# Financial Stability Insights from Recent IMF/World Bank FSAP Assessments

By Michael J. Zamorski and Vincent Choon-Seng Lim

#### 1. Introduction and Background

The International Monetary Fund (IMF or the Fund) and The World Bank conduct<sup>1</sup> periodic assessments of member countries' overall financial stability through their Financial Stability Assessment Program (FSAP). Mandatory FSAP assessments are conducted at least every five years for the 25 jurisdictions deemed to have systemically important financial sectors.<sup>2</sup> Countries' FSAP results are published by the IMF in "Financial System Stability Assessment" reports (FSAP Reports), accessible on the IMF's website.<sup>3</sup>

Maintaining financial stability is essential to achieving sustainable, long-term economic growth. Since the onset of the Global Financial Crisis (GFC) of 2007-08, financial stability issues have received priority attention from financial sector policymakers and international standard-setters. The FSAP assessment approach was revised in 2009, incorporating lessons learned from the GFC, to achieve more forward-looking, "systematic, candid and transparent" assessments.<sup>4</sup>

Many countries conduct periodic financial stability self-assessments, using criteria and approaches similar to those employed in the FSAP. Self-assessments inform policymakers about potential risks and vulnerabilities to financial stability. They can also determine whether a jurisdiction's financial stability infrastructure and approaches meet international standards. In the interest of transparency and public accountability, many countries publish their self-assessments.

# 2. Significance of the Study

The IMF/World Bank commenced their FSAP reviews in 1999, after the 1997 Asian financial crisis and other costly and disruptive episodes of financial instability and banking system crises over the last several decades, many of which involved multiple jurisdictions.<sup>5</sup>

FSAPs are a critical part of the IMF's on-going surveillance activities, providing independent assessments of the strength and resiliency of countries' economies and financial system infrastructure.<sup>6</sup> These evaluations are primarily based on on-site missions and other field work performed by experienced teams of trained assessors, which include subject matter experts in various aspects of financial stability.

While FSAPs' coverage and scope for different countries are similar, they are not identical. They are tailored to a country's stage of economic development, and the composition, size and complexity of its banking system and financial markets. FSAP Reports are quite detailed and contain a wide variety of findings, conclusions and recommendations for remedial action, reflecting the diverse characteristics of the countries being reviewed. In addition, while the FSAP Report is the core country assessment document, there are frequently multiple supporting documents that provide more detailed analyses and commentary supporting overall FSAP conclusions.

FSAPs frequently focus on the strength and resiliency of the countries' banking sectors, given banks' typical importance in providing credit. That same emphasis was evident in the FSAPs we reviewed, hence our focus on banking sector stability.

It is important to understand the lessons learned and financial stability insights contained in post-GFC FSAP Reports. Persistent fragilities in many of the major developed economies, regional vulnerabilities, and various linkages and transmission channels could precipitate future periods of instability or crisis. Proactively identifying and addressing potential risks and vulnerabilities are essential to avoiding or dampening periods of instability or crises, and reducing the potential for contagion. This article is intended to provide insights to assist Asia-Pacific countries as they benchmark and enhance their own financial stability self-assessments.

# 3. Research Methodology

Twenty-two country FSAP Reports, with more than 1,500 pages of detailed comments and conclusions, were published from 1 January 2012 through 31 August 2013, based on country missions and field work performed during 2011 to 2013.<sup>7</sup> This group of FSAP Reports was selected for analysis as the assessed countries represent a broad cross-section with respect to their stage of development, size and complexity. Also, the timing of the FSAP field work and missions for the assessments was sufficiently after the GFC to allow reasonable clarity in understanding how it impacted those jurisdictions, and the lessons learned from the crisis. Nine of the 22 countries have systemically important financial sectors.<sup>8</sup>

Our analysis and commentary are not intended to be an empirical study based on the frequency of similar FSAP findings. There are numerous variables and chains of causation that can impact financial stability within a particular country or region. Frequency of a particular FSAP observation does not necessarily convey its relative importance, nor lend itself to a meaningful statistical analysis. In this article, we focus on specific FSAP Report findings which, in our professional judgment and experience, are most relevant to the Asia-Pacific region.

