FSAP Review and the 2014 Triennial Surveillance Review. The Executive Board will also have the opportunity to affirm the importance of financial surveillance as a priority area in the context of the next medium-term budget.

VI. ISSUES FOR DISCUSSION

29. *Strategy*: Do Directors support the overall strategy as set out by staff? Do Directors have specific views on the relative importance of the three elements of the proposed strategy, that is, (i) improving the effectiveness and impact of the Fund's financial sector policy advice, including through strengthened risk identification and policy analysis; (ii) deeper integration of bilateral and multilateral risk assessments in the Fund's various instruments and products; and (iii) more active engagement with a broader range of relevant stakeholders?

30. *Challenges*: What are the key challenges that Directors perceive in implementing the strategy? Do Directors agree that addressing analytical gaps in macro-financial and cross-border linkages, data gaps, resources, and traction with stakeholders will be critical in implementing the strategy? Do Directors have views on the relative importance of these challenges?

31. *Traction:* Do Directors agree that more "truth-telling" would be helpful in mitigating risks and that there may be scope to better engage key stakeholders to help advance the traction of Fund's work in financial surveillance?

Appendix 1: Discussions with External Experts

32. **As background to this paper, staff engaged in bilateral conversations with external experts familiar with the Fund and its role in financial surveillance.**[8] Discussions focused on: the areas and issues that should be the priority for the Fund in the coming 3–5 years, the traction and effectiveness of the products and instruments of Fund financial surveillance, and how the Fund's role should adapt in light of the evolving global architecture.

33. **The role of the Fund:** Experts stressed the importance of leveraging the Fund's comparative and absolute advantages. These included its analytical rigor, its independence, its cross-country experience, its wide network of global contacts, and its ability to send teams to a wide range of countries at short notice. Some noted the importance of ensuring that the Fund's assessments were frank, open, and even handed, including with regard to large and systemically important countries.

34. **Analytical and policy priorities:** Experts wanted to see further progress in establishing macrofinancial analysis and the communication of risks, and mitigating the negative impact of cross-border spillovers. Most emphasized that the Fund should focus squarely on macrofinancial issues, leaving the detailed analysis of microprudential issues to the FSB and standard-setters (although one stressed particularly the critical role of the Fund as an independent voice in the FSB). The following analytical issues were identified:

- *Systemic risk measurement:* Experts noted that the Fund should take a lead role in designing measures of systemic risk, focusing on feedbacks between financial stability, microprudential policies, and economic growth.

- *Cross-border issues*: Given the Fund's cross country experience and multilateral mandate, the Fund should focus on policies to address the risks associated with capital flows, interconnectedness, opaque derivative structures, and, in cooperation with the FSB and relevant national authorities, the resolution of complex, cross-border, and "too-important-to-fail" financial institutions.

- *Macroprudential policy*: Given its surveillance mandate, the Fund should play a central role in facilitating a global consensus on the instruments and institutional bases for this new strand of

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[8] Interlocutors, who expressed a range of views, were Montek Singh Ahluwalia (Deputy Chairman, Indian Planning Commission), Agustín Carstens (Governor, Bank of Mexico), Jaime Caruana (General Manager, BIS), Charles Goodhart (London School of Economics), Stefan Ingves (Governor, Riksbank), Simon Johnson (Massachusetts Institute of Technology and Peterson Institute), Tiff Macklem (Senior Deputy Governor, Bank of Canada), Ravi Menon (Managing Director, Monetary Authority of Singapore), Raghu Rajan (University of Chicago), and Paul Tucker (Deputy Governor, Bank of England).

policymaking. They would like the Fund to define as concretely as possible "best practices" with regard to macroprudential tools and frameworks.

- *Financial deepening*: The Fund's recent work in this area was appreciated, and there is scope (especially with the World Bank) to promote the important role that the financial sector can play in growth and development. At the same time, a question was raised whether a larger and more leveraged financial sector is always good for sustained prosperity.

- *Microprudential issues*: Most experts noted that this was not an area where the Fund should take the lead or invest large resources, but there was agreement that the Fund was well placed, through its FSAPs, to point to gaps in prudential supervision and in international standard, and to assess the macroeconomic/growth implications of regulatory reform. One expert expressed concern about the lack of ambition in the Basel III standards and suggested that the Fund has an important role to play in formulating global regulatory standards.

