

# **RISK ASSESSMENT AND**

# **INTERVENTION:**

# **A Micro and Macro Perspectives**

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# Introduction

## Lessons from Asian Crisis

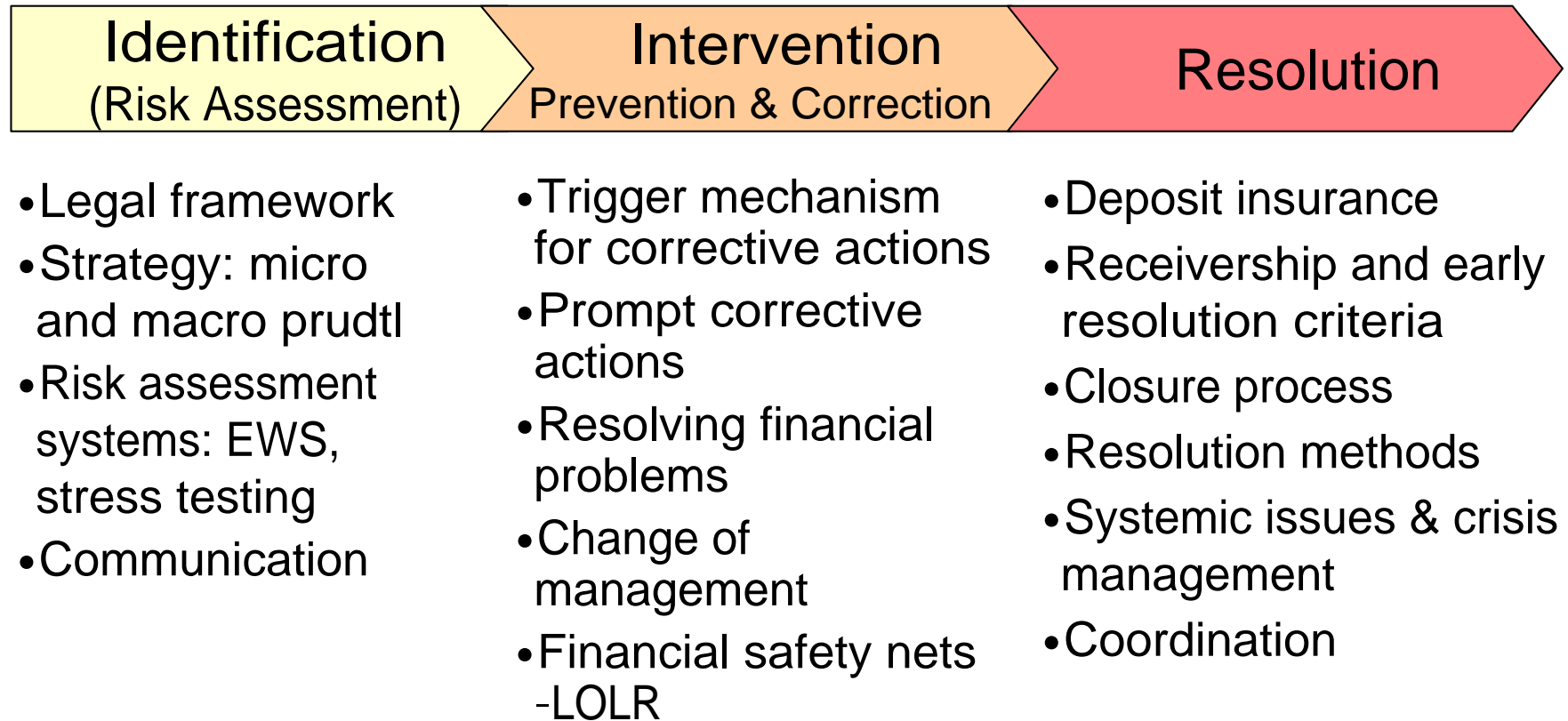
- Drawbacks in governance, risk management and supervision are among key factors exacerbating the crises
- Crisis resolution is very complex and costly
- Lack of financial safety nets and crisis management worsen the crisis.
- Monetary stability closely links with financial stability