# 4. Key Points of Emphasis in Recent FSAP Reports

The 22 FSAP Reports evaluated multiple financial stability factors (and factor interactions), including: countries' current macroeconomic conditions, past economic performance, the impact of the GFC, potential vulnerabilities, systemic resiliency to internal and external shocks, conformity of financial sector supervisory and regulatory arrangements to international standards, and crisis management preparedness and resolution infrastructure.

From the 22 FSAP Report sample, we identified three core areas which received greater emphasis compared to pre-crisis FSAP Reports:

- Observance of International Regulatory and Supervisory Standards
- Macroprudential Stress Testing of the Banking Sector
- Crisis Management and Resolution Arrangements

These areas of emphasis are not surprising given the severe impact of the GFC on the banking sector, and the severe time pressures that national authorities faced to take decisive action to preserve public confidence in banks and markets and contain the crisis.

# 5. Observance of International Regulatory and Supervisory Standards

The Bank for International Settlements (BIS), Basel, Switzerland, owned by the world's central banks and monetary authorities,<sup>9</sup> hosts the following regulatory and supervisory standard-setting committees that cover the indicated financial industry sector/infrastructure:

- Basel Committee on Banking Supervision (Basel Committee or BCBS) Banking<sup>10</sup>
- International Association of Insurance Supervisors (IAIS) Insurance
- International Association of Deposit Insurers (IADI) Deposit Insurance Systems
- Committee on Payment and Settlement Systems (CPSS) Payment and Settlement Systems

Additionally, the International Organization of Securities Commissions (IOSCO), Madrid, Spain, issues standards for securities (capital markets) regulation and supervision, and the Financial Action Task Force (FATF), Paris, France, promulgates "legal, regulatory and operational measures for combatting money laundering, terrorist financing and other related threats to the integrity of the international financial system."<sup>11</sup>

FSAP teams assess countries' compliance with the following minimum standards for sound regulatory and supervisory practice<sup>12</sup>:

- Basel Committee: "Core Principles for Effective Supervision" (known as the Basel Core Principles or BCP), originally issued in 1997, revised in 2006 and 2012
- IAIS: "Insurance Core Principles, Standards, Guidance and Assessment Methodology," as amended in 2012
- IOSCO: "Objectives and Principles of Securities Regulation," as augmented in 2010
- CPSS: "Core Principles for Systemically Important Payment Systems," issued 2001
- CPSS-IOSCO: "Recommendations for Securities Settlement Systems," issued 2001

- CPSS-IOSCO: "Recommendations for Central Counterparties," issued 2004
- CPSS-IOSCO: "Principles for Financial Market Infrastructures," issued 2012
- IADI: "Core Principles for Effective Deposit Insurance Systems," jointly issued with the BCBS in 2009
- FATF: "International Standards on Combatting Money Laundering and the Financing of Terrorism & Proliferation," issued 2012.<sup>13</sup>

The 22 FSAP Reports contain comprehensive analytical and systematic investigation into compliance with international regulatory and supervisory standards. FSAP teams assess countries' compliance with international standards for sound regulatory and supervisory practice covering the banking, insurance and securities (capital markets) industries, payment and settlement systems, deposit insurance arrangements and financial crimes prevention.

In the 22 FSAP Reports analyzed, the condition of the banking sector was closely correlated to an economy's overall financial stability and performance. This reflects the importance of banks as the primary intermediaries of credit and counterparty risk in these countries, and also the main source of systemic risk. In view of these circumstances, our analysis focuses on the BCP. The BCP provide a framework to assess whether regulatory jurisdictions meet the essential preconditions or minimum standards necessary to have sound and effective bank supervision programs.

