INTERNATIONAL MONETARY FUND

The Fund's Response to the 2007–08 Financial Crisis—Stocktaking and Collaboration with the Financial Stability Forum

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GLOSSARY

BCBS	Basel Committee on Banking Supervision
BIS	Bank for International Settlements
CEBS	Committee of European Banking Supervisors
CGFS	Committee on the Global Financial System
CRAs	Credit rating agencies
CRD	Capital requirements directive
CRMPG III	Counterparty Risk Management Policy Group III
FSAP	Financial Sector Assessment Program
FSF	Financial Stability Forum
GFSR	Global Financial Stability Report
IADI	International Association of Deposit Insurers
IAASB	International Auditing and Assurance Standards Board
IAIS	International Association of Insurance Supervisors
IASB	International Accounting Standards Board
IIF	Institute of International Finance
IMFC	International Monetary and Financial Committee
IOSCO	International Organization of Securities Commissions
MCM	Monetary and Capital Markets Department
OBSEs	Off-balance sheet entities
OECD	Organization for Economic Co-operation and Development
OTC	Over-the-counter
RES	Research Department
SEC	U.S. Securities and Exchange Commission
WEO	World Economic Outlook

EXECUTIVE SUMMARY

The present financial crisis is testing the resilience of the global financial system as well as the robustness of national and multilateral policy frameworks. As requested by Executive Directors, this paper reviews recent progress in meeting these challenges, focusing on the role of the Fund and its collaboration with the Financial Stability Forum (FSF).

In concert with other international bodies, the Fund has sought to promote appropriate policy responses to the financial turmoil, including through its report on *The Recent Financial Turmoil—Initial Assessment, Policy Lessons, and Implications for Fund Surveillance*, in the *Global Financial Stability Report* (GFSR) and the *World Economic Outlook* (WEO), as well as in recent Article IV consultations and Financial Sector Assessment Programs (FSAPs). The Fund has also responded to the International Monetary and Financial Committee's (IMFC) call for closer collaboration with other international fora, including by supporting the implementation of policy lessons from the crisis, such as the 67 FSF recommendations issued in April 2008.

As the crisis unfolds, Fund surveillance will continue to focus on financial stability and macrofinancial linkages, consistent with its mandate and strategic priorities. The Fund has become a lead international agency for macrofinancial analysis, reflecting its unique responsibility in promoting financial and economic stability. In response to the growing globalization of capital flows and recent crises, the Fund has continued to place increased emphasis on integrating its country-specific surveillance with its regional and global analyses, and to enhance its financial sector surveillance and early warning capabilities. For example, the Monetary and Capital Markets Department (MCM) is deepening its expertise in core policy areas such as bank regulation and supervision of risk management practices; financial market disclosure and valuation practices; central bank operations; and deposit insurance and crisis management arrangements. Similarly, the Research Department (RES) is placing additional resources into its work on macrofinancial linkages and global spillovers.

The roles of the Fund and FSF are complementary, and enhance each institution's ability to achieve its respective mandate. With its universal membership, the Fund has a capacity to draw synergies from its multilateral, regional, and bilateral surveillance activities; integrate financial sector assessments with macroeconomic stability analyses; adapt its policy advice to the needs and circumstances of each country; and closely monitor and evaluate policy implementation. For its part, the FSF plays a crucial role in bringing together senior national policymakers and key international supervisory, regulatory, and central banks, and in coordinating the international community's response to financial system vulnerabilities. Such complementarity helps each institution to achieve its respective mandate, although there may still be scope for further strengthening Fund-FSF collaboration going forward.

I. INTRODUCTION [1]

1. **The present financial crisis is testing the resilience of the global financial system as well as the robustness of national and multilateral policy frameworks.** For example, many major central banks have had to make significant amendments in their liquidity arrangements to ensure the continued smooth functioning of money markets, and in some countries authorities have also had to cope with the failure of systemically important institutions. At the global level, the severity of cross-border spillovers from the shock to the U.S. housing market has pointed to the need for strengthened multilateral approaches to "early warning systems," as well as for collaborative approaches to defining and promoting policy responses.

2. **As requested by Executive Directors, this paper reviews the recent progress in meeting these challenges, focusing on the role of the Fund and its collaboration with the FSF.** Section II reviews the role of the Fund, especially in light of recent strategic directions given by the IMFC and the increasing focus of Fund surveillance on financial stability and macrofinancial linkages. Section III takes stock of ongoing international work aimed at distilling and implementing policy lessons and recommendations from the crisis. Section IV lays out principles and possible modalities for closer Fund-FSF collaboration, as well as the Fund's financial sector work agenda going forward. Finally, Section V suggests issues for discussion by Executive Directors.

II. THE CRISIS AND THE ROLE OF THE FUND

3. **In concert with other international bodies, the Fund has sought to promote appropriate policy responses to the financial turmoil (Box 1).** The Fund's contributions to these multilateral initiatives have included:

- The report on *The Recent Financial Turmoil—Initial Assessment, Policy Lessons, and Implications for Fund Surveillance*,[2] which identified preliminary policy lessons from the crisis of a structural, medium-term nature, in order to inform the Fund's bilateral and multilateral surveillance work;
- The *GFSR* and the *WEO,* their updates, and other multilateral surveillance outputs,[3] which provide and disseminate in depth assessments of vulnerabilities in the financial system and their interaction with the real economy;
- Recent *Article IV consultations and FSAPs*, including in advanced and emerging market economies. In its bilateral surveillance, the Fund has for several years placed a

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[1] This paper was prepared by Nicolas Blancher and Ulrich Klueh (MCM).

[2] See http://www.imf.org/external/pp/longres.aspx?id=4240.

[3] Including, for example, surveillance notes prepared by Fund staff for various international fora (e.g., the G8 and G20).

heightened focus on financial sector issues and policy lessons for maintaining financial stability. More recently, and in response to the crisis, this focus has been sharpened further with increased emphasis on assessing the risk of cross-border spillovers and the extent of crisis prevention and preparedness, and on disseminating lessons learned (see below).