## Response: Key Measures

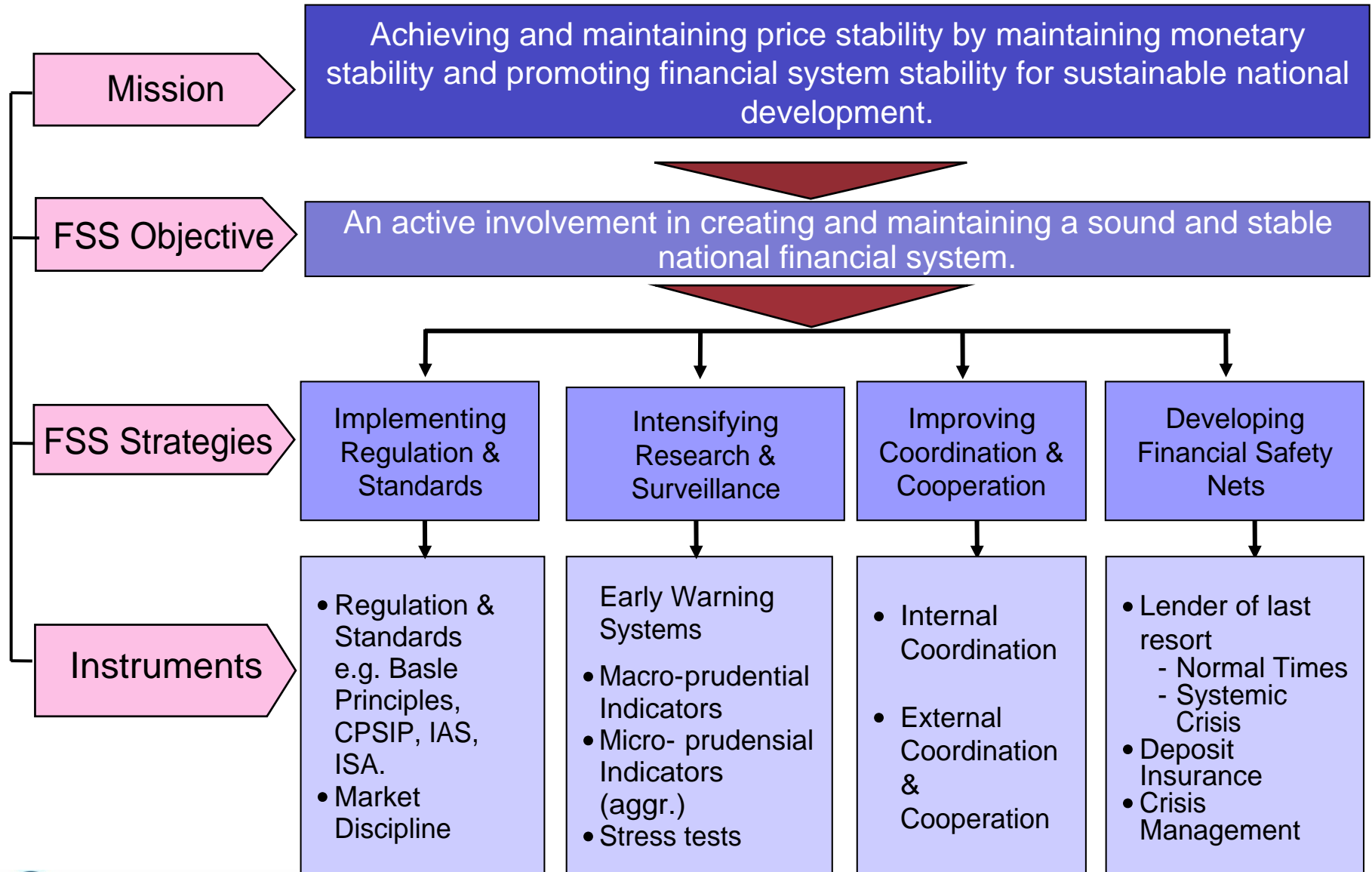
- Improving bank corporate governance and risk management
- Improving the effectiveness banking supervision (micro prudential)
- Developing financial safety nets
- Strengthening financial system stability (macro prudential).
  - Macro surveillance
  - Crisis management
  - Interagency coordination

# Introduction

“The task of the supervisor is to identify problems early, ensure preventive or corrective measures are adopted, and have a resolution strategy in place should preventive action fail” (Supervisory Guidance on Dealing with Weak Banks, BCBS, BIS, March 2002)