# 5.1 FSAP Reports and the Basel Core Principles Assessment Methodology

The 2006 BCP contains 25 individual core principles (CPs), supplemented by a separate "Core Principles Methodology,"<sup>14</sup> specifying the criteria for assessing CP compliance, the definition of the grading system, and other practical considerations in conducting assessments. Each CP is intended to apply to the prudential supervision of all banks, ranging from large, complex internationally-active banks to small, non-complex deposit-taking institutions. The BCP recognize that supervisory resources should be allocated in proportion to the risk profile and systemic importance of banks.<sup>15</sup>

The 2006 BCP structure covers the following seven topical assessment clusters, with the related range of CPs parenthetically indicated:

- 1. Objectives, independence, powers, transparency and cooperation (CP 1)
- 2. Licensing and structure (CPs 2 to 5)
- 3. Prudential regulation and requirements (CPs 6 to 18)
- 4. Methods of ongoing banking supervision (CPs 19 to 21)
- 5. Accounting and disclosure (CP 22)
- 6. Corrective and remedial powers of supervisors (CP 23)
- 7. Consolidated and cross-border banking supervision (CP 24 and 25)

Assessment criteria identified and articulated for each of the CPs are designated as either "Essential Criteria" ("minimum baseline requirements for sound supervisory practices universally applicable to all countries") or "Additional Criteria" ("supervisory practices that exceed current baseline expectations but will contribute to the robustness of individual supervisory frameworks").<sup>16</sup> FSAP CP assessments cover compliance with only the Essential Criteria, though a country can voluntarily choose to also be assessed against the Additional Criteria.

All of the 22 FSAP BCP assessments were conducted using the 2006 methodology. Parenthetically, as of 31 July 2013, no FSAP Reports have yet been published which use the 2012 revised BCP assessment criteria.

## 5.2 Major Findings of the FSAP Reports Based on the BCP Assessment

Twenty of the 22 countries sampled had previously received at least one prior FSAP assessment. The overall level of BCP compliance was generally satisfactory as most countries had taken action to address prior FSAP findings of less than full compliance. Nevertheless, there were instances of partial or noncompliance with individual CPs. The relative gravity and circumstances of CP noncompliance varies, with some new instances of noncompliance arising out of less than satisfactory experiences before and during the GFC with respect to effective CP implementation.

The remainder of this section highlights what we consider to be, in our professional judgment, the most important areas of recurrent noncompliance with the referenced CPs' Essential Criteria, listed in numerical order. The text reflects our opinions and interpretations of pertinent portions of the referenced CPs and related FSAP commentary.

# 5.2.1 Objectives, Independence, Powers, Transparency and Cooperation (CP 1)

Some basic shortcomings in these areas were observed across multiple countries. These are:

# (1) Inadequate resourcing of bank supervision

For supervision to be effective, it must be performed by qualified professionals in a manner that allows for timely detection and mitigation of excessive risk. Some jurisdictions lacked budget autonomy or failed to provide sufficient resources to attract and retain adequate staffing and expertise.

Efforts to augment bank supervisory staff need to take into account the training needs for new hires. Training programs for new bank supervisors, which frequently include apprenticeship training, may take several years for new hires to achieve the necessary degree of proficiency. Therefore, the benefits of increasing competent staff may be delayed due to training needs. In addition to a high degree of technical competency, effective bank supervisors need to possess good judgment, a healthy degree of professional skepticism, and be able to communicate effectively and persuasively with the highest levels of bank management and boards of directors. Therefore, their training should also emphasize "soft skills" development.

# (2) Lack of legal protections for bank supervisors

Some jurisdictions lacked proper legal protections for bank supervisors, which should be enacted in law. Supervisors should be shielded from political pressure and the threat of lawsuits for actions taken or decisions made in good faith in discharging their official duties. Otherwise, such threats could inhibit bank supervisors from taking necessary actions to curtail excessive risk or other unsound practices. Statutory immunity should be extended to include coverage of any litigation costs.

# (3) Inability to legally exchange confidential supervisory information with domestic and foreign financial sector supervisors

Effective cooperation and information-sharing arrangements among domestic and foreign supervisors are essential to understanding and overseeing risk in more complex banking organizations, such as those with multi-tiered corporate structures, mixed (banking and commercial) groups, and cross-border operations. Supervisors who lack the legal authority to share confidential information will likely be unable to adequately assess prudential risks, and thus unable to properly fulfill their supervisory responsibilities.

