

The World in Balance Sheet Recession: What Post-2008 West Can Learn from Japan 1990-2005

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

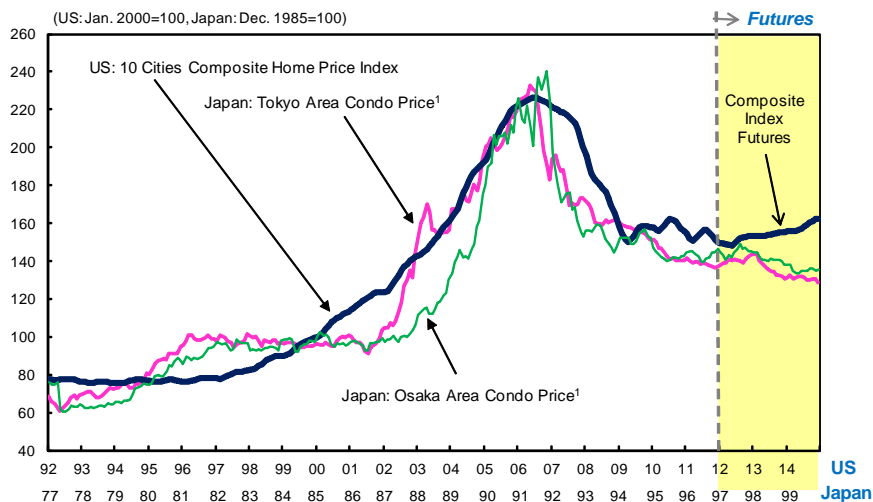
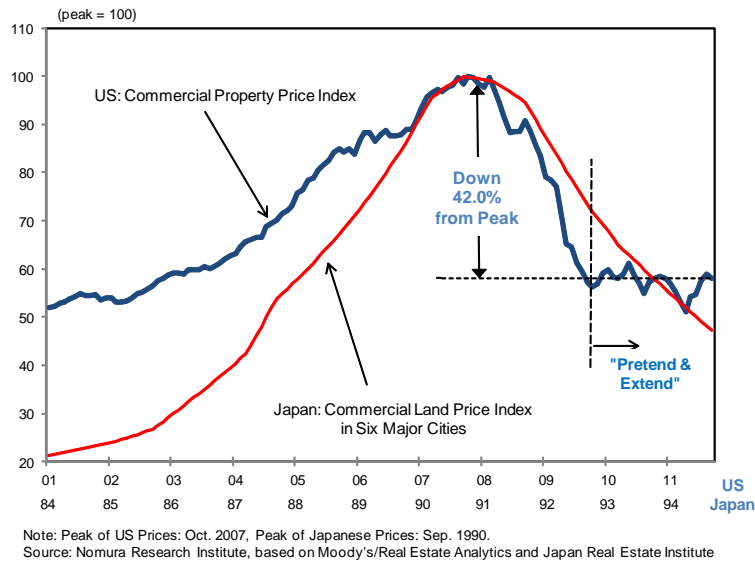
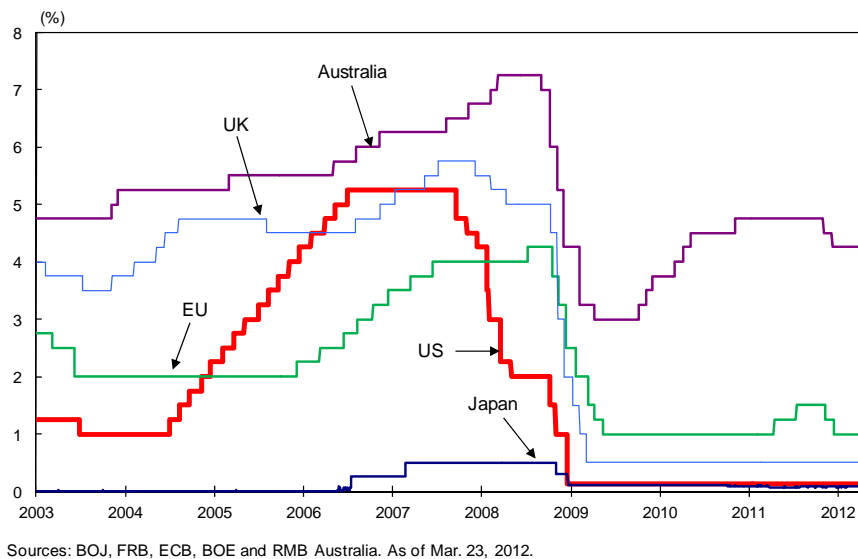


Exhibit 2. US Commercial Real Estate Prices Also Falling to Japanese Levels



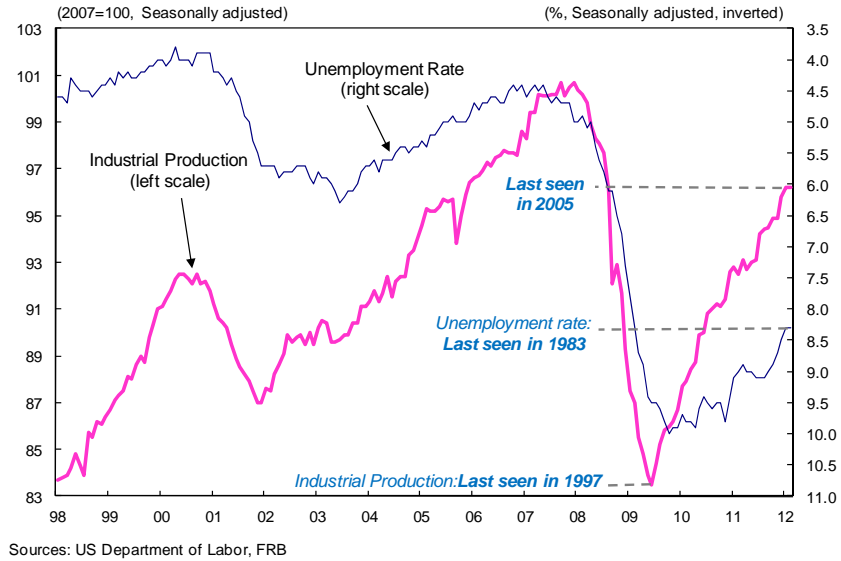
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Exhibit 3. Drastic Rate Cuts Have Done Little to Revive Employment or House Prices



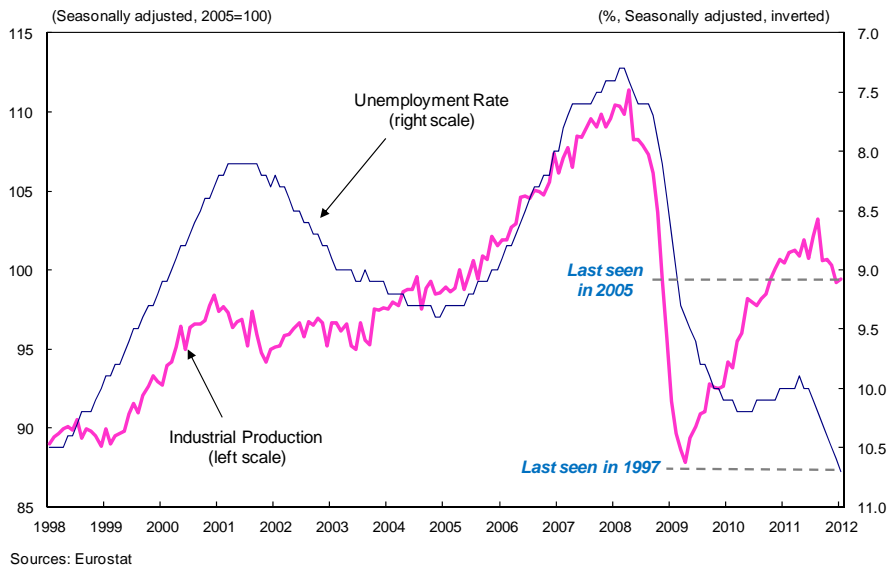
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Exhibit 4. US Economy Is still a Long Way from Previous Peak



