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

(US: Jan. 2000=100, Japan: Dec. 1985=100)

US: 10 Cities Composite Home Price Index

Japan: Tokyo Area Condo Price

Japan: Osaka Area Condo Price

Note: per m², 5-month moving average
Sources: Bloomberg, Real Estate Economic Institute, Japan, S&P, S&P/Case-Shiller® Home Price Indices, as of Oct. 28, 2011
Exhibit 2. Drastic Liquidity Injection Failed to Increase Money Supply (I): US

(Aug. 2008 =100, Seasonally Adjusted)

- **Red Line (Monetary Base)**
- **Blue Line (Money Supply (M2))**
- **Green Line (Loans and Leases in Bank Credit)**

**Consumer Spending Deflator (core)**

- Down 25%

**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 3. Drastic Liquidity Injection Failed to Increase Money Supply (II): EU

(Aug. 2008 =100, Seasonally Adjusted)

- Base Money
- Money Supply (M3)
- Credit to Euro Area Residents

CPI core

Sources: ECB, Eurostat
Note: Base money's figures are seasonally adjusted by Nomura Research Institute.
Exhibit 4. 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 5. 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 6. Japan’s De-leveraging with Zero Interest Rates Lasted for 10 Years

Funds Raised by Non-Financial Corporate Sector

(% Nominal GDP, 4Q Moving Average)

Sources: Bank of Japan, Cabinet Office, Japan
Exhibit 7. Japan’s GDP Grew in spite of Massive Loss of Wealth and Private Sector De-leveraging

Sources: Cabinet Office, Japan Real Estate Institute
Exhibit 8. Japanese Government Borrowed and Spent the Unborrowed Savings of the Private Sector to Sustain GDP

Source: Ministry of Finance, Japan
Note: FY 2011 includes 2nd supplementary budget.
Exhibit 9. Premature Fiscal Reforms in 1997 and 2001 Weakened Economy, Reduced Tax Revenue and *Increased* Deficit

Source: Ministry of Finance, Japan
*: estimated by MOF

unnecessary increase in deficit: ¥103.3 tril.

Balance Sheets of Banks in Japan

December 1998

Assets

- Credit Extended to the Public Sector: ¥140.4 tril.
- Foreign Assets (net): ¥32.7 tril.
- Credit Extended to the Private Sector: ¥601.6 tril.
- Money Supply (M2+CD): ¥621.5 tril.
- Other Liabilities (net): ¥153.2 tril.

Total Assets ¥774.7 tril.

December 2007

Assets

- Credit Extended to the Public Sector: ¥140.4 tril.
- Foreign assets (net): ¥247.2 tril.
- Credit Extended to the Private Sector: ¥501.8 tril. (-99.8)
- Money Supply (M2+CD): ¥744.4 tril. (+122.9)
- Other Liabilities (net): ¥78.7 tril. (-74.5)

Total Assets ¥823.1 tril. (+48.4)

Source: Bank of Japan "Monetary Survey"

Source: Board of Governors of the Federal Reserve System (1976)  *Banking and Monetary Statistics 1914-1941* pp.72-79
Exhibit 12. US in Balance Sheet Recession: US Private Sector Increased Savings Massively after the Bubble

Financial Surplus or Deficit by Sector

(as a ratio to nominal GDP, %, quarterly)

Shift from 4Q 2006 in private sector: 9.30% of GDP
Corporate: 1.40%
Households: 8.22%

Shift from 4Q 2006 in public sector: 5.80% of GDP

Note: For the latest figures, 4 quarter averages ending with 2Q/11’ are used.
Sources: FRB, US Department of Commerce
Exhibit 13. 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 2Q/11’ are used.
Source: Office for National Statistics, UK
Exhibit 14. Global Bond Yields* Nearing Japanese Levels

*Note: Excluding Eurozone. As of Oct. 28, 2011.
Source: Bloomberg
Exhibit 15. Euro-Zone Bond Yields Are Diverging Sharply

Note: As of Oct. 28, 2011.
Source: Bloomberg
Exhibit 16. Euro-zone in Balance Sheet Recession: Euro-zone Private Sector Increased Savings Massively after the Bubble

Financial Surplus or Deficit by Sector

(as a ratio to nominal GDP, %)

