Crisis Simulation Exercises Overview



"The authorities can run all kinds of stress tests on the capital structures of the world's largest banks, trying to predict how well they would bear losses in a future crisis. The stress test they really need to run is on themselves — whether they will stick to their promise to work nicely with each other or will revert to self-interest."

John Gapper Financial Times, Nov 12, 2014



Agenda

- Introduction
- What is a Crisis Simulation Exercises?
 - Types of Simulation Exercises
- WB Crisis Simulation Exercise (CSE)
 - How does it work?
 - Types of CSEs structures and issues
 - More in detail & picturing the 'Play'
- CSE projects and delivery
- Some frequent questions, observations, and feedback



Introduction:

- World Bank Finance, Competitiveness & Innovation Global Practice
- Since 2008, 36 Exercises to-date: 30 single jurisdiction & 6 regional
- CSE WB team typically includes CSE specialists and other senior specialists in:
 - Financial stability / central bank market operations;
 - Banking supervisor;
 - Resolutions/deposit insurance;
 - Other financial sector experts (capital markets, insurance, etc.)

Regions	# of Countries	# of Single- jurisdiction	# of Multi- jurisdiction
East Asia & Pacific	2	3	1
Europe & Central Asia	10	11	2
Latin America & Caribbean	7	7	3
Middle East & North Africa	2	3	
Sub-Saharan Africa	6	6	
Total	27	30	6



What is a Crisis Simulation Exercise?

- NOT a test/exam that you can pass or fail.
- It is an opportunity to PRACTICE decision-making in difficult situations. By practicing you may discover things that you would like to do differently.
- Because it is practice, not an exam, it should be done regularly.
- To regularly conduct exercises you will need to develop local capacity to prepare and run simulations. For that reason, we prepare and run this exercise together with a local team.



Practicing ... but what?

We practice COMMUNICATION and COORDINATION.

Why are we practicing COMMUNICATION?

Because not everybody knows all the relevant facts that define a problem. Only by effectively communicating what each party knows, and how each party understands it, is it possible to identify the problem to be solved.

Why are we practicing COORDINATION?

Because by acting unilaterally, without coordinating with other decision makers, it is easy to make big mistakes.



Types of Simulation Exercises

- Different ways of simulating situations that demand critical decision-making:
 - "Case study": All receive same package of information and each provides analysis and answers what should be done.
 - Round-table: Participants receive different packets and discuss reactions around the table.
 - "Role-playing": Simulated sequence of information unfolding through various channels (action-reaction).



How Do WB simulations work?

- The Control Team (World Bank staff and members of the local counterpart team) prepares the basic facts of the scenario.
- Those facts correspond to plausible problems that might take an extended period of time to develop in real life. This then may require substantial "time compression".
- The Control Team communicates those facts to the participating teams through a sequence of brief, public and private messages.



How Do WB simulations work? (2)

Public messages: simultaneously available (in a <u>local</u> web page) to all participating teams, and assumed to be available to the general public.

 Private messages: sent to only some of the participating teams (via a <u>local</u> email system), from different sources of information (staff of the participating teams, bankers, foreign authorities, politicians, journalists, etc.) role-played by members of the Control Team.



Interactions in a CSE

Participant Roles:

"Role-Players", as various fictional characters, deliver the scenario facts and interact with the Players.

"Players" react to the facts given and take decisions for entities they represent via interaction with other players and role-players.

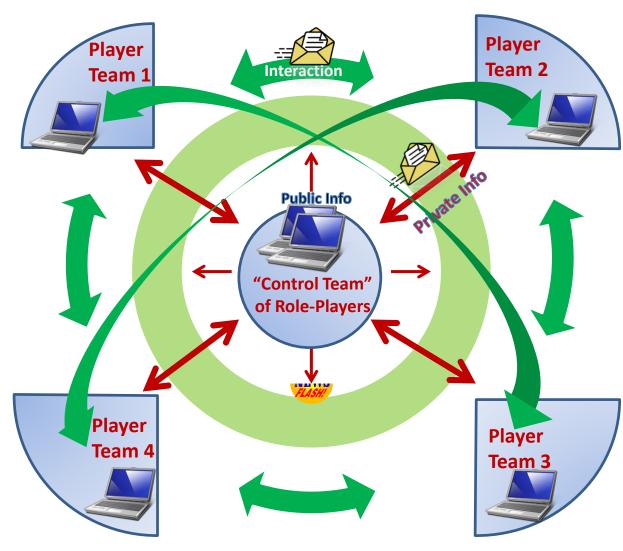
Modes of Communication:

Public Info = on the News site

Private Info = Emails from the CT to only one player team

Email Interaction between and among players





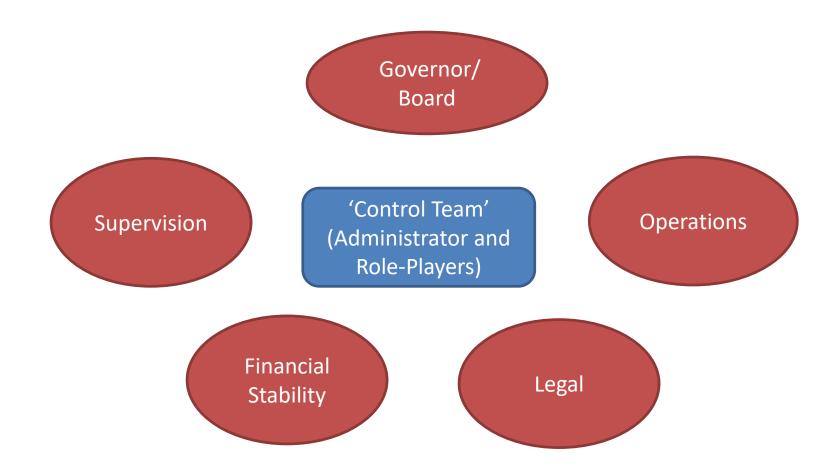
How Do WB simulations work? (3)

 To cope with the asymmetric information resulting from the private messages, participating teams decide what information to share (with the other teams, via email), and how and when to do it.

 Teams eventually take, individually or collectively, the decisions prescribed by the existing legal and operational frameworks.

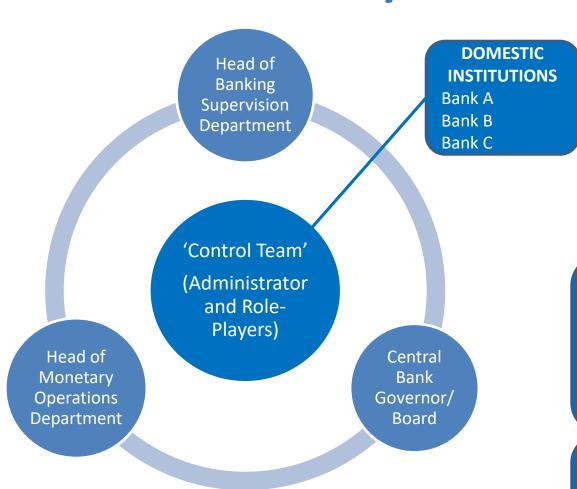


Sample Participating Teams: Single agency exercise





Single agency CSE Example of Players & Role-Played Characters



FOREIGN ENTITIES

Parent Bank A
Parent Bank B
Country A Bank Supervision
Country B Bank Supervision
Piratenbank Aktiengesellschaft
Cyprus Bank Supervision
Neighbor Country's Bank Supervision
Neighbor Country's MOF
Ratings Agency
Deutsche Bank Frankfurt

LOCAL ENTITIES & DEPARTMENTS

Minister of Finance (Ministry Officials)
President Insurance Supervision Agency
President Sec. & Exchange Commission
Staff of Banking Supervision
Staff of Banking Operations
Payment Systems Department

OTHER LOCAL ENTITIES

Journalist & Press
Prime Minister
Bankers Association
Consumer Protection Agency
Deposit Protection Fund
Country's Ambassador in Country A



Sample Participating Teams: National level, multi-agency exercise

Central **Financial Bank Board** Stability 'Control Team' Market (Administrator and Supervision Operations Role-Players) Deposit Ministry of Guarantee Finance **Fund**



Multi-agency CSE Example of Players & **Role-Played Characters**

National Bank 'Control Team' Ministry Non-bank (Administrator of Superv. and Role-Finance Authority Players) Deposit Insurance Agency

WORLD BANK GROUP

Finance, Competitiveness & Innovation

LOCAL ENTITIES

Local Journalist & Press Alandian Postal Service Prime Minister of Alandia **Special Administrator Trustees & Liquidators** Bankers Assoc. of Alandia

DOMESTIC INSTITUTIONS

Bank 1

Bank 1's Insurance Co.

Bank 2

Bank 2's Asset Mgmt Co.

