



# Bank Resolution and Crisis Management

- Japan's experiences

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## ***I. Financial Crisis -Japan's experiences-***

- Remarkable Similarities with the Recent Financial Crisis

## ***II. Crisis Management in Japan***

- Institutional Framework
- BoJ's Policy Actions

## ***III. Some Implications***

- Best Crisis Prevention  $\neq$  Best Crisis Response
- Interactions and Feedback Loops
- Liquidity and Solvency
- Central Bank Policies



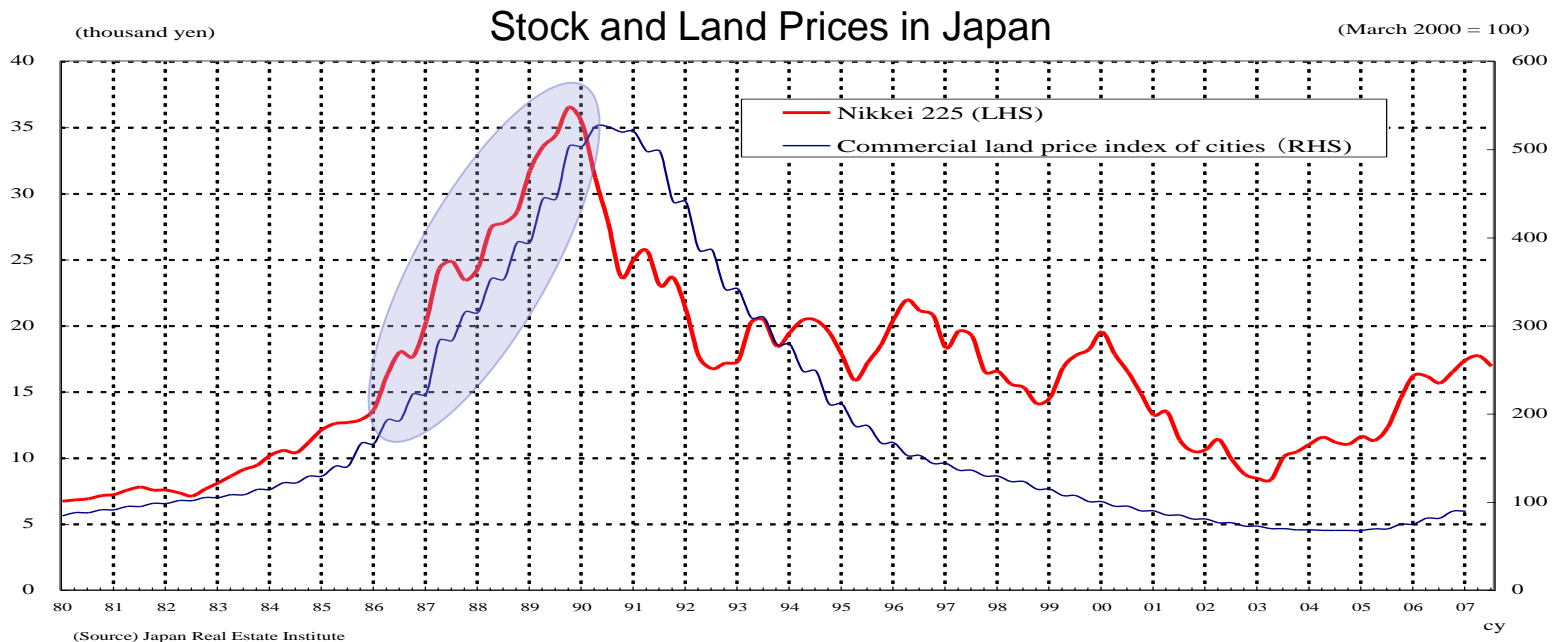
## ***I . Financial Crisis – Japan's experiences***

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Remarkable similarities between the recent crisis and Japan's crisis in 1990s

## ***I-1. Asset Price "Bubble" in late 1980s***

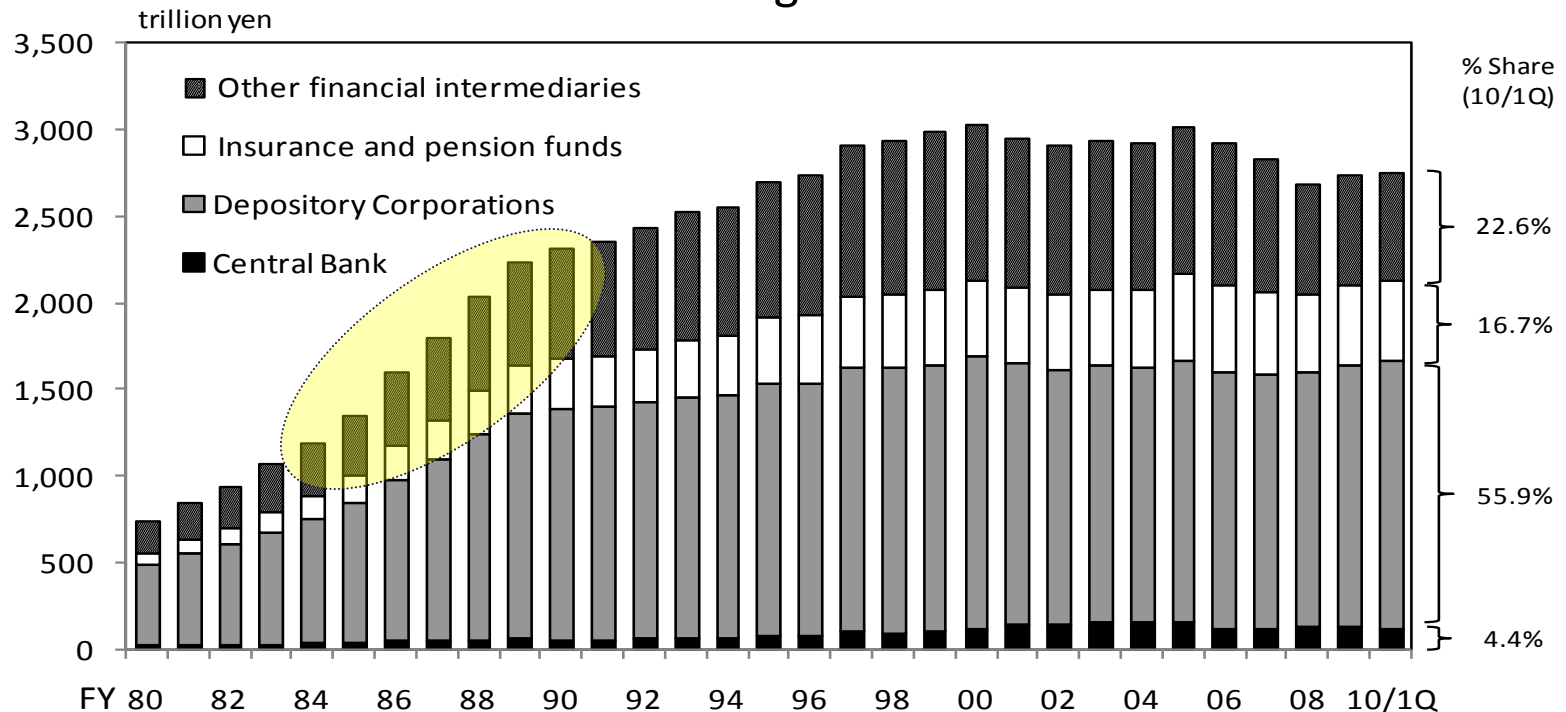
- **Co-existence of relatively high growth and low inflation**
  - Many argued that such developments were attributable to productivity growth.
- **Substantial Rise in Asset Prices**
  - Similar to the period of global "Great Moderation" before 2007



