



# REPUBLIC OF KOREA

## FINANCIAL SECTOR ASSESSMENT PROGRAM

### CRISIS PREPAREDNESS AND CRISIS MANAGEMENT FRAMEWORK—TECHNICAL NOTE

January 2015

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December 2014

# TECHNICAL NOTE

## CRISIS PREPAREDNESS AND CRISIS MANAGEMENT FRAMEWORK

Prepared By  
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Markets Department, IMF and  
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This Technical Note was prepared by International Monetary Fund (IMF) led mission with World Bank participation that visited Seoul on April 3–19, 2013 and July 1–17, 2013 to update the Financial Sector Assessment Program (FSAP) for the Republic of Korea (Korea) conducted in 2003. It contains technical analysis and detailed information underpinning the FSAP’s findings and recommendations. Further information on the FSAP program can be found at <http://www.imf.org/external/np/fsap/fssa.aspx>, and [www.worldbank.org/fsap](http://www.worldbank.org/fsap).



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## Glossary

|         |  |
|---------|--|
| ASIFI   | Act on Structural Improvement of the Financial Industry  |
| BA      | Banking Act  |
| BCBS    | Basel Committee on Banking Supervision   |
| BCP     | Basel Core Principles for Effective Banking Supervision  |
| BIS     | Bank for International Settlements   |
| BOK     | Bank of Korea  |
| BOKA    | Bank of Korea Act and Enforcement Decree   |
| CAMEL-R | Supervisory Bank Rating Methodology  |
| CMGs    | Crisis Management Groups   |
| CMM     | Crisis Management Manual   |
| CMT     | Crisis Management Team   |
| CSE     | Crisis Simulation Exercise   |
| DIC     | Deposit Insurance Committee  |
| DICP    | Core Principles for Effective Deposit Insurance Systems  |
| DIF     | Depositor Insurance Fund   |
| DPA     | Deposit Protection Act   |
| D-SIFIs | Domestic Systemically Important Financial Institution  |
| ELA     | Emergency Liquidity Assistance   |
| FHC     | Financial Holding Company  |
| FI      | Financial Institution  |
| FMI     | Financial Market Infrastructures   |
| FRI     | Financial Resolution Institution   |
| FSAP    | Financial Sector Assessment Program  |
| FSB     | Financial Stability Board  |
| FSF     | Financial Stability Forum  |
| FSC     | Financial Services Commission  |
| FSC Law | Act on the Establishment, etc. of the Financial Services Commission and its Enforcement Decree |
| FSR     | Financial Stability Report   |
| FSS     | Financial Supervisory Service  |
| GDP     | Gross Domestic Product   |
| G-SIFI  | Global Systemically Important Financial Institution  |
| KA      | Key Attributes for Effective Resolution Regimes  |
| KAMCO   | Korea Asset Management Company   |
| KDIC    | Korea Deposit Insurance Corporation  |
| KRW     | Korean Won (Local Currency)  |
| MEFM    | Macroeconomic Financial Meeting  |
| MMF     | Money Market Fund  |
| MOSF    | Ministry of Strategy and Finance   |

|      |  |
|------|--|
| MOU  | Memorandum of Understanding                  |
| MMOU | Multilateral Memorandum of Understanding     |
| MPC  | Monetary Policy Committee                    |
| MSB  | Mutual Savings Bank                          |
| NBFI | Non-bank Financial Institution               |
| NPL  | Non-performing Loan                          |
| OMO  | Open Market Operation                        |
| OTC  | Over-the-Counter                             |
| LOLR | Lender of Last Resort                        |
| SFC  | Securities and Futures Commission            |
| SIBs | Systemically Important Banks                 |
| SIFI | Systemically Important Financial Institution |
| SME  | Small and Medium Enterprise                  |
| USD  | United States Dollar                         |

## PREFACE

As part of the Financial Sector Assessment Program (FSAP) conducted by a joint team from the World Bank and International Monetary Fund in April 2013, the mission was requested by the authorities to perform an assessment of the crisis preparedness and management framework. The mission visited Seoul from April 3–19, 2013.

The team is grateful to the officials and staff of the Financial Services Commission, Financial Supervisory Service, Korea Deposit Insurance Corporation, Bank of Korea, Ministry of Strategy and Finance, market players and other stakeholders for their cooperation, assistance, and hospitality.

## EXECUTIVE SUMMARY<sup>1</sup>

**Korea experienced significant financial distress in the late 1990s along with some of its Asian neighbors.** The authorities' experience in handling this crisis and the experience in handling the fallout from the global financial crisis in 2007–08 helped them establish a broad crisis management framework in Korea.

**Improving and formalizing the framework for crisis management would help preserve and build upon institutional memory.** Authorities can consider formally setting up an apex forum for leading the inter-agency cooperation and coordination work on crisis preparedness and crisis management. With a view to avoid duplication, the authorities may consider upgrading the Macroeconomic Financial Meeting (MEFM) with participation by the heads of the Ministry of Strategy and Finance (MOSF), Financial Services Commission (FSC), Financial Supervisory Service (FSS), Bank of Korea (BOK), and Korea Deposit Insurance Corporation (KDIC) as members, and by including crisis preparedness and crisis management as an explicit mandate.

**The essential elements of a financial safety net are available in Korea, and the Emergency Liquidity Assistance (ELA) framework and deposit insurance system can be improved to make the safety net more responsive.** For ELA, this can be achieved by reviewing and revising the legal and procedural aspects to remove any scope for delays in actual disbursement of funds. For deposit insurance system, improvements can be made by bringing the deposit insurance fund out of deficit, and assuring a back-up funding.

**The financial safety net is well supported by an efficient framework of financial sector supervision.** While the corrective action framework has some of the main elements in place it can, among others, be improved in the following areas for better effectiveness: (a) reviewing the triggers for corrective actions and improving their objectivity to enable timely intervention, including even before banks breach regulatory thresholds; and (b) putting in place norms and guidance determining the use of the powers to postpone or suspend corrective actions.

**To ensure that the KDIC is able to intervene effectively during or leading up to a crisis and is not in the process exposed to avoidable losses, certain improvements are required.** These include the following: (i) not allowing insolvent banks to continue to accept fresh deposits and repay existing deposits; (ii) establishing a back-up funding arrangement to improve its ability to make prompt depositor payouts and meet liquidity needs in times of crisis—such arrangements may include funding arrangement with the Central Bank or a line of credit from the Government; and (iii) reviewing the processes involved to reduce the allowed timelines for making decisions on depositor payouts, for providing financial assistance to troubled banks and their resolution.

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<sup>1</sup> This Technical Note has been prepared by Ernesto Aguirre (Consultant), IMF and Yejin Carol Lee, World Bank.

**The authorities have a few ready and efficient options that can be activated in the event of a financial crisis.** These include tools to influence systemic liquidity in money and securities markets, to increase deposit insurance and investor protection cover (including full guarantee), to mobilize public funds to provide support to financial institutions and markets that may be under stress, and to intervene and resolve troubled financial institutions.

**Korea established several funds in the wake of the recent global financial crisis to provide financial assistance to financial institutions either directly or indirectly.** While these funds are playing a useful role by providing liquidity and capital support, they have potential implications for distorting the incentive framework for financial institutions, particularly, when they are deployed without imposing losses on shareholders and other creditors, or when bank managements are not held accountable. While supervisory authorities' powers are comprehensive to address threats to financial stability, moral hazard issues may need to be more fully addressed.

**Other important elements of crisis management framework that could be formalized or improved include the following:** (a) formally designating crisis management team(s) in each supervisory authority; (b) developing a crisis management handbook/manual; (c) establishing multi-agency institution-specific crisis management groups; (d) establishing group-wide contingency plans by Financial Holding Companies (FHCs); and (e) periodically conducting crisis simulation exercises to test and enhance contingency plans and overall preparedness.

**While financial supervisory authorities have in place a good and sound framework for information sharing with domestic and foreign supervisors, there is room to further strengthen these arrangements from crisis preparedness and crisis management perspectives.** The governance structure in these agencies provides for information sharing, cooperation, and coordination, which is supplemented by bilateral and multilateral arrangements to cooperate and coordinate with each other in the discharge of their respective roles. Current arrangements with domestic agencies broadly cover information exchange in normal times and upon request, but similar arrangements need to be put in place with foreign deposit insurers and resolution agencies.

**The resolution framework for financial institutions in Korea provides a comprehensive range of resolution options but can be improved in light of the Financial Stability Board (FSB) and the Basel Committee on Banking Supervision (BCBS) recommendations.** The legal framework establishes a special resolution regime for distressed financial institutions in Korea. While the resolution authorities' powers are sufficiently comprehensive to address threats to financial stability, there is a scope for improvement to assure certainty and avoid delays in resolution processes. These include, (i) establishing clarity of definition of "systemic stability;" (ii) improving the resolvability of financial institutions through mechanisms like living wills and bail-ins; (iii) establishing criteria for the identification of systemically important financial institutions (SIFI); and (iv) introducing schemes to improve "resolvability" of financial institutions, improving efficiency, and reducing costs.<sup>2</sup>

<sup>2</sup> The KDIC has since engaged in consultation with the FSC for identifying the domestic SIFIs and applying the relevant FSB KAs.

Table 1. Recommendations

| No.                                   | Recommendation   | Priority (H-M) <sup>1</sup> |   |
|---------------------------------------|--|-----------------------------|---|
| <b>Government</b>                     |  |                             |   |
| 18                                    | Formalize an apex crisis monitoring and crisis coordination committee.   | H                           |   |
| 34                                    | Assure back-up liquidity and funding support to the KDIC.  | H                           |   |
| <b>FSC, FSS, KDIC, and Government</b> |  |                             |   |
| 19                                    | Strengthen inter-agency information sharing and coordination arrangements with domestic and foreign authorities from crisis preparedness and crisis management perspectives.   |                             | M |
| 31                                    | Prevent banks determined as insolvent from taking fresh deposits and allowing deposit withdrawals.   | H                           |   |
| 32                                    | Arrange to replenish the deficit in the Deposit Insurance Fund.  | H                           |   |
| 33                                    | Review the funding and accounting of the Depositor Insurance Fund (DIF) (especially the Special Account) to eliminate direct cross subsidization by other segments of financial sector.  |                             | M |
| 35                                    | KDIC adopt a more pro-active approach for timely depositor payouts.  |                             | M |
| 60                                    | KDIC and FSC should review the processes involved to reduce the timelines allowed for making decisions on the making depositor payouts, providing financial assistance to, and resolving troubled banks.                                       |                             |   |
| 46                                    | Make improvements to the corrective action framework by reviewing the triggers and improving their objectivity to enable early intervention; put in place norms and guidance determining the postponement or suspension of corrective actions. |                             | M |
| 51                                    | Consider requiring FHCs to prepare and submit group-wide contingency plans and recovery plans.   |                             | M |
| 52                                    | Formalize or improve some elements of crisis management framework. <ul style="list-style-type: none"> <li>• Crisis management teams; crisis management handbooks; and crisis management groups.</li> </ul>                                     |                             | M |
| 53                                    | Undertake periodic crisis simulation exercises to test the adequacy and effectiveness of the crisis preparedness and crisis management arrangements.   | H                           |   |
| 64                                    | Ensure use of public funds does not provide wrong incentives and only after first imposing losses on existing shareholders and creditors.  | H                           |   |
| 84-86                                 | Review and improve resolution framework for financial institutions in the light of FSB and BCBS recommendations.   |                             | M |
| <b>BOK and Government</b>             |  |                             |   |
| 41                                    | Review and revise the Bank of Korea Act and Enforcement Decree (BOKA) to avoid scope for potential delays in providing ELA in a timely manner.   |                             | M |

<sup>1</sup> H—High; M—Medium.