Public Insurance Company

Small Bank A, B, C, D

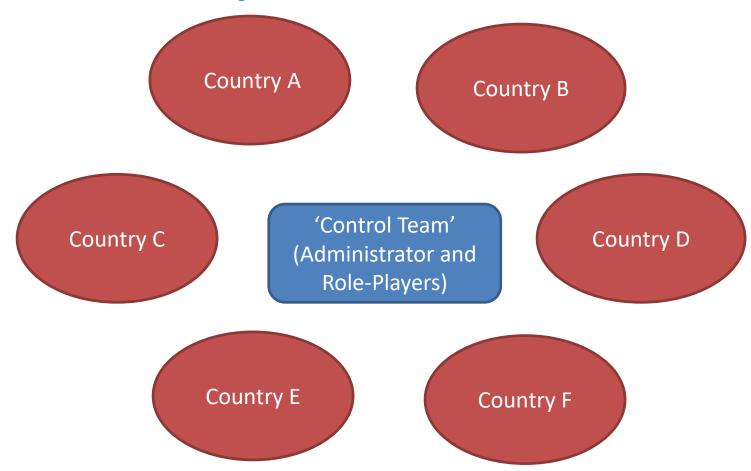
DEPARTMENTS

Bank Supervision Dept. (NBA) Market Operations Dept. (NBA) Payment Systems Op. Dept. (NBA) Pensions Supervision Dept. (NBFISA) Insurance Supervision Dept. (NBFISA) Deposit Insurance Division of DIA

FOREIGN ENTITIES

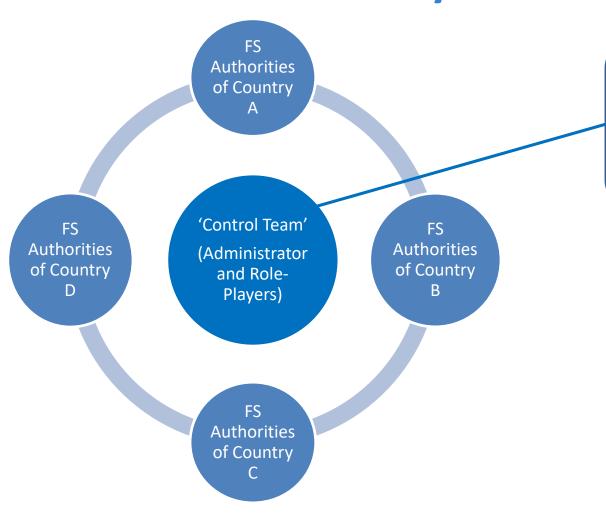
Parent Bank of Bank 1 in Country X Parent Bank of Bank 2 in Country Y Country X & Y's Bank Supervisors Turkisch Finanz Actiengesellschaft (TFA) Wells Fargo **Foreign Press** EBA; Cyprus Bank Supervisors

Sample Participating Teams: Multi-jurisdictions exercise





Multi-jurisdiction CSE Example of Players & Role-Played Characters



FINANCIAL INSTITUTIONS

BANK 1 – COUNTRY A, B, C, D

BANK 2 – COUNTRY A, B, C, D

BANK 3 - COUNTRY A, B, C, D

STAFF of AUTHORITIES of A, B, C, D

Staff of Central Bank Staff of Supervisory Agencies Staff of Finance Ministry

OTHERS:

Deposit Insurance Agency
President of the Country
Police
Judge
Appeals Court

Congress
Journalist
Bankers Association
Workers Union



What WB Crisis Simulation Exercises are NOT

- Predictions of crises to hit the country
 - We bring experts in crisis preparedness and mgmt and work with local team to have the scenario /delivery be as realistic as possible, but not a prediction on vulnerabilities
- Full diagnosis of issues in legal mandate/powers, policies, procedures
 - Scenario will highlight the shortcomings if any, but an exhaustive diagnosis is not the point of the CSE (shortage of time, select participants, etc.)
- An assessment or stress test of financial institutions or systems done on a spreadsheet
- A "gap analysis" of a crisis framework
- A test or an exam for the participants



The real benefit is gained in the process...

- Through the experience, participants have formed various ideas to improve practices, procedures, frameworks, regulations (i.e. "the way they do what they do")
 - PLUS, take-aways from interaction within the "player" teams;
 - Learning respective roles, practiced versus expected responsibilities (can even roleplay!);
 - A group of local staff who are 'trained' in CSEs...
- After the exercise, the WB team will provide some observations on issues that seemed to emerge, and any recommendations for further exploration of those.