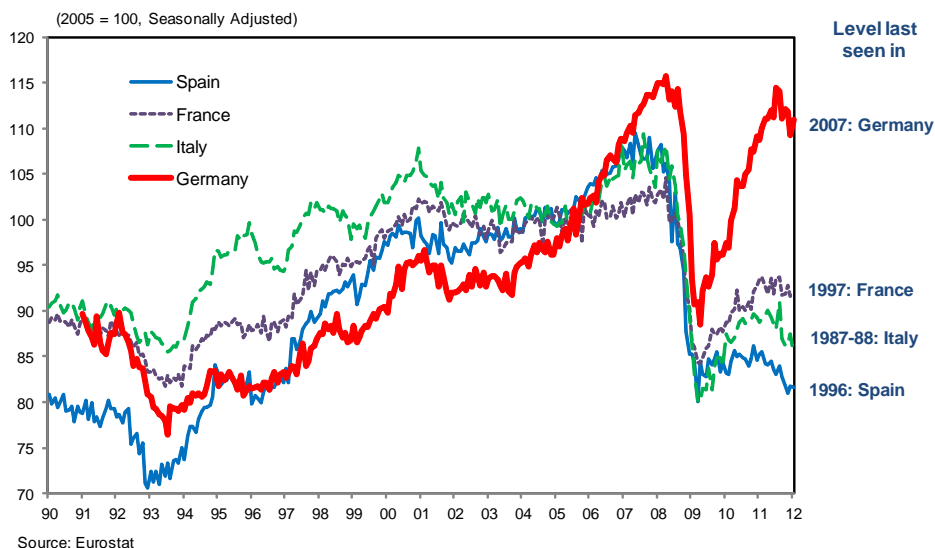
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Exhibit 5. Euro-Zone Economy Is still a Long Way from Previous Peak



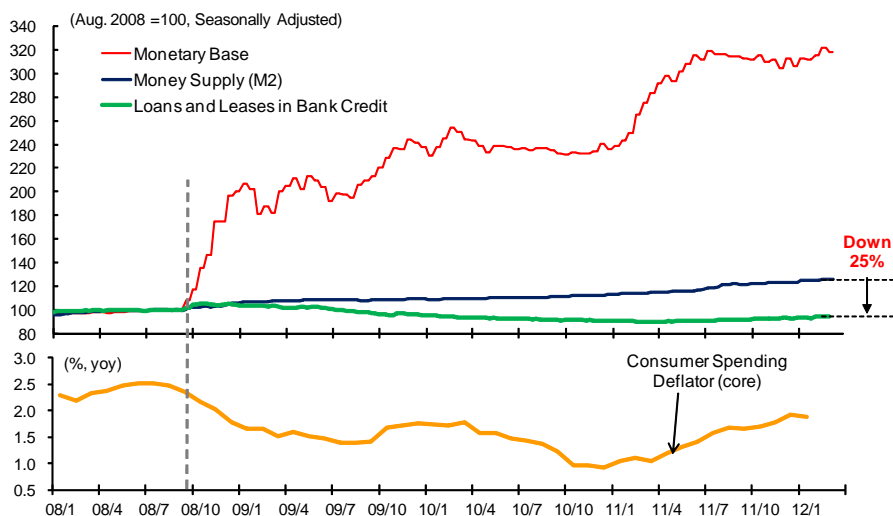
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Exhibit 6. Except in Germany, Industrial Production in Europe Is still Weak



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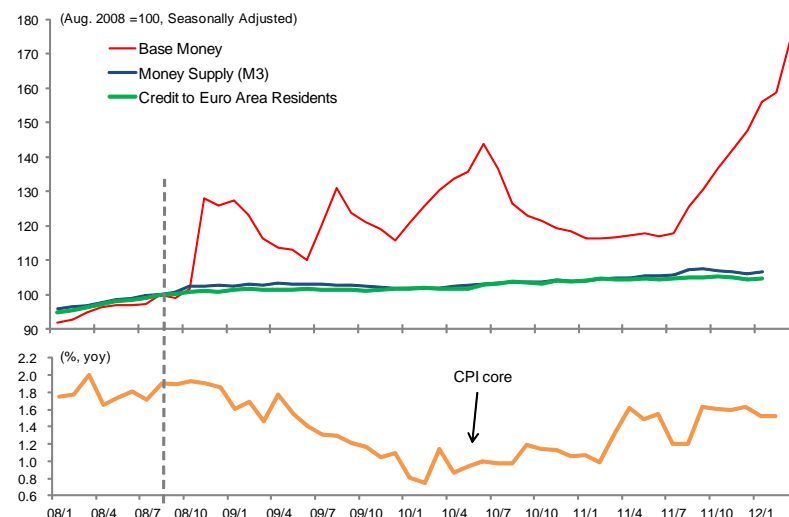
Exhibit 7. Drastic Liquidity Injection Failed to Increase Money Supply (I): US



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.

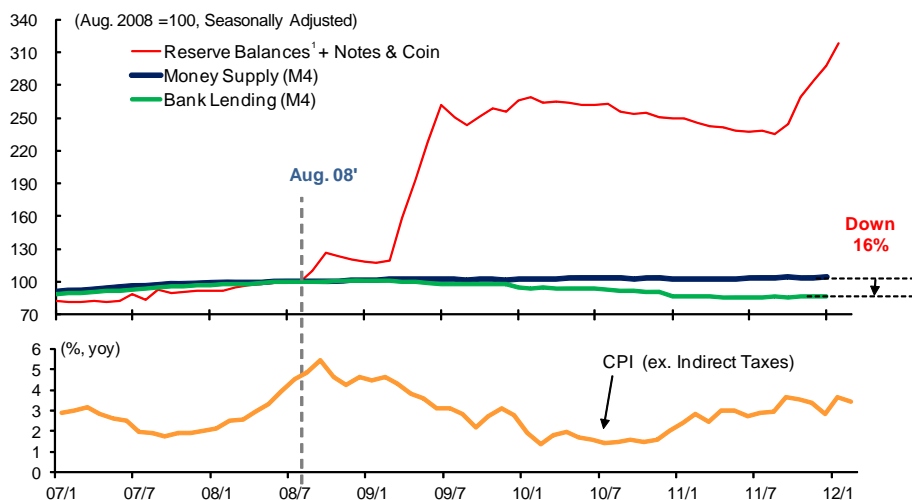
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Exhibit 8. Drastic Liquidity Injection Failed to Increase Money Supply (II): EU



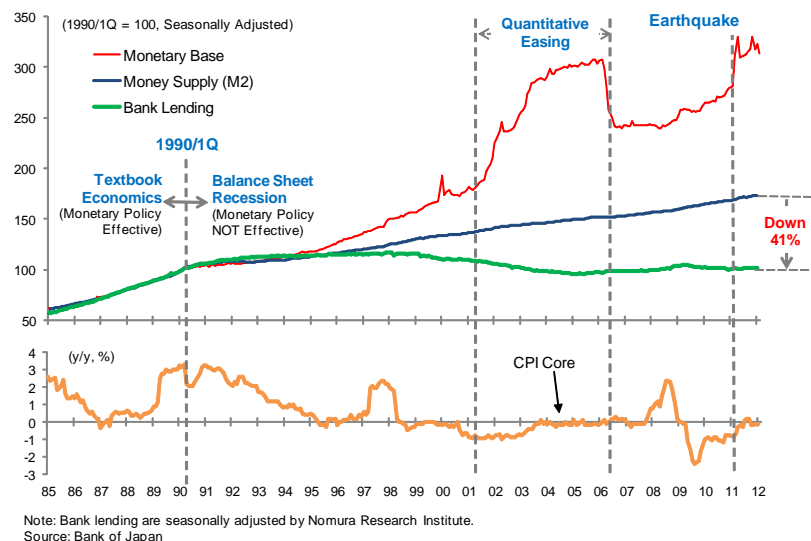
Sources: ECB, Eurostat
Note: Base money's figures are seasonally adjusted by Nomura Research Institute.

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



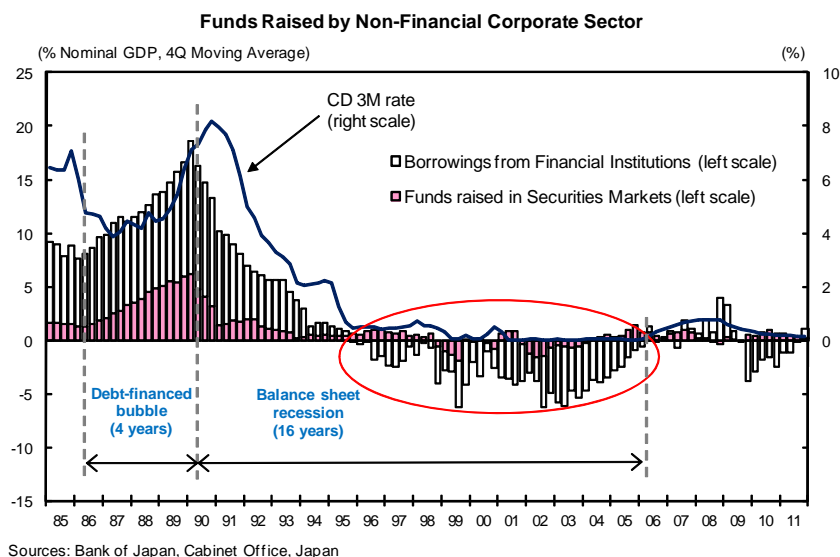
Sources: Bank of England, Office for National Statistics, UK
Notes: 1. Reserve Balances data are seasonally unadjusted. 2. Money supply and bank lending data exclude intermediate financial institutions.