# INTRODUCTION

## A. Past Experience in Crisis Management

### 1. Korea experienced a financial crisis in the late 1990s, which it overcame successfully.

The rich experiences gained in handling past crises have helped in the establishment of a broad crisis management framework in Korea. The successful management of the 1997 financial crisis is reported to have been guided by the following principles: (i) bold and decisive measures are required to regain market confidence, rather than incremental ones; (ii) though Government will take the lead in crisis management initiatives, private capital should be encouraged to fully participate in the process; (iii) bank recapitalization and creation of a bad bank are not mutually exclusive options; the crisis management measures should be politically acceptable and have built-in exit strategies with clear time-frames; (iv) moral hazard should be minimized; and (v) all forms of financial protectionism must be rejected.<sup>3</sup>

**2. Korea responded to the 2008 global financial crisis with certain policy measures that helped the Korean financial and real sectors to weather the immediate effects of the global crisis.** These included policy and financial support to stabilize the money, securities, and bond markets, to extend financial support to corporate and financial entities, and to support small and medium enterprise (SME) and micro finance sectors. (Please see Box 1 for details).

**3. The authorities introduced a series of measures to contain the stress in Mutual Savings Banks (MSBs) during 2011 and 2012 and turned them around.** The stress in MSBs was largely due to an extensive industry-wide exposure to troubled real estate project financing as well as shareholder and management misconduct.<sup>4</sup> Faced with sector-wide stress and declining depositor confidence the financial sector regulatory agencies jointly announced new mitigating measures for the MSB sector.<sup>5</sup>

## B. Korean Financial System

**4. Korea's financial sector has continued its modest growth in the past two years at an average rate of 7.9 percent, with assets at 3.2 times GDP in end-2012.** The financial sector includes banks (54 percent market share), non-bank depository institutions<sup>6</sup> (13 percent), insurance companies (18 percent), securities companies (6 percent), and collective investment companies

<sup>3</sup> Lee, Myung-Bak. "How Korea Solved Its Banking Crisis: The world can learn from our experience in the late '90s." *The Wall Street Journal* March, 27 2009.

<sup>4</sup> FSS, 2011 Annual Report.

<sup>5</sup> These included the following: joint examinations; establishment of funding arrangements to provide liquidity and solvency support to MSBs; establishment of a counseling and support center to assist the defrauded depositors; and creation of a special account in the deposit insurance agency to support resolution of troubled MSBs.

<sup>6</sup> MSBs, credit cooperatives (credit unions, community credit cooperatives, mutual banking entities), merchant banks, and postal savings.

(8 percent). The banking sector comprises of 13 commercial banks (7 national and 6 local), 39 foreign bank branches, and 5 specialized banks. It is fairly concentrated, with the top 5 banks making up 54 percent of market share. (Please see Tables 1, 2, and 3 in the Appendix for details).

### **Box 1. Policy Measures Initiated in the Wake of the 2008 Global Financial Crisis**

- Signed currency swap agreement with the U.S. in October 2008.
- BOK injected liquidity via repos to securities companies and asset management companies in the light of the sudden shortage of liquidity in November 2008.
- Established Bond Market Stabilization Fund in November 2008 to ease credit crunch.
- Expanded total amount of SME support through policy banking institutions (Korea Development Bank & Industrial Bank of Korea).
- Created the Corporate Credit Support Task Force in November 2008 to support corporate restructuring; the restructuring process began in February 2009.
- Established Bank Recapitalization Fund in February 2009 to enable banks to sufficiently support the real sector and lead the restructuring process.
- Established Corporate Restructuring Fund within the Korea Asset Management Corporation (KAMCO) in March 2009.
- Created Stock Market Stabilization Fund to boost demand in the stock market (1Q09).
- The government collaborated with the BOK to provide US\$16 billion of support to import-export financing.
- Eased regulation on banks' foreign currency liquidity ratio (seven-day gap ratio) in 1Q09; Encouraged lengthening of external debt maturity (ongoing) and encouraged banks to supply foreign currency capital to export and import companies.
- Initiatives to support micro finance (1Q09): Announced residential finance support through lease-deposit repayment guarantees and interest rate cuts for residential mortgage loans; reduced credit card transaction fees to street-market merchants (2.0–2.2 percent→2.0–2.2 percent); Debt restructuring (Pre-workout) plans initiated in March 2009.
- Introduction of new bond products to facilitate short-term funding of companies; Support the issuance of structured covered bonds and assist banks' funding of foreign currency capital

Source: FSC.

**5. The Korean financial system is dominated by twelve FHCs that constitute about 50 percent of financial sector assets.**<sup>7</sup> The FHCs have steadily increased their market share in total financial sector assets from about 39 percent at end-2010. The FHCs have 87 percent of their consolidated assets in banking (accounting for about 70 percent of the banking sector assets). Of the 18 commercial and specialized banks in Korea, 14 are operating under 10 bank holding companies, which have a total of 275 subsidiaries. The financial companies under the bank holding companies are operating in almost all segments of the financial sector.

**6. Foreign financial institutions in Korea constitute roughly 11 percent of the financial sector assets.** The banking and insurance sectors have the highest presence of foreign companies with 15 and 12 percent market shares, respectively. In the banking sector, there are 41 foreign-owned banks (two subsidiaries, 39 branches) from 16 countries making up about 14 percent of the banking sector. In the insurance sector, 12 insurance companies' subsidiaries from five countries make up 10 percent of the domestic insurance sector. About six percent of the securities sector assets are held by 20 foreign companies from eight countries.

**7. Korean financial institutions abroad make up roughly 2 percent of the financial sector in terms of assets.** Of these, the banking sector is the most notable, doing business abroad through 100 entities in 28 countries. Twenty securities companies operate in 15 countries and 15 collective investment (asset management) companies operate in 11 countries.

## LEGAL AND INSTITUTIONAL FRAMEWORK FOR CRISIS MANAGEMENT

### A. The Framework

**8. Effective crisis management requires swift and coordinated action that must be planned in advance.** Well-defined legal powers, processes, procedures, and clarity in the roles and relationships among all relevant stakeholders, namely central bank, ministries, domestic financial sector supervisors, and foreign supervisors are essential. Experience has shown that it is important to have mechanisms in place before a crisis to ensure that the authorities' actions are coordinated at all stages.

**9. The mandates and powers for financial sector oversight in Korea are clearly allocated among five authorities:** The FSC, the FSS, the BOK, the KDIC, and the MOSF. The relevant laws and their enforcement decrees have provided the FSC/FSS, KDIC, and BOK with explicit mandates for financial stability. FSC and FSS are assigned with the responsibility "to promote the advancement of the financial industry and the stability of financial markets, establish sound credit order and fair financial transaction practices, and protect depositors, investors, and other financial consumers."<sup>8</sup>

<sup>7</sup> Ten Bank Holding Companies and 1 Securities Holding Company and 1 Insurance Holding Company – Bank holding companies make up 98 percent of the assets under FHC structure.

<sup>8</sup> Article 1 of the Act on the Establishment, etc. of the Financial Services Commission.

KDIC is assigned with the responsibility “to contribute to the protection of depositors and the maintenance of the stability of the financial system.”<sup>9</sup> On top of its price stability mandate, the BoK has been assigned with the responsibility to “pay attention to financial stability in carrying out its monetary and credit policies.”<sup>10</sup>

**10. The powers distributed among the above agencies are comprehensive to address threats to financial stability.** The MOSF develops and coordinates economic and fiscal policies of the country, and serves on various decision-making bodies of the financial regulators. The FSC is in charge of financial sector and supervisory policies, including early intervention and resolution of troubled financial institutions. FSC is empowered to impose various corrective and resolution measures, such as the suspension of executives, appointment of management supervisors, suspension of all or part of the business, and writing down of shareholder equity. The FSS, an integrated supervisor for all supervised financial entities, operates under the guidance of FSC and its Securities and Futures Commission (SFC). (The SFC was established under the FSC to perform matters related to the capital market and business accounting supervision among the affairs of the FSC.) KDIC, the deposit insurance agency, operates an integrated deposit insurance system and resolves troubled financial institutions, largely under FSC oversight. The BOK, the central bank, is mainly responsible for the country’s monetary and credit policies, payment systems operations, and is the lender of last resort.

**11. The legal framework establishes a special resolution regime for distressed financial institutions in Korea and identifies the roles and responsibilities of different authorities with clear mandates.**<sup>11</sup> The Act on Structural Improvement of the Financial Industry (ASIFI) identifies the FSC and KDIC as the resolution authorities, with the FSC acting as the lead resolution authority. Although the BOK is not a resolution authority, it has a role in providing financial assistance, indirectly through KDIC or public funds. The special resolution regime for the financial sector entities, under the ASIFI and the Deposit Protection Act (DPA) extends to banks, the Industrial Bank of Korea, investment traders, brokers, collective investment business entities, investment advisory business entities, discretionary investment business entities, insurance companies, mutual savings banks, trust business entities, merchant banks, and financial holding companies. The specialized banks are outside the purview of the special resolution regime, but are governed by the provisions in the relevant special statutes under which they were established.

**12. The legal framework facilitates resolution through a broad range of resolution tools.** The resolution tools include merger and acquisition, purchase and assumption, bridge bank, funding by government and other relevant authorities (including the KDIC),<sup>12</sup> and liquidation. The FSC is

<sup>9</sup> Article 1 of the Depositor Protection Act.

<sup>10</sup> Article 1 of the Bank of Korea Act.

<sup>11</sup> The relevant laws include the ASIFI and its Enforcement Decree; Depositor Protection Act (DPA) and its Enforcement Decree; the Act on the Establishment, etc. of the Financial Services Commission and its Enforcement Decree (FSC Law); the Banking Act (BA) and its Enforcement Decree; and the Regulations on the Supervision of Banking Institutions.

<sup>12</sup> Article 10 (1), 11 (1), and 12 (1) of ASIFI.

empowered to appoint an administrator (management supervisor) and direct the administrator to undertake the necessary resolution process if the distressed bank fails to comply with prompt corrective actions.<sup>13</sup> DPA mandates the application of the least cost test in the choice of a resolution method by the KDIC,<sup>14</sup> which can establish a financial institution for resolution (like a bridge bank) as a separate entity for taking over business or contracts of insolvent financial institutions or conducting the resolution process.<sup>15</sup>

## B. Interagency Cooperation and Coordination

**13. The governance structure in the Korean financial sector supervisory and regulatory agencies, including the central bank, provides for information sharing, cooperation, and coordination.** These agencies have cross representation at key decision-making levels (boards or commissions) as presented in Table 4.

| Name   | MOSF                              | BOK   | FSC   | FSS   | FSC-SFC                            | KDIC                       | OTHERS  |
|--|-----------------------------------|---|---|---|------------------------------------|----------------------------|---|
| <b>Macroeconomic Financial Meeting</b>           | <b>Chair:</b><br>Vice Minister    | Senior Deputy Governor                            | Vice Chair                                  | Senior Deputy Governor                            | -                                  | Vice President             | -   |
| <b>Bank of Korea (Monetary Policy Committee)</b> | Vice Minister (non-voting member) | <b>Chair:</b><br>Governor and Sr. Deputy Governor | Vice Chair (non-voting member)              | -   | -                                  | -                          | Five other members (one member each recommended by BOK, MOSF, FSC, Korea Chamber of Commerce & Industry, and Korea Federation of Banks) |
| <b>Financial Services Commission</b>             | Vice Minister                     | Senior Deputy Governor                            | <b>Chair:</b> FSC Chairman & FSC Vice Chair | Governor  | -                                  | President                  | Three external members including one recommended by Chamber of Commerce   |
| <b>FSC– SFC</b>                                  | -                                 | -   | -   | -   | <b>Chair:</b><br>FSC Vice Chairman | -                          | One standing commissioner and three non-standing commissioners  |
| <b>Deposit Insurance Committee</b>               | Vice Minister                     | Senior Deputy Governor                            | Vice Chair                                  | -   | -                                  | <b>Chair:</b><br>President | Three external members  |
| <b>Financial Supervisory Services</b>            | -                                 | -   | -   | <b>Chair:</b><br>Governor, Senior Deputy Governor | -                                  | -                          | -   |

**14. In addition, a vice-ministerial level forum was formally established for deliberation, consultation and coordination of policy action among the financial sector authorities.** This

<sup>13</sup> Article 14 of ASIFI.

