

# Japanese Economy since 1990

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# Japan in 1980s

- Japanese economy was highly acclaimed as “No.1” by western intellectuals in late 1980s.
- The argued that Japan presented an alternative model of capitalism, which is distinguished from North American or European Capitalism.

# The Lost Decade

- The bubbles in the stock and real estate markets in the late 1980s crashed in the early 1990s.
- Since then Japanese economy suffered from a more than decade long recession until recently.
- The lost 90s were characterized by low inflation and low interest rate.

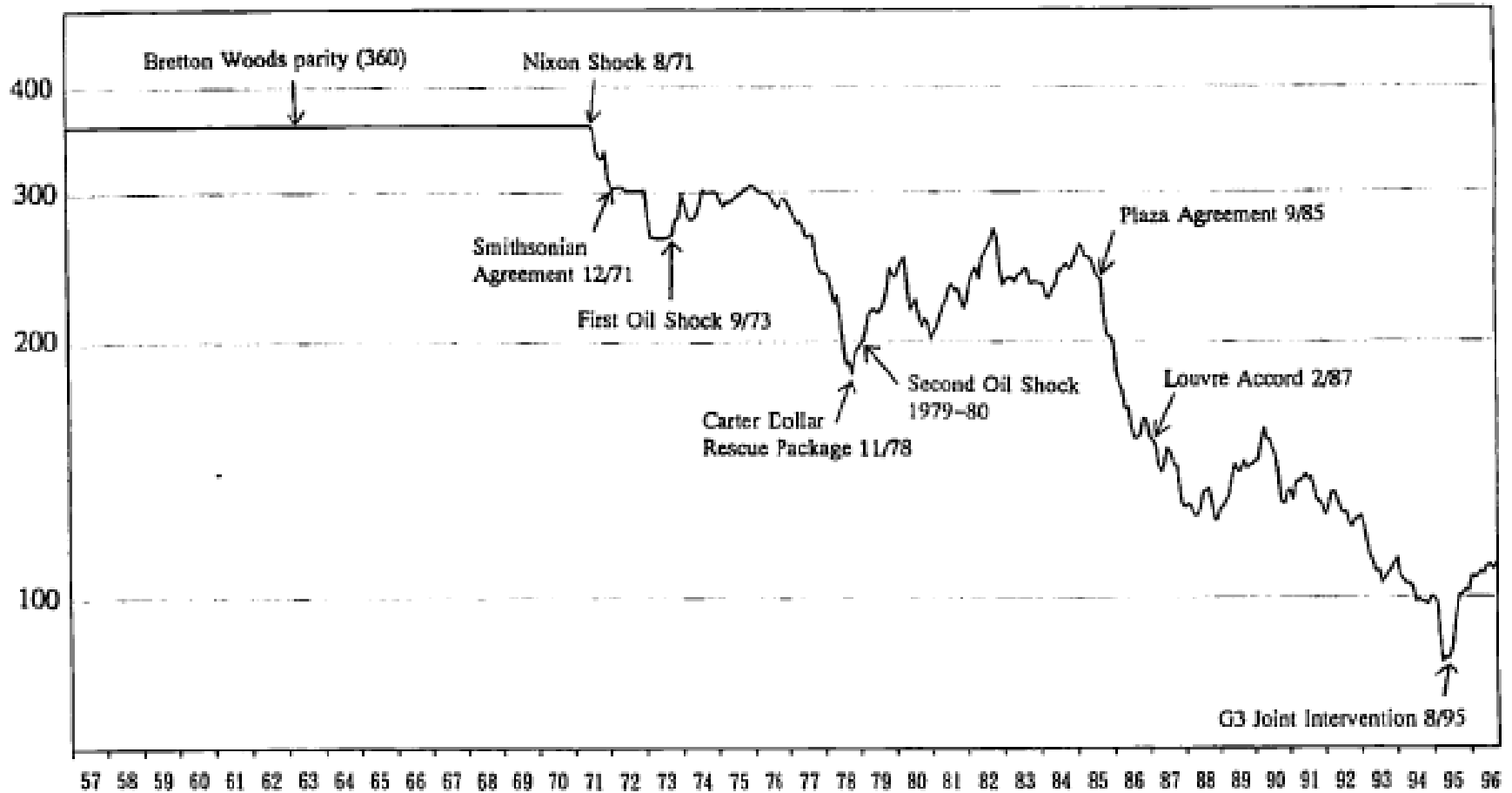


Figure 1.1  
 Nominal yen-dollar exchange rate, semilog scale. Source: IMF, *International Financial Statistics*, CD-ROM, December 1996.

