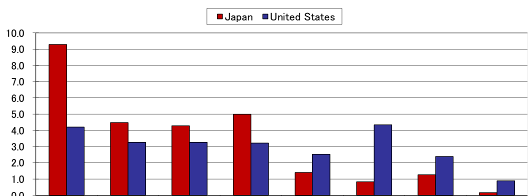
Japan's Bubble Economy and its Burst

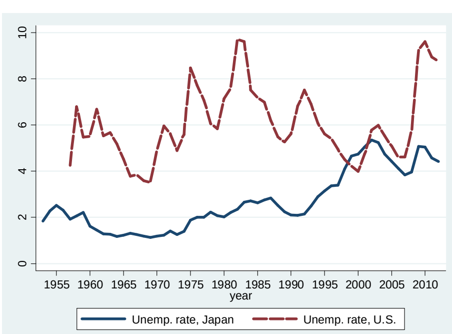
Japanese Economy in the 1980s and 1990s

Real GDP Growth rates: Japan vs. United States



	1961–70	1971–80	1981–85	1986–1990	1991–1995	1996–2000	2001–05	2006–11
Japan	9.3	4.5	4.3	5.0	1.4	0.9	1.3	0.2
United States	4.2	3.3	3.3	3.2	2.5	4.3	2.4	0.9

Unemployment Rates, Japan vs. United States, 1955 - 2011



Structure of Japan’s stable growth

- Strong growth in private consumption
- Well-educated labor force
  - Almost no conflict b/w management and labor and between blue and white collar workers
- Stable political environment
  - 55-system
  - Emergence of technocrats
- Stable geopolitical environment
- “Dual system”
  - Tradable sector vs. non-tradable sector
  - Manufacturing vs. service sector
- Egalitarian economic policy

Price of Japan’s stable growth

- Labor force with weak creativity
- Corruption and collusion in the political arena
- “Dual system”
  - Super-competitive sector vs. super-inefficient sector
- Dysfunctional cross-subsidy scheme vs. Egalitarianism

The “Bubble Economy” in the 80s and its Collapse in the 90s

- The current recession (“Heisei recession”: 平成不況）started w/ the burst of the bubble in the asset markets in 1990.
- But initially, this is something Japanese people wanted …
- **The system that fueled the economic boom in the 1980s has become the core of the problems in the 1990s.**

In Sum, …

- Change in banking sector in Japan
- ➔ Led to "easy credit" during the 1980s
- ➔ Investment, especially in asset markets, boomed, so did bank lending
- US "Twin Deficits" fueled credit expansion in Japan
- After the collapse of asset markets, Japan's financial system became dysfunctional b/o non-performing loans

To talk about the 1980s bubble, we need to talk about Japanese Financial Policy before the 1980s

Banking Structure up to the '70s

- Up to '70s – Division of Labor in Japanese finance
  - City banks/industrial banks (public banks)
    - → Financed large corporations/projects for infra. building and industrial policy
  - Regional banks, credit unions, agri-coops
    - → Financed SME, individuals (self-employed)

Banking Structure after the '70s

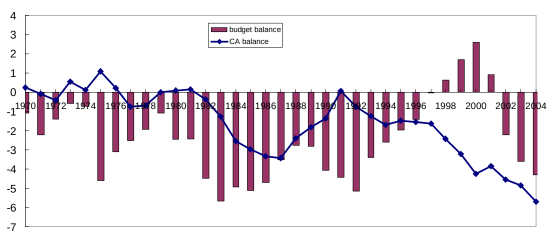
- Change in the division of labor (late '70s and early '80s)
  - Internationalization of corps. + Financial liberalization
    - ➔ Big MNC such as Toyota and Matsushita started financing in overseas markets
    - ➔ Some of them became able to get financed directly from the markets, i.e., issued corporate bonds and papers
    - ➔ Big banks lost their traditional customers
  - Banks started demanding deregulation in banking industry to expand their territories
  - Big banks started retailing, squeezing other smaller banks
  - Smaller banks also started demanding financial deregulation

  ex. *Jusen* (住専)

U.S. also demand Japan's financial deregulation

- The "**Twin deficits**" became severe under the Reagan administration
  - Tight monetary policy in 1981-82
  - High gov't spending
  - Large tax cuts ➔ Reaganomics
  - ➔ US dollar appreciated
  - ➔ Contributed to trade deficits
  - U.S. trade deficits against Japan were already politicized since 1960s
  - Yen was claimed to be undervalued