<sup>14</sup> Article 38–4 of the DPA.

<sup>15</sup> Article 36–3 of the DPA.

forum is the “Macroeconomic Financial Meeting”<sup>16</sup> (MEFM) and includes deputy level representation from the MOSF (in the Chair), FSC, FSS, BOK, and KDIC (by invitation when the agenda involves information sharing and joint examinations). Though the forum does not have a legal basis, it was established through a Presidential Decree lending it a formal status. This forum met regularly but informally since 2008, until it was formalized in September 2012. The MEFM is designed to meet on a quarterly basis at the minimum and can hold additional ad-hoc meetings to cooperate and coordinate on the identification and assessment of threats to financial stability and to ensure smooth information exchange among relevant institutions. In effect, the MEFM has been meeting quite frequently, sometimes even weekly.

**15. The Presidential Decree for the establishment of the MEFM does not explicitly mandate it with responsibility of crisis response, but the authorities view and operate as if it is a crisis response committee.** While the role of the MEFM appears to be a consultative and coordinating forum, the Presidential Decree mentions that its deliberation requires two-thirds attendance and decisions carried by votes of at least two-thirds in the affirmative. Authorities assert that in practice, decisions are made by consensus, and unresolved issues are escalated to an informal ministerial level meeting (referred to as the “Economic and Financial Council”). If need be, issues are further escalated to a top-level “Blue House Meeting,” a meeting convened by the President’s office for discussion of matters of greater significance.

**16. Authorities also enter into bilateral and multilateral arrangements to cooperate and coordinate with each other in the discharge of their respective roles.** The domestic financial sector authorities (FSC, FSS, BOK, MOSF, and KDIC) have signed a joint Memorandum of Understanding (MOU) that provides for sharing “periodic” and “non-scheduled” financial information submitted by financial institutions to BOK, FSS, and KDIC. The MOU also provides for each authority to share its own “processed information” as much as possible.<sup>17</sup> Aside from the MOUs (multilateral as well as bilateral) for information sharing, the relevant laws allow the BOK and the KDIC to request FSS for undertaking joint examinations of regulated entities and sharing of examination reports.<sup>18</sup> The MOUs do not explicitly provide for crisis management elements, but these are taken up through the MEFM for dealing with threats to financial stability.

**17. While crisis management is essentially a national responsibility, it also must include cross-border arrangements for cooperation, coordination, and information exchange.**<sup>19</sup> FSC/FSS have entered into MOUs with 33 foreign authorities in 18 countries. The MOUs with host

<sup>16</sup> This “Meeting” formalized in September 2012 and combined three previously existing separate meetings called “Economic and Financial Status Review Meeting”, the “Financial Consultative Meeting,” and the “Foreign Exchange Market Stabilization Consultative Meeting.”

<sup>17</sup> The MOU gives 10 days (three days if urgent) for complying with information requests and also provides for confidentiality of certain information and for any disputes in relation thereto to be taken up by the MEFM.

<sup>18</sup> Article 88 of the Bank of Korea Act and Article 21 of the Depositor Protection Act, and related Enforcement Decrees.

<sup>19</sup> Korean financial institutions have presence and operations in about 28 countries through 68 branches and 152 subsidiaries.

authorities broadly cover information exchange arrangements for ongoing supervisory purposes during normal times and on request. These do not explicitly provide for arrangements from crisis preparedness and crisis management perspectives, including resolution matters. In the case of capital markets, the FSC/FSS are signatories to the IOSCO multilateral MOU (MMOU), a global information-sharing arrangement among securities regulators. Through the MMOU, the FSC/FSS have an extensive framework for assistance and mutual co-operation with regulators from major developed markets including the UK and the USA, but these have a limited scope for cooperation. The KDIC also has MOUs with other foreign deposit insurers and resolution authorities that provide for cooperation on staff secondment but do not cover information sharing arrangements or dealing with situations that can arise during a crisis in either jurisdiction.<sup>20</sup>

## Recommendations

**18. Improving and formalizing the framework for crisis management would help preserve and build upon institutional memory and existing framework.** Authorities can consider formally setting up an apex forum for leading the inter-agency cooperation and coordination work on crisis preparedness and crisis management. The apex forum can include the supervisory agencies, the Central Bank, the Deposit Insurance Agency, and the Ministry of Strategy and Finance as they all have a relevant role in crisis preparedness and crisis management. With a view to avoid duplication, the authorities may consider upgrading the MEFM with participation by the heads of these agencies, and by including crisis preparedness and crisis management as an explicit mandate.

**19. While FSC, FSS, BOK, KDIC, and the MOSF have in place a good and sound framework for information sharing with domestic and foreign supervisors, there is a room to further strengthen these arrangements from a crisis preparedness and crisis management perspective.** The improvements can be aimed at inclusion of explicit provisions in the inter-agency MoUs (both domestic and cross border) for cooperation and coordination for crisis preparedness and crisis management, including ongoing information sharing with the relevant foreign agencies. To facilitate better cooperation and coordination during crisis situations, relevant MOUs should explicitly cover arrangements to minimize overall costs of resolution in home and host jurisdictions, the need to duly consider the potential impact of resolution actions on financial stability in other jurisdictions, and the need to achieve a cooperative solution with foreign resolution authorities.<sup>21</sup> The authorities may also consider putting in place institution-specific cooperation and coordination arrangements (usually for entities that can be systemic from a home or host perspective) and jurisdiction-specific arrangements where more than one Korean entity is operating.<sup>22</sup>

<sup>20</sup> The KDIC has MOUs with the deposit insurance agencies or resolution authorities of ten countries, including the U.S. Federal Deposit Insurance Corporation and the Securities Investor Protection Corporation (the home jurisdiction of Citibank Korea).

<sup>21</sup> FSB Key Attributes of Effective Resolution Regimes for Financial Institutions 2.3 and 7.

<sup>22</sup> The improvements can largely be along the lines of the recommendations contained in the relevant pronouncements of the FSB (and its predecessor, the Financial Stability Forum—FSF) and the BCBS. These include the FSB's Key Attributes of Effective Resolution Regimes for Financial Institutions and FSF Principles for Cross-border

(continued)

# CRISIS PREPAREDNESS AND PREVENTION

## FRAMEWORK

### A. Systemic Risk and Financial Stability Assessment

**20. The MEFM acts as an inter-agency forum for sharing and reviewing the analyses of risks to financial system stability.** These analyses are performed independently by the various agencies responsible for financial sector regulation and supervision that are members of the MEFM (namely the MOSF, the BOK, the FSC, and the FSS). For example, the FSC's early warning system tracks local and global financial market situation and grades the level of threat to financial stability on a five point scale (sound, precautionary, cautionary, grave, and critical). Similar analyses of the potential threats to financial stability are also prepared independently by the other financial regulators. The analyses by these agencies are periodically discussed at the MEFM to identify policy responses.

**21. The BOK's Financial Stability Report (FSR), published twice a year, comprises of analyses of changes in the macroprudential environment and potential risk factors, an assessment of Korean financial system stability, and a review of policy response efforts and future challenges.**<sup>23</sup> Its analytical efforts include using its Systemic Risk Assessment Model for Macroprudential Policy (SAMP), strengthening its research on non-bank financial institutions (NBFIs), and monitoring the funding and operational behaviors of financial institutions. In its assessment of the Korean financial system stability, the FSR evaluates and analyses any vulnerabilities inherent in banks and non-bank financial institutions (NBFIs), and suggests policies to resolve them. The BOK analyses the potential threats to financial system stability by subdividing the macroprudential environment into the world economy, the domestic economy and the economic agents (households and firms).<sup>24</sup> It also analyses the risk factors inherent in each of the four main segments of the financial system (namely banks, NBFIs, financial markets and foreign exchange soundness). To facilitate and support its analyses, the BOK receives accurate and timely information on financial institutions from the FSS, solicits the views of the academics, outside experts and other agencies, and reflects them while drawing up the FSR.

### B. Financial Safety Net

**22. The essential elements of a financial safety net are available in Korea.** These include comprehensive BOK liquidity facilities including emergency liquidity assistance (ELA), a deposit

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Cooperation on crisis management; BCBS's Report and Recommendations of the Cross-border Bank Resolution Group.

<sup>23</sup> The BOK compiles twice a year (April, October) a report evaluating the status of the nation's macro-financial stability, and submit it to the National Assembly. This is a requirement under Article 96 of the BOKA.

<sup>24</sup> The October 2012 FSR pointed out that household debt accumulation could act as a factor reducing the macro-financial resilience.

insurance scheme for deposits in financial institutions, and an efficient framework of financial sector supervision.

## Deposit Insurance

**23. The deposit insurance system in Korea is an integrated insurance system that provides protection to depositors in the banking and non-banking sectors, up to KRW 50 million per depositor per covered financial institution.** The 'covered financial institutions' include banks, life insurers, non-life insurers, financial investment companies (e.g., securities firms and asset management companies), merchant banks, and mutual savings banks. Deposits that are eligible for protection<sup>25</sup> are broadly defined as all money due to customers of financial institutions even if these are not strictly in line with the conventional definition of a bank deposit. Deposits in banks that qualify for protection include the deposits held in banks in Korea (including foreign bank branches in Korea), foreign currency deposits in Korea, and the deposits held in the foreign branches of Korean banks when these are not protected by the host jurisdiction. Participation in the deposit insurance system is mandatory for all licensed financial institutions. The size of insurance cover per depositor is approximately twice the per capita GDP. Deposits made by government, local government, BOK, KDIC, FSS, or a "covered financial institution," certificates of deposits, MMFs, commercial papers and insurance policies held and paid by corporate policy holders are not eligible for KDIC's protection.

**24. KDIC's deposit protection cover is available to about 97 percent of bank depositors and 32 percent of deposits.** The corresponding extent of coverage for the other segments of the financial sector is provided in Table 5 below. The DIF for bank deposits is about 0.64 percent of total deposits, which is short of the target ratio of 0.825 to 1.1 percent.

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<sup>25</sup> Under Article 2-2 of DPA, "deposits) is defined to include- money raised by insured financial institutions in the form of deposits, installment deposits, etc.; through money trusts whose principal is protected; customer deposits at securities firms for the purchase and sale of securities and other transactions; and insurance premiums collected by insurance companies and money raised by insurance companies through money trusts whose principal is protected and surrender value (or insurance benefits at maturity or accident claims) of insurance policies (except for variable policies).

**Table 3. Deposit Insurance Protection (at end-2012)**

| Type of Financial Institution  | Share of Fully-Insured Depositors (%) | Share of Deposits Eligible for Insurance (%) | Share of Insured Deposits <sup>26</sup> (%) | Ex-ante Coverage Ratio <sup>27</sup> (%) |
|--------------------------------|---------------------------------------|--|---|--|
| Banks                          | 97.3                                  | 79.6   | 32.1  | 1.58                                     |
| Life Insurer                   | 94.4                                  | 95.2   | 78.9  | 1.10                                     |
| Non-life Insurer               | 96.8                                  | 86.1   | 77.8  | 0.98                                     |
| Financial Investment Companies | 98.8                                  | 90.2   | 59.3  | 2.30                                     |
| Merchant Banks                 | 96.0                                  | 80.2   | 60.3  | 3.66                                     |
| Mutual Savings Bank            | 99.3                                  | 99.2   | 94.2  | -4.39                                    |

Source: KDIC.

**25. The provisions in the DPA and the relevant regulations do not explicitly stipulate stringent timelines for allowing depositors access to their deposits in troubled financial institutions that are under resolution.** KDIC has put in place an efficient information technology system to handle payouts since 2008,<sup>28</sup> but has not set any time limits within which it shall make deposit pay-outs, when the insurance contingencies occur. When a 'category one' insurance contingency occurs (insured financial institutions' payment suspension of claims such as deposits), the KDIC has two months to decide whether to payout depositors.<sup>29</sup> When a 'category two' insurance contingency occurs (revocation of license, dissolution, or bankruptcy declaration) in an insured financial institution, the KDIC shall pay the insurance money, upon the request of the depositors of the insured financial institution concerned, but the time period within which such payment shall be made is not stipulated in law or regulations. Authorities note that KDIC has not had to implement payouts of commercial bank deposits in the past 10 years. Pending deposit pay-outs, KDIC can make provisional pay-outs (partial payments within the insured limit). The 'standard' time for effecting the provisional pay-outs of deposits was reduced to 2 weeks in 2011.