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



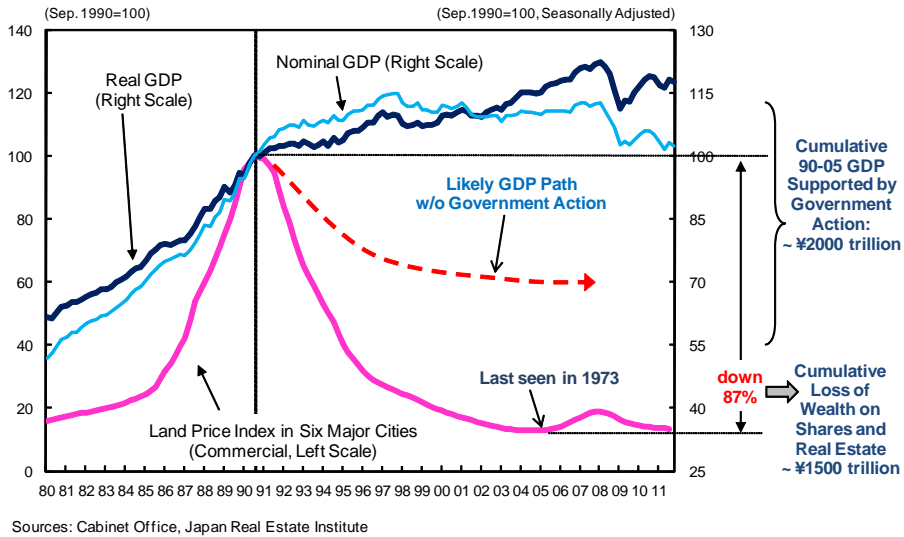
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Exhibit 11. Japan's De-leveraging with Zero Interest Rates Lasted for 10 Years



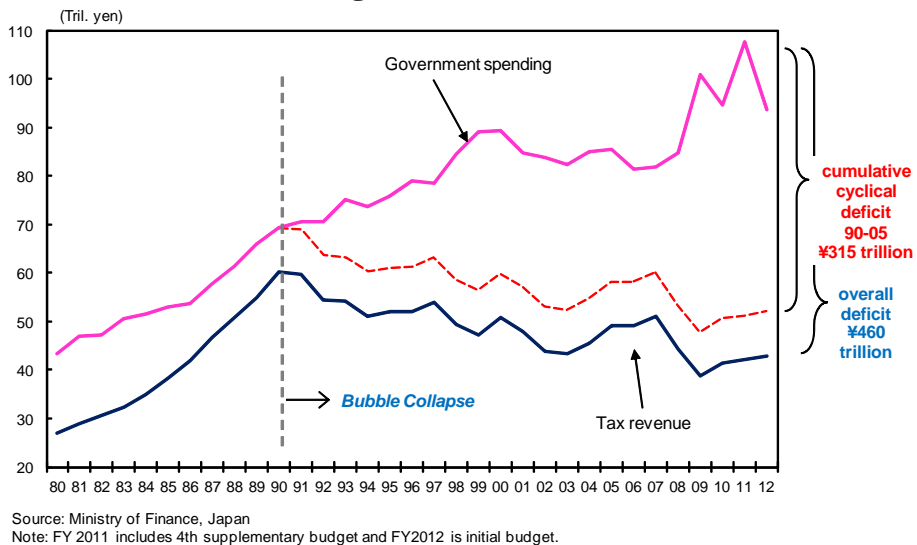
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Exhibit 12. Japan's GDP Grew in spite of Massive Loss of Wealth and Private Sector De-leveraging



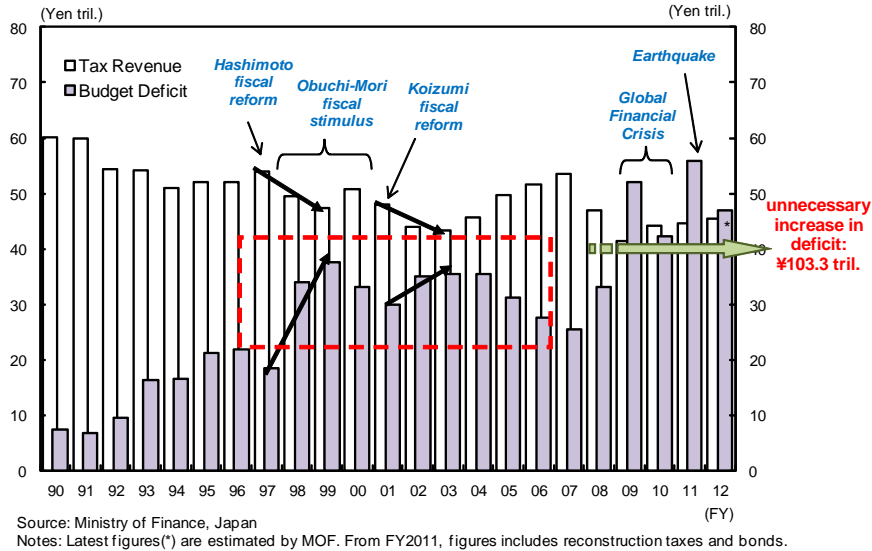
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Exhibit 13. Japanese Government Borrowed and Spent the Unborrowed Savings of the Private Sector to Sustain GDP



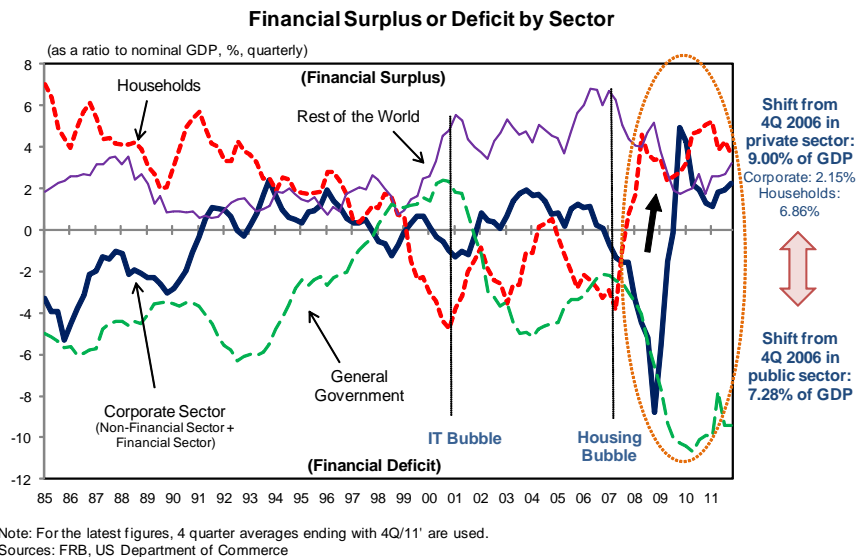
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Exhibit 14. Premature Fiscal Reforms in 1997 and 2001 Weakened Economy, Reduced Tax Revenue and Increased Deficit



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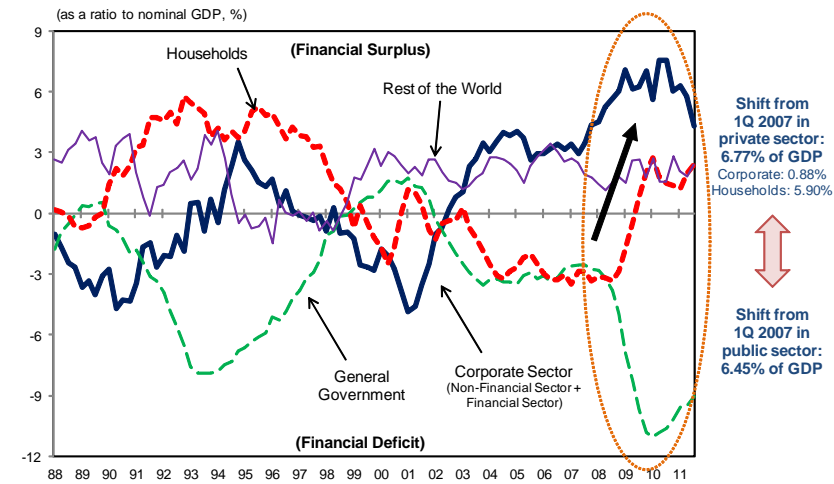
Exhibit 15. US in Balance Sheet Recession: US Private Sector Increased Savings Massively after the Bubble



