

“Will The U.S. Bank ReCapitalization Work? Lessons from Japan”

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Outline

- 1) Some similarities between the U.S. and Japan
- 2) The Japanese asset purchase and equity infusion experience
- 3) Lessons from Japan

Jūsen: The first leg of Japan's Crisis

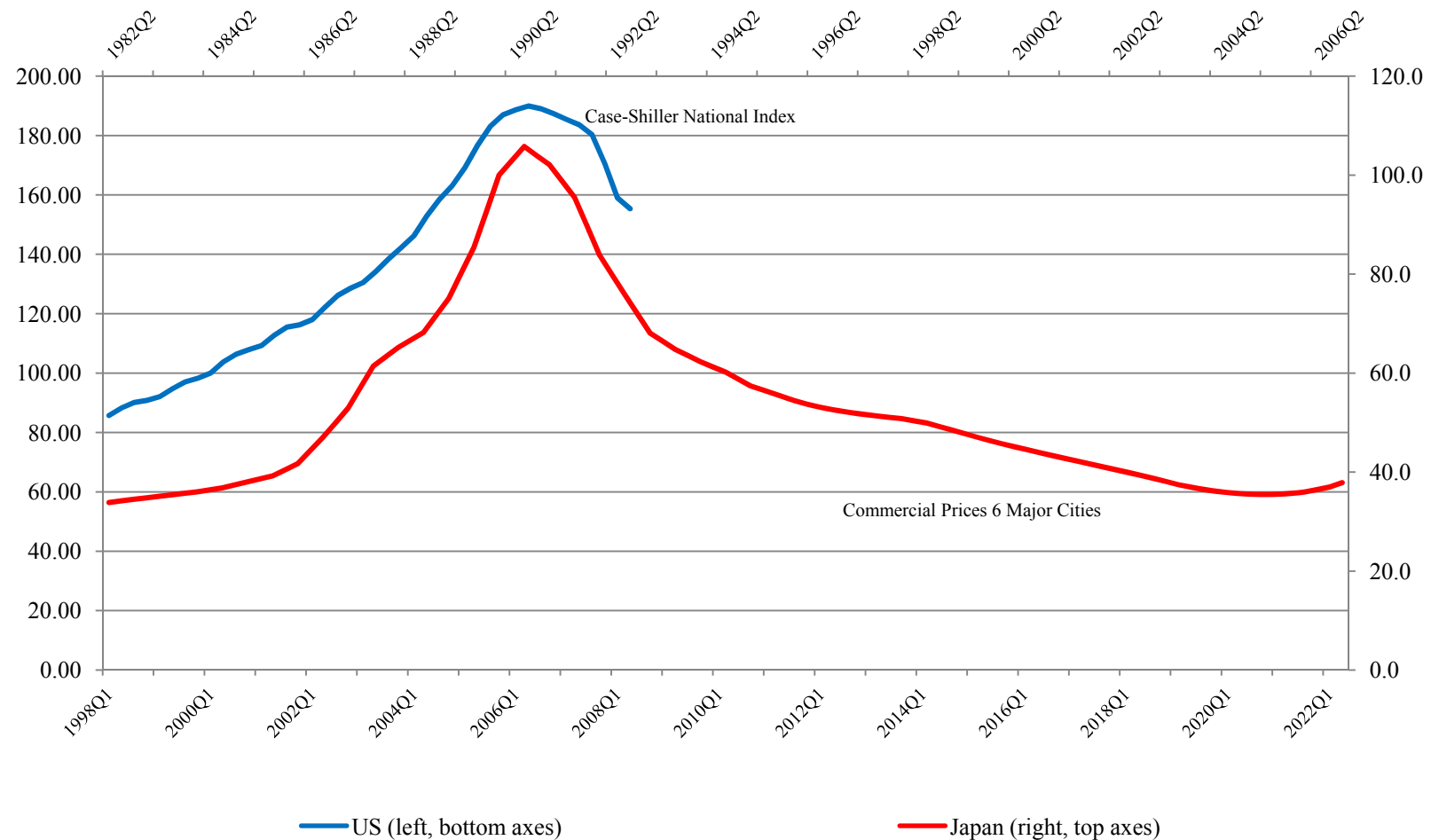
- *Jūsen*: created in the 1970s to provide mortgages
 - High population growth in urban area during the rapid growth era increased housing demand
- City banks were reluctant to jump into home mortgage business, which was new to them
- *Jūsen* were founded by banks but encouraged and guided by the MOF
- *Jūsen* also provided attractive places for the MOF *amakudari* officials