4. **The Fund has also responded to the IMFC's call for closer collaboration with other international fora, including the FSF.**[4] Fund staff has continued to participate actively in the FSF and its various working groups (including ongoing joint work on procyclicality, valuation, and leverage), as well as in working groups of the Basel Committee on Banking Supervision (e.g., on Basel II implementation), the Joint Forum (e.g., on Risk Assessment and Capital), and other standard setters. On the occasion of the IMF/World Bank Annual Meetings in October 2008, the Fund will co-host with the FSF a high-level meeting on the financial turmoil and related policy responses, which illustrates the Fund's ability to reach out to key emerging market countries. The Fund has also recently invited the chairman of the FSF to discuss with Executive Directors the work of the FSF and the status of its response to the crisis. Finally, the Fund has used the recommendations by the FSF in its April 2008 report,[5] as well as the analysis in its own report to the IMFC to help shape its bilateral policy advice.

5. **Recently, there have been further calls for strengthening the Fund's role in multilateral surveillance and crisis prevention.** The G-8 finance ministers emphasized the need for an enhanced framework for assessing financial stability, including additional efforts to reinforce early warning capabilities through closer cooperation between the FSF and the IMF.[6] In this connection, several countries have put forward specific calls for additional tools for analyzing cross-country spillover risks and their macroeconomic implications.[7] In addition, there have been calls from mature and emerging market countries to disseminate more actively information about the crisis and the lessons learned so far.

6. **The Fund has sought to support these initiatives in the context of ongoing efforts to enhance its financial sector surveillance, at both the bilateral and multilateral levels.** Financial sector surveillance has become a core area of Fund surveillance, focusing primarily on macrofinancial linkages and risks, as well as on institutional weaknesses and vulnerabilities. Internally, it increasingly relies on broad interdepartmental coordination to integrate country, regional and global perspectives.[8] In support of these efforts, the Fund's

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[4] *Communiqué of the International Monetary and Financial Committee of the Board of Governors of the International Monetary Fund*, April 12, 2008.

[5] *Report of the Financial Stability Forum on Enhancing Market and Institutional Resilience*, April 7, 2008.

[6] Statement of the G-8 Finance Ministers Meeting, Osaka, June 14, 2008.

[7] See, for example, *Embracing Financial Globalisation*, HM Treasury, May 2008.

[8] The Executive Board will have several opportunities to assess progress in these areas, including as part of the discussion of the *2008 Triennial Surveillance Review*. Recent Article IV consultations with systemically

(continued)

Monetary and Capital Markets Department (MCM) continues to deepen its expertise across a range of policy areas relevant to financial stability (see below), and a Macrofinancial Unit is to be established in the Fund's Research Department, which is to focus on developing a comprehensive framework to analyze macrofinancial linkages.[9] Section IV presents in greater detail the Fund's financial sector work program ahead.

7. **More broadly, the above initiatives reflect the view that the Fund has a unique mandate and capacity to prevent and resolve international financial crises.** The Fund has the benefit of a near universal membership, and its members have provided it with a unique mandate to promote financial and economic stability. Its members' commitment to participate in multilateral surveillance provide the Fund with an important vehicle for integrating financial sector assessments with macroeconomic stability analyses, building on experience in many countries and adapting its policy advice to each country's specific circumstances. These activities involve mature and emerging market, and low income countries. In addition to its bilateral, regional, and multilateral surveillance, the Fund also has a special role in promoting financial sector stability in the context of its technical assistance and lending activities.

III. Policy Recommendations and Lessons From the Crisis

A. Preliminary Lessons and Recommendations

8. **The international community has put forward a range of initiatives to restore financial market functioning and increase the resilience of the financial system going forward.** Numerous challenges have arisen in addressing the crisis, such as in balancing short-term stabilization needs with longer-term actions to prevent a recurrence of similar events. Given the global nature of the financial crisis, such efforts have required intensified cooperation among a diverse set of bodies and institutions, including national authorities, standard setters, other international financial institutions, and the private sector.

9. **In April 2008, the FSF issued 67 recommendations covering a broad range of key policy issues.** Reflecting the close collaboration between the FSF, the Fund, other international fora, and national authorities, there is a considerable degree of consistency between these recommendations and the preliminary policy lessons from the crisis formulated by the Fund at the request of the IMFC. The FSF recommendations fall into five main areas (Table 1):

- *Strengthened prudential oversight of capital, liquidity and risk management.* Key recommendations include timely implementation of Basel II capital rules; an enhanced capital treatment under Basel II of securitization and off-balance sheet

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important countries will also provide the basis for bringing to the Board a presentation on cross-cutting issues emerging from these consultations, helping bridging the gap between bilateral and multilateral surveillance.

[9] See also Box 1.

activities; enhanced guidance on liquidity risk management and related regulatory practices; reinvigorating Pillar II supervisory reviews of risk management practices; and strengthening the operational infrastructure for over-the-counter (OTC) derivatives.

- *Enhancing transparency and valuation.* A two-pronged approach is proposed: (i) to support the restoration of market confidence, financial institutions are urged to promptly disclose their risk exposures following leading practice; and (ii) to increase the resilience of the system, recommendations include enhanced accounting and disclosure standards to better capture off-balance sheet exposures and contingent liabilities; additional guidance on the valuation of illiquid financial instruments and related disclosures; and more transparency in securitization processes and markets.
- *Changes in the role and uses of credit ratings*, calling for actions to (i) address conflicts of interest in credit rating agencies (CRAs) through improved codes of conduct; (ii) increase the quality of credit rating models and underlying data; and (iii) improve the use of ratings through differentiated ratings and more information on structured products and more cautious reliance on ratings, including in regulatory frameworks.
- *Strengthening the authorities' responsiveness to risks.* In particular, it is recommended to better translate risk analysis into action and to improve coordination among authorities across both sectors and borders, including through stepped up efforts to understand and communicate risks; the establishment of bank-specific international colleges of supervisors; and intensified cooperation between supervisors, standard setters, the FSF, and the IMF.
- *Robust arrangements for dealing with stress in the financial system.* The recommendations focus on (i) ensuring that central bank operational frameworks for providing liquidity are sufficiently flexible in terms of frequency and maturity of operations, available instruments, and the breadth of eligible collateral and counterparties; (ii) strengthening national and cross-border arrangements for dealing with weak banks, including with respect to deposit insurance; and (iii) strengthened cooperation in cross-border crisis management planning.

