

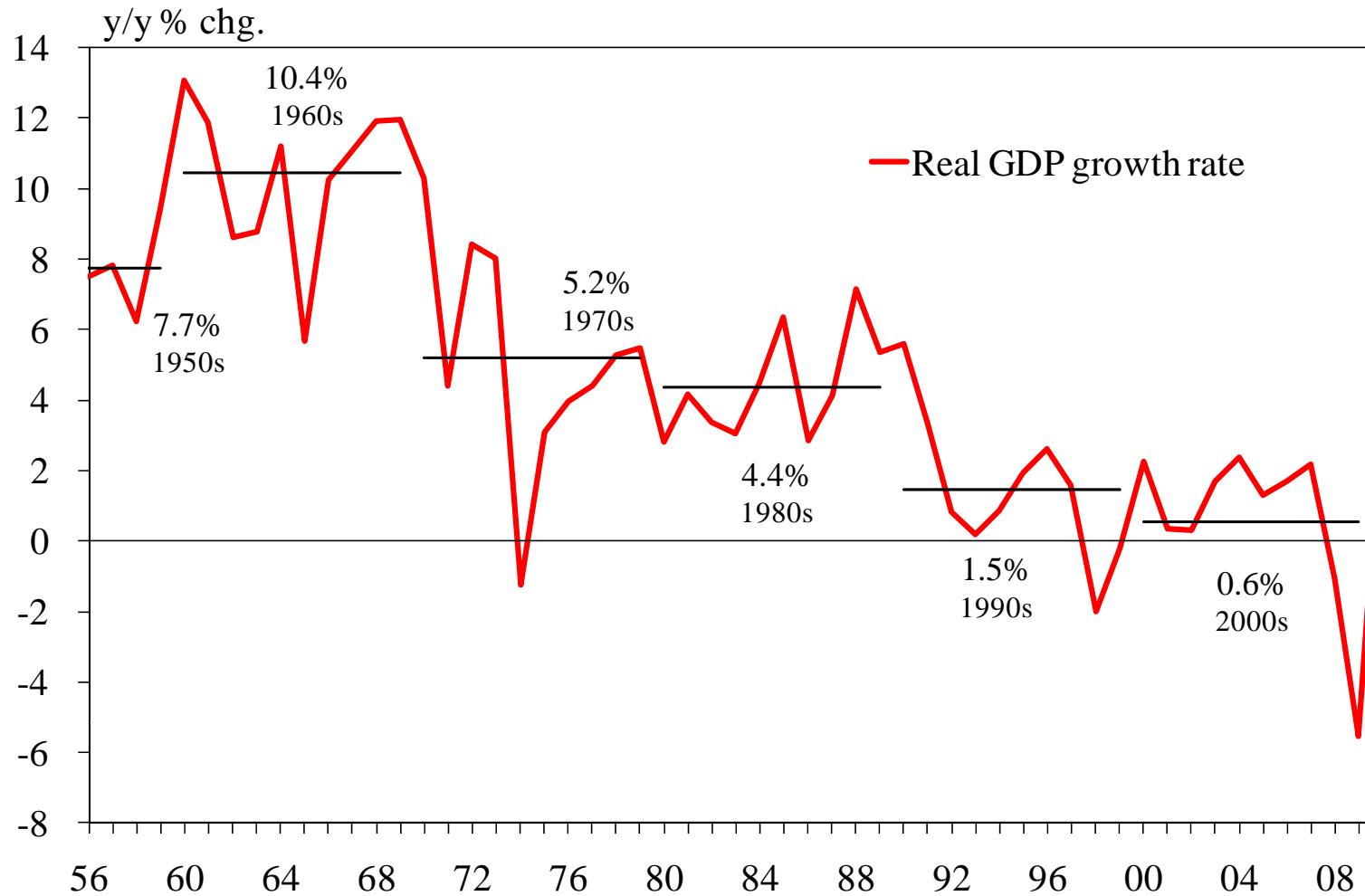
Deleveraging and Growth: Is the Developed World Following Japan's Long and Winding Road?

January 10, 2012

Lecture at the London School of Economics and Political Science
(Co-hosted by the Asia Research Centre and STICERD, LSE)

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Governor of the Bank of Japan

Japan's Real Economic Growth Rate in a Long-Term Horizon



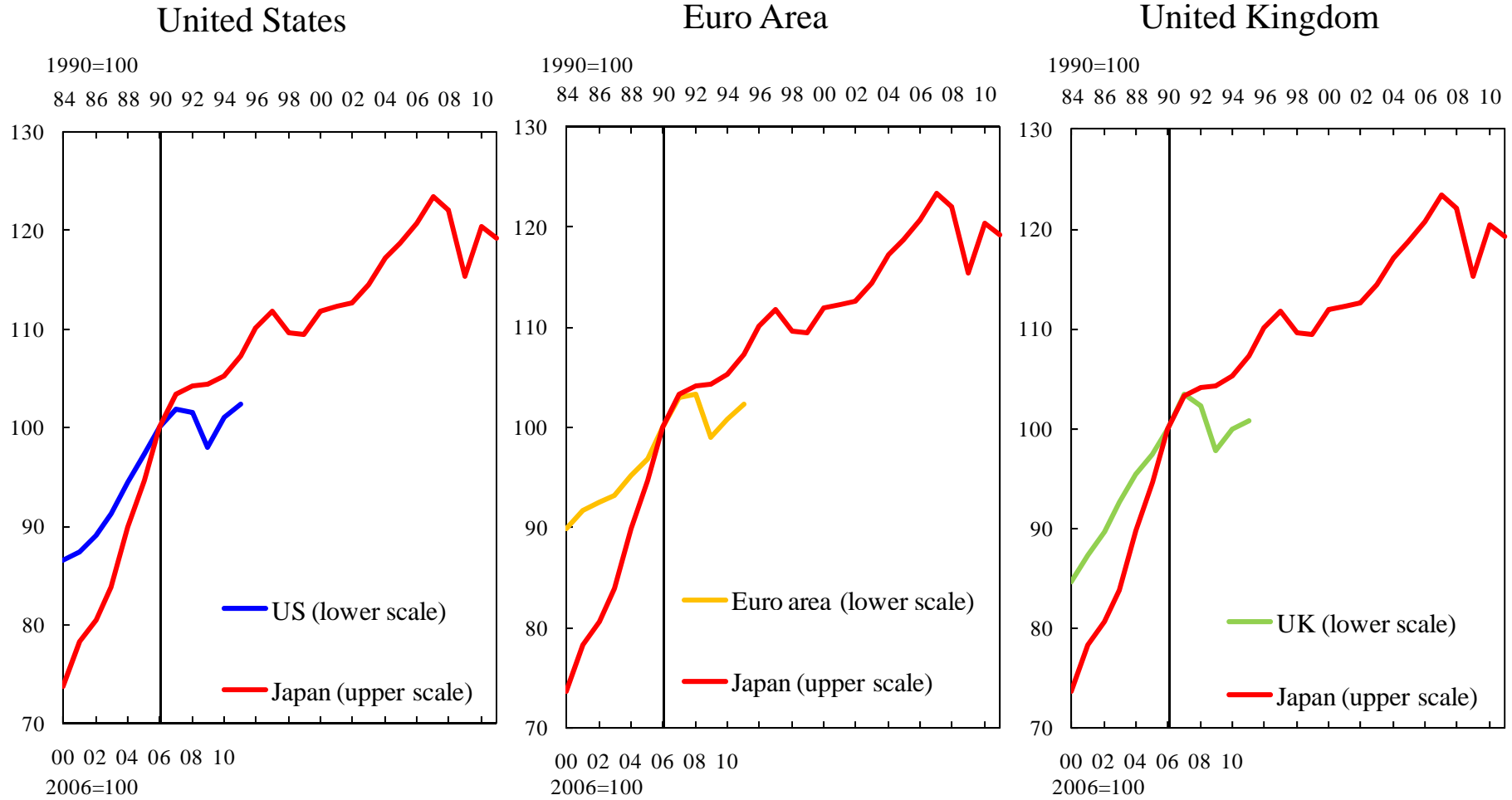
Notes: 1. Data up to 1980 are based on the 68SNA (System of National Accounts), while those from 1981 are based on the 93SNA.

2. Data for the 1950s is the average of the year-on-year rates from 1956 to 1959.

Source: Cabinet Office.

