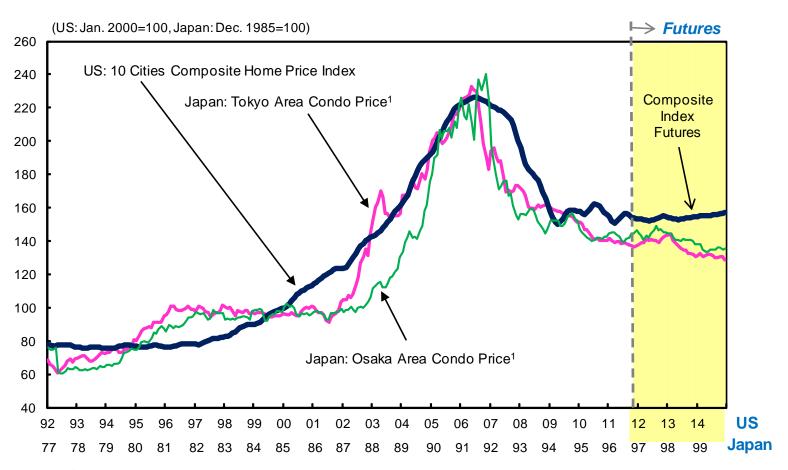


# Rebuilding of the European and US Economy and Japan

Richard C. Koo Chief Economist Nomura Research Institute Tokyo January 2012



### **Exhibit 1. US Housing Prices Are Moving along the Japanese Experience**

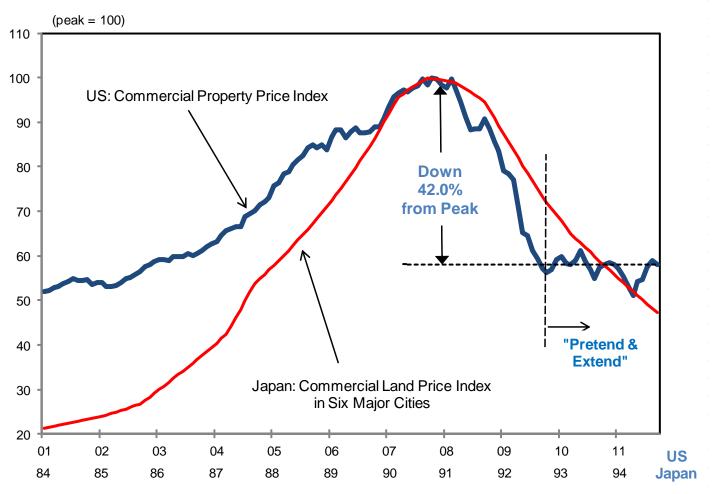


Note: per m<sup>2</sup>, 5-month moving average

 $Sources: Bloomberg, Real\ Estate\ Economic\ Institute, Japan,\ S\&P,\ S\&P/Case-Shiller \circledR\ Home\ Price\ Indices, as\ of\ Jan.\ 11,\ 2012,\ S\&P/Case-Shiller \r$ 



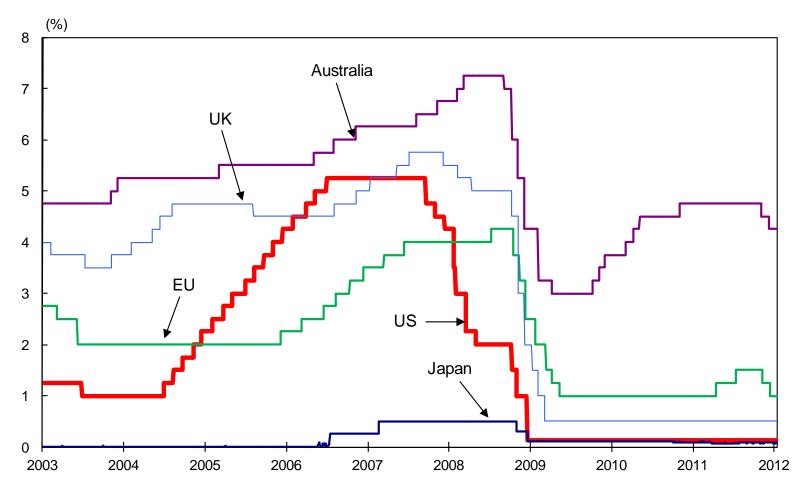
Exhibit 2. US Commercial Real Estate Prices Also Falling to Japanese Levels



Note: Peak of US Prices: Oct. 2007, Peak of Japanese Prices: Sep. 1990. Source: Nomura Research Institute, based on Moody's/Real Estate Analytics and Japan Real Estate Institute



**Exhibit 3. Drastic Rate Cuts Have Done Little to Revive Employment or House Prices** 



Sources: BOJ, FRB, ECB, BOE and RMB Australia. As of Jan. 11, 2012.