## ***I-2.Credit Expansion during the “Bubble” Period***

### **- Contribution of “Shadow Banks” (Non-banks)**

**Amount Outstanding of Financial Assets**



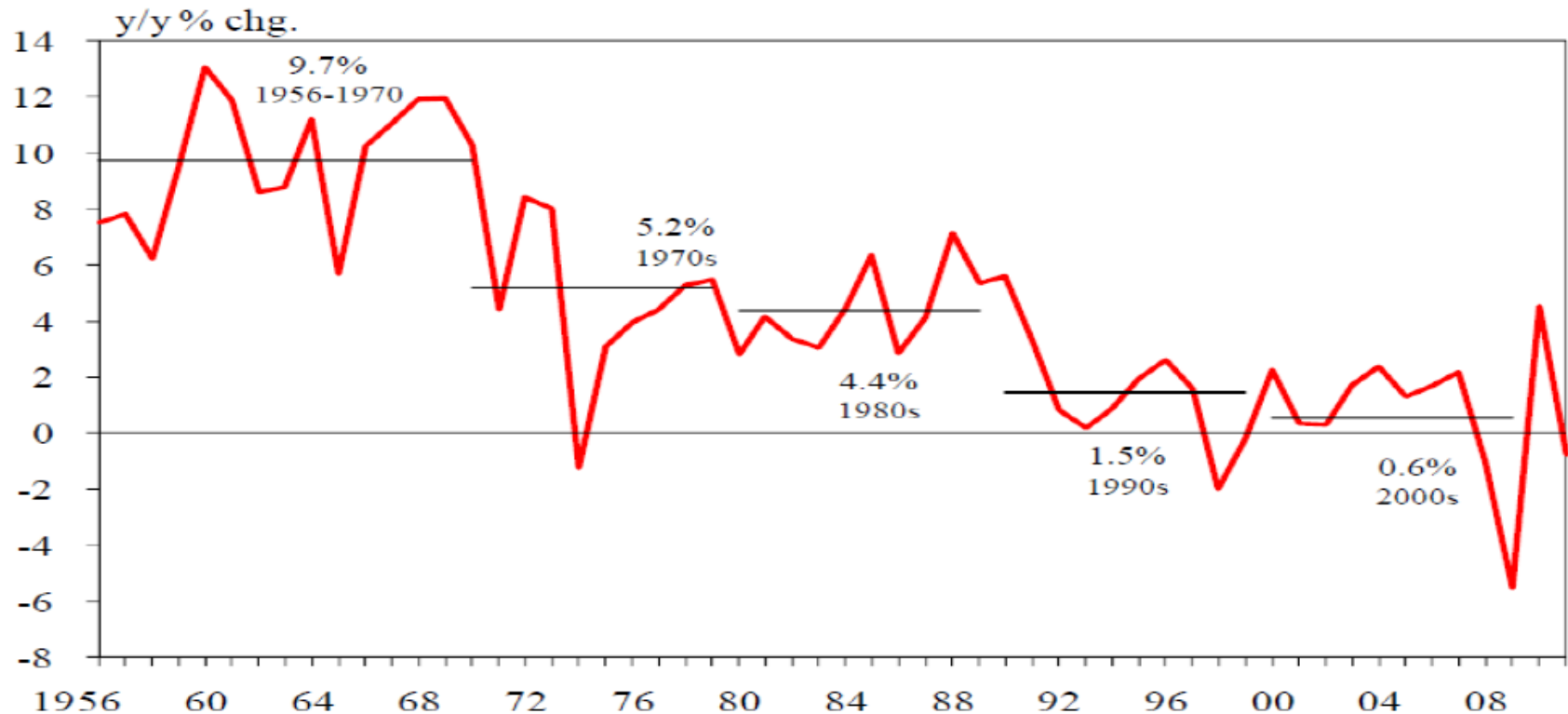
Note: 1) “Other financial Intermediaries” include Financial dealer/brokers, Public Financial Institutions, Nonbanks and Securities investment trusts.

2) Other financial institutions, classified as “Financial auxiliaries”(Stock Exchanges, FX brokers, etc.) have been excluded from above, because their financial assets are marginal (Share in 10/1Q: 0.4%).

Source: Flow of Funds Accounts, Bank of Japan

## ***I-3. Real GDP Growth***

■ After the crisis, Japan's economy had been weak for a prolonged period.



Source: Cabinet Office, *Annual Report on National Accounts*.

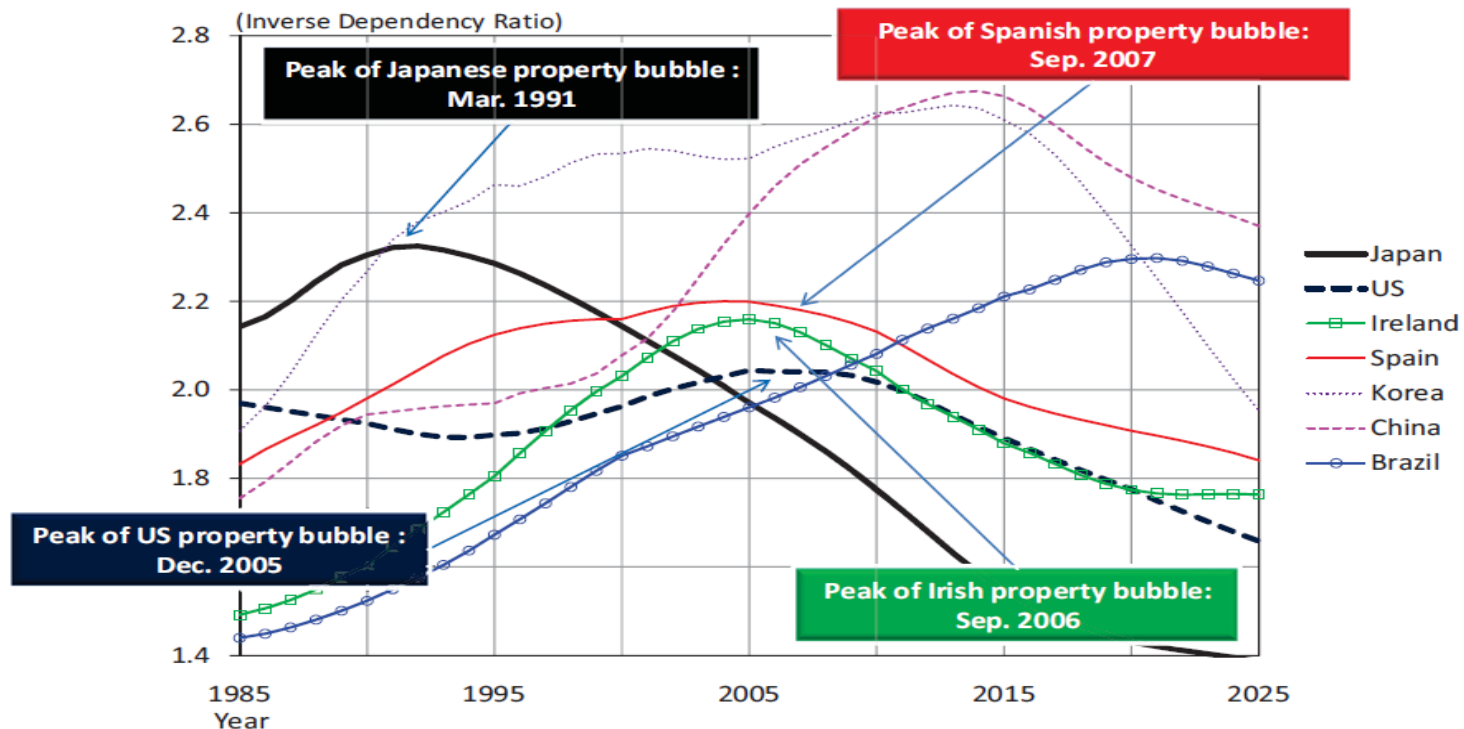
# ***I-4. Real Estate Bubble and Demographic Transition***

— Another Similarity between Japan and other economies

■ In most countries, real estate bubbles coincide with demographic transition.