# 5.2.2 Capital Adequacy (CP 6) and Risk Management Process (CP 7)

Supervisory authorities should establish and enforce prudent minimum capital adequacy requirements for banks. Internationally-active banks should have minimum capital requirements at least equal to applicable Basel Committee requirements (CP 6). Additionally, the CP 7 Essential Criteria require that bank supervisors determine that banks have capital adequacy assessment processes that provide for maintenance of capital levels that are commensurate with their risk profiles. Also, for those countries that have implemented the Basel II capital requirements, supervisors should ensure that banks have an effective Internal Capital Adequacy Assessment Process (ICAAP) to enable the banks' boards of directors to determine and substantiate their own capital adequacy assessment and strategy.

The FSAP assessment teams found that some countries: (1) set minimum capital requirements too low or did not fully specify their ICAAP expectations; and (2) did not have procedures to require that additional capital charges be imposed when supervisors identified additional material risks not previously taken into account by banks in their ICAAP.

#### 5.2.3 Problem Assets, Provisions and Reserves (CP 9)

Bank supervisors need to confirm that banks adequately evaluate and control risks in problem assets, with clear loss mitigation strategies and timely loss recognition. Adequate bank policies and procedures should be in place to ensure that provisions for possible loan losses result in maintenance of "adequate" reserves for loan losses. Bank documentation should therefore substantiate that reserve levels realistically reflect the level of risk inherent in related credit portfolios.

Banks also need to recognize loan impairments and other asset loss exposures (such as real estate acquired through foreclosure) in a timely manner. Failure to establish adequate reserves and take timely asset write-downs is an unsafe and unsound practice, which can result in material overstatement of a bank's earnings and capital. Such misstatements could result in the publication or submission of erroneous, false or misleading information to the public and regulatory authorities. Regulators rely on this information for off-site monitoring, so its accuracy is critical.

The FSAP Report sample disclosed fundamental shortcomings in this area, even in several advanced countries. Cited deficiencies included inadequate procedures for reviewing the adequacy of banks' loan loss provisioning and loss recognition procedures, and, in some cases, there was not even supervisory review of these areas during on-site inspections. This type of analysis would normally be embedded in problem asset review processes.

#### 5.2.4 Large Exposure Limits (CP 10)

Adequate risk diversification is a basic tenet of sound banking practice. Concentrations of risk have been a primary or contributing factor in past banking crises. Countries should set and stringently enforce prudential limits on bank risk exposures to single counterparties or groups of connected counterparties.

The FSAP reports stress the need for bank supervisors to ensure that banks have adequate policies and procedures to identify and manage asset concentrations. Some countries' supervisors did little or no review of banks' concentrations risks. In some cases, limits on large exposures were not sufficiently stringent or not enforced.

#### 5.2.5 Corrective and Remedial Powers of Supervisors (CP 23)

Bank supervisors need to not only possess appropriate legal authority related to safety and soundness oversight of the banking sector, but also to actually take timely action to identify and mitigate excessive risk or unsound conditions or practices. The sampled FSAP Reports conclude that several countries seemed reluctant or slow to exercise supervisory powers in developing problem situations, allowing problems to worsen. In addition, regulatory interventions in the case of weak or failing banks were too slow, or the legal authority to intervene (such as prompt corrective action<sup>17</sup>)

was not stringent enough, allowing nonviable banks to continue operating, increasing ultimate resolution costs.

# 5.2.6 Consolidated Supervision (CP 24) and Cross-border Banking (CP 25)

Increasing integration and conglomeration in the financial services industry have opened up possibilities of greater efficiency through increased economies of scale. Banks are increasingly owned by holding companies or other corporate parents. There may be multiple ownership layers between a bank and its ultimate parent. Each commonly owned/controlled affiliate, and the bank itself, may have subsidiaries. Some banks operate as part of complex group structures or conglomerates. Affiliated organizations, including bank affiliates, may be located in different countries. Nonbank affiliates may also be engaged in activities closely related to banking or financial services, and may engage in business transactions with each other. Some countries allow banks to be part of mixed groups, in which banks are affiliated with, or owned by commercial businesses.