### Exhibit 4. US Economy Is still a Long Way from Previous Peak

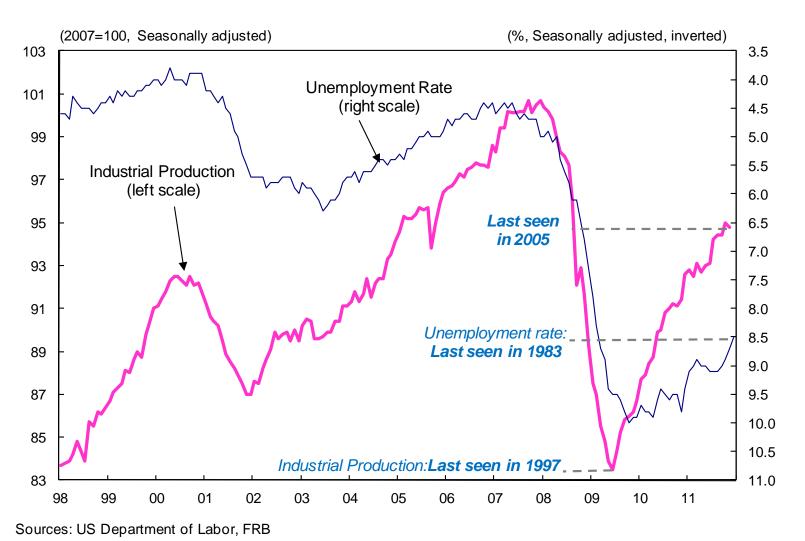




Exhibit 5. Euro-Zone Economy Is still a Long Way from Previous Peak

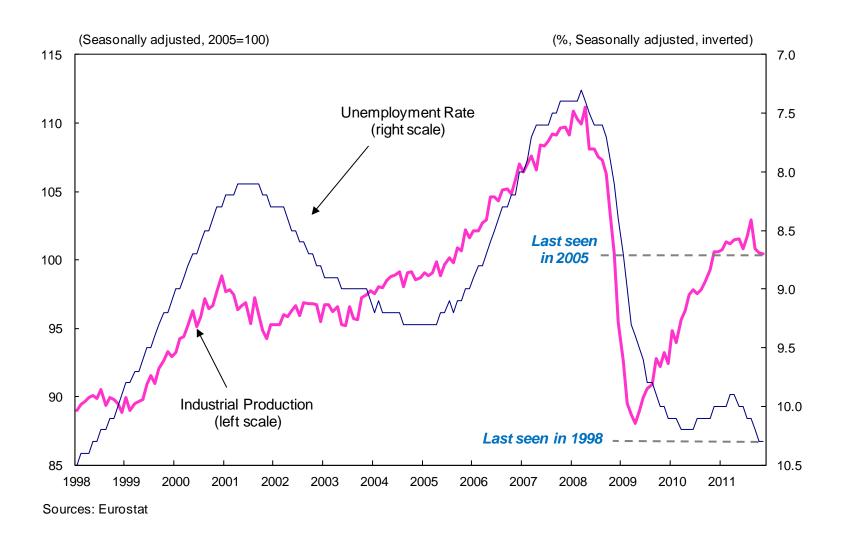




Exhibit 6. Except in Germany, Industrial Production in Europe Is still Weak

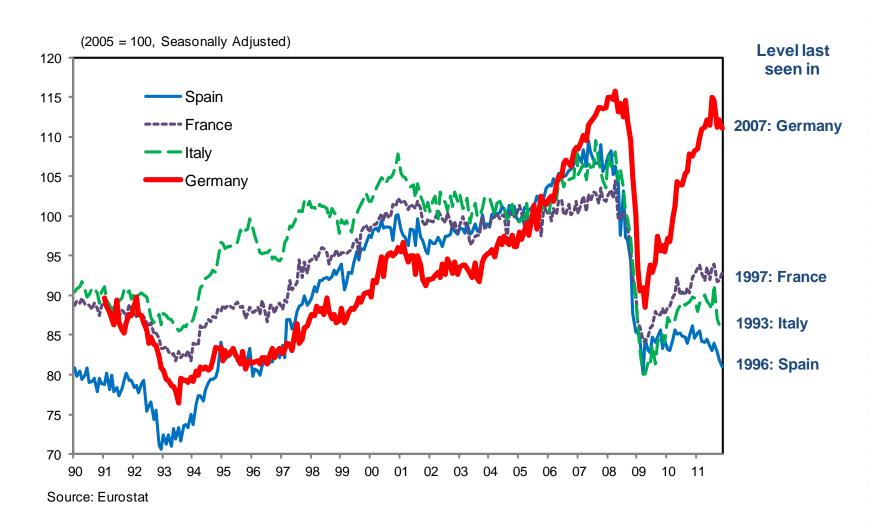
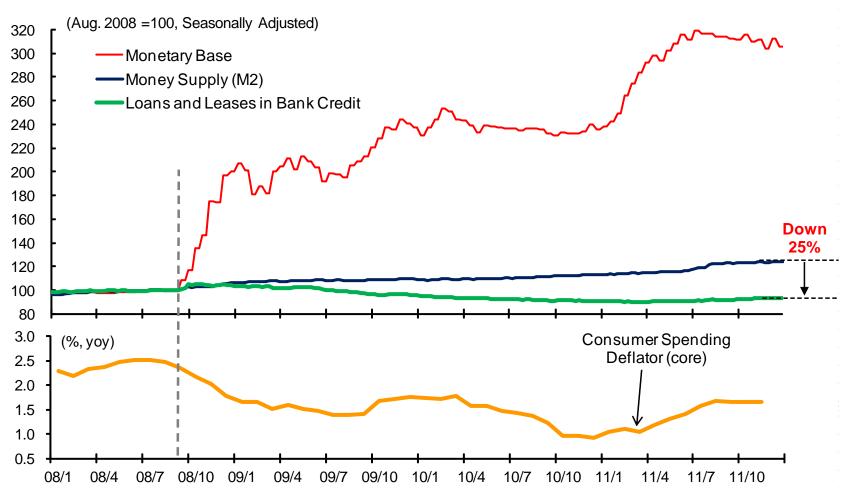




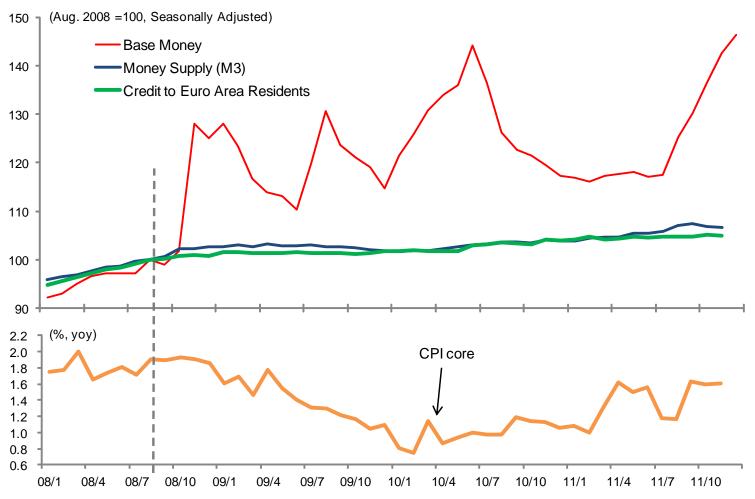
Exhibit 7. Drastic Liquidity Injection Failed to Increase Money Supply (I): US



Sources: Board of Governors of the Federal Reserve System, US Department of Commerce Note: Commercial bank loans and leases, adjustments for discontinuities made by Nomura Research Institute.