# BI's Financial System Stability Framework



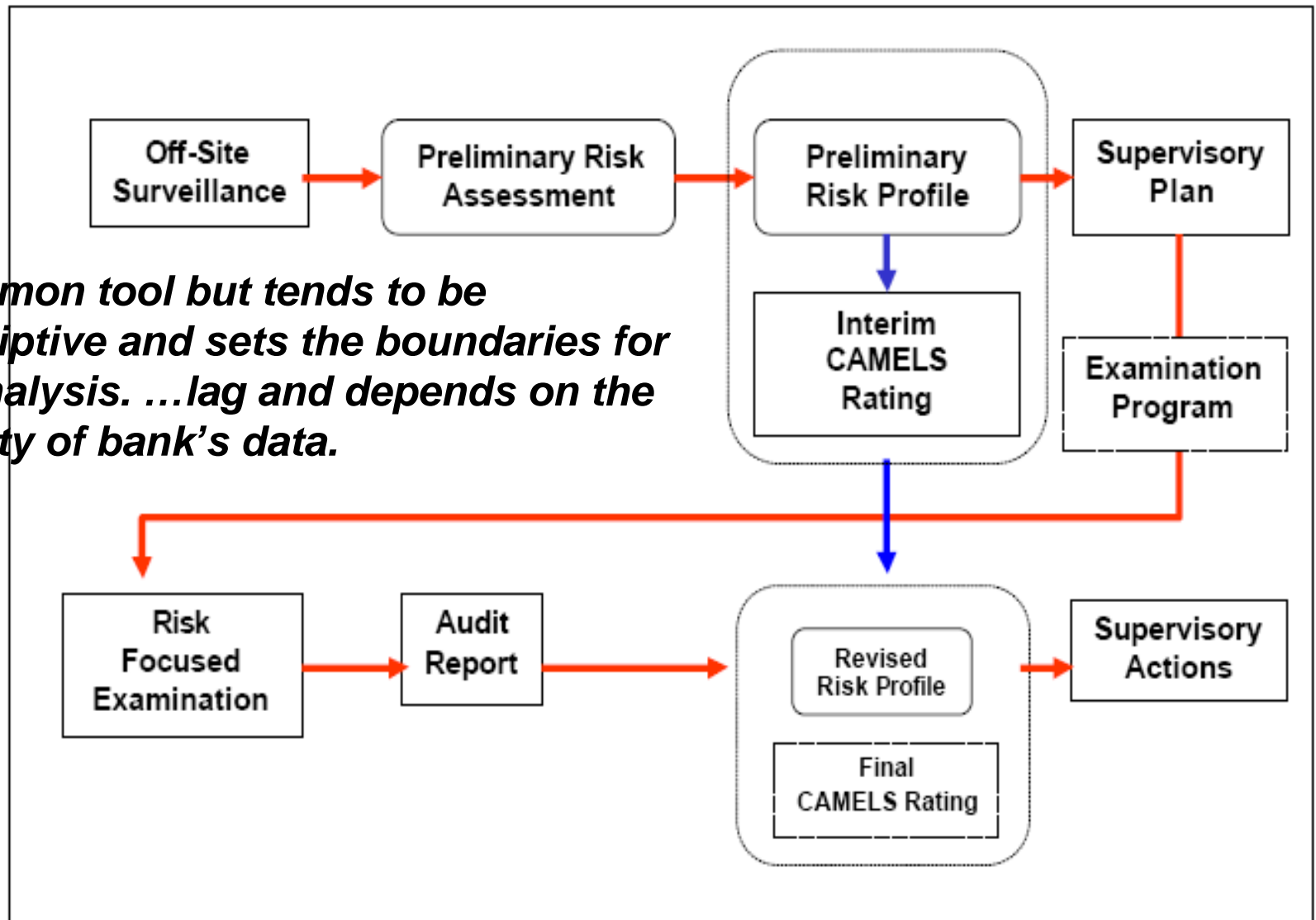
# Risk-based Supervisory Cycle

*... focus on supervisor's understanding on the bank and dialog with bank management.*



# CAMELS Rating

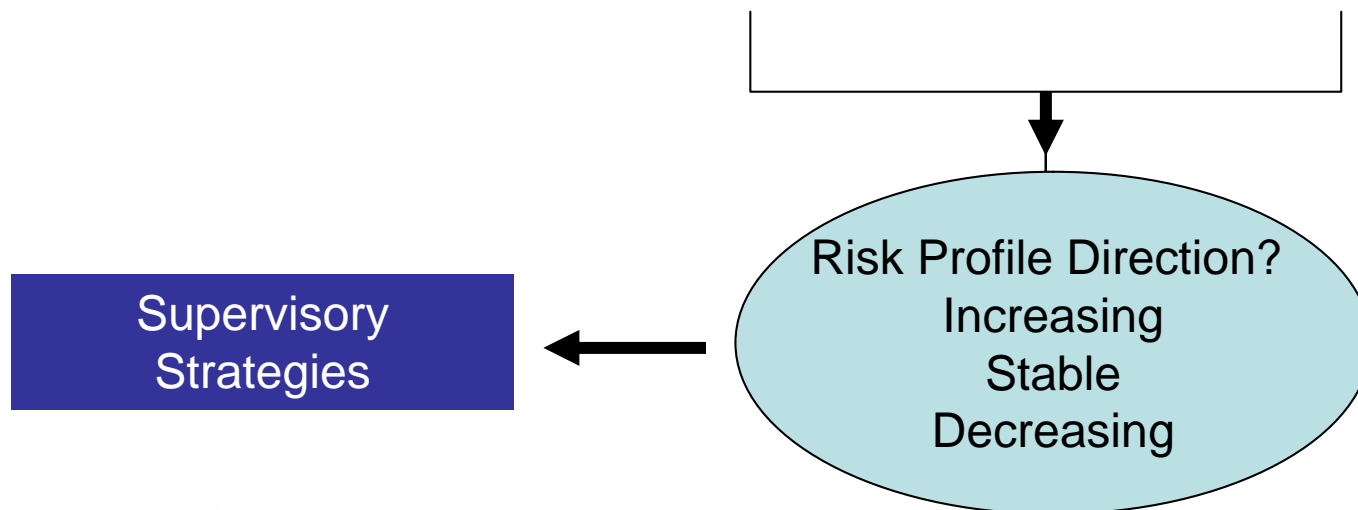
*A common tool but tends to be prescriptive and sets the boundaries for risk analysis. ...lag and depends on the integrity of bank's data.*