The complex nature of financial institutions poses several problems to supervisors. First, complex ownership structures, lack of access to information, or other opacities can impair supervisors' ability to assess and control risk in a financial conglomerate. Second, transactions with affiliates, or problems in affiliated organizations, can adversely impact banks' safety and soundness. Third, contagion risk<sup>18</sup> can spread quickly through a group via intercompany transactions and also pose reputational risk. Fourth, problems in large conglomerates and mixed groups could pose financial stability risks to the countries in which they operate.

Consolidated supervision is a long-standing, fundamental principle and essential element of effective bank supervision, which seeks to determine the financial soundness of a bank, taking into account the financial soundness and risks posed by affiliate relationships, as previously mentioned. As the Basel Committee recently reaffirmed, bank supervisors should have "...the necessary powers, authority and resources to perform comprehensive group-wide supervision of financial conglomerates...(and) ensure financial conglomerates have robust governance, capital, liquidity and risk management frameworks."<sup>19</sup> Moreover, the 2012 revisions to the BCP require that banking supervisors should be able to supervise banking groups on a consolidated and on-going basis.

Surprisingly, despite the longstanding requirement that bank supervisors practice consolidated supervision, the 22 FSAP Reports disclosed that some countries, which have banks that operate within group structures or conglomerates, do not comply with this fundamental standard. Some cited shortcomings include:

- the lack of legal authority to review the overall activities of a banking group
- no legal authority to exchange confidential supervisory information with foreign supervisors
- having, but not exercising, legal authority to review group information

## 6. Macroprudential Stress Testing in the Banking Sector

Compared to pre-GFC reports, current FSAP approaches to identifying and quantifying risks and vulnerabilities to countries' financial sectors place strong emphasis on comprehensive macroprudential stress testing. In the past, while some degree of stress testing was utilized, financial sector surveillance was focused on tracking various Financial Soundness Indicators (FSIs) for the banking industry, such as overall capital levels, credit and counterparty risks, asset growth, profitability, and liquidity.

FSIs, while useful, have analytical limitations as they mostly provide a static view of risk. Stress testing, though it also has limitations, produces a more dynamic, forward-looking analysis that considers a range of outcomes based on multiple scenarios. This allows better identification and understanding of financial stability risks and vulnerabilities.

The need to expand forward-looking analysis is reflected in the extent and sophistication of FSAP stress testing in post-GFC FSAPs. All 22 FSAP assessments included macroprudential stress testing of the strength and resiliency of the countries' banking systems. FSAP teams reviewed countries' stress testing methods and results, typically performing supplemental testing using their own baseline and multiple adverse or shock scenarios. The FSAP teams also tested risk factors that countries' had not previously tested.

FSAP stress testing methods included:

- 1. Scenario analysis with changing risk factors due to foreseeable (plausible) future events
- 2. Maximum loss approach, assuming "worst case" scenario/extreme events
- 3. Contagion analysis, which considers exposure to the overall financial system from the transmission of shocks from individual financial institutions
- 4. Network analysis (similar to contagion but with cross-border spillovers), based on bilateral exposures of banking systems across countries
- 5. Analysis of potential cross-border knock-on effects of banking sector distress on the nonbank and sovereign sectors of each country
- 6. Reverse stress testing simulating the severity of individual and multiple risk factors needed to pose systemic risk

Common FSAP "top down" banking system stress test scenarios included:

- Industry capital levels needed to meet international standards with appropriate buffers
- Industry liquidity levels needed to meet international standards with appropriate buffers
- Industry capital levels before and after single and multiple shocks
- Upward and downward parallel shifts in yield curves

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- Liquidity/systemic risk impacts of shocks, including deposit runs
- Estimates of possible central bank liquidity support in response to various shocks
- Impact of depletion of foreign exchange reserves

# 6.1 Major Findings of the FSAP Reports on Stress Testing

Many of the 22 FSAP reports recommended that central banks/monetary authorities refine and expand stress testing activities, which may require additional resourcing and expertise. Banks supervised by these authorities conduct stress testing using different models and approaches. Central banks that have bank supervisory oversight responsibilities should, therefore, have the expert capability to validate and cross-check individual bank results to ensure overall consistency. In countries where banking system stress testing is conducted by national authorities outside the central bank, there should be appropriate communication and collaboration with those authorities. In addition, stress testing protocols should integrate both micro- and macro prudential analysis, and be expanded beyond the banking sector.

