

# Resolving Japan's Banking Crisis

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# Outline

- I. Japanese Banking Crisis in the 1990s
  - ▶ Strategies adopted
    1. Asset management companies
    2. Liquidation of *Jusen*
    3. Protection of bank liabilities
    4. Capital injections
    5. Temporary nationalization of insolvent but systemic important banks
    6. Takenaka plan
  - ▶ Fiscal cost
- II. Strategies not adopted (but adopted in the 1940s)

# Mainly based on

“Will the U.S. Bank Recapitalization Succeed? Lessons from Japan” (with Anil Kashyap), NBER Working Paper 14401, December 2008.

“Cleaning up the Balance Sheets: Japanese Experience in the Postwar Reconstruction Period,” in Masahiko Aoki and Hyung-Ki Kim (Eds.) *Corporate Governance in Transitional Economies*. The World Bank, 1995, pp.303–359.

# 1. Asset Management Companies

Name	Dates (purchases)	Target Purchases	Amount Spent (¥ Trillion)	Amount Collected (¥ Trillion)	Comments
Cooperative Credit Purchasing Co. (CCPC)	12/1992-3/2001	Non-performing loans with land collateral of contributing banks	5.8 (market ) [=15.4 book]		Bank financed, created tax benefits by buying loans Liquidated in 3/2004
Tokyo Kyodo Bank	1/1995-4/1999	Initially assets of failed credit unions, later assets of any failed banks	4.718	5.362	Reorganized as Resolution and Collection Bank (RCB) in 9/1996
Housing Loan and Administration Corp. (HLAC)	7/1996-4/1999	Loans of failed <i>jusen</i> (specialty housing loan companies)	4.656 (market)	3.233	Financed with mix of public and private money
Resolution and Collection Corp.	4/1999-6/2005	Combined RCB and HLAC, mandate extended to allow purchases of assets from solvent banks	0.356 (market) [=4.046 book] (beyond earlier HLAC and RCB spending)	0.649	Starting in 2001 also reorganized loans, ultimately involved in restructuring 577 borrowers
Industrial Revitalization Corp. of Japan	5/2003-3/2005	Buy non-performing loans through 2005, restructure them within 3 years	0.53(market) [=0.97(book)]	NA [0.094 surplus as of 5/2007]	Restructured 41 borrowers with 4 trillion total debt Closed in 5/2007

## 2. Liquidation of *jusen*

- ▶ Government led (optimistic) restructuring plans in 1991 and 1993 failed
- ▶ By 1995, 75% of loans non-performing (60% completely unrecoverable), leverage > 150
- ▶ Write-off of ¥6.41 trillion (¥3.50 trillion by the founder institutions; ¥0.53 trillion by the agricultural coops; ¥1.70 trillion by the other lenders; ¥0.68 trillion by the taxpayers)
- ▶ The remaining assets (¥6.6 trillion) transferred to *Jūsen* Resolution Corporation

# 3. Full protection of bank liabilities

1996 ¥10 million limit on deposit insurance (per account) was lifted (to expire on 03/2001)

1997 (Nov.) BOJ and MOF reiterated the full protection of deposits and announced “security” of interbank loans

1998 Bank liabilities were protected when LTCB and NCB were nationalized

2000 Expiration date of the assistance that exceeds the “pay-off costs” moved to 03/2002

# 4. Capital injections

Legislation	Date	Securities Used	Number of financial institutions (# with nonzero outstanding balance)	Amount Injected (Trillion ¥)	Amount Sold or Collected to date (as of September 2008) (Trillion ¥)
Financial Function Stabilization Act	3/1998	Preferred shares, subordinated debts	21 (2)	1.816	1.653 [1.626 (book)]
Prompt Recapitalization Act	3/1999 – 3/2002	Preferred shares, subordinated debts	32 (10)	8.605	8.820 [7.556 (book)]
Financial Reorganization Promotion Act	9/2003	Subordinated debts	1 (0)	0.006	0.006 [0.006 (book)]
Deposit Insurance Act (Article 102-1)	6/2003	Common shares, preferred shares	1 (1)	1.960	0.611 [0.017 (book)]
Act for Strengthening Financial Functions	11/2006-12/2006	Preferred shares	2 (2)	0.041	0.000

# 5. Temporary nationalization

- ▶ Financial Reconstruction Act of 1998
- ▶ Weak banks were allowed to apply for nationalization
- ▶ Long-term Credit Bank asked to be nationalized (Oct 1998) → approved
- ▶ FRC forced nationalization of Nippon Credit Bank (Dec 1998)
- ▶ Several failed regional banks put under receivership (1999–2001)