## **Demographic “Bonus” and Bubbles**

Inverse Dependency Ratio: Ratio of Working-Age Population to the Rest.  
= How many people of working age have to provide for one dependent person?



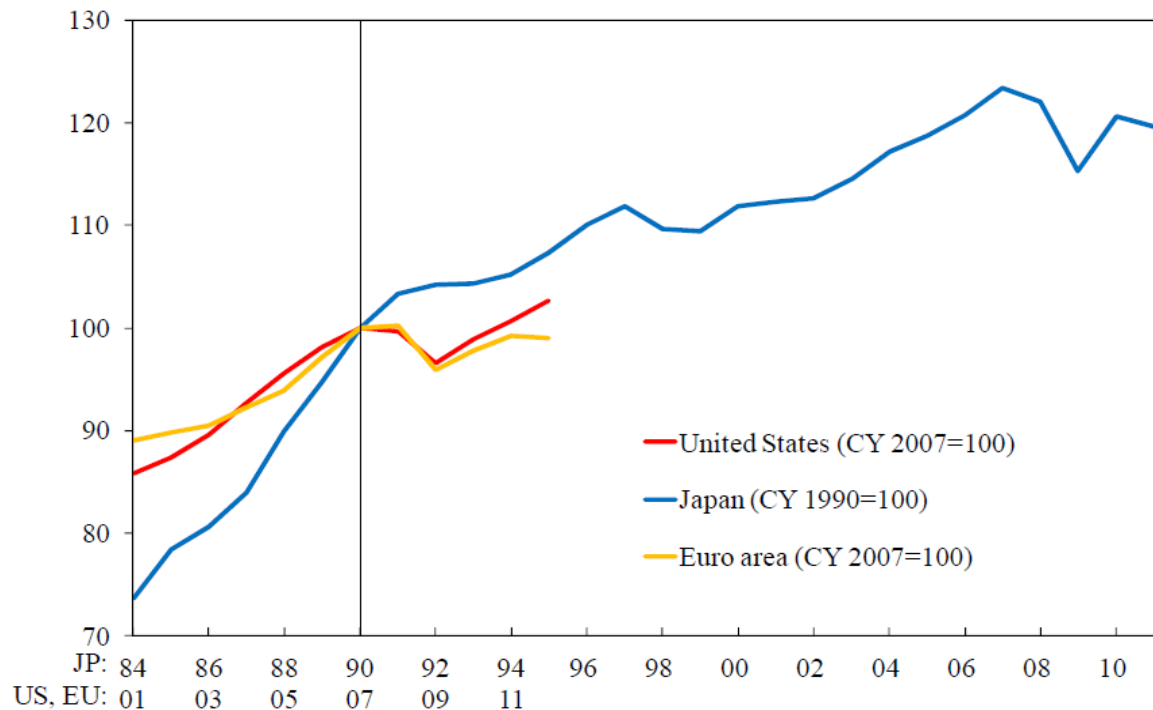
Source: United Nations World Population Prospects; The 2010 Revision Population Database.

## ***I-5. Real GDP: Slow Recovery after the Financial Crisis***

— Comparison of US, Euro Area and Japan

### **■ After the crises, economic recovery is likely to be sluggish.**

— Due to strong downward pressures stemming from B/S adjustment, malfunctioning of financial systems and weak risk-appetite as well as weaker growth potential.







## ***I-6. From Governor Shirakawa's Speech***

— “Way Out of Economic and Financial Crisis:  
Lessons and Policy Actions” (April 23, 2009)

- “I would next like to point out **remarkable similarities** between Japan's crisis experience from the 1990s to early this century and what the US has undergone in the past several years. These commonalities fall into five categories.”
  1. First, financial crises in both countries were preceded by **high economic growth and low inflation** for an extended period of time.
  2. Second, both Japan and the US **took time** to recognize the collapse of the economic bubbles and to appreciate its substantive implications for the broader economy.
  3. Third, **liquidity strains** have been a prime catalyst for many of the past financial crises.
  4. Fourth, even when financial stability was in jeopardy, **decisive measures such as public capital injections did not come** until the market disruptions reached a critical point in our two countries.



5. Fifth, there are similarities on monetary policy front.

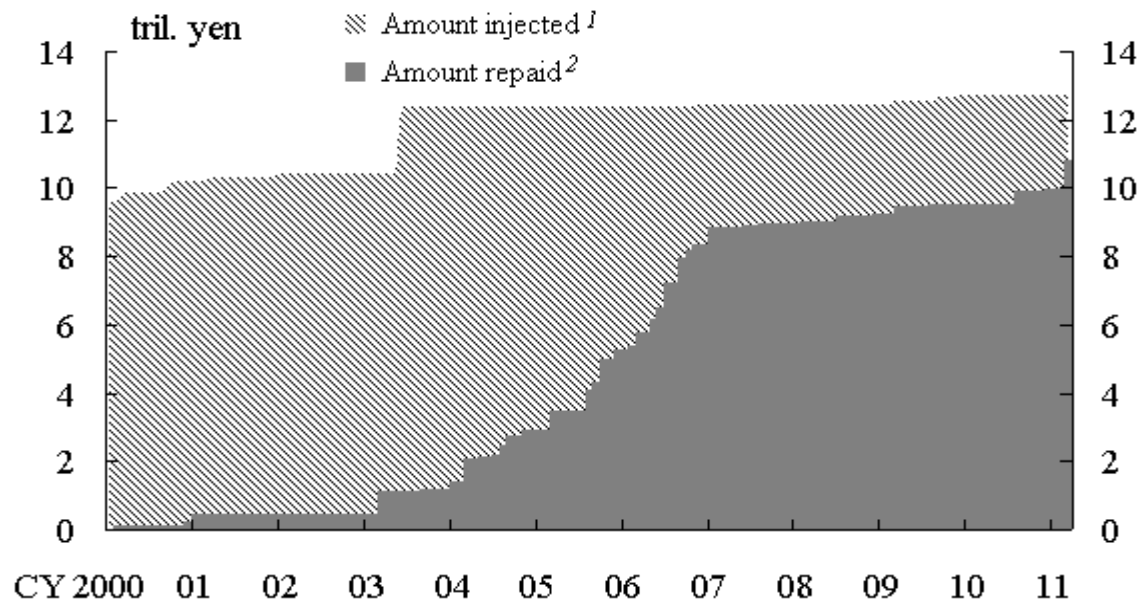
During the crisis, the Bank of Japan provided **ample liquidity** and brought the **policy rate down to zero**. In so doing, the Bank of Japan **extended the maturities** of liquidity-providing operations while **expanding the range of acceptable collateral and counterparties**. We also introduced a **special lending facility** to ease funding stress in the markets. Furthermore, we **purchased private-label securities** such as asset-backed commercial paper (ABCP) and asset-backed securities (ABS). In this crisis, the US authorities have implemented a variety of measures similar to those innovative steps the Bank of Japan took in the past.