**26. Banks declared insolvent and under resolution by the KDIC are allowed to operate and accept new deposits as well as repay existing deposits.** In response to the public criticism that the depositors in insolvent mutual savings banks are not able to access their deposits in time, FSC is now allowing insolvent mutual savings banks to continue operations while the KDIC is considering

<sup>26</sup> Share of deposits within insured amount as percentage of total deposits.

<sup>27</sup> Deposit insurance fund as percentage of deposits eligible for insurance.

<sup>28</sup> Since 2008, depositors can file deposit claims and receive payments promptly via KDIC's website through an IT system (Integrated Resolution Information System (IRIS)). Through this system, KDIC calculates deposit insurance coverage, process claims, make payments, and keep records, with capacity to handle 100,000 claims per hour. There are contingency plans in place for system slowdowns and failures.

<sup>29</sup> Articles 31 and 34 (Payment Decision) of the Depositor Protection Act.

the resolution options. This can expose the DIF to the risk of a higher loss. This can also expose new depositors in excess of the insured amounts to risk of loss, allow the insolvent bank to make preferential payments or resort to asset stripping that can eventually lead to a potential additional burden on the DIF.

**27. The deposit insurance fund is currently in deficit.** The KDIC is an organization without capital. The DIF which is to be financed ex-ante as provided for in Article 30 of the DPA is managing a fund of KRW 8.354 trillion (as of end-2012). The DIF is funded by collection of premium from the insured entities. The current premium structure is presented in the table below. The DIF is divided into six accounts—separate for commercial banks, merchant banks, life insurance, non-life insurance, finance investment companies, and mutual savings banks. In 2011, KDIC created a separate special account for MSB failure resolutions. The special account is funded ex-post with part of deposit insurance premiums paid by other financial sector institutions until the Account’s expiration date (which is December 31, 2026) and funds recovered from failed and assisted banks. The special account has a deficit (negative balance) of KRW 15.887 trillion (as of end-2012). When aggregated, the DIF is in deficit (negative balance) of approximately KRW 7.5 trillion.

**Table 4. Deposit Insurance Premium Rates per Financial Sector Segment**

| Category               | Banks     | Financial Investment Companies | Insurance Companies | Merchant Banks | MSBs      |
|------------------------|-----------|--------------------------------|---------------------|----------------|-----------|
| Insurance Premium Rate | 8/10,000  | 15/10,000                      | 15/10,000           | 15/10,000      | 40/10,000 |
| Legal Maximum Limit    | 50/10,000 | 50/10,000                      | 50/10,000           | 50/10,000      | 50/10,000 |

**28. Recent amendments to the DPA following the failure of a few MSBs in Korea allows the special account for MSB in the DIF to borrow from other accounts in the DIF, thereby departing from the DPA’s principle of separation of the different accounts and also promoting cross subsidization.** Article 24-4-2 of DPA which establishes the special account for the restructuring of the mutual savings banks provides that, among others, one of the sources of revenue for this special account may be in the form of “borrowings from other accounts in the deposit protection fund.” While responding to the stress in mutual savings banks, the special account for mutual savings banks had borrowed from the other accounts in the DIF. In addition, the deficit in the Special Account is being funded by appropriating 45 percent of the annual premium received from all insured entities. This results in cross-subsidization of the losses in MSB segment by the insured entities in other segments. This is an exception to the provision in the DPA that requires that separate accounts for each type of covered financial institution be established and each account be kept separate from each other.

**29. From a liquidity perspective, the DIF for conventional bank deposits will be adequate for paying out the insured depositors in only one regional bank if it became necessary to make a deposit pay-out.** The DIF for commercial banks will have no difficulty paying out the minimal share of insured deposits in foreign bank branches in Korea with the present ex-ante funds available. However, the fund, which constitutes about 1.6 percent of the deposits within the

insurable limit, will need to be augmented if it were to pay-out depositors of more than one regional bank at one time. The fund is inadequate to cover the deposit payout liability in any one of the top 10 banks (except for one which has a smaller amount of insured deposits) that collectively account for about 91 percent of the insured deposits.

**30. The KDIC has the legal basis to garner additional funds as needed to support its role in resolution of financial entities,<sup>30</sup> but does not have access to an explicit and assured funding mechanism which it can tap in an emergency for meeting its liquidity needs.** In times of crisis and/or market liquidity crunch, the quick market sources of funding (borrowing from member financial institutions or issuing DIF Bonds) may not be feasible, and the arrangement of loans from the Government can involve some process time (from 2 weeks to 3 months). Having an assured liquidity support which can be drawn down immediately when required in an emergency will be a step in the direction of international best practices.<sup>31</sup>

### ***Recommendations***

**31. Authorities should not permit banks determined as insolvent banks to accept fresh deposits and allow withdrawal of existing deposits.<sup>32</sup>**

**32. Authorities should arrange to replenish the deficit in the deposit insurance fund.** This will help to preserve credibility of the deposit insurance as an effective safety net component and will also be in alignment with the core principles for effective deposit insurance systems.

**33. Authorities should consider reviewing and modifying the DPA to preserve the principle of separation of the different accounts and avoid cross-sector subsidization by entities in other financial sector segments.** Going forward, it is recommended that authorities review the DPA with regard to the funding options for the special account for MSB (within the DIF) to avoid co-mingling of funds, and aligning the premiums in each account with reference to that sector's performance without cross subsidization from other accounts, either directly or indirectly.

**34. Authorities should establish an explicitly assured line of credit from the Government to provide back-up funding to KDIC to improve its ability to ensure prompt reimbursement of**

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<sup>30</sup> Article 26 DPA allows the KDIC to borrow from the Government, BOK, insured financial institution, or other institutions identified by the Presidential Decree, and issuance of DIF bonds.

<sup>31</sup> Core Principles for Effective Deposit Insurance Systems, Principle 11, Essential Criteria 2.

<sup>32</sup> Through the use of purchase and assumption in resolution, "good assets" of the insolvent banks could be transferred to a bridge bank together with deposits to allow for orderly withdrawals by depositors. In the context of the early stages of official administration when special audits are being conducted to ascertain solvency or where resolution options are being considered, banks should not be allowed to accept more deposits when it becomes evident that they are not solvent or that their return to solvency is not feasible. In appropriate cases, moratoriums should be used judiciously to prevent additional risks to banks but in a manner that does not cause panic or potential runs on other banks.

**depositors' claims and to provide financial assistance in times of crisis.**<sup>33</sup> KDIC should also establish clear processes for timely access to the line of credit and liquidity facility.

**35. KDIC should adopt a more pro-active approach for depositor payouts by putting in place a procedure for timely payouts to eligible depositors, for example within two weeks from the occurrence of insurance contingencies, and without requiring the depositors to lodge their claims.**

**36. Authorities should review and revise the DPA to give priority to depositors' claims up to the insured amount in the DPA, over other general classes of unsecured creditors within constitutional limits and within the broader design of the resolution framework in Korea.**

### **Emergency Liquidity Assistance (ELA)**

**37. In addition to its powers to provide liquidity support to banks under normal conditions, the BOK is empowered to provide emergency liquidity support.**<sup>34</sup> It can provide ELA against a flexible list of collateral<sup>35</sup> to banking institutions whose liquidity conditions have deteriorated due to funding liquidity mismatches. It can also provide temporary ELA to banking institutions which are expected to experience pronounced difficulty in carrying out their operations due to temporary shortages of funds for payment caused by a breakdown of an electronic information processing system or other accidental mishap. The BOK's policy is to provide ELA only to solvent entities although the BOK Act does not formally prescribe such a requirement.

**38. The BOK has considerable discretion over the range of assets it may accept as collateral.** Essentially any security or currently performing customer loan could potentially be pledged to the BOK as collateral provided it has one year or less to maturity. The BOK would decide on the acceptability of a particular loan/security on a case-by-case basis. The BOK advised that there is a contingency plan that the MPC has developed to help guide this decision-making process but no details were available to the mission.

**39. BOK can also lend to for-profit non-bank businesses (including non-financial enterprises).**<sup>36</sup> This is intended to be used when these companies experience severe impediments in obtaining funds from financial institutions, including when there is a severe contraction of credit or when there is a strong likelihood of that arising.

<sup>33</sup> This will be in line with the requirements under D1CP 11(EC 2) and D1CP 17(EC 3).

<sup>34</sup> Article 65 of the BOKA.

<sup>35</sup> This support can be in the form of re-discounting, discounting, buying and selling of promissory notes, bills of exchange, and other credit securities which banking institutions have acquired, provided that the instruments mature within one year from the date of their acquisition by the BOK. It can also extend ELA against any assets of banking institutions which can be treated as temporarily acceptable collateral.

<sup>36</sup> Article 80 of the BOKA.

**40. As provided by Article 65 of BOKA, the BOK shall hear the opinions of the government before deciding on the provision of ELA, which has the potential to delay ELA decisions.** Any decision of the MPC, including ELA provision, may be challenged by the government. Article 91 of the BOKA give the MOSF and FSC the right for the Vice Minister/Vice Chairman of those entities to attend and state their opinions at the meeting of the MPC.<sup>37</sup> As provided by Article 92 of BOKA, where the MOSF considers the decisions taken by the MPC to be in conflict with the Government's economic policy, he may request the MPC to reconsider them. In these cases, the decision of the MPC must be reconsidered and elevated to the President for ultimate decision in the event that five members of the MPC continue to disagree with the views of the MOSF. Where the Minister of Strategy and Finance makes a request for reconsideration, the purpose and contents of the request are required to be publicly disclosed immediately. These processes have the potential to slow decisions on ELA.

### **Recommendation**

**41. As scope for delays, though remote, in providing ELA to financial institutions during a crisis can be critical to financial stability, authorities should review and revise the BOKA and related processes to avoid scope for potential delays in timely provision of ELA.**

## **C. Supervisory Framework for Problem Banks**

**42. The FSC/FSS conducts comprehensive oversight of banks by using the on-site CAMEL-R assessments and the off-site surveillance.** The FSS performs on-site examinations in major banks once in two years. The degree of off-site surveillance and the scope of the inspection plan are dependent upon individual bank's financial situation, size, risk profile, and the prevailing macro-economic situation. Banks are assigned a supervisory safety and soundness rating on a scale of 1 to 5, using the CAMEL-R methodology.

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<sup>37</sup> The Vice Chairman of the FSC may be present and state his/her opinion only on matters related to the responsibilities of the FSC.

