# Managing System-wide Financial Crises
## - A Macro Approach -

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# What is a system-wide financial crisis?

- Ordinary financial crisis= toppling of dominoes
  - Micro prudential regulations
  - Orderly resolutions of individual financial institutions
    - Early intervention
    - Resolvability etc.
- System-wide financial crisis = Large and long-lasting quakes that could topple most of the dominoes on the table

# Title II won’t work as intended

- Uncertainties over which dominoes may fall next
- Long period of balance sheet adjustments
- Could develop into sovereign crisis, currency crisis, hyper inflation…
- Trying to “orderly” liquidate individual financial institutions could trigger “disorder” in the entire financial system

# Approach toward a system-wide financial crisis

- Crisis prevention = Macro prudential regulations in addition to micro prudential regulations

- Crisis management = Macro approach for an orderly *financial system* in addition to orderly liquidations of *individual financial institutions*

# Doubts over feasibility of DFA Title II

- Most independent analysts and many people active in financial markets regard this proposition as unproven at best and, most likely, simply incorrect. -- *MIT Professor Johnson*

- Moody's continues to see the probability of support for highly interconnected, systemically important institutions as very high, although that probability is lower than it was during the financial crisis.– *Moodys'*

- As currently structured, many large banks and nonbank SIFIs maintain thousands of subsidiaries and manage their activities within business lines that cross many different organizational structures and regulatory jurisdictions. This can make it very difficult to implement an orderly resolution of one part of the company without triggering a costly collapse of the entire company. – *Sheila Bair*

# Problem No.1

- Lack of international framework for cross-border bank resolution

→ Sticking to Title II or a no bail-out policy would make it more difficult to achieve international agreements

# Problem No.2

- They are still too large and too complex to be resolved orderly

→ Break up the banks!

-- *Johnson, Bair*

→Can we? Should we?

-- *Johnson, Tarullo*

# Problem No.3

- Even if we can solve problems No.1 and No.2, Title II is infeasible for a system-wide financial crisis

- Japan maintains the systemic risk exception clause in the Deposit Insurance Act

# Lessons learned from Japan’s experience

- Non-SIFIs also cause systemic risk
- Need to orderly resolve financial firms in order to avoid turmoil in both domestic and overseas markets
- Temporary nationalization and public capital injection as a last resort are very important policy measures

# Sanyo's case

- Sanyo Securities filed for protection under the Corporate Reorganization Act on 11/3/1997
- Because of the court's protective order, Sanyo was unable to repay 9.3 billion yen (72.8 million dollars) borrowed from the money market
- The mere fact of a default destroyed market confidence, thereby drying up liquidity and triggering a financial crisis.

# Yamaichi’s case

- Yamaichi Securities announced its "voluntary closure" on 11/24/1997
- In Yamaichi’s liquidation process, its operations continued and various types of financial agreements were settled
- The BOJ provided a "special loan" to Yamaichi totaling over 1.2 trillion yen at the peak as a lender of last resort