The transformation of the *Jūsen*

- Initially focused on home mortgages
- In the 1980s, banks (founders of *jūsen*) enter home mortgage business as they lose their traditional customers to the capital market
- *Jūsen* started to lend more to real estate developers
- *Jūsen* were non-depository institutions and borrowed from (founder) banks and agricultural coops
- Founder banks collected “**finder’s fees**” for high-risk loans

Housing prices

Land Prices in the U.S. and Japan



November 1997 to February 1999 in Japan

(Chapter 8 of Hoshi and Kashyap 2001)

- Unexpected failure of multiple large institutions (Nov 1997)
- Spike in the interbank borrowing rate
- New accounting rules to cover up problems (Jan 1998)
- Half-hearted recapitalization (Mar 1998)
 - All banks get the same injection = amount desired by the strongest bank
 - Deposit guarantees
- LDP loses election, government resigns (June 1998)
- Compromise second round crisis legislation (Oct 1998)
- Several major financial firms nationalized (Nov 1998)
- Second round recapitalization (preferred shares) (Mar 1999)
 - MOF declares crisis “will be over in 2 weeks”

Figure 8.1
One-Year Yen Interbank Loan Rate
Difference Between Bank and US, UK Average



How Big was the Problem in Japan?

(All banks, ¥ trillion)

End of	Loan Losses	(addition to loan loss reserves)	Cumulative Loan Losses since 4/1992	Number of Major Banks
3/1994	3.872	1.146	5.512	21
3/1995	5.232	1.402	10.744	21
3/1996	13.369	7.087	24.113	20
3/1997	7.763	3.447	31.877	20
3/1998	13.258	8.403	45.135	20
3/1999	13.631	8.118	58.766	17
3/2000	6.944	2.531	65.710	18
3/2001	6.108	2.732	71.818	18
3/2002	9.722	5.196	81.540	15
3/2003	6.658	3.101	88.198	13
3/2004	5.374	1.616	93.572	13
3/2005	2.848	0.094	96.420	13
3/2006	0.363	-0.372	96.783	11
3/2007	1.046	0.524	97.829	11
3/2008	1.124	0.289	98.953	11

≈19%
of
GDP



Asset Management Companies in Japan

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

Recapitalizations in Japan

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 debt	21 (2)	1.816	1.653 [1.626 (book)]
Prompt Recapitalization Act	3/1999 – 3/2002	Preferred shares, subordinated debt	32 (10)	8.605	8.820 [7.556 (book)]
Financial Reorganization Promotion Act	9/2003	Subordinated debt	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

	Official Core capital	Deferred Tax Assets	Estimated Under-reserving	Modified Capital	Capital held by the 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

Source of data: Assets and core capital are from the Bank of Japan for all domestically licensed banks.

Deferred tax and under-reserving estimates are from Fukao (2003a) and JCER (2004), based on Federation of Bankers Association "Analysis of Bank Financial Statements," various issues and securities reports for individual banks.

Note: Core capital, sometimes referred to as Tier I capital, includes equity capital and capital reserves.

Fukao also estimates that prior to 2001 there were substantial unrealized portfolio gains that could have been available.

The after tax amounts he reports from 1996 to 2000 are 12.8, 6.7, 3.1, 2.6 and 6.1 trillion yen respectively.