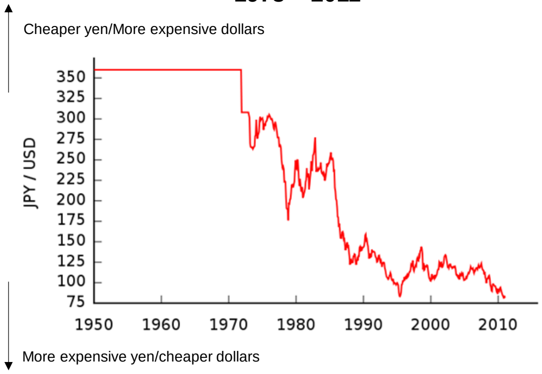
US Budget Balances and Current Account Balances as a ratio to GDP, 1970 - 2004



U.S. also demand Japan's financial deregulation

- In the early 1980s, US trade policy started becoming protectionist
- And, the US Gov't started demanding Japan to liberalize financial markets
  - The "**Yen-Dollar Committee**" (1983): The reason why US dollars do not depreciate is because Japanese financial markets are closed, making it less attractive to invest.
  - Japanese authorities are maintain an artificially low level of interest rates in Japan
- Japanese banks perceived US gov't as a good ally to demand further financial deregulation/liberalization with

Yen-US Dollar Exchange Rate 1973 – 2011



U.S. Claim to Japan in the pre-Plaza accord period (1981 – 1985)

- **Japan** is the *biggest contributor* to U.S. CA deficit
- **Japan**, with *manipulative currency policy*, keeps its *currency undervalued* and keeps *dumping exports* to U.S. markets
- **Japan** *needs to revalue* its currency, and
- *develop and liberalize its financial markets*, so that
- **Japan's** *excessively high saving rate* will go down, and that
- **Japan's** enormous current account surplus will be *recycled within the country (or the region), not flowing into the U.S.*

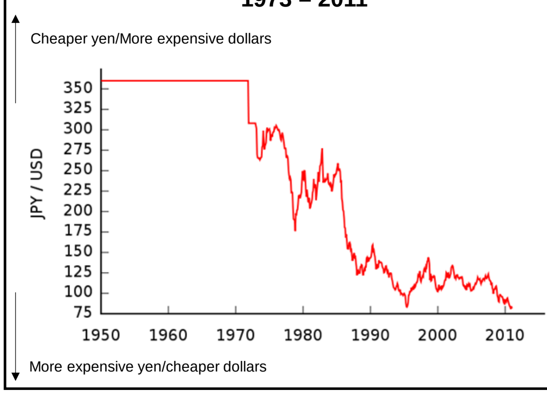
U.S. Claim to China in the 2000s

- **China** (or East Asia) is the *biggest contributor* to U.S. CA deficit
- **China**, with *manipulative currency policy*, keeps its *currency undervalued* and keeps *dumping exports* to U.S. markets
- **China** *needs to revalue* its currency, and
- *develop and liberalize its financial markets*, so that
- **China's** *excessively high saving rate* will go down, and that
- **China's** enormous current account surplus will be *recycled within the country (or the region), not flowing into the U.S.*

Japan's financial deregulation/liberalization

- In 1984, GOJ announced it will implement financial dereg./lib. policies.
- Ironically, GOJ's liberalization policy enhanced more Japanese investment to the US and contributed to stronger US dollars
- Consequently, US trade deficits worsened
- 1985:9 – The Plaza Accord
  - G5 countries agreed to "correct" the value of US dollars by intervening the markets
- Yen soared afterwards → hurting J's exports

Yen-US Dollar Exchange Rate 1973 – 2011



Credit expansion in the late 1980s

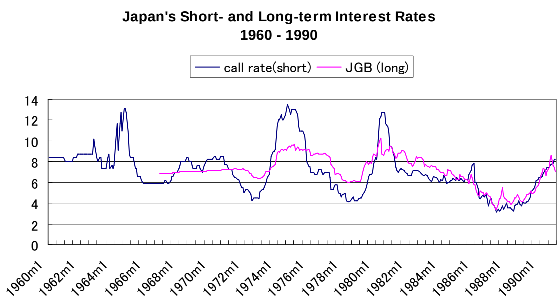
- Strong yen hurt the competitiveness of the export sector ➔ High Yen (En-daka) Recession in 1987
- US Black Monday (Oct.19, 1987)
  - DJ fell 22.6%, 41.8% in Australia, 22.5 in Canada, 45.8% in HK, 26.4% in UK

➔ Japan was intact and quickly lowered the interest rate, which it was already lowering after the Plaza accord.