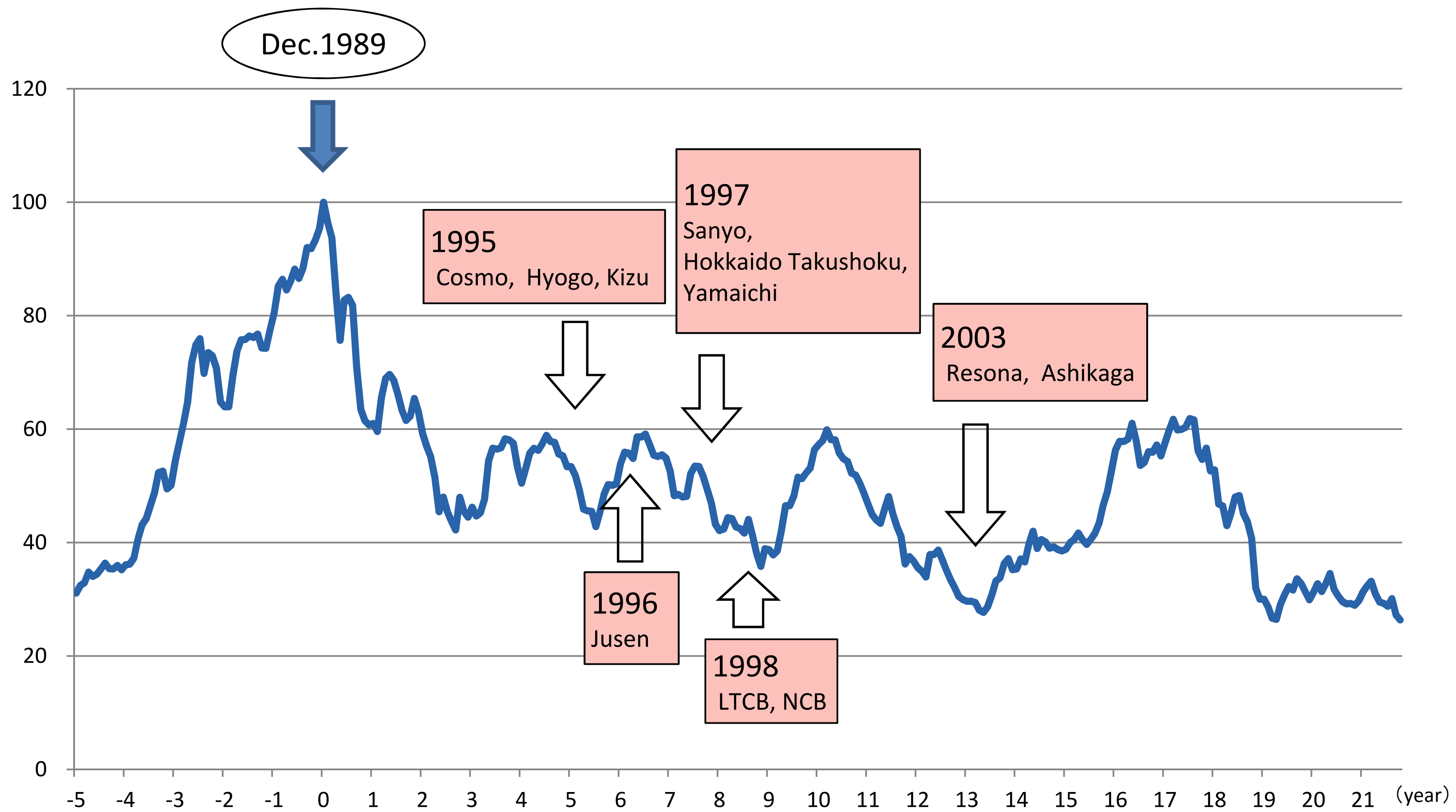
# Temporary nationalization and public capital injection

- In 1998 temporary nationalization and public capital injection were introduced through temporary legislation
- In 2000 the revised Deposit Insurance Act introduced temporary nationalization and capital injections as permanent measures to deal with systemic risk
- Under article 102 of the DIA, when deemed to be at risk of becoming an extremely serious obstacle to maintaining financial system stability, the Council chaired by the Prime Minister may decide:
  - to rescue solvent banks with capital injections
  - to temporarily nationalize insolvent banks