- “In a severe economic crisis, policymakers have to be careful not to mistake a temporary rebound in the economy, or a **false dawn** I would say, for a genuine recovery. “

## I-7. Public Capital Injection

- Although the idea of public capital injection was expressed by then-PM Miyazawa in 1992, due to **strong public hostility against using taxpayers' money**, Japanese government infused sizable amount of capital into major banks as late as in 1999.
- Most of the injected public money has already been repaid.

(Repayment of the injected public funds)

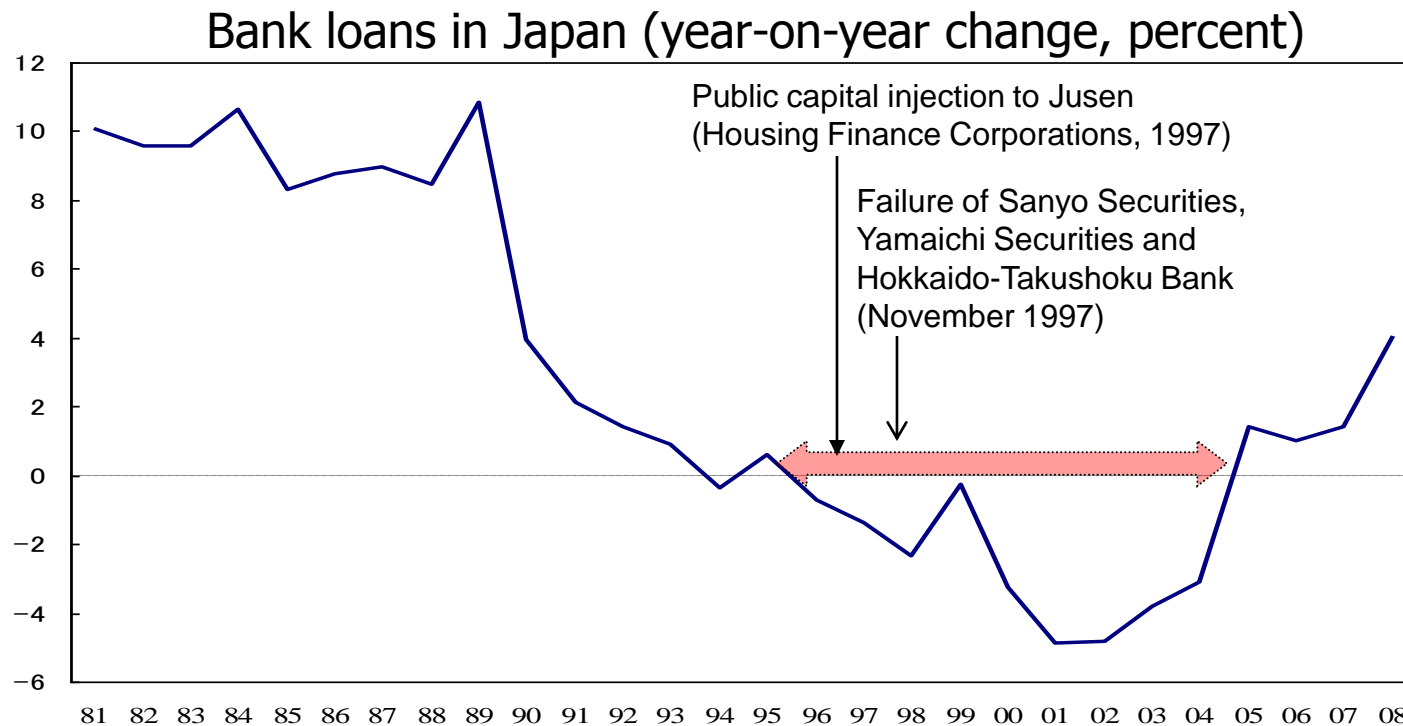


Notes: 1. The sum of public funds injected pursuant to the Early Strengthening Law, the Financial Function Stabilization Law, the Deposit Insurance Law, the Financial Reorganization Promotion Law, and the Financial Functions Strengthening Law.

2. At face value.

## ***I-8. Weak Bank Lending after the Crisis***

- Bank loans in Japan continued to decline for a decade.
- The losses stemming from financial malfunctioning were much bigger than taxpayers' direct losses associated with public capital injection.





## ***II. Crisis Management in Japan***

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# ***II - 1. BOJ's Mandate in Financial Stability***

## *- The Bank of Japan Act*

### Article 1 of BOJ Act (Purpose)

#### Para 1:

The objective of the Bank of Japan, as the central bank of Japan, is to issue banknotes and to carry out currency and monetary control

#### Article 2 of BOJ Act

#### **Price Stability**

#### Para 2:

In addition to what is prescribed by the preceding Paragraph, the Bank's objective is to ensure smooth settlement of funds among banks and other financial institutions, thereby contributing to the maintenance of an orderly financial system

#### The role of BOJ for financial stability

- Central banking services, such as settlement through BOJ accounts
- On-site examination and off-site monitoring
- Lender of Last Resort
- Macro-prudential Policy



## ***II -2. On-site Examination by the BOJ***

### **- Responsibilities of BoJ and Japan FSA**

	<b>BoJ On-site Examination</b>	<b>Japan FSA On-site Inspection</b>
Based on	Bank of Japan Act art.44 Contract with BoJ counterparties	Banking Act Art.25, etc.
Target	Banks, Trust Banks, Foreign banks, Shinkin Banks Securities Firms, Bankers' Associations (Holders of BoJ Account)	Banks, Trust Banks, Foreign banks, Shinkin Banks Credit Unions (Securities Firms ⇒ SESC <Securities &Exchange Surveillance Commission>) Insurance Firms, Consumer Finance Companies, etc.
Number of Examination/ Inspection	100 (2010FY)	515 (2011FY)