Credit expansion in the late 1980s

Credit expansion occurred in Japan

- **Surrounding factors for low *i* policy**
  - "High yen recession" (1987)
  - US Black Monday (Oct. 1987)
  - Government debt (early 1980s) + Privatization
- Change in Banking structure: Deregulation made it easier for banks to provide credit



Average (Short-term) Interest Rate:
1960s: 7.9
1970s: 7.3
1980s: 6.2
1985–89: 4.8

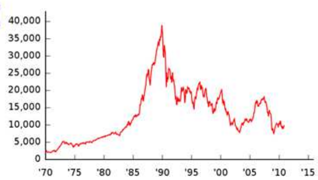
Credit expansion in the late 1980s

- Thinner profits, but larger lending
- This was sustainable as long as the value of land kept rising. → **Land as collateral**
- Rising stock market prices → increasing lending
  - **The higher the stock market level, the more capital, and the more lending**.

The Bust of the Bubble …

- Asset inflation became a social issue
- BOJ guided higher interest rates in 1989
- The stock market collapsed in 1990.
  - By Oct. '92, the Tokyo stock market lost its value by 50%.
- The land market value started declining in 1992.
- The anti-wealth effect or the vicious cycle started in the early 1990s.

Asset Prices: Nikkei Stock Index and Land Price Index



Roller Coaster Markets

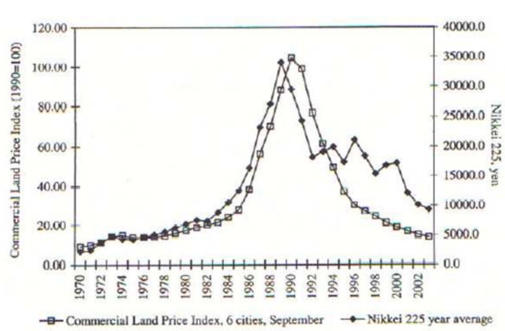
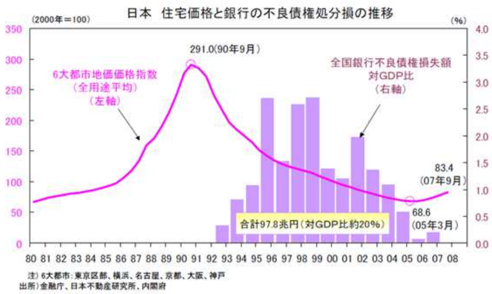


Fig. 4.1 Land prices and stock prices, 1970–2003

Bad loans are bad …



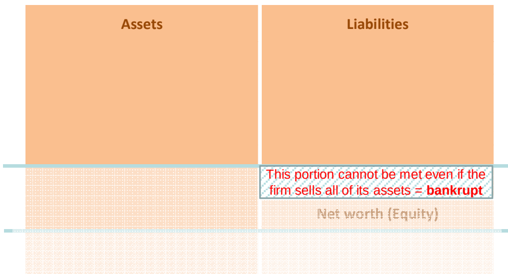
A Little Bit of Accounting – Firm’s perspective

Assets	Liabilities
Current assets Cash Accounts receivable Inventory Fixed Assets	Current liabilities Accounts payable Notes payable Long-term debt
	Net worth (Equity)
	Stocks Retained earnings

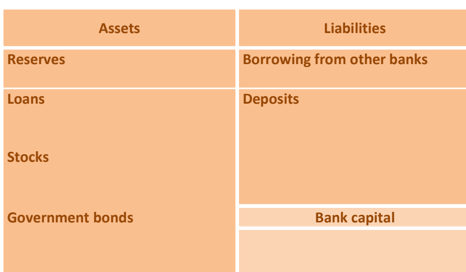
A Little Bit of Accounting – Firm’s Perspective

Assets	Liabilities
	Net worth (Equity)

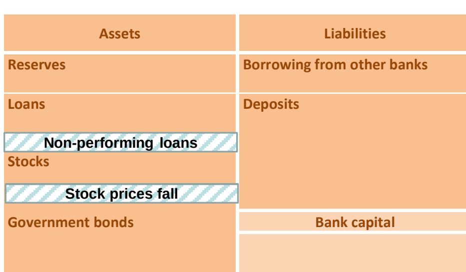
A Little Bit of Accounting – Firm's Perspective if losses occur



A Little Bit of Accounting – Bank's perspective



A Little Bit of Accounting – Bank's perspective – when losses occur



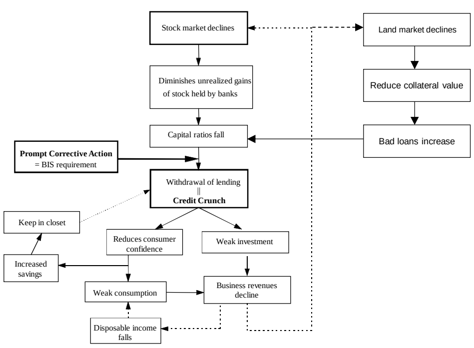
Real asset deflation shrinks the asset side of the balance sheet