10. **Since the Spring of 2008, the crisis has exposed additional vulnerabilities and raised new policy challenges.** Broader questions have emerged about the underlying strength of banks and the macroeconomic outlook, leading to a sharp drop in equity valuations and to a broader policy focus, including new types of institutions, such as U.S. regional banks and government sponsored enterprises. While the bulk of financial institutions' losses from exposures to mortgage markets may now be assessed with a higher degree of confidence, conditions in the housing market continue to deteriorate and banks are finding it increasingly difficult to raise new capital. In addition, systemic risks remain elevated, as uncertainties have risen with respect to a broader deterioration in asset quality from adverse macroeconomic developments. Recently, the crisis has also increasingly

impacted some emerging market countries, where tightening external and internal conditions could lead to a downturn in the domestic credit cycle.

B. Implementation Status

11. **At the multilateral level, a number of key projects are expected to be completed by various organizations before the end of 2008.** [10] Box 2 provides an overview of multilateral initiatives underway to implement the various FSF recommendations. A few major contributions have already materialized. For instance, the BCBS issued for public comments in June 2008 guidance on sound practices in the management and supervision of liquidity risks for public consultation, and in July, jointly with the International Organization of Securities Commissions (IOSCO), guidance on capital requirements for credit exposures held in trading books of banks and securities firms. Also, the IOSCO released in May 2008 a revised *Code of Conduct Fundamentals for Credit Rating Agencies* that sets out enhanced expectations regarding the quality and integrity of the rating process. Overall, a large share of the policy guidance in response to the FSF recommendations should be issued by end-2008.

12. **At the national level, important reforms have been initiated, especially in advanced economies.** For example, the G-7 countries responded to the FSF recommendations with specific commitments and timetables for meeting them.[11] These initiatives have been reflected in, and indeed an increasing focus of, Fund bilateral surveillance activities across its membership (Box 1 and Appendix). This is evident in particular in the July 2008 Article IV consultations in some advanced economies:

- **Euro area:** the staff report discusses the ECB's liquidity management actions and initiatives to reform the EU financial stability and crisis management frameworks. It supports proposed responses to the crisis (e.g., with regard to transparency, valuation, prudential requirements, and market functioning), and highlights as key priorities liquidity regulation, reduced incentives for regulatory arbitrage (e.g., through off-balance sheet exposures), and strengthened CRA oversight.
- **Japan:** the staff report reviews the steps taken by the authorities to support market confidence, in addition to providing exceptional liquidity, and including better disclosure of banks' subprime and structured product holdings. It highlights several policy priorities consistent with the FSF recommendations, including enhancing transparency, raising Tier 1 capital ratios, and strengthening securitization markets.
- **United Kingdom:** the staff report notes that key aspects of the U.K.'s financial stability framework have been questioned since August 2007. It supports the authorities' main proposals for reform, including stronger liquidity risk management

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[10] See *Update on the Implementation of the FSF's Recommendations - Report by the FSF Chairman to the G8 Finance Ministers*, June 11, 2008.

[11] Statement of G-7 Finance Ministers and Central Bank Governors, Washington, DC, April 11, 2008.

and bank resolution frameworks, as well as more formal links between risk identification and supervisory action. It also supports the need to ensure that relevant and timely bank-specific information is available to the Bank of England, to allow it to carry out its lender-of-last-resort function effectively.

- **United States:** the staff report addresses the gradual widening of access to the Fed's liquidity facilities, the crisis management setup, and recent progress on regulatory issues, including (i) the Treasury blueprint for regulatory consolidation and stronger oversight of major investment banks and liquidity risk; and (ii) the newly proposed rules from the United States Securities and Exchange Commission (SEC) on transparency throughout the rating process, to allow more effective exercise of due diligence by investors. It also assesses the Treasury's new authority to support the two largest government-sponsored enterprises, discussing medium-term options to address attendant moral hazard risks.

13. **The implementation of policy lessons from the crisis has also been supported by the Fund through its recent FSAP assessments.** Since August 2007, 21 FSAPs (mostly updates) have taken place, including in advanced and emerging market countries that could be expected to be susceptible to the turmoil. In these assessments, particular attention was paid to crisis management frameworks and cross-border supervisory cooperation, as well as to exposures to subprime-related financial instruments and tighter funding conditions. In the case of Iceland, where contagion risks were seen as higher, an FSAP mission was fielded within one month from the authorities' request, illustrating the Fund's readiness and flexibility to address exceptional situations at short notice.

14. **In particular, stress-test and scenario analyses performed by staff are increasingly focusing on key risks and macrofinancial linkages highlighted by the crisis**. As part of the Fund's ongoing efforts to enhance financial stability modeling and to develop stress testing applications, recent progress has been made in the following areas:

- **Credit risk**. Scenario stress testing has built on new approaches to model credit portfolio loss distributions and to quantify the impact of macroeconomic shocks on banks' economic capital in the presence of data constraints. The contingent claims approach (CCA) to constructing risk-adjusted balance sheets has also been increasingly used for scenario analysis;

- **Second-round effects**. In addition to measures of systemic financial fragility (e.g., based on banks' joint probability of default), new contagion models capture the specificities of extreme shock transmission across financial systems. Also, a framework integrating the CCA with macroeconomic models has been implemented;

- **Liquidity risk**. Methods to stress test liquidity risk exposures are incorporating nontraditional funding liquidity risks (e.g., through securitization), market liquidity risks (e.g., effects of fire-sales), as well as off-balance-sheet concentration risk (e.g., excessive credit lines extended to a single counterparty).