**Table 5. Corrective Action Framework for Banks and Bank Holding Companies<sup>38</sup>**

| Actions  | Management Improvement Recommendation  | Management Improvement Requirement  | Management Improvement Order  |
|--|--|---|---|
| Triggering Point   | 1. BIS capital ratio of lower than 8%<br>2. CAMEL-R rating of 3 or higher with capital adequacy and/or asset quality rating of 4 or lower<br>3. Financial irregularity or non-performing loans of considerable magnitude | 1. BIS capital ratio of lower than 6%<br>2. CAMEL-R rating of 4 or lower<br>3. Financial irregularity or non-performing loan of considerable magnitude.<br>4. Failure to implement improvement plan that a bank has been required to prepare and implement as a result of FSC's Management Improvement Recommendation | 1. BIS capital ratio of lower than 2%<br>2. Banks defined as failing banks under the Act on Structural Improvement of the Financial Industry<br>3. Failure to implement improvement plan that a bank has been required to prepare and implement as a result of FSC's Management Improvement Requirement |
| Issuing Authority  | FSC  | FSC   | FSC   |
| 1. For securities firms, net capital ratio of lower than 150% or safety and soundness rating of 3 or higher with capital adequacy and/or asset quality rating of 4 or lower triggers the first level of corrective action, Management Improvement Recommendation.<br>2. For insurance firms, triggering point for Management Improvement Recommendation is solvency margin ratio of lower than 100% or safety and soundness rating of 3 or higher with capital adequacy and/or asset quality rating of 4 or lower. |  |   |   |

**43. FSC triggers corrective actions when the safety and soundness indicators fall below the threshold levels established in regulations.** The corrective measures are triggered at three stages and the triggers are clearly established (please see Table 7 above). The triggers at the first stage will result in the issuance of a management improvement recommendation by the FSC, while the next stage will result in a management improvement requirement, and the last stage will result in the management improvement order. While FSC can take corrective action with reference to the CAMEL-R rating and financial irregularity or non-performing loans (NPLs), the triggers set with reference to the CAR indicates potential delay in activating corrective measures, the asset quality trigger in stage 2 is unclear, and the asset quality trigger in stage 3 is absent. The corrective action triggers with reference to banks' CAR are set to be activated only after a bank breaches the minimum capital ratio, and allows the capital ratio to go down to 2 percent before the bank is subject to intrusive measures (intervened).<sup>39</sup> For instance, in the case of mutual savings banks, the authorities effectively adopted more stringent corrective measures when the CAR was close to or lower than 2 percent, which did not allow enough time for meaningful corrective actions. Several MSBs were put into resolution after they became insolvent. The corrective action framework for securities and insurance firms are similar to that for banks.

**44. The FSC has broad discretion on the range of remedial actions it can take to address problem situations and is guided by the relevant regulations.**<sup>40</sup> The range of actions that can be invoked is proportionate to the gravity of the safety and soundness rating and the stage of

<sup>38</sup> Articles 34 to 36 of the Regulation on supervision of banking business (amended June 26, 2012).

<sup>39</sup> These measures can include retirements of all or parts of issued stocks, suspension of duties of officers, appointment of administrators, transfer of all or parts of business or contracts, suspension of business, mergers and acquisitions.

<sup>40</sup> Articles 34 to 36 of the Enforcement Decree for the Regulation on Supervision of Banking Business.

intervention. In situations where there may be a rapid deterioration of a bank's financial position and if a bank is recognized to significantly undermine the interests of depositors, the FSC can take emergency measures for removing such danger.<sup>41</sup> The range of emergency measures include, among others, restriction on taking deposits and granting credits, suspension of payment of all or parts of deposits, prohibition of debt—repayment, and disposal of assets.

**45. Pursuant to ASIFI and DPA, the FSC can postpone or suspend the corrective actions, including revocation of license, for a specified period under certain special situations.** For example, if the situations in the financial institution are determined to be such that it will be able to meet the required standards within a short time (such as capital increase, disposal of assets, or other grounds corresponding thereto), the FSC can postpone the corrective action for a specified period.<sup>42</sup> The subordinate regulations stipulate that the suspension period for corrective action shall be limited to no more than 3 months for financial institutions with small asset volume. The FSC can also choose not to revoke authorization or permission for a period up to one year in cases where the financial institution ordered to reduce capital, or amortize all or some of its stocks, or consolidate its stocks, complies with the order.<sup>43</sup> Under Article 21(6) of the DPA, where the KDIC requests the FSC to take adequate measures where it appears to KDIC that there is a threat to the insurance contingency as a result of its investigations, the FSC should comply with the request unless there exist "any special grounds" for it not to so comply. In the absence of written criteria of when FSC can indeed exercise its discretion under these provisions, there are elements of uncertainty on the efficacy of the intervention framework and possible forbearance. The FSC has used its power to postpone the corrective actions in mutual savings banks, which is one of the reasons cited anecdotally for their failure. Such postponement results in higher losses to the KDIC.

## Recommendations

**46. While the corrective actions framework has some of the main elements, there is scope for improving it and its effectiveness.** The improvements can be in the areas of reviewing the triggers, introducing greater clarity and objectivity to the triggers, re-setting the triggers to earlier stages in the deterioration of a financial institution's health than at present. This will be in compliance with international standards<sup>44</sup> that require that the supervisor intervenes at an early stage to require a bank to take action to prevent it from reaching its minimum regulatory requirements. The FSC should also develop strict internal guidelines and criteria that will allow it to postpone or suspend serious corrective actions (including interventions) only in extremely rare cases that are of systemic relevance, and which deserve support in the larger interest of preserving

<sup>41</sup> The broad determining factors will include (a) shortage of reserves and assets for future payment to depositors, default of external debts, and other similar situations due to the rapid deterioration of liquidity; (b) cases where it is impossible and difficult to conduct normal businesses due to the unexpected accidents such as shutdown, suspension of business, bank run, and labor disputes, etc.; and (c) cases where bankruptcy or insolvency is highly expected.

<sup>42</sup> Article 37 of the Regulation on supervision of banks and Art 10 (3) of ASIFI.

<sup>43</sup> Article 11(4) of ASIFI.

<sup>44</sup> Basel Core Principles for Effective Banking Supervision.

financial stability. As this matter is best addressed in the primary law or in subsidiary legislation rather than in internal guidelines, authorities should undertake revisions to the relevant laws.

## D. Contingency Plans

**47. The financial institutions, particularly banks, have prepared contingency plans to address the stress that might arise from their exposures to certain risks like liquidity and operational risks.** The financial institutions undertake periodic stress tests to identify their risk vulnerabilities and prepare their contingency plans to address the situations that might arise if the stress levels were to materialize. These are subject to periodic oversight by the FSS.

**48. Preparedness at the group level for addressing risk vulnerabilities might not be as comprehensive as at the individual group entity (subsidiary) level.** As observed during the process of the standards assessments,<sup>45</sup> the financial groups normally oversee risk management in the group entities at their solo level but do not always undertake a group-wide approach to risk management. The financial groups seem to be at early stages of adopting a group-wide approach to risk management. Consequently, their contingency plans for responding to stress situations are at the subsidiary level.

**49. The FSC, FSS, KDIC, BOK, and MOSF are stated to have contingency plans for responding to stress in the financial system.** While the assessment team did not have access to the contingency plans per se of all authorities, the authorities assert that these are detailed and are adequate. A gist of the contingency plans shared by the FSS, KDIC, and BOK is presented in the Box 2. In the event of a stress or threat to financial stability, the response measures proposed by each regulator are stated to be discussed in the MEFM, and the package of response measures as appropriate for the level of stress in the financial system is agreed upon. The actual activation of the measures is handled by each responsible regulator.

**50. While the authorities have made good progress in establishing a crisis preparedness framework, these have not been tested for their operational feasibility and effectiveness through crisis simulation exercises (CSEs).** CSEs are powerful tools to diagnose what is missing or not working in existing crisis management arrangements (the organizational, legal, and operational framework, inter-agency information sharing and coordination arrangements, communications with key stakeholders and the public, etc.). The intensity and scope of the diagnosis can be modulated by developing and designing appropriate plausible scenarios for the simulations. The CSEs are also particularly useful for “learning by doing” training in the implementation of contingency plans and crisis-management options. Financial sector CSEs have been undertaken at inter- or intra-agency levels, at the national level, and across borders. CSEs usually include situations that demand quick decision-making under critical and worsening scenarios. Lessons for promoting changes to law, policy, procedures, and institutional arrangements may naturally arise from these exercises.

<sup>45</sup> Undertaken as a part of the FSAP Update, like the assessment of the compliance with the Basel Core Principles for Effective Banking Supervision.

Discussions with the industry and the financial regulators suggest that they have not yet undertaken CSEs to test the framework and the various functionalities.

## Box 2. Contingency Planning in Korea

The FSS has an early warning system that identifies the prevailing financial sector situation under five levels – ranging from ‘sound’ to ‘critical’. The FSS has also developed three sets of contingency plans to respond to the stress scenarios identified in each of the five market segments (financial system, foreign exchange market, banking, insurance, and capital market), as deemed appropriate for the last three levels of stress situation, namely ‘cautionary’, ‘grave’, and ‘critical’. The authorities assert that the contingency plans are broadly defined, and that they can use the response measures in a flexible manner. The contingency planning matrix of the FSS would resemble the table below.

| Stage of crisis                   | Cautionary | Grave | Crisis |
|-----------------------------------|------------|-------|--------|
| <b>Areas of Response Measures</b> |            |       |        |
| Overall financial system          |            |       |        |
| Foreign exchange                  |            |       |        |
| Banking                           |            |       |        |
| Insurance                         |            |       |        |
| Capital market                    |            |       |        |

The BoK has developed contingency plans for responding to market stress arising out of natural disasters. The contingency plan envisages that the financial and exchange markets are expected to be impacted as a consequence of the natural disasters, and broadly anticipates three stages of risk. The plan has also identified the policy options for each stage. Despite the source of shock, the transmission channels are likely to be the same as identified by the BoK, and hence this contingency plan can also perhaps double up as a contingency plan for a few other sources of threat to financial stability. The contingency planning matrix of the BoK would resemble the table below.

| Stage of crisis                            | Early stage | Risk spread | Crisis |
|--|-------------|-------------|--------|
| <b>Areas of response measures</b>          |             |             |        |
| Surveillance and Monitoring                |             |             |        |
| Signalling response                        |             |             |        |
| Liquidity support to specific institutions |             |             |        |
| Market liquidity support                   |             |             |        |
| Cash transaction (currency) support        |             |             |        |
| Other measures                             |             |             |        |

KDIC has identified the broad indicators that would represent the build-up of a crisis and has grouped these under three stages: ‘signs’ of a crisis; ‘development’ of a crisis and ‘full manifestation’ of a crisis. For each stage of crisis, KDIC has identified a menu of responses each catering to one of the five areas which the responses are targeting, namely ‘risk monitoring’, funding and management, failure resolution, post resolution work and HR-organisation-management-budget. The contingency planning matrix of the KDIC would resemble the table below.

| Stage of crisis                   | Signs of crisis | Development of the crisis | Full manifestation of the crisis |
|-----------------------------------|-----------------|---------------------------|----------------------------------|
| <b>Areas of Response Measures</b> |                 |                           |                                  |
| Risk Monitoring                   |                 |                           |                                  |
| Funding & management              |                 |                           |                                  |
| Failure resolution                |                 |                           |                                  |
| Post resolution work              |                 |                           |                                  |
| HR-Organisation-Management-Budget |                 |                           |                                  |

The MOSF and the FSC assert that they have contingency plans in place but have regretted their inability to share these with the FSAP team in the light of market sensitivity.

Source: FSS, BoK and KDIC

## Recommendations

**51. Given the significance of the FHCs in the system, the extent of their concentration in the banking sector, their presence in the other key financial sector segments and also their international presence, the authorities should consider requiring the FHCs to prepare their contingency plans at the group-wide level.** While the group contingency plans could be for dealing with specific risks, a key element of crisis preparedness initiatives requires that the authorities require the FHCs to prepare and submit their recovery plans. This will be in alignment

with the trend in the advanced economies and also in line with the proposals in the FSB Key Attributes.<sup>46</sup>

**52. While the existing framework for identifying and responding to threats to financial stability is generally working well, these can be formalized or additional steps can be taken to enhance crisis preparedness.** Some of the key elements of the framework for crisis preparedness which can be reviewed for improvement will include the following:

- (a) **Crisis management teams (CMTs):** Each agency (FSC, FSS, BOK, KDIC, and MOSF) can identify key officials tasked with executing crisis preparedness and crisis management related activities. Relevant tasks can include finalizing the internal procedures and processes, preparation and maintenance of the documents identified below, interacting with the secretariat of the proposed Apex Forum, and implementation of crisis response measures.
- (b) **Crisis management handbook or reference materials:** Having key reference materials summarized in advance and readily at hand can aid senior officials in a time of crisis. Relevant reference materials can include the following: crisis management protocols/procedures (e.g., documents that identify key actions likely to be required and those responsible for taking them, that enumerate detailed steps required to implement those actions, etc.); extracts of relevant sections of laws and regulations that may be relied upon while responding to a crisis; summaries of key policies; templates of key documents that might need to be issued (e.g., directives to boards of distressed institutions); regularly updated lists of relevant stakeholders with contact details; and communication protocols (basic guidance for interacting with the media, templates for press releases, etc).
- (c) **Crisis management groups (CMGs):** In line with the FSB Key Attributes for Effective Resolution Regimes (KAs), the authorities should consider establishing institution-specific CMGs with the objective of enhancing preparedness for resolving complex institutions and mitigating the potential for systemic crises. The CMGs would normally be envisaged for each financial institution that is of systemic relevance. The CMGs could include the FSC, the BOK, the KDIC, other domestic financial sector supervisory agencies, and key foreign authorities.<sup>47</sup>

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<sup>46</sup> Jurisdictions should put in place an ongoing process for recovery and resolution planning, covering at a minimum, domestically incorporated firms that could be systemically significant or critical if they fail. (FSB-KA 11.1) Supervisory and resolution authorities should ensure that the firms for which a recovery and resolution plan is required maintain a recovery plan that identifies options to restore financial strength and viability when the firm comes under severe stress. Recovery plans should include: (i) credible options to cope with a range of scenarios including both idiosyncratic and market wide stress; (ii) scenarios that address capital shortfalls and liquidity pressures; and (iii) processes to ensure timely implementation of recovery options in a range of stress situations. (FSB-KA 11.5).