Lessons from Japanese Recapitalizations

1. Banks may refuse public funds (fear of signaling troubled situation; creation of claims senior to the existing shares)
2. Small (and repeated) recapitalizations ease the capital shortage only temporarily
3. Recapitalization of failing banks is counter-productive
4. Recapitalization with requirement to increase lending to small and medium firms may have been counter-productive

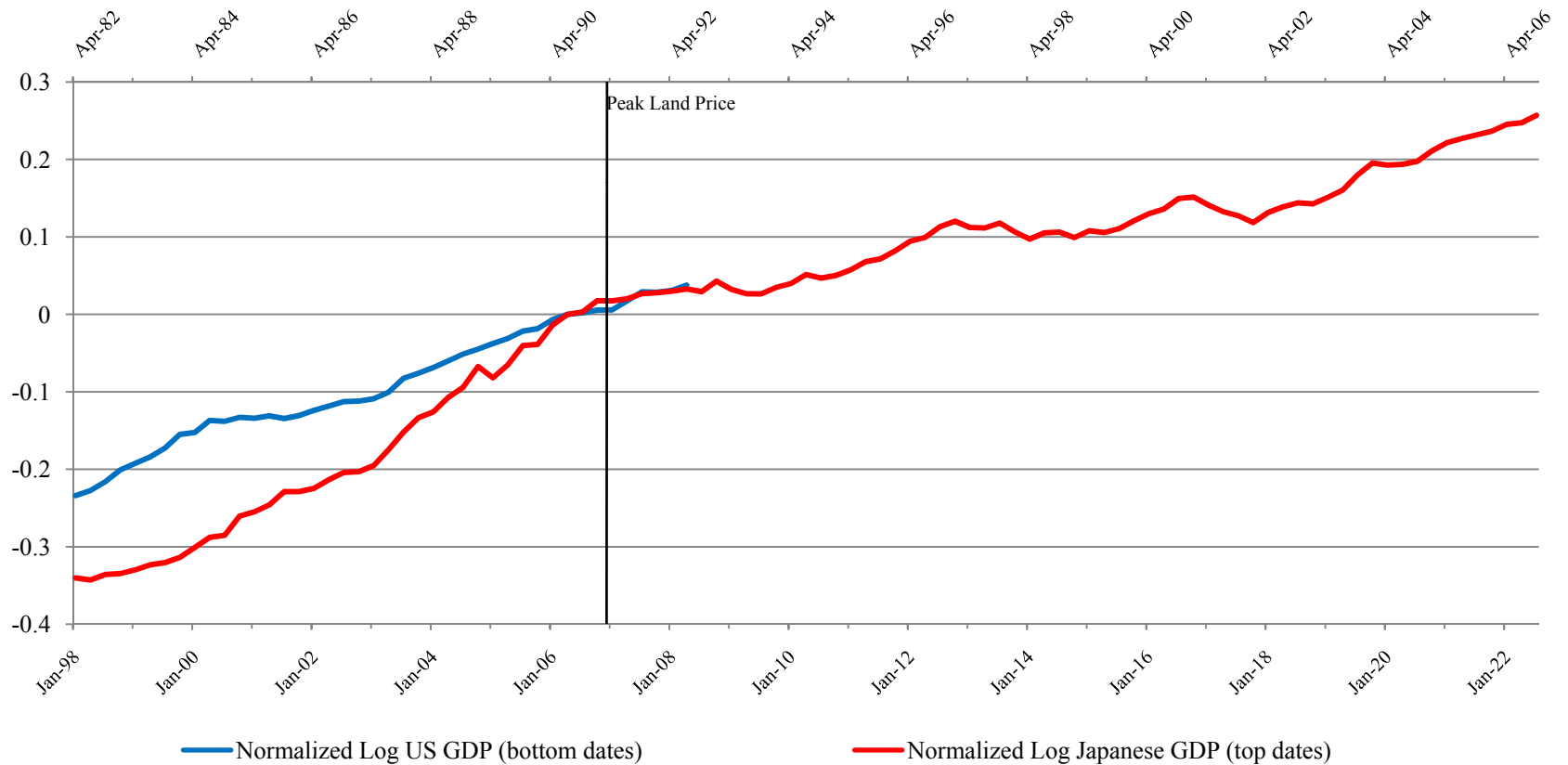
Principles for Capital Injection

1. Do not waste money helping non-viable banks (use audits, and/or market signals to decide who to save)
2. Prevent new money from being diverted to existing creditors (Dilute current shareholders, try to restructure long-term debt or concentrate spending on healthy banks; suspend dividend payments.)
3. Make the capital injection large enough to recapitalize the system
4. Insist that the most healthy banks get more capital (private funding is even better)