# Resona's case

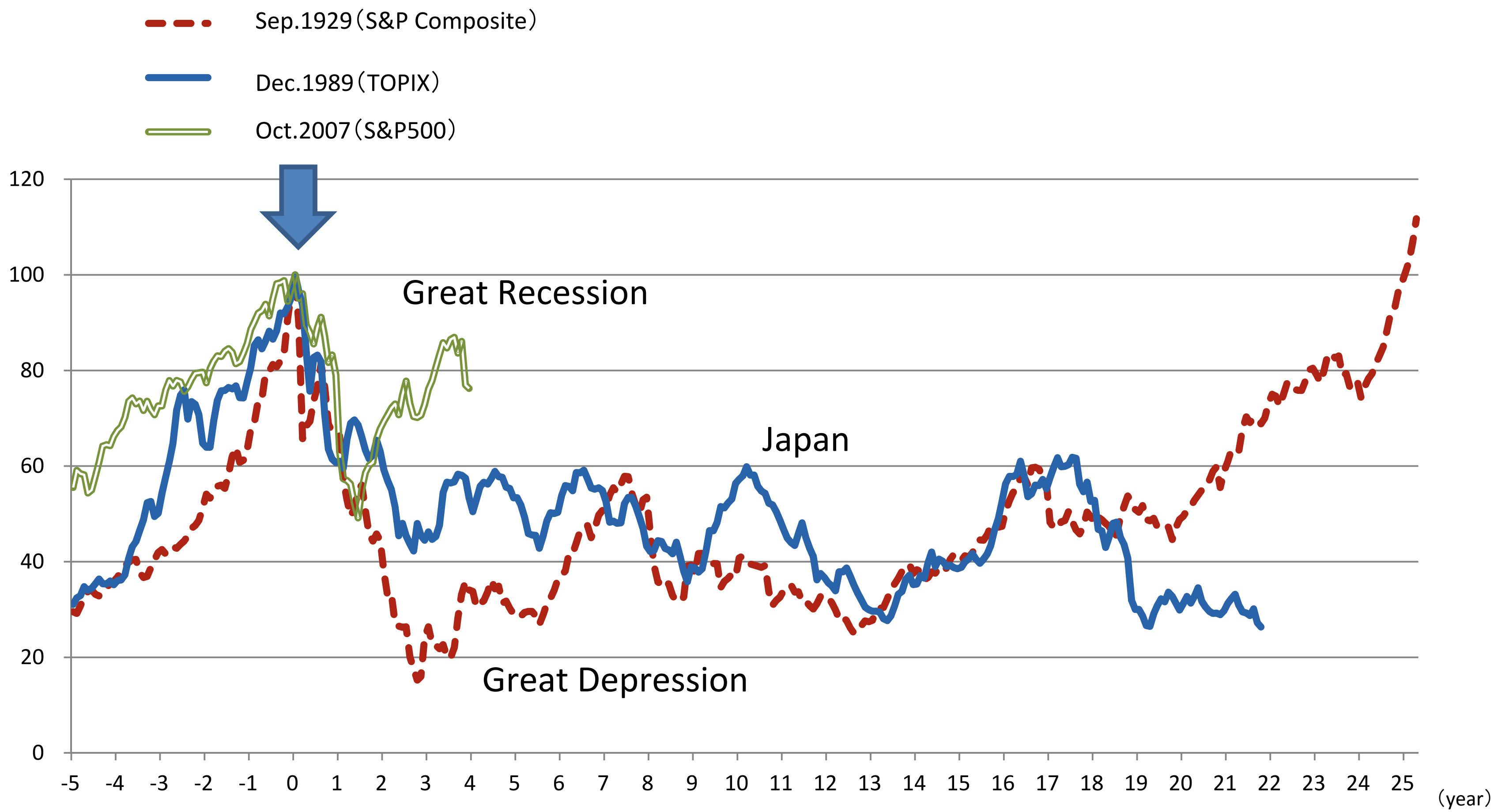
- In May 2003, the capital ratio of Resona Holdings had fallen below the regulatory minimum after reflecting the results of FSA's inspection
- The Council decided to inject about 2 trillion yen (16.8 billion dollars) of capital into Resona because it deemed the bank solvent
- The Council decided to invoke the systemic risk exception clause under the DIA allowing for a public capital injection without wiping out shareholders in order to maintain financial system stability

# Japan's system-wide financial crisis




(Note) TOPIX (December 1989 = 100)