<sup>47</sup> The CMGs will also include the supervisory authorities, central banks, resolution authorities, finance ministries and the public authorities responsible for guarantee schemes from key home and host jurisdictions of the group entities that are material to its resolution. The KDIC has since engaged in consultation with the FSC on establishment of a consultative body similar to the CMGs.

**53. The crisis preparedness and crisis management capabilities in Korea should be fully tested through crisis simulation exercises.** Going forward, conducting periodic crisis simulations should be an important area of focus. While these exercises can be undertaken at the level of individual regulators to test their internal systems and decision-making frameworks, the authorities should also consider undertaking national inter-agency simulations. These simulations can cover severe but plausible crisis situations involving individual institutions and system-wide disruptions. It will be beneficial to repeat the simulations at periodical intervals, particularly when there have been significant changes in the incumbents of the major stakeholders, the legal framework, the banking system, and the operating environment.

## CRISIS MANAGEMENT FRAMEWORK

**54. The objective of financial crisis management is to seek to prevent serious domestic or international financial instability that would have an adverse impact on the real economy.** In so doing, the FSB principles<sup>48</sup> require that authorities be mindful of the impact that interventions may have on the public purse and, as far as possible.

- (a) Maintain incentives for financial institutions to behave prudently;
- (b) Promote private sector solutions and use public sector interventions only when this is necessary to preserve financial stability; and
- (c) Maintain a level, competitive international playing field, in the spirit of the Basel Accord.

**55. The authorities have a few ready and efficient options that can be activated in the event of a financial crisis.** These include tools to influence systemic liquidity in money and securities markets, to increase deposit insurance and investor protection cover (including full guarantee), to mobilize public funds to provide support to financial institutions and markets that may be under stress, and to intervene and resolve troubled financial institutions. These options are discussed below.

### A. Systemic Liquidity in Money and Securities Markets

**56. The BOK is empowered to influence systemic liquidity through its open market operations (OMO),<sup>49</sup> via its standing facilities, and by varying reserve requirements.<sup>50</sup>** OMOs are normally done in certain specified securities (Government bonds of the Republic of Korea and securities whose full redemption and interest payments are guaranteed by the Government). The BOK has an expanded list of eligible collateral which is used for the BOK's standing credit facility (Liquidity Adjustment Loans). This wider list includes other credit securities such as promissory notes

<sup>48</sup> FSB Principles for Cross Border Cooperation on Crisis Management, April 2009.

<sup>49</sup> Article 68 of the BOKA.

<sup>50</sup> Article 68 of BOKA.

and bills of exchange. Banks in Korea are required to maintain a certain percentage of their liabilities as reserves with the BOK (reserve requirements vary between 0 and 7 percent depending on the type of liability), which can be varied to influence systemic liquidity. Banks may also be required to maintain marginal reserves over and above the ratio of reserves on liabilities.

**57. The BOK has planned a securities lending facility under the OMO window<sup>51</sup> and provides intraday funds to participant institutions of payment systems.<sup>52</sup>** The proposed facility would aim to not only ease the liquidity situation indirectly but can also help in addressing stress in both money markets and the securities markets. The latter is available to participants of those payment systems that are operated directly by the Bank of Korea. This facility allows the BOK to address gridlock situations in the BOK Wire settlement system that might arise due to temporary shortage of funds in one or more participating institutions, including non-banks.

## B. Deposit Insurance and Guarantee

**58. Raising and widening the deposit insurance cover is a tested option for KDIC to signal its commitment to maintaining calm in the markets in times of crisis.** KDIC had raised the insurance cover from KRW 20 million to a blanket guarantee in November 1997 during the Asian Financial Crisis, and dropped the coverage in 2001 to KRW 50 million, where it remains unchanged.<sup>53</sup> In the wake of the global financial crisis in 2008, the deposit insurance cover was extended to also cover foreign currency deposits.

**59. The processes stipulated in the laws and the related procedures can prove to be a serious challenge to effective crisis management if there were failure or insolvency of a medium or large financial institution.** To enable the KDIC to decide on the repayment of depositors in insolvent banks, it will undertake due diligence, perform a least cost test of the available options, and choose the one that is imposing least cost on the DIF. Thereafter, the KDIC's proposal will be referred to the FSC for its approval. These steps are expected to take at least about two months even in the case of mutual savings banks, which are small. If the chosen option involves use of public funds, obtaining approvals and raising the funds are expected to take about 2 more months. In addition, when a financial institution is required to write down shareholder equity and creditors' claims under the chosen option, the KDIC/failed bank is required to provide due notice of at least 10 days to the creditors.

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<sup>51</sup> Article 68 of BOKA.

<sup>52</sup> Article 81–2 of the BOKA.

<sup>53</sup> Article 32 (2) of the Depositor Protection Act provides that the maximum amount of insurance money be decided by Presidential Decree in consideration of the per capita GDP and size of protected deposits. Article 18 (6) of the Enforcement Decree of the Depositor Protection Act specifies that the ceiling be fifty million won, while by Addendum to the Enforcement Decree (Article 5), July 25, 1998, the limit was lifted until December 31, 2000, effecting the blanket guarantee. Currently, as a part of the normal review, KDIC is contemplating raising the insurance cover for some sectors' deposits.

## Recommendation

**60. KDIC and FSC should review the processes involved to reduce the timelines allowed for making decisions on making depositor payouts, providing financial assistance to, and resolving troubled banks.**

### C. Public Financial Support

**61. Korea established several funds in the wake of the recent global financial crisis to provide financial assistance to financial institutions either directly or indirectly.** These funds were used to provide liquidity assistance and capital assistance to the financial institutions or to stressed borrowers. Some of these funds (for example, Bank Recapitalization Fund, and Restructuring Fund) receive support from the Government and BOK, either through loans or through guarantee of the bonds issued by them. These funds can be collectively seen as serving the role of an additional tool for managing stress in the financial system, and which have been used to stabilize the system during past crises (please see Box 3).

**62. While these funds are playing a useful role, they have potential implications for distorting the incentive framework for financial institutions.** While some of these funds might have received funding from the BOK directly or indirectly, the funding or guarantee has been largely provided by state-owned financial enterprises. The establishment of funds to help the financial institutions directly and indirectly to overcome the stress on their liquidity and solvency can give rise to moral hazard and distort the incentive framework for these institutions to better manage their risk.

**63. While FSC and KDIC powers are comprehensive to address threats to financial stability, moral hazard issues may need to be more fully addressed.** While the ASIFI empowers the FSC to impose various corrective and resolution measures, it does not explicitly provide for mandatory imposition of losses first on shareholders and other creditors before deploying public funds.<sup>54</sup> This is at a variance with the FSB KAs and DICP.<sup>55</sup> However, authorities assert that as a matter of practice, the FSC has imposed losses on shareholders. Hence, formalizing this is not expected to be difficult and it will also help to address the moral hazard issues.

<sup>54</sup> Article 12(3) of the ASIFI provides an option to the FSC to order writing down of shareholders equity.

<sup>55</sup> FSB KA (6.4) requires that public funding should be temporary, that private funding is either not available or cannot achieve these objectives, that losses are allocated to shareholders and that residual losses are borne by the creditors or the industry (if required through ex-post levies or insurance premiums). DICP 16 (EC 7) requires that resolution procedures clearly ensure that bank shareholders take first losses.

### Box 3. Use of Public Funds to Support the Financial System

A compilation of the funds established in Korea is presented below:

| Fund   | Established                          | Beneficiaries          | Purpose   | Size (KRW Trillion)                              | Funding Source  |
|--|--------------------------------------|------------------------|---|--|---|
| NPL Resolution Fund (Public fund)                        | 1997, via law (wound-up in Feb 2013) | Financial institutions | To buy and dispose of bad assets from financial entities  | 21.6 Raised                                      | Government, KAMCO, FT's   |
| Bond Market Stabilization Fund                           | 2008 (wound-up in 2011)              | Corporates             | To subscribe to bonds of troubled companies to provide liquidity                                      | 5  | From 90 FT's and KoFC (20%)   |
| Bank Recapitalization Fund                               | 2008 (term to 2014)                  | Banks (8)              | To enable solvent banks to improve capital positions to support real sector                           | 20 Raised<br>5.0 Used                            | BoK (indirect) through KoFC, KAMCO                                    |
| Restructuring Fund (Public fund)                         | 2009, via law (term to 2014)         | Financial institutions | To buy bad debts of enterprises, and subscribe to project financing bonds, etc.                       | 6.2 Raised                                       | Government, and KAMCO   |
| Financial Market Stabilization Fund (FMSF) (Public fund) | 2009, via law (open ended)           | Financial institutions | To respond quickly to financial market stabilization needs broadly with capital and liquidity support | Flexible; No committed funds yet ('post-funded') | As needed: bonds (with or without govt guarantee), borrowing from BoK |

The Korean experience of establishing and using funds to assist in the handling of financial stability disruptions started in the wake of the 1997 Asian crisis, with the establishment of the **NPL Resolution Fund**, KAMCO a government-owned agency, was managing the operations of this fund. The fund bought and disposed of bad assets of nearly KRW 106.2 trillion arising from the late 1990 crisis and terminated in February 2013 with a 120 percent recovery rate.

The global financial crisis was the next impetus for the creation of several funds which have been in operation. The **Bond Market Stabilization Fund** was established in 2008 at the behest of the bankers and securities companies associations, to provide liquidity for companies facing liquidity problems due to uncertainties experienced in the bond market at the time. This fund has matured in 2011.

**Bank Recapitalization Fund** was created in the same year through consensus by FSC, BoK, MOSF, and KoFC, with support mainly from BoK's lending to KoFC for indirect contribution, and to a smaller degree by KAMCO. The Fund bought preferred shares and hybrid bonds of 8 solvent banks to improve their capital positions to be able to sufficiently support the real sector. Although only 25 percent of the funds raised were utilized and this fund is due to expire in 2014, it is understood that the FSC may extend the validity of the Fund.

The public **Restructuring Fund** was created and placed under KAMCO, which obtained National Assembly approval to issue new government-guaranteed bonds in 2009. The fund has been used to restructure bad debts of financial institutions, including mutual savings banks, and is due to expire in 2014.

The **Financial Market Stabilization Fund** was created by law as an open-ended fund with a broader scope of providing capital and liquidity funding to troubled financial institutions. Serving as a ready public funding mechanism, its particular use is left to be determined as needed by FSC, to be managed by KoFC. In 2011, FSC announced a program for the mutual savings banks; however, the fund was not used since no MSB applied for assistance and thus no contributions were raised.

While these funds are playing an useful role as an additional safety net and can have benefits from crisis preparedness and crisis management perspectives, it is likely that the authorities' readiness to set up these funds can distort the incentive framework for financial institutions. Further, the gap in the legal and regulatory framework whereby failing or troubled banks can receive support from these funds without necessarily imposing losses or costs on the shareholders and other creditors can promote moral hazard.