Exhibit 8. Drastic Liquidity Injection Failed to Increase Money Supply (II): EU

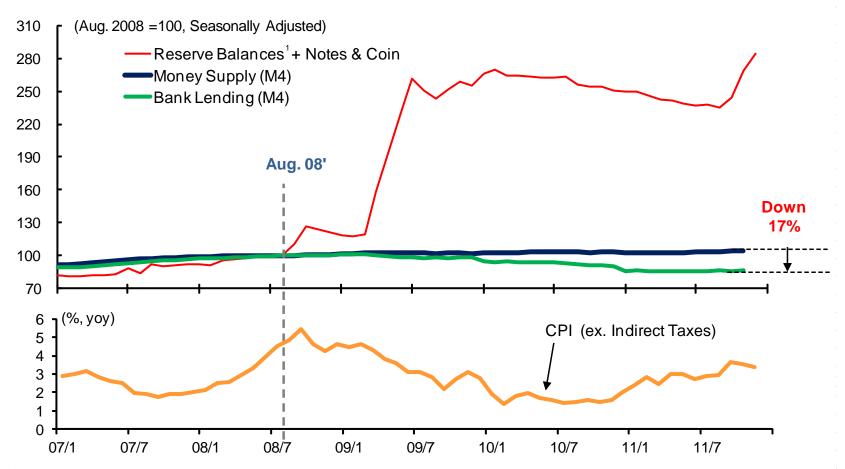


Sources: ECB, Eurostat

Note: Base money's figures are seasonally adjusted by Nomura Research Institute.



### Exhibit 9. Drastic Liquidity Injection Failed to Increase Money Supply (III): UK

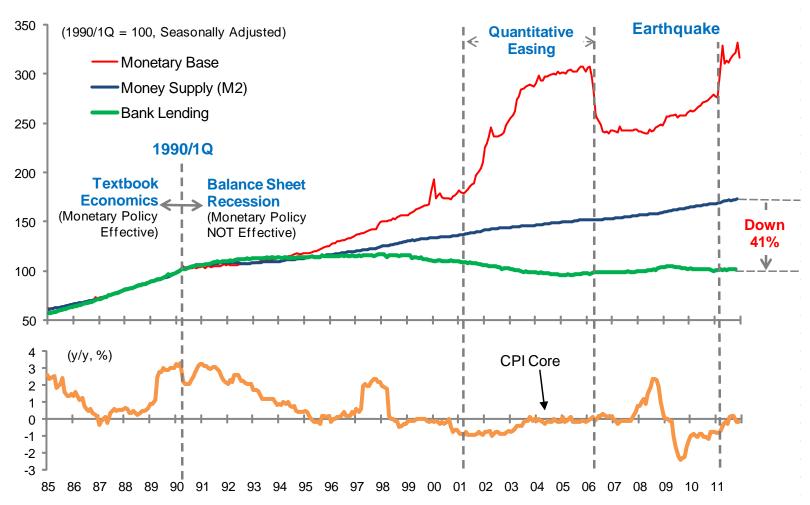


Sources: Bank of England, Office for National Statistics, UK

Notes: 1. Reserve Balances data are seasonally unadjusted. 2. Money supply and bank lending data exclude intermmediate financial institutions.



# Exhibit 10. Drastic Liquidity Injection Failed to Produce Drastic Increase in Money Supply (IV): Japan



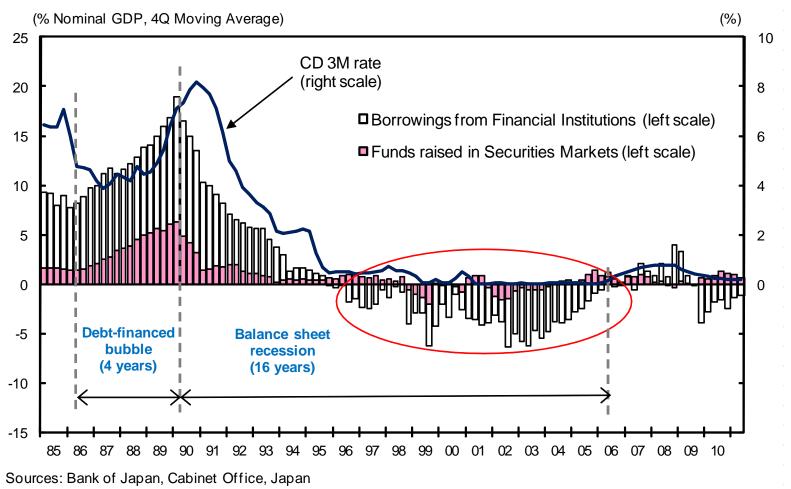
Note: Bank lending are seasonally adjusted by Nomura Research Institute.

Source: Bank of Japan



### Exhibit 11. Japan's De-leveraging with Zero Interest Rates Lasted for 10 Years

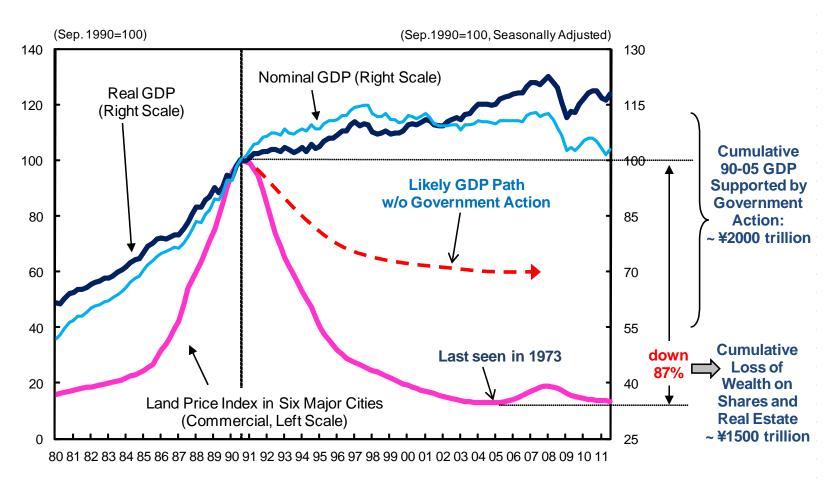
#### **Funds Raised by Non-Financial Corporate Sector**