Comprehensive stress testing may require systems thinking beyond national borders (e.g., network analysis models) by taking into account international linkages and dynamics. In this regard, stress testing capabilities are generally currently not able to produce reliable output that considers cross-border dynamics. However, supervisors can exchange relevant cross-border risk information to inform the risk assessment process.

While stress tests are a useful tool, the lack of data or poor data quality sometimes inhibits their reliability. Complexity and sophistication of stress testing models do not necessarily guarantee reliable results. For example, data and model limitations have been found to limit the ability of banks to identify and aggregate exposures across the wider financial system (BIS 2009). These limitations restrict the ability to expand scenarios that can be tested and, therefore, limit the quality of analyses that can be generated. As is the case with other financial modeling tools, outputs need to be expertly interpreted, with appropriate judgmental "overrides" applied in making analytical conclusions.

In summary, while recognizing the foregoing limitations, stress testing can greatly enhance central banks' ability to identify potential financial stability threats and inform related policy decisions. Therefore, central banks should devote the necessary resources to build and enhance such analytical infrastructure.

# 7. Crisis Management and Resolution Arrangements

The GFC demonstrated that authorities did not always have sufficient legal powers or crisis management capabilities or infrastructure to deal with financial instability or systemic crises. These powers are needed to enable timely and decisive action to control risk and preserve public confidence in the banking system in order to contain a crisis. Crisis management planning also minimizes ad hoc decision making in the midst of a crisis that can increase costs and have unintended and unforeseen consequences. The 22 FSAP assessments noted the need to address the following specific weaknesses:

- Insufficient crisis management planning
- Insufficient specification of roles of national authorities in a crisis
- Insufficient legal powers to take various emergency actions in a crisis
- Insufficient information-sharing arrangements with relevant authorities both domestically and cross-border
- Insufficient or nonexistent arrangements for providing emergency liquidity to banks
- Insufficient specification of failing/failed bank resolution strategies/options
- Not conducting crisis simulation exercises

It is recommended that central banks and other authorities should seek necessary legal authorities to deal with a broad range of potential crises. They should periodically conduct crisis simulation exercises including all relevant parties to assess the efficacy of such arrangements under multiple crisis scenarios. Formal interagency agreements can clarify beforehand the roles and responsibilities of various national authorities in a crisis.

The introduction of an explicit deposit insurance scheme that conforms to IADI core principles was a recurrent FSAP recommendation. Also, crisis management and resolution arrangements should consider cross-border operations. Cross-border coordination arrangements can include participation in cross-border crisis management groups and establishing effective crisis communication systems among supervisors of cross-border banking groups.

#### 8. Conclusions and Recommendations

What are the main implications of the FSAP assessments and related action items for policymakers? We have six recommendations in that regard:

- 1. Conduct stringent, periodic country self-assessments using the FSAP approach with the participation of other relevant national authorities
- 2. Take timely action to address risks and vulnerabilities identified from selfassessments
- 3. Ensure a comprehensive supervision framework is in place that conforms to the Basel Core Principles
- 4. Ensure compliance with other international standards and codes related to financial sector supervision and oversight
- 5. Ensure effective crisis management and resolution arrangements are in place to deal with any crisis situations that may develop
- 6. Organizational training and human capital management should result in the acquisition and retention of top quality talent and expertise to ensure ongoing effective implementation of the preceding recommendations

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The FSAP analytical framework provides a very useful guide to policy-makers and supervisors to construct and fine-tune their approaches to attaining, preserving and monitoring financial stability. However, it must be emphasized that risky practices usually emerge and proliferate during good times. Accordingly, financial stability self-assessments should be purposely stringent to effectively identify potential issues and risks. Related remedial action can then be taken to help avert or dampen future periods of instability or crisis.