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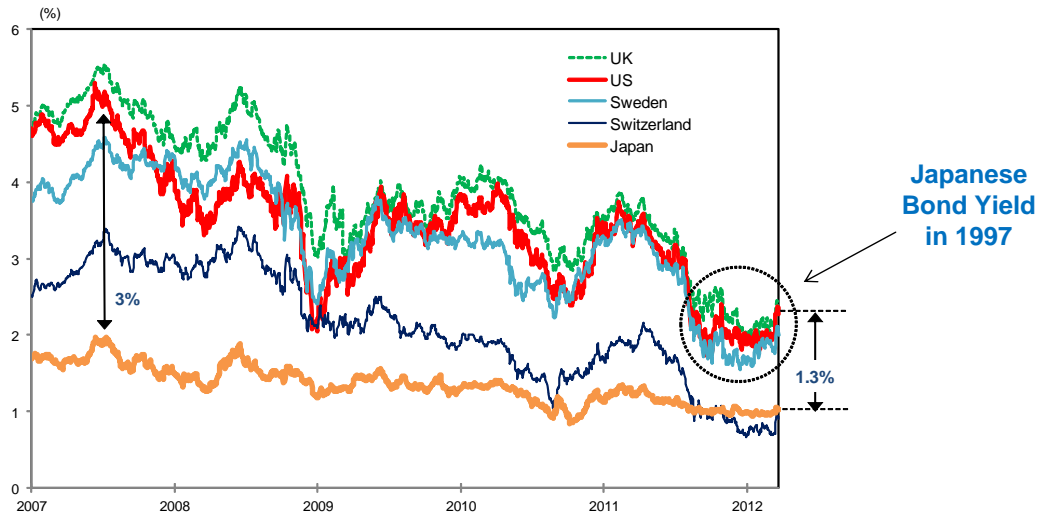
Exhibit 16. UK in Balance Sheet Recession: UK Private Sector Increased Savings Massively after the Bubble

Financial Surplus or Deficit by Sector



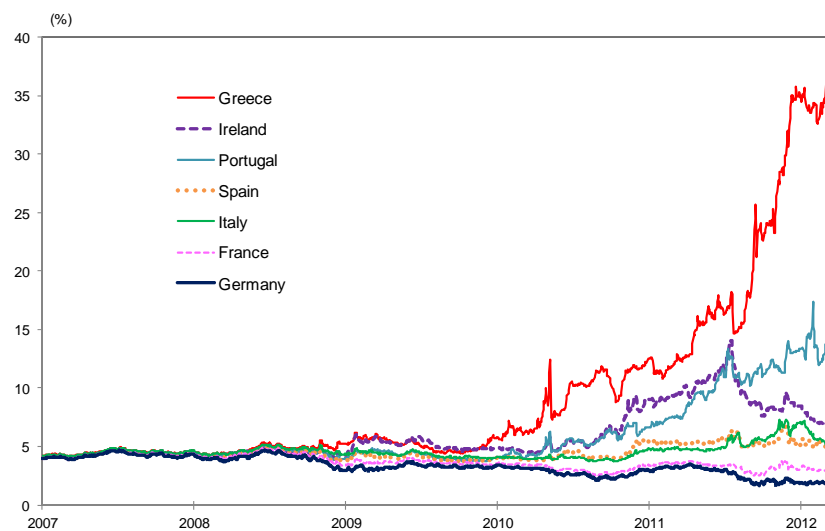
Note: For the latest figures, 4 quarter averages ending with 3Q/11' are used.
Source: Office for National Statistics, UK

Exhibit 17. Global Bond Yields* Nearing Japanese Levels



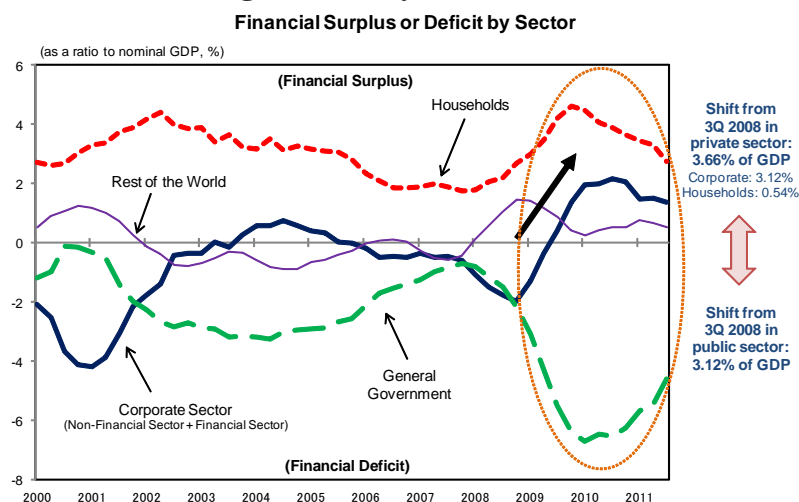
*Note: Excluding Eurozone. As of Mar. 22, 2012.
Source: Bloomberg

Exhibit 18. Euro-Zone Bond Yields Are Diverging Sharply



Note: As of Mar. 22, 2012.
Source: Bloomberg

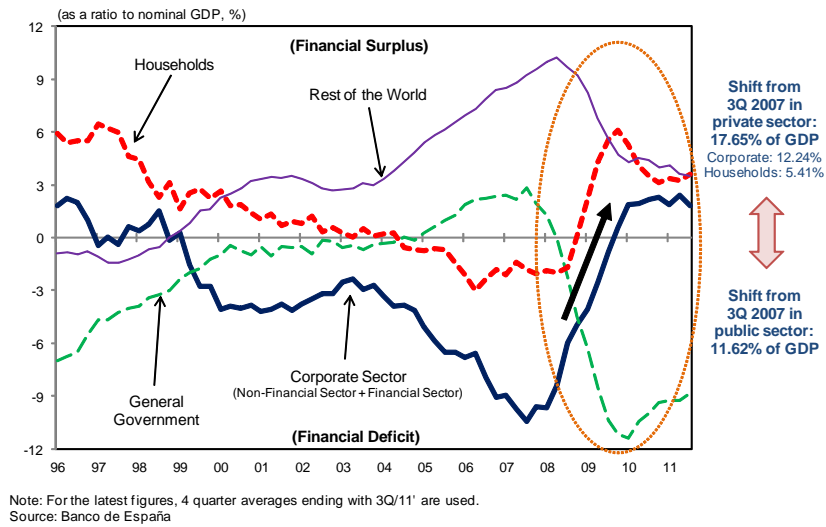
Exhibit 19. Euro-zone in Balance Sheet Recession: Euro-zone Private Sector Increased Savings Massively after the Bubble