11



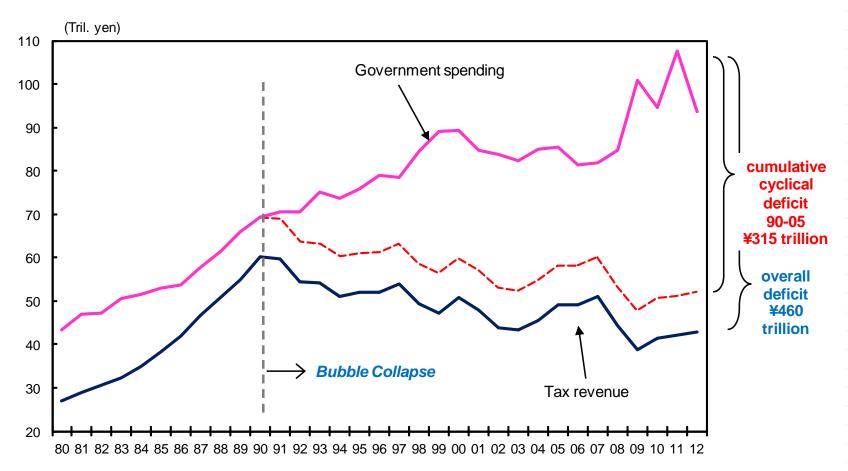
Exhibit 12. Japan's GDP Grew in spite of Massive Loss of Wealth and Private Sector De-leveraging



Sources: Cabinet Office, Japan Real Estate Institute



# Exhibit 13. Japanese Government Borrowed and Spent the Unborrowed Savings of the Private Sector to Sustain GDP

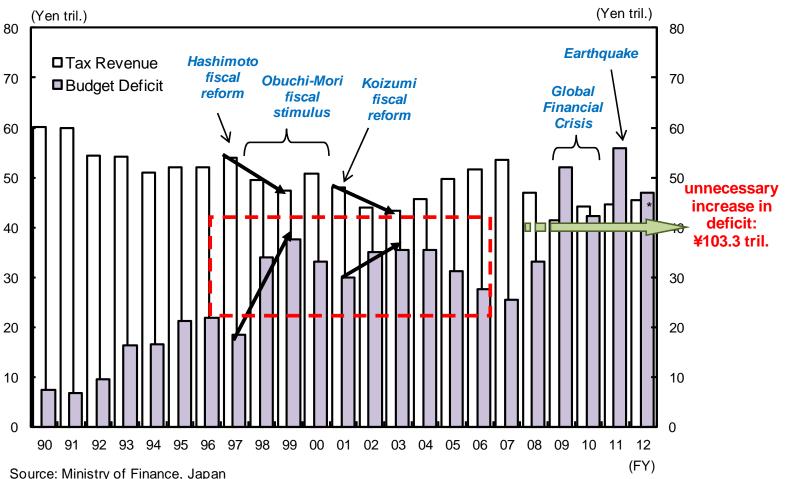


Source: Ministry of Finance, Japan

Note: FY 2011 includes 4th supplementary budget and FY2012 is initial budget.



Exhibit 14. Premature Fiscal Reforms in 1997 and 2001 Weakened **Economy, Reduced Tax Revenue and Increased Deficit** 



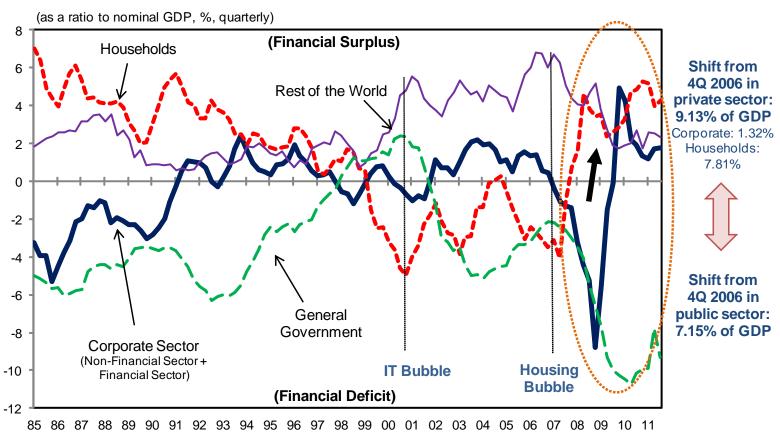
Source: Ministry of Finance, Japan

Notes: Latest figures(\*) are estimated by MOF. From FY2011, figures includes reconstruction taxes and bonds.



# Exhibit 15. US in Balance Sheet Recession: US Private Sector Increased Savings Massively after the Bubble

#### Financial Surplus or Deficit by Sector

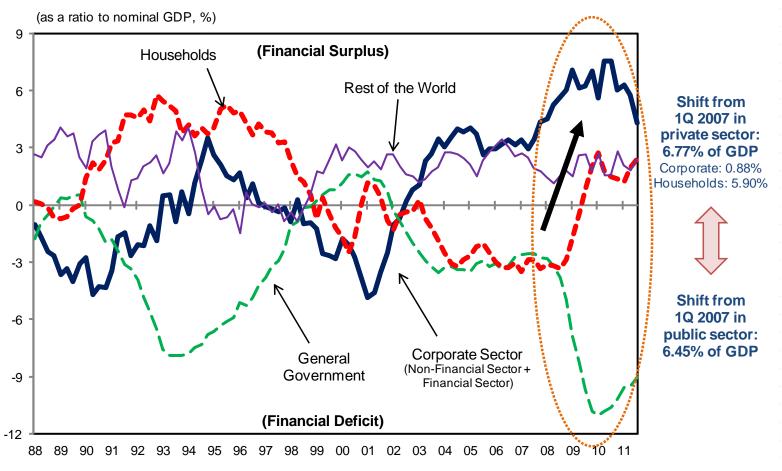


Note: For the latest figures, 4 quarter averages ending with 3Q/11' are used. Sources: FRB, US Department of Commerce



# Exhibit 16. UK in Balance Sheet Recession: UK Private Sector Increased Savings Massively after the Bubble

#### Financial Surplus or Deficit by Sector

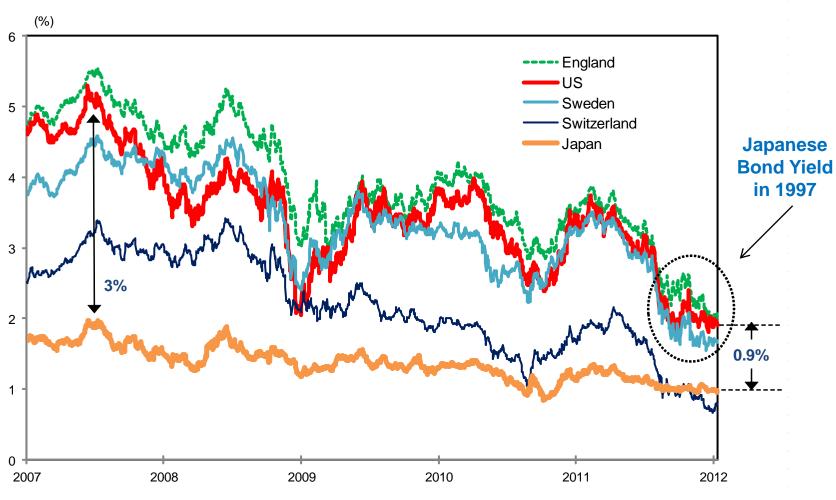


Note: For the latest figures, 4 quarter averages ending with 3Q/11' are used.