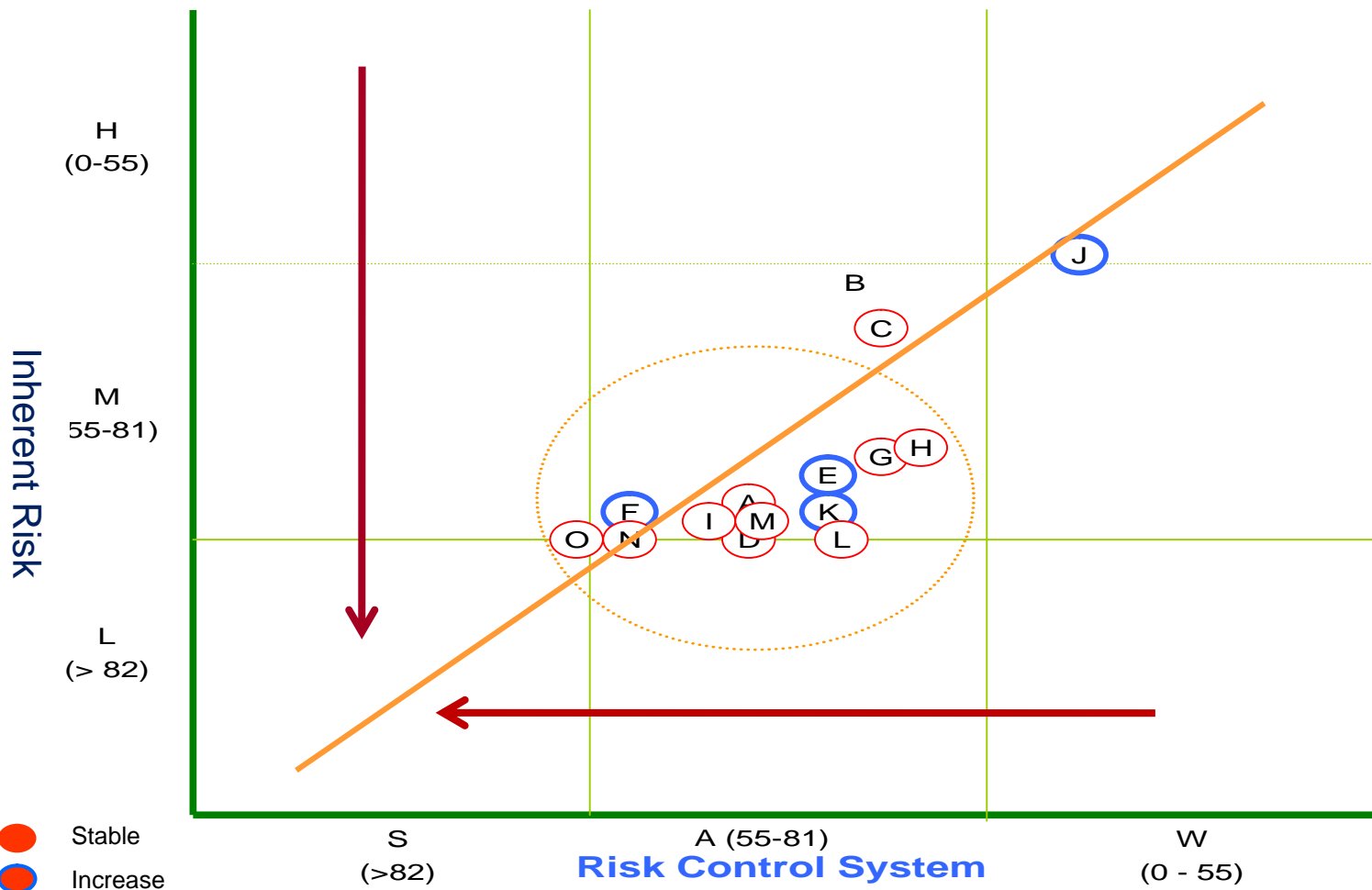
# Risk Assessment System

Eight types of risks: credit ~, market ~, liquidity ~, operational, legal ~, strategic ~, reputation ~, and compliance ~.