## ***II -3.BoJ's Wide-ranging Policy Actions during and after Japan's Financial Crisis***

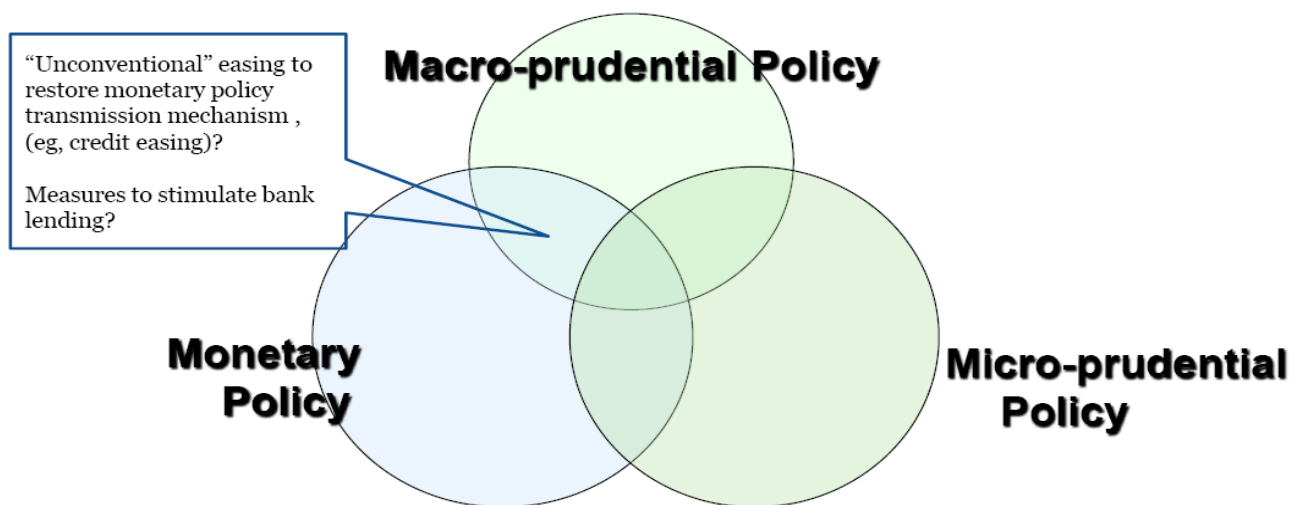
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- Massive Liquidity Provision
  - Zero-Interest-Rate Policy (ZIRP)
  - Quantitative Easing (QE)
  - Support for Bank Lending (FLS-type schemes)
- +**
- Outright Purchases of ABSs and ABCP
    - The BoJ tried to strengthen the transmission mechanism of monetary easing against the background of banks' weak financial intermediary function.
  - Outright Purchases of Stocks Held by Banks
    - The BoJ tried to reduce market risks held by banks, to alleviate capital constraints and to restore banks' risk-taking capacity.



## ***II -4. Monetary and Prudential Policies***

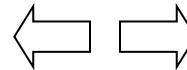
- After financial crises, CBs are likely to face “**zero lower bound**” of nominal interest rates due to strong downward pressures. Such circumstances may require CBs’ “**unconventional**” monetary easing.
- After financial crises, it is important for CBs to restore the soundness of financial systems, in order to restore both **financial stability** and **monetary policy transmission mechanism**.
- Thus, it is not easy to draw a clear line between **unconventional monetary policy** and **macro-prudential policy** (eg. FLS, credit easing).



## ***II-5. BoJ's Outright Purchase of ABS, ABCP and Stocks***

- BOJ Act considers the risk associated with each policy measure, and tries to strike the balance between due process and flexibility.
- BOJ Act Articles 15(1) and 43(1) enable the BOJ to make use of widely-ranging policy tools, if necessary.
  - BoJ bought ABS and ABCP as a part of unconventional monetary policy (QE) based on the Article 15, and stocks held by banks as macro-prudential policy based on Article 43.

smaller risks of losses  
more flexibility



larger risks of losses  
heavier accountability requirement

Article	BOJ Act Article 15 (1)	BOJ Act Article 43 (1)
Procedure	Solely by BOJ's decision	Authorization from PM and FM is needed.
Policy measures	<ul style="list-style-type: none"> <li>✓ Massive liquidity provision</li> <li>✓ Outright purchase of ABS and ABCP from the market</li> <li>✓ Outright purchase of government securities from the market</li> </ul>	<ul style="list-style-type: none"> <li>✓ <u>Purchase of stocks held by banks</u></li> <li>✓ <u>Provision of subordinated loans to banks</u></li> </ul>



## ***II -6. BoJ's Decision-making***

- BoJ has two types of policy board meetings, namely, Regular Meetings and Monetary Policy Meetings (MPMs).
- BoJ decided outright purchase of stocks in the regular meeting (in 2002), and outright purchase of ABCP and ABS in the MPM (in 2003).

Meetings	Policy Board Meetings	
	Regular Meetings	Monetary Policy Meetings (MPMs)
<b>Purpose</b>	<b>To make decisions on matters other than “monetary control matters”</b>	<b>To make decisions on “monetary control matters” defined by Article 15 (1) of BOJ Act</b>
<b>Examples of Policy Actions</b>	<ul style="list-style-type: none"><li>✓ <u>Purchase of stocks held by banks</u></li><li>✓ <u>Provision of subordinated loans to banks</u></li><li>✓ <u>LLRs</u></li></ul>	<ul style="list-style-type: none"><li>✓ <b>Monetary Policy Decisions</b></li><li>✓ <b>Outright purchase of ABS and ABCP from the market</b></li></ul>

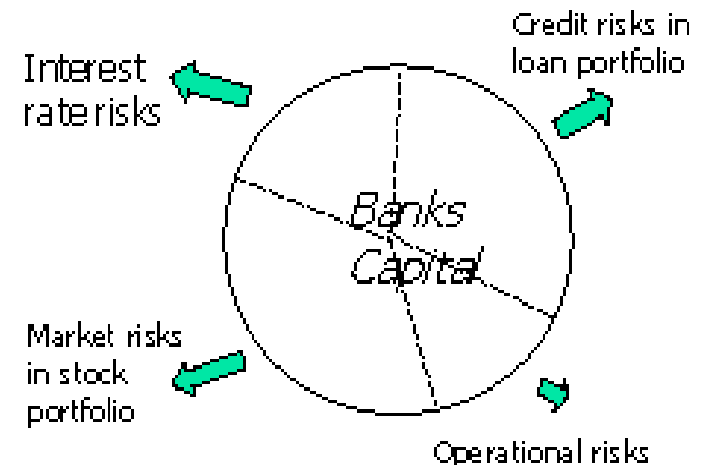
## ***II-7. BoJ's Stock Purchasing***

- **BoJ's stock purchasing aimed at restoring banks' risk-taking capacity and stimulate bank lending.**

Outline for Stock Purchasing  
<Nov. 2002-Sep.2004>

- ✓ Eligible institutions: Any bank whose stockholding exceed its Tier I capital
- ✓ Price: at the market price
- ✓ Amount: a total of 2 trillion JPY (later increased to 3 trillion JPY)
  - + limit per bank (the lesser of (a) the amount exceeding the bank's Tier I capital, or (b) 500 billion JPY)
  - + limit per issuer

(Banks' Risk Management Practice)



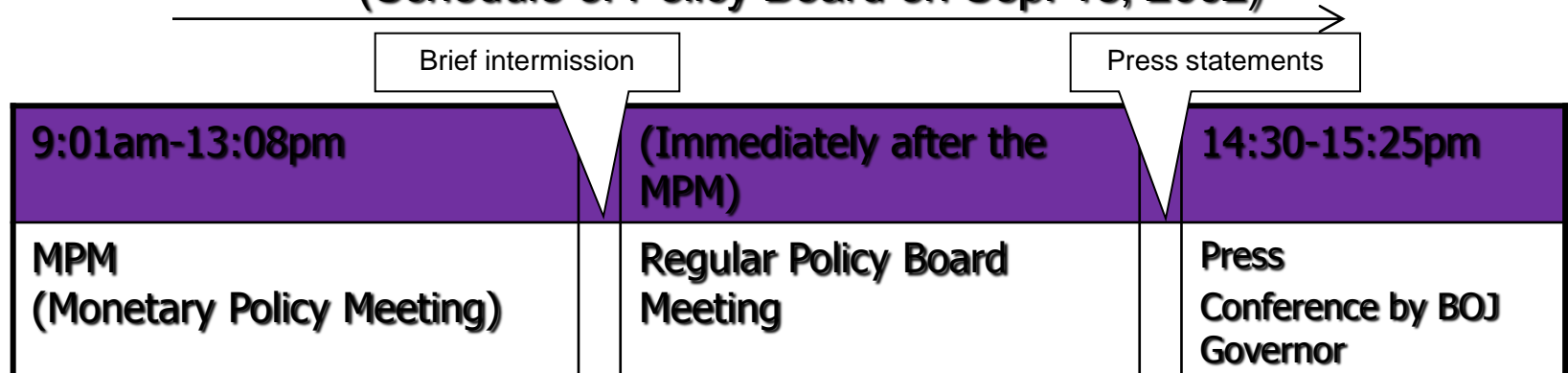
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## ***II-8. BoJ's Communication Strategy***

### ***–Decision on Sep.18, 2002***

- Communication strategy is important for maintaining the consistency of the CB's monetary and macro-prudential policies.
- On Sep. 18, 2002, BOJ held MPM and regular Policy Board Meeting, where the stock purchasing was decided, on a “**back-to-back**” basis, followed by the **Governor's comprehensive press conference**.