Real GDP

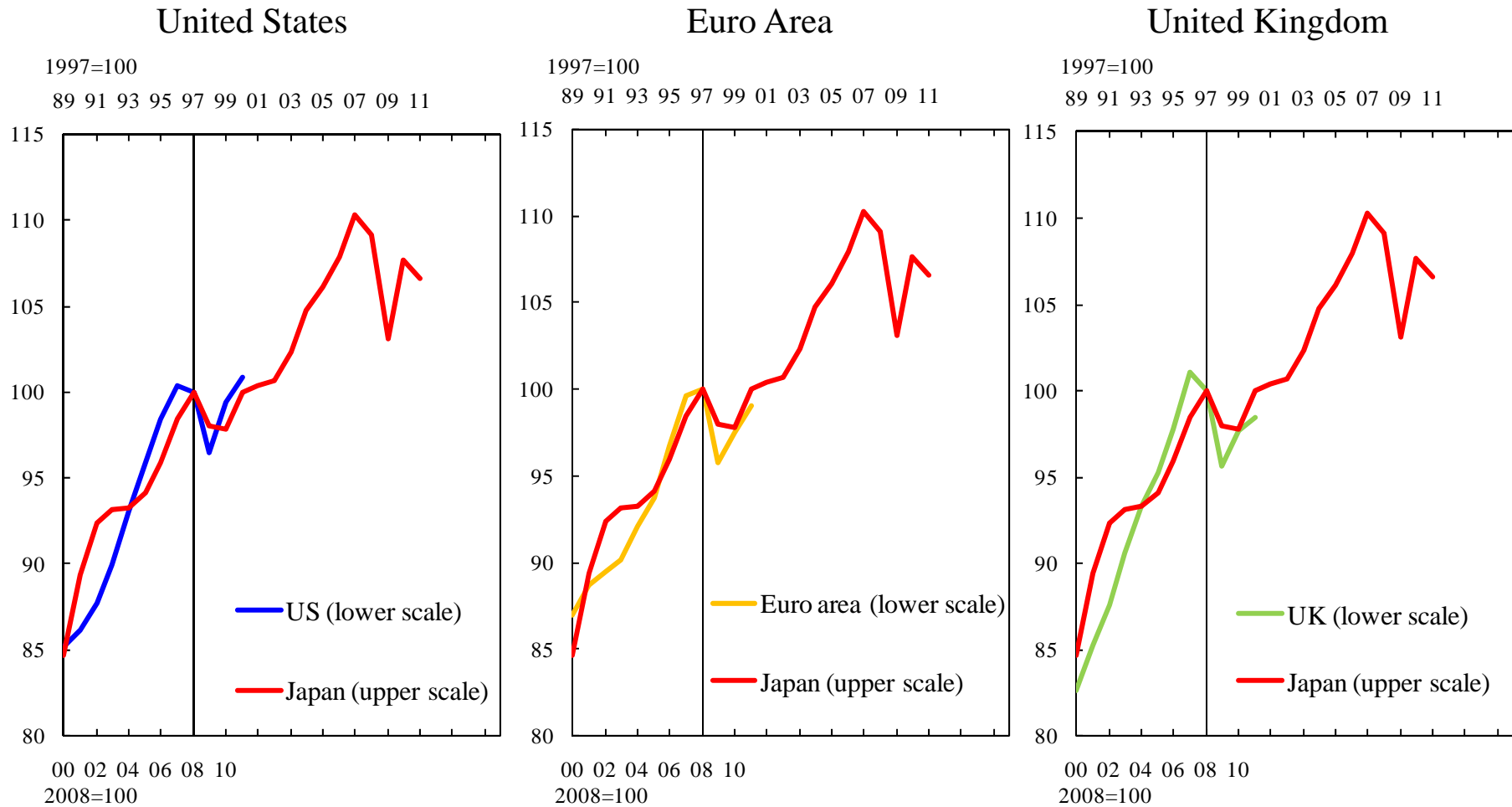
After the Collapse of the Bubble Economy: Comparison with Japan's Experience



Sources: ONS; Eurostat; BEA; Cabinet Office.

Real GDP

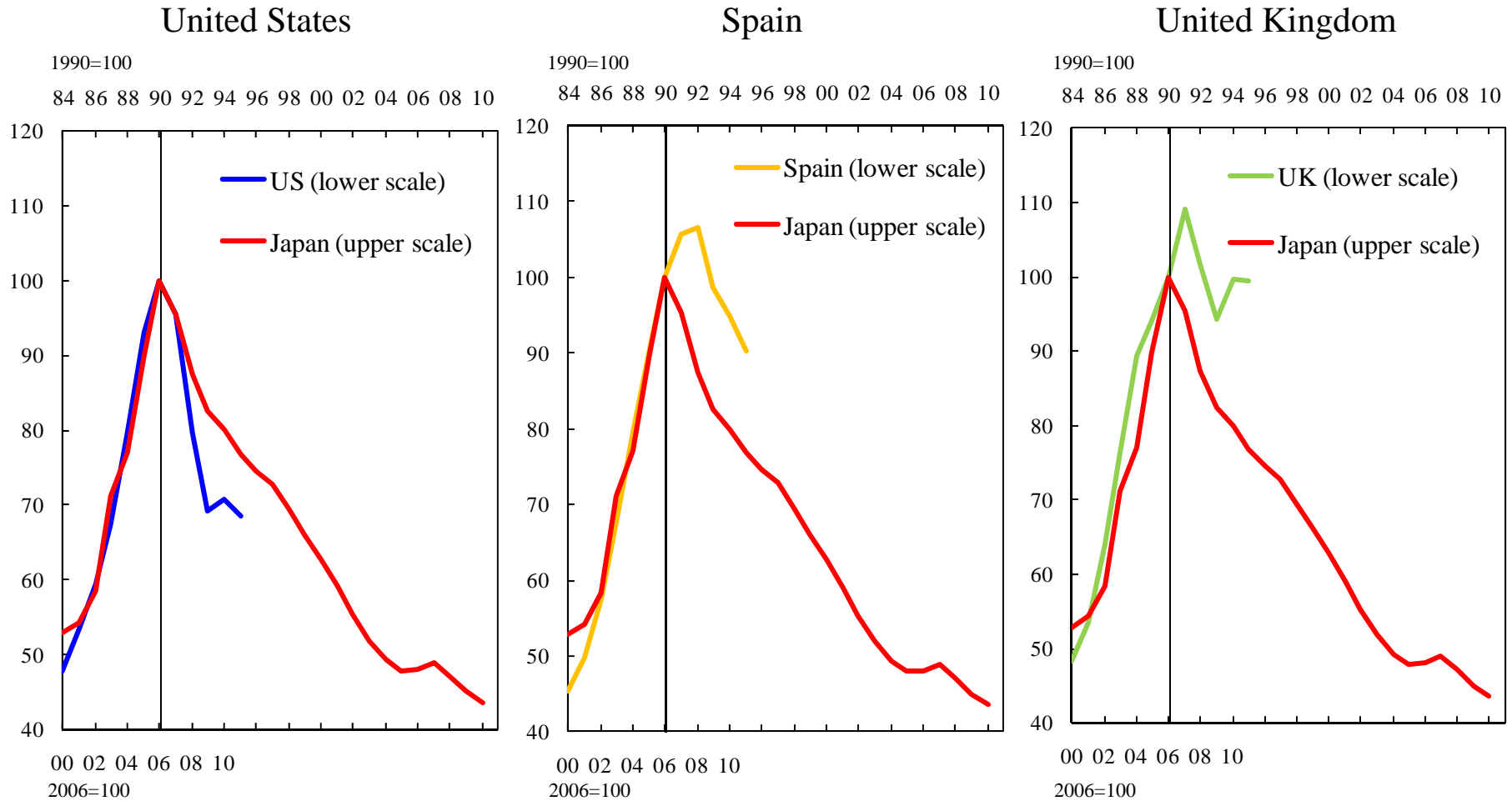
After the Financial Crisis: Comparison with Japan's Experience



Sources: ONS; Eurostat; BEA; Cabinet Office.

