

# Japan's Financial Crisis and Economic Stagnation

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# Japan's Lost 90s

- “Highlights powerful *two-way* links between the real economy and the financial system”, says BIS.
- $\text{Real GDP} = \text{Nominal GDP} / \text{Price Level}$
- “Great Recession but Depression because the worst annual real GDP growth was -2%, while it was -6% in the Great Depression of the USA.

# Growth Slowdown and Deflation

- The apparent decline of trend growth rate around the early 1990s is clear. (Figure 1)
- The annual deflation rate since 1994 has been relatively small. (Figure 2)
- The decline in the asset prices is extraordinary:
- Nikkei: 40,000 (1989) down to 8,000 (2003)
- Land prices doubled from 1980 to 1990, and returned to its 1980 level in 2003.

# The Financial Crisis

- Land has been extensively used as *collateral* for loans. The decline in land prices resulted in the recent crisis of the banking sector.
- The financial problem of Japan is disproportionately large relative to the macro stagnation: The taxpayers' loss amounts to 4% of GDP, while the depositors' loss was 2% in US in 1930s.

# Feedback from the Financial Sector to the Real Economy

- An influential but minor view taken by Hayashi and Prescott (2002): *The financial sector problems are even irrelevant*. The Solow growth theory, treating TFP (total factor productivity) as exogenous, accounts well for the Japan's lost decade.
- The textbook view is that the banking problems led to a *credit crunch* that depressed employment and investment.

# Regulation affected Banks' Policy

- Japanese banks continued to provide credit to firms even though the prospects of being repaid were limited.
- Caballero, Hoshi, and Kashyap (2003): The banks' policy to keep money-losing "zombie" firms in business has depressed the creation of new businesses in the sectors where the subsidized firms are most prevalent.

# The Government took Drastic Policies to Stimulate the Economy

- Bank of Japan lowered the interest rate aggressively. (Figure 3)
- The average fiscal deficit from 1995 to 2001 was 5.1% of GDP.
- The government repeatedly delayed the deposit insurance reform to limit its coverage, in order to support insolvent borrowers.
- Why have those policies failed?

# Financial System Overview (Table 1)

- There are 10 city banks including Tokyo-Mitsubishi, Mizuho, UFJ, Mitsui-Sumitomo, and Resona)
- Banks account for half of all assets, deposits, and loans.
- The public sector in Japan plays a largest roles in financial intermediation in OECD countries.
- Postal Savings account for 10% of assets, and 20% of deposits.

# Bank Sector Problems

- Since 1980, Japanese banks have compensated for the cumulative loan losses by realizing capital gains on long-held stocks.
- The interest margin is only 1.2% of assets (US: 3.5%).
- Japanese banks heavily depends on lending revenue (nonlending revenue: 38% for Japan, 73% for US )

# Too Large Banking Sector

- Bank assets per person and bank assets relative to GDP are twice as high in Japan as in the US.
- Japan's banking sector has been too large due to capital controls and other regulations that restricted nonbank financing options.
- Deregulation and development of nonbank financing will make bank assets shrink.

# Government Financial Institution

- Postal saving systems provide much more convenient services (huge number of branches, competitive interest rate on deposits, no maintenance fees).
- Government Housing Loan Corporation (GHLC) accounts for 40% of all home mortgage loans.
- The public has not been convinced that the government-sponsored financial institutions are the reasons of the banks' low profitability.

# Low Profitability of Borrowers

- Banks are consciously continuing to extend credit to insolvent borrowers (“ever-greening”).
- Bank loans increased disproportionately to underperforming sectors.
- Firms with low profit rates and poor stock market returns attracted more loans.
- More firms received loans with below-market interest rates.

# What explains the ever-greening?

- First, the government does not want large borrowers fall into bankruptcy, being afraid of significant job losses.
- Second, banks want to hide the troubles from their customers. Otherwise a serious *capital shortage* would be revealed.

# Capital Shortage Problem

- The published capital figures are biased upward for several reasons.
- First, banks in Japan tend to underreserve against recognized bad loans (40-60% for Japan, 160% for US).
- Second, deferred tax assets are overcounted. Deferred tax assets are tax credits from past losses that banks expect to claim in the future.

# Adjusted Capital is Much Less than the Reported Capital (Table 2)

- Since the crash of the Bubble Economy, the market value of shares has continued to decline to their book values in 2003.
- Deferred tax assets now account for 40% of banks' reported capital.
- The underreserves amounts to 5 through 15 trillion yen.
- Most of the capital comes from the government transfers in the past.

# The Double Gearing

- Banks and insurance companies hold each other's bonds and stocks.
- This cross-holding makes both banks and insurance companies appear better capitalized.

# Why have the past injections of taxpayers' money failed?

- Much money has been wasted on banks that should have gone out of business.
- Taxpayers' money should have been used to encourage more profitable activities.

# Fiscal Investment and Loan Program (FILP)

- A large part of deposits collected by postal saving system go to FILP, which in turn lends to government-sponsored corporations such as:
- Government Housing Loan Corporation (¥66 trillion)
- Development Banks of Japan (¥15 tr.)
- Japan Highway Public Corporation (¥22 tr.)
- Japan Finance Corporation for Municipal Enterprises (¥18 tr.)
- Urban Development Corporation (¥15 tr.)

# Why is FILP so bad?

- Most of borrowers of FILP are doing unprofitable activities.
- The loss of FILP is compensated for by the government subsidies, and eventually require a taxpayer bailout.
- The assets of FILP borrowers are overvalued. Most of assets are counted by the high book values at which they purchased them in the Bubble Period.