35. **Instruments and products:** Experts generally praised the Fund's financial surveillance, which was viewed as having improved considerably in recent years. At the same time, they stressed that its impact would be higher if its messages were more precise and products were more concise. Other observations included:

- *Article IV consultations / Financial Sector Assessment Program (FSAP)*: The Fund's bilateral surveillance was viewed favorably, but Article IV teams would benefit from greater integration of financial sector issues. A bridge is also needed, between the Fund's annual surveillance and its more in-depth FSAPs, to allow for higher frequency systemic risk assessments.

- *Early Warning Exercise (EWE)*: Experts felt that the EWE provided a useful forum for policymakers to engage, but that there was room for improvement, including by distinguishing better between the baseline and tail risks, by leveraging the ability of FSB members to engage effectively with national authorities with regard to the broader systemic risks identified by the Fund, and by establishing a more continuous dialogue and risk assessment.

- *Global Financial Stability Reports (GFSR)*: Experts universally praised this instrument of financial surveillance, noting that its candor, relevance of topic covered, and analytical content had strengthened in recent years. At the same time, one of them noted that the feedback between bilateral and multilateral surveillance could be strengthened, and another cautioned that the recent proliferation of multilateral surveillance instruments risked diluting the Fund's impact.

36. **Engagement:**

- *Traction*: Recognizing the inherent tension between "telling truth to power" and being a "trusted advisor," experts emphasized that the Fund had a responsibility to deliver tough messages, but most felt that their impact would be greater if they could be delivered in private first and publicly later if necessary. Some stressed the importance of sufficiently early warnings by the Fund, both publicly and privately.

- *Messaging*: The Fund's messaging and reports needed to be backed by strong analytical content. Given top decision makers' information overload, messages need to be delivered in a way that is compact, relevant, and easily digestible.

- *FSB/IMF roles*: Experts acknowledged that there are overlaps in responsibilities and that the key was to avoid unnecessary duplication. The Fund should leverage its unique macrofinancial expertise and its "external" auditor role to deliver independent and candid assessments. The Fund has a natural advantage in leading macrofinancial surveillance, given its analytical rigor and experience in fielding missions to 188 member countries. As an example, they noted that the FSB should take the lead in designing regulatory reforms, but the Fund should analyze the macroeconomic impact of regulatory reform and assess implementation progress. The FSB has the comparative advantage of its microprudential expertise, access to institution-specific data and information, and traction with policy makers. Therefore work on identifying vulnerabilities should be conducted by both the IMF and FSB.

- *Role vis-à-vis standard setters*: Although the Fund was not in the lead in setting regulatory standards, it was important for it to be involved given its role in assessing countries' compliance with international standards (for example, in FSAPs).

Appendix 2: Innovations and Remaining Gaps in IMF Financial Surveillance

37. **Innovations have occurred in three main areas:** analysis, adaptations of the IMF's instruments and products, and dialogue with stakeholders (Figure 6).

Figure 6. Financial Surveillance: Three Strands of Innovation

A. Evolution of Analytical Approaches

38. **The Fund's policy advice on financial stability has been strengthened by analytical advances.**[9] A critical effort in this regard has been to build up the Fund's knowledge and understanding of financial markets over the last decade, including by attracting specialized staff with experience across a broad range of financial sector disciplines and countries. In parallel, the development of the Fund's toolkit for systemic risk assessment has progressed along three main tracks:

- *Financial sector vulnerabilities:* Analysis has evolved from static and backward-looking financial sector indicators to forward-looking tools that assess a range of new financial stability risks, including contagion between financial institutions and markets and the role of systemically important financial institutions (SIFIs). These analyses vary in many dimensions, and may: (i) address the build-up of vulnerabilities at the global level (for example, acceleration of deleveraging in Europe) or at a local level, tailored to country-specific circumstances; (ii) involve sensitivity analyses for single or multiple risk factors (for example, the impact on emerging markets of both deleveraging and high oil prices); (iii) combine high- and low-frequency data (for example, balance sheet with market data to conduct Contingent Claims Analysis (CCA)); and (iv) conduct financial sector stress tests, on a bottom-up (run by individual financial institutions) or top-down (run by the central bank, financial supervisor, or IMF) basis.

