Japanese Financial Crisis and Crisis Management

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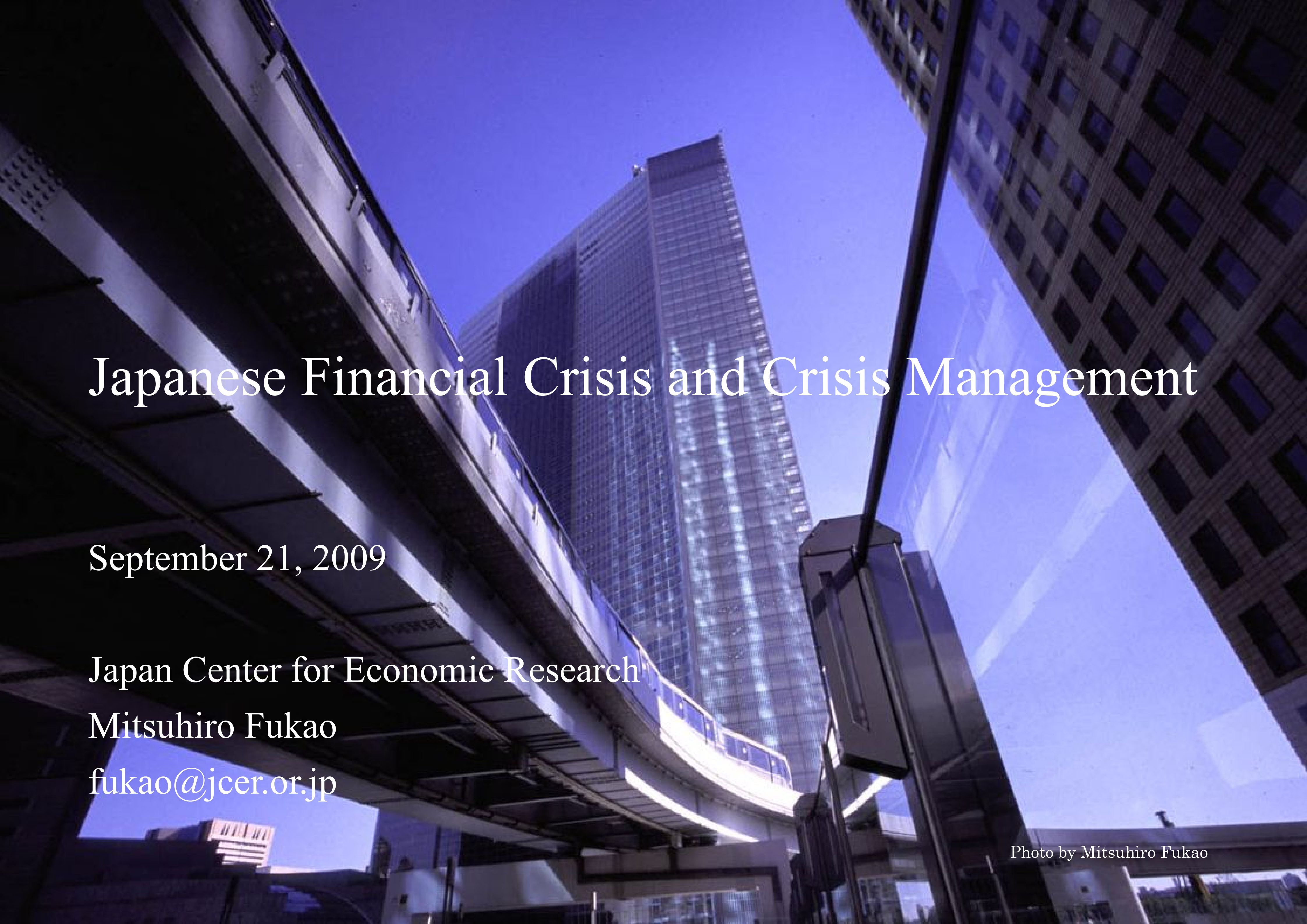


Photo by Mitsuhiro Fukao

Origin of Japanese Financial Crisis in 1997-2002

Speculative bubble in real estate and stock markets

1. Overheating of the economy in 1987-88 and slow response of monetary policy

   Excessive loosening of monetary policy after a large appreciation of the yen after the Plaza agreement

   Excessive response to the sharp temporary fall in stock prices in 1987

2. Tax distortions favoring real estate investment

   Inheritance tax and corporate income tax favored unrealized capital gains in real estate