It is important to keep ample capital for a rainy day – BIS capital adequacy ratio

$$BIS \text{ capital ratio} = \frac{\text{Bank capital}}{\text{Risk - adjusted assets}}$$

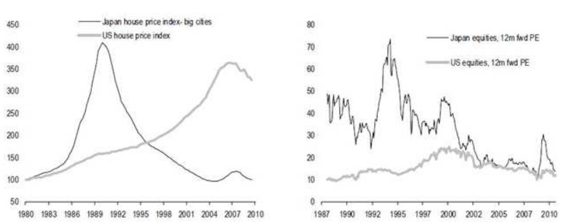
- If you are facing a fall in the ratio, and you want to stop it from falling further or increase it, what would you like to do?
  - ❑ You want to increase the numerator
  - ❑ You want to decrease the denominator

The "Vicious Cycle"

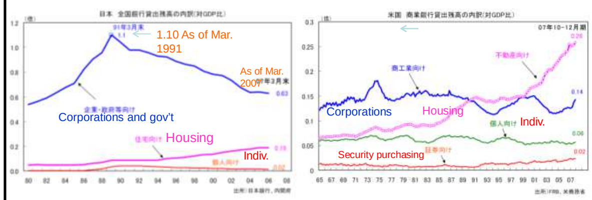


Ito and Szamosszegi (1998)

The Bubble and the Bust!



Loans to Different Types of Borrowers (as % of GDP)



The "Lost Decade<u>s</u>"/The "Great Recession" (1991 – present)

1991 – 1995
- Asset deflation
- Reversed wealth effect: "Vicious cycle"

1995 – 1996
- Yen appreciation
- Massive fiscal expansion

1997 – 1999
- Fiscal contraction
- Banking crisis

1999 – present
- Deflation, Liquidity trap
- Social security system crisis
- Earthquake/Tsunami/Nuclear crisis

Macroeconomic policies have been ineffective(?)

Macroeconomic Policies

- Fiscal policy (Gov't spending and tax cuts)
- Monetary policy
- (Exchange rate policy)

Macroeconomic policies have been ineffective (?)

Government spending (J-gov't spent about $1trillion during the 1990s)

- Well, it did work, maybe. The economy could've been worse w/out massive fiscal spending in the early 1990s.
- But, it was not as effective.
  - Diminishing returns
  - Public works spending in less productive areas ← Pork barrel: highways, roads, dam, ports, etc. "in the middle of nowhere"

Why didn't macro policy work?

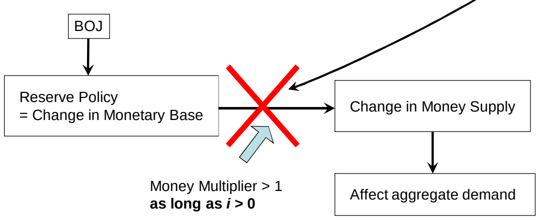
- **Tax Cuts**
  - "No one to give tax cuts to":
    - A large proportion of potential tax payers aren't paying taxes after a series of tax cuts
    - "Don't favor the rich!!"
  - "**Ricardian equivalence**" due to mounting government debt

Why didn't macro policy work?

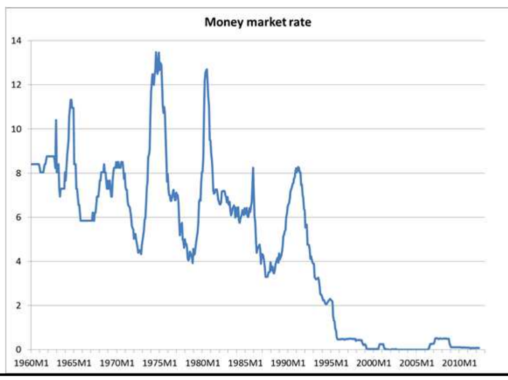
- **Monetary policy** – not effective especially in the late 1990s
  - "Liquidity Trap"
  - Banking crisis in 1997 – 98

The "Liquidity Trap"

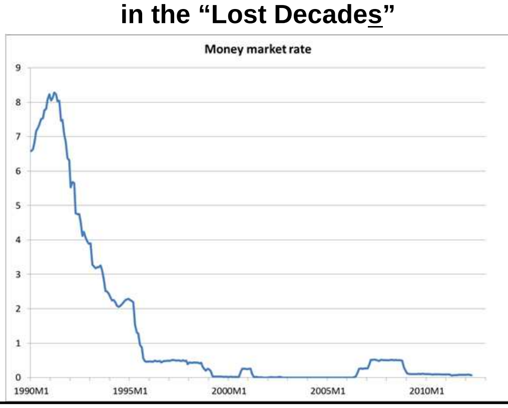
- Monetary policy is ineffective when i = 0 (September 1999 – present).