- *Macrofinancial linkages*: The economics literature has traditionally studied finance and macroeconomics separately. Only recently have there been attempts to integrate these theoretical approaches, but a unified *macrofinancial framework* is still lacking. Nevertheless, the Fund is building models that incorporate financial sectors, conducting empirical work, identifying stylized facts, and developing "best practices" in assessing systemic risk that are

[9] Appendix 3 provides a selected bibliography of recent relevant papers by Fund staff.

proving useful for surveillance. For example, analyses of *asset price and credit booms and busts* have enabled staff to alert authorities to potential risks, given these are often leading indicators of banking and currency crises. *Balance sheet analysis* provides a framework for understanding the accumulation of financial stress based on an examination of a country's aggregate and sectoral balance sheets. In low-income countries, where shallow financial systems limit macroeconomic policy choices and impede opportunities to hedge or diversify risk, analytical tools and frameworks are also being developed, in collaboration with the World Bank.

- *Cross-border dimensions and global risks*: International financial considerations such as external debt sustainability, capital flows management, and optimal levels of external reserves have long been key elements of Fund surveillance. However, with international spillovers increasingly affecting domestic stability, financial surveillance is being placed in a broader cross-border context, to assess international risk transmissions and inform international policy coordination. New approaches to interconnectedness among countries include network and cluster analysis to understand where the linkages are strongest and to identify countries ("gatekeepers") or groups of countries ("clusters") that are most relevant for regional and global financial stability.

39. **New policy themes have recently emerged as lessons from the crisis were drawn.** The Fund has become an active contributor to the international financial policy agenda, including through its participation in international fora and in shaping the formulation and enhancement of regulatory and supervisory standards. New areas of focus in the policy dialogue between the Fund and its members include the following:

- *Macroprudential policy:* Policy tools are needed to complement macroeconomic and microprudential policies, so as to directly address risks to financial stability.

- *Financial regulation and supervision:* The crisis has highlighted the importance of embedding a cross-border dimension in national financial sector policies, as national financial stability may also depend on the policies and institutional framework of other countries. New and more comprehensive financial sector standards (and related assessment methodologies) have been developed by standard-setters with input from the IMF. In these discussions, the Fund has sought to leverage its nearly universal membership, its mandate to promote international financial stability, and its surveillance role to help design reforms that best serve its broad membership and are implemented in a consistent and effective manner.

40. **Notwithstanding substantial progress on the analytical and policy front, a more comprehensive and integrated approach to risk analysis is needed, especially at the global level.** The current toolkit yields only partial coverage of key types of risks and cross-border linkages, tentative signals as to the likelihood of their materialization, and early warning signals that are not fully reliable. Further work is needed to strengthen the Fund's macrofinancial oversight—the relationships between the financial system and macroeconomic outcomes, including cross-border linkages—and incorporating this understanding into policy analysis.

B. Development of the Fund's Instruments and Products

41. **The Fund's financial surveillance instruments and products have changed significantly in recent years** (Table 2):

- *Article IV Consultations*: These are the core instrument of the Fund's bilateral surveillance. In contrast to only a decade ago, Article IV reports today contain substantive discussions of financial sector issues and the depth of their vulnerability analysis has improved significantly. For example, stress tests are increasingly part of Article IV reports, and, to ensure an adequate coverage of macrofinancial linkages, country teams are including Risk Assessment Matrices (RAMs) highlighting key risks to the economy, with their associated likelihood and potential impact. Since the onset of the global crisis, advanced economy reports have increasingly provided advice on how to ensure systemic liquidity, prevent excessive deleveraging, and develop well-designed firewalls. In emerging and developing economies, staff advice has increasingly focused on policies to cope with volatile capital flows, overheating pressures, asset price bubbles, and rising vulnerabilities in the financial sector. The inclusion of a set of financial soundness indicators has become standard practice, as has a discussion of inward spillovers of global or regional shocks. For large economies, a discussion of outward spillovers is now being included in Article IV consultations.

- *Financial Sector Assessment Program (FSAP)*: An FSAP is an in-depth assessment of a country's financial stability risks and financial oversight and crisis preparedness frameworks, based on both quantitative and qualitative analyses such as stress testing and evaluations of compliance with international financial standards. The Fund has continuously innovated to improve the quality of FSAPs since their introduction in 2000. FSAP assessments have become more candid and transparent (for example, as reflected in the coverage and severity of stress tests). There is greater emphasis on spillovers between financial institutions, markets, and countries (for example, as regards liquidity risks, the sovereign sector and nonbanks), and deeper analysis of crisis management and supervisory issues. Regional FSAPs have been conducted to assess financial stability risks within groups of countries (for example, in the ECCU or the CEMAC, and next year in the European Union). To improve their focus, FSAPs have become more tailored to country needs (for example, with the introduction of modular FSAPs in 2010) and more standardized in how they assess the soundness of financial institutions, the quality of financial oversight, and the ability to manage financial crises. In 2011, the introduction of mandatory financial stability assessments under Article IV for the S25 jurisdictions moved financial surveillance towards a more risk-based approach.