15. **Similarly, the focus of the Fund's capacity-building activities has shifted in recent months in response to the turmoil**. Such a shift has been observed in several emerging market countries, reflecting the authorities' changing priorities in the wake of the crisis, toward strengthening bank supervision and crisis management systems. MCM's advice to these countries is already drawing on lessons learned by advanced market countries, such as on collateral policies for central banks' liquidity support. Indeed, the Fund has brought together policymakers from mature and emerging market countries to discuss the root causes of the turmoil, existing vulnerabilities, and policy responses.[12] Finally, capacity-building work has also allowed to disseminate analytical tools to enhance financial stability assessments and to deploy highly specialized expertise in support to Article IV teams.

16. **Private sector efforts to restore financial soundness and to draw lessons from the crisis are also underway.** While the restoration of balance sheets is still far from complete, industry associations have formulated desirable policy responses. In July 2008, the Institute of International Finance (IIF) released a comprehensive report that shares many of the concerns highlighted by the Fund and FSF, and identifies areas where private sector-led initiatives may contribute to address the crisis–even though some controversial points remain, such as regarding valuation practices.[13] In August 2008, the U.S. Counterparty Risk Management Policy Group III (CRMPG III) issued proposals to strengthen industry practices and help mitigate systemic risks. Such reforms relate in particular to accounting, risk management and clearing, and settlement, and would lead to substantial changes in infrastructures and business processes.[14]

IV. Going Forward—Deepening the Policy Dialogue

A. Strengthening Fund–FSF Collaboration

17. **The FSF plays a crucial coordinating role in the international community's response to vulnerabilities in the financial system.** The FSF was created in 1999 at the initiative of G-7 finance ministers and central bank governors, in order to promote international financial stability, including by improving coordination and information exchange among national and international authorities responsible for financial stability. It regularly brings together national financial authorities (supervisory agencies, central banks and finance ministries) from countries with systemically important economies and financial systems, and international institutions, including standard setters (BCBS, IOSCO, IAIS, IASB), the BIS, the OECD, the World Bank, and the Fund. The FSF works through its members and is serviced by a small secretariat.

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[12] The MCM-led Roundtable on *Emerging Issues for Financial Stability,* in June 2008, is one example.

[13] *Final Report of the Committee on Market Best Practices*, Institute of International Finance, July 17, 2008.

[14] *Containing Systemic Risk: The Road to Reform*, Counterparty Risk Management Policy Group III (CRMPG III), August 6, 2008.

18. **There is a natural complementarity between the roles of the Fund and the FSF.** As noted, the Fund has a lead role in macrofinancial surveillance and a universal membership. It is equipped with resources to maintain continuous bilateral financial sector surveillance through dedicated country teams, which underscores its capacity to formulate and follow up on country-specific policy advice, and to directly assist country authorities in the management of crises.[15] At the same time, however, the Fund faces constraints in the conduct of financial sector surveillance. For example, the Fund does not play the role of global financial regulator or set standards for private financial institutions. By contrast, the FSF does bring together senior national policymakers and key international supervisory and regulatory institutions, and central banks, as well as international standard setters, giving it a unique capacity to give impetus to and facilitate coordination among these bodies, especially in the area of financial sector regulation.

19. **Reflecting such complementarity, Fund-FSF collaboration benefits from the role of the Fund in fulfilling certain key functions**:

- **Identifying and responding to global financial risks**, including through the development and dissemination of risk analysis tools;[16]
- **Adopting and disseminating policy lessons and best practices** as part of its continued dialogue with mature market, emerging market, and low-income countries;
- **Providing feedback to international bodies and standard setters** on recurring weaknesses across financial systems, contributing to the process of consensus-building on vulnerabilities and appropriate policy responses;[17] and
- **Monitoring and evaluating implementation of policy lessons and best practices in its surveillance,** paying particular attention to macrofinancial linkages.

20. **Some specific ways to further strengthen Fund-FSF collaboration can be envisaged.** Fund staff has been working closely with the FSF since its establishment, including through direct participation in FSF working groups, projects and outreach efforts, and contributions to FSF papers and publications. The Fund (MCM) also staffs a permanent position in the FSF Secretariat. Looking ahead, modalities of collaboration could include:

[15] Including in combination with financial support—e.g., in cases where financial sector shocks result in balance of payments difficulties.

[16] This addresses FSF recommendations V.3 ("FSF will give more force to its own risk analysis and recommendations, both directly and through the actions of its members") and V.13 ("FSF and IMF to intensify their cooperation on financial stability, with each complementing the other's role").

[17] This is consistent with FSF recommendation V.12 ("Encourage joint strategic reviews by standard-setting committees to better ensure policy development is coordinated and focused on priorities").

- The sharing of global financial vulnerability assessments could be further enhanced by building on existing mechanisms: the Fund should continue to develop further the broad-based analysis in the *Financial Stability Note* that it provides to the FSF, in the direction of early identification of vulnerabilities and assessment of macrofinancial linkages. This would complement the vulnerability assessments and recommended policy responses by the authorities of countries represented in the FSF;
- To carry out its existing role in monitoring, communicating and developing further best practices in financial stability assessments, the Fund has established robust processes to exchange information and collaborate with other bodies and standard setters (often in cooperation with the World Bank).[18] Similar ways to collaborate on a pragmatic and informal basis, or to more frequently exploit opportunities for joint outreach, could be further explored with the FSF;
- Fund-FSF cooperation could be fostered by continuing secondments of Fund staff at the FSF, as well as other relevant bodies, and including at different levels of seniority.