#### **(Schedule of Policy Board on Sep. 18, 2002)**





## ***II -9. BoJ's LLR (Lender of Last Resort) Function***

— “Four Principles” for BOJ’s special loans (uncollateralized LLR loans to individual financial institutions) <published on May 28, 1999>

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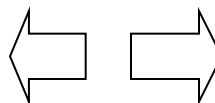
- There must be a strong likelihood that **systemic risk** may materialize.
- There must be **no alternative** to the provision of central bank funds.
- All responsible parties are required to take clear responsibility to **avoid moral hazard**.
- The **financial soundness of the BoJ** should not be impaired.



## ***II -10 . Legal Aspects of BOJ's Lending Facility***

- BOJ Act considers the risk associated with each BoJ facility, and asks more stringent procedure for special uncollateralized loans.

smaller risks of losses  
more flexibility



larger risks of losses  
heavier accountability  
requirement

Article	Article 33 (1)	Article 38 (for special loans)
Procedure	Solely by BOJ's decision	Request from PM and FM is needed.
Policy measures	Lombard-type Facility (Ordinary loan provision to financial institutions on a collateralized basis)	Loan provision to financial institutions on an uncollateralized basis (e.g. Loan provision to Yamaichi Securities Co.)

## ***II -11. LLR Lending to Yamaichi Securities Co.***

- Japan's full scale crisis was also triggered by the failure of the nation's fourth biggest securities firm.

- **In order to avoid systemic crisis and cross-border spillovers, the BoJ provided LLR Liquidity to Yamaichi in Nov. 1997, on the assumption that Yamaichi was not insolvent.**
- **Nonetheless, Yamaichi became bankrupt on June 1999, and the BoJ registered the credit loss of 111.1 bil. JPY.**
- **BoJ believes that LLR liquidity to Yamaichi was necessary to prevent cross-border systemic consequences. This fact also illustrates the difficulty in distinguishing solvency issues from liquidity issues in a period of stress.**





## ***II -12. BOJ's provision of LLR to Yamaichi Securities Co. (Nov. 1997)***

Statement by the Governor (Nov.24, 1997) - excerpt	Statement by the Governor (Jun.2 1999) - excerpt
<p>"the Bank of Japan, as the nation's central bank, in order to fulfill its responsibility of maintaining stability of the financial system, has decided to take the extraordinary measure of providing necessary liquidity pursuant to Article 25 of the Bank of Japan Law, in cooperation with the main banks of the firm so that <b>it may return customer assets, orderly settle outstanding transactions and withdraw from overseas activities.</b></p> <p><b>The firm is not insolvent.</b> Furthermore, the government will take appropriate steps to resolve this situation and to establish a comprehensive resolution framework by legislating for the Securities Deposit Compensation Fund, enlarging the Fund's financial base and by strengthening its functions. Therefore, we believe there will not be a case in which concerns regarding the full recovery of our funds may emerge.</p>	<p>"there was a serious concern that the inability of Yamaichi, which was conducting a wide range of business in domestic as well as overseas markets and serving a large number of customers, to fulfill its contractual obligations could cause a major disruption in both domestic and overseas markets, thus undermining the overall financial stability.</p> <p>In view of such considerations, the Bank of Japan considered it extremely important that, during the process of closing down Yamaichi, its outstanding contracts as well as overseas markets might be avoided, thereby ensuring the stability of the financial system as a whole. To date, the Bank of Japan has been informed by Yamaichi that <b>it has basically completed settlement of its regular business transactions, and therefore the Bank is of the view that the purpose of the liquidity provision has been sufficiently attained.</b></p> <p>Now that Yamaichi has been declared bankrupt, the Bank of Japan will endeavor to collect the funds it provided to Yamaichi by exercising its right in the course of bankruptcy procedures.</p>



### ***III. Some Implications***

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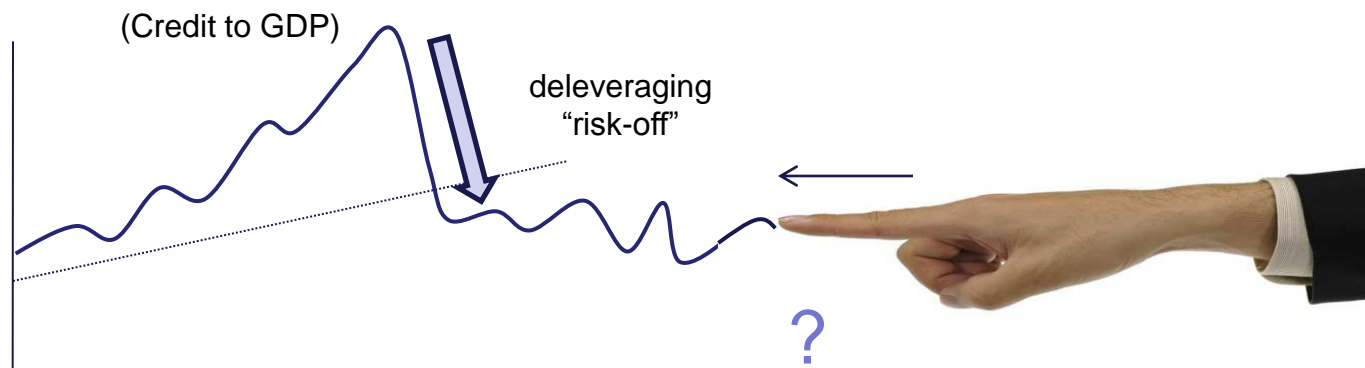
### ***III-1. Best Crisis Prevention ≠ Best Crisis Response***

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- **After the financial crisis, public opinions and politics become hostile against banks, and many people talk about future crisis prevention.**
- **Nonetheless, the negative impacts of the crisis is persistent, and what policymakers have to do first is to contain the negative impacts of **the current crisis**, before preventing **a future crisis**.**
  - Policymakers may face the conflicts between longer-term desirable goals (eg. prevention of moral hazard) and immediate responses (eg. bail-in, blanket deposit guarantee).
- **In terms of macro-prudential policies, what policymakers need first is **macro-prudential easing**, instead of tightening.**