- *Global Financial Stability Report (GFSR)*: The GFSR provides a unique global perspective on potential systemic risks and vulnerabilities as they evolve in the international financial system. To ensure it remains topical and relevant, it draws heavily on both the analytical approaches discussed in the previous sub-section and interactions with market participants and country authorities. For instance, the GFSR has helped shape discussions in a range of policy areas, such as on deleveraging, the scale of capital shortfalls in the banking sector, the size of mortgage loan losses, the shrinking universe of safe assets, the use of macroprudential tools, the role of credit ratings, and the systemic importance of central clearing counterparties. Over time, the analytical depth, candor, and reach of the Fund's global financial risk assessments, as communicated in the GFSR, have increased.

- *Vulnerability Exercises (VEs)*: Financial surveillance has been considerably strengthened by the introduction of the semi-annual vulnerability assessment exercise in 2001. This is a bottom-up internal cross-departmental assessment of single-country vulnerabilities, initially focused on emerging market economies, extended in 2009 to include advanced economies (recognizing the role of core countries in originating and transmitting shocks), and in 2011 to low-income countries (recognizing the global scope of shock transmission). The VEs have also increasingly covered special topics, such as cross-cutting themes relevant to global financial stability.

- *Early Warning Exercise (EWE)*: Starting in 2009, the IMF and FSB were mandated to conduct joint early warning exercises, with the aim to (a) identify countries' vulnerabilities to tail risks with high systemic impact, (b) ensure candid risk identification, and (c) improve traction by delivering messages directly to policymakers. The objective is not to predict the probability or timing of a crisis—which has proven to be difficult—but to conduct "what-if" and "flag-raising" exercises. Fund Management and the FSB discuss the result of the EWE exercise with high-level policymakers every six months.

- *Spillover and Interconnectedness Reports*: These are among the recent innovations and address the need to bridge more effectively the Fund's bilateral and multilateral surveillance. Covering selected countries, they have been produced since 2011 to analyze outward spillovers, focusing on the cross-border consequences of economic developments in systemically important countries. In addition, recent advances in network analysis and interconnectedness have also been discussed by the Executive Board.

42. **While the Fund has made progress in adapting its instruments and products, there remains a need to better integrate and leverage them.** As regards the bilateral and multilateral aspects of risk assessments, the focus in the past has mainly been on augmenting country-level analysis with considerations of global macrofinancial risk transmission. To better integrate ongoing risk assessments, Fund Management and staff have established a number of internal working groups since 2008 that cover a range of topics—multilateral surveillance, financial surveillance, capital flows, macroprudential policies, and crisis mitigation. At the same time, there is greater scope to integrate bilateral and multilateral work in the Fund's instruments and products, which is also facilitated by the recent update to the legal framework (through the adoption of the Integrated Surveillance Decision in June 2012).

C. Strengthening Relationships with Stakeholders

43. **The Fund's own work has evolved as the international architecture has also undergone a sea change.** Following the crises of the 1990s, the international community reviewed and enhanced this architecture, resulting in the establishment of the Financial Stability Forum (FSF), the standards and codes initiative, and innovations in the Fund's instruments and surveillance operations. The current global financial crisis has underscored the need to extend and strengthen these earlier responses, most notably by improving their inclusiveness to increase their legitimacy and recognize the growing global reach of financial crises. In this context, and reflecting the concentration of the current crisis in the advanced economies, the G20 has become a key player in financial policy reform. In parallel, the FSF has been transformed into a new body, the Financial Stability Board (FSB), with responsibility for coordinating the development, and promoting the implementation, of global regulatory, supervisory, and other financial sector reforms. Given its wide membership, the Fund complements and enriches these discussions with its expertise and cross-country perspectives, in order to address the concerns of all its members.

44. **The current international financial architecture comprises a large number of bodies, with sometimes overlapping responsibilities.** Besides the FSB (whose mandate includes the responsibility to "assess vulnerabilities affecting the global financial system and identify and review on a timely and ongoing basis actions needed to address them"), a large number of standard-setting bodies (SSBs) have taken on greater responsibility for monitoring the implementation of the regulatory standards that they have issued.[10] In addition, other bodies, including the Bank for International Settlements (BIS) and the Committee on the Global Financial System (CGFS), are also important for identifying systemic risks and promoting early and effective policy responses.