B. The Fund's Financial Sector Work Ahead

21. **The Fund's work in the above policy areas will remain focused in line with its own mandate and priorities.** The FSF set out a range of recommendations that are important for the international financial community in general, and the Fund in particular. Going forward, the Fund's financial sector work will continue to reflect its overall mandate, comparative advantages, core areas of specialization, resource constraints, and related priorities—some of which are identified in the recent *Statement of Surveillance Priorities*. In certain core areas, such as risk management practices and financial disclosure and valuation practices, the Fund's value added may primarily stem from its capacity to put policy challenges in the broader macrofinancial stability perspective (rather than solely from its technical expertise). In other core areas, such as bank regulation (especially Basel II implementation), central bank operations and crisis management arrangements, the Fund has also developed in-house technical expertise that is critical to fulfilling its mandate.

22. **Additional areas will require attention from the Fund going forward, including to strengthen its early warning capabilities.** The Fund's financial sector work will address specific issues such as: stress-testing methodologies and processes; cross-border convergence of accounting standards; potential adverse effects of central banks' emergency liquidity operations; and supervisory structures, including with respect to the appropriate role of central banks and supervisors' legal powers and resources. More broadly, efforts are underway to strengthen the two-way feedback between multilateral and bilateral financial

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[18] For instance, Fund staff has been included in key BCBS drafting groups on guidance for the transition to Basel II. The Fund also provides its analysis of securities regulation assessments to the IOSCO through periodic meetings, as a means of informing the IOSCO's work program and of engaging the IOSCO on specific topics of interest arising from assessments (such as on accounting and auditing standards).

sector surveillance and to further sharpen the Fund's high-frequency market analyses and stability assessments. Fund staff is also intensifying its dialogue with market participants given the essential role market intelligence has in identifying vulnerabilities at an early stage. Together with the development in RES of a work program on macrofinancial linkages and the extension of the Fund's vulnerability exercise to advanced countries, these efforts should contribute to significantly enhance the Fund's early warning role.

23. **Within MCM, specific work streams comprise:**

- *Supervisory agencies/central banks and financial stability*. This work will aim to strengthen frameworks for monitoring the risk profiles of individual financial institutions against the background of overall macroeconomic conditions, and for coordinated actions among supervisory agencies and central banks for effective oversight of group-wide risks, liquidity provision, and bank resolution. Key expected outputs include: (i) principles and operational guidelines for institutional frameworks, including interagency cooperation; (ii) outreach on broader central banking and financial stability issues; and (iii) policy guidance regarding remedial action and domestic and home/host supervisory arrangements.
- *Procyclicality and financial stability*. This work will focus on the financial stability implications of various channels of procyclicality, including monetary policy, regulatory and accounting frameworks, and firms' risk management practices and compensation policies. Addressing the way in which risk-taking incentives evolve over the financial cycle will also take into account the impact of financial safety net arrangements. Closely related to our understanding of qualitative and quantitative aspects of macrofinancial linkages, this work will be undertaken in collaboration with various international and national institutions, and will underpin the Fund's advice under surveillance and technical assistance activities.
- *Transition to Basel II*. Greater supervisory attention in the transition to Basel II is warranted, especially given the risks of "cherry-picking" elements of the framework, as partial implementation may not deliver the expected benefits for banks and supervisors. Supervisors should closely reflect on impact analyses emerging from the parallel run period, and be prepared to extend the capital floors for longer periods if warranted. This work stream will consist in: full consultations with the Basel Committee on the *Basel II Implementation Assessment Methodology* currently under review; and, the conduct of Basel II implementation assessments based on the revised methodology.
- *Central bank liquidity management.* Analytical work has recently focused on central banks' response to the current turmoil, benefiting from ongoing exchanges with major mature and emerging market central banks. Going forward, issues to be explored further include exit strategies from emergency operations; market impact of the definition of eligible collateral; choice of central bank counterparties and impact on monetary policy transmission; design of standing credit facilities; and central bank

balance sheet flexibility. Expected outputs will underpin Fund advice in surveillance and technical assistance activities.

- *Crisis management and resolution*. This work will focus on several weaknesses in crisis management frameworks highlighted by the current turmoil (e.g., with regard to supervisory authority, resolution arrangements, deposit insurance schemes, and interagency coordination), and on the financial stability impact of bank failures. Expected outputs include: a review of crisis management frameworks in selected countries; the development of a template for analyzing safety net frameworks for use in Article IV and FSAP missions; and the development of crisis simulation modules to assess countries' preparedness and capacity to address problem banks and a systemic crisis.

C. Resource Costs

24. **The above proposals regarding Fund-FSF collaboration and the Fund's financial sector work prioritization will need to be accommodated within existing budget constraints.** As noted, the above proposals and related internal work initiatives are part of ongoing efforts to maintain the Fund's participation in key international fora (including the FSF) and to further prioritize its financial sector work. As such, most of these initiatives have already been implemented or initiated in the recent period on the basis of existing resources.

V. Issues for Discussion

25. Do Directors consider that overall, the Fund has played an appropriate role in drawing and supporting the implementation of international policy lessons and recommendations from the current crisis, at both the multilateral and bilateral levels?

26. Do Directors agree that the Fund has a key role to play in fulfilling the key functions highlighted in paragraph 19, including as a reflection of its complementarity with the FSF?

27. Directors may wish to express views regarding possible concrete modalities of closer Fund-FSF collaboration, for example as suggested in paragraph 20.