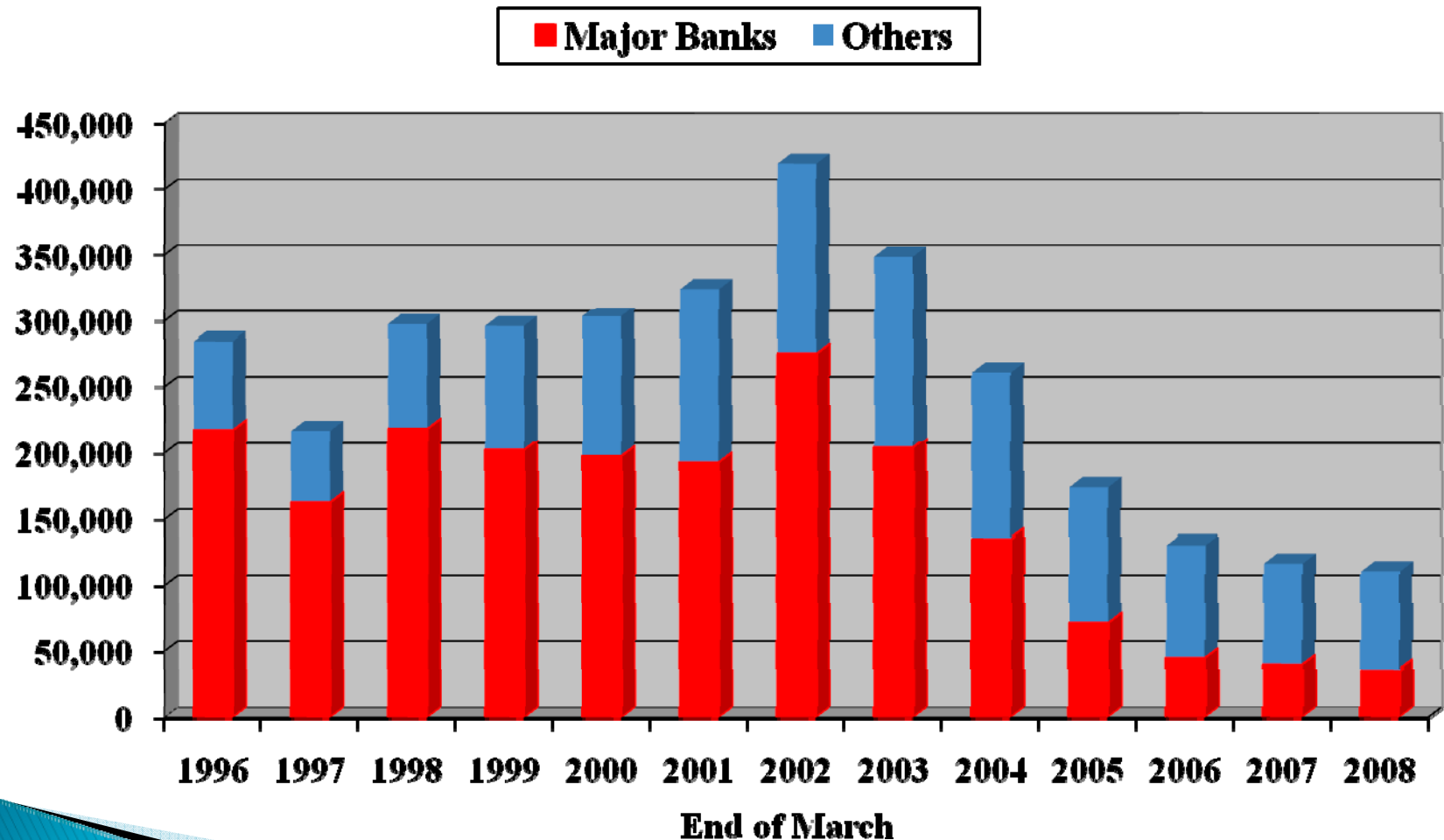
# 6. Takenaka Plan

1. Have banks make more rigorous evaluation of assets using discounted expected cash flows or market prices of non-performing loans
2. Check cross-bank consistency in classifying loans to large debtors
3. Publicize the discrepancy between the banks' self evaluations and the FSA's evaluations
4. Be prepared to inject public funds if necessary
5. Prohibit banks from declaring unrealistically large deferred tax assets
6. Impose business improvement orders for banks that substantially underachieved the revitalization plans.