# Great Depression & Great Recession



# Cases of system-wide financial crises

| | 1930s | 1990s～ （Japan) | 2007～ |
|---|---|---|---|
| Stock Index | S&P composite | TOPIX | S&P 500 |
| Peak | 31.30<br>(Sep. 1929) | 2859.57<br>(Dec. 1989) | 1539.66<br>(Oct. 2007) |
| 5 years to the peak | +238.4% | +221.7% | +80.2% |
| (the first) Bottom | 4.77<br>(Jun. 1932) | 1023.68<br>(Oct. 1998) | 757.13<br>(Mar. 2009) |
| Peak to (the first) bottom | -84.8% | -64.2% | -50.8% |
| New peak | Sep. 1954 | not yet | not yet |

| | 1930s | 1990s～　(Japan) | 2007～ |
|---|---|---|---|
| Prolonged period of crises | ①1930～1932<br>bank runs in several U.S. States<br>Credit -Anshtalt<br>②Feb.-Mar.　1933<br>nation-wide bank runs in the U.S. | ①1995, 1996<br>Several bank runs, Jusen<br>②1997<br>Sanyo, Hokkaido-Takushoku, Yamaichi<br>③1998<br>LTCB, NCB<br>④2003<br>Resona, Ashikaga | ①2007<br>Paribas shock, Northern Rock, SIVs<br>②2008<br>Bear Stearns, GSEs, Lehman, AIG<br>③2010, 2011<br>PIIGS and European banks |
| Implementation of restrictive fiscal and monetary policies | •Tight monetary policy continued after the crash of 1929<br>•Fed raised interest rate in 1931.<br>•Principles of balanced budget observed in early 1930s and 1937 | •Increase in consumption tax and medical co-pays, introduction of the Sound Budget law in 1996<br>•BOJ terminated zero interest rate policy in Aug. 2000 | •ECB raised interest rate in Jul. 2008, Apr. 2011 and Jul.2011<br>•Pressure for fiscal austerity |

# Will next time be different?

| | 1930s (U.S.) | 1990s (Japan) | 2007-2009 (U.S.) | Under DFA |
|---|---|---|---|---|
| Deposit Insurance | FDIC created | Expanded | Expanded | Expanded |
| Obligation guarantee | | Temporarily introduced (Permanent guarantee of payment & settlement account) | Temporarily introduced | Limited to a program for solvent banks and bank holding companies |
| Capital injection | Started in Mar. 1933 | Implemented in 1996<br>Restarted in Mar.1998 | Started in Oct. 2008 | Prohibited |
| Purchase of bad assets & loss sharing | | Oct.1998 ～Mar.2005 | PPIP in 2009 | Permitted only for orderly resolution |
| Temporary nationalization (with protection of creditors) | | Oct. 1998: LTCB<br>Dec. 1998: NCB<br>Nov. 2003: Ashikaga | Fannie Mae, Freddie Mac | Prohibited |
| Emergency funding by the central bank | Introduced | 22 cases implemented since 1995 | TSLF, PDCF, AMLF, CPFF, MMIFF, TALF, Maiden Lane I-III | Limited to a facility for solvent borrowers |

# System-wide stress test + Backstops

- Experience of SCAP

  "there needs to be a credible capital backstop so that market participants can be sure banks will be able to raise the capital that they need under a stress environment"