## III-2. How to "Push on a string?"

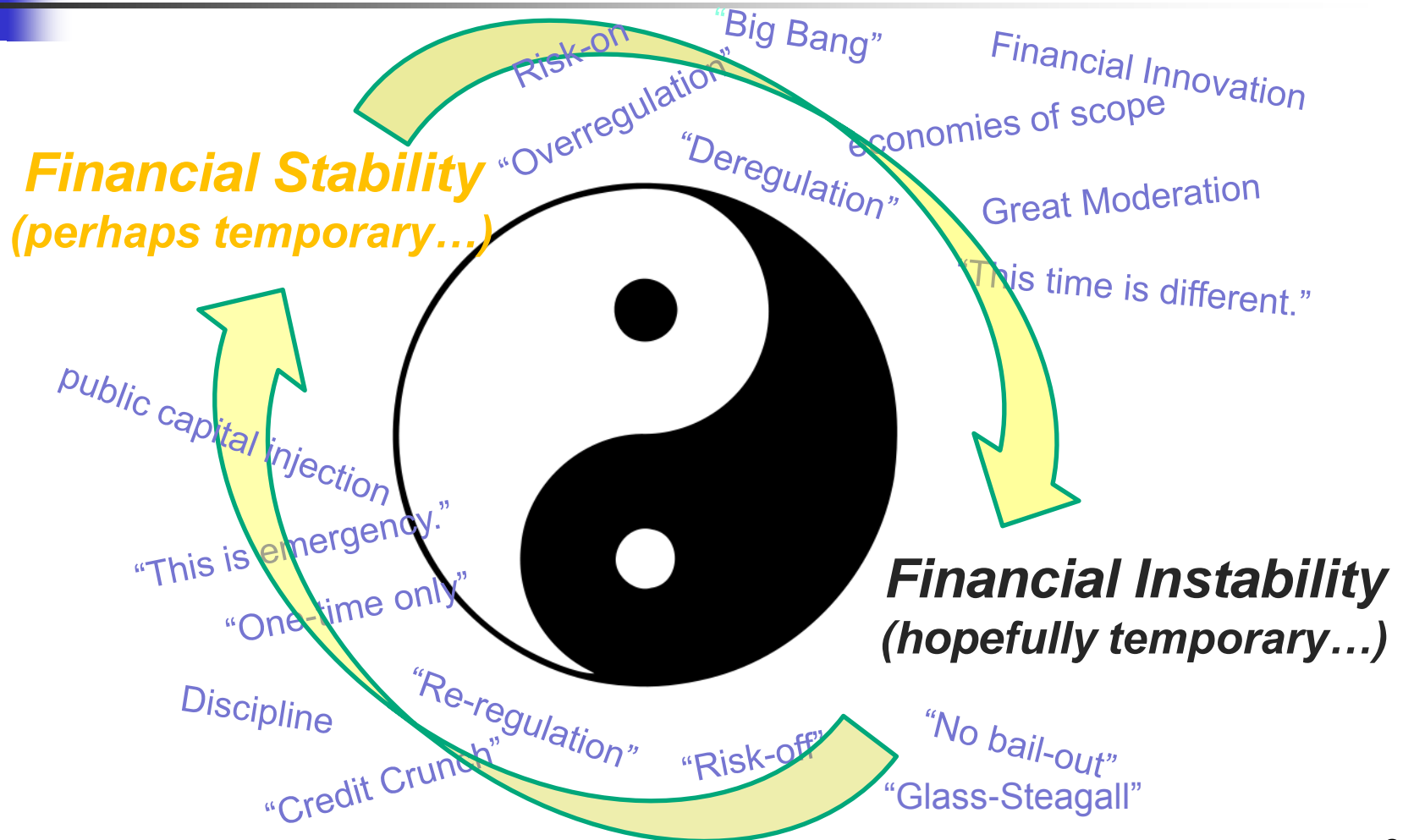
- Micro- and macro- prudential tools (eg, LTV, DTI,) are usually considered as those for “tightening” and encouraging “risk-off”.
- However, real challenges for policymakers after the crisis is to stimulate credit creation and encouraging “risk-on”.



- Moreover, policymakers may have to deal with this issue under extremely severe macro-policy constraints (eg, deterioration in fiscal balance, zero-bound of interest rates).
- Real challenge is the shortage of effective policy tools!

### ***III-3. Never-ending Changes of Phases***

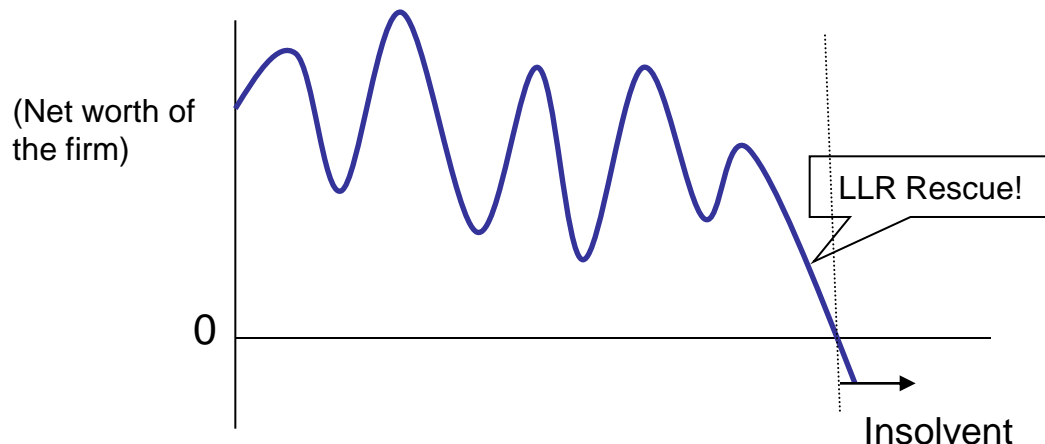
- Policymakers have to choose the right policy at the right timing.



### ***III-4. Systemic Spillover, Liquidity and Solvency***

- According to Japan's experiences ....
- ✓ any small financial institution can trigger a systemic spillover.
- ✓ it is not easy to draw a clear line between liquidity and solvency problems in times of stress.

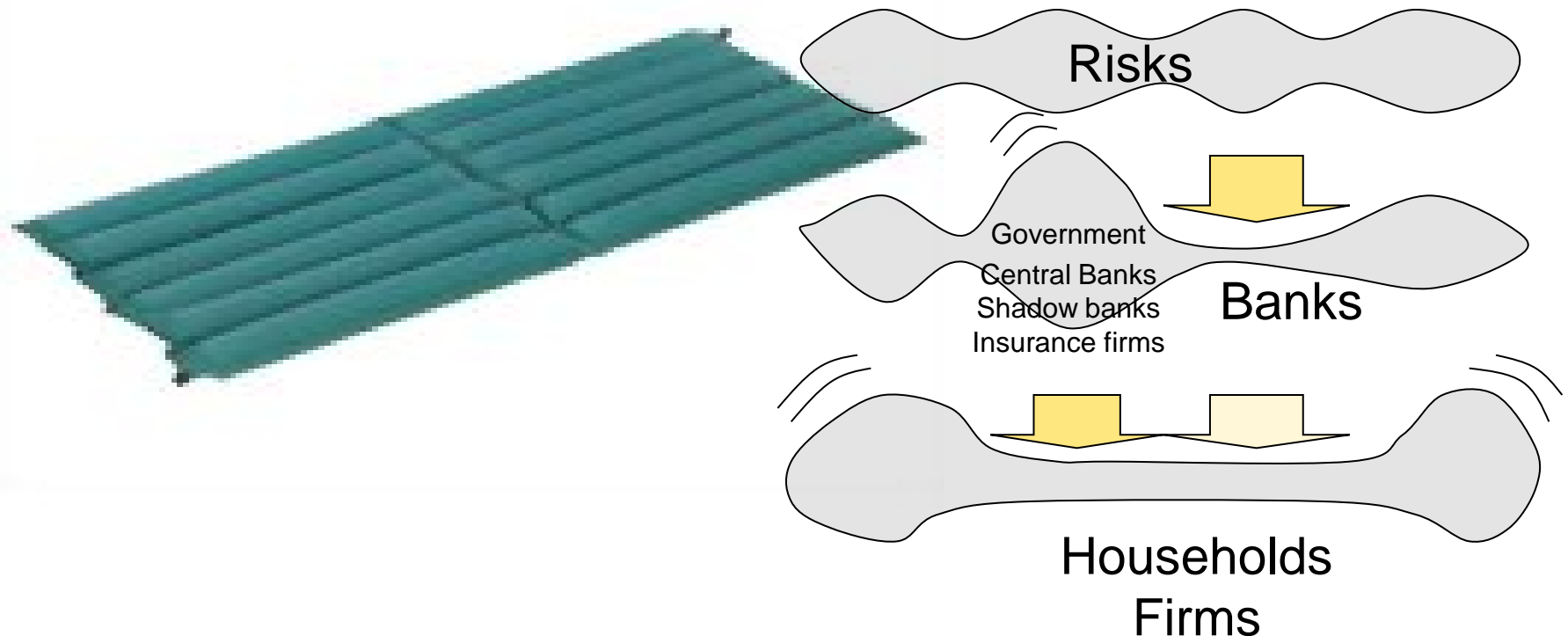
-- When financial markets are extremely volatile, the prices of widely-ranging financial assets may substantially decline.