Source: Office for National Statistics, UK



Exhibit 17. Global Bond Yields\* Nearing Japanese Levels



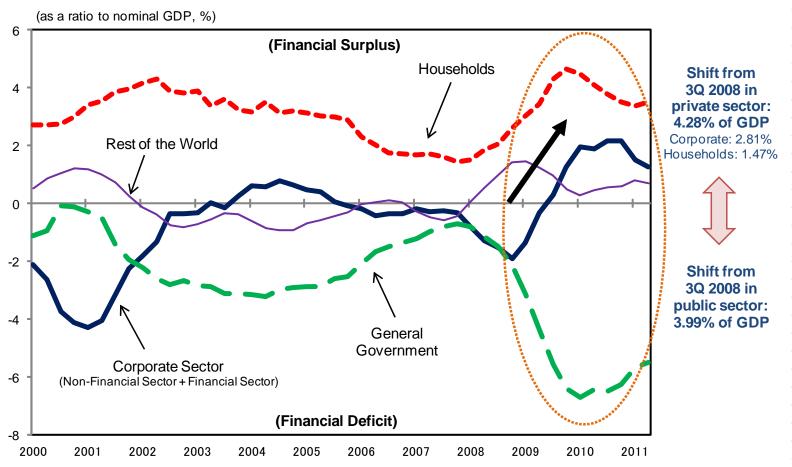
\*Note: Excluding Eurozone. As of Jan. 12, 2012.

Source: Bloomberg



Exhibit 18. Euro-zone in Balance Sheet Recession: Euro-zone Private Sector Increased Savings Massively after the Bubble

#### Financial Surplus or Deficit by Sector

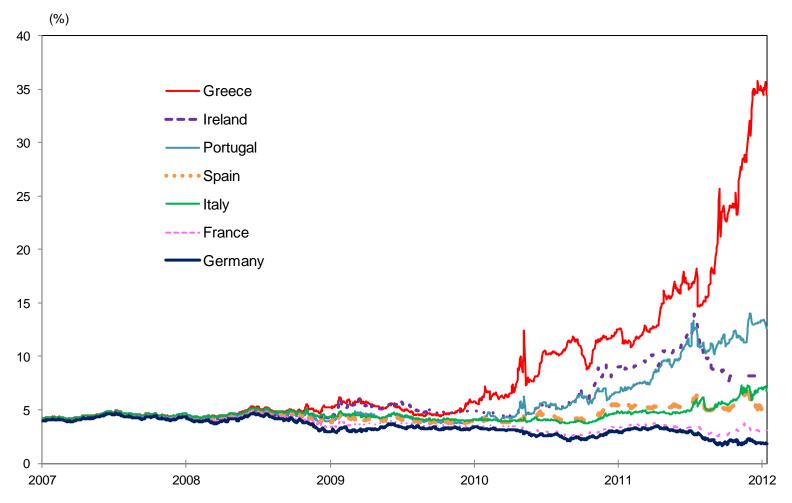


Note: For the latest figures, 4 quarter averages ending with 2Q/11' are used.

Source: ECB



**Exhibit 19. Euro-Zone Bond Yields Are Diverging Sharply** 

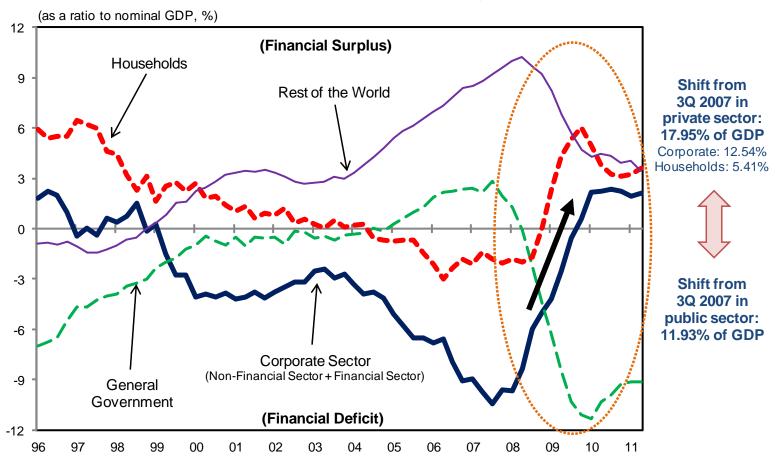


Note: As of Jan. 12, 2012. Source: Bloomberg



# Exhibit 20. Spain in Balance Sheet Recession: Spanish Private Sector Increased Savings Massively after the Bubble

Financial Surplus or Deficit by Sector



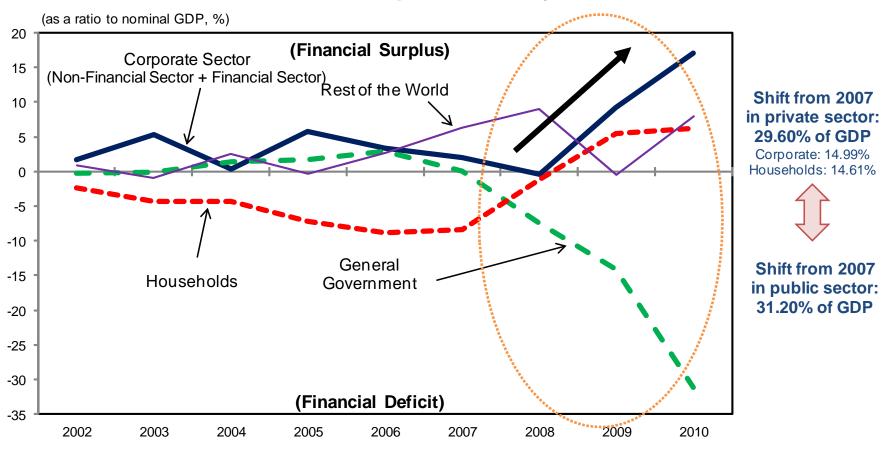
Note: For the latest figures, 4 quarter averages ending with  $2Q/11^{\circ}$  are used.