Real-Estate Prices

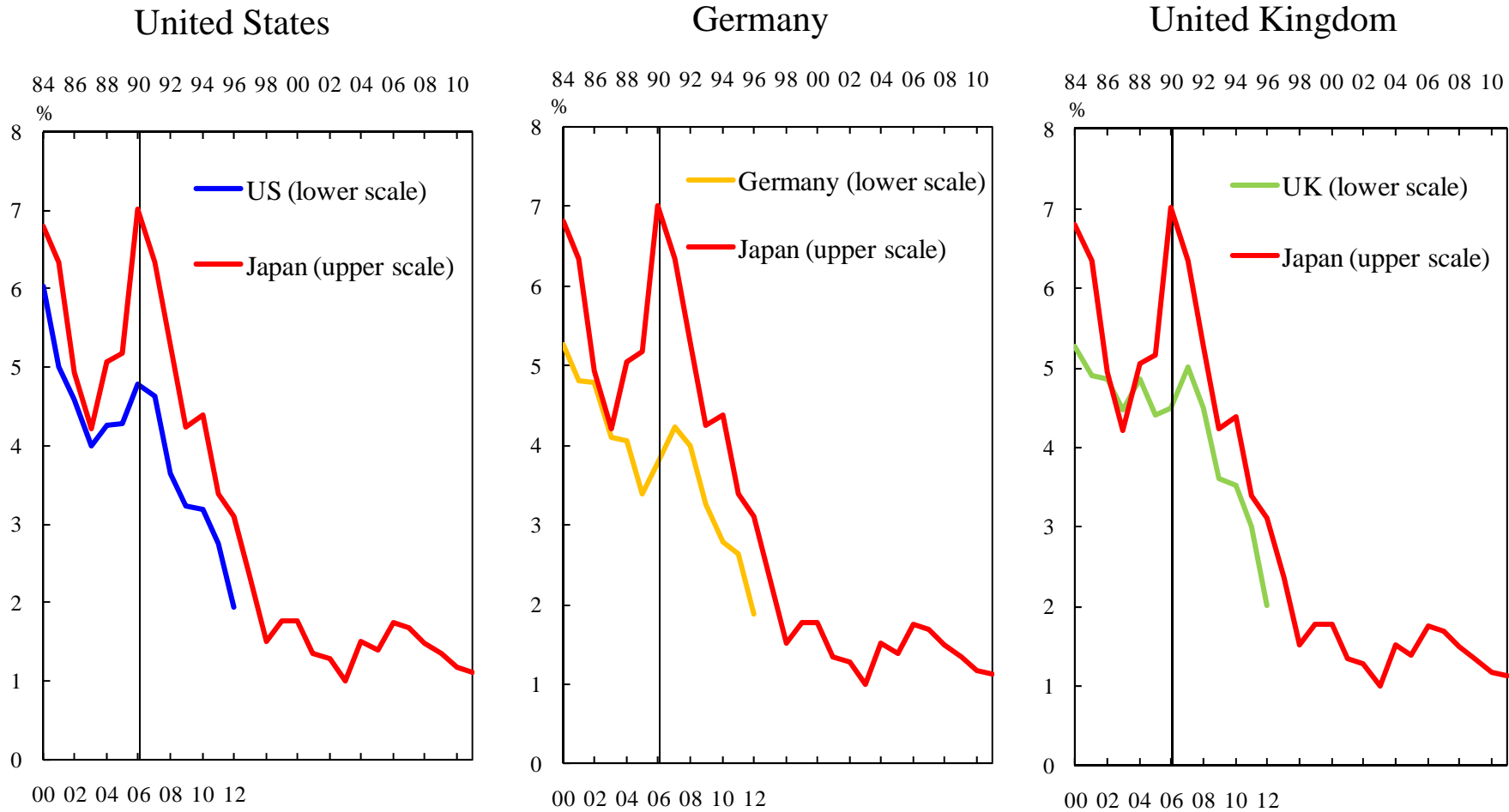
After the Collapse of the Bubble Economy: Comparison with Japan's Experience



Note: Figures for Japan are treated as those in the previous year (e.g. Jan 1, 2011→2010).
Sources: Haver; Ministry of Land, Infrastructure, Transport and Tourism.

Long-Term Interest Rates

After the Collapse of the Bubble Economy: Comparison with Japan's Experience

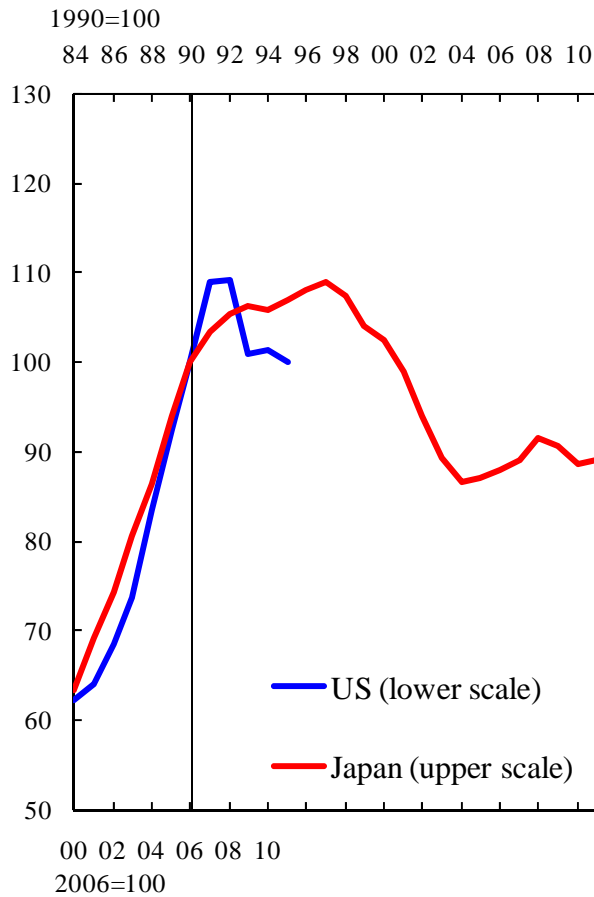


Note: Figures are annual averages. Figures for 2012 are the averages of daily data up to Jan 9, 2012.
Sources: IMF; Bloomberg.

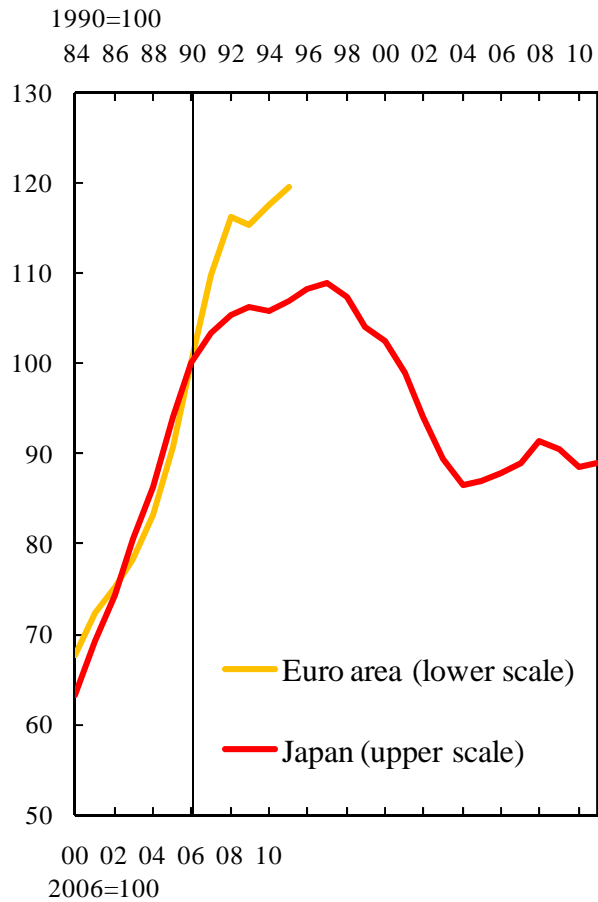
Bank Loan

After the Collapse of the Bubble Economy: Comparison with Japan's Experience

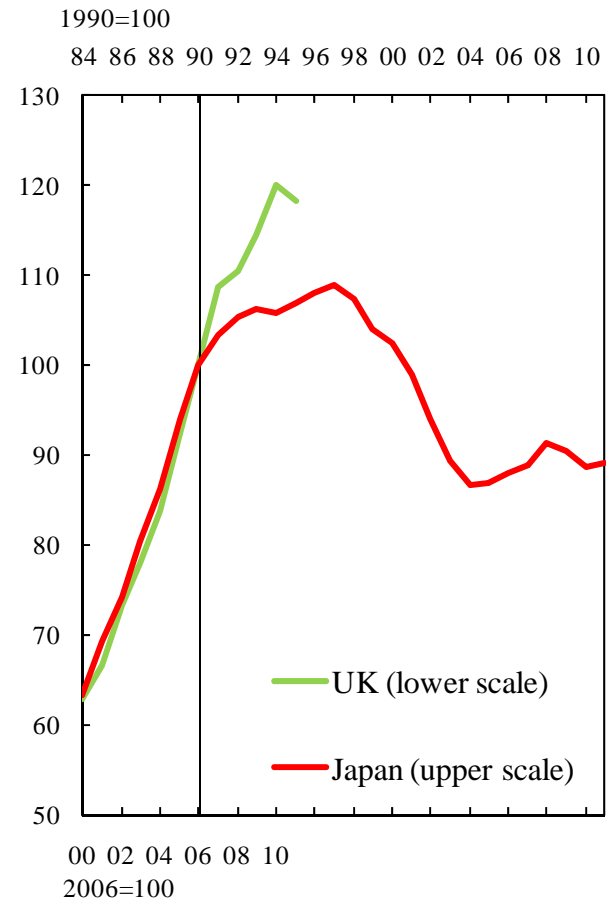
United States



Euro Area



United Kingdom



Note: Figures show loans to domestic households and non-financial corporations.
Sources: Haver; CEIC; FDIC; Bank of Japan.

The Bank of Japan has introduced various unorthodox policy measures since the second half of the 1990s, ahead of other central banks.