...and the extent of benefits are up to players

- Ownership by the authorities: The bulk of the benefits of a CSE is gained through the preparation process and the experience of the Exercise itself by the participants.
 - Participants have taken notes during the exercise of the issues faced to improve upon future responses.
 - Have convened afterwards to work on an action plan to improve some gaps that they felt.
 - One jurisdiction has conducted their own round table exercise revisiting issues with the records of our CSE.



Picture this...

- Usually happens in one full day, flexible end time
- Everyone in separate rooms or spaces
- Communication is via Email ONLY, on given email addresses within CSE platform Local Area Network (LAN)
- No discussions away from rooms or face-to-face meetings
- No breaks for meetings or lunch
- Dynamic interaction exercise count of prepared messages v. final messages
- Setting the scene given narrative (not necessarily 'now')
- Time compression periods, dynamic, 'time-stamping'



How to 'PLAY'

- Works best when everyone understands it is not a test
- You get out of it what you put in
 - CT's job to make scenarios probable enough for all to engage
- Contrary to certain games: No winners and losers. Designed to put players under stress (in a productive way)!
- Teams receiving private messages must decide what and when to share info with whom, and how.
- In making decisions, the teams can ask various other characters for input as in real life.
- Each team takes its decisions regarding the situation according to their legal framework, policies, and procedures.
- KEY: Must play with the given facts. Do not make up facts.



CSE Projects Process

PLANNING



BUILDING



RUNNING



REPORTING

- Decide type of simulation
- Decide agency participation
- Designate dedicated local staff for "Control Team"
- Gather info and draft
 Scenario and materials
- Build & test
 IT platform
- Secure venue& IT logistics

- Introduction
- Play
- Debrief

- Review & analyze written record of exercise
- Prepare & deliver report



CSE Output

- The interaction generates between 250 and 600 emails.
- Posterior report on analysis of the emails provides insights on how decisions are taken and could be improved, and on possible legal, regulatory, and operational issues for further consideration.
- CSE Platform is all on Open Source technology



Some Frequent Questions

- When should we have a CSE?
 - A) Do it early to see what you should put in place.
 - B) Do it after you have in place what you want.
 - C) OTHER: A case to be made for both A and B. Experience tells us there is no right or wrong PRACTICE periodically.
- To Play or not to Play?
 - Agencies can participate in various ways with Pros/Cons
 - A) Separate "player" group
 - B) Sit with the Control Team to observe or role-play
- After: How did we do (internal)?
- How do countries compare in their readiness for crisis?



Types of issues presented in CSEs:

- Information-sharing and coordination among various financial sector regulators;
- Home-Host supervision issues (banking group supervisory colleges);
- Central bank liquidity facilities;
- Bank runs;
- Bank solvency issues;
- Bank resolution;
- PCA, escalation of supervisory action
- Licensing, fit and proper criteria;
- Public communication (press releases and journalists);
- Cybersecurity breaches, etc.



Some Frequent Observations

- ELA: lengthy decision making
- Public Communications: contradictory public statements
- Home-Host relations: far from coherent exchanges of relevant information
- Parent to the rescue: excessively optimistic expectations about their support
- Resolution processes: lack of understanding of/experience with the relevant legal framework
- Deposit Insurance: lack of accurate information on depositors, back-up funding
- Cyber-security issues: still perceived as strictly technical issue, for the "IT Guys", and not a policy issue for the top authorities



Some frequent feedback

- On average close to about 80% of participants say they loved the experience and would do it again / recommend to others, with the rest saying they thought it was good to do.
- "It was beyond my expectations"
- "Roles and responsibilities of each department should be clarified to all parties (within and to other departments) in order to avoid reaching out to the wrong department for information. A lot of coordination is needed."
- "To clarify roles within the CB, which would be particularly helpful during crisis, as well as mastering internal and external communication procedures."
- "Suggestion to perform further exercises (on a periodic basis) and information sharing, analysis/feedback of the performance through the exercise and suggesting improvements."
- "Very interesting exercise...in addition to the objectives, the exercise highlighted other areas/gaps that need to be strengthened/fulfilled."



THANK YOU & Q&A

- Lessons learned from ECA region Crisis Simulation Exercises
 - http://pubdocs.worldbank.org/pubdocs/publicdoc/2016/1/150791453290633
 503/CSE-in-ECA-lessons-learned-Working-paper.pdf
- Lessons learned series of the Financial Sector Reform and Strengthening (FIRST) Initiative
 - https://www.firstinitiative.org/reports/world-bank-crisis-simulation-exerciseswhat-stake-coordinating-and-making-decisions-crisis

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