Source: Banco de España



# Exhibit 21. Ireland in Balance Sheet Recession: Irish Private Sector Increased Savings Massively after the Bubble

#### Financial Surplus or Deficit by Sector

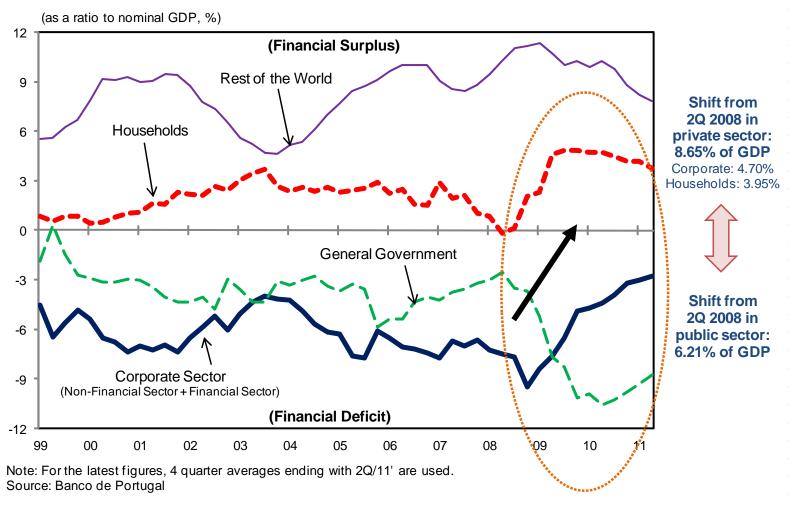


Sources: Eurostat, Central Statistics Office, Ireland



### Exhibit 22. Portugal in Balance Sheet Recession: Portuguese Private Sector Increased Savings Massively after the Bubble

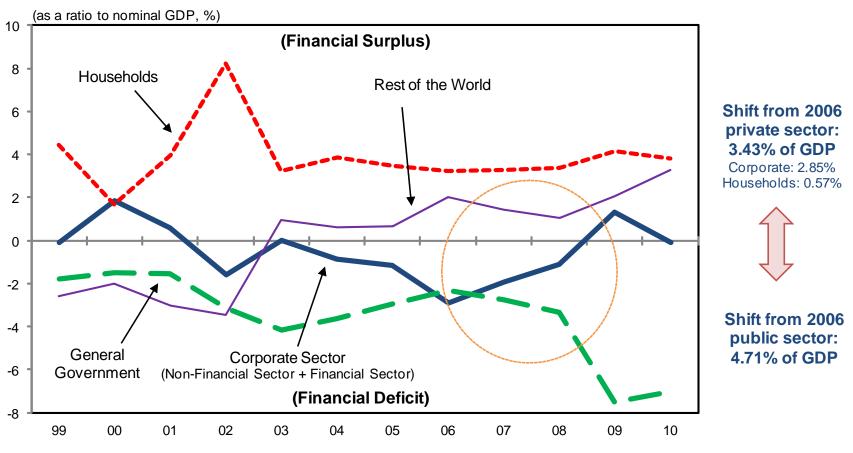
#### Financial Surplus or Deficit by Sector





#### **Exhibit 23. Balance Sheet Correction in France Was Minimal**

#### Financial Surplus or Deficit by Sector

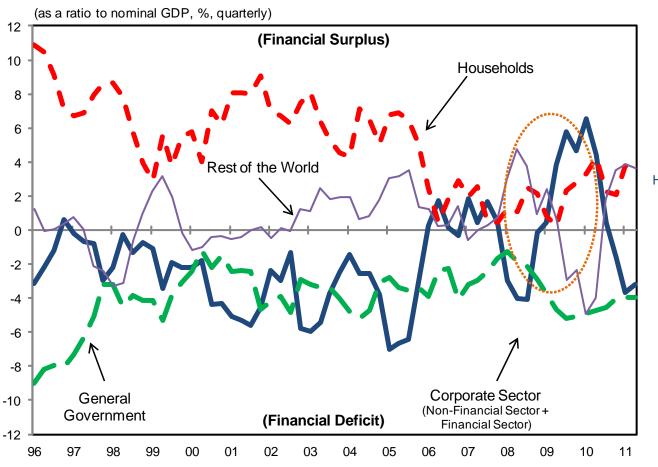


Sources: ECB, Eurostat



### **Exhibit 24. Balance Sheet Correction in Italy Was Minimal**

#### Financial Surplus or Deficit by Sector



Shift from 3Q 2008 in private sector: 3.49% of GDP Corporate: 4.53%

Households: -1.04%



Shift from 3Q 2008 in public sector: 1.90% of GDP

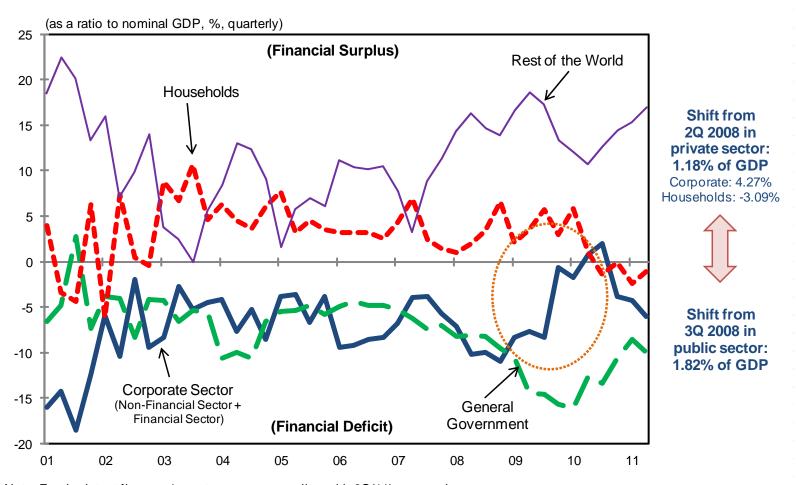
Note: For the latest figures, 4 quarter averages ending with 2Q/11' are used.