		BOJ	FRB	ECB	BOE
Extremely low interest rates		02/1999 ¹	12/2008	05/2009	03/2009
Commitment to maintain extremely low interest rates		04/1999 ¹	08/2011	—	—
Quantitative/Credit easing		03/2001	11/2008	—	03/2009
Purchases of risk assets	ABS	06/2003	11/2008 ²	—	—
	ABCP	06/2003	09/2008 ³	—	06/2009
	CP	12/2008	10/2008 ⁴	—	01/2009
	Corporate bonds	01/2009	—	—	01/2009
	ETFs	10/2010	—	—	—
	J-REITs	10/2010	—	—	—
	Stocks held by financial institutions	10/2002	—	—	—
	Subordinated loans to banks	03/2009	—	—	—
	Agency debt Agency MBS	—	11/2008	—	—
Covered bonds	—	—	05/2009	—	

Notes: 1. The time at which the Bank of Japan first introduced its zero interest rate policy and made its commitment to maintain zero interest rates.

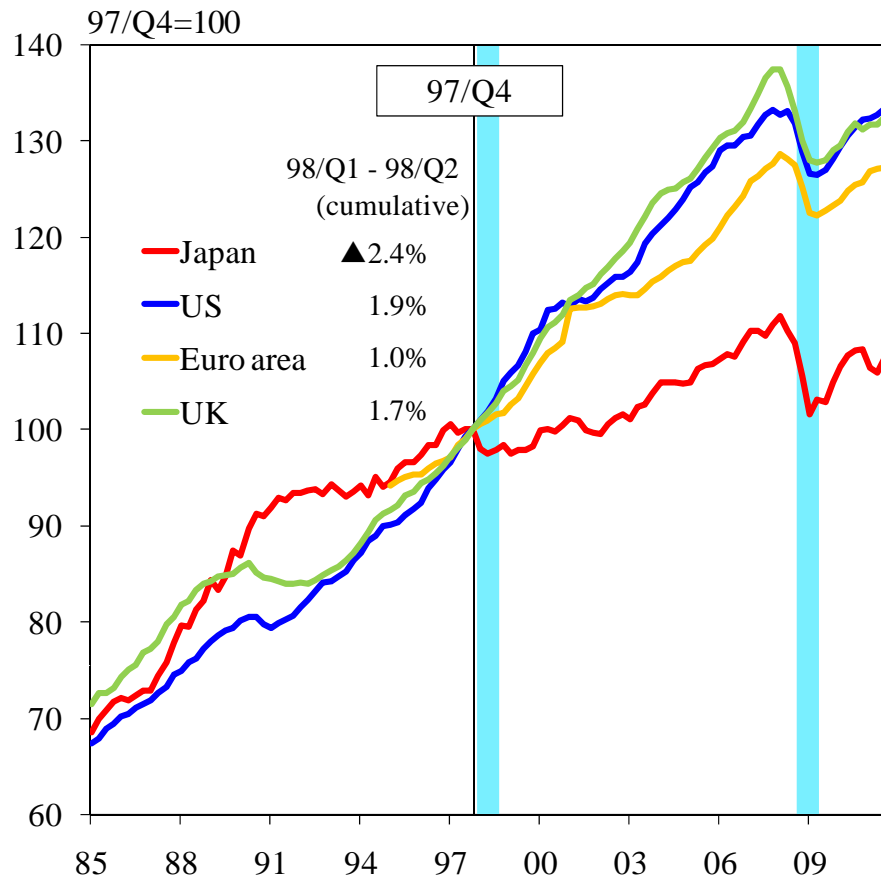
2. Introduction of TALF (Term Asset-Backed Securities Loan Facility), which provides non-recourse loans against collateral, mainly ABS, effectively purchases ABS.

3. Introduction of AMLF (ABCP Money Market Mutual Fund Liquidity Facility), which provides U.S. depository institutions and bank holding companies with non-recourse loans against ABCP as collateral, effectively purchases ABCP.

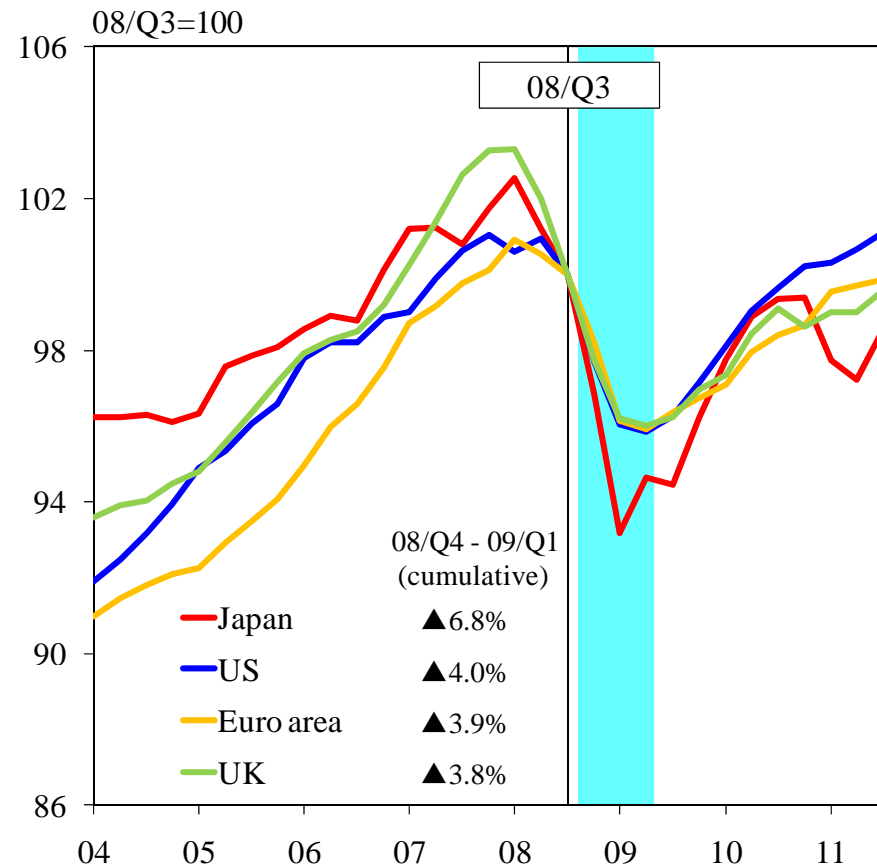
4. Introduction of CPFF (Commercial Paper Funding Facility), which provides SPVs with loans against collateral, mainly CP, effectively purchases CP.

Financial turmoil in Japan did not trigger a global financial crisis.