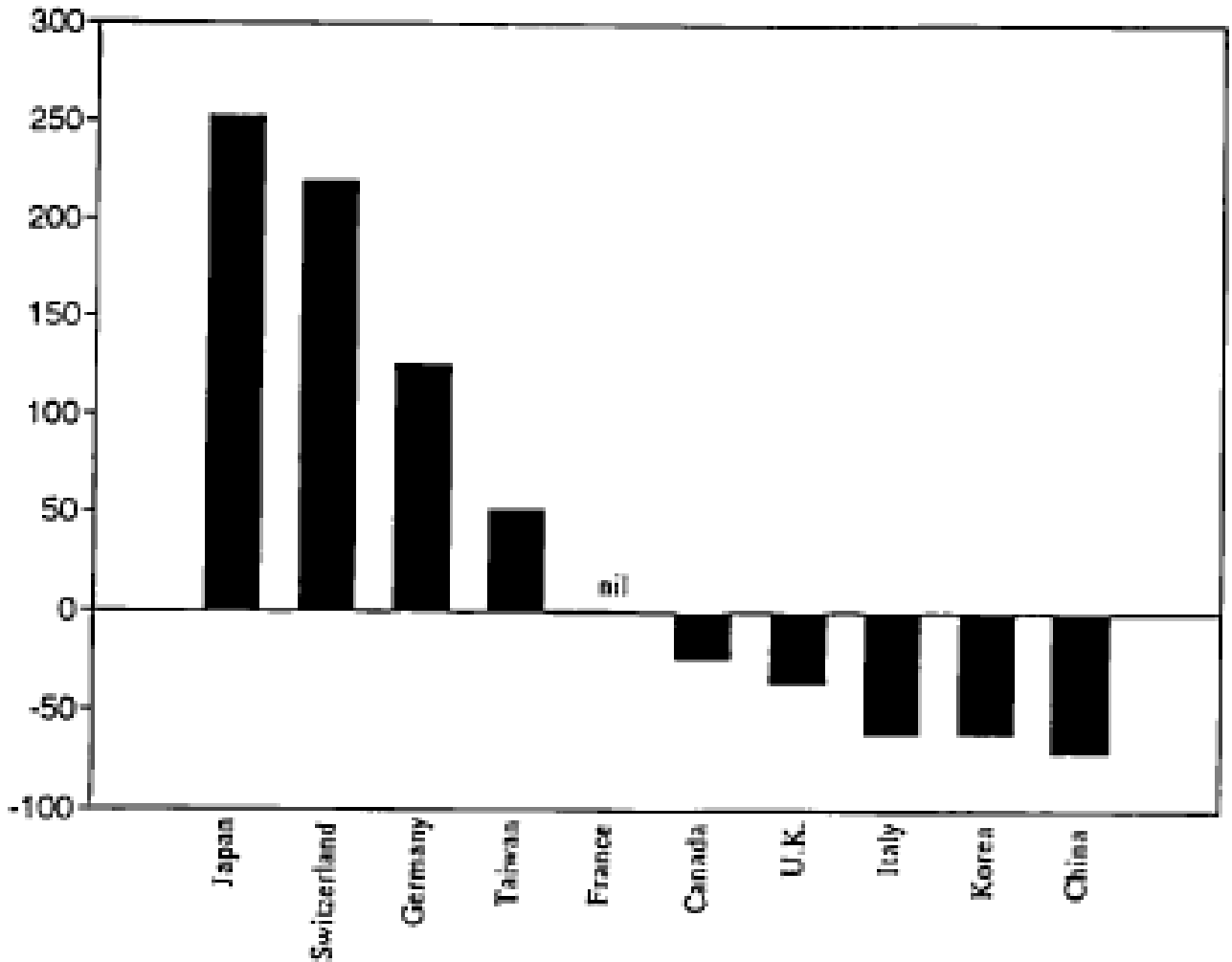
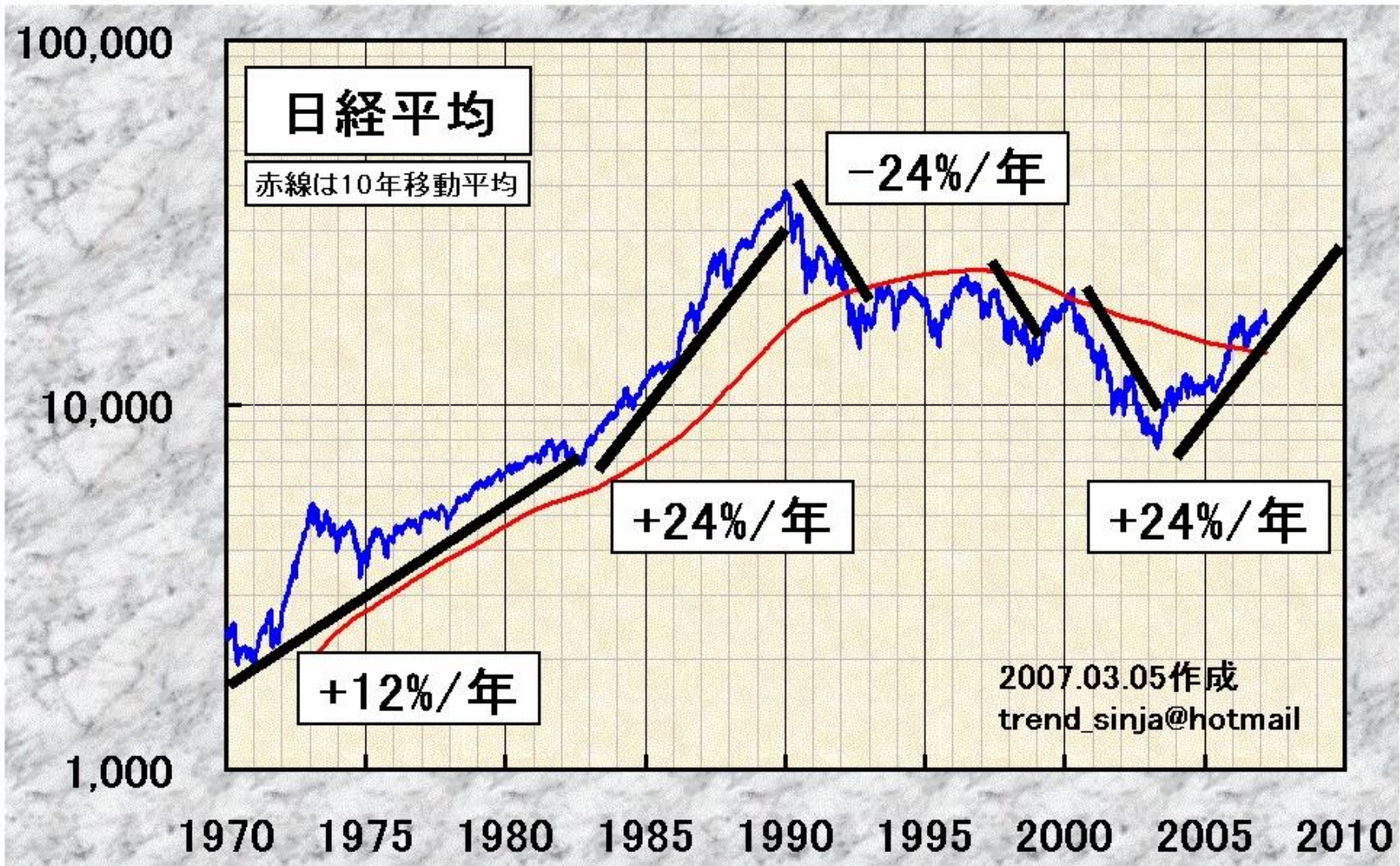
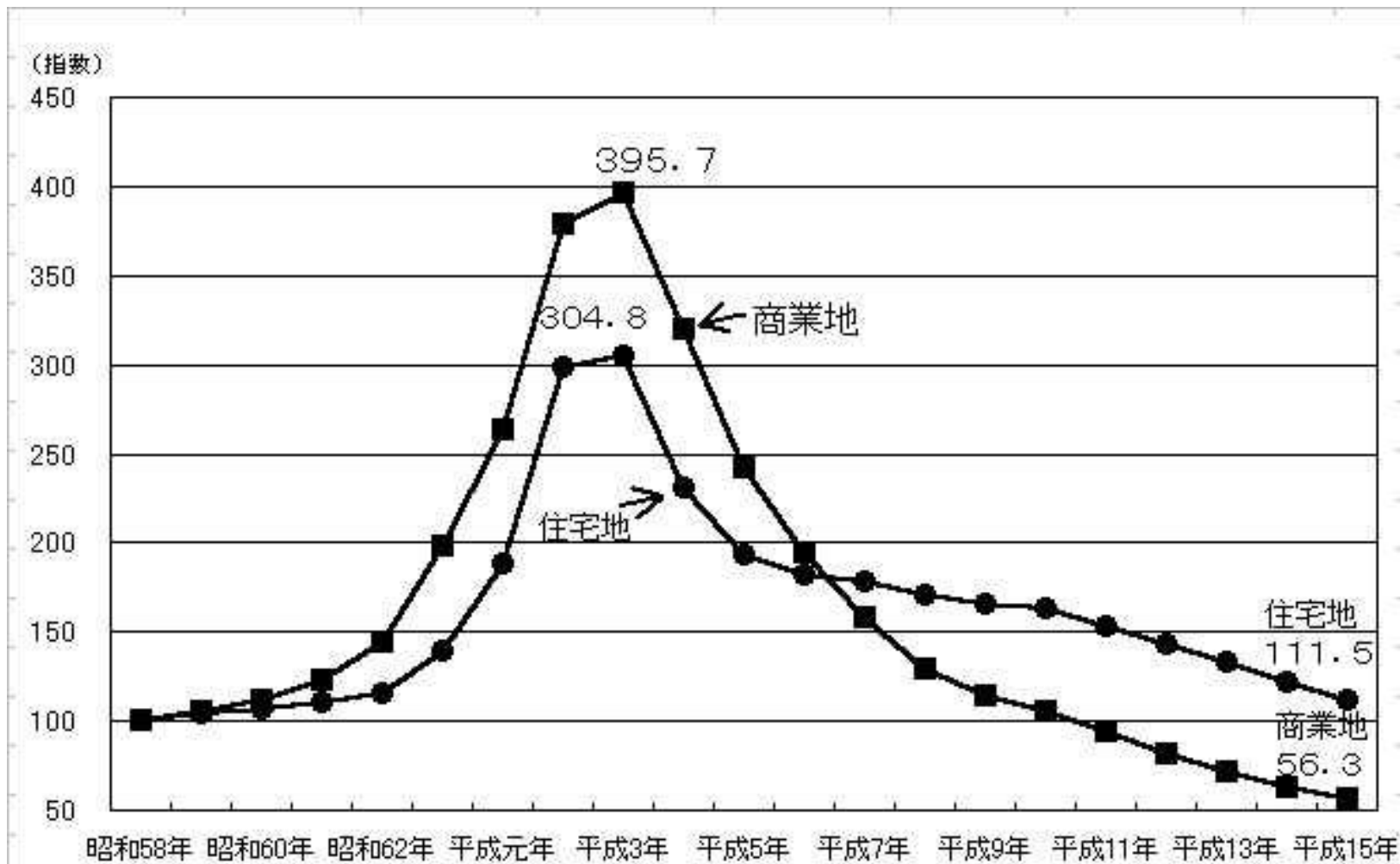


Figure 1.2  
 Nominal appreciation against the dollar, cumulative percent change in 1970-94. Sources: IMF, *International Financial Statistics*, and Bank of Japan, *Economic Statistics Monthly*, various issues.