## Recommendations

**64. Authorities should review the direct and indirect use of public funds (including Depositor Protection Fund) to ensure that the incentive frameworks are not distorted and that moral hazard issues are fully addressed.** The international trend is to put in place frameworks whereby costs of financial institution resolutions are borne by the private sector first and that public

funds are used only when the private sector sources are not available or cannot achieve the objective.<sup>56</sup> Additionally, when use of public funds is inevitable, the shareholders and other creditors of insolvent financial institutions should always bear the losses caused to that institution, before the infusion of public funds. Authorities should ensure that utilization of public funds for managing stress situations, including resolution of financial institutions, complies with the above principles. Further, in order to restore market discipline and promote efficient operation of financial markets, the authorities should consider, and incorporate into their planning, clear options or principles for exit from public involvement.

## FINANCIAL INSTITUTIONS RESOLUTION

### A. Resolution Measures for Insolvent Banks

**65. The FSC have the legal powers to take stronger measures for insolvent banks.** There is a second level of legal triggers<sup>57</sup>, which allows the FSC to take more radical measures, including ordering the suspension of the business of the financial institution or their total transfer to another financial institution;<sup>58</sup> these actions require the institution to be “insolvent.” At this point the KDIC comes to be a key player in the process.<sup>59</sup>

**66. Definition of “insolvency” under Korean financial laws. A key definition under Korean Financial Laws—ASIFI, article 2.2, and DPA, Article 2.5.) is that of “Insolvency” that needs to be examined, as follows.** The definition has three aspects, two of them objectives and one with some subjective elements. They are:

- (a) the financial institution’s liabilities exceed its assets (balance sheet insolvency);
- (b) the financial institution has suspended its payments; and

<sup>56</sup> This will be in line with the FSB KA 6.4.

<sup>57</sup> In addition to the corrective actions in terms of Banking Act. Articles. 34 and 46 and in terms of Act on Structural Improvement Article 10 (4).

<sup>58</sup> The ASIFI refers in its Article 10 (4) to the transfer of “all business” and/or “all contracts” which reduces the flexibility of the power, nevertheless, DPA Articles. 36-2 and 36-3 does not require the transfer to include “all” assets, liabilities, or contracts, which goes in line with the requirements of KA 3.3 and 3.4.

<sup>59</sup> Although most of the actions that the KDIC is authorized by law, to undertake, are related to insolvent financial institutions, the corporation make request from an insured financial institution and/or its parent financial holding company, to submit all data, and it also can investigate the financial institution’s business and financial status as needed for the exercise of its KDIC’s duties, including the determination of the institution being an “insolvency threatened institution” This may occur since a very early moment, in the process, even from the time on which the financial institution start to be in non compliance of its basic standards as prescribed in the Regulation on the Supervision of Banking Business. See DPA Article. 21 (1) and (2), and DPA enforcement decree Article 12-2. This norms go in line with KA 3.1 which states that the resolution regime should provide for timely and early entry into resolution before a firm is balance-sheet insolvent and before all equity has been fully wiped out.

- (c) The financial institution, in the opinion of the FSC or the KDIC, is deemed as having difficulty in paying its claims without financial assistance.<sup>60</sup>

**67. The KDIC may repay depositors or perform resolution operations.** In cases (a) and (b), the KDIC shall pay the insured deposits (DPA) Article 31)<sup>61</sup>, and if the grounds for bankruptcy are there, the FSC may file a petition for bankruptcy. However, if the KDIC considers that the insolvent financial institution needs help for the protection of depositors or “the stability of the credit market” (DPA Article 38(1)2) it may, by a resolution of its Committee to provide financial assistance. This treatment applies, in practice, to most cases of insolvency under criteria (c) above.

**68. The specific type of resolution operation to be performed is determined by the FSC and performed by the KDIC.** The KDIC financial assistance is most frequently provided in the context of a resolution operation that in most cases implies either a total or partial merger with a sound financial institution, or the partial or total transfer of business or contracts to another financial institution. Once the determination of insolvency has been made either by the FSC or the KDIC (DPA Act Article 2.5 and ASIFI Article 2.2), the FSC decides, at the request of the KDIC, the specific type of resolution operation that will be performed (DPA Article 36–2).<sup>62</sup>

**69. The resolution operations are, generally, performed under management appointed by the FSC.** As a general rule the performance of a resolution operation is made under a Management Supervisor appointed by the FSC<sup>63</sup> (ASIFI, Article 14 (7)) in concordance with Arts. 10(1)4 and 14 (1) of the same Act), this officer has the authority to conduct the business and to manage and dispose of assets and liabilities of the insolvent financial institution. In cases on which the KDIC provides financial assistance the Management Supervisor appointed by the FSC shall be “an executive or employee” of the KDIC (ASIFI, Article 14–6 (1)).<sup>64</sup>

**70. The capital of insolvent institutions under resolution operations may be reduced and/or consolidated by the FSC.** In case of performance of resolution operations such as forced mergers or the transfer of business and contracts, the FSC may reduce and/or consolidate the

<sup>60</sup> In fact the Regulation on Supervision of Banking Business provides in arts 42 to 45 a number of elements for the determination of insolvency by the FSC and KDIC, including criteria and procedures for the valuation of assets and liabilities of the financial entity in question.

<sup>61</sup> See that in case (b) above the revocation of the insured institution’s business authorization or its dissolution (by FSC decision) or a declaration of insolvency are prior requirements for the payment of deposits, (DPA Article 2.7 (b)).

<sup>62</sup> As can be seen from the above description, the triggering of resolution results from the interaction between the FSA and the KDIC. While the determination of insolvency can be made by any of the two entities, the decision related to the kind of resolution operation that should be performed can only be taken by the FSA; once this decision is taken the actual performance of the operation is to be undertaken by the KDIC.

<sup>63</sup> . 14 (1) of the Act on Structural Improvement requires the Governor of the FSS to previously request this action to the FSC.

<sup>64</sup> In some special cases the FSC may appoint additional management supervisors, whenever the FSC considers that the depositors need some additional protection. (ASIFI, Article 14–6 (2)).

capital of the insolvent institution, using the powers from Article 10 (1) of the ASIFI, in concordance with Article 12 (3) of the same Act.<sup>65</sup>

**71. The KDIC can also provide financial assistance to financial institutions on which the Government has made investments to avoid their “complete destabilization.”** Financial assistance from the KDIC can also be provided in cases on which the FSC so request in relation to Financial institutions on which the Government (as the request of the FSC) has made investments to avoid a complete destabilization of its financial structure due to “the continued withdrawal of funds” (ASIFI, Article 12 (1)).

**72. The KDIC can also provide financial assistance to sound financial institutions that accept to merge with insolvent financial institution, or receiving transfer of contracts from them.** In the case on which the FSC has ordered a merger of the insolvent financial institution with a sound financial institution, or a transfer of business or contracts,<sup>66</sup> the KDIC can also provide financial assistance. In this case the financial assistance will be provided to the sound entity.<sup>67 68</sup>

**73. The KDIC can also create “bridge banks” and to provide their capital.** The KDIC can also establish a Financial Resolution Institution with the purpose of “taking over business or contracts of insolvent financial institutions or conducting the resolution process”.<sup>69</sup> The capital of this Financial Resolution Institution shall be paid up in full by the KDIC.

## Recommendations

**74. The definition of “Insolvent Financial Institutions” shall be made less discretionary by the Law to make the resolution process more precise and improve legal certainty.** The authorities should consider the inclusion in the law of some key parameters to declare a financial

<sup>65</sup> See that the power of the FSC in these cases is fully discretionary. Although we understand that there may be some exceptional cases on which the reduction and consolidation of capital may not be appropriate (for example the case on which the remaining capital of the assisted institution is not below the minimum requirement of the Commercial Act. See Article 24–4 (1) 4 of the DPA Implementation Decree, or cases on which assistance is provided to a sound financial entity which merges with an insolvent financial institution) the general rule should be that capital reduction shall proceed in all cases, except in those specifically excluded by Law.

<sup>66</sup> ASIFI, Article 11 (1).

<sup>67</sup> DPA, Article 38 (1) 1.

<sup>68</sup> The “arrangements” for the merger or transfer can also be originated by the KDIC whenever it deems that ‘necessary for the protection of depositors and the maintenance of financial stability’ (DPA, Article 36). In this case the KDIC request the FSC to order the merger or transfer. Then, the sound institution which will participate in the operation should make an application for financial assistance from the KDIC (Article 37 DPA), and the KDIC can decide by itself on the provision of such assistance (Article 38 (1) 1 DPA).

<sup>69</sup> DPA, 36–3.

institution as insolvent under ASIFI Article 2, 2. (c) and DPA Article 2. 5. (c). i.e., in cases on which the FSC and/or the KDIC have discretionary power to determine the insolvency.<sup>70 71</sup>

**75. Reduction or consolidation of capital in insolvent financial institutions under the resolution regime should be made the general rule.** Considering that in case of performance of resolution operations, such as forced mergers or the transfer of business and contracts, the FSC may reduce and/or consolidate the capital of the insolvent institution on a discretionary basis, using the powers from Article 10 (1) of the ASIFI, in concordance with Article 12 (3) of the same Act, the authorities should consider a change in the law to make the reduction of capital the general rule, and to allow exceptions only in extreme and very justified cases as determined by the Law.<sup>72</sup>

## B. The Least Cost Principle

**76. The KDIC is subject to the “least cost principle” in all its operations. Insurance payments and resolution actions by the KDIC are subject to the least cost principle as stated in Article 38–4 of the DPA.** The provision states that whenever the KDIC pays insured money or provides financial assistance to insured institutions, “it shall do so in a manner as to minimize any loss to the deposit insurance fund.”

**77. Complementary elements of the definition of the “least cost principle” are provided in secondary legislation and in KDIC policies.** Article 24–3 of the DPA Enforcement Decree states that whenever the KDIC pays insurance money or provides financial assistance shall minimize the loss to the deposit insurance fund by “objectively understanding the management status and financial conditions of the insured financial institution and the financial holding company that has such insured financial institution as a subsidiary, through a due diligence of assets and liabilities, etc.” Reportedly, the KDIC has developed some internal criteria for the appropriate performance of due diligence exercises, which would make the least cost principle’s application more precise.

**78. Exceptions to the application of the least cost principle.** Whenever the KDIC Committee considers that the liquidation or bankruptcy of an insolvent financial institution “might seriously undermine the stability of the financial system,” the KDIC can provide the financial assistance or pay the insured depositors without regard to the least cost principle.<sup>73</sup>

**79. The exceptions to the application of the principle are rather general and discretionary.** Considering that the KDIC is authorized by law to receive contributions from the Government (DPA

<sup>70</sup> The existing regulatory provisions in this matter (see footnote 63) are a good step in this direction but the system would benefit from a reduction in discretionality at the legal level to improve legal certainty in a key element of the resolution framework.

<sup>71</sup> KA 3.1 requires that “clear standards” and/or “suitable indicators” of non-viability shall be in place to help guide decisions on whether firms meet the conditions for entry into resolution.

<sup>72</sup> The recommended amendment, by reducing the likelihood that pre-resolution shareholders receive unjustified financial help, would allow a more appropriate application of KA 6 to the system.

<sup>73</sup> DPA, Article 38–4 (3).

Act, Article 24 (2) 2, that it can also borrow funds from the Government and the BOK (DPA Act, Article 26 (1)), and that it can issued Deposit Insurance Fund Bonds, guaranteed by the Government, (DPA Act, Article 26–2 (5)) the general formulation of the least cost principle and the high degree of discretionality on which exemptions can be granted, may introduce a significant moral hazard element into the system. The first of the above aspects (generality of the definition) can be reduced by the criteria that may be included in the policy on Due Diligence Requirements. Still it would be better to include those criteria in a higher level provision which would provide more legal certainty. On the second aspect (discretionality for the granting of exemptions), see the comments and recommendations presented below under “Systemic Implications.”