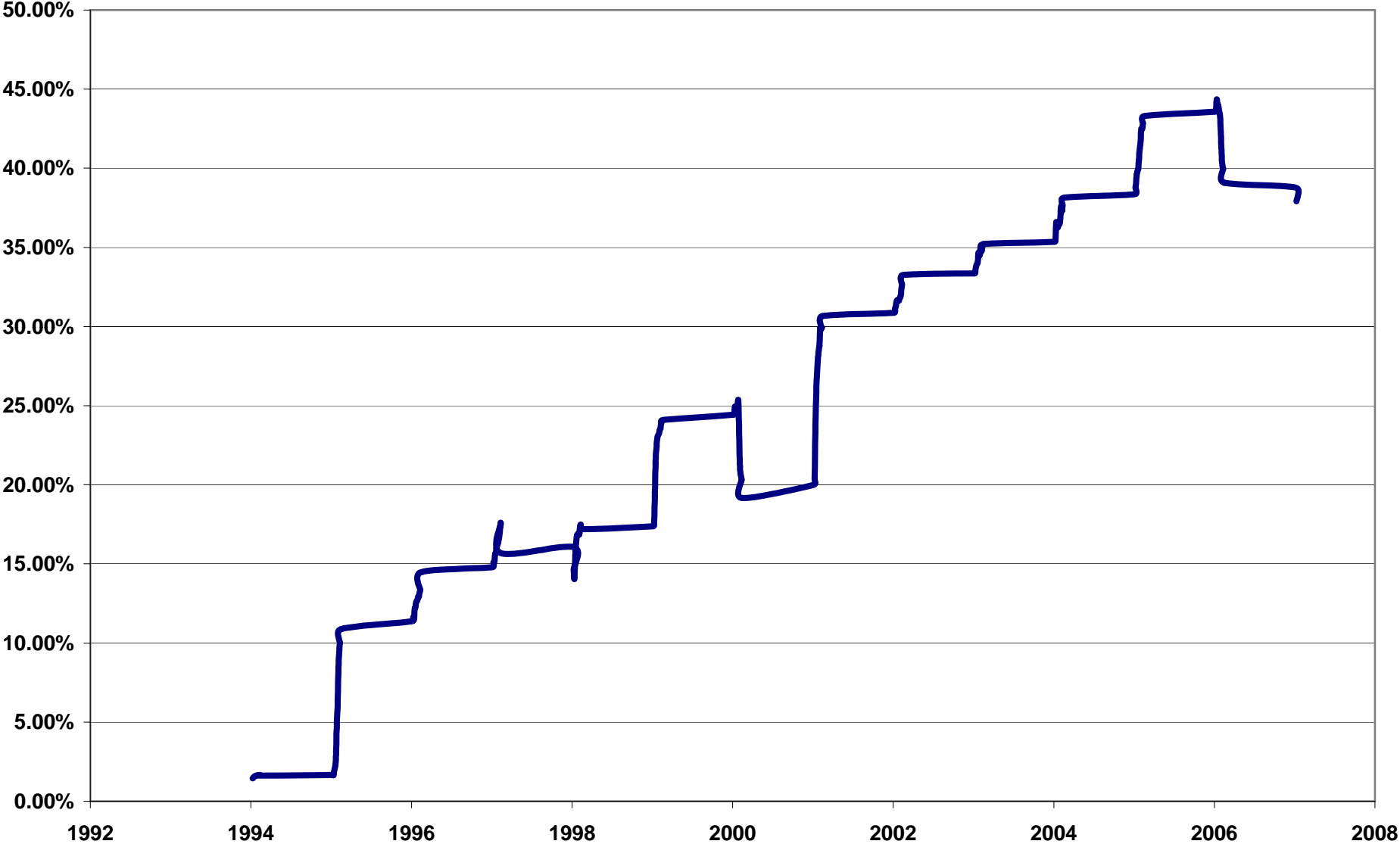
	YTD through	Assets (\$ millions)	Loans (not counting allowance for loss)	% real estate	% credit card	Mortgage Investment Securities (Fair Value)	Equity/ Assets
Bank of America	30-Jun	1,327,429	618,328	27.97%	1.89%	199,163	0.082
Merrill Lynch	27-Jun	966,210	79,170	22.00%	4.00%	20,881	0.036
Combined		2,293,639	697,498	25.46%	2.78%	220,044	0.063
JP Morgan	30-Jun	1,685,490	613,137	23.98%	7.91%	104,807	0.106
CitiGroup	30-Jun	1,228,445	321,610	21.69%	3.63%	54,527	0.078
Wells Fargo	30-Jun	1,173,966	705,573	35.91%	1.10%	146,740	0.097
Goldman Sachs	31-Aug	1,081,773	29,045	31.41%	0.00%	29,540	0.042
Mogan Stanley	31-Aug	987,403	93,118	4.62%	24.89%	214,221	0.036
NY Mellon	30-Jun	201,225	50,568	0.00%	0.00%	40,134	0.142
State Street	30-Jun	138,859	11,317	0.00%	0.00%	25,706	0.091
Total (including recent acquisitions)		8,790,799	2,521,866	23.45%	5.69%	133,745	0.074