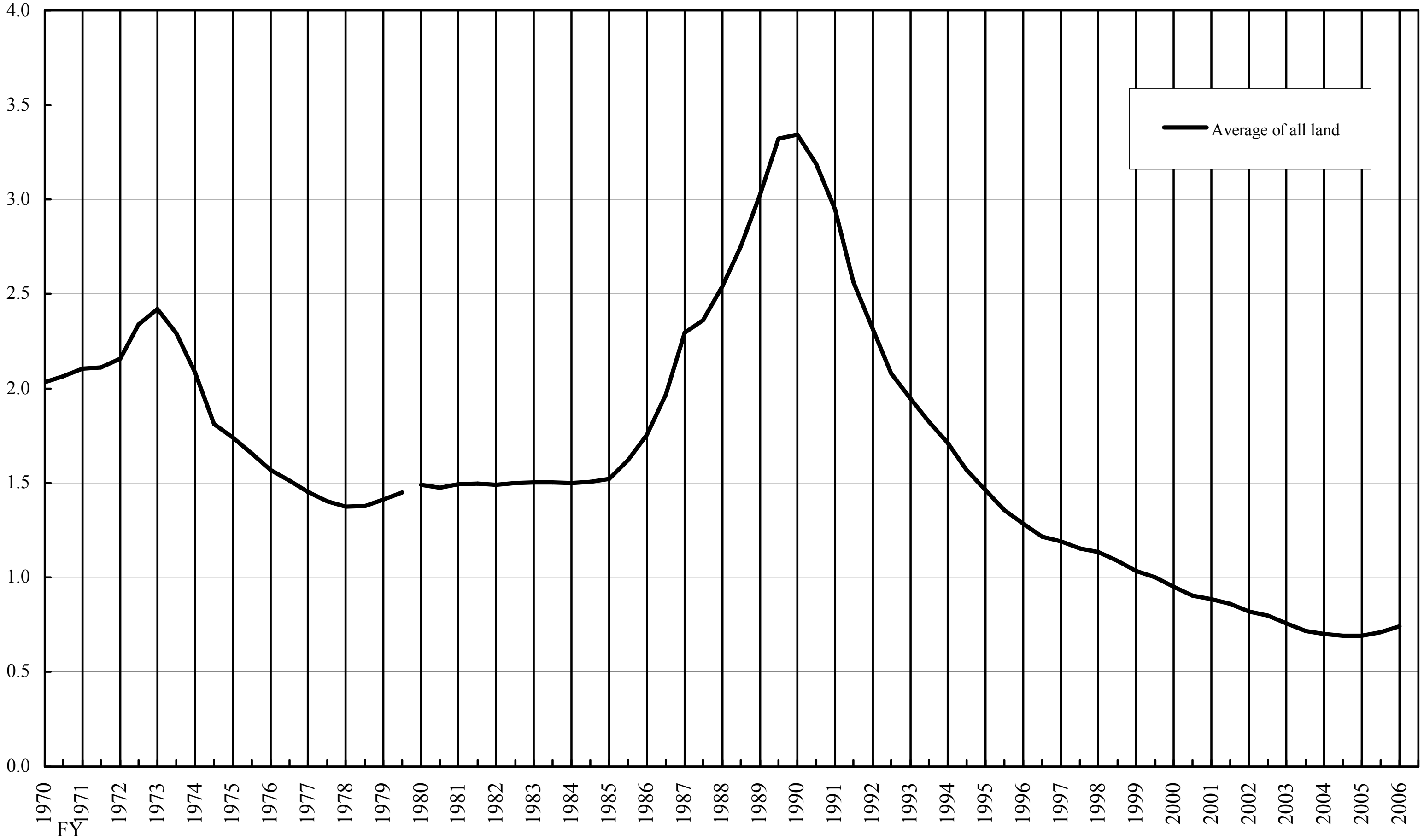
3. Excessive reliance in real estate collateral by banks