Real GDP following the Financial Turmoil in Japan

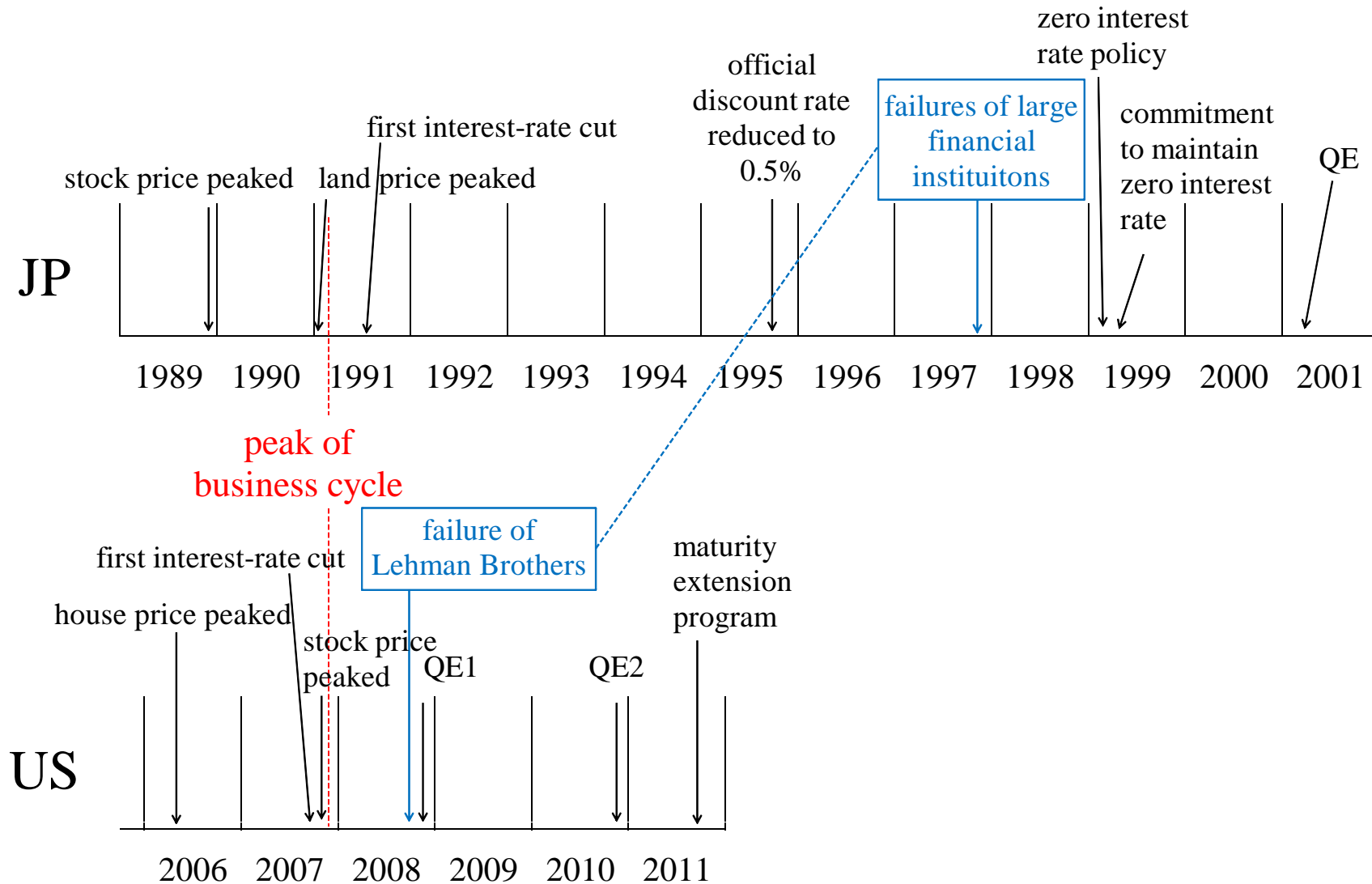


Real GDP following the Failure of Lehman Brothers



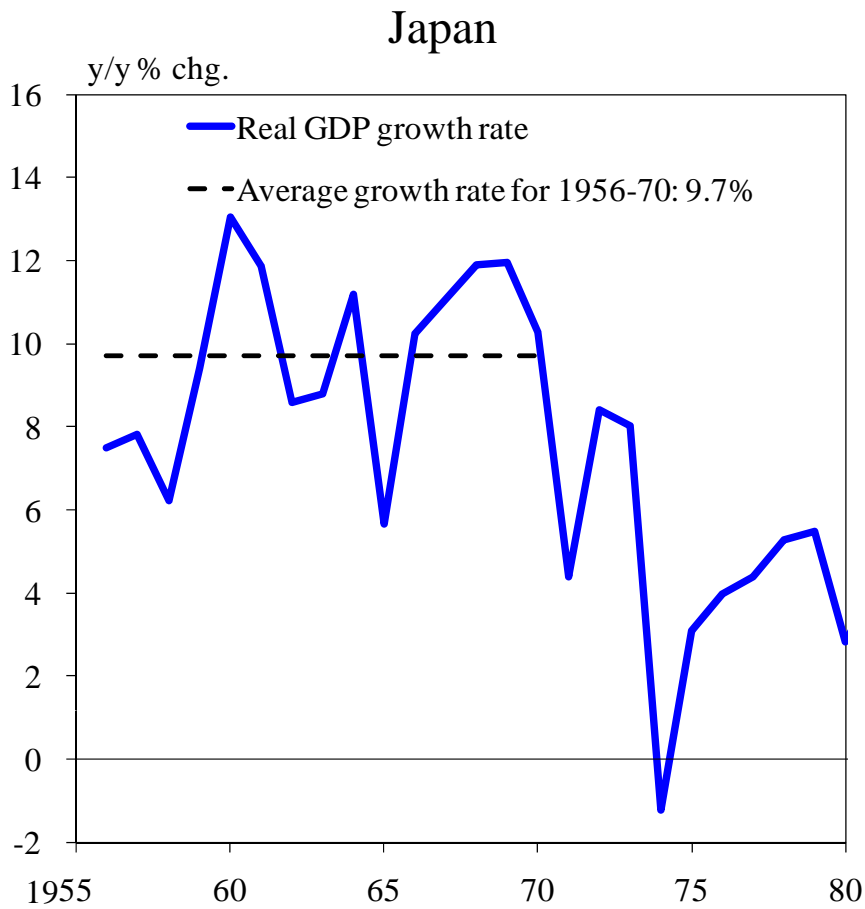
Sources: Cabinet Office; BEA; Eurostat; ONS.

Time Length from the Collapse of the Bubble Economy until the Occurrence of the Financial Crisis



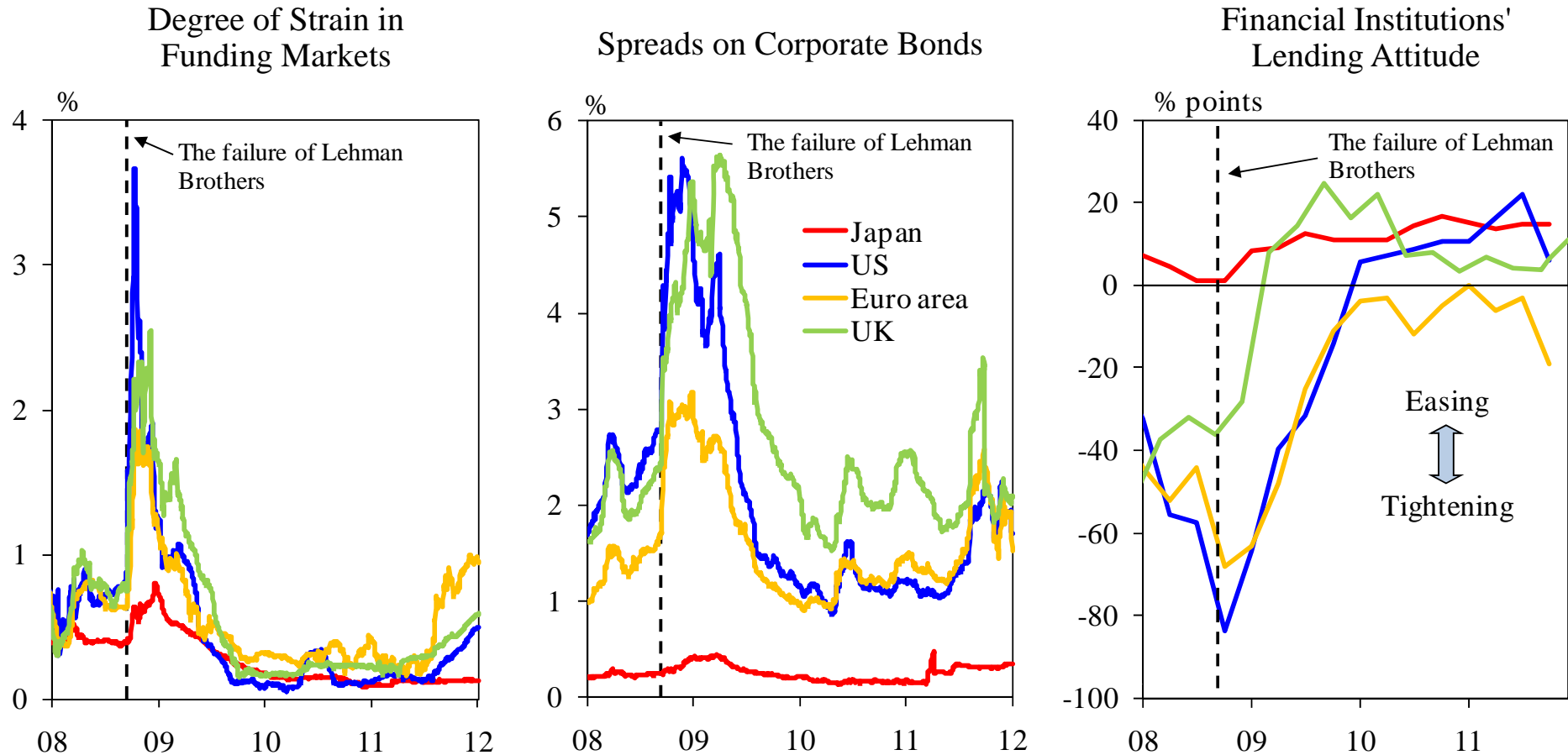
Note: The land price of Japan in this chart is based on "Published Price of Land".

Japan's High-Growth Era: Comparison with China



Sources: Cabinet Office; National Bureau of Statistics of China.

The stability of Japan's financial system and financial markets is notable compared to the United States and Europe.

