May 1\textsuperscript{st}: Problems of the Japanese Economy
In the 1990s, Japan was suddenly transformed from a high- to low-growth economy.

- In the second half of the 1980s, per capita GDP had still been growing at 4% annually.
- Then in 1991-2000, per capita GDP grew by only 0.5% p.a.
  - The comparable figure for the U.S. was 2.6%.
  - If you grow 2% slower per annum for a decade, you fall 25% behind.

This economic malaise was unexpected.

It clearly changed Japan’s diplomatic leverage in Asia, compared to say China.

- All this makes it important for us to understand the causes of the slump.
Origins of the problem

- Backdrop was a state-led, heavily regulated financial system (public banks, postal savings system, directed lending).
- The financial system was then liberalized in the 1980s. Big corporate borrowers could suddenly fund themselves by issuing securities.
- Banks, desperate for clients, scrambled into risky loans to small firms, real estate loans and securities holdings. Many of these were secured by land holdings (even loans to small firms).
Banks then lent on real estate, with disastrous consequences [can you say “subprime crisis?”]
And just in case you’re not alarmed yet…
In addition to financial deregulation, other factors fed the lending boom

- Bank of Japan then cut interest rates as part of the Plaza and Louvre Agreements.
  - Does this make you think of the US starting in 2001?

- This fed the stock market bubble. Investment surged along with securities prices, stimulating growth and disguising underlying problems.
  - [This also sounds a lot like Thailand, Korea and the other countries that succumbed to the Asian crisis after 1997. Is this an exam question?]

- Then in 1989 the B of J raised rates and the bubble burst. This left the banks with portfolios bring over with nonperforming loans and worthless collateral.
  - Again, can you say “subprime crisis”?
The Japanese economy has been in a slump every since: it experienced three recessions in the 1990s, and its largest one-year contraction ever in 1997-8.

- But how do we interpret and explain this extended slump?
Interpretation 1: the Slump as a Banking Crisis

- By this interpretation, the bursting of the bubble and the tight monetary policy that followed (shades of the U.S. in the 1930s…) precipitated the banking crisis.
- We know that banking crises take years to clear away even in the best of circumstances.
- Typically, they depress output for 3 years and lead to a 10 per cent cumulative output loss.
- In Japan, the banking crisis actually continued for more than a decade. Growth was depressed for more than ten years. The cumulative loss approached 25 per cent of GDP.
Why were the macroeconomic effects so large?

- Because of continued dependence on bank lending (notwithstanding previous disintermediation).
- The bad loan problem (at 15-20% of GDP) was five times as large as in the US S&L crisis of the 1980s.
- Perhaps most importantly, intervention was less than timely. Japanese regulators allowed the banks to gamble for redemption (throwing good money after bad and digging themselves a deeper hole).
But why was Japan so slow to fix the banking system?
But why was Japan so slow to fix the banking system?

- Sheer size of the problem made clean-up look dangerous.
  - Securitizing and selling off real estate collateral would have led to a further collapse of the real estate market.

- Using public funds to recapitalize the banks would have required a year’s worth of public spending
  - The very expense encouraged hesitation (in the hope that the problem might solve itself).

- Post-WWII growth in Japan was predicated on close connections between banks and government.
  - Powerful financial interests could therefore effectively lobby against closing down insolvent financial institutions.
Interpretation 2: the slump as a deflationary crisis

- Starting in 1994, prices in Japan started falling. A second interpretation of why the crisis lasted so long is that the banking crisis was succeeded by a deflationary crisis – which the BOJ and government failed to effectively address.
  - Consumer prices fell by 0.3% in 1999, 0.8% in 2000, 0.7% in 2001, and 1.0% in 2002.
  - GDP deflator fell even faster, at a rate of 1 ½ to 2 per cent per year.
  - Only in 2005-6 did it finally appear that the long decade of chronic deflation had been brought to a halt.

- We would expect a financial crisis to be deflationary. (After all, the banks stop lending, and consumers, newly uncertain stop spending.) But we would also expect the central bank to intervene by rapidly cutting interest rates (as the Fed did last August in response to the subprime crisis). But the BOJ did not do this. Prices started falling, and expectations of deflation fed on themselves.
Why is deflation so damaging?

- Do you recall our discussion of this in the context of the 1930s?
Why is deflation so damaging?

- Consumers hold off spending in expectation of lower prices tomorrow.
- Firms hold off borrowing and investing, since their revenues will be lower tomorrow but costs of investment are incurred today.
- Banks hold off lending, since interest rates are too low to make this attractive.
What is the standard remedy for deflation?

- When is this standard remedy unlikely to work?
What is the standard remedy for deflation?

- What is the standard remedy for deflation?
- When is this standard remedy unlikely to work?
  - Hint: What happens to the usefulness of standard instruments of monetary policy (like the BoJ’s overnight interest rate) when nominal interest rates fall to zero?
This figure shows the liquidity trap

- Note how after 1995 narrow and broad money decouple.
- So even when the BOJ did finally start injecting high powered money into the economy, deposits and CDs were not growing because interest rates were so low.
Are there solutions to this problem?

- By printing enough money, can’t the central bank reverse expectations of deflation?
- By announcing a target for inflation or exchange rate depreciation, can’t the central bank quickly transform expectations?
  - After all, by depreciating the dollar, FDR was able to vanquish deflationary expectations and the US was able to escape the liquidity trap in the 1930s.