Real GDP

Real GDP in US and Japan
(Normalized to be 0 when land prices peak)

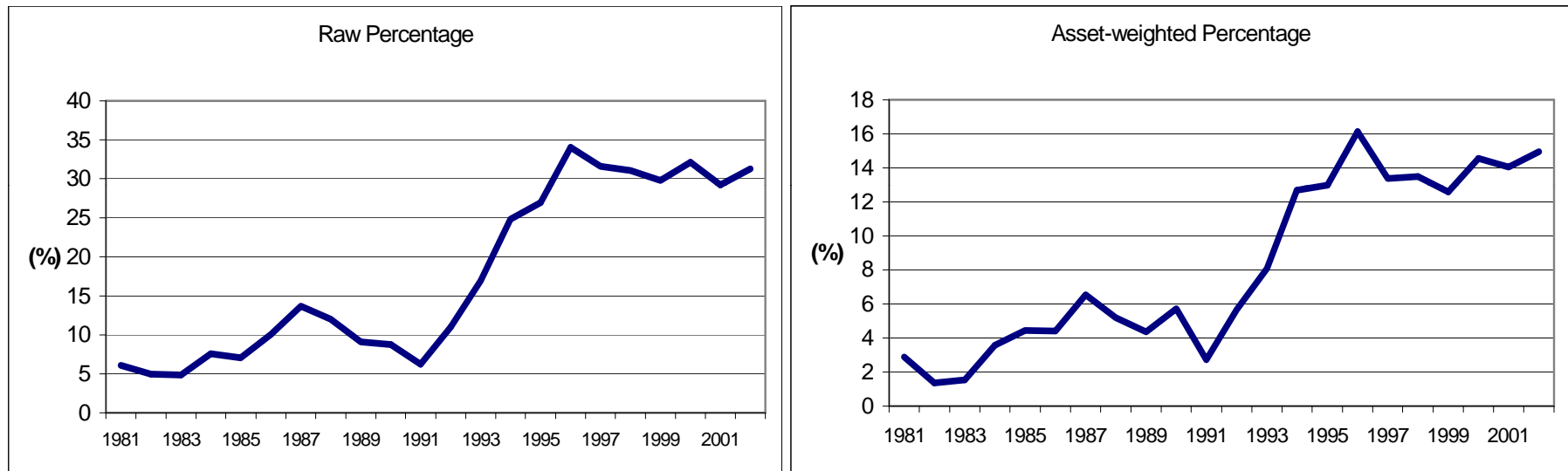


Percent of Japanese Bank Loans Less than 1.5%

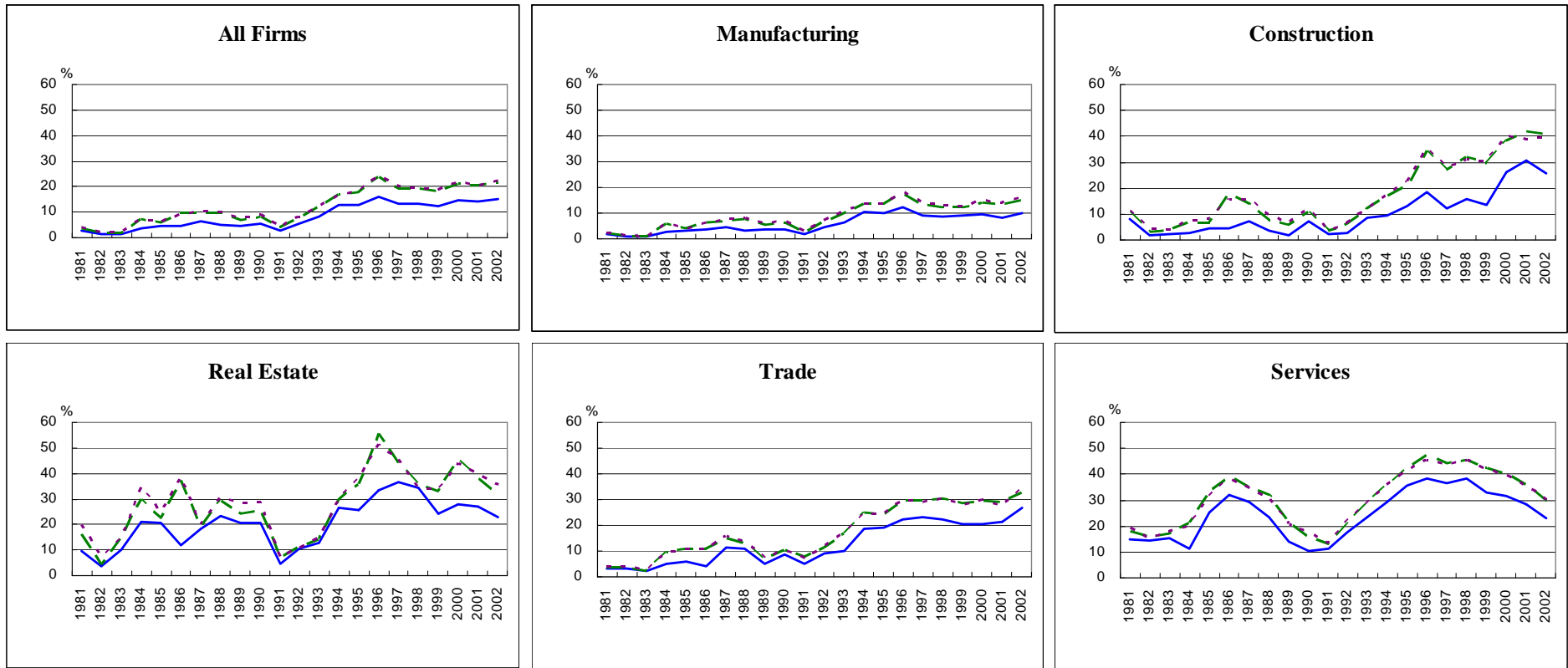


Zombies \equiv Firms getting subsidized credit

The sample is listed firms in manufacturing, construction, real estate, retail and wholesale (other than the nine largest general trading companies), and services