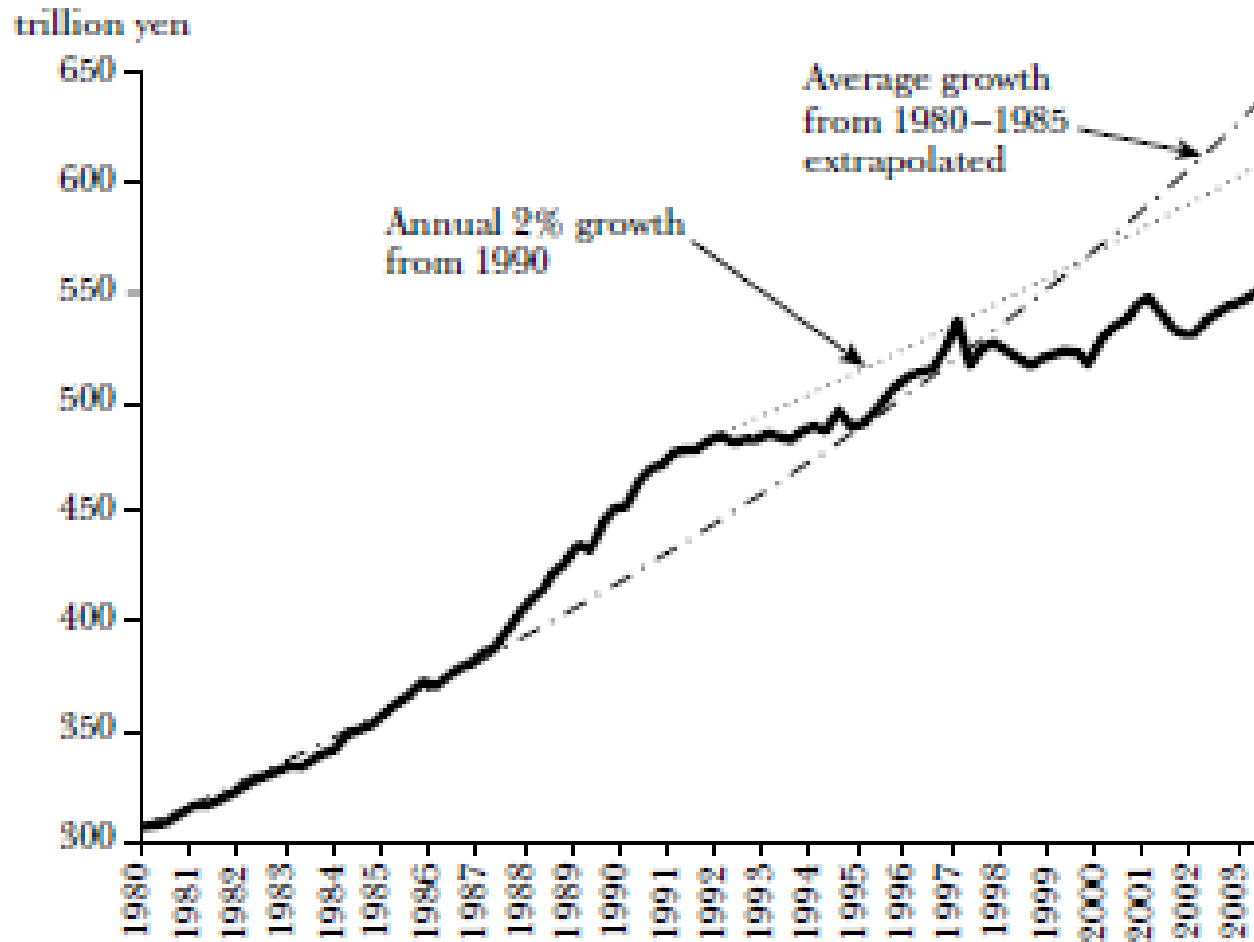
1983

1990

2000

*Figure 1*

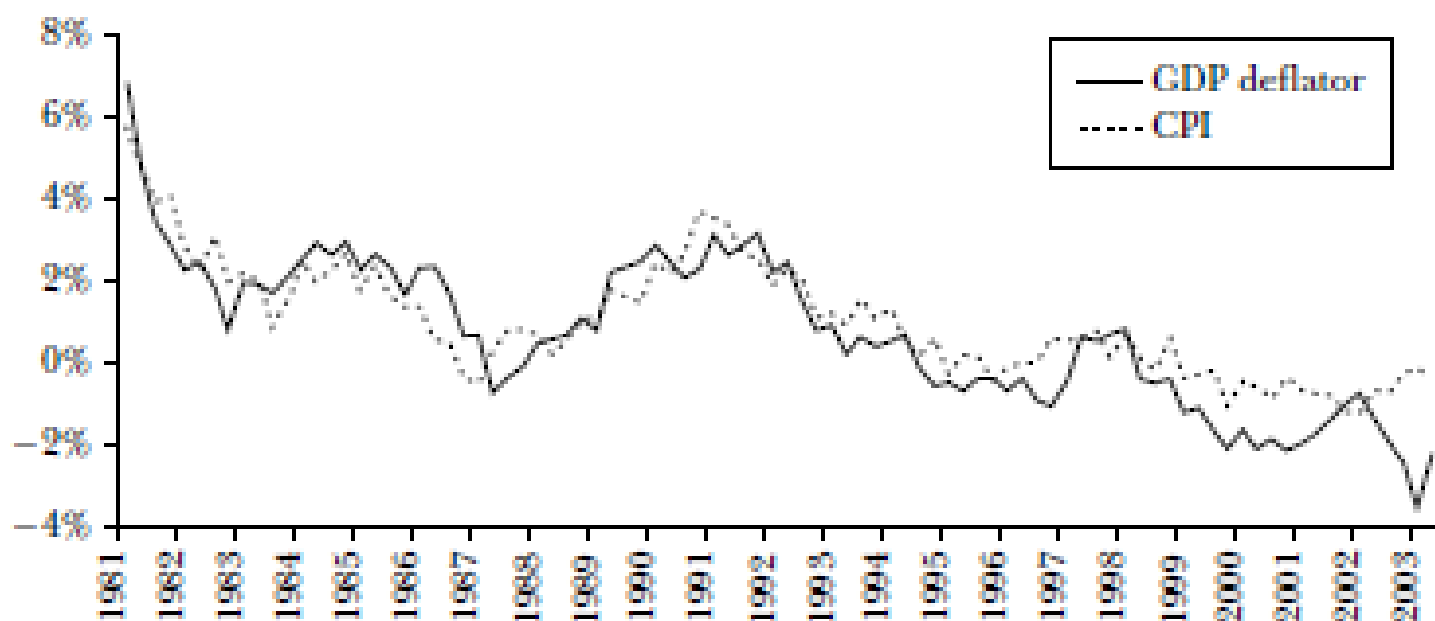
**Real GDP: 1980–2002**



Source: Japanese SNA (System of National Accounting); (<http://www.esri.cao.go.jp/en/sna/menu.html>).