4. General perception that real estate prices will never fall

5. Real estate prices started to fall in 1990 after the monetary policy tightening in 1989

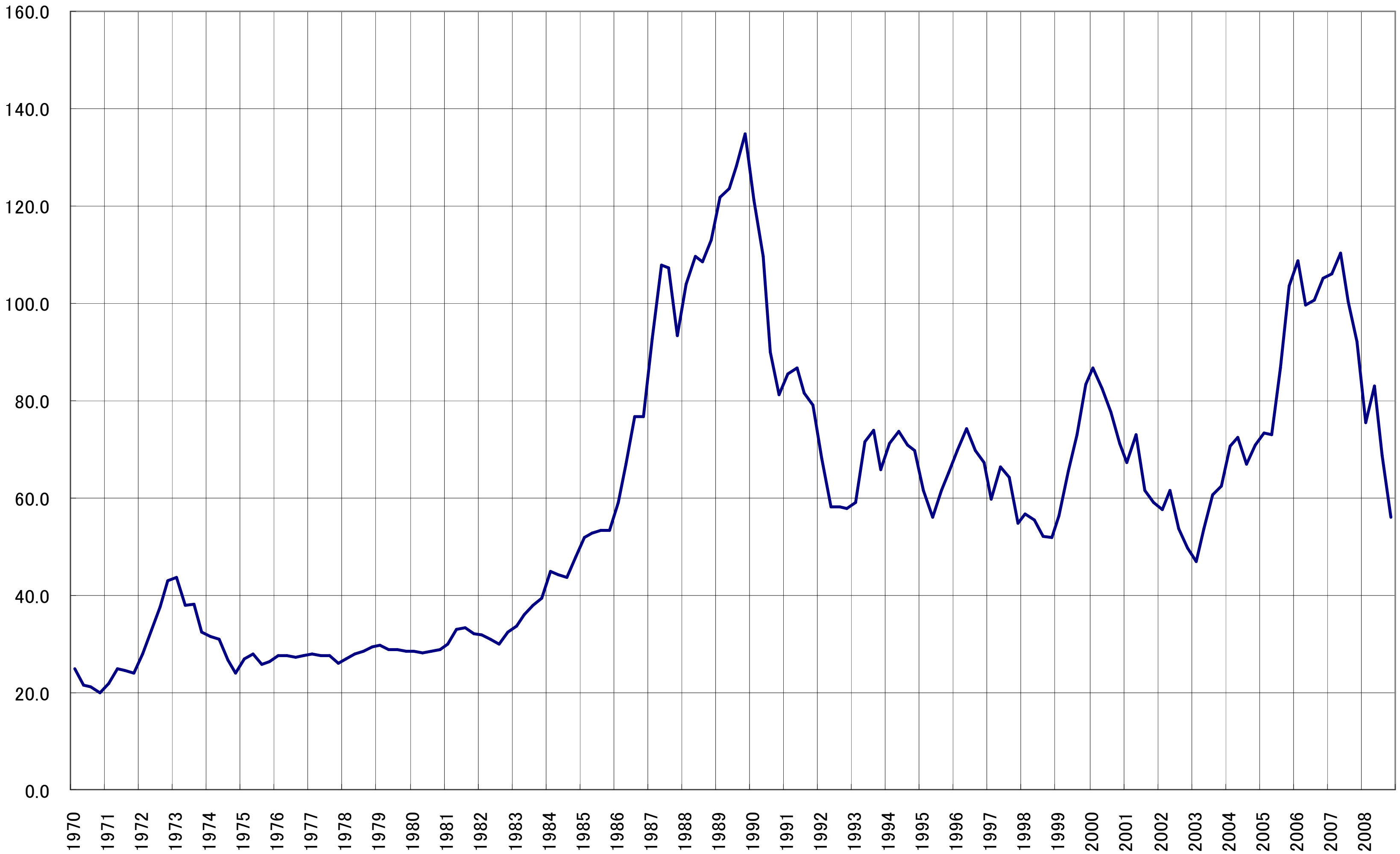
Urban Land Price Index

(Divided by nominal GDP index; times; semi-annual)



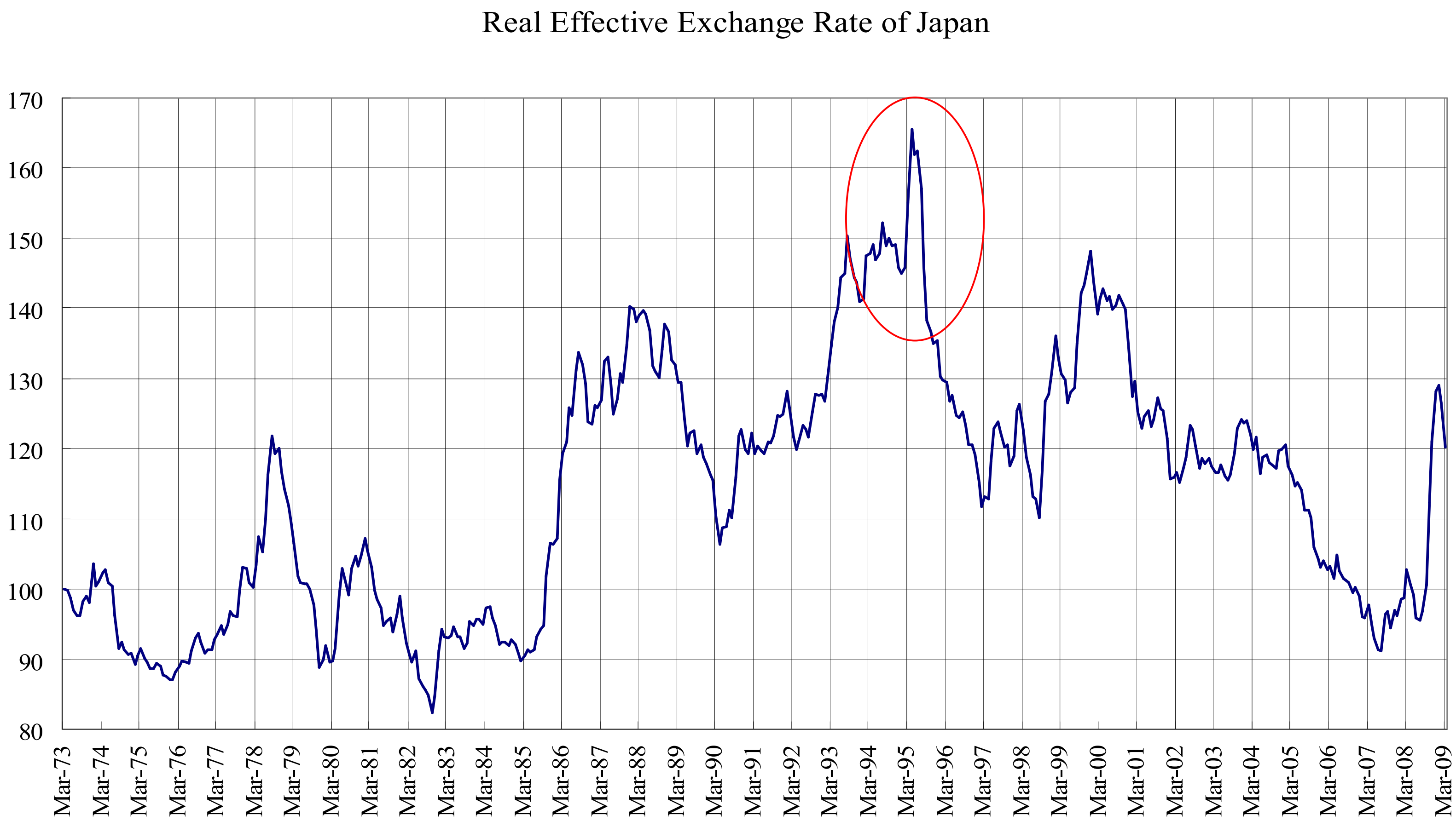
Notes: 1. Urban Land price index (6 large urban areas, second half of fiscal 1999 <end of Mar. 2000>=100) /
Nominal GDP index (second half of fiscal 2000=100)
2. Data until second half of fiscal 1979 = 68SNA basis
Data from first half of fiscal 1980 = 93SNA basis