45. **The Fund has been forging strong relationships and is collaborating actively with these international partners** (Box 2)**.** Besides the World Bank, with whom the Fund has traditionally worked closely, these efforts reflect the considerable changes underway in the global financial surveillance architecture described above. In particular, the Fund has intensified its contributions to the discussion of global financial issues through its presence in key committees and groups of the FSB and SSBs. While the FSB is leading the effort, the Fund continues to play a key role in influencing the broader regulatory reform debate and in helping countries implement the post-crisis regulatory reforms.

46. **Still, greater traction with key stakeholders, including national authorities, remains a key objective.** Strengthening risk analysis, clearly communicating its findings, and providing sound policy advice are essential, but not enough. The recent Triennial Surveillance Review noted that there was uneven traction across the membership, and that it is lower in systemic countries. The latter is of particular concern since the global impact of shocks transmitting from systemic countries

[10] These include the Basel Committee on Banking Supervision, the International Organization of Securities Commissions, and the International Association of Insurance Supervisors.

is significant. This requires collective policy cooperation at the global level and ways to enhance peer pressure at the national level. More effective communication strategies are also needed, including to broader audiences. In pursuing these goals, the IMF's member countries need to support and promote more effectively the Fund's role as an independent analyst and advisor.

Box 2. Key International Partners

The World Bank. The IMF has worked closely with the World Bank in the FSAP process since it was introduced in 2000. Assessments are joint in all but the advanced countries, where the Fund takes sole responsibility. The two institutions also collaborate closely in providing technical advice related to financial sector deepening in emerging markets and low income countries.

The G20. The G20 established in 2008 an ambitious agenda for financial regulatory reform and surveillance. These initiatives have been grounded solidly in the Bank-Fund FSAP, which was assigned an important role in assessing adherence to the G20 financial reform agenda, including through a commitment by all FSB members to undergo an FSAP assessment every five years, and to disclose their degree of compliance with international standards by publishing the corresponding detailed assessment reports.

The Financial Stability Board (FSB). The FSB was established in 2009, with a wide-ranging mandate for financial surveillance, regulatory policy coordination, implementation monitoring, and contingency planning. To enhance global crisis prevention and improve cooperation between the IMF and FSB, the G20 leaders mandated the establishment of an early warning exercise (EWE) in late 2008.[11] This involves joint reports by the IMF and the FSB to the Fund's advisory committee—the International Monetary and Financial Committee (IMFC)—at its spring and fall meetings. At the Los Cabos Summit (June 2012), the G20 leaders endorsed recommendations for strengthening the FSB's capacity, resources and governance, including its coordination role vis-à-vis other standard-setting bodies on policy development and implementation monitoring. The FSB has become an important partner in the Fund's multilateral surveillance, while also helping promote Bank-Fund financial standards assessments.

Standard-setting bodies. The role of the major standard-setting bodies has also evolved considerably, including, in several cases, by taking on greater responsibility for assessing national progress in meeting their standards. The results of these assessments provide useful benchmarks for gauging the strength of supervisory and regulatory systems for a wide swath of financial systems, and a helpful input to the Fund's own policy advice. Fund staff participates in a number of international fora with these bodies.

The private financial sector. Given the rising significance of large financial institutions, the volatility and volume of capital flows for emerging markets, and the growing impact of decisions by market participants on national economies, the IMF has increased its interactions with the private sector, including through a high-level Financial Institutions Consultative Group (FICG). Also, IMF country teams routinely meet private sector participants during Article IV consultations.

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[11] "*The IMF, in collaboration with the expanded FSB and other bodies, should work to better identify vulnerabilities, anticipate potential stresses, and act swiftly to play a key role in crisis response.*" (G20 Communiqué, November 15, 2008).