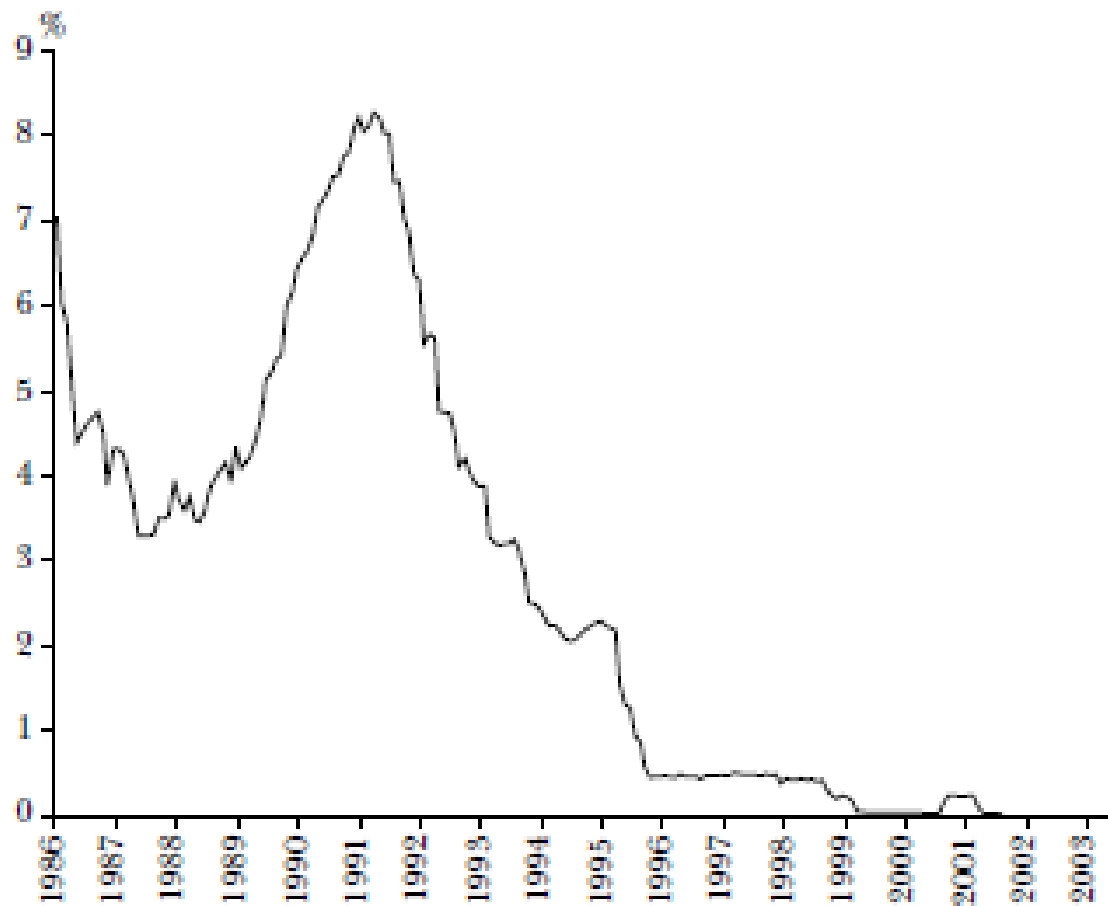


*Figure 2*  
**Inflation Rate**



Sources: GDP deflator is from Japanese SNA (<http://www.esri.cao.jp/en/sna/menu.html>). CPI (consumer price index) is the series modified by Arai and Hoshi (2003) to remove the effects of consumption tax changes in 1989 and 1997. The original series for CPI is available at (<http://www.stat.go.jp/data/cpi>).

*Figure 3*  
**Call Rate**  
*(overnight uncollateralized)*



Source: Bank of Japan ([http://www.boj.or.jp/en/stat/stat\\_f.htm](http://www.boj.or.jp/en/stat/stat_f.htm)).

# History of the Yen-Dollar Exchange Rate

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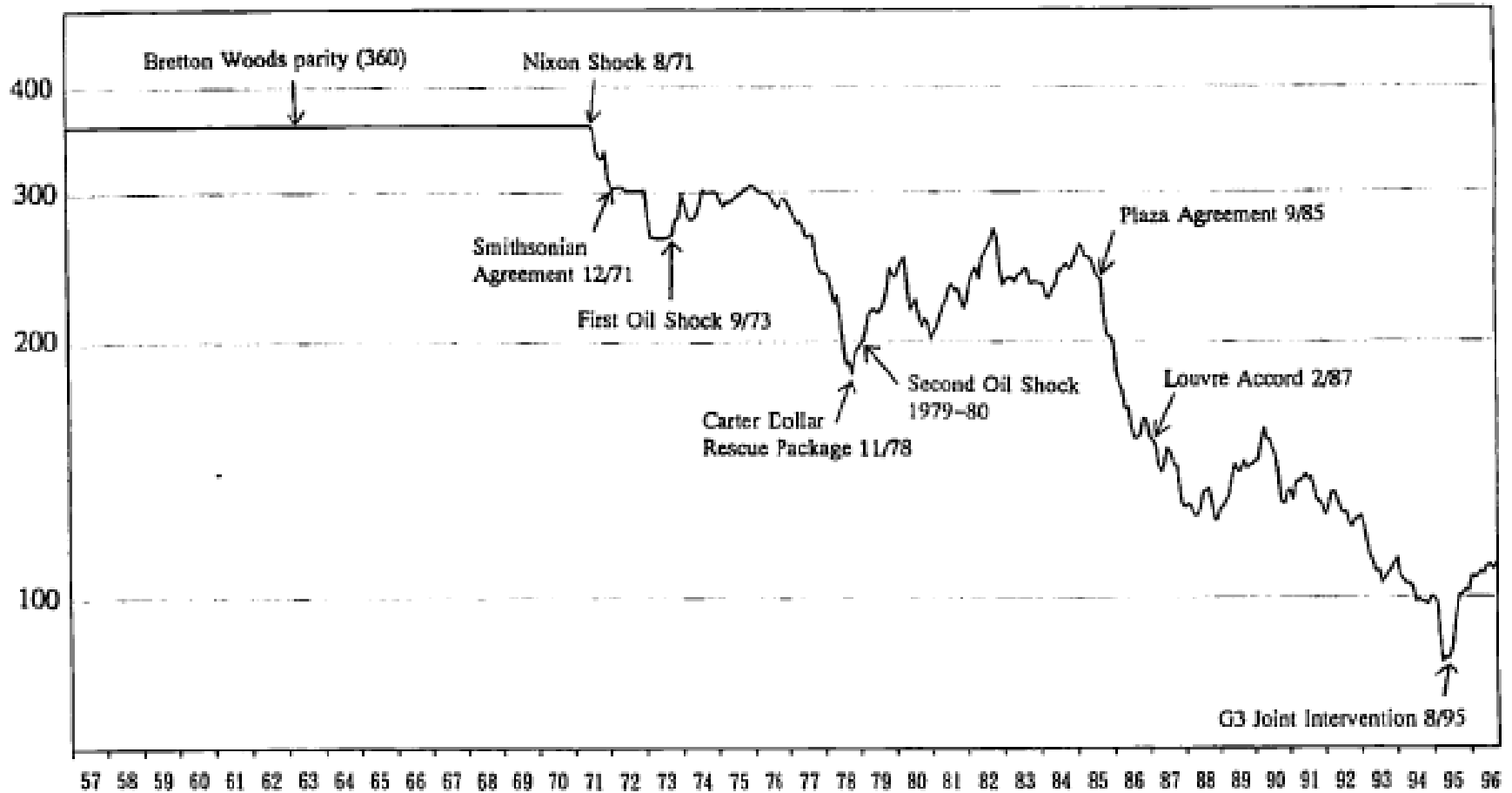