Market Value GDP Ratio
Tokyo Stock Exchange 1st Section



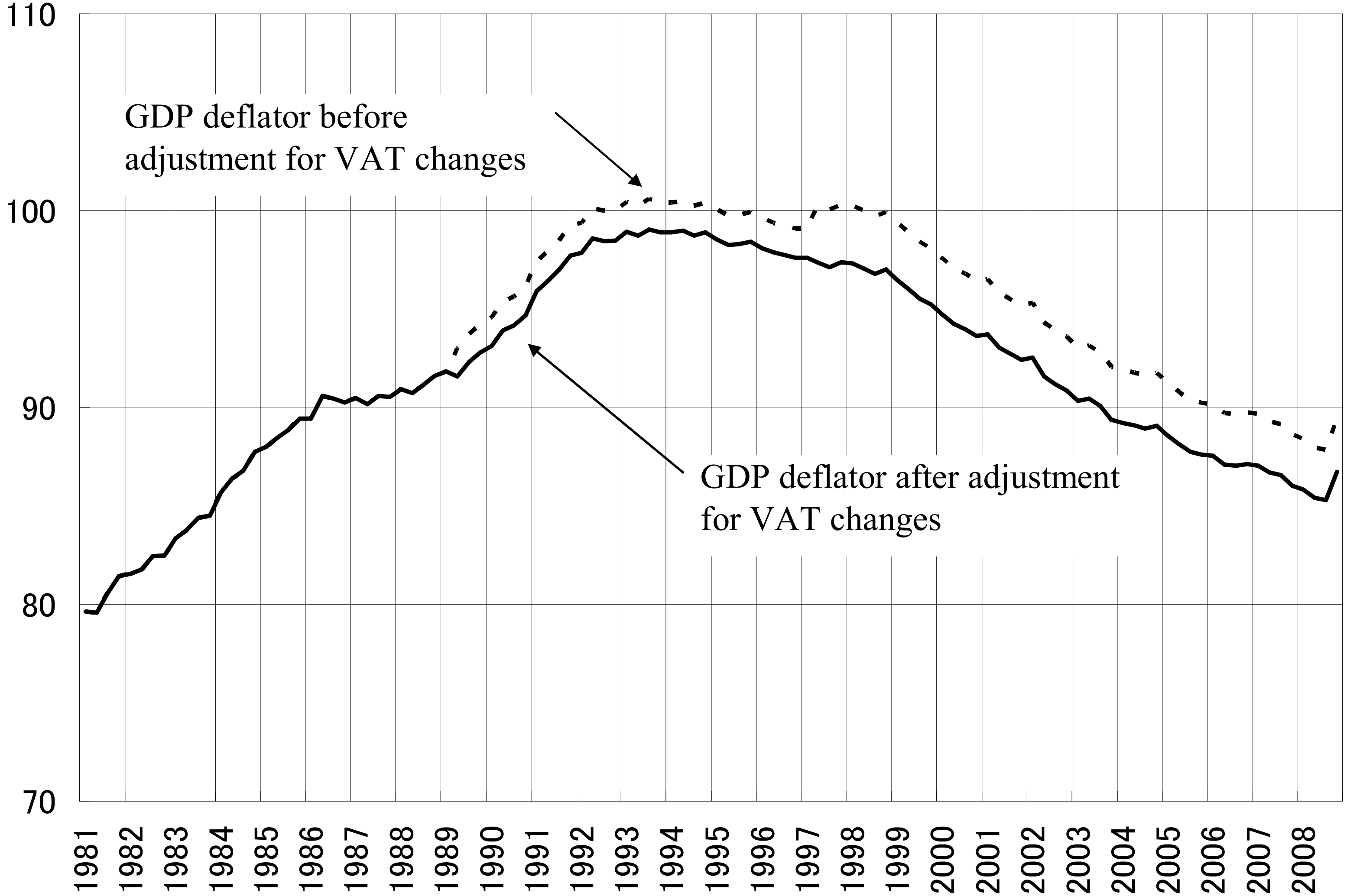
Origin of Japanese Financial Crisis in 1997-2002

Sharp appreciation of the yen in 1995 pushed Japan into mild deflation



Source: Bank of Japan

Japan's GDP Deflator（1995=100）



Origin of Japanese Financial Crisis in 1997-2002

Increasing distrust of disclosures by financial institutions

1. Financial institutions and regulators postponed the disposal of bad loans

   Deterioration of non-bank housing loan companies (Jusen companies) was obvious by 1992-93 but MOF did not move

   In 1995, MOF finally used public money to take care Jusen failures

      Strong negative public opinion on the use of public money tied hands of the MOF until the financial crisis in 1997-98

2. Distrust on external auditors and financial supervision gradually increased

   Banks postponed the recognition of loan losses by window dressings

Financial Crisis of 1997-98

Successive failures of financial institutions started a panic in the market

November 4, 1997: Sanyo Securities filed bankruptcy

First failure of a publicly listed security company since the war

November 17, 1997: Hokkaido Takushoku Bank asked BOJ for emergency loan

First failure of a City Bank since the war

November 22, 1997: Yamaichi Securities started voluntary liquidation

One of top four security companies failed.