Sources: Banca d'Italia, Eurostat



#### Exhibit 25. Balance Sheet Correction in Greece Was Minimal

#### Financial Surplus or Deficit by Sector

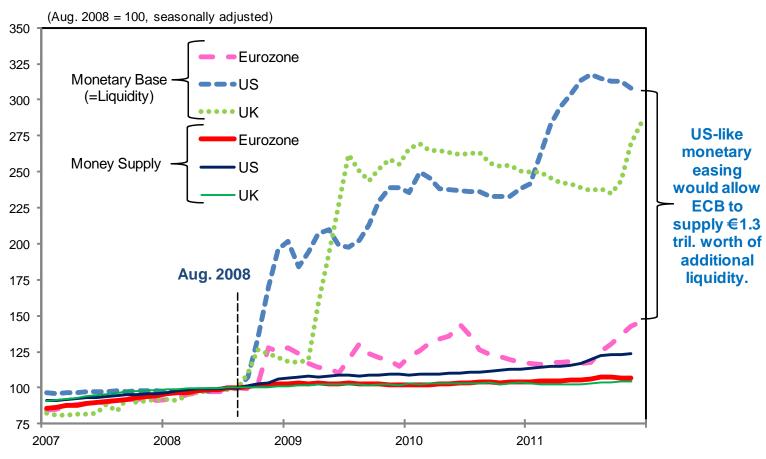


Note: For the latest figures, 4 quarter averages ending with 2Q/11' are used.

Sources: Bank of Greece, Eurostat



# Exhibit 26. ECB Facing Balance Sheet Recession Can Supply Large Amounts of Liquidity without Igniting Inflation



Notes: 1. UK's reserve balances data are seasonally unadjusted.

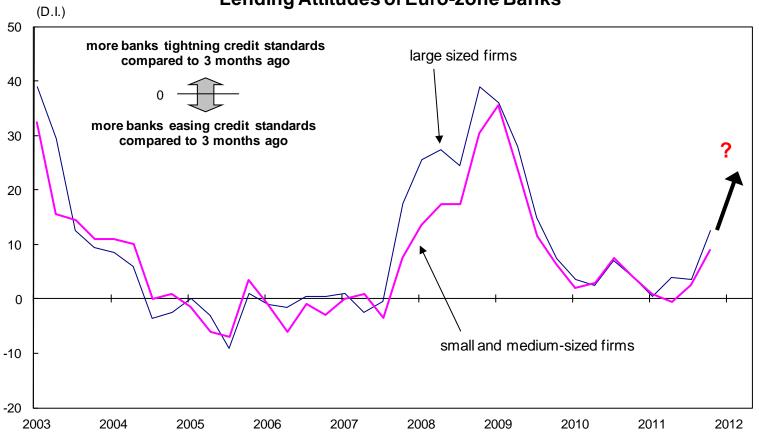
- 2. UK's money supply and bank lending data exclude intermmediate financial institutions.
- 3. Base money's figures of Eurozone are seasonally adjusted by Nomura Research Institute.

Source: Nomura Research Institute, based on FRB, ECB and Bank of England data.



### Exhibit 27. European Banks Are Already on Credit-Crunch Mode





Source: Nomura Research Institute, based on ECB, The Euro Area Bank Lending Survey.

Note: D.I. are calculated from the answers to the question, "Over the past three months, how have your bank's credit standards as applied to the approval of loans or credit lines to enterprises changed?"

D.I. = ("Tightened considerably" + "Tightened somewhat" × 0.5) - ("Eased somewhat" × 0.5 + "Eased considerably")



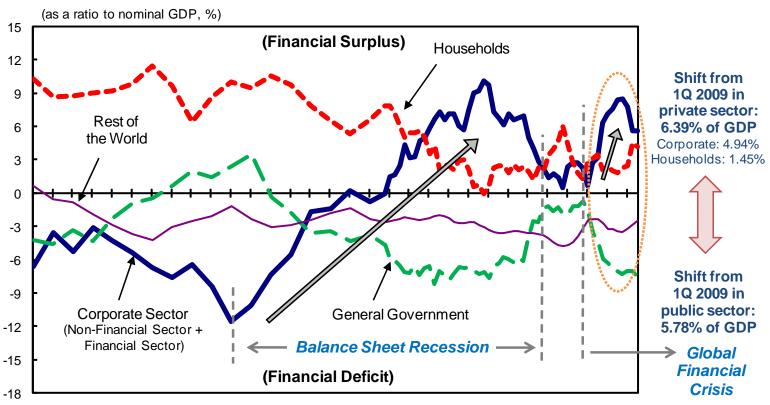
# Exhibit 28. Sustaining Fiscal Stimulus in Democracy during Peacetime Is <u>Difficult</u>

Authoritarian	Democracies
No opposition	"Bond market might rebel"
(if any, quickly suppressed)	"Big Government is BAD Government"
	"Wasteful spending"
	"Monetary Policy should work better"
	"Aging Population"
	"Should not use grand-children's credit card"
	"Structual Reform is what is needed"
	"Republicans, Tea Party types and Blue Dog Democrats (U.S.)"
	"Need to beg Chinese to buy more Treasuries (U.S.)"



# Exhibit 29. Exit Problem (I): Japanese Corporates Increased Savings Again After Lehman

#### Financial Surplus or Deficit by Sector



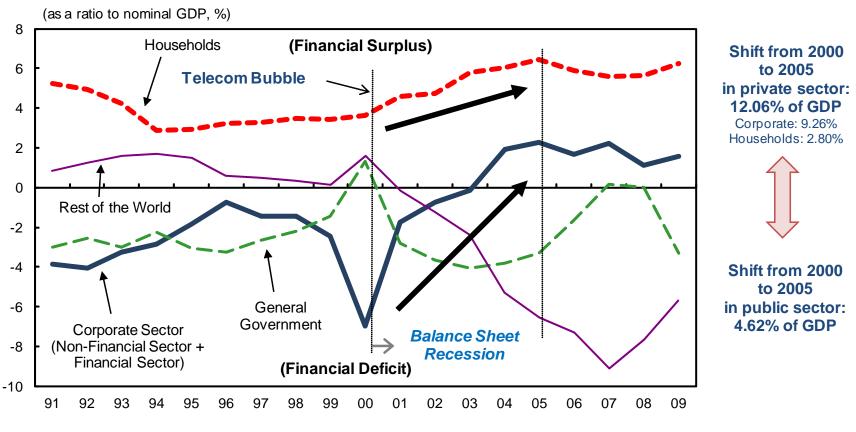
81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11

Note: For the latest figures, 4 quarter averages ending with 3Q/11' are used. Sources: Bank of Japan, *Flow of Funds Accounts*, and Government of Japan, Cabinet Office, *National Accounts* 