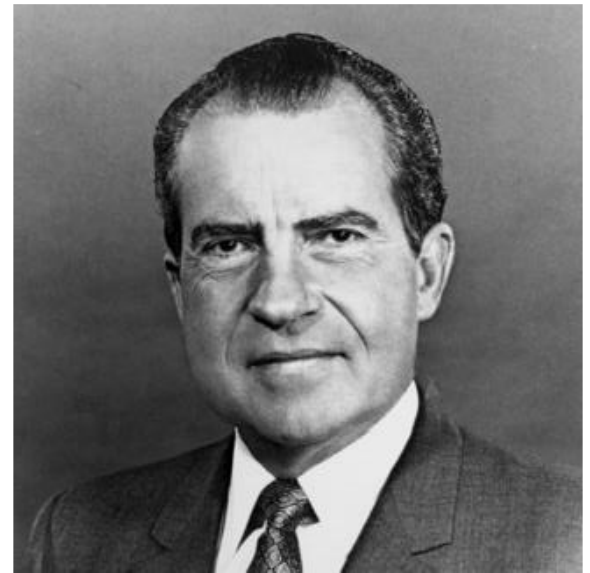
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Nominal yen-dollar exchange rate, semilog scale. Source: IMF, *International Financial Statistics*, CD-ROM, December 1996.

# Bretton-Woods (BW) system

- From 1948 to 1971, the global economy was in a fixed-exchange rate system.
- Countries except US are responsible to maintain the fixed exchange rate of their domestic currencies with the US dollar.
- The US had an obligation to exchange 1 oz of gold with \$35.
- The BW system was a type of gold standard.

# The Nixon Shock

- Members of BW were allowed to change the exchange rate only if their balance of payment was in a “fundamental disequilibrium.”
- In late 1960s, US suffered the increasing current account deficit, which was settled only by the reduction of the gold reserve.
- In August 15, 1971, the US President Richard Nixon finally announced that US suspended the convertibility of the US dollar with gold.

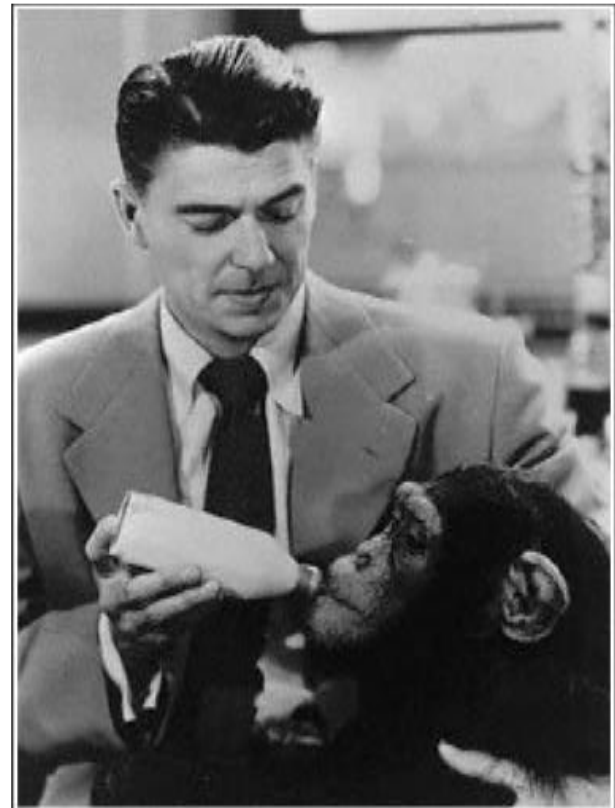


# Transition to the Floating System

- (Smithsonian Agreement 1971) Japan agreed with America on the appreciation of Yen to ¥308/\$.
- The new parity lasted until 1973, when then the leading economy switched to the fixed exchange rate system.
- Since then Yen has been appreciating. In 1978 it reached ¥180/\$.

# The Reaganomics

- In late 1970 the US economy suffered inflation and low GDP growth (stagflation), which lowered US dollar.
- In 1980 Ronald Reagan became the US President and took a drastic economic policy to raise interest rates and expand the government deficits. “



Bedtime for Bonzo



# The Twin Deficits

- The high interest rate attracted foreign investors to buy US dollar at a higher exchange rate, which in turn made US industries less competitive and increased the *current account deficit*.
- The Regan administration cut taxes but raised military expenditure, which resulted in the huge *government budget deficit*.
- The Twin Deficits were gradually recognized as a fatal disease of the global economy.

# G7

- In 1975, seven leading capitalist economies started a regular series of annual “summit” meetings.
- The finance officials (finance ministers and president of central banks) of G7 or G5 began to meet on a regular basis in 1980s.
- Japan was one of the members, which was a source of pride as well as pressure to design economic policies to serve international as well as national interests.