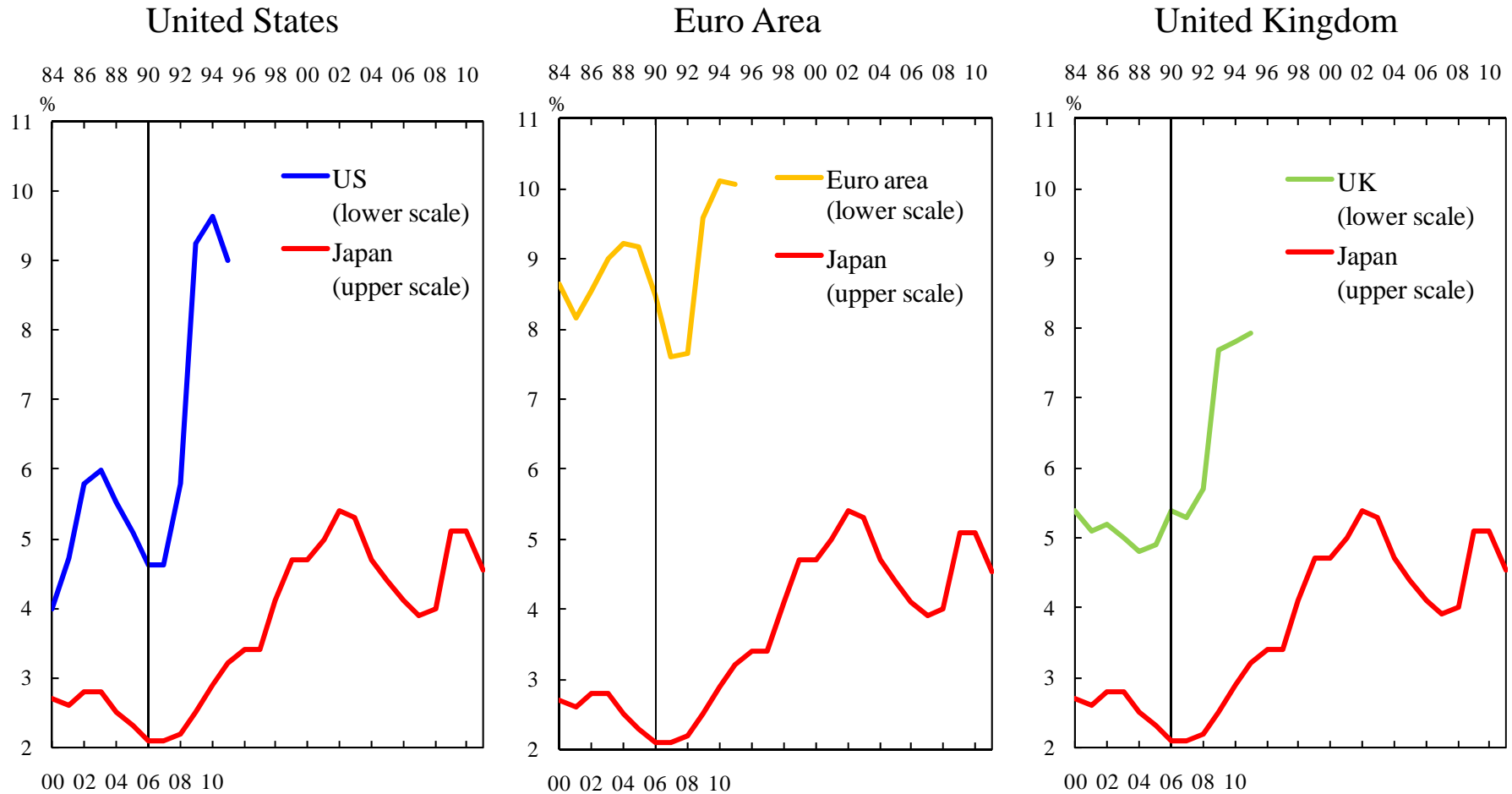


Notes: 1. The degree of strain in funding markets is 3-month Libor minus 3-month overnight index swap (OIS) rates.
 2. The spreads on corporate bonds (rated AA) are corporate bond yields minus government bond yields.
 3. Financial institutions' lending attitude is the average of the DIs for large, medium-sized, and small firms for Japan, large and medium-sized firms for the United States, large firms for the euro area, and firms of all sizes for the United Kingdom.

Sources: Bloomberg; Japan Securities Dealers Association; Bank of Japan; FRB; ECB; BOE.

Unemployment Rate

After the Collapse of the Bubble Economy: Comparison with Japan's Experience

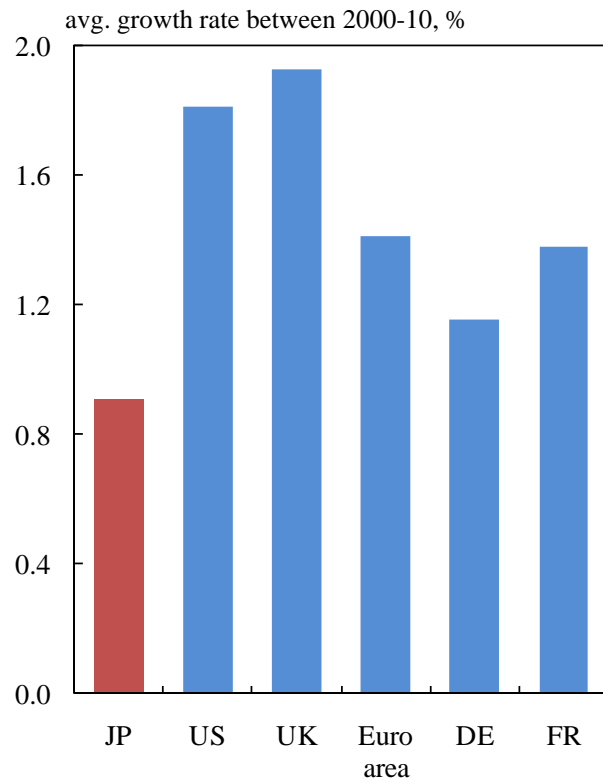


Sources: ONS; Eurostat; BLS; Ministry of Internal Affairs and Communications.

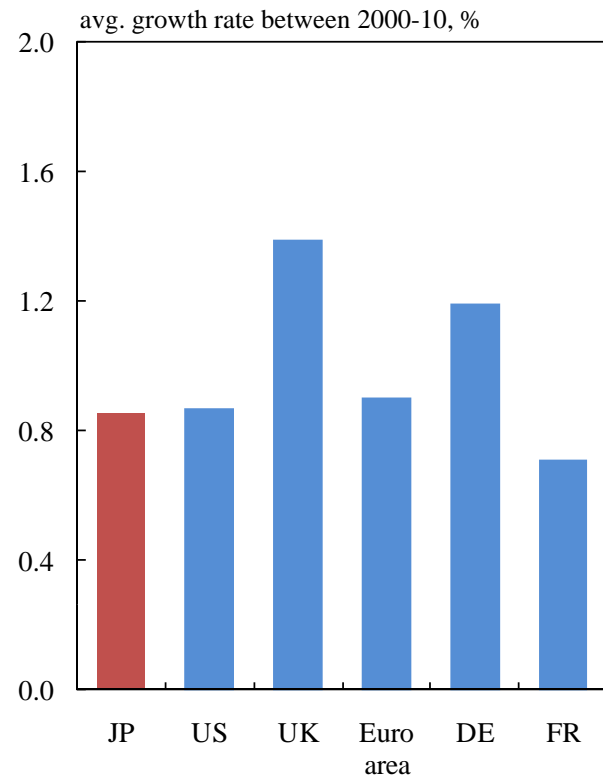
Japan's Growth Rate

----- The lowest in terms of real GDP growth rate, the highest in terms of real GDP growth rate per working-age person.