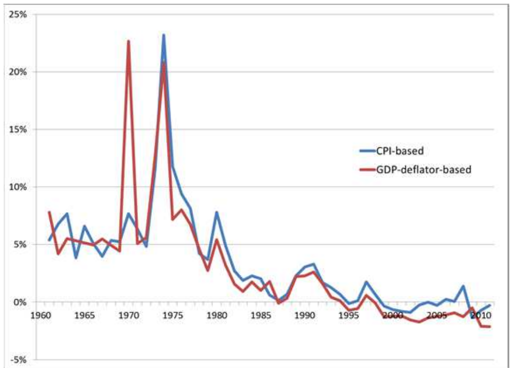
Money Market Rate: 1960 – 2011



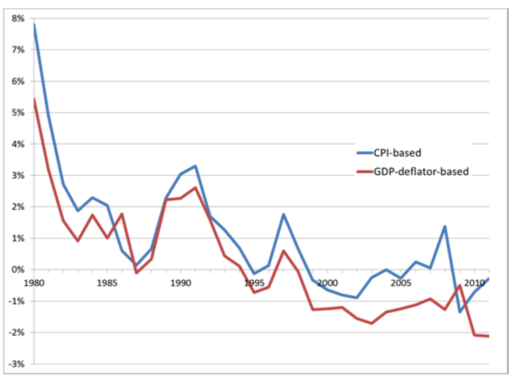
Money Market Rate in the "Lost Decades"



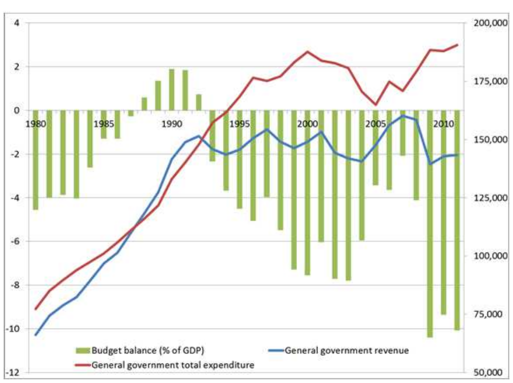
Japan’s Inflation



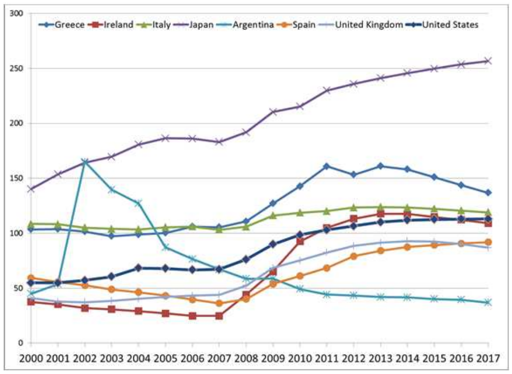
Japan’s Deflation



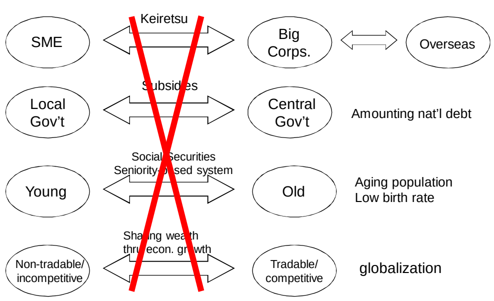
Japan’s Public Finance



Gross National Debt (as % of GDP)



The nation-wide cross-subsidy, or mutual insurance system



is no longer sustainable

Climate Change Outside and Inside Japan

1950s		1980s on
Abundant in young people	**Demography**	Rapidly aging
Abundant and cheap	**Labor**	Declining and expensive
Scarce	**Capital accumulation**	Abundant
Relatively restricted	**Trade**	Free
Restricted	**Capital flow**	Free
Low	**Value of Yen**	High

Political Inertia

- Climate change inside and outside Japan and rigidity in the system
- Lack of objective policy analysis/policy debates
- Legacy of the Cold War
  - Extreme risk averse behavior / Avoidance of social fragmentation
  - Conservatism / status quo
- Legacy of the war economy – "If the markets aren't working *properly,* why doesn't the gov't intervene?"
  (cf. rise in foreign investors)