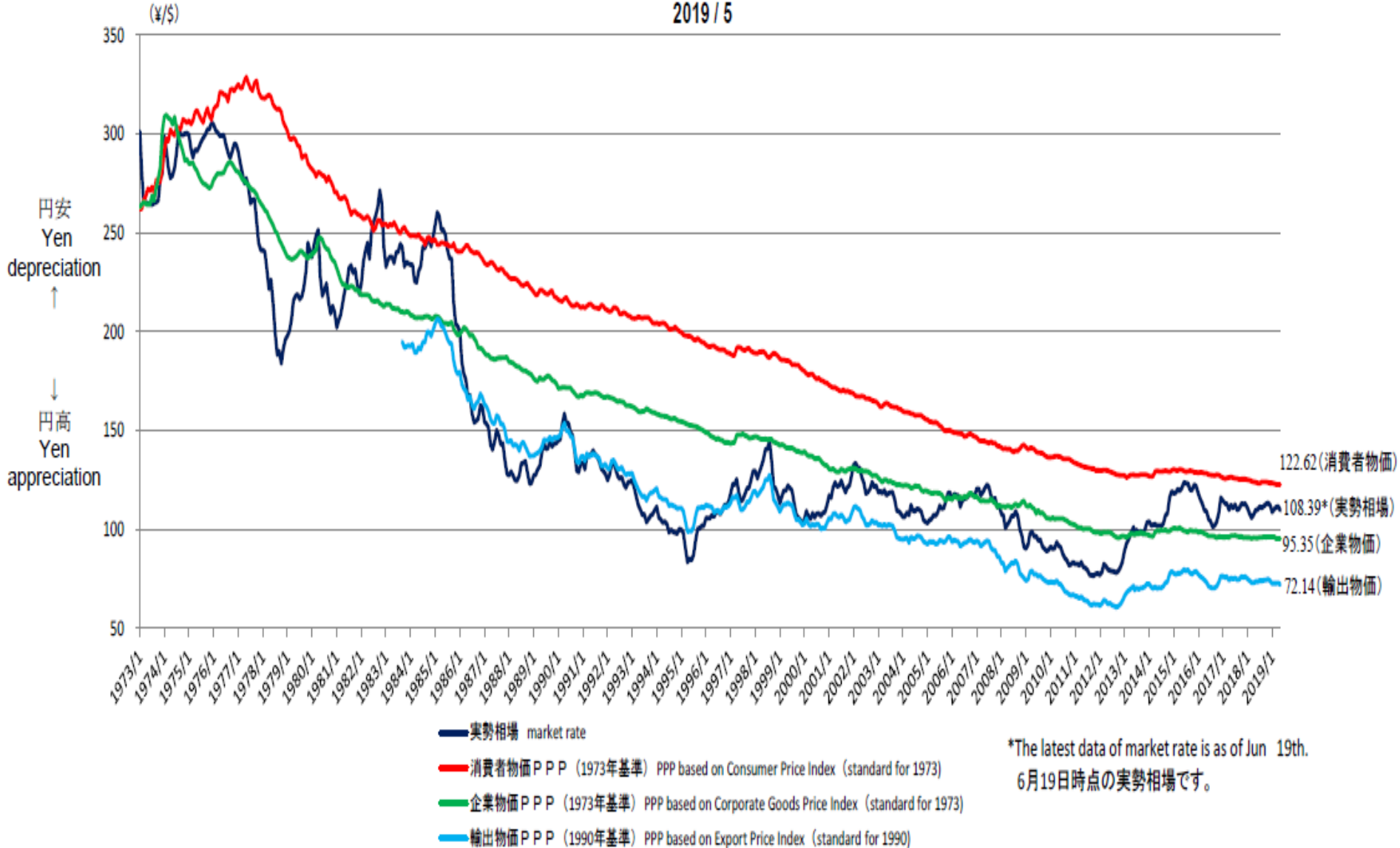
# Plaza Accord 1985

- G5 nations agreed on the devaluation of US dollar, which had been too high, thanks to the US “strong dollar” policy associated with the “Reaganomics.”
- Japan committed a policy to stimulate its domestic economy.
- The BOJ took a drastic monetary expansion to counter the Yen appreciation.
- The easy money provoked the dramatic inflation of the late 1980 (the *bubble economy*).

# The Ever-Appreciating Yen

- The Purchasing Power Parity (PPP) is the foreign exchange rate which equates the prices of tradable commodities across countries.
- In the long-run, the Yen/Dollar rate tends to converge to its PPP, which reflects the gaps in the inflation and productivity growth between countries.
- The productivity growth rates had been higher in Japan than in the US after the WWII, while the inflation rates higher in US since 1970s. Then the Yen must appreciate against the US dollar.
- The actual rate has been moving around the PPP.

ドル円購買力平価と実勢相場  
 purchasing power parity and market rate / U.S. Dollar against Japanese Yen  
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# The Ever-Appreciating Yen Syndrome

- We can say that the Yen is overvalued if the actual rate is higher than its PPP based on the tradable goods.
- The overvalued Yen creates deflationary pressure on the Japanese economy.
- The overvalued yen forces Japanese firms to exert some unsustainable efforts to reduce their production costs, which makes them even more competitive in the global market and yields further evaluation of the Yen.
- Eventually, the Japanese manufacturing firms reach their limit to the cost reduction, and close domestic plants and fire employees.
- This consequence is called as the Ever-Appreciating Yen Syndrome by Ronald McKinnon and Ken-ichi Ohno in 1999.

# The Five Crises

- The Crush of the Bubble (1990)
- The Asian Currency Crisis (1997-98)
- The IT Bubble and its Crush (2000)
- The ‘Subprime’ Crisis (2007) and the Lehman Shock (2008)
- The Great East-Japan Earthquake (2011)

# The Reason for the Lost Decade 1

- During 1990s the major opinion claimed that the recession was caused by the crash of aggregate demand associated with land and stock price.
- The government took a series of stimulating economy by adding public demand to private one, and piling up public projects.



# The Reason for the Lost Decade 2

- However the demand-driven policy failed to help the economy to fully recover from the bottom.
- Then an alternative view took dominance in the 21<sup>st</sup> century.
- The new view claimed that it was productivity slowdown that made Japanese economy to stagnate so long.

# Temporary Recovery

- Thanks to the demand-added policies repeated by the government, our economy recorded 3.8% real growth in 1996.
- Then the government raised the consumption tax rate from 3% to 5%.

# Asian Currency Crisis

- International Investors attacked the currencies of some economic growth leaders in Asia in 1997.
- Before the crisis those Asian countries attracted global money into their growing industries with very high interest rates.
- However the growing pessimistic view among foreign investors caused a reversal of capital flow.
- The crisis was harsh especially for Thailand, Malaysia, Indonesia, and South Korea.

# Fixed Exchange Rate and Foreign Currency Reserve

- Most of the emerging Asian economies adopted fixed exchange rate (FER) system and protected the value of their currencies by foreign currency reserves (FCR).
- But their FCR were not sufficient for maintaining the FER.
- Many of them dropped out of the FER system.

# Exchange rate regime

- In order to maintain a fixed exchange rate regime, a *sufficient* amount of foreign reserves has to be maintained.
- But it is not clear how much is sufficient, with huge capital flows.

# Crisis of Japan in 1998

- The temporary recovery of Japanese economy was reversed by the double attack of the drop in demand caused by VAT increase and the Asian Currency Crisis.
- The financial system became fragile and three major financial corporations (Hokkaido-takushoku, Sanyo, Yamaichi) bankrupted.
- The leading party, LDP, lost the election in the Upper House, and PM Hashimoto resigned.

# LDP cabinets

- Hashimoto (1996-1998): Lost election.
- Obuchi (1998-2000): died of a brain stroke.
- Mori (2000-2001): unpopular and resigned.
- Koizumi (2001-2006): retired successfully.
- Abe (2006-2007): threw away his cabinet.
- Fukuda (2007-2008)
- Aso (2008-2009)

# DP cabinets

- Hatoyama (2009-2010)
- Kan (2010-2011)
- Noda (2011-2012)

# LDP cabinets return

- Abe (2012-)



# Why Japan's cabinets last so short?

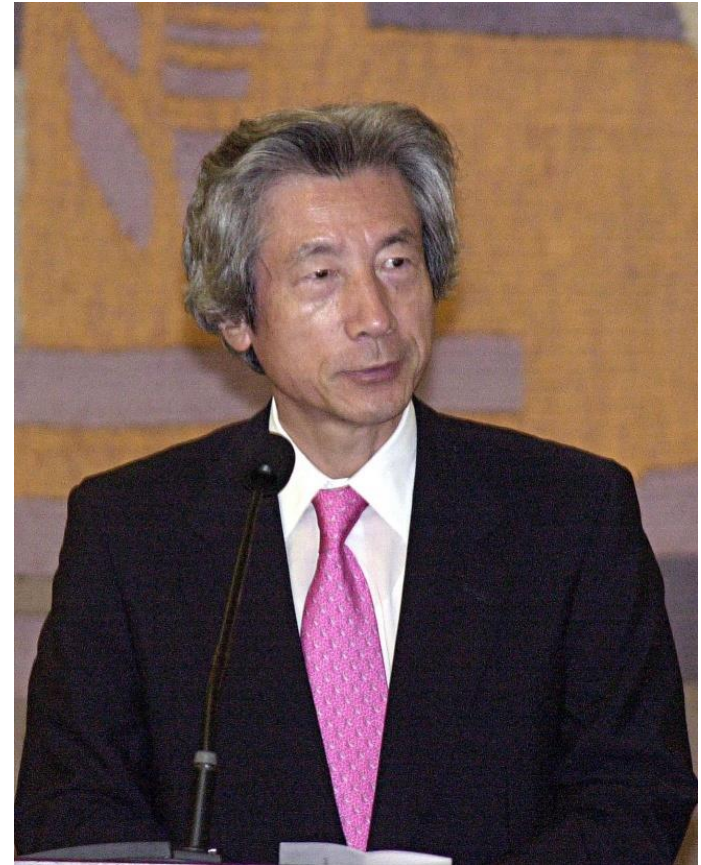
- The short tenure of the DP cabinets can be explained by the “nejire”, that is, the fact that the majority party of the lower house does not hold the majority of the upper house.
- However, the short tenure of Japan's cabinets started in the late 1980s.
- The reform of election system (, introduction of the one-seat voting districts) done in the early 1990s might have made our political rule fragile.