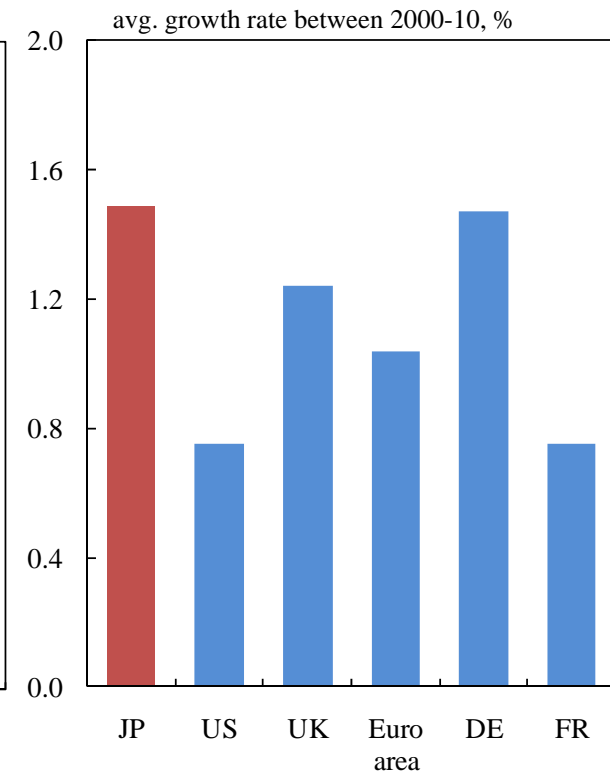
Real GDP Growth Rate



Real GDP Growth Rate per Capita

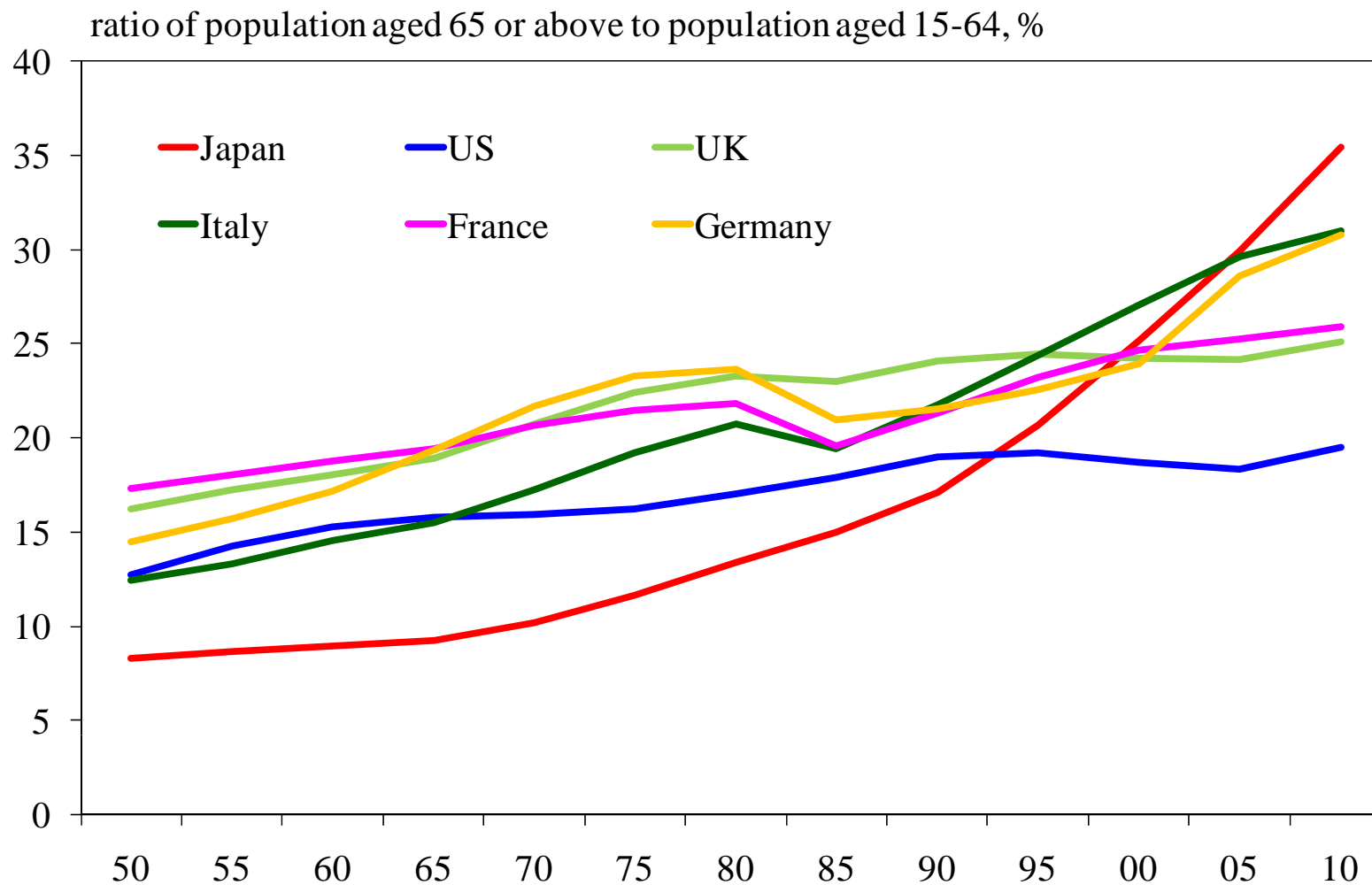


Real GDP Growth Rate per Working-Age Person



Sources: World Bank; Haver.

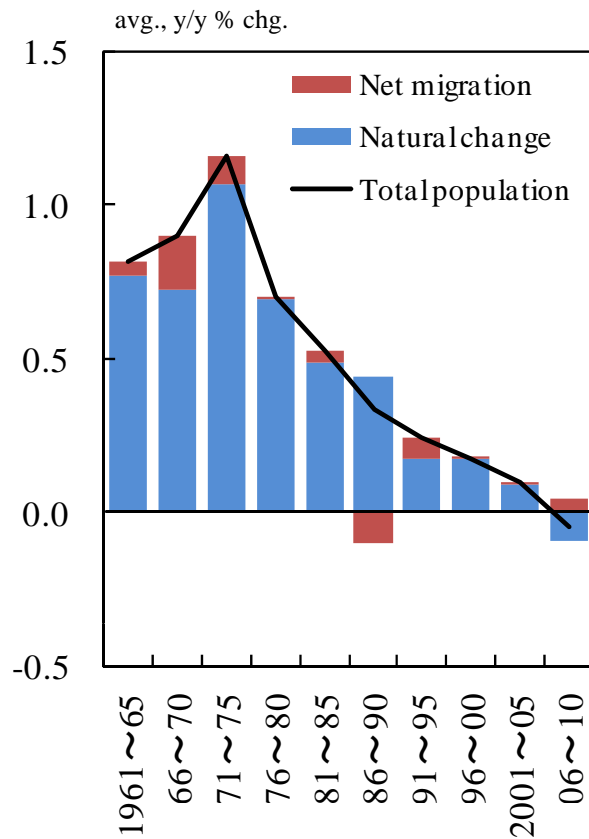
Japan has been facing a rapid demographic change.



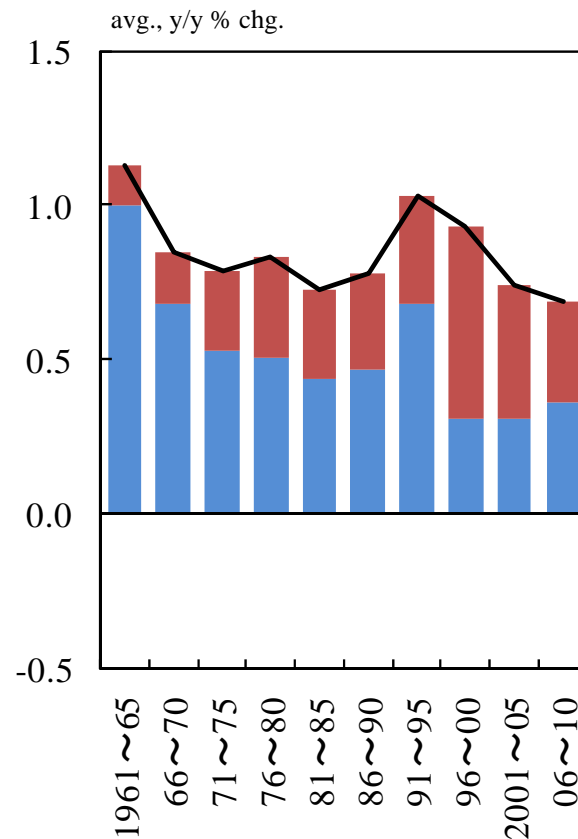
Source: United Nations.