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

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

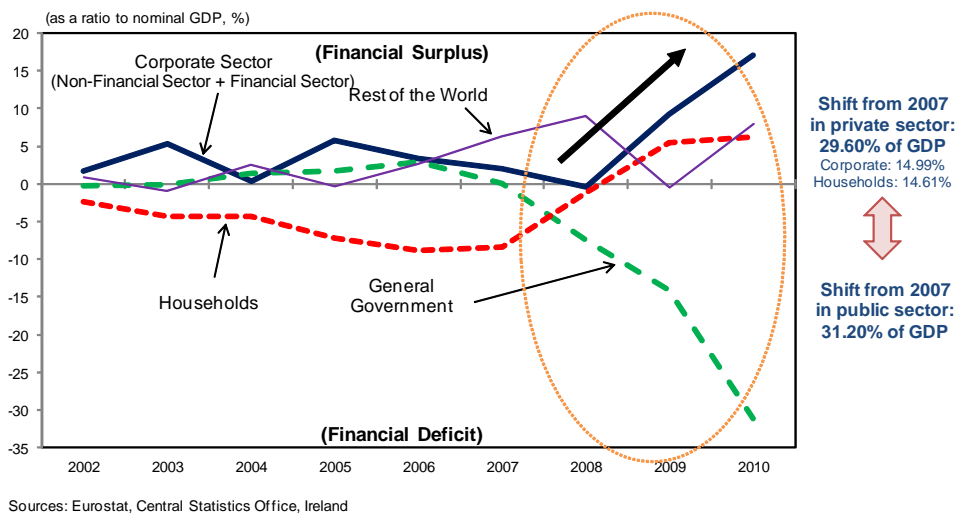
Financial Surplus or Deficit by Sector



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

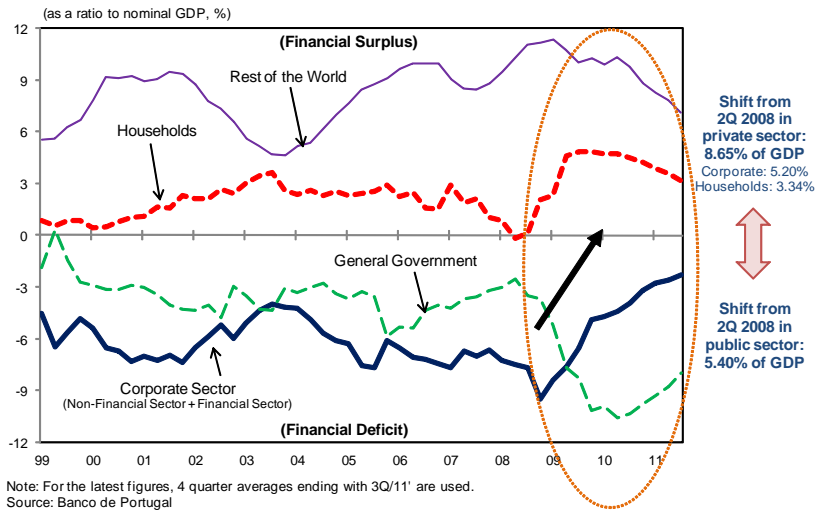
Financial Surplus or Deficit by Sector



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

Financial Surplus or Deficit by Sector



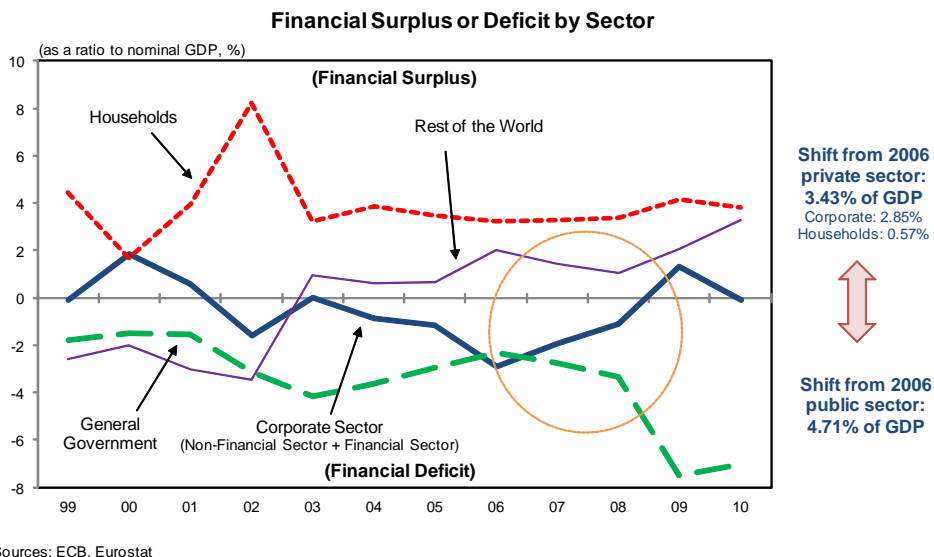
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Exhibit 23. Sustaining Fiscal Stimulus in Democracy during Peacetime Is Difficult

<i>Authoritarian</i>	<i>Democracies</i>
No opposition (if any, quickly suppressed)	"Bond market might rebel" "Big Government is BAD Government" "Monetary Policy should work better" "Aging Population" "Should not use grand-children's credit card" "Structural Reform is what is needed" "Maastricht Treaty and Fiscal Compact" "Must Avoid Greece's Fate" ⋮

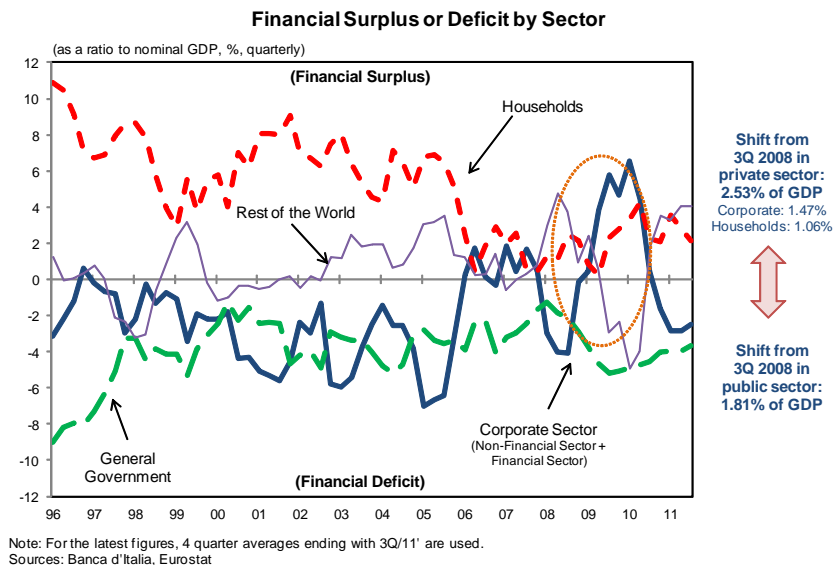
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Exhibit 24. Balance Sheet Correction in France Was Minimal



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Exhibit 25. Balance Sheet Correction in Italy Was Minimal



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Exhibit 26. Italian Corporates Are Back to Normal After 2 Difficult Years

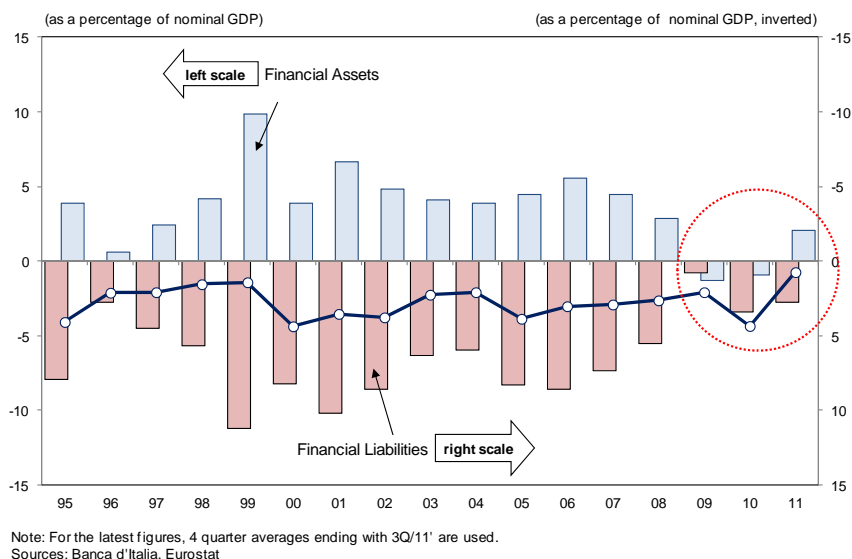


Exhibit 27. Italian Households Are Not Affected by Crisis

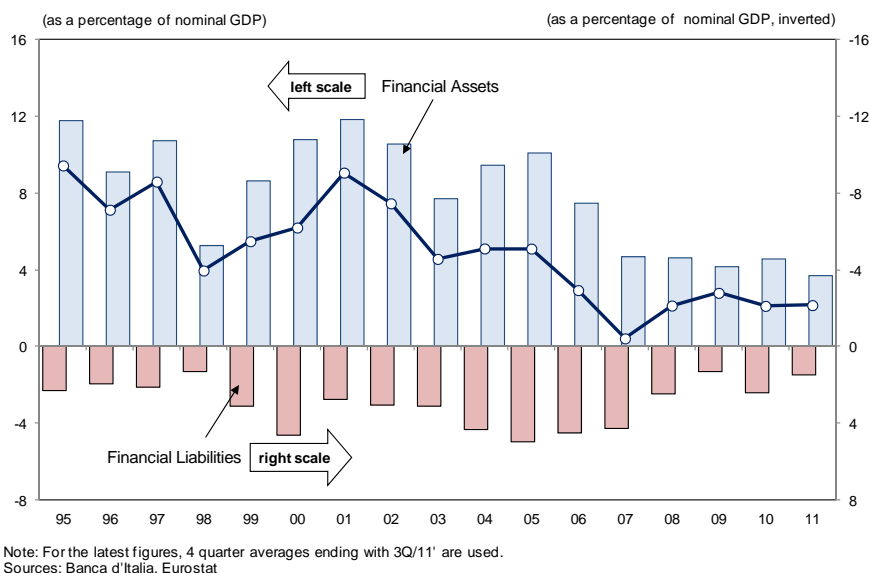
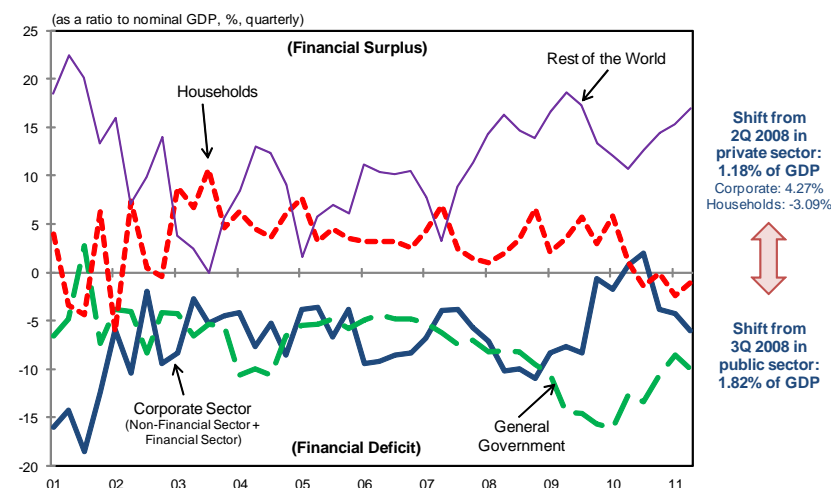