Fig. 3. The price of cotton and the exchange rate, 1930–1936. Solid line: cotton price; dotted line: value of the dollar in pounds.
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But what?
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- **Japanese government bonds (JGBs)**? But interest rates on these are close to zero already.
- **Stocks**? But doesn’t this create a moral hazard problem for the issuers, and a dilemma for the government? (On the other hand, Hong Kong Monetary Authority did this successfully in 1998.)
- **Foreign exchange**? But won’t this hurt Japan’s Asian neighbors by pushing down the yen against their currencies?*

Still, there would appear to be a number of options. So why, in the five-plus years since deflation set in, was the BOJ reluctant to take such steps?

* Reminiscent of the complaints one hears currently about the U.S. pushing down the dollar at the expense of other countries.
Explanations for BOJ reluctance

- Misdiagnosis of the problem as structural rather than macroeconomic (implying need to do nothing)
- Belief that loosening monetary policy will reduce the pressure for structural reform
  - [Recall liquidationist view in the 1930s]
- Anachronistic fears (worries about creating another bubble economy)
  - [Again, recall 1930s arguments about moral hazard]
- Need to assert and defend CB independence (only finally granted in 1998).
  - But why is a perversely tight policy the bet way of asserting independence?
- Influence of demography on policy (Japan has the highest dependency ratios in the world).
  - For the elderly, deflation is not so bad…
- Conspiracy between those who benefit from public spending/public works and BOJ?
Japan has mainly used fiscal policy in the effort to counter the slump (consistent with the arguments of those who emphasize the influence of vested interests in construction sector and local government).

Small deficits were used for reflationary purposes between 1992 and 1997. But after 1997, when full-fledged crisis loomed, deficits were allowed to explode.

In 2002 the government budget deficit was 7% of GDP!

This raises the question of why fiscal policy didn’t succeed in solving the problem.
Explanations for ineffectiveness of fiscal policy

- Given the debt burden, people realize that there will have to be big tax increases in the future. Hence, they stop spending now.
- Much of this government spending was inefficient (lined the pockets of construction companies), which undermined confidence in economic management rather than buttressing it.
- Implemented fiscal policy was less expansionary than announced fiscal policy. Often Tokyo announced a fiscal stimulus plan but left it to local governments to fund and implement it.
- Fiscal impulse has been sporadic.
- And there is a looming debt problem.
Fiscal impulse has been sporadic

Figure 4: Government's Contribution to Japan's Real GDP Growth over Year-Earlier Quarter, 1985-99

Note: The contribution to the change in GDP is equal to the change in the component from four quarters earlier divided by GDP in the earlier quarter.

Source: Economic Planning Agency
The looming debt problem

- In 2002 general gov/debt ratio was 156% of GDP.
  - Comparable numbers for Argentina were only 120% before its crisis.
- With a debt/income ratio of 150% and an equilibrium growth rate that roughly equals the equilibrium interest rate, a balanced budget is not enough to keep the debt/income ratio from exploding.
- Japan needs in addition to run substantial primary budget surpluses.
- It is now running large deficits.
- This implies the need for a big fiscal contraction at the same time the economy is stagnant and demographic pressures are building. Is this possible?
- Can inflation solve this problem?
Is the slump now finally over?

- Japan is growing again now for the first time in years, by about 2%. (Current IMF forecast is for 1.6% in 2008.)
- On the policy front, BOJ became more serious of vanquishing deflation following the installation of a new governor in 2003.
- On the corporate front, Japanese companies have restructured, some such as Nissan and Matsushita Electric shaving their workforces significantly (a radical step for a country with a tradition of lifetime employment).
- On the labor market front, workers sent by private employment agencies can now work on 1 to 3 year contracts, providing more employment flexibility than before.
- On the financial front, bad loans have been written off; big financial groups like Sumitomo-Mitsui Banking have replenished their capital; there has been consolidation among the big first-tier banks.
And on the external front, China’s growth has pulled Japan along behind it. Japanese exports to China have been growing by 12% p.a. We can see this in the rising share of Japanese exports destined for China...
On the other hand....

- Favorable world conditions boosting exports may not continue forever.
  - The U.S. slowdown could become serious.
  - Even more seriously for Japan, growth in China could slow.
    - Recall our discussion of possible reasons this might occur.

- The Bank of Japan is now reversing out its zero interest rate policy in an effort to regain control of monetary policy. This may significantly slow the recovery.
  - And every time growth accelerates a little bit, the yen appreciates to stifle that acceleration.

- Investment is still inefficient.
  - The Incremental Capital-Output Ratio (ICOR) is twice US levels.*
  - Does this reflect empire building by corporations and weakness of shareholder rights?

- And then there is the looming demographic problem.
  - High old-age dependency ratios imply the need to divert additional resources to health care, etc.
  - With a slowly growing labor force, it is unlikely that the economy can grow very fast.

* ICOR = Rate of growth of output/Rate of Growth of capital stock.
Conclusion: The Crisis in Historical Perspective

- Japan had a government led, bank centered growth model.
- The need to move toward a more decentralized economic system once their early gains from extensive growth were exhausted prompted financial liberalization.
- But prudential supervision was not adequate. Transactions were opaque, bank-firm connections not arms length.
- This led to a predictable boom, bubble and crash.
- The deep mystery is why Japan, unlike, say, Korea, has taken so long to clean up the mess.
iClicker question: Could what happened in Japan happen in the US?

A. Yes
B. No

capital goods orders in Japan (LHS)
money supply growth in Japan (RHS)
capital goods order in the US (LHS)
money supply in the US (RHS)