Population Growth Rate

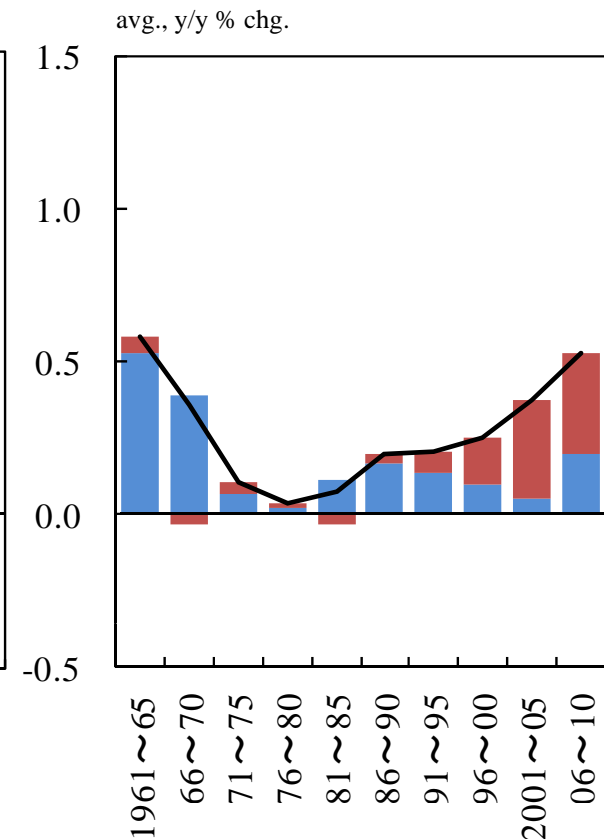
Japan



United States

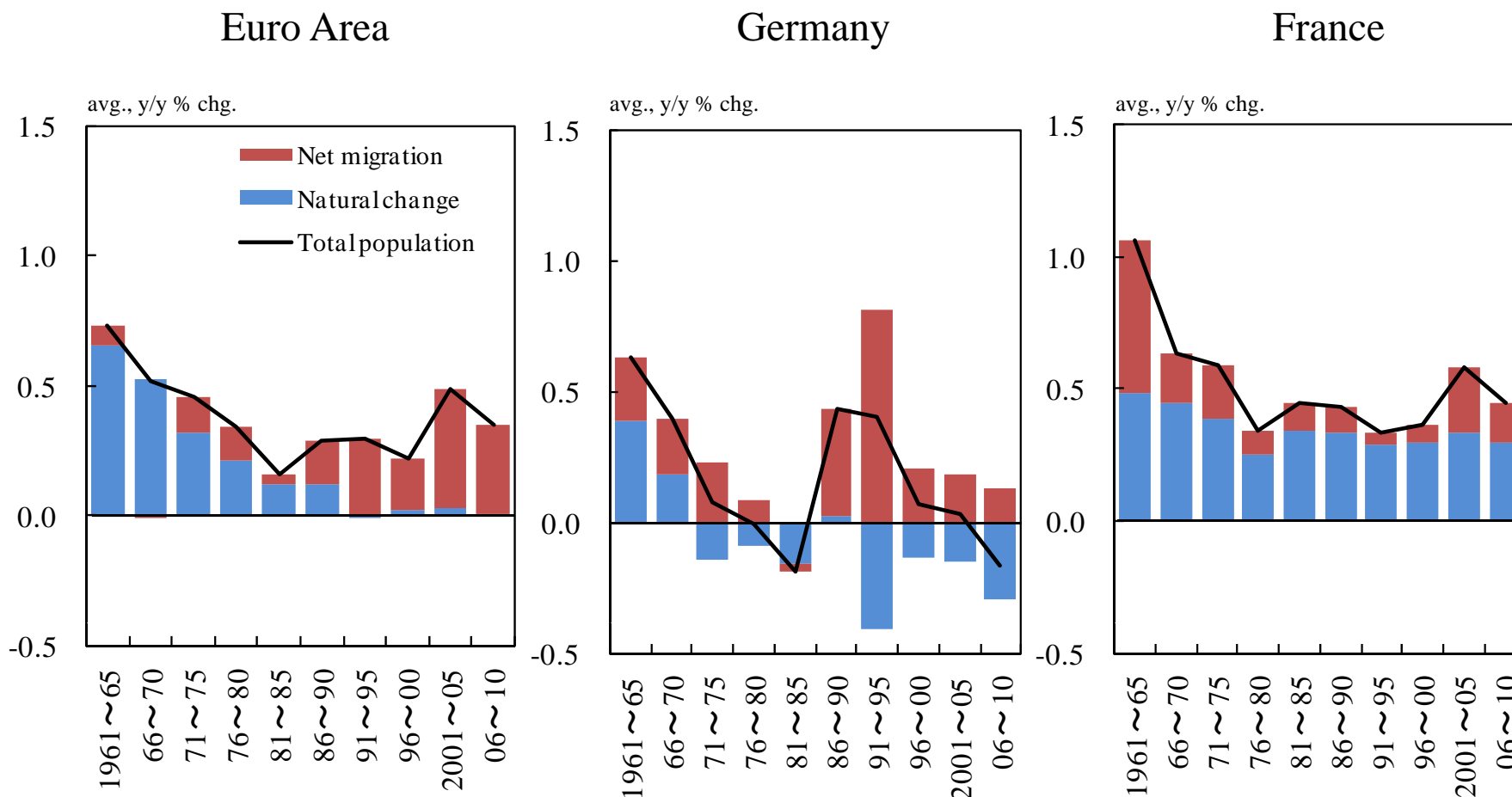


United Kingdom



Source: World Bank.

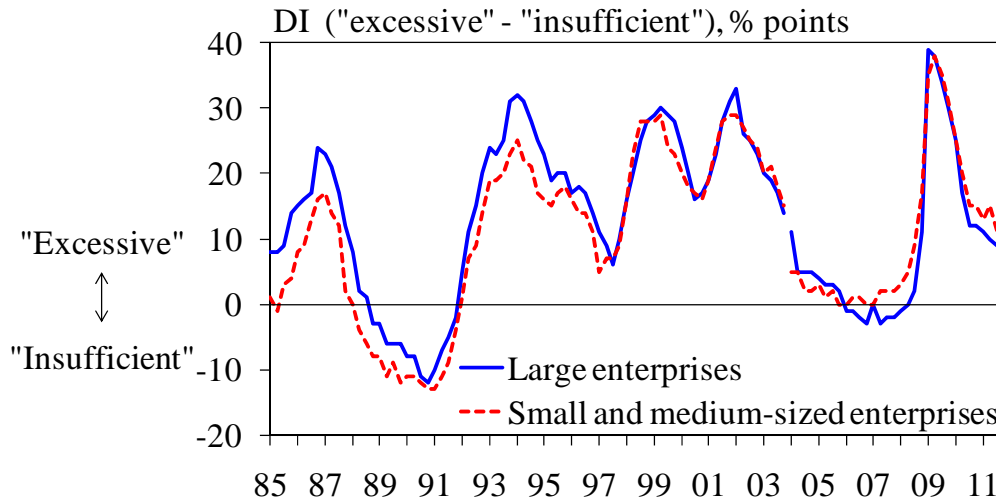
Population Growth Rate (Cont.)



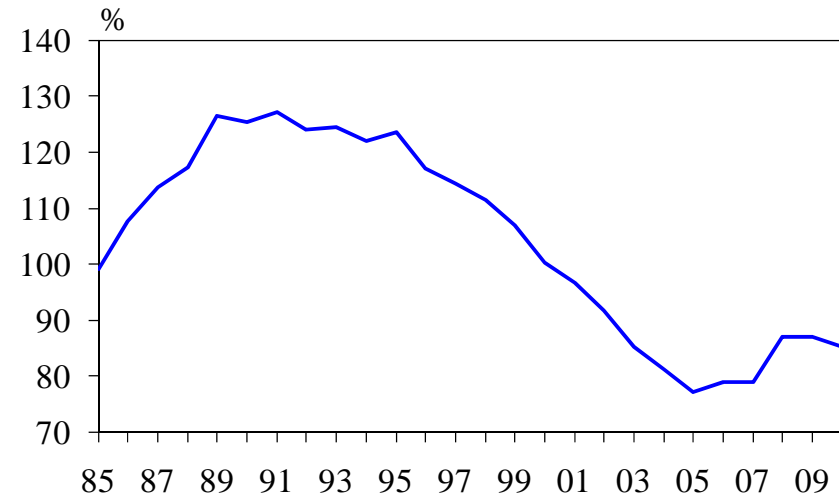
Source: World Bank.

Since the early 2000s, Japan's economy gradually overcame the post-bubble effects of deleveraging.

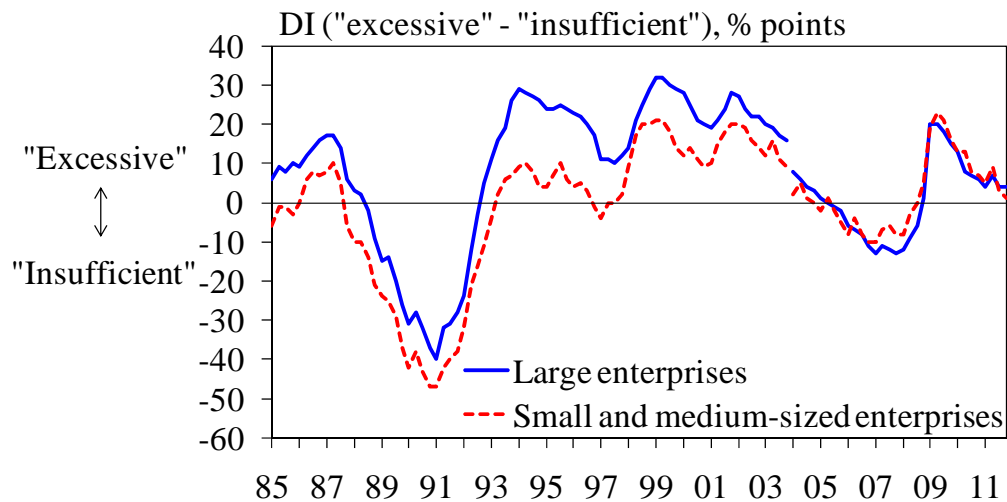
Production Capacity DI^{2,3}



Ratio of Debt to Nominal GDP¹



Employment Conditions DI^{2,3}



- Notes: 1. Debt is the sum of loans and securities (other than equities) in private non-financial corporations.
2. Production capacity DI shows "TANKAN Production Capacity DI (Manufacturing)." Employment conditions DI shows "TANKAN Employment Conditions DI (All Industries)."
3. The "TANKAN" has been revised from the March 2004 survey. Figures up to the December 2003 survey are based on the previous data sets. Figures from the December 2003 survey are on the new basis.

Sources: Cabinet Office; Bank of Japan.

Japan's economic recovery since 2002 was supported by the high growth of the global economy.