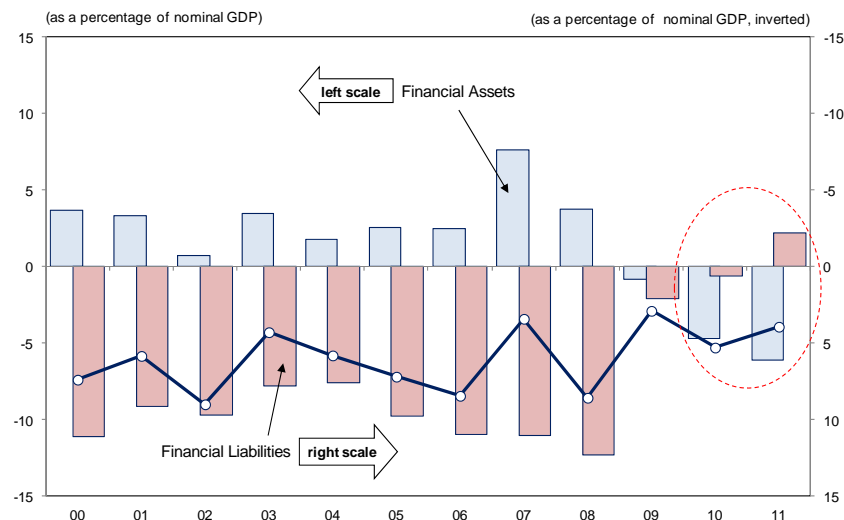
Exhibit 28. Greek Private Sector Is Drawing Down Savings to Survive

Financial Surplus or Deficit by Sector



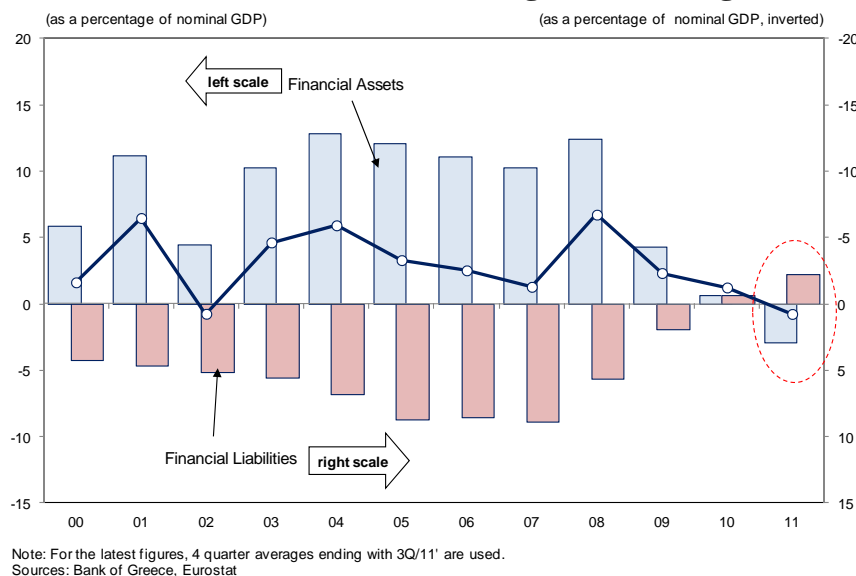
Note: For the latest figures, 4 quarter averages ending with 2Q/11' are used.
Sources: Bank of Greece, Eurostat

Exhibit 29. Greek Corporates Are Both Drawing Down Savings and Reducing Debt



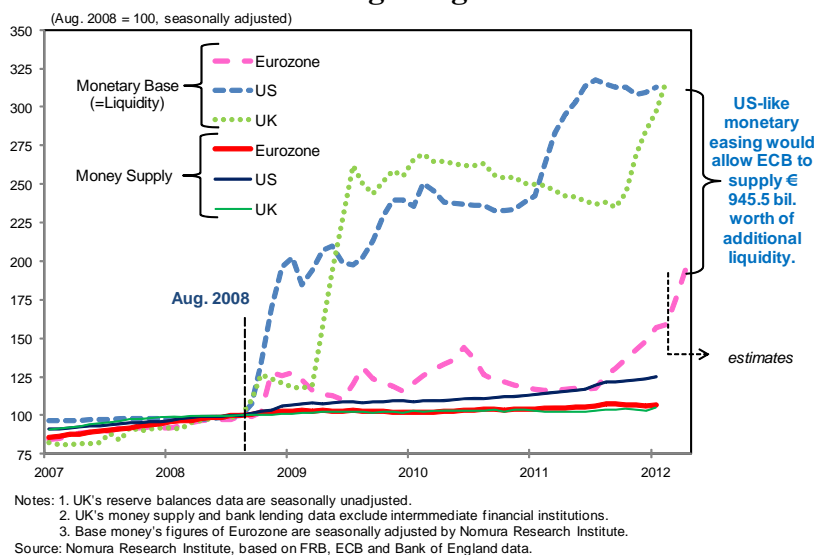
Note: For the latest figures, 4 quarter averages ending with 3Q/11' are used.
Sources: Bank of Greece, Eurostat

Exhibit 30. Greek Households Are Both Drawing Down Savings and Reducing Debt



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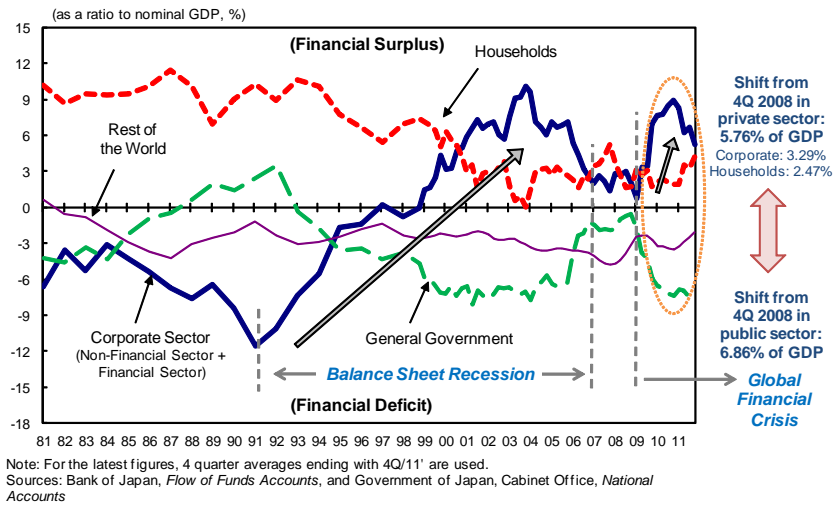
Exhibit 31. ECB Facing Balance Sheet Recession Can Supply Large Amounts of Liquidity without Igniting Inflation