  -- *Dudley, FRBNY*

- DFA introduced Sec.165(i) while prohibiting any backstop mechanism

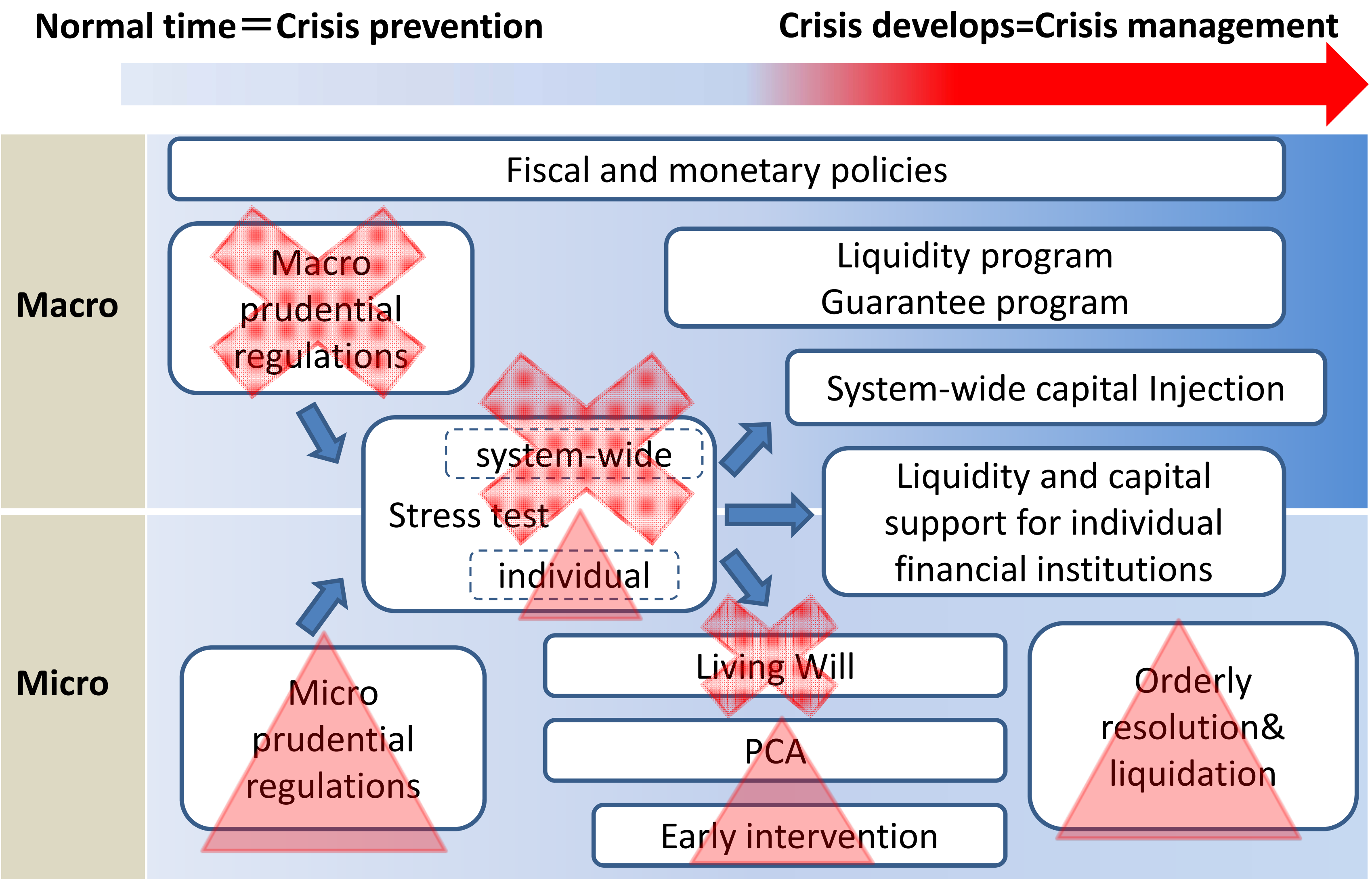
# Examples of regional & international backstop schemes

- EFSF (European Financial Stability Facility)
- Bank Recapitalization Fund to recapitalize major local banks in small and medium-size developing countries established in 2009 by IFC and JBIC (Japan Bank for International Cooperation)
- Why don’t we have a more general scheme to deal with crises in broader regions & banks?