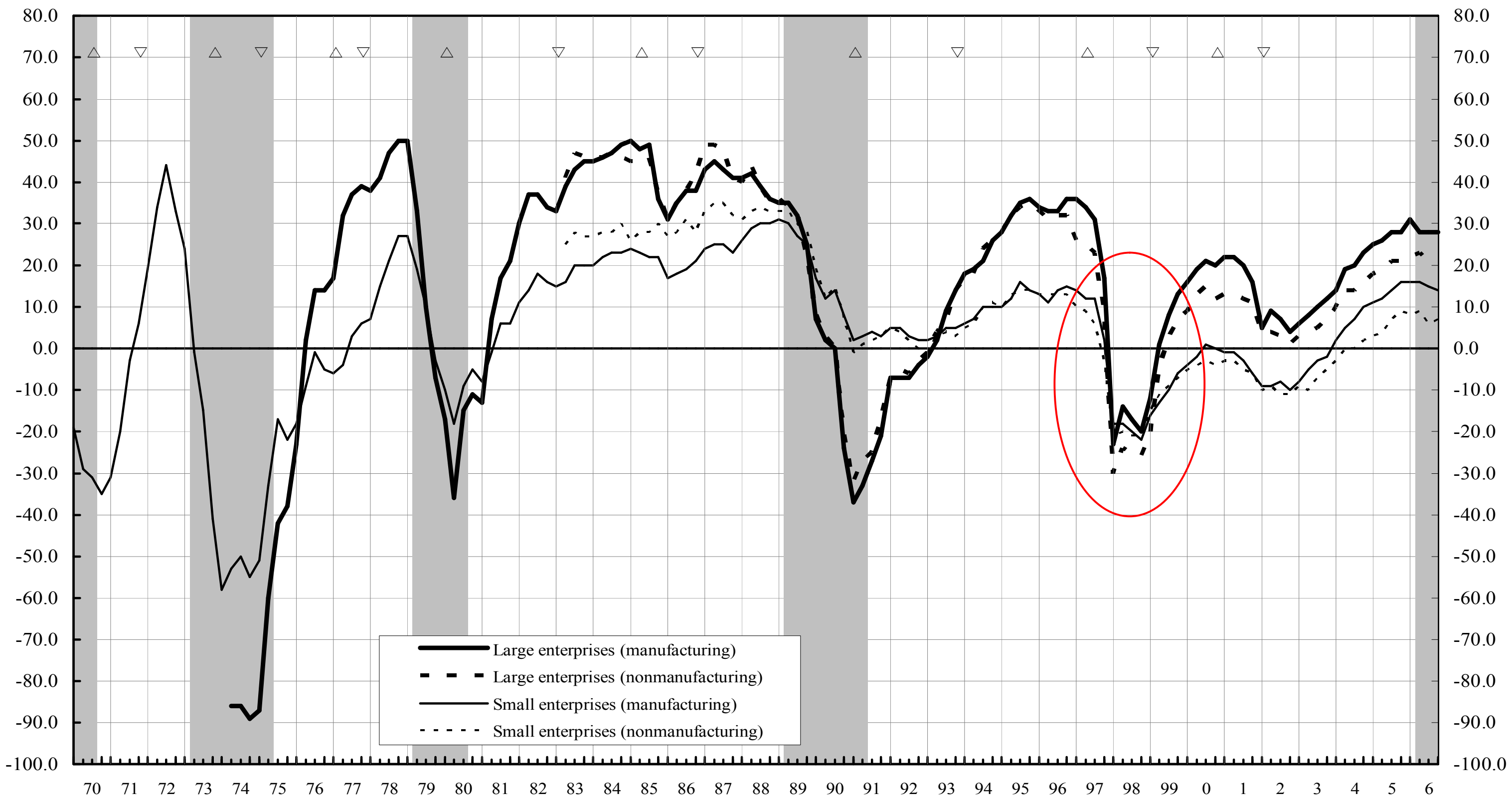
March 1998: First capital injection (1.8 trillion yen for 21 banks) was too small to stabilize the market