28. Do Directors support the financial sector work program laid out in paragraphs 21–23?

Table 1. FSF Recommendations and Key International Initiatives

FSF Recommendations	Key International Initiatives
Strengthening prudential oversight of capital, liquidity, and risk management	
Capital requirements. Basel II implementation should be timely. Supervisors to assess its impact, strengthen the capital treatment of structured credit and securitization activities, and update risk parameters and other provisions under Basel II as needed. Authorities to ensure that capital buffers for monoline insurers and financial guarantors are commensurate with their role in the financial system	National supervisors, BCBS, IOSCO, IAIS
Liquidity management. Supervisors to issue for consultation guidance on sound practice in management and supervision of liquidity	BCBS-draft P*rinciples for Sound Liquidity Risk Management and Supervision* issued (July 2008), National supervisors
Supervisory oversight of banks' risk management. Supervisors to use Pillar 2 to strengthen banks' risk management and mitigate the build up of excessive exposures and risk concentrations. Regulators to strengthen requirements for institutional investors' processes for investment in structured products. Financial industry should align compensation models with long-term firm-wide profitability. Regulators and supervisors to work with market participants to mitigate risks arising from inappropriate incentive structures	National supervisors and regulators, BCBS, IIF Best Market Practice proposals on remuneration policies
Operational infrastructure for OTC derivatives. Market participants to act promptly to ensure that settlement, legal and operational infrastructure underlying OTC derivatives markets is sound	Financial industry
Enhancing transparency and valuation	
Risk disclosures by market participants. Financial institutions to strengthen risk disclosures. Supervisors to improve requirements under Pillar 3 of Basel II	Financial industry, BCBS
Accounting and disclosure standards for off-balance sheet vehicles. IASB to improve such standards on an accelerated basis, and to work with other standard setters toward international convergence.	IASB
Valuation. International standard setters to enhance accounting, disclosure and audit guidance for valuations. Firms' valuation processes and related supervisory guidance to be enhanced	IASB, IAASB, financial and audit industries, BCBS
Transparency in securitization processes and markets. Securities market regulators to work with market participants to expand information on securitized products and their underlying assets	National security regulators, IOSCO, Financial industry, CRAs
Changes in the role and uses of credit ratings	
Quality of the credit rating process. CRAs to improve such quality and manage conflicts of interest in rating structured products	IOSCO-revised *Code of Conduct Fundamentals for CRAs*, CRAs
Differentiated ratings and expanded information on structured products. CRAs to differentiate such ratings from those on bonds, and to expand the initial and ongoing information provided on risk characteristics of structured products.	CRAs
CRA assessments of underlying data quality. CRAs to enhance their review of the quality of data input and due diligence performed on underlying assets by originators, arrangers and issuers involved in structured products	CRAs

FSF Recommendations	Key International Initiatives
Use of ratings by investors and regulators. Investors to address over-reliance on ratings. Investor associations to consider standards of due diligence/credit analysis for investing in structured products. Authorities to review their use of ratings in the regulatory and supervisory framework.	Financial industry, National supervisors and regulators, Joint Forum
Strengthening the authorities' responsiveness to risks	
Translating risk analysis into action. Supervisors, regulators and central banks to take additional steps to more effectively translate their risk analysis into actions that mitigate those risks	National supervisors and regulators, FSF
Improving information exchange and cooperation among authorities. Authorities' exchange of information and cooperation in the development of good practices to be improved at national and international levels	National supervisors, central banks, FSF WG on 'supervisory colleges'
Enhancing international bodies' policy work. Enhance the speed, prioritization and coordination of their policy development work. Intensify cooperation between the FSF and the IMF on financial stability, with each complementing the other's role. The IMF to report its findings on risks to FSF meetings, and to incorporate relevant FSF's conclusions into its own bilateral and multilateral surveillance work	International regulatory, supervisory and central bank committees, FSF, IMF
Robust arrangements for dealing with stress in the financial system	
Central bank operations. Central bank operational frameworks to be sufficiently flexible in terms of potential frequency and maturity of operations, available instruments, and range of counterparties and collateral, to deal with extraordinary situations	Central banks, CGFS
Arrangements for dealing with weak banks. Authorities to clarify and strengthen such national and cross-border arrangements	National authorities, BCBS-Cross-border Bank Resolution Group report by December 2008, International Association of Deposit Insurers draft international principles

Box 1. The Fund's Response to the 2007–08 Financial Market Crisis

The Fund's reaction to the current crisis has taken place under a tighter budgetary environment and internal reorganization. Nevertheless, the focus of analytical and policy work, both in area and functional departments, has shifted in several areas in response to the crisis. This is reflected in the growing focus on macrofinancial linkages in RES, the preparation of policy notes and other guidance distilling preliminary lessons from the crisis for Fund surveillance, and the continued development of quantitative tools for financial sector assessments in MCM. Below are some examples of these efforts.

Multilateral surveillance. Even before the crisis, the April 2006, September 2006, and April 2007 GFSRs had highlighted risks associated with complex financial instruments, liquidity, and the growth in subprime mortgages. Following the onset of the turmoil, the GFSR focused on analyzing its implications for global financial stability. The Fall 2007 issue examined the roles of weakening standards in mortgage loan origination in the U.S. and of risk management techniques used by market participants during the crisis, and provided early estimates of potential losses from subprime exposures. The 2008 issues of the GFSR included recommendations in the areas of valuation and disclosure of structured products; stress in interbank markets and monetary policy transmission; and fair value accounting in the current credit cycle. In addition, the WEO addressed in 2008 the changing housing cycle and implications for monetary policy, as well as the relationship between financial stress and economic downturns.

Bilateral surveillance. Article IV consultations adapted to the needs of the membership. In some countries (e.g., Canada, Japan), they focused on the exposure of financial systems to subprime-related products. In others (e.g., Switzerland, United Kingdom), the challenges faced by many central banks and regulatory authorities in stabilizing disrupted money markets while adapting their liquidity loan collateral policies figured prominently in the discussions. In many countries (e.g., Baltic countries and Hungary), Article IV consultations examined closely the crisis management and bank resolution frameworks. To facilitate the exchange of experience across the membership and use the Article IV missions to disseminate the lessons from the crisis, MCM provided a preliminary operational guidance on issues and lessons learned in the recent financial market turmoil.

FSAP. Many countries that initiated FSAPs assessments during the last twelve months are industrial and emerging countries that could potentially be affected by the aftershocks of the crisis. In most of these cases, frameworks for risk management, crisis management and bank resolution were examined in depth, with particular emphasis on most relevant aspects, such as cross-border supervisory agreements given changing ownership structures. Stress test scenarios were specifically constructed to capture the potential for contagion through financial channels increasingly relevant to many of these countries (e.g., Austria).