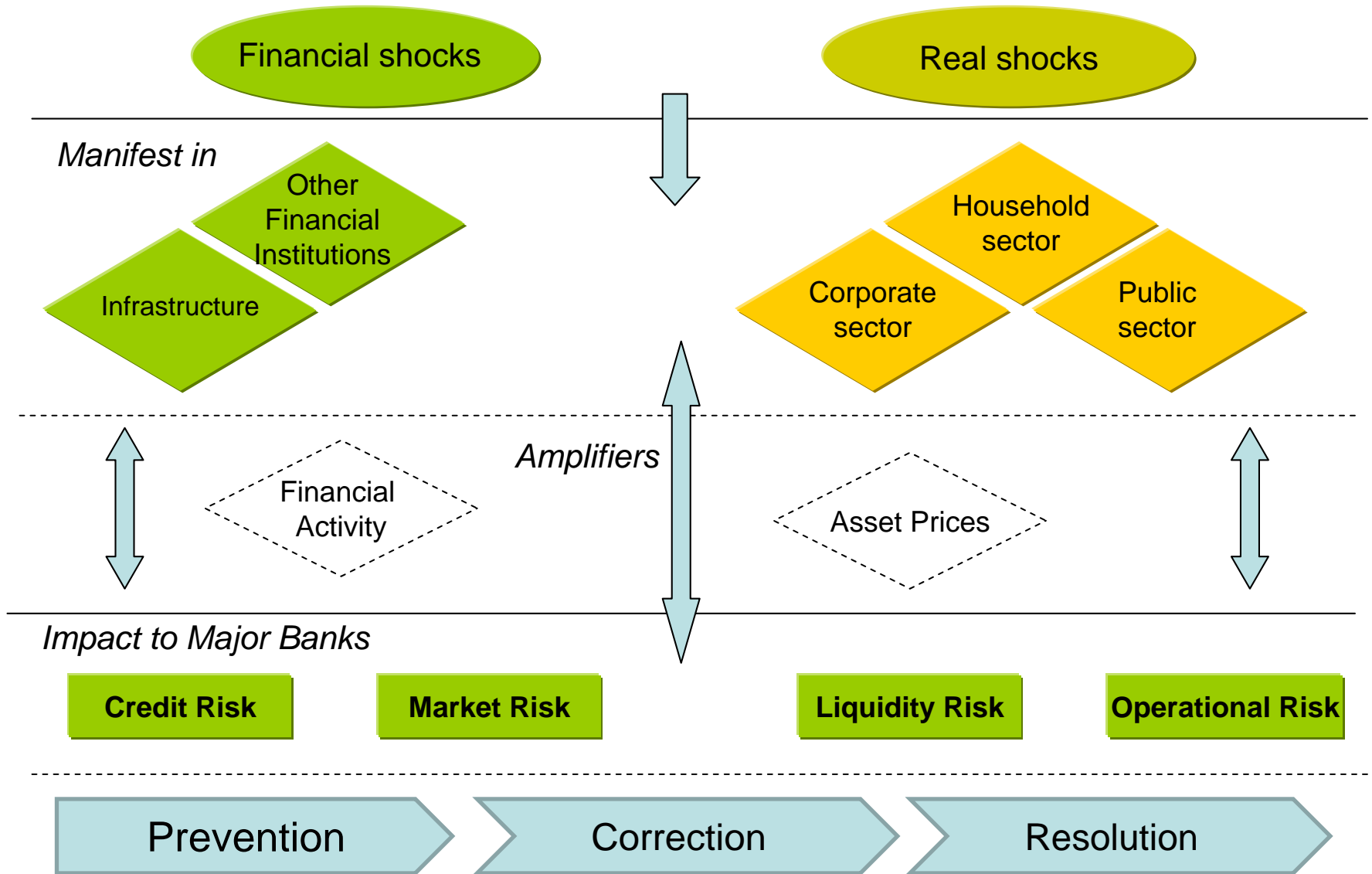
Composite Risk		Inherent Risks		
		Low	Moderate	High
Risk Management Process	Weak	Moderate	Moderate to High	High
	Acceptable	Low	Moderate	High
	Strong	Low	Moderate to Low	Moderate



# Risk Matrix



# Risk Transmission Map



# Early Warning System and Other Indicators

- Financial soundness indicators or ratios
- Stress testing
  - Linear regression model for panel data
  - A General Unrestricted Panel Model (GUPM)
- Corporate failure
  - Credit risk with barrier option
- Financial stability index
  - Econometric model to assess the effect of microeconomic and macroeconomic factors on financial system stability.
  - Two Stage Least Squares (TSLS) regression to estimate the simultaneous equations model

# Problem Bank Intervention

## Intensive Supervision

- Net NPL > 5%
- CAMELS rating of 4 or 5
- Risk Profile: High
- Legal Lending Limit
- Net Open Position
- Liquidity problem
- Profitability problem