# Fair treatment of nonbanks

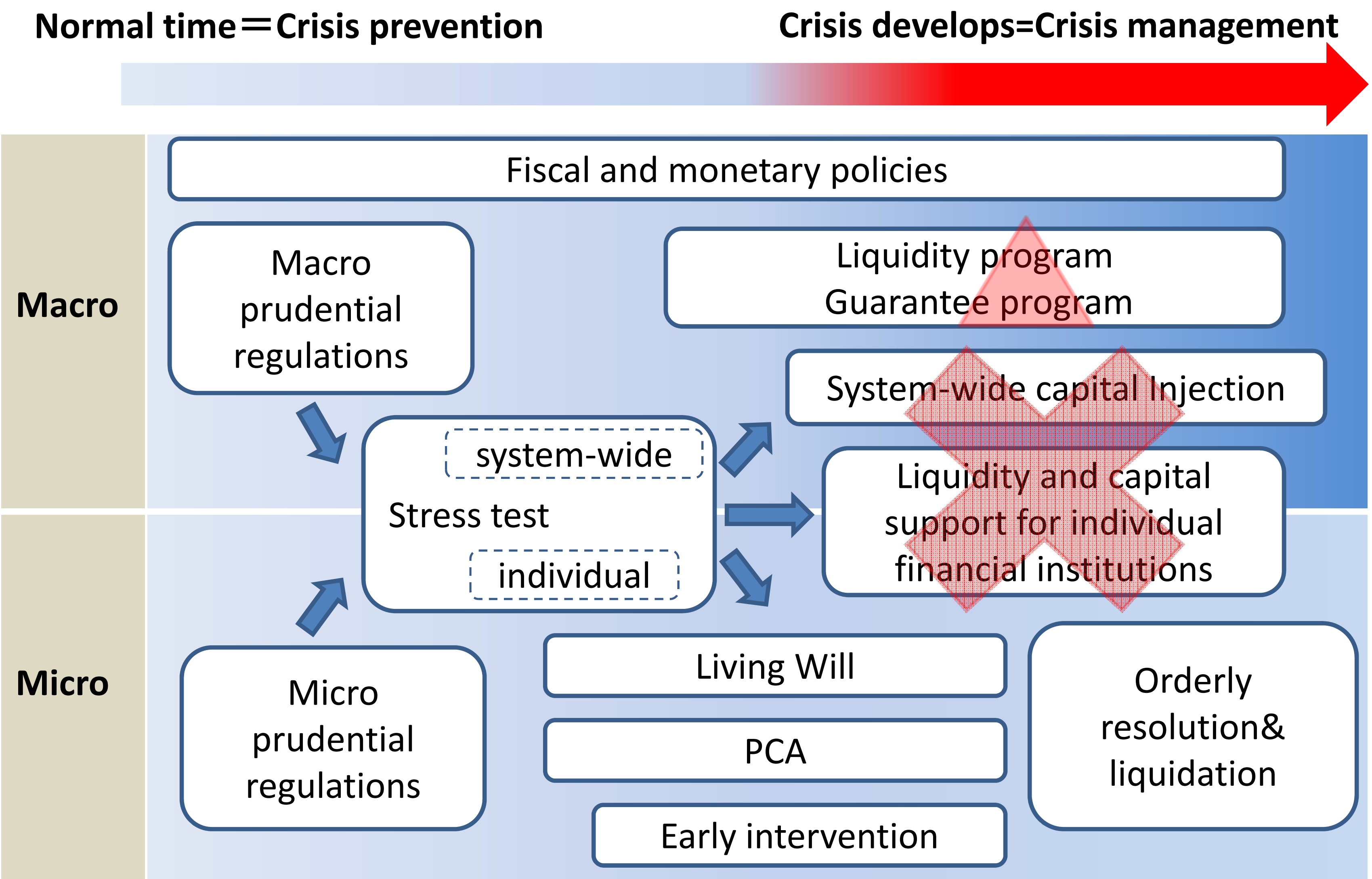
- Deposit insurance type of scheme for non-banks -- *Ricks, Gordon & Muller*
- DFA limits 13(3) emergency lending by FRB
- No guarantee program by FDIC for nonbanks
- Shall we turn nonbanks into bank holding companies again or initiate their massive liquidation?
- Access to central bank liquidity even in ordinary times →Better supervision

# Regulatory framework- *Before* DFA




（Note）×means unavailable, △means insufficient

# Regulatory framework- *After* DFA

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# Better and realistic regime