# Adjusted bank capital: 1996–2008

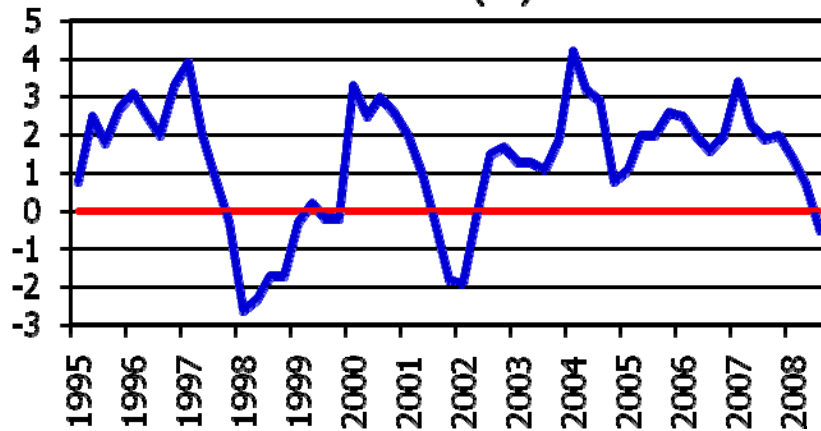
Date	Official Core capital	Deferred Tax Assets	Estimated Under-reserving	Modified Capital	Capital held by gov't	Bank Assets	Capital Gap
	A	B	C	D=A-B-C	E	F	G=0.03*F-D
Mar-96	27.9	0.0	NA	27.9	0.0	846.5	-2.5
Mar-97	28.5	0.0	15.0	13.5	0.0	856.0	12.2
Mar-98	24.3	0.0	4.9	19.4	0.3	848.0	6.0
Mar-99	33.7	8.4	4.0	21.3	6.3	759.7	1.5
Mar-00	35.6	8.2	5.8	21.6	6.9	737.2	0.5
Mar-01	37.6	7.1	7.5	23.0	7.1	804.3	1.1
Mar-02	30.2	10.6	6.8	12.8	7.2	756.1	9.9
Mar-03	24.8	10.6	5.4	8.8	7.3	746.3	13.6
Mar-04	29.0	7.2	5.7	16.1	8.9	746.7	6.3
Mar-05	31.4	5.7	6.9	18.8	8.1	745.9	3.6
Mar-06	37.3	2.3	8.3	26.7	5.2	766.9	-3.7
Mar-07	40.0	1.3	9.4	29.4	3.5	761.1	-6.5
Mar-08	34.8	3.6	10.2	21.0	3.1	780.7	2.4

# Non-Performing Loans (Risk Management Loans): 1996-2008 (100 million yen)

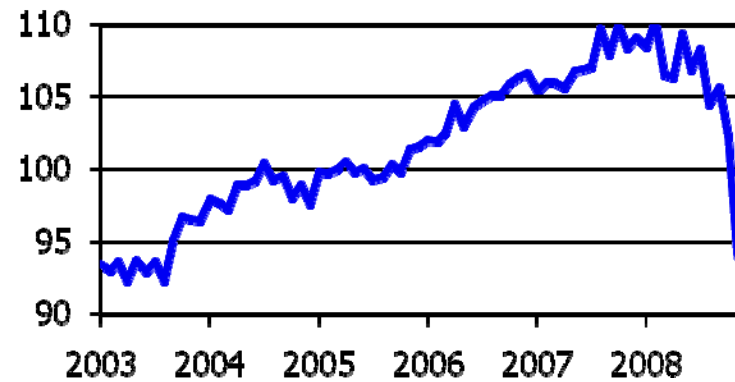


# Macroeconomic recovery

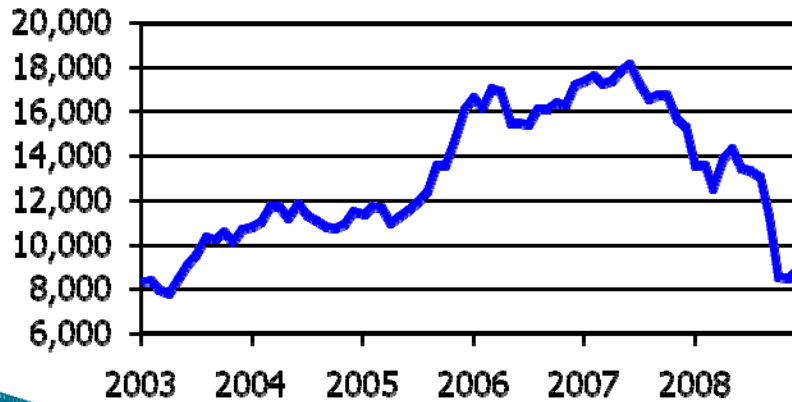
GDP Growth (%)