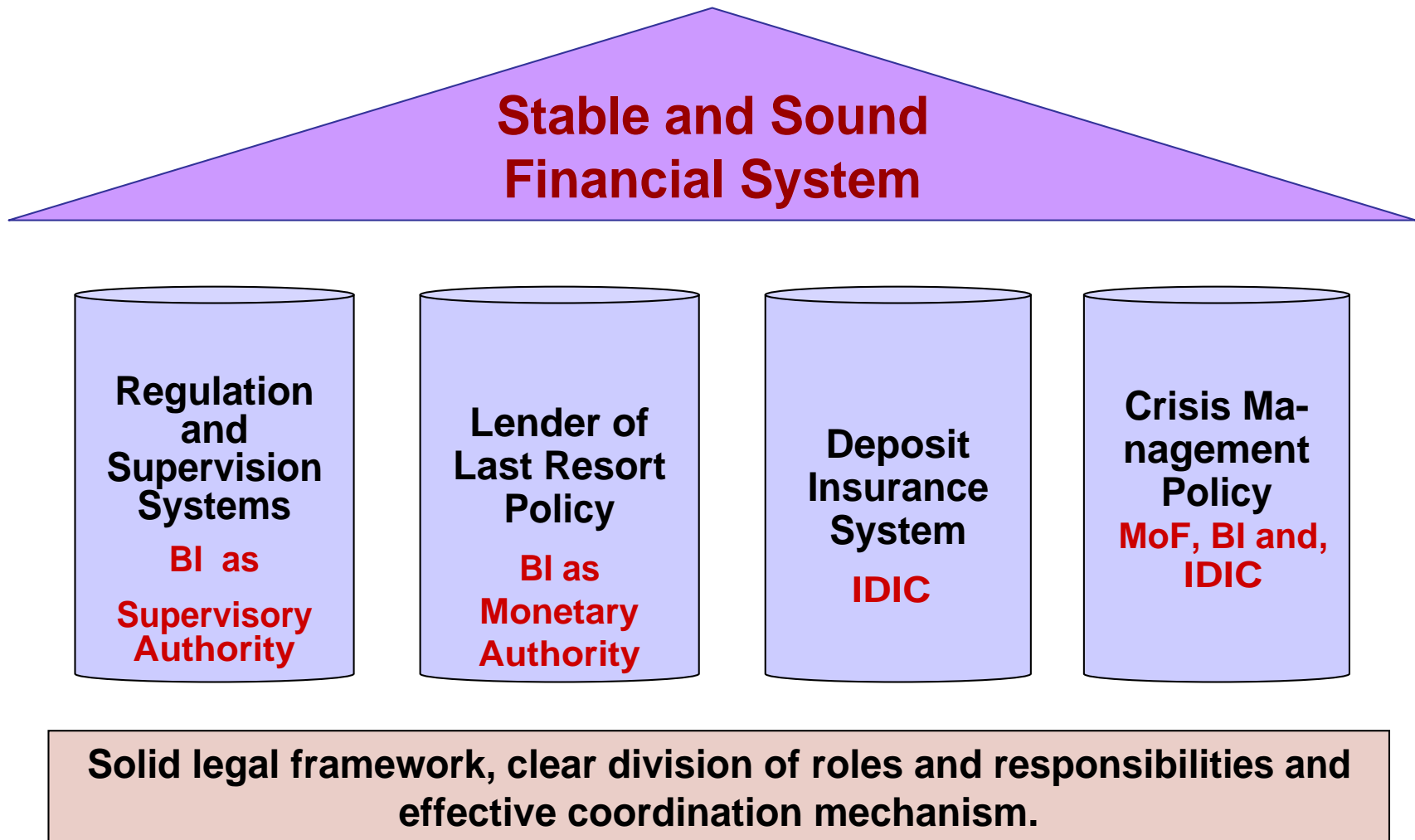
## Special Surveillance

- CAR < 8%; and or
- Statutory reserve ratio < the required ratio with worsening trend
- Undergoing a fundamental liquidity problem

1. demand the bank to submit a report of particular issues
2. review business plan
3. ask the bank to prepare action plan
4. conduct on-site inspection
5. conduct CDO

1. order **Capital Restoration Plan**
2. order the bank to comply with its **Mandatory Supervisory Actions**;
3. order the bank and/ or the bank's shareholders to carry out certain actions such as:
  - to change the Board of Commissio. and/or Boar of Directors;
  - to write off loans
  - to merge with other bank(s);
  - to sell the bank to investors willing to take over all liabilities of the bank;
  - to delegate the management of bank to third party;
  - to sell part or all of the assets and liabilities of the bank to other bank(s) or other investors; and or
  - suspend certain business activities of the Bank.

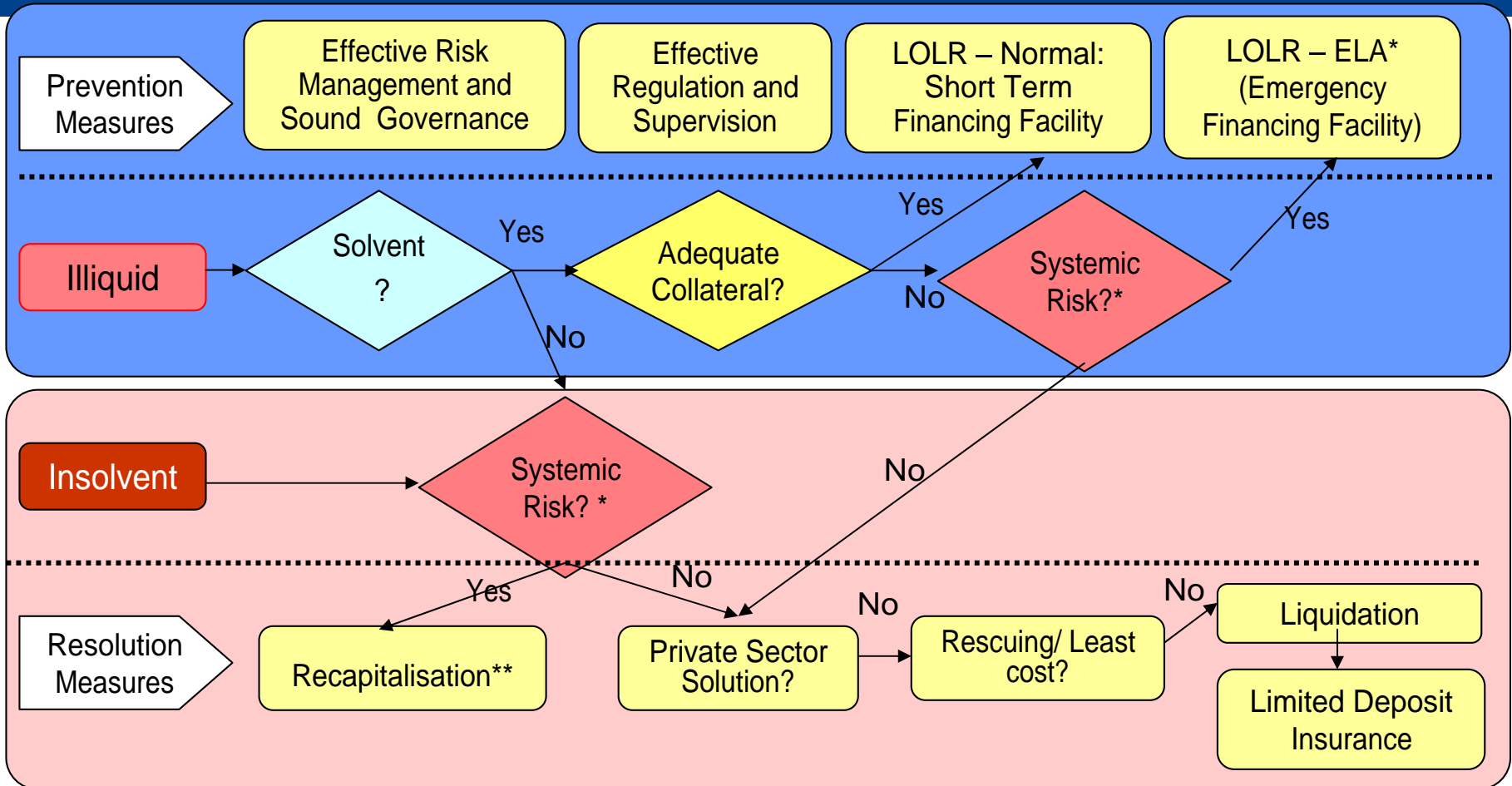
# Financial Safety Nets and Crisis Management