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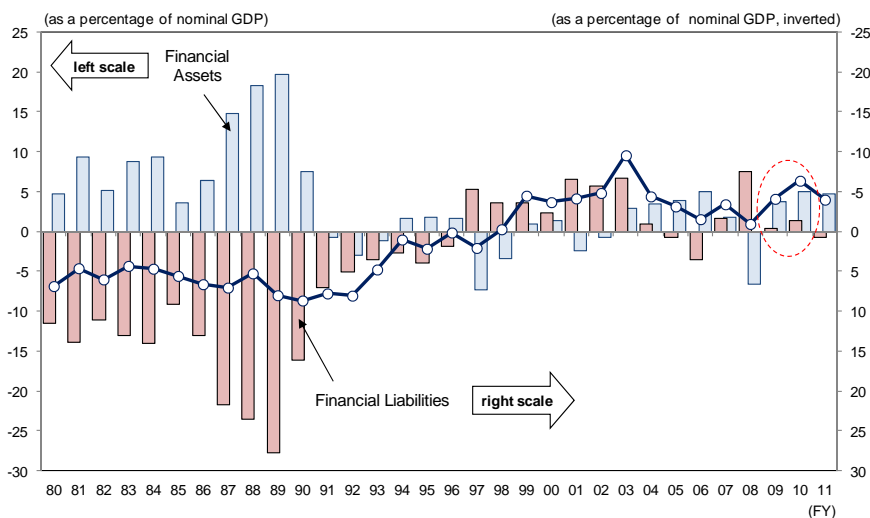
Exhibit 32. Exit Problem (I): Japanese Corporates Increased Savings Again After Lehman

Financial Surplus or Deficit by Sector



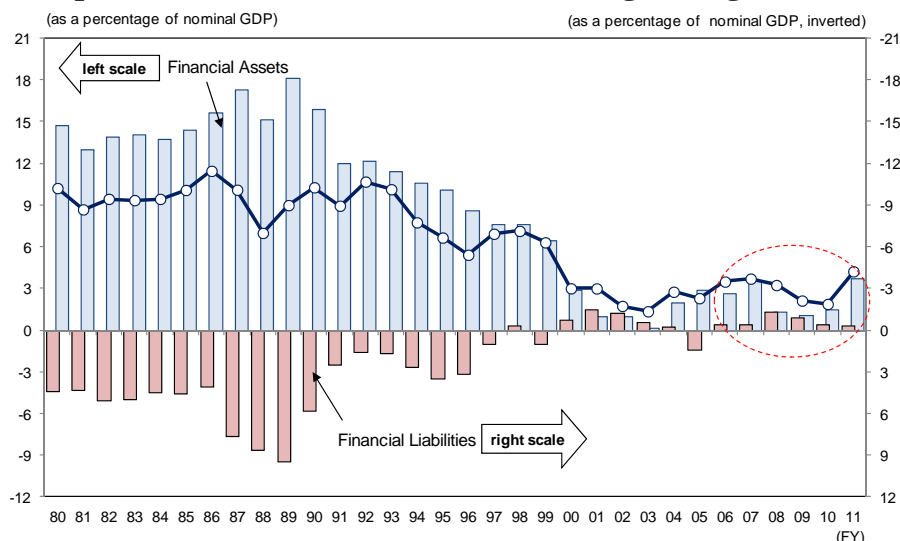
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Exhibit 33. Japanese Corporates Are Increasing Savings



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Exhibit 34. Japanese Households Are Both Increasing Savings and Reducing Debt



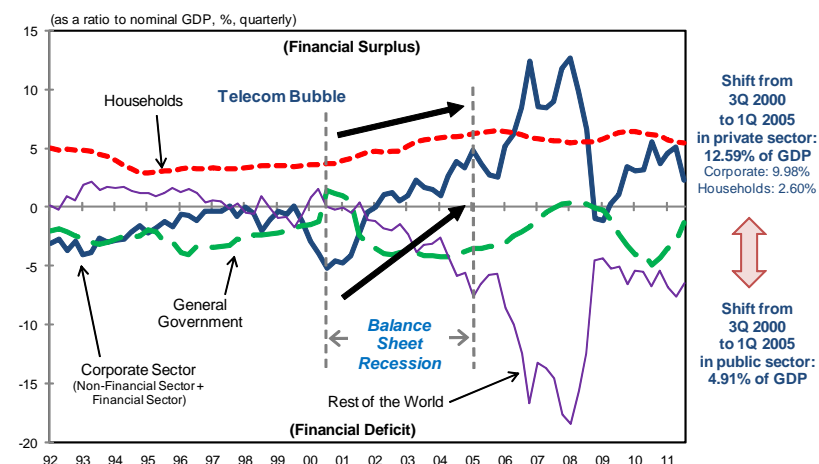
Note: For the latest figures, 4 quarter averages ending with 4Q/11' are used.

Sources: Bank of Japan, Flow of Funds Accounts, and Government of Japan, Cabinet Office, National Accounts

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Exhibit 35. Exit Problem (II): German Private Sector Refused to Borrow Money after 1999-2000 Telecom Bubble

Financial Surplus or Deficit by Sector

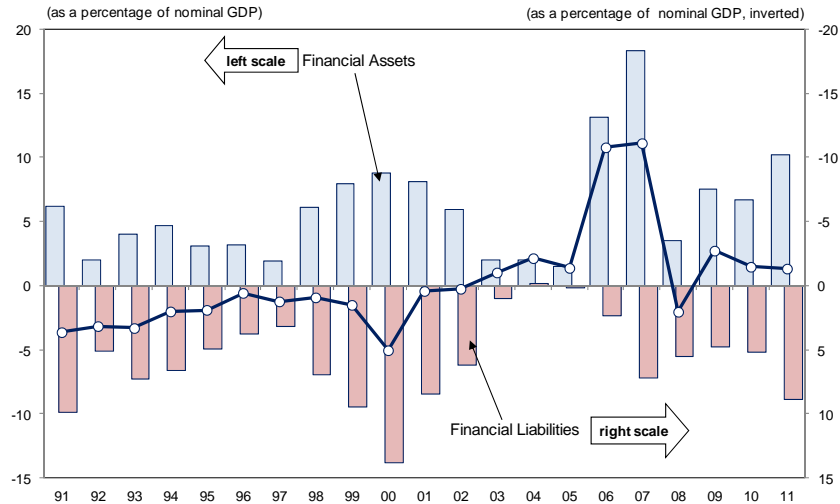


Notes: The assumption of Treuhand agency's debt by the Redemption Fund for Inherited Liabilities in 1995 is adjusted. For the latest figures, 4 quarter averages ending with 3Q/11' are used.

Source: Deutsche Bundesbank

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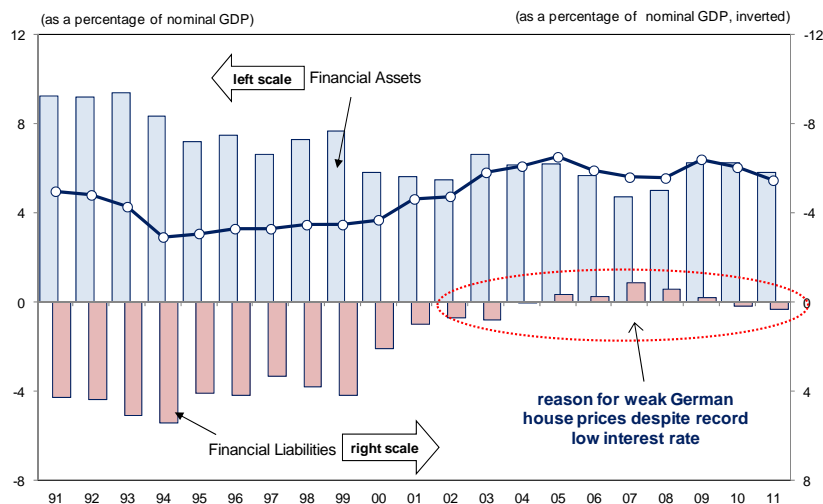
Exhibit 36. German Corporates Are Saving More than Borrowing



Notes: The assumption of Treuhand agency's debt by the Redemption Fund for Inherited Liabilities in 1995 is adjusted. For the latest figures, 4 quarter averages ending with 3Q/11' are used.
Source: Deutsche Bundesbank

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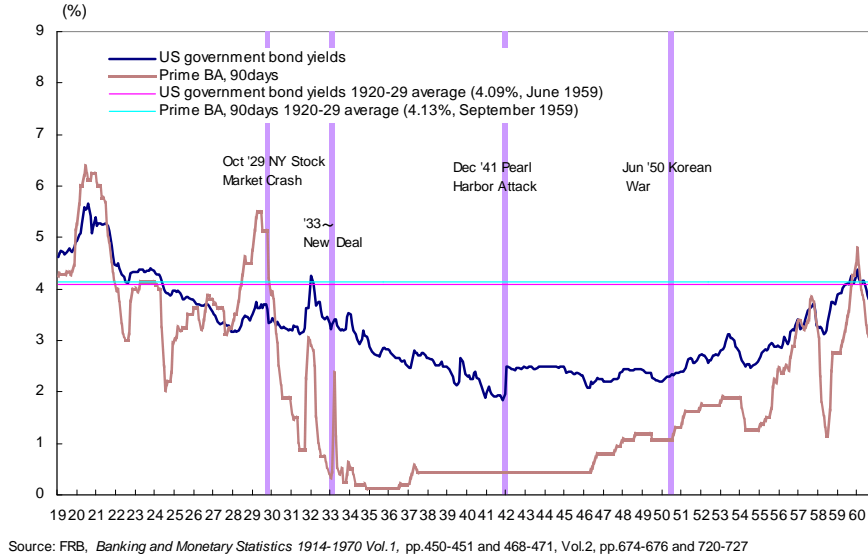
Exhibit 37. German Households Are Refusing to Borrow