The BCP were revised in 2012 to maintain their relevance as a global standard of good practice, by incorporating lessons learned from the GFC, and feedback from the IMF and World Bank FSAP process.<sup>20</sup> The BCBS encourages bank supervisory authorities "...to move towards the adoption of updated and new international supervisory standards as they are issued."<sup>21</sup>

Accordingly, central banks should coordinate with other relevant national authorities to conduct self-assessments using the revised 2012 BCPs as part of their efforts to promote financial sector stability. However, it must be emphasized that the ultimate test of supervisory effectiveness depends upon whether a country's actual implementation of the BCP, and the prudential regulator's supervisory culture and practices, allow for the timely detection and curtailment of imprudent risk-taking, or other unsound practices, at their incipient stages.

Adequate human capital, training programs that promote continuing professional development and a strong legal framework are prerequisites for attaining and maintaining an effective program of financial sector supervision and regulation that conforms to international standards and codes.

The Asian financial crisis of 1997-98 was particularly noteworthy for its sudden onset and contagion effects, with the crisis spreading quickly to other countries, indicating the many close inter-linkages and potential transmission channels for crossborder contagion. Comprehensive consolidated supervision of the banking sector is therefore especially critical in view of the many sizeable banking groups that operate across multiple countries in the Asia-Pacific region. In this regard, effective crossborder coordination and information-sharing arrangements are essential, including both on-going supervision and crisis preparedness.

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# Endnotes

- The respective FSAP roles and responsibilities of the IMF and World Bank are 1. detailed in The Financial Sector Assessment Program, Factsheet, (Washington, D.C.: IMF, last updated March 15, 2013), available at http://www.imf.org/ external/np/exr/facts/fsap.htm: "FSAP assessments are the joint responsibility of the IMF and World Bank in developing and emerging market countries and of the Fund alone in advanced economies, and include two major components: a financial stability assessment, which is the responsibility of the Fund and, in developing and emerging countries, a financial development assessment, the responsibility of the World Bank." With respect to assessing financial sector stability, "FSAP teams examine the soundness of the banking and other financial sectors; conduct stress tests; rate the quality of bank, insurance, and financial market supervision against accepted international standards; and evaluate the ability of supervisors, policymakers, and financial safety nets to respond effectively in case of systemic stress. While FSAPs do not evaluate the health of individual financial institutions and cannot predict or prevent financial crises, they identify the main vulnerabilities that could trigger one."
- 2. <u>The Financial Sector Assessment Program, Factsheet</u>, (Washington, D.C.: IMF), last updated March 15, 2013.
- 3. A searchable index of FSAP and ancillary reports issued from 2001 to the present is available at <a href="http://www.imf.org/external/np/fsap/fsap.aspx">http://www.imf.org/external/np/fsap/fsap.aspx</a>. This page also contains links to IMF documents that provide an in-depth discussion of the FSAP process and related matters. IMF surveillance and FSAP assessment activities for a jurisdiction are sometimes conveyed in multiple reports, each providing detailed assessments of a particular risk area or assessment of international standards and practices observance. Overall FSAP findings may incorporate or reference the findings of these reports in an overall country assessment, which is presented in a "Financial System Stability Assessment" report, commonly referred to as an "FSAP report."
- Financial Sector Assessment Program: Frequently Asked Questions, (Washington, D.C.: IMF, last updated October 03, 2012), available at <u>http://www.imf.org/</u> <u>external/np/fsap/faq</u>
- Laeven, Luc and Valencia, Fabian, "Systemic Banking Crises: A New Database," Working Paper No. 08/224, (Washington, D.C.: IMF, September 1, 2008); (Working Papers do not represent the views of the IMF).