Other work. The Fiscal Affairs Department (FAD) has focused on fiscal-financial linkages (see *Globalization, Financial Markets, and Fiscal Policy*—http://www.imf.org/external/np/sec/pn/2008/pn0828.htm). The Legal Department (LEG) is prioritizing resources on financial sector policy and technical assistance work, including legal aspects of financial stability, crisis resolution mechanisms, and AML/CFT work. An MCM-LEG note reviewed crisis management arrangements in a number of advanced market countries, highlighting key aspects that merit further consideration, and the challenges for monetary policy implementation in distressed financial markets have also been explored. Efforts to improve the quantitative techniques used to gauge financial stability have come to fruition in a number of cases, including in the latest Article IV consultation with the United States. Finally, the above efforts have also informed the Fund's capacity building activities with, for instance, INS finance courses for country officials now incorporating lessons from the recent crisis.

Box 2. Multilateral Initiatives to Implement the FSF Recommendations—Status Report

Basel II implementation. The BCBS will publish later this year proposals for establishing higher capital requirements for complex structured credit products and short-term liquidity facilities extended to ABCP conduits. National and regional initiatives are also advancing. For example, the European Commission is currently discussing potential changes to the Capital Requirements Directive (CRD).

Liquidity risk management and regulation. On June 17, the BCBS issued for public consultation global guidance on the management and supervision of liquidity risks, expanding significantly on its 2000 paper on Sound Practices for Managing Liquidity in Banking Organizations. Local initiatives have also followed suit. The Committee of European Banking Supervisors (CEBS), for example, issued the second part of its Technical Advice on Liquidity Risk Management.

Review of risk management. On April 16, the BCBS announced the issuance of Pillar 2 guidance to strengthen risk management and supervisory practices, including stress-testing practices and capital planning processes. A consultative document will be issued around end-2008.

Operational infrastructure for OTC derivatives. In June, the Federal Reserve Bank of New York brought together major market participants and their supervisors to agree on an agenda to address weaknesses in this area, including through further standardization and automation of credit derivatives trade processing, and a central counterparty arrangement for credit default swap trades.

Risk disclosures by market participants. Based on reports from its members, the FSF will assess in September how internationally active financial institutions have implemented the leading practice risk disclosures set forth in the FSF Report as part of their mid-2008 reporting, and whether national authorities' strong encouragement to use recommended risk disclosure practices has been sufficient.

Accounting standards for off-balance sheet entities (OBSEs). The IASB has prioritized its Consolidation project, which identifies when an entity should be brought on to another entity's balance sheet, and its Derecognition project, examining when assets should be removed from the balance sheet. It will issue exposure drafts on the consolidation project by end-2008, and on derecognition proposals shortly thereafter.

Valuation. The IASB established an expert advisory panel to review best practices in valuation and formulate additional guidance on valuation methods when markets are no longer active. In parallel, the BCBS is developing guidance to enhance supervisory assessments of banks' valuation processes.

Credit Rating Agencies. The IOSCO issued its revised Code of Conduct for CRAs in May, and is developing a work plan to review the adequacy of due diligence typically conducted by investment managers when making investments in structured products. In parallel, the Joint Forum is reviewing the use of ratings by member authorities.

Improving information exchange and cooperation among authorities. The FSF has formed a group of key supervisors to develop protocols needed to establish supervisory colleges by end-2008. In September, the FSF and IMF are expected to brief relevant parties, including the IMFC, on areas for intensified cooperation.

Central bank operations. The CGFS has compiled information on the steps taken by central banks to adapt their operations, and submitted a first version of its report. Central banks are continuing to actively investigate the lessons drawn from recent experiences for their operational frameworks, and the CGFS will present a progress report to the FSF in September.

Dealing with weak banks. The BCBS is working with national authorities to take stock of country practices in crisis resolution. Consultations on establishing a cross-border group for crisis management planning have been initiated. The BCBS and the IADI are jointly developing core international principles for effective deposit insurance systems, and the IMF and World Bank have started to review national authorities' arrangements.

Appendix: The Fund's Response to the Crisis—Selected Country and Regional Cases[19]

Appendix Table 1. The Fund's Response to the Crisis— Selected Country Cases

Country	Activities—Surveillance, Technical Assistance, and FSAP	Output
Australia	The ***2008 Article IV consultation*** focused in particular on bank resilience to shocks, including increased funding costs as a result of the global financial turmoil.	Article IV report and Selected Issues paper (http://www.imf.org/external/np/sec/pn/2008/pn08123.htm)
Austria	The ***FSAP Update*** (June 2008) focused on the impact of global funding pressures on Austrian banks, with emphasis on liquidity risks and cross-border effects.	FSSA report (http://www.imf.org/external/pubs/cat/longres.cfm?sk=22068.0)
Canada	The January 2008 ***FSAP Update*** assessed the resilience of the banking system in particular to shocks emanating from the subprime crisis in the U.S., and reviewed the agreement to restructure non-bank ABCP and its impact on financial market conditions. The ***2008 Article IV consultation*** (February 2008) addressed the quantitative impacts of U.S. financial shocks on Canada.	FSSA report (http://www.imf.org/external/pubs/cat/longres.cfm?sk=21710.0) Article IV report and Selected Issues paper (http://www.imf.org/external/np/sec/pn/2008/pn0819.htm)
Germany	Following two bank rescues at the outset of the global turmoil, the ***2008 Article IV consultation*** (February 2008) focused extensively on crisis prevention and management frameworks, supervision, and banking sector restructuring.	Article IV report (http://www.imf.org/external/pubs/cat/longres.cfm?sk=21759.0)
Hungary	The ***2008 Article IV consultation*** (June 2008) assessed the adequacy of risk management practices and existing financial safety nets, including arrangements for corrective action, deposit insurance, crisis management, and cross-border collaboration.	Article IV report (http://www.imf.org/external/np/sec/pn/2008/pn08124.htm
Israel	A major focus of the ***2007 Article IV consultation*** (February 2008) was the assessment of the banking and insurance supervision frameworks, including reviews of progress toward Basel II implementation and the onsite and offsite supervision processes, respectively.	Article IV report and Selected Issues paper (http://www.imf.org/external/pubs/ft/scr/2008/cr0863.pdf)
Japan	The ***2008 Article IV consultation*** assessed the exposure to and impact of the subprime crisis on Japanese financial intermediaries, with a particular focus on new channels of transmission from global to domestic markets, and drew lessons from the crisis for risk management and information disclosure.	Article IV report and Selected Issues paper (http://www.imf.org/external/pubs/cat/longres.cfm?sk=22210.0)
Kazakhstan	In the recent period, including in the ***2008 Article IV consultation***, the Fund provided and followed	Article IV report

[19] This table provides examples of crisis-related focuses in recent Fund activities and corresponding outputs. It is not a comprehensive inventory of such work across all issues and countries.