Financial Crisis of 1997-98

A sever credit crunch started at the end of 1997

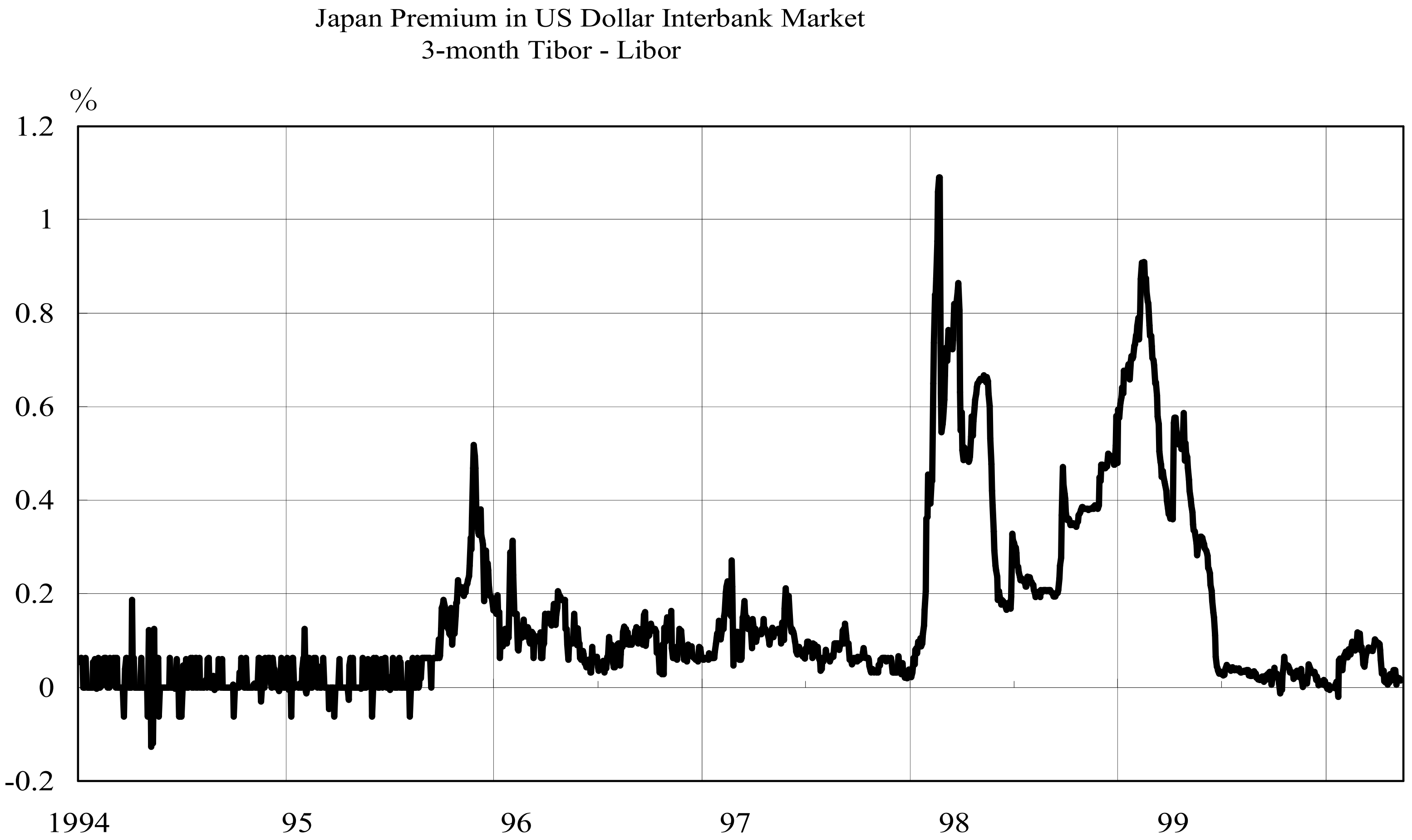
Diffusion Index of Lending Attitude of Financial Institutions

(Based on *the Short-term Economic Survey of All Enterprises in Japan* < 'Accommodative' - 'Severe' >; % points)



Financial Crisis of 1997-98

The turmoil in the financial market deteriorated as the Diet was debating laws to stabilize banks



Source: QUICK

Financial Crisis of 1997-98

The turmoil in the financial market deteriorated as the Diet was debating laws to stabilize banks

October 1998: Diet finally passed a strong and usable bankruptcy law for banks and a law for public capital injection

October 23, 1998: Nationalization of Long-Term Credit Bank of Japan

All the LTCB shares lost value

December 14, 1998: Nationalization of Nippon Credit Bank

All the NCB shares lost vale

March 13, 1999: Government Inject 6.7 trillion yen to 15 banks

Succeed to stabilize financial market: Japan premium largely disappeared

Crisis Management by the Government (1)

July 1995: Ministry of Finance announced that DIC would protect all deposits for five years (until then, insurance was limited to 10 million yen per person)

June 1996: Deposit Insurance Law was amended to allow DIC to protect all deposits and other liabilities of banks until March 2001

March 1998: Fist attempt of recapitalization of banks by the government could not stabilize the market

October 1998: The Diet passed Financial Revitalization Act (bankruptcy procedure for banks without stopping payments) and Bank Recapitalization Act

Crisis Management by the Government (2)

March 1999: Second attempt of recapitalization by the government could stabilize the market

Japan premium mostly disappeared by the injection

Could not stop deterioration of bank assed due to recession

March 1999: Bank were allowed to show deferred tax asset by new accounting standard

Deferred tax asset was much abused by banks to show fake asset

FSA tacitly approved this abuse

By 2002-03: Bank capital was almost depleted due to new bad loans

<u>Capital injection without economic recovery did not work</u>

Capital in the Japanse banking sector

(trillion yen)

	Market value of shares held by banks	Book value of shares held by banks	Capital account (Core capital)	Deferred tax asset	Estimated Under-reserving	Equity capital held by the government	Net capital Account	Nikkei225 Index
	A	B	C	D	E	F	C+(A-B)×0.6-D-E-F	
Mar-91	77.7	33.1	30.2	0.0	NA	0.0	57.0	26292
Mar-92	56.4	34.5	31.3	0.0	NA	0.0	44.4	19346
Mar-93	56.4	34.5	31.8	0.0	NA	0.0	44.9	18591
Mar-94	61.9	36.5	32.3	0.0	NA	0.0	47.5	19112
Mar-95	52.0	39.8	32.3	0.0	NA	0.0	39.6	15140
Mar-96	64.3	43.0	27.9	0.0	NA	0.0	40.7	21407
Mar-97	54.1	42.9	28.5	0.0	15.0	0.0	20.2	18003
Mar-98	50.8	45.7	24.3	0.0	4.9	0.3	22.2	16527
Mar-99	47.1	42.7	33.7	8.4	4.0	6.3	17.7	15837
Mar-00	54.5	44.4	35.6	8.2	5.8	6.9	20.8	20337
Mar-01	44.5	44.3	37.6	7.1	7.5	7.1	16.0	13000
Mar-02	34.4	34.4	30.2	10.6	6.8	7.2	5.6	11025
Mar-03	23.2	23.2	24.8	10.6	5.4	7.3	1.5	7973
Mar-04	28.5	28.5	29.0	7.2	5.7	8.9	7.2	11715
Mar-05	27.7	27.7	31.4	5.7	6.9	8.1	10.8	11688
Mar-06	33.2	33.2	37.3	2.3	8.3	5.2	21.5	17059
Mar-07	33.9	33.9	39.7	1.3	9.3	3.5	25.7	17287
Mar-08	25.6	25.6	34.8	3.6	10.2	3.1	17.9	12525

Source of data: Federation of Bankers Associations of Japan, "Analysis of Bank Financial Statements," various issues.