- 6. The views expressed in FSAP reports are "...based on the information available at the time (they were) completed... (and) the views expressed...are those of the staff team and do not necessarily reflect the views of the government of (the jurisdiction being assessed) or the Executive Board of the IMF." Further, each FSAP report reviewed for this article contained the following, or substantially similar, qualification: "FSAP assessments are designed to assess the stability of the financial system as a whole and not that of individual institutions. They have been developed to help countries identify and remedy weaknesses in their financial sector structure, thereby enhancing their resilience to macroeconomic shocks and cross-border contagion. FSAP assessments do not cover risks that are specific to individual institutions such as asset quality, operational or legal risks, or fraud."
- The twenty-two country FSAP reports analyzed for this article were published by 7. the IMF on the parenthetically indicated dates, with each report having an "IMF Country Report" identification number ("IMFCR"): Mexico (March 30, 2012, IMFCR 12/65); Israel (April 2, 2012, IMFCR 12/69); Saudi Arabia (April 18, 2012, IMFCR 12/92); Spain (June 8, 2012, IMFCR 12/137); Czech Republic (July 17, 2012, IMFCR 12/177); Brazil (July 31, 2012, IMFCR 12/206); Japan (August 1, 2012, IMFCR 12/210); Tunisia (August 13, 2012, IMFCR 12/241); Turkey (September 7, 2012, IMFCR 12/261); Australia (November 15, 2012, IMFCR 12/308); Republic of Slovenia (December 6, 2012, 12/325); France (December 21, 2012, IMFCR 12/341); Republic of Armenia (January 11, 2013, IMFCR 13/10); India (January 15, 2013, IMFCR 13/8); Colombia (February 22, 2013, IMFCR 13/50); Malaysia (February 28, 2013, IMFCR 13/52); The Bahamas (April 11, 2013, IMFCR 13/101); Republic of Kosovo (April 12, 2013, IMFCR 13/99); Belgium (May 17, 2013, IMFCR 13/124); Nigeria (May 28, 2013, IMFCR 13/140); Uruguay (May 31, 2013, IMFCR 13/152); and the Republic of Poland (July 23, 2013, IMFCR 13/221).
- 8. Mexico, Spain, Brazil, Japan, Turkey, Australia, France, India, Belgium.
- 9. Sixty central banks are listed as having rights of voting and representation according to "The BIS in profile," (Basel: BIS), June 2012, available on-line at <a href="http://www.bis.org/about/profile.pdf">http://www.bis.org/about/profile.pdf</a>
- 10. The BCBS, founded in 1974 and the oldest of the BIS standard-setters, provides a forum for international cooperation on bank supervisory matters, develops standards and sound practices for the global banking industry, and encourages convergence toward common approaches.
- 11. Details concerning the mandate and activities of the FATF are available at <u>http://www.fatf-gafi.org</u>
- 12. Standards issued by BIS-hosted financial sector standards-setters (BCBS, IAIS, IOSCO, CPSS and IADI) can be accessed through from their website at <u>http://www.bis.org</u>

- 13. Link: <u>http://www.fatf-gafi.org/media/fatf/documents/recommendations/pdfs/</u> <u>FATF\_Recommendations.pdf</u>
- 14. BCBS, "Core Principles Methodology," October 2006, (Basel: BIS).
- 15. BCBS, "Core Principles for Effective Banking Supervision," September 2012, (Basel: BIS), p. 5.
- 16. BCBS, "Core Principles for Effective Banking Supervision," September 2012, (Basel: BIS), pp. 7-8.
- 17. Prompt corrective action, also known as PCA, refers to banking laws that mandate increasingly stringent operating restrictions on undercapitalized banks, up to and including license revocation. The general objective of PCA is to close nonviable institutions or transfer their operations to new ownership well before book capital is zero or negative, to minimize losses. PCA frameworks usually mandate more stringent restrictions as capital levels decline, and there can also be liquidity triggers for mandatory restrictions. Restrictions can include dividend prohibitions, curtailment of non-deposit borrowings or asset growth, and executive compensation limitations.
- 18. Contagion risk in this context is the risk that financial weaknesses or problems in one affiliate can be transmitted to affiliated organizations through various mechanisms.
- 19. BCBS/Joint Forum, "Principles for the supervision of financial conglomerates," September 2012, (Basel: BIS), p. 3.
- 20. The 2012 BCP revisions are available at http://www.bis.org
- 21. BCBS, "Core Principles for Effective Supervision," September 2012, (Basel: BIS), p. 5.

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