CRISIS SIMULATION EXERCISES (CSEs)

Vienna Financial Sector Advisory Center (FinSAC)

WORLD BANK GROUP
Banking systems are considered to be relatively fragile and subject to periodic, cyclical or random crises - precipitated by intrinsic imbalances and/or external shocks - that can undermine financial intermediation and stability. Systemic crises affect financial market functioning, have negative consequences for monetary policy transmission, undermine government fiscal positions and raise public sector debt levels - to the extent that public funds need to be committed to address systemic problems - and often result in a deep contraction of real economic activity and high unemployment.

The timely and effective management of financial crises is critical, as wrong decisions often result in an exponential increase of the costs. The rapid spread of the latest global financial crisis raised concerns about the capacity of national authorities to effectively and efficiently handles the resolution of systemically important financial institutions and to mitigate the impact of their eventual collapse. Common issues observed before or during crises include a lack of, or poor quality of, information; asymmetric financial information; excessive credit growth granted with poor underwriting standards; progressive or sudden destabilization and/or failure of financial institutions of different sizes; unresponsive or corrupt management at some banks; an aggressive press; conflicts of interest among decision makers; and political interference.

There is recognition of the need to prepare and train for early, swift and effective decision making and close cooperation among the responsible authorities, domestically and across borders, under extreme and adverse scenarios. Cooperative arrangements among policy makers at different institutions should be regularly assessed and strengthened where needed, and the information, tools, methods and behaviors used to handle typical crisis events should be tested.

The Vienna Financial Sector Advisory Center (FinSAC) helps national financial sector authorities prepare to effectively manage financial crises, reducing the risk of problems in individual financial institutions and financial markets, having systemic consequences. Technical assistance through the use of tailor-made crisis simulation exercises (CSEs), seeks to test financial stability arrangements and assess how legal and regulatory frameworks work under distressed conditions. Undertaking practical, simulated but realistic, crisis scenarios allows those involved to “learn by doing” and contributes to team formation and trust development, vital for successfully addressing policy issues in the event of an actual crisis.

1. WHAT IS A CRISIS SIMULATION EXERCISE?

A CSE is akin to a “war game” that simulates a series of stressful, but realistic, scenarios and shocks, which require quick actions and decisions by senior policy makers. There are several alternative ways of simulating circumstances that demand critical decision-making under pressure, FinSAC has chosen to deliver “role playing” exercises. World Bank/FinSAC staff creates a realistic country-specific scenario that senior decision makers of public institutions and their core staff must respond to. Each exercise is tailored to the client country, but they include the following general components:

- the specific national financial sector structure - in terms of size, concentration, ownership, currencies and other specific features;
- the national institutional, legal and regulatory frameworks, which provide tools and establish limits to the menu of possible actions/measures;
- the operational arrangements across and at specific key institutions (typically the Central Bank, The Supervisory Agency, the Ministry of Finance, the Deposit Insurance Agency and Resolution Agency);
- information generation and sharing;
- coordination mechanisms inside and among relevant agencies;
- communication among key stakeholders and with the public.

Following the role-playing exercise, FinSAC and World Bank experts examine all the decisions and actions taken and provide detailed feedback to the participants, including recommendations for improvements to laws and regulations, policies, procedures and/or institutional arrangements.

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2. WHAT ARE THE OBJECTIVES?

CSEs are powerful tools to diagnose what is working, and what is not working, in existing crisis management arrangements. They provide essential practical training (“learning by doing”) on the use of conceptually adequate, but rarely tested, crisis-management arrangements. Working on a practical case gives some realism and it is one of the most important value-adding outcomes of the CSE. FinSAC’s CSEs are designed to highlight weaknesses in laws, policies, procedures, and contingency plans in the context of actual conditions and vulnerabilities in the national financial system. They also help stakeholders remain abreast of market developments, and ensure that current incumbents of senior decision-making positions are familiar with the pros and cons of the tools at their disposal and are willing to cooperate, to overcome severe, and possibly systemic, crises at the lowest possible cost for the taxpayers and the economy. FinSAC promotes the periodic use of CSEs as an ongoing means of identifying weaknesses and gaps in existing crisis management arrangements and assessing the effectiveness of changes implemented following previous CSEs.