Notes: The assumption of Treuhand agency's debt by the Redemption Fund for Inherited Liabilities in 1995 is adjusted. For the latest figures, 4 quarter averages ending with 3Q/11' are used.
Source: Deutsche Bundesbank

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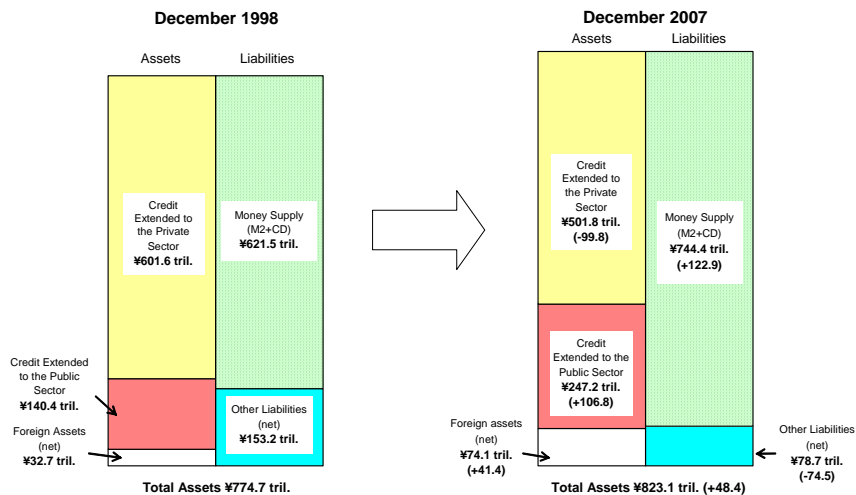
Exhibit 38. Exit Problem (III): U.S. Took 30 Years to Normalize Interest Rate after 1929 Because of Private Sector Aversion to Debt



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Exhibit 39. Japanese Money Supply Kept up by Government Borrowings

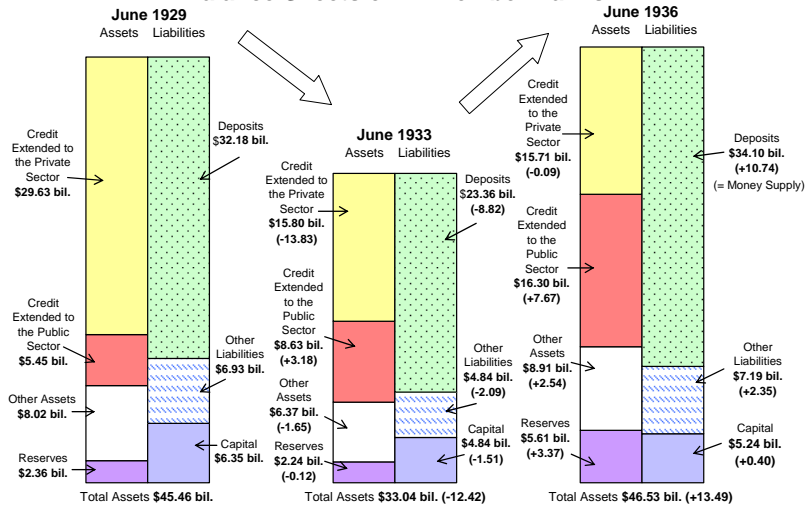
Balance Sheets of Banks in Japan



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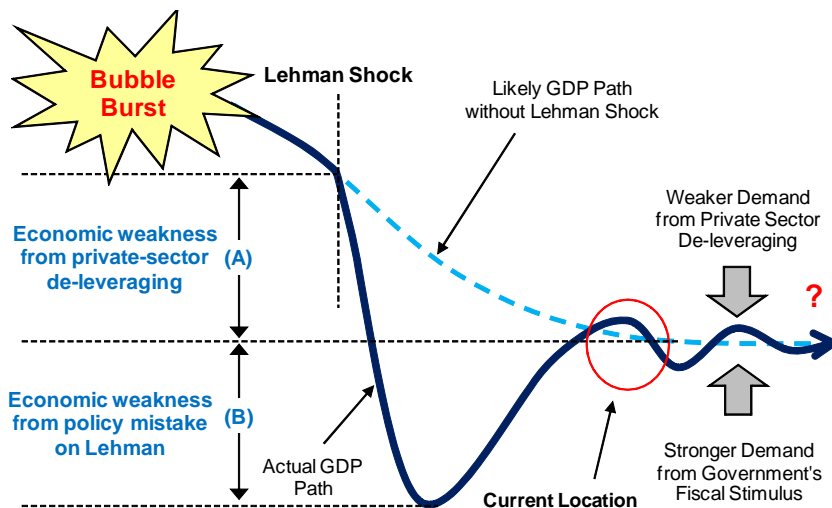
Exhibit 40. US Money Supply Increased after 1933 because of Government Borrowings

Balance Sheets of All Member Banks



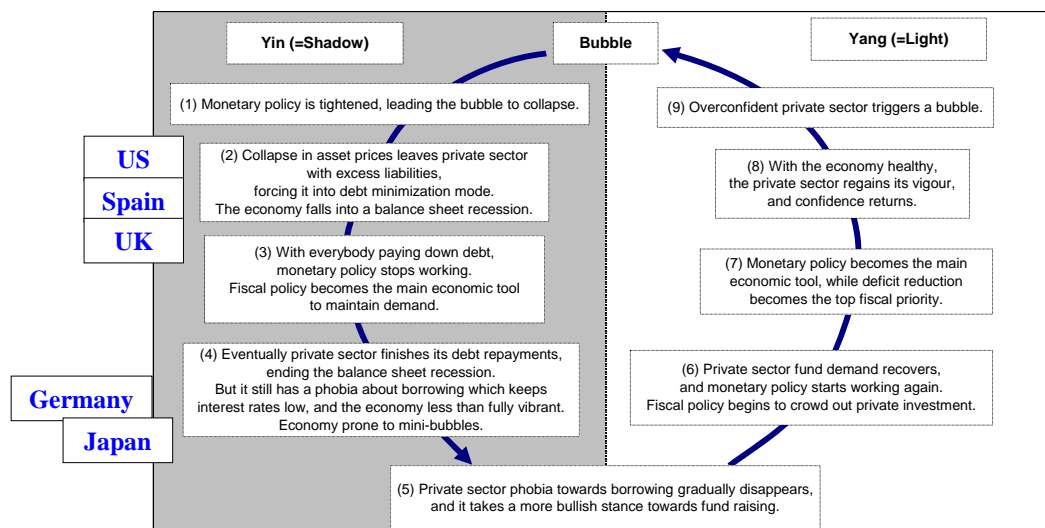
Source: Board of Governors of the Federal Reserve System (1976) *Banking and Monetary Statistics 1914-1941* pp.72-79

Exhibit 41. Recovery from Lehman Shock Is NOT Recovery from Balance Sheet Recession



Source: Nomura Research Institute

Exhibit 42. Yin Yang Cycle of Bubbles and Balance Sheet Recessions



Source: Richard Koo, *The Holy Grail of Macroeconomics: Lessons from Japan's Great Recession*, John Wiley & Sons, Singapore, April 2008 p.160.

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Exhibit 43. Contrast Between Yin and Yang Phases of Cycle

		Yang	Yin
1) Phenomenon		Textbook economy	Balance sheet recession
2) Fundamental driver		Adam Smith's "invisible hand"	Fallacy of composition
3) Corporate financial condition		Assets > Liabilities	Assets < Liabilities
4) Behavioral principle		Profit maximization	Debt minimization
5) Outcome		Greatest good for greatest number	Depression if left unattended
6) Monetary policy		Effective	Ineffective (liquidity trap)
7) Fiscal policy		Counterproductive (crowding-out)	Effective
8) Prices		Inflationary	Deflationary
9) Interest rates		Normal	Very low
10) Savings		Virtue	Vice (paradox of thrift)
11) Remedy for Banking Crisis	a) Localized	Quick NPL disposal Pursue accountability	Normal NPL disposal Pursue accountability
	b) Systemic	Slow NPL disposal Fat spread	Slow NPL disposal Capital injection

Source: Richard Koo, *The Holy Grail of Macroeconomics: Lessons from Japan's Great Recession*, John Wiley & Sons, Singapore, 2008

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