# Development of Financial Safety Nets

- **FSN Framework** - BI and MoF have designed framework of Indonesian Financial Safety Nets (IFSN) that defined roles and responsibilities including coordination mechanism of related government agencies in maintaining financial system stability. The IFSN policy will be stipulated in the law.
- **Lender of last resort (LoLR)** - BI's role as LOLR both in normal times and emergency in order to maintain the financial system stability.
  - Normal times → smoothening payment system operation
  - Emergency → Emergency Liquidity Assistance to prevent systemic crisis
- **Deposit Insurance Scheme** - In line with phasing-out of the blanket guarantee program, Indonesia has set-up the Indonesian Deposit Insurance Corporation (IDIC) in November 2005.
- **Coordinating Committee** consist of MoF (chair), BI's Governor and Chief Commissioner of IDIC established responsible to decide policies to prevent and resolve systemic crisis. In addition, **Financial System Stability Forum**, consist of officers from BI, MoF and IDIC, has been established.

# Problem Bank Resolution Framework in Indonesia



## Legal basis:

- Banking Law No.10/1992
- IDIC Law No.24/2004 and IDIC Regulations
- BI Regulation on Exit Policy

\*Joint decision by BI and MoF

\*\*Decided by Coordinating Committee (BI, MoF, IDIC)

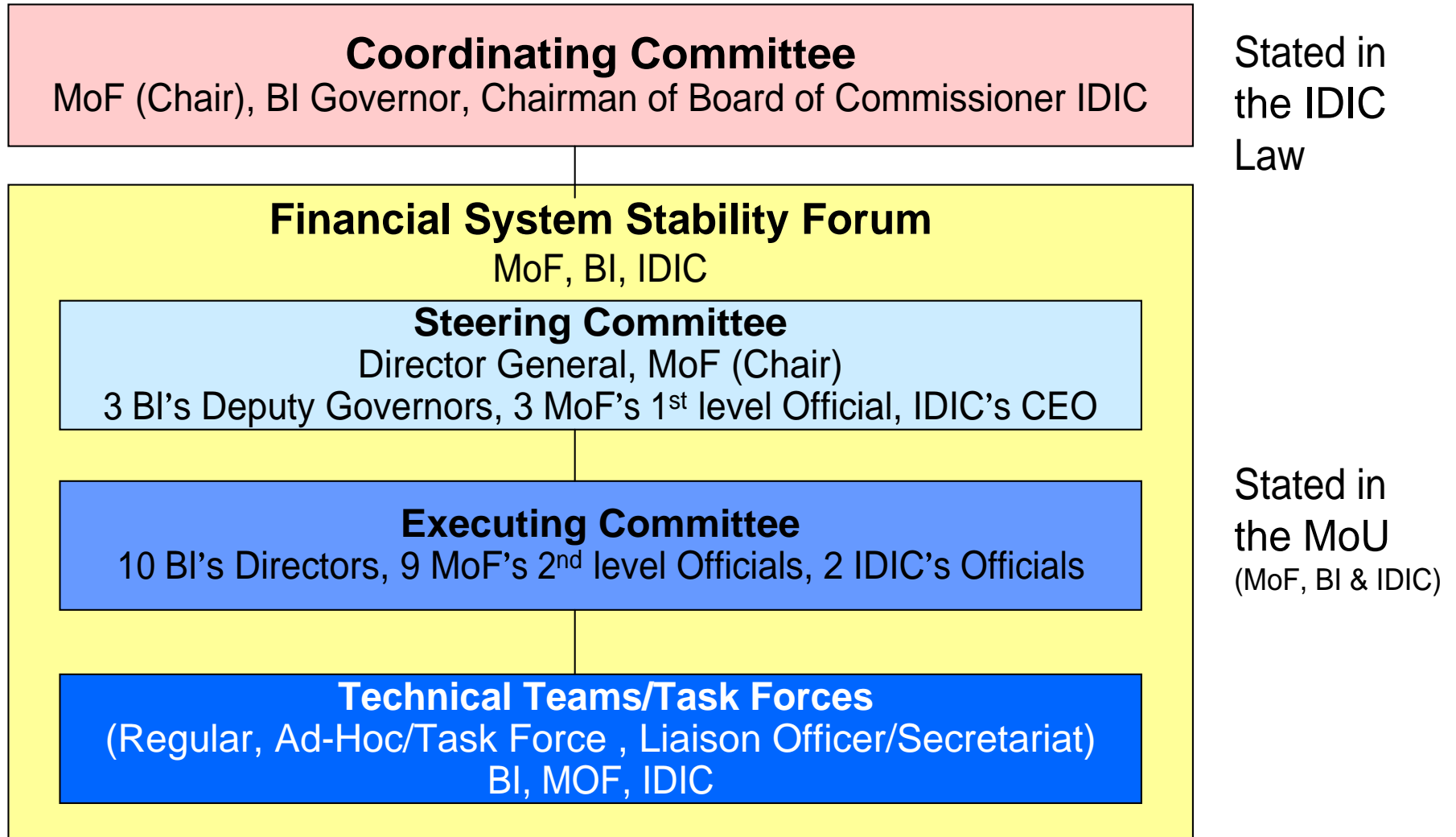
# Coordination among Financial Safety Nets Players