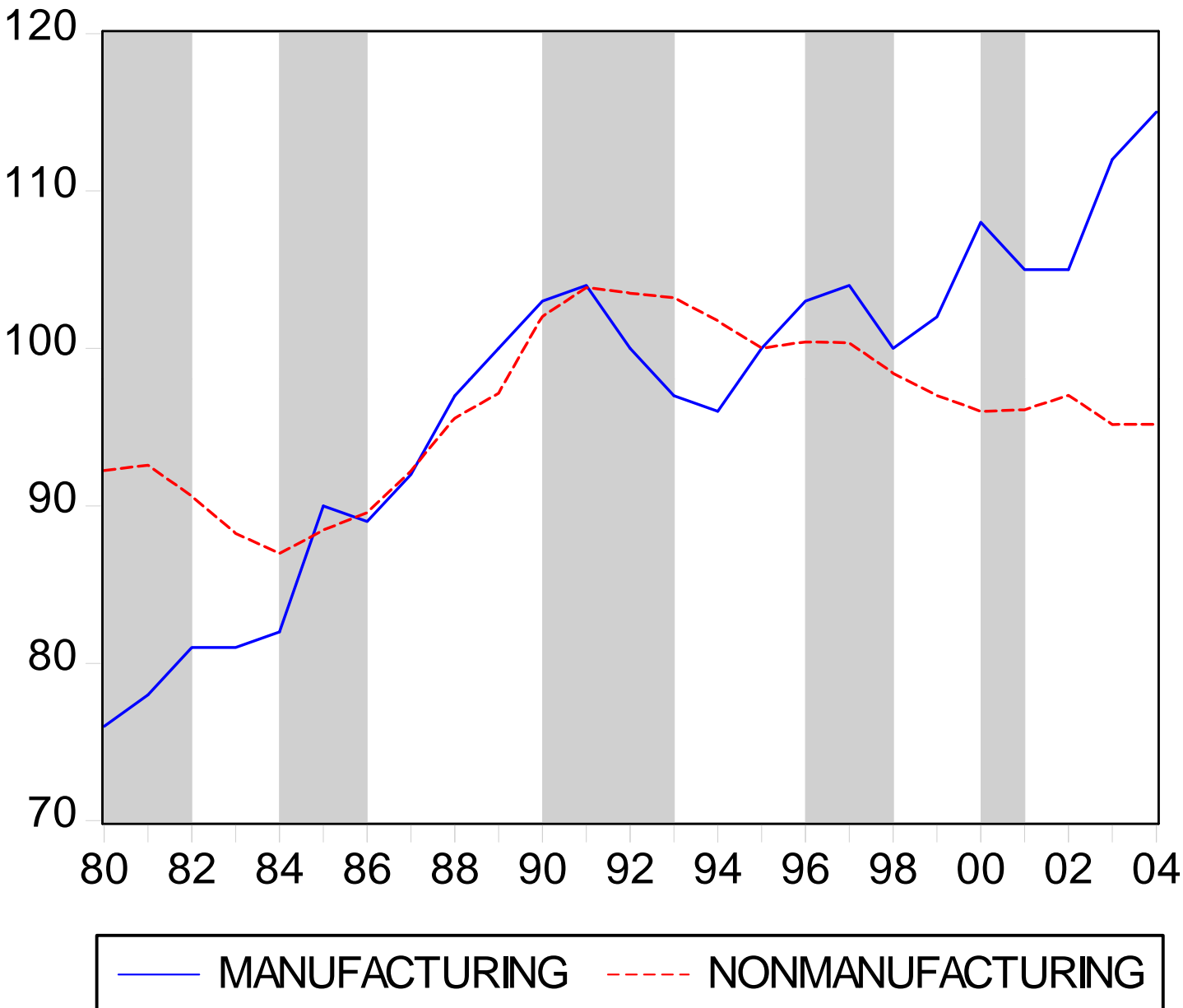


Cross-industry incidence of zombies



- Crisp
- - Fuzzy with $(d1, d2) = (0, 50bp)$
- · · Fuzzy with $(d1, d2) = (-25bp, 75bp)$

Total Factor Productivity by Industry: 1980-2002 (1995=100)



Today's News headlines

WSJ: “The U.S. government's financial-system rescue plans are coming under pressure as a growing array of distressed companies signal the need for assistance.”

Bloomberg: “Revised AIG Terms Begin Treasury Transfusions to 'Zombie' Firms”

At risk employment

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Conclusions

- Government focus on capital shortages is welcome, but details of the bail out matter
 - Willingness to lend comes with sufficient capital
- Too early to declare victory – some increasingly scary analogies to Japan
- Bailouts to distressed industries could turn the recession into an extended period of slow growth