Table 2. IMF Financial Surveillance—Recent Reforms of Instruments and Products

Instrument	Description	Recent Reforms
The surveillance framework	The 2008 and 2011 Triennial Surveillance Reviews sought to close a number of gaps in the Fund's broader surveillance framework, with proposals that were particularly relevant for the Fund's work in the financial sphere http://www.imf.org/external/pp/longres.aspx?id=4596. The update to the Legal Framework through the adoption of an Integrated Surveillance Decision enables greater integration of multilateral and bilateral surveillance and for spillovers to become a primary focus of Article IV consultations.	**Article IV:** Annual Article IV consultations are the cornerstone of the Fund's surveillance of members' financial sectors. In order to bolster this aspect of bilateral surveillance, the TSR called for stepped up financial stability analysis in Article IV surveillance, including through better training, dissemination of tools, and internal guidance. **Spillovers and interconnectedness:** The TSR affirmed the importance of continued work by the Fund on cross-country spillovers, especially those stemming from financial linkages, and encouraged further efforts to address data gaps that could weaken the Fund's exercise of surveillance. The adoption of the Integrated Surveillance Decision will greatly facilitate this work. **Multilateral surveillance**: A critical component of the Fund's financial surveillance is the work that underlies the Global Financial Stability Report. This report has grown continuously in terms of its analytical depth and prominence, and significant effort has been made to link it more closely with the Fund's other multilateral surveillance vehicles (including the WEO and the Fiscal Monitor). An important manifestation of this commitment has been the Fund's Consolidated Multilateral Surveillance Report.
Financial Sector Assessment Program	The IMF–World Bank FSAP was introduced in 2000, as a voluntary program. Assessments are joint in all but the advanced countries, where the Fund takes sole responsibility, and are supposed to take place roughly every five years. The stability assessment typically involves analyses of systemic risk (based usually on stress testing), the supervisory and regulatory system (often based on formal standards and codes assessments or ROSC) and the crisis management and safety net framework. The most recent Board review of the FSAP was in 2010 (http://www.imf.org/external/np/sec/pr/2010/pr10357.htm).	**Modular FSAPs**: Since 2010, in order to enable the Bank and Fund better leverage their resources and tailor assessments to country needs, scope is provided to conduct modular assessments of stability and development assessments, a move that was endorsed in the G20's Korea Summit communiqué. **Mandatory FSAPs**: In 2010, another important step was to make stability assessments mandatory for 25 jurisdictions that were deemed to have systemically important financial sectors (every five years). **FSAP frequency**: Although the Board rejected the call for increasing the frequency of FSAP assessments for all members, greater encouragement was provided for assessments more frequently.

Reports on Standards and Codes (ROSCs)	The Standards and Codes Initiative (SCI) was launched in 1999 in recognition of the fact that shortcomings in financial policy transparency, supervision, and regulation undermined both stability and risk identification. Bank and Fund are charged with preparing Reports on Standards and Codes (ROSCs), or detailed assessments of a jurisdiction's compliance with key financial and transparency standards. The most recent Fund review of the Initiative was in 2011 (http://www.imf.org/external/np/sec/pn/2011/pn1138.htm).	**Targeted ROSCs:** In 2009, the IMF and Bank Boards agreed to provide greater flexibility to staff teams to adopt a risk-based approach to assessments of the key financial standards, allowing for assessment of only a subset of principles when a full assessment had already been done previously. **Expanded standards:** In 2011, the Standards and Codes Initiative underwent a major revamping by expanding the core set of standards to cover gaps—i.e., in crisis resolution and deposit insurance—that were seen as critical in the run up to the crisis.
Vulnerability Exercises	In 2001, the Fund introduced a framework for cross-departmental assessments of systemic vulnerabilities, in order to better "connect the dots" between individual countries and markets and to ensure a more consistent approach to bilateral and multilateral surveillance. The exercise, which is semi-annual, focused initially on emerging markets, but has expanded considerably over the years (see http://www.imf.org/external/np/pdr/surv/2003/071103.pdf).	**VEA:** In 2009, partly in response to lessons drawn from weaknesses in the Fund's surveillance heading into the 2008 global financial crisis, the VE exercise was extended to include advanced economies—the so-called VEA. **VE–LIC:** In 2011, this exercise was extended to include low income countries—the so-called VE-LIC.
Early Warning Exercise (EWE)	The G20 leaders, in their November 2008 communiqué, tasked the IMF and FSB to prepare joint reports about global risks to macrofinancial stability to the Fund's advisory committee—the International Monetary and Financial Committee—at its spring and fall meetings.	These exercises involve oral briefings by the Fund's Management and the FSB's Secretary General, with the Fund taking the lead on issues related to macroeconomic and macrofinancial vulnerabilities, and the FSB has taking the lead on vulnerabilities and regulatory challenges in the financial sector.
Supportive Role of Technical Assistance	Although the Fund's TA is not formally a surveillance instrument, it plays a key supportive role for both the Fund's surveillance and crisis management work. In the financial sphere, TA covers a broad range issues including central banking, capital controls, debt and asset management, and regulatory and supervisory issues.	In response to the crisis and the global regulatory reform effort, the Fund's financial TA has begun put greater emphasis on macroprudential policymaking; stress testing, Basel II and III implementation, and crisis management.

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