- BI and IDIC signed a MoU in 2006 which covers regular information sharing for normal and problem banks as well as cooperation in closing insolvent banks.
- Basically, there are three possibilities regarding the resolution of problem banks:
  - In case of failing **banks without systemic effect**, BI will transfer the bank to IDIC for resolution. Prior to transfer, BI will inform IDIC and discuss about the bank's problem and condition.
  - If BI identifies that **problem bank** has a liquidity problem **with a systemic effect** or contagion risk, it will call Finance Minister for meeting to decide for extension of emergency liquidity assistance.
  - In case the **problem bank is insolvent with a systemic effect**, BI will call Coordinating Committee for meeting to determine resolution measures of the failing bank.

As prescribed in the IDIC Law, the Coordinating Committee consists of Finance Minister, Governor of Bank Indonesia and Chief Commissioner of IDIC.

- Financial System Stability Forum consist of high level officers from MoF, BI and IDIC was established to support Coordinating Committee.
- To provide a solid legal framework, policy for maintaining financial system stability including coordination mechanisms among authorities is set out in the Indonesian Financial Safety Net (FSN) Act which has been drafted by a joint task force of officials from Ministry of Finance, Bank Indonesia and the IDIC.

# Financial System Stability Committee



# Function and Task of FSSF

- FSSF is a forum for coordination and information exchange between BI, MoF and IDIC in maintaining financial system stability.
- FSSF is established based on Memorandum of Understanding between Ministry of Finance, BI's Governor and Chief of Board of Commissioner of IDIC on Financial System Stability Forum (FSSF) of 30 December 2005.
- The Forum is organized in two levels: Steering Forum and Executing Forum. In addition, Task Force is formed to support the Executing Forum.
- Steering Forum is responsible to provide recommendation to Coordinating Committee on financial system stability policies including management and resolution of problem bank with systemic risk.

# Current Initiatives on Financial Stability

- Continuing the implementation of **Indonesian Banking Architecture** which is aimed at improving the effectiveness of banking supervision and the performance and soundness of the banking industry
- Formulating **Indonesian Financial System Architecture** with cooperation with related agencies
- Finalising the draft of the **Indonesian Financial Safety Nets** law to provide a clear legal basis for maintaining financial system stability
- Developing detailed **Crisis Management Protocols**

# Key Challenges and The Way Forward

- How to ensure both macro and micro supervisory objectives - to maintain financial stability and ensure depositor protection - are effectively attained. Difficulty in identifying and managing systemic risk. Crises episodes show that effective micro-prudential supervision which is aimed at ensuring individual soundness of a bank must be combined with a macro-prudential surveillance to ensure financial system stability.
- For countries which do not yet have a crisis management framework it is important to develop a comprehensive financial safety nets, consisting of: (i) an explicit and limited deposit insurance scheme; (ii) a well-defined and transparent LLR both in normal times and during systemic crises; and (iii) a clear crisis management framework.
- The financial crises are often repeated, but there were no two crises alike. The financial crises are also difficult to predict and, thus, to avoid. Hence, both crisis prevention and crisis resolution are crucial to ensure the resilience of the financial system. The key is 'be well prepared' - always expect the unexpected. A well-devised framework is essential, but effective implementation is much more important. Therefore, a capacity building e.g. by performing a crisis simulation is indispensable.

## Annex 2. Selected References

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