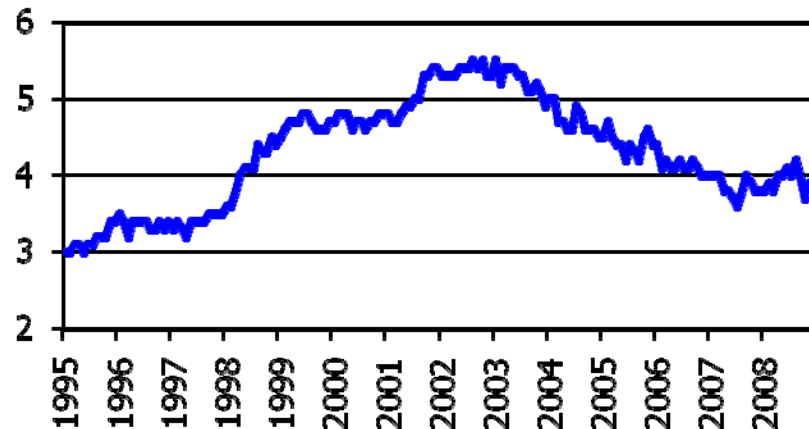
Industrial Production (SA)



Nikkei225



Unemployment Rate (%)



# How Big was the Problem in Japan? (All banks, ¥ billion)

End of	Loan Losses	Cumulative Loan Losses since 4/1992	Number of Major Banks
3/1994	3.872	5.512	21
3/1995	5.232	10.744	21
3/1996	13.369	24.113	20
3/1997	7.763	31.877	20
3/1998	13.258	45.135	20
3/1999	13.631	58.766	17
3/2000	6.944	65.710	18
3/2001	6.108	71.818	18
3/2002	9.722	81.540	15
3/2003	6.658	88.198	13
3/2004	5.374	93.572	13
3/2005	2.848	96.420	13
3/2006	0.363	96.783	11
3/2007	1.046	97.829	11
3/2008	1.124	98.953	11

≈19%  
of  
GDP

# Fiscal Cost (FDIC financial assistance and recovery, Sept. 2008, ¥ billion)

	Assistance	Recovery
Monetary grants	18,868	
Assets purchase	9,778	9,672
Capital injection	12,427	10,539
Others	5,995	4,861
Total	47,068	25,072

Net : ¥21,996 billion

*Jusen* resolution: ¥ 680 billion

Loss compensation for RCC: ¥ 292 billion

Total: gross ¥48,040 billion (about 9.6% of GDP)  
net ¥22,968 billion (about 4.6% of GDP)

# Strategies not adopted

- ▶ Many banks were insolvent in immediate post-war period, because the Japanese government was told by the occupational force to repudiate wartime debts and guarantees
- ▶ A standard good bank–bad bank separation was applied to each and every bank

# 1. Splitting the balance sheet into two

Assets	Liabilities
Old account	
(A1) Loans	(L1) Second-line frozen deposits
(A2) Bonds and equities	(L2) Special deposits
(A3) Unpaid capital	(L3) Retained earnings
(A4) others (incl. tangible assets)	(L4) Capital
[(A5) Receivable from New Acct.]	[(L5) Payable to New Acct.]
New account	
(a1) Cash	(I1) Free deposits
(a2) Interbank loans	(I2) First-line frozen deposits
(a3) Government and muni. bonds	(I3) Interbank loans
[(a4) Receivable from Old Acct.]	(I4) Tax obligations
	[(I5) Payable to Old Acct.]

Freeze Old account. Continue business with New account.



## 2. Reorganizing the old account

- ▶ (conservative) Reevaluation of the value of assets
- ▶ Losses are paid by cancelling liabilities in the old account in the following order
  1. Realized capital gains on assets
  2. Retained earnings
  3. 90% of capital
  4. 70% of frozen corporate deposits (> 5 million yen)
  5. 50% of frozen corporate deposits (> 1 million yen)
  6. 30% of frozen corporate deposits (> 100,000 yen)
  7. 70% of remaining frozen deposits
  8. Remaining 10% of capital
  9. Remaining 30% of frozen deposits
  10. Frozen deposits designated for tax payments

## 2. Reorganizing the old account (continued)

- ▶ After reorganization, the old account was merged with the new account
- ▶ Reconciliation account was created to accumulate revenues and capital gains from the assets in the old account

# 3. Recapitalization

- ▶ The merged account showed a little or no capital
- ▶ Banks were required to recapitalize through IPO
- ▶ Creditors whose credit was wiped off had first priority to buy the new shares

# Fiscal cost to clean up banks

- ▶ Total losses of the old accounts  
¥27.5 billion (about 6% of GDP)
- ▶ Paid by:
  - Capital gains and profits (¥6.2 billion)
  - Retained earnings (¥1.3 billion)
  - Capital (¥1.6 billion)
  - Deposits (¥18.0 billion)
  - Government (¥0.4 billion)

# Fiscal cost to clean up agricultural banks and insurance companies

- ▶ Total losses of the old accounts  
¥16.6 billion
- ▶ Paid by:
  - Capital gains and profits (¥1.7 billion)
  - Retained earnings (¥0.2 billion)
  - Capital (¥0.4 billion)
  - Deposits (¥2.9 billion)
  - Government (¥11.4 billion)

Total cost to the government (banks +)  
¥11.8 billion (2.5% of GDP)