## ***III-5. Interactions and Feedback Loops***

- "Waterbed" or "air mat" effects

- Sound risk-taking is needed for the economy. If banks' risk-taking is excessively discouraged, the risks would be transferred to others, or economic recovery would be delayed.



### ***III-6. Intensity of Feedback Loop Depends on Circumstances !***

**Banks' capital constraints...(due to NPLs, Loan Losses and regulatory requirements, etc.)**

If banks can easily raise capital...

**Adjustment in prices**  
(Higher lending rates reflecting higher banks' funding costs)

**No "zero-bound" constraints**  
(a central bank can reduce its policy rate so as to offset the rise in bank lending rates)

**"zero-bound" constraints**  
(a central bank cannot fully offset the rise in bank lending rates)

If banks capital-raising is under constraints...  
(due to NPL problems, weak bank stock prices, "crowding-out" of capital market, etc.)

**Adjustment in quantity**  
(Tighter lending stance, decline in bank loans, credit crunch)

small

Negative impacts on the economy

big



### ***III-7. Interactions and Feedback Loops***

- Policymakers should take into account various “dynamic games” and complicated feedback loops, such as follow:

- ✓ If regulators impose strict capital regulation on banks while requiring them to maintain the volume of lending to domestic borrowers, banks cannot help cutting overseas lending...
- ✓ Investors might avoid investing in bail-inable debts when they become risk-sensitive. If they already have these debts, they might try to sell them as soon as possible in a period of stress...
- ✓ If regulators impose strict regulation on securitized markets, banks' risk management would also be constrained somewhat, and banks might become more reluctant to make long-term loans.

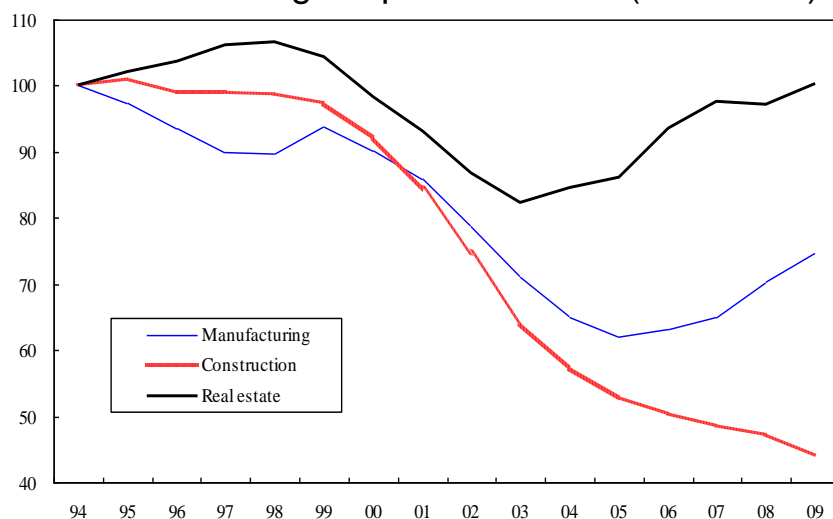


***Policymakers always have to strike a delicate balance, with paying due attention to changing circumstances.***

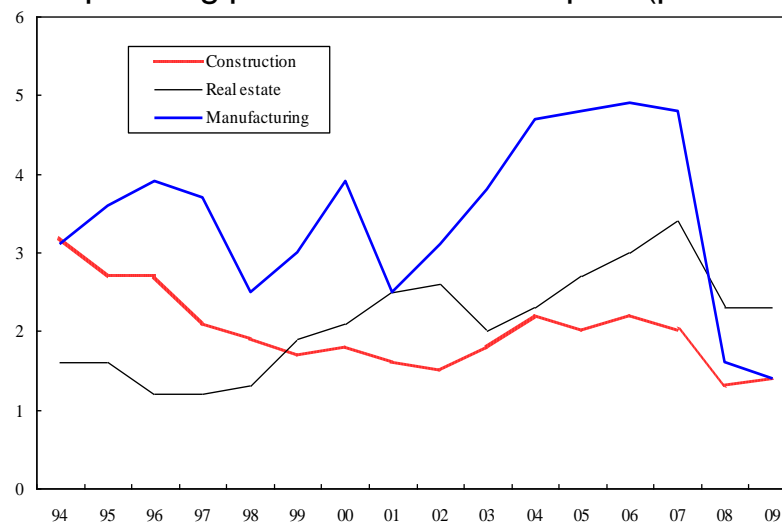
## *III-8. Central Banks' "Buy-time" policy and Structural Reform*

- During Japan's crisis, macro-policies supported bank lending. Nonetheless, bank maintained the volume of lending to the sectors with relatively low profitability.
- Policymakers should not make their "buy-time" policy decelerate necessary structural reform. But this is not an easy task.

Bank lending to specific sectors (1994=100)



Operating profit ratio to total capital (percent)





## ***III-9. Avoid “Overconfidence”!***

■ Before any crisis, we always see overconfidence.

✓ **Co-existence of *high growth and low inflation***

—e.g., “Great Moderation”, “Japan as No.1” “New Industrial Revolution led by IT”

—Asset price bubbles are often justified as “the reflection of “productivity growth”.

✓ **Overconfidence on *Risk Management Ability***

—e.g., “Banks’ internal rating model can appropriately trace risks.” “Securitized markets enable various economic entities to manage risks.”

✓ **Overconfidence on *Policy Frameworks***

—e.g., “Combination of Inflation Targeting and Micro-oriented regulation is very effective.”

✓ **Overconficende on the *Effectiveness of Policy Tools***

—e.g., “There are sufficient macro-prudential policy tools to maintain financial stability.”

# ***III-10. Japan's Experiences at Great East Japan Earthquake***

—World's deepest Tsunami Breakwater at Kamaishi Port)

Two years later,  
shattered by the force of  
a tsunami equivalent to  
250 Jumbo jets (B747)  
impacting at 1,000km/h



- 1,960m(6,430ft5in) long,
- 63m (206ft8in) deep,
- World's deepest breakwater (Guinness World Record)
- Completed in March 2009





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***Thank you for your attention!***