# IT bubble

- Obuchi changed economic policy and increases public demands.
- Thanks to Information Technology Bubble, Japanese economy recovered in 1999.
- However, the bubble crashed and Obuchi died in illness in 2000.

# Koizumi and Takenaka

- In 2001, Koizumi was chosen as LDP president by LDP's party member's vote, and elected as Prime Minister.
- He appointed Takaneka as Minister of Economy, and started *Koizumi Reform*.



# “Structural Reform”

- Koizumi’s policy focuses on the supply side of the economy, viewing the persistence of low-productivity firms as the main cause of our economic slump.
- Postal Saving (PS), government-run financial service corporation, was regarded by Koizumi as the main financial sources for those inefficient firms.
- Koizumi’s goal was to privatize PS.

# Economic Crisis Again

- Koizumi was applauded by people for his strong political leadership.
- But the economy became even worse, thanks to demand fall associated with the 9.11 terrorist attack.
- In 2003, Nikkei index of Tokyo Stock Exchange (TSE) recorded the historical lowest at 7600 yen.

# The Bad Loan problem

- The economic crisis was partly caused by Takanaka's drastic policy to clear unperformed loans.
- Takenaka obliged banks to report the true values of their net assets in the balance sheets.
- Many banks suffered capital shortage after they made their 'true' balance sheets open to public.



## ASSETS

## LIABILITIES

Loans and other Assets	Deposits
	Equity capital

### Bank's Balance Sheet

Japan's banks have been heavily in debts, due to the insufficient development of capital markets.

**BIS regulation:**

Equity capital must be higher than 8% for international business

# Reversal of the Fortune

- Takenaka dramatically changed his harsh policy on banks and bailout Resona Bank Co. in 2003.
- Since then Japanese economy started to recover.



# The 'Subprime' Crisis (2007) and the Lehman Shock (2008)

Ryoichi Imai

# The 'Subprime' loan in the US

- The US residential land prices had been increasing more than proportionally to its GDP since 2003.
- This was caused significantly by the increase in generous loan offers to financially unreliable population with high bankruptcy risks.

# Crush of the Bubble

- In the late 2006, the land price started to decline.
- The Housing Bubble was recognized by the US stock market in July 2007.
- Finally, Lehman Brothers bankrupted in October 2008.
- Dow declined from 14000 (October 2007) to 6547 (March 9, 2009).

# Bailouts

- (Wikipedia) A **bailout** is a fresh injection of liquidity to a bankrupt or nearly bankrupt entity, such as a corporation or a bank, in order for it to meet its short-term obligations.
- Bailout Examples
  - Bear Stearns
  - Fannie Mae and Freddy Mac
  - American International Group
- Lehman was not bailed out.

# Bailout in balance sheet

Firm in Crisis		After Bailout	
ASSETS	LIABILITIES	ASSETS	LIABILITIES
Loans and other Assets	Debts	Loans and other Assets	Debts
	Equity capital		Equity capital
			Public funds

# ‘derivative’ securities.

- There is a tradeoff between the high risk and the high profitability.
- The ‘subprime’ loans have been combined with ‘prime’ loans and sold to investors as ‘derivative’ securities.
- Investors tend to neglect the high risk of the derivative securities, because they are advertised as ‘safe’ thanks to the highly developed financial technologies.

# Black-Scholes Formula

- Fischer Black and Myron Scholes published a mathematical formula to calculate the theoretical price of European stock options in *Journal of Political Economy* (1973).
- Their research was soon extended to the pricing of various financial products. The formulae have been widely used by the financial industry to make huge profits.
- Scholes and Robert Merton were awarded a Nobel Prize for Economics in 1997.
- Unfortunately, Black died in 1995.

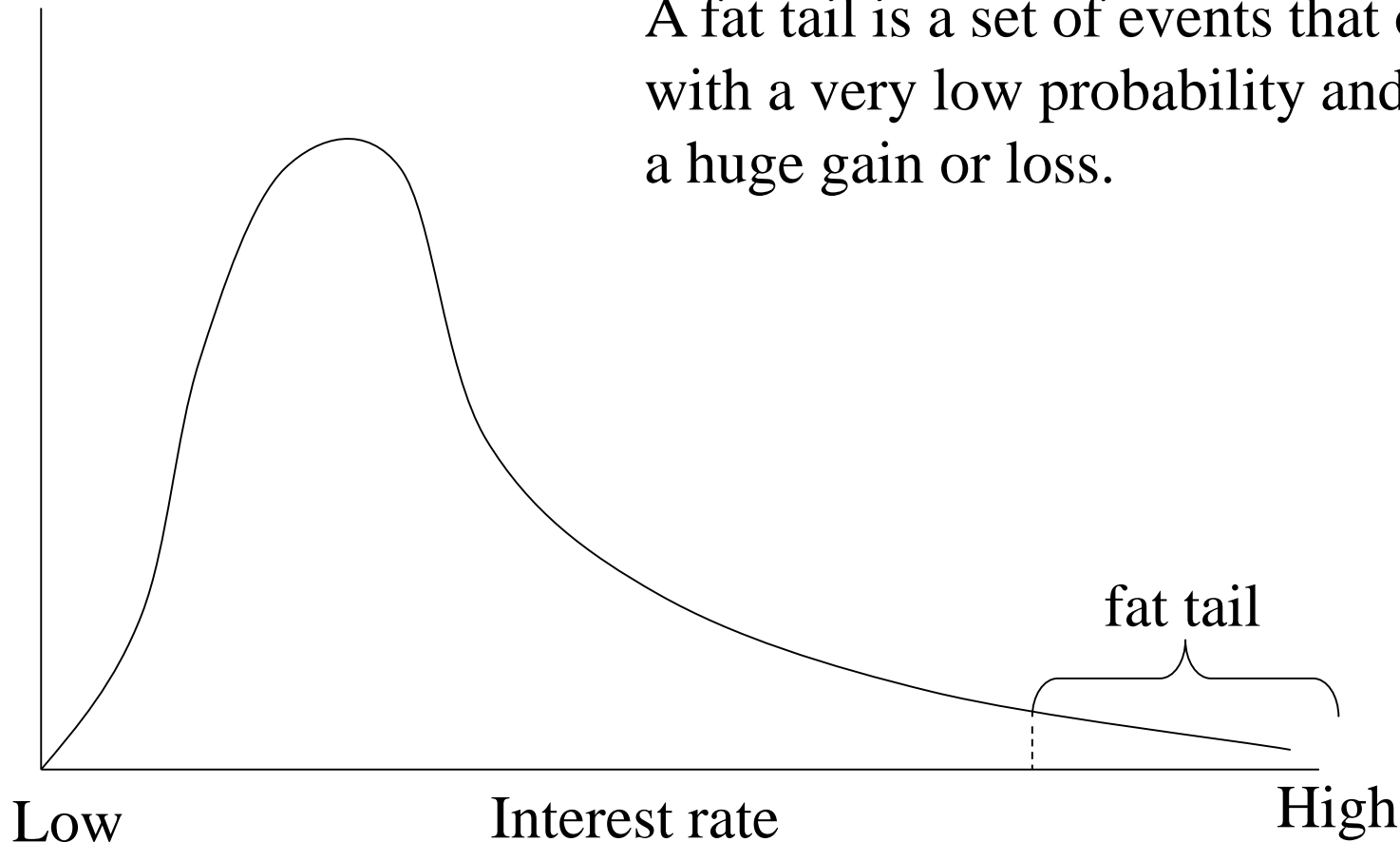
# Taking Huge Risks

- The core strategy to obtain huge profits in the financial industry (investment banks and hedge funds) is to make a portfolio that yields the highest expected profits for a given risk distribution.
- Sometimes they take too much risks to obtain huge profits.
- They often failed by the *fat tail* events.