Note: The table represents the banking accounts of all banks in Japan.

Estimated required loan loss reserves is defined as follows:

1% of category I loan + 20% of category II loan + 70% of category III +100% of category IV loan

Since FSA terminated to disclose classified loan figures from March 2003, the classified loan figures and the required loan loss reserves were estimated from the disclosed bad loan figures.

Profitability of Japanese Banking Sector

Trillion yen

Financial Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Lending Margin (A)	7.1	8.9	9.8	9.2	9.7	10.8	10.7	10.0	9.6	9.7	9.4	9.8	9.4	9.0	8.7	8.7	8.5	8.6
Other Revenue (B)	2.6	2.2	2.5	2.8	2.1	3.3	3.7	3.6	3.1	2.5	3.0	3.1	3.6	4.3	4.6	5.2	4.3	3.4
Operating Costs (C)	7.1	7.5	7.7	7.7	7.8	7.8	8.0	8.0	7.5	7.3	7.1	7.0	7.0	6.7	6.4	6.5	6.5	6.7
Salaries and Wages	3.7	3.9	4.0	4.0	4.0	4.0	4.0	4.0	3.6	3.5	3.4	3.2	2.8	3.1	2.8	2.8	2.6	2.7
Gross Profit (D)=(A)+(B)-(C)	2.6	3.5	4.5	4.3	4.0	6.3	6.4	5.6	5.2	4.9	5.3	5.9	6.0	6.6	6.9	7.4	6.2	5.3
Loan Loss (E)	0.8	1.0	2.0	4.6	6.2	13.3	7.3	13.5	13.5	6.3	6.6	9.4	7.0	6.1	4.2	2.0	1.7	2.0
Net Operating Profit (F)=(D)-(E	1.8	2.5	2.5	-0.4	-2.2	-7.0	-1.0	-7.9	-8.3	-1.4	-1.3	-3.5	-1.0	0.5	2.7	5.4	4.5	3.3
Realized Capital Gains (G)	2.0	0.7	0.0	2.0	3.2	4.4	1.2	3.6	1.4	3.8	1.4	-2.4	-4.1	0.6	-0.1	0.5	0.2	0.1
Net Profit (F)+(G)	3.8	3.3	2.5	1.7	1.0	-2.6	0.2	-4.2	-6.9	2.3	0.1	-5.9	-5.1	1.1	2.6	5.9	4.7	3.4
Asset	927.6	914.4	859.5	849.8	845.0	847.1	858.4	845.0	762.5	741.9	806.0	772.1	739.0	750.0	748.3	770.2	764.5	782.0
Outstanding loans	522.0	537.0	542.4	539.1	538.5	553.6	563.3	536.4	492.4	475.9	474.1	464.5	435.0	422.5	414.0	428.1	435.9	446.0

Note: Financial Statement of All Commercial Banks.
Other revenue (B) includes all the other profit such as dealing profits and fees but excludes realized capital gains of stocks and real estates.
Realized capital gains includes gains of stocks and real estates.
Source: Japan Center for Economic Research (2008)

Crisis Management by the Government (3)

March 2003: Many weakened banks were allowed to operate by showing massive

deferred tax asset (DTA)

FSA adopted forbearance policy and waited for economic recovery

Too many bad banks for the government to nationalize

May 2003: Government injected 2 trillion yen of capital to Risona Bank as a sound bank

even though it was clearly insolvent

Market rallied (so called moral hazard rally)

November 2003: Ashikaga Bank, a big regional bank was nationalized

The Ratio of Deferred Tax Asset in the Core Capital of Major Japanese Banks

March 2003

	Core Capital (A) Billion yen	Net DTA (B) Billion Yen	Ratio (B/A) Percent
Mitsubishi Tokyo Financial Group	3,338	1,303	39.0
UFJ Holdings	2,665	1,522	57.1
Resona Holdings	635	522	82.2
Resona Bank	366	401	109.6
Saitama Resona Bank	155	44	28.4
Sumitomo Mitsui Financial Group	3,168	1,842	58.1
Mizuho Financial Group	4,322	2,105	48.7
Mistui Trust Holdings	341	346	101.5

Source: Disclosure materials of individual banks.

Notes: Net DTA means deferred tax assets minus deferred tax liabilities.