### Exhibit 30. Exit Problem (II): German Private Sector Refused to Borrow Money after 1999-2000 Telecom Bubble

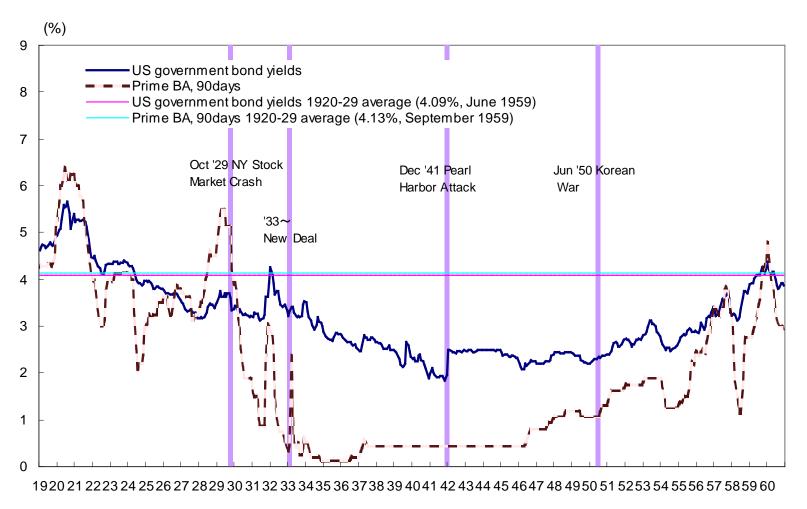
#### Financial Surplus or Deficit by Sector



Sources: Deutsche Bundesbank, Federal Statistical Office Germany Note: The assumption of Treuhand agency's debt by the Redemption Fund for Inherited Liabilities in 1995 is adjusted.



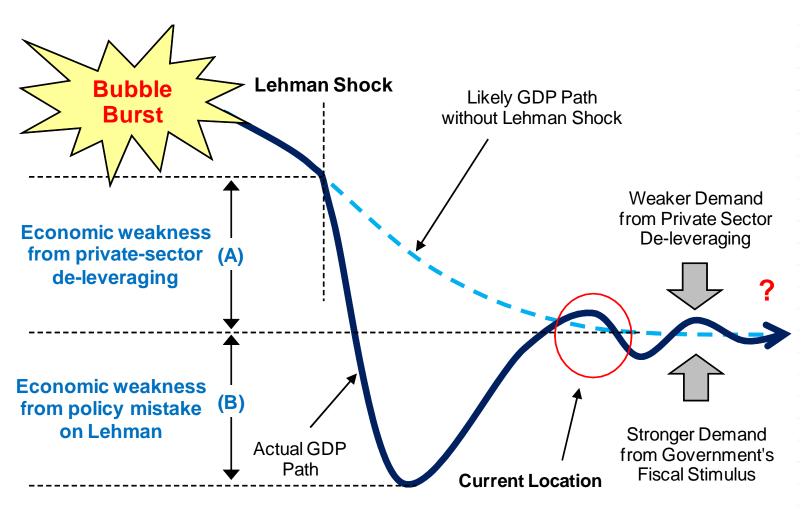
### Exhibit 31. Exit Problem (III): U.S. Took 30 Years to Normalize Interest Rate after 1929 Because of Private Sector Aversion to Debt



Source: FRB, Banking and Monetary Statistics 1914-1970 Vol.1, pp.450-451 and 468-471, Vol.2, pp.674-676 and 720-727



Exhibit 32. Recovery from Lehman Shock Is NOT Recovery from Balance Sheet Recession

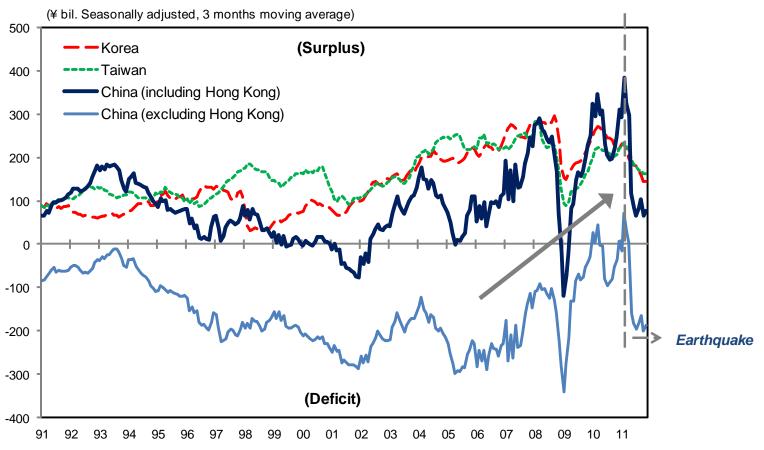


Source: Nomura Research Institute



# Exhibit 33. Before the Earthquake, Japan Was Running Increasingly Larger Trade Surpluses even with Strong Yen

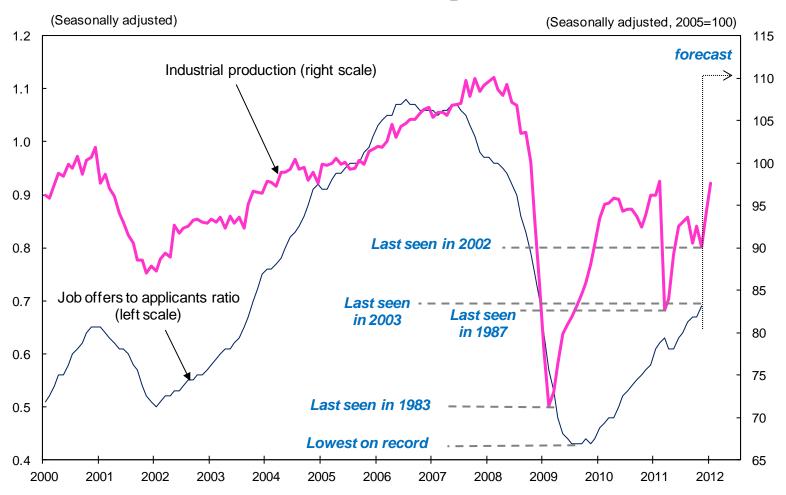
Japan's Trade Balances with Korea, Taiwan and China



Source: Nomura Research Institute, based on Ministry of Finance, Japan, Trade Statistics Note: Seasonal adjustments by Nomura Research Institute.



Exhibit 34. Industrial Production Fell to the Level of 1987 after the Earthquake



Note: Forecasts are calculated from METI's survey on planned production. Sources: Ministry of Economy, Trade and Industry (METI), and Ministry of Health, Labour and Welfare