# The fat tail

Probability  
density



A fat tail is a set of events that occur with a very low probability and bring a huge gain or loss.

# The LTCM

- Before 1998 the Long-Term Capital Management was the “Dream Team” in the financial industry, hiring Merton and Scholes.
- They bet on the prospect that the interest rate gap within Europe would be reduced thanks to the economic integration.
- But the sovereign bond crisis in Russia caused by the Asia Currency Crisis *increased* the interest rate gap in Europe, which resulted in a bankruptcy of LTCM.
- The Fed coordinated US banks to bailout LTCM.

# The Liquidity Crisis in 2008

- This time, the US private sector can no longer bailout all the financial institutions, because the crisis is so huge and profound.
- Due to the complexity of the derivative securities, it is hard to verify the true loss caused by the housing price decline.
- (Disorganization) Firms can no longer rely on the financial sustainability of their business partners.
- Bailout by public funds is the only way to stabilize the economy.

# Emergency Economic Stabilization Act (EESA)

- The Emergency Economic Stabilization Act was proposed by the Bush administration in September 2008.
- But the Congress rejected it in the first round, being afraid of the tax payers' anger on the CEOs of the financial industry.
- Finally the bill passed through the US Diet in the early October 2008.
- The bill has enabled the government to inject public funds into the balance sheet of the weak business.
- However, the stock market focused more on the weak real economy (consumption, production, and employment).

# Public Fund Injection

- In the EESA, the government is originally supposed to purchase under-performing assets of the banks at ‘fair’ prices.
- However, investors are afraid of the bank’s loss caused by the too low prices at which the government purchase their assets.
- The US government finally decided to inject tax payers’ money into the banks’ balance sheets.

# The Stagnation

- The initial crisis was over in March 2009, according to the NBER report.
- The US and the World Economy steadily recovered.
- However, the boom has not yet reduced the unemployment rate.
- In the US, the unemployment rate still remains at 8% in the fall 2012.

# The Euro Crisis

- The stagnation was even worsened by the public finance crises in Europe.
- Greece is near bankruptcy.
- Spain and Italy seem to follow Greece.
- The EU faces a difficult choice between;
  - Bailing out financially the weak Euro members,  
or
  - Kicking them out of the Euro zone.

# “Japanization”

- The US government spends a huge budget to stimulate the economy.
- The Fed took a series of unconventional monetary policies, named QE1 and QE2.
- Unfortunately, these fiscal and monetary policies have not been so effective in reducing the unemployment rate.
- The nominal interest rate remains close to zero – the economy looks similar to Japan since 1990.



# The *Endaka*

- Japan's export industries suffers the Yen appreciation to the even higher level than the one that was reached in 1995.
- At the nominal value, the Yen is at the historically highest level, 75¥/\$ in October 2011.
- However, the effective real exchange rate is not so high as the nominal one.

# The Effective Real Exchange Rate

- The nominal exchange rate is not a good measure of a country's competitiveness in the global economy.
- Inflation and trade shares must be accounted for the global competitiveness.

# Inflation

- In the last two decades, Japan has been suffering from deflation, which means a continuing decline in the production costs, including employees' wages.
- On the contrary, the inflation rate in the US has been significantly above zero, which is a rise in the production costs.

# Trade Shares

- 20 years ago, the US was the largest trade partner of Japan.
- Today, the US is replaced by China.
- Therefore, the weight of China's Yuan is higher than that of the US dollar in the calculation of the effective exchange rate of the Yen.

# 実効為替レートの推移(日本・米国・ユーロ圏・中国)

(2019年4月まで)



(注) 対象バスケットはブロードベース(58カ国)。ただし1993年以前はナローベース(27カ国、中国を含まず)に接続。

(資料) BIS(国際決済銀行)HP、毎日新聞2014.12.19(年表事項)

# Summary on the Effective Exchange Rates

- In the short and middle runs, the effective exchange rate fluctuates and brings booms and recessions to countries.
- In the long run, there is no trend in the effective real values of the currencies of the major economic areas.
- Now US and Europe try to exit from the recession by reducing the value of their currencies.
- However, China's effective rate is steadily appreciating.
- Then as a total, the effective exchange rate of the Yen is not so high or low in the historical perspective.

# The Equal Employment Opportunity Law for Men and Women (1985)

- Most leading employers redefined their jobs into nominally gender-neutral categories of:
  - 総合職: Comprehensive Work: formerly men-only career track.
  - 一般職: General Work: formerly women-only clerical track.
- Small number of women began to enter the comprehensive track and private sector careers comparable to those of men.

# Disasters: Natural and Human



- In 1995 a major earthquake struck Kobe. More than four thousand people were killed.
- In the same year, a terrorist attack on the Tokyo subways with poisonous gas destroyed people's confidence in the nation's low crime rate and the safety of major cities.



# The Fall of the LDP

- Abe was succeeded by Fukuda Yasuo, who resigned in September 2008.
- Aso Taro was elected as PM then, but he is unpopular and the people's supporting rate remained very low.



Is being a politician a family business? - Fukuda is a son of a former PM, Fukuda Takeo. Aso was a grandson of Yoshida Shigeru.

# Koizumi's Successor

- Koizumi was succeeded by Abe Shinzo, a grandson of Kishi Nobusuke, who revised the US-J Security Treaty in 1960.
- In 2007 voters became furious when they learned that the government had lost fifty million accounts of the Social Security Pension recipients.
- Abe resigned in September 2007, taking the responsibility for the miserable loss in the Upper House Election in July.



# Change of Government 政権交代

- In August 2009, Democratic Party of Japan (DPJ) defeated LDP in the General Election.
- The DPJ leader Yukio Hatoyama was appointed to be the prime minister (PM), whom Ichiro Ozawa supported as the party's secretary general.



Hatoyama



Ozawa

# Great East-Japan Earthquake

- On March 11, 2011, The east coast of Japan was hit by a huge earthquake, which killed more than 20,000 citizens.
- A tsunami destroyed the First Fukushima nuclear plant, and the local citizens were forced to evacuate.
- The initial poor management of the nuclear accident by the Kan cabinet was severely criticized by mass media.

# Akihabara Case

- On Sunday, June 8, 2008, a 25-years-old man, Kato Tomohiro, attacked the pedestrians walking on the streets at Akihabara, Tokyo, and killed 7 with a dagger.
- He was a former dispatched employee of an automobile factory, and just laid off.
- He was insulted by the users of his favorite internet bulletin board, where he was complaining about job loss and his lonesome life.
- On the night of the disaster, many people on the internet bulletin board sympathized with him in his situation.
- He was sentenced to death by the Supreme Court in 2014.

# The Return of Abe

- In December 2012, LDP defeated DPJ in the general election.
- Shinzo Abe, the LDP leader, was appointed as PM by the refreshed Diet.
- The stock market positively reacted to the DPJ PM Noda's call for the general election in November, expecting LDP to win.
- At the same time, the Yen started to devalue.