3. WHO PARTICIPATES?

CSEs are most useful when they involve direct and dedicated participation by senior decision-makers¹ in all relevant institutions. They are undertaken at three levels:

- Cross-border CSEs, involving authorities from home and host countries.
- National CSEs, involving all or a number of domestic responsible authorities.
- Single agency CSEs, which assess how well different departments work together in sharing information and taking action. Typically, each team would comprise the senior decision maker assisted by a core staff team of 3 to 6 members.

World Bank/FinSAC experts and consultants “role play” the parties and characters that have a major impact on the outcomes of the exercise, such as commercial banks, bank depositors, foreign supervisors, the judicial system, parliament, legal professionals, and the media.

¹Typically, the Central Bank (CB) Governor, the Minister of Finance, the Head of the Deposit Insurance Agency, CB Market operations and Banking Supervision.

4. WHAT IS THE SCENARIO AND HOW IS IT DESIGNED?

Generally, the scenario involves a number of parallel and interconnected hypothetical storylines that gradually build up the distress in the financial system. The scenario thus reflects the structure of the financial system of the country and consists of a series of unraveling, simultaneous or sequential, events that the authorities will have to handle during the CSE. It takes the form of a sequence of e-mails and other messages progressively revealing, over several hours or days, the problems to be addressed by the participating decision makers. To add to the reality of the exercise participants are “bombarded” with asymmetric information in the form of public and private information (received by some, but not all the players). World Bank/FinSAC staff work with a locally appointed multi-disciplinary “Counter- party Team” team to prepare a relevant, stressful and plausible scenario for the specific country’s risk profile. The CSE is very dynamic and is adapted throughout the exercise in response to the actions and decisions of those taking part.

CSE - Scenario and Teams

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5. **HOW DO THE AUTHORITIES AND WORLD BANK/FinSAC EXPERTS WORK TOGETHER?**

To develop a scenario that suits the client country’s circumstances, the World Bank/FinSAC team reviews the legal, regulatory and operational framework, and the actual evolution of all relevant (or at least several representative) financial institutions over the previous three to five years. Access to relevant samples of the typical internal reports and memoranda circulated among the participants in real life is essential for this preparation. The team is assisted by a locally appointed CT, consisting of key staff of the participating authorities. The role of the CT is twofold: first, it acts as a sounding board to the World Bank/FinSAC team of external experts; it reviews and contributes to the scenario by tailoring it to the specific local environment and conditions, including developing “mock” bank financial statements and other reports. Second, it provides a local “flavor” to the scenario by assisting in the drafting of the messages and supporting material to make the case more realistic, relevant and interesting. For the CSE to be successful, it is important that the CT is available during the preparation phase and the delivery of the actual exercise.

Clearly, it is crucial that the CT remains separate from the decision makers and staff who participate in the CSE to protect the confidentiality of the scenario.

6. **HOW IS A CRISIS SIMULATION EXERCISE DELIVERED AND ANALYZED?**

A CSE typically takes place over several hours or a full day. For confidentiality and reliability reasons, the scenario is delivered to the players inside a closed/dedicated local area network (LAN), not connected to the Internet. Communication among participants, and between them and the team of role players, takes place exclusively in writing via e-mail messages, enabling an exhaustive ex-post analysis of the interactions during the Exercise.

On completion of the exercise the World Bank/FinSAC team uses the written record to extract the key interactions, employing network analysis and natural language processing technologies. Once the meaning and practical implications of those interactions are properly clarified and analyzed, the team produces an interim report (sent to the authorities for their review and comments) followed by a final report, including any relevant recommendations. The final report evaluates the response of the authorities to the simulated shocks and offers recommendations for improvement. A seminar or de-briefing to disseminate and discuss the findings among the participating authorities can also be arranged.

7. **WHAT HAS BEEN THE IMPACT OF A CRISIS SIMULATION EXERCISE?**

CSEs are designed as diagnostic tools and to identify gaps and weaknesses in crisis management tools and arrangements. In practice they also function as validation tools for existing crisis management frameworks, confirming what works well and what does not. Several client countries have implemented legal, operational and regulatory changes to address gaps and weaknesses identified during CSEs. Others have streamlined domestic or international cooperation arrangements as well as escalation procedures between authorities. FinSAC can also provide follow up advisory services to the participating authorities to strengthen weaknesses or correct flaws of fragile institutional arrangements identified or confirmed during the CSEs.