Note: For the latest figures, 4 quarter averages ending with 1Q/11’ are used.
Source: ECB
Exhibit 17. Spain in Balance Sheet Recession: Spanish Private Sector Increased Savings Massively after the Bubble

Financial Surplus or Deficit by Sector

Shift from 3Q 2007 in private sector: 17.95% of GDP
Corporate: 12.54%
Households: 5.41%

Shift from 3Q 2007 in public sector: 11.93% of GDP

Note: For the latest figures, 4 quarter averages ending with 2Q/11' are used.
Source: Banco de España
Exhibit 18. Ireland in Balance Sheet Recession: Irish Private Sector Increased Savings Massively after the Bubble

Financial Surplus or Deficit by Sector

(as a ratio to nominal GDP, %)

Corporate Sector
(Non-Financial Sector + Financial Sector)

Rest of the World

General Government

Households

(2002-2009)

Shift from 2006 in private sector: 21.55% of GDP
Corporate: 7.29%
Households: 14.26%

Shift from 2006 in public sector: 16.78% of GDP

Sources: Eurostat, Central Statistics Office, Ireland

Financial Surplus or Deficit by Sector

(As a ratio to nominal GDP, %)

Shift from 2000 to 2005
in private sector: 12.06% of GDP
Corporate: 9.26%
Households: 2.80%

Shift from 2000 to 2005
in public sector: 4.62% of GDP

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 20. Recovery from Lehman Shock Is NOT Recovery from Balance Sheet Recession

- Bubble Burst
- Lehman Shock
- Likely GDP Path without Lehman Shock
- Current Location

Economic weakness from private-sector de-leveraging (A)
Economic weakness from policy mistake on Lehman (B)

Weaker Demand from Private Sector De-leveraging
Stronger Demand from Government's Fiscal Stimulus

Source: Nomura Research Institute
(1) Monetary policy is tightened, leading the bubble to collapse.

(2) Collapse in asset prices leaves private sector with excess liabilities, forcing it into debt minimization mode. The economy falls into a balance sheet recession.

(3) With everybody paying down debt, monetary policy stops working. Fiscal policy becomes the main economic tool to maintain demand.

(4) Eventually private sector finishes its debt repayments, ending the balance sheet recession. But it still has a phobia about borrowing which keeps interest rates low, and the economy less than fully vibrant. Economy prone to mini-bubbles.

(5) Private sector phobia towards borrowing gradually disappears, and it takes a more bullish stance towards fund raising.

(6) Private sector fund demand recovers, and monetary policy starts working again. Fiscal policy begins to crowd out private investment.

(7) Monetary policy becomes the main economic tool, while deficit reduction becomes the top fiscal priority.

(8) With the economy healthy, the private sector regains its vigour, and confidence returns.

(9) Overconfident private sector triggers a bubble.

### Exhibit 22. Euro-Zone Banks Need Low-Cost Unconditional Capital Injection to Avoid Credit Crunch

#### Contrast Between Yin and Yang Phases of Cycle

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<th>Behavioral principle</th>
<th><strong>Yang</strong> = Profit maximization</th>
<th><strong>Yin</strong> = Debt minimization</th>
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<tr>
<td>1) Phenomenon</td>
<td>Textbook economy</td>
<td>Balance sheet recession</td>
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<td>2) Private sector financial condition</td>
<td>Assets &gt; Liabilities</td>
<td>Assets &lt; Liabilities</td>
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<td>3) Outcome</td>
<td>Greatest good for greatest number</td>
<td>Depression if left unattended</td>
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<td>4) Monetary policy</td>
<td>Effective</td>
<td>Ineffective (liquidity trap)</td>
</tr>
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<td>5) Fiscal policy</td>
<td>Counterproductive (crowding-out)</td>
<td>Effective</td>
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<td>6) Prices</td>
<td>Inflationary</td>
<td>Deflationary</td>
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<td>7) Interest rates</td>
<td>Normal</td>
<td>Very low</td>
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<td>8) Savings</td>
<td>Virtue</td>
<td>Vice (paradox of thrift)</td>
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<td>9) Remedy for Banking Crisis</td>
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<tr>
<td>a) Localized</td>
<td>Quick NPL disposal</td>
<td>Normal NPL disposal</td>
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<td>b) Systemic</td>
<td>Slow NPL disposal Fat spread</td>
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