Country	Activities—Surveillance, Technical Assistance, and FSAP	Output
	up on detailed advice on crisis preparedness.	(http://www.imf.org/external/np/sec/pn/2008/pn08108.htm)
Korea	The ***2008 Article IV consultation*** focused on lessons from the subprime crisis relevant to Korea, including the need for regulation to keep apace with financial innovation and OTC market liquidity.	Article IV report and Selected Issues paper (http://www.imf.org/external/np/sec/pn/2008/pn08117.htm)
Mexico	The ***2007 Article IV consultation*** (November 2007) included reviews of developments in the financial system in light of the global financial turmoil and potential financial spillovers from advanced economies. The challenge of containing risks while stimulating financial development was highlighted, with emphasis on analysis of the recent rapid growth of mortgage-backed securities in Mexico, taking into account lessons emerging from the U.S. experience.	Article IV report and Selected Issues paper (http://www.imf.org/external/pubs/cat/longres.cfm?sk=21500.0)
Portugal	The ***2008 Article IV consultation*** has focused on enhancing the financial stability framework through stronger monitoring of liquidity developments, more pro-active use of stress tests, and improved deposit insurance fund (the latter in the context of EU-wide revision of deposit insurance schemes).	Article IV report (http://www.imf.org/external/np/sec/pn/2008/pn08128.htm)
Singapore	In view of the recent global turmoil, the ***2008 Article IV consultation*** (July 2008) focused on quantifying default interdependencies between Singaporean and regional financial institutions.	Article IV report and Selected Issues paper (http://www.imf.org/external/np/sec/pn/2008/pn08107.htm)
South Africa	The ***2007 Article IV consultation*** (July 2007) took place in the context of rapid domestic credit growth and the initial stages of the subprime crisis. It focused in particular on improving household debt data and refining the assessment of the implications of asset price developments for household balance sheets.	Article IV report (http://www.imf.org/external/np/sec/pn/2007/pn0794.htm)
Sweden	The ***2008 Article IV consultation*** (August 2008) assessed in particular the risks in the banking sector stemming from the exposures to the Baltics.	Article IV report (http://www.imf.org/external/np/sec/pn/2008/pn08105.htm)
Switzerland	The ***2008 Article IV Consultation*** focused heavily on financial sector issues, including a review of liquidity management efforts to limit the knock-on effects of the financial crisis and efforts to increase buffers in the financial system, as well as the supervisory capabilities of FINMA.	Article IV report (http://www.imf.org/external/np/sec/pn/2008/pn0861.htm)
United Kingdom	The ***2008 Article IV consultation*** (July 2008) assessed the U.K.'s financial stability framework, including the authorities' proposals to improve the supervisory setup in light of the Northern Rock failure, liquidity regulation, and the special framework for bank resolution.	Article IV report (http://www.imf.org/external/np/sec/pn/2008/pn0899.htm)
United States	The ***2008 Article IV consultation*** (July 2008) focused heavily on the financial sector and its interaction with the housing downturn, with extensive MCM support, using tools recently developed by staff (i.e., a financial conditions index and a measure of systemic banking stress) to assess financial stability; estimating macrofinancial linkages; reviewing the impact of the subprime crisis on the real economy; discussing government support for housing and financial markets; and reviewing financial regulation arrangements.	Article IV report and Selected Issues papers (http://www.imf.org/external/pubs/cat/longres.cfm?sk=22213.0)

Appendix Table 2. The Fund's Response to the Crisis— Selected Regional Cases

Region	Activities	Output
MCD	Assessment of the impact of recent global liquidity and credit developments on various countries in the region.	Internal staff note
Gulf Cooperation Council	Updated assessment of the impact of recent global liquidity and credit developments on GCC countries.	Internal staff note
APD	Estimated exposure of banks in the region to subprime-related products and potential risks and highlighted lessons from the ongoing global turmoil relevant to the region.	APD REO (http://www.imf.org/external/pubs/ft/reo/2008/APD/ENG/areo0408.htm)
Euro Area	The 2008 Article IV consultation (June 2008) analyzed macrofinancial spillovers from the current turmoil, discussed the ECB's liquidity management framework, and emphasized the need to improve arrangements for cross-border supervision and crisis management in light of recent developments.	2008 Article IV report (http://www.imf.org/external/pubs/cat/longres.cfm?sk=22225.0)
EUR	Analyses of the (i) spillover risks among major EU banks, using the extreme value theory approach; (ii) regional financial interlinkages and contagion channels in emerging Europe; (iii) extent to which the current financial turmoil, and associated increase in banks' risk profile, affect banks' supply of credit, and consequently, output; and (iv) potential macroeconomic consequences of the current financial turmoil on emerging Europe.	EUR REO (http://www.imf.org/external/Pubs/FT/REO/2008/EUR/ENG/ereo0408.htm)
WHD Argentina-Brazil-Mexico	An ad-hoc financial surveillance mission to Argentina, Brazil, and Mexico (February 2008) assessed the risks originating from the external environment, and held discussions with country authorities on possible policy responses.	Internal staff note WHD REO, Chapters 1 and 2 (http://www.imf.org/external/pubs/ft/reo/2008/whd/ENG/wreo0408.pdf)