## Recommendations

**80. Key principles for the application of the KDIC’s Least Cost Principle should be included in higher level norms to improve legal certainty.** The authorities should consider to include some of the principles that clarify and complement the definition of the Least Cost Principle, currently reflected only in KDIC internal policies, in higher level norms (e.g. the DPA Enforcement Decree) in order to improve transparency and also to provide a higher degree of legal certainty in this very important part of the resolution regime.<sup>74</sup>

**81. Exemptions to the application of the Least Cost Principle should be clearly linked to the parameters used to define “systemic Implications.”** Once the parameters and key criteria to define “systemic implications” will be identified, as described below, the exemptions to the application of the Least Cost Principle by the KDIC should be clearly linked to those parameters either by Law or the Enforcement Decree.

## C. Systemic Implications

**82. There are a number of cases under the Korean financial laws on which terms implying “systemic implications” trigger a number of special funding possibilities.** Under the Korean Laws there are a number of cases on which different languages suggest the requirement of some degree of systemic implications as prerequisite for certain actions to be taken by the authorities in relation to insolvent financial institutions, as follows:

- (a) In order for the KDIC to be able to provide financial assistance to insured financial institutions, it is required, under Article 38 (1) 2 of the DPA, that the insolvent financial institution would need the assistance for the protection of depositors and **“the stability of the credit market.”** No additional precision or developments of the expression, for the exercise of one of the “regular” functions of the KDIC.
- (b) Under Article 36 of the DPA Act, the KDIC may “make arrangements” for a merger, business transfer or takeover of an insolvent financial institution or its parent financial holding

<sup>74</sup> The appropriate application of the least cost principle as recommended in this paragraph will be in line with KA 6 by reducing the likelihood of the use of public funds in unjustified cases.

company, where it considers it necessary for the protection of depositors and “the maintenance of financial stability.” In this case, although the basic power to order the merger or transfer remains with the FSC (Article 11 of the Law on Structural Improvement) and the FSC does not need to invoke any kind of “systemic implication.” the KDIC, in addition to the above mentioned power to “make arrangements” for the merger or transfer, gets two additional powers by invoking the maintenance of financial stability, one is the possibility to request the FSC to take “the necessary measures”<sup>75</sup> and the second one is that, under Article 38 (1) 1 of the DPA Act, the Corporation can provide financial assistance to the sound financial entity that is willing to participate in the merger or transfer.

- (c) Under Article 36–3 of the DPA Act, the Corporation may establish a Financial Resolution Institution (FRI, which is a kind of “bridge bank”) with the approval of the FSC, to take over the business and contracts of an insolvent financial institution, when “deemed necessary for the protection of depositors and maintenance of **the stability of the financial system.**” This is a more “special” power since the FRI is fully capitalized by the KDIC and can perform a number of functions, including to develop the whole resolution process. The FRI can exercise its functions for an initial period of up to five years, which may be extended by the FSC.
- (d) Under Article 38–4 (3) of the DPA Act, the Corporation may pay insurance money, or provide financial assistance beyond the limits of the “least cost principle,” whenever its Committee deems that the liquidation or bankruptcy of the insolvent financial institution “might seriously undermine the stability of the financial system” In this case the expression “**seriously undermine**” is added, but we need to take into account that considering the very wide possibilities of official (and private) funding and guarantees that the law gives to the KDIC. This is a power that may have tremendous implications in financial and stability and moral hazard terms.

**83. The above key expressions are not identical but none of them is specifically defined by law, and all of them generate additional funding powers.** From all of the above can be seen that under the Korean laws there are a number of expressions suggesting the presence of systemic implications, used to allow the financial authorities, specially the KDIC, to use special powers to provide different kind of assistance to insolvent financial institutions. The expressions are not identical, and none of them is specifically defined by law or regulation.

**84. The lack of precision in all the above cases but specially in the granting of exceptions to the least cost principle seriously reduces accountability and legal certainty.** The lack of precision of the used terms described in the above paragraphs, especially in the case that allows for exceptions to the KDIC’s least cost principle, is a weakness in the system that may allow the financial authorities to take case by case decisions, undermining the basis for accountability, all of which affects the certainty of the legal rules and the credibility of the resolution scheme.

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<sup>75</sup> DPA Act, Article 36–2 (1).

**85. In line with the recommendations of the BCBS in its key documents on Domestic Systemically Important Financial Institutions (DSIFIS), the financial sector authorities shall continue its efforts to develop parameters to objectively identify systemically important FI and then to reflect them in norms.** In accordance with the above paragraph, we consider that sustained progress should be made in the current efforts of the financial authorities to identify parameters that can objectively help to identify the degree of systemic importance that a financial institution or financial holding company may have, and then to reflect those parameters in appropriate norms, in order to reduce the high degree of discretionality implied in the current system and to improve accountability and legal certainty.<sup>76</sup>

## Recommendations

**86. The financial authorities shall step-up its current efforts to establish criteria for the identification of systemically important financial institutions and to reflect those in norms to be integrated into the resolution regime.** In order to be able to apply the KA directed at G-SIFIS in an appropriate manner, the financial authorities should continue their efforts to develop objective parameters and criteria to identify systemically important financial institutions and groups, and the FSC shall reflect those criteria in norms integrating the resolution regime. For that purpose, the authorities shall follow the Assessment Methodology Principles reflected in the BCBS D-SIB framework, with special regard to Principle 5 in relation to the bank-specific factors that should be taken into account in order to determine those which should be considered as D-SIFIs in the Korean context. The financial authorities should be empowered to take all necessary measures since an early stage, to reduce the potential cost of resolving systemically important FI, and to facilitate the progressive implementation of resolution operations as needed.

**87. As part of the process mentioned in the above paragraph, the authorities should modify the existing legal definitions of systemic implications, systemic stability, and similar expressions used in the different laws, to be in alignment with the domestic application of the principles reflected in the BCBS D-SIB framework.** Those definitions should be replaced by new ones resulting from the application of the BCBS D-SIB framework in Korea, and, once the definitions are reflected in the domestic laws and regulations, KA directed at G-SIFIs shall be applied, including KA 8 on CMGs, KA 9 on institution specific cooperation agreements (COAGs), KA 11 on Resolution and Recovery Plans (RRPs), and KA 10 on Resolvability Assessments.<sup>77</sup>

<sup>76</sup> The BOK, in coordination with industry members is currently developing studies in order to establish appropriate criteria and parameters to identify domestic Systemically Important Financial Institutions. The plan of the financial authorities is to develop those parameters and to reflect them in regulations by 2016.

<sup>77</sup> The KDIC has since engaged in consultation with the FSC for identifying the domestic SIFIs and applying the relevant FSB KAs.

## Appendix I. Financial System

Table 1. Financial System Structure

|   | No of institutions | Total Assets     |              |                  |              |
|---|--------------------|------------------|--------------|------------------|--------------|
|   |                    | end-2010         |              | end-2012         |              |
|   |                    | (billion won)    | (in percent) | (billion won)    | (in percent) |
| <b>Banks</b>  | 57                 | 1,884,114        | 54.4         | 2,194,879        | 54.4         |
| <b>Non-bank depository institutions</b>   | 3,983              | 531,768          | 15.3         | 536,220          | 13.3         |
| Merchant banks <sup>1)</sup>  | 1                  | 24,242           | 0.7          | 14,468           | 0.4          |
| Mutual savings bank   | 97                 | 91,271           | 2.6          | 49,388           | 1.2          |
| Credit cooperatives   | 3,884              | 360,863          | 10.4         | 412,163          | 10.2         |
| Credit unions   | 982                | 48,763           | 1.4          | 55,340           | 1.4          |
| Community credit cooperatives   | 1,525              | 92,101           | 2.7          | 104,836          | 2.6          |
| Mutual banking  | 1,377              | 219,999          | 6.3          | 251,987          | 6.2          |
| Postal savings  | 1                  | 55,392           | 1.6          | 60,200           | 1.5          |
| <b>Insurance companies</b>  |                    | 536,068          | 15.5         | 735,318          | 18.2         |
| Life insurance companies  | 24                 | 408,495          | 11.8         | 547,827          | 13.6         |
| Non-life insurance companies  | 31                 | 98,987           | 2.9          | 151,794          | 3.8          |
| Postal insurance <sup>2)</sup>  | 1                  | 28,586           | 0.8          | 35,697           | 0.9          |
| <b>Securities companies<sup>3)</sup></b>  | 50                 | 189,384          | 5.5          | 250,710          | 6.2          |
| <b>Collective investment business entities<sup>4)</sup></b><br>(asset management companies) | 84                 | 325,279          | 9.4          | 317,273          | 7.9          |
| <b>Total</b>  |                    | <b>3,466,613</b> | <b>100.0</b> | <b>4,034,399</b> | <b>100</b>   |
| GDP (nominal)   |                    | 1,235,161        |              | 1,272,460        |              |
| <b>Financial Sector as % of GDP</b>   |                    | <b>280.7</b>     |              | <b>317.1</b>     |              |

Source: BOK.

(1) Includes consolidated financial accounts of banks and securities companies.

(2) As of end-2011.

(3) Excludes foreign branches.

(4) Based on investment trust accounts.

Table 2. Banking Sector Structure  
(end-2012)

|                       | end-2012          |   |                     | % Change  |           |
|-----------------------|-------------------|---|---------------------|-----------|-----------|
|                       | # of institutions | total assets <sup>1)</sup><br>(billion KRW) | % of banking sector | 2011-2012 | 2010-2011 |
| <b>Banks</b>          |                   |   |                     |           |           |
| commercial banks      | 52                | 1,578,043                                   | 70.6%               | 2.0%      | 5.0%      |
| national banks        | 7                 | 1,226,827                                   | 54.9%               | 0.6%      | 5.4%      |
| local banks           | 6                 | 147,082                                     | 6.6%                | 8.6%      | 9.5%      |
| foreign bank branches | 39                | 204,134                                     | 9.1%                | 5.7%      | -0.9%     |
| specialized banks     | 5                 | 657,359                                     | 29.4%               | 7.0%      | 9.6%      |
| <b>Total Banks</b>    | 57                | 2,235,402                                   | 100.0%              | 3.4%      | 6.2%      |

Source: FSS.

Total assets = (banking account + trust account + merchandise banking account) - (inter transactions among banking, trust and merchandise banking accounts).

Table 3. Top 10 Banks

| BANK (Name of Financial Holding Company)         | Total assets<br>(KRW billion) |                      |                    |
|--|-------------------------------|----------------------|--------------------|
|  | 2012                          | (% of total banking) | % growth 2011-2012 |
| <b>Kookmin Bank (KB)</b>                         | 280,310                       | 13%                  | 1.2%               |
| <b>Woori Bank (Woori)</b>                        | 265,614                       | 12%                  | 2.9%               |
| <b>Shinhan Bank (Shinhan)</b>                    | 253,955                       | 11%                  | 1.2%               |
| <b>NH Bank* (NH)</b>                             | 206,466                       | 9%                   | 3.9%               |
| <b>Industrial Bank of Korea*</b>                 | 205,668                       | 9%                   | 8.5%               |
| <b>Hana Bank (Hana)</b>                          | 168,124                       | 8%                   | 0.8%               |
| <b>Korea Development Bank* (KDB)</b>             | 167,132                       | 7%                   | 12.2%              |
| <b>Korea Exchange Bank (Hana, since Feb2012)</b> | 123,058                       | 6%                   | 2.0%               |
| <b>SC First Bank (Standard Chartered Korea)</b>  | 69,354                        | 3%                   | -3.0%              |
| <b>Citibank Korea (Citigroup Korea)</b>          | 66,402                        | 3%                   | -10.5%             |
| <i>Top 5 total</i>                               | 1,212,013                     | 54%                  | 3.2%               |
| <i>Top 10 total</i>                              | 1,806,083                     | 81%                  | 2.8%               |
| <b>National totals</b>                           | <b>2,235,402</b>              |                      | <b>3.4%</b>        |

Source: FSS.

\*Specialized banks.