Distribution of Adjusted Capital/Asset Ratio of Major Japanese Banks

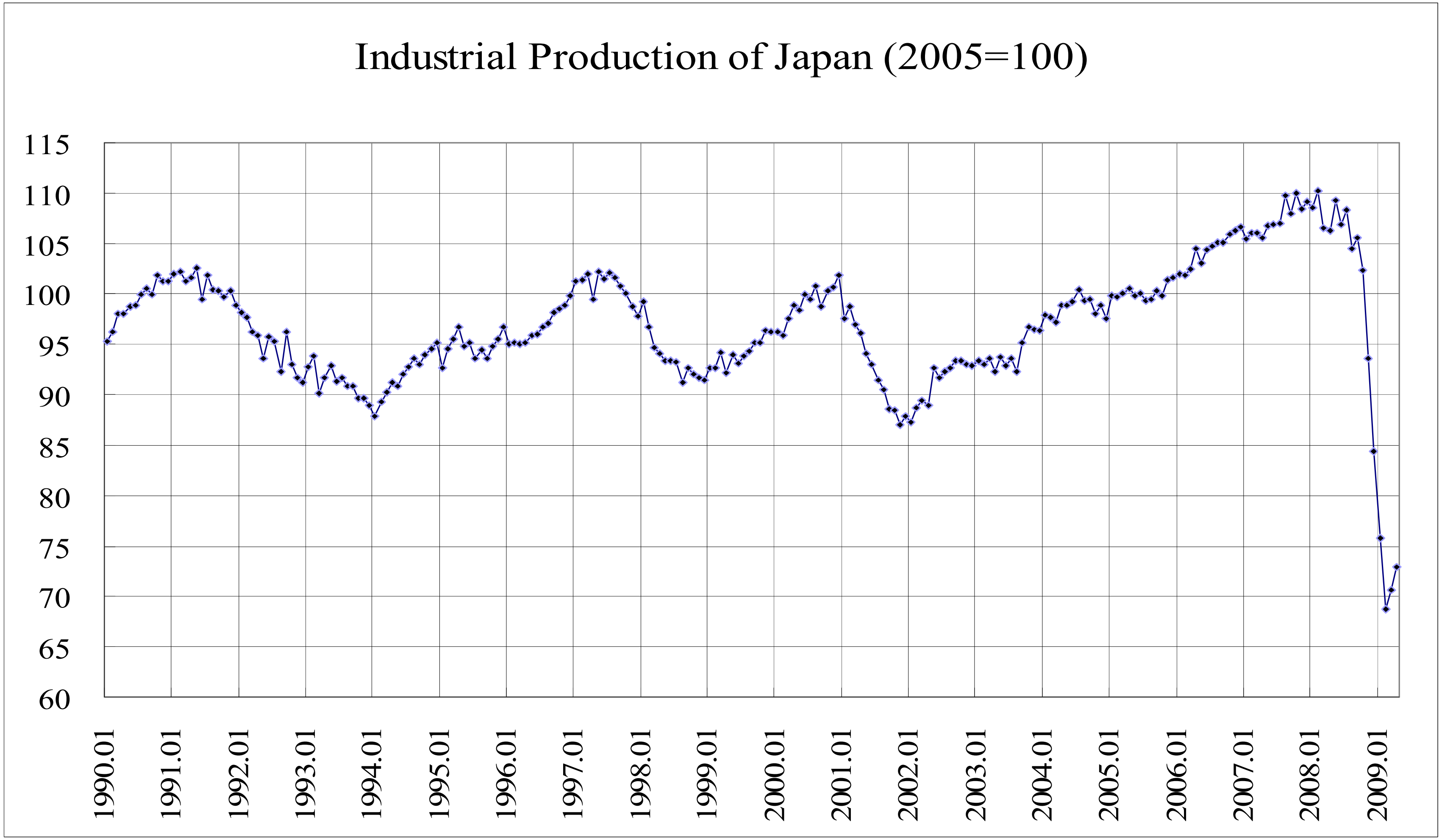
	Total	Number of Banks: Less than -2%	-2% to 0%	0% to 2%	2% to 4%	4% to 6%	More than 6%	Weighted Average %	Nikkei 225 index
March-00	18	0	0	1	16	0	1	3.21	20337
March-01	18	0	0	10	6	0	2	1.91	13000
March-02	15	0	2	10	1	0	2	0.80	11025
March-03	14	1	3	8	0	0	2	0.36	7973
March-04	15	0	1	6	5	0	3	1.63	11715
March-05	17	0	0	5	6	1	5	2.06	11688
March-06	13	0	0	3	5	0	5	3.15	17059

Notes
Major banks include city banks, long-term credit banks, and major trust banks.
We excluded three new but small trust banks; Nomura Trust, Mitsui Asset Trust, and Resona Trust.
Two privatized long-term credit banks after nationalization maintain "More than 6%" capital.
Adjusted Capital = Core Capital + Unrealized Capital Gains and Losses
+ Loan Loss Reserves - Estimated Required Loan Loss Reserves
- Deferred Tax Asset
Estimated Required Loan Loss Reserves = 100% of defaulted loans + 70% of risk loans
+ 20% of doubtful loans + 1% of normal loans
Adjusted Capital/Asset Ratio = Adjusted Capital/Gross Asset

Source: Japan Center for Economic Research (2001a, 2003b, 2006)

Strong Export Led Recovery since 2003 Cured Japanese Banks

The world financial crisis may undermine Japanese financial system



Necessary Reforms to improve the quality of world financial system

Due diligence of all the major financial institutions is necessary.

The cause of the very high loss-ratio (91%) of Lehman debt should be investigated and the result should be released to the public.

Yamaichi: 3% loss rate, Kizu Credit Union: 77% (the worst case in Japan.)

Nippon Credit Bank: 29%, Long-term credit bank of Japan: 12%.

The government should establish a high degree of transparency on the financial statement of major financial institutions

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