A Japanese Lesson for the Eurozone in Balance Sheet Recession

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See Appendix A-1 for important disclosures and the status of non-US analysts.
Exhibit 1. Drastic Liquidity Injections Resulted in minimal Increases in Money Supply and Credit (I): US

Note: Commercial bank loans and leases, adjustments for discontinuities made by Nomura Research Institute.
Sources: Federal Reserve Board; US Department of Commerce
Exhibit 2. Drastic Liquidity Injections Resulted in minimal Increases in Money Supply and Credit (II): Eurozone

Note: Base money’s figures are seasonally adjusted by Nomura Research Institute.
Sources: European Central Bank; Eurostat
Exhibit 3. Drastic Liquidity Injections Resulted in minimal Increases in Money Supply and Credit (III): UK

(Aug. 2008 =100, seasonally adjusted)

- Reserve Balances + Notes & Coin
- Money Supply (M4)
- Bank Lending (M4)

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

Sources: Bank of England; Office for National Statistics, UK
Exhibit 4. Drastic Liquidity Injections Resulted in minimal Increases in Money Supply and Credit (IV): Japan

Notes:
1. Figures for bank lending are seasonally adjusted by Nomura Research Institute.
2. Excluding the impact of consumption tax.
Source: Bank of Japan
US House Prices Have Been Following the Japanese Experience

Notes: per m², 5-month moving average. As of Nov. 3, 2014.
Sources: Bloomberg; Real Estate Economic Institute, Japan; S&P, S&P/Case-Shiller® Home Price Indices.
Exhibit 6. Europe also Experienced House Price Bubbles, except Germany and Austria

Notes: 1. Ireland’s figures before 2005 are existing house prices only.
2. Greece’s figures are flats’ prices in Athens and Thessaloniki.
Sources: Nomura Research Institute, calculated from Bank for International Settlements data.
Exhibit 7. Japan’s Corporate De-leveraging with Zero Interest Rates Lasted for over 10 Years

Funds Raised by Non-Financial Corporate Sector

(% Nominal GDP, 4Q Moving Average)

- Borrowings from Financial Institutions (left scale)
- Funds raised in Securities Markets (left scale)
- CD 3M rate (right scale)

Sources: Bank of Japan; Cabinet Office, Japan
Exhibit 8. Japan’s GDP Grew despite major Loss of Wealth and Private Sector De-leveraging

Sources: Cabinet Office, Japan; Japan Real Estate Institute
Exhibit 9. Japan’s Challenge: Get Businesses to Borrow Money

Financial Surplus or Deficit by Sector

(As a ratio to nominal GDP, %)

- Financial Surplus
- Financial Deficit

- Households
- Rest of the World
- Corporate Sector (Non-Financial Sector + Financial Sector)
- General Government

Note: All entries are four-quarter moving averages. For the latest figures, four-quarter averages ending in 2014 Q2 are used.

Sources: Bank of Japan, Flow of Funds Accounts, and Government of Japan, Cabinet Office, National Accounts
Exhibit 10. US in Balance Sheet Recession: US Private Sector Saved on Average 5% of GDP since 2008 Q4

Financial Surplus or Deficit by Sector

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

- Household
- Rest of the World
- Corporate Sector (Non-Financial Sector + Financial Sector)
- General Government

2014 Q2 Private Sector Savings: 3.42% of GDP

Note: All entries are four-quarter moving averages. For the latest figures, four-quarter averages ending in 2014 Q2 are used.

Sources: FRB, US Department of Commerce
Exhibit 11. Europe in Balance Sheet Recession, but Maastricht Treaty cannot Handle Private Sector Savings far more than 3% of GDP

Notes: 1. Private Sector = Household Sector + Non-Financial Corporate Sector + Financial Sector
2. All entries are four-quarter moving averages. For the latest figures, four-quarter averages ending in 2014 1Q (only Spain and Portugal, 2014 2Q) are used. Budget deficits in Euro area in 2013 are from Oct. 21, 2014 release by Eurostat.
Sources: Bank of Greece, Banco de España, National Statistics Institute, Spain, The Central Bank of Ireland, Central Statistics Office Ireland, Banco de Portugal, Banca d'Italia and Italian National Institute of Statistics
Exhibit 12. Peripheral Eurozone Bond Yields Jumped because of De-stabilizing Capital Flows

Note: As of Nov. 3, 2014.
Source: Bloomberg

Eurozone crisis
Exhibit 13. The Collapse of Neuer Markt in 2001 Pushed German Economy into Balance Sheet Recession

Source: Bloomberg As of Oct. 31, 2014
Exhibit 14. German Private Sector Refused to Borrow Money after the Dotcom Bubble

Financial Surplus or Deficit by Sector
(as a ratio to nominal GDP, %, seasonally adjusted)

Households
Dotcom Bubble
German Private Sector Savings 13.4% of GDP
General Government
Corporate Sector (Non-Financial Sector + Financial Sector)
Balance Sheet Recession
Rest of the World

Notes: The assumption of Treuhand agency’s debt by the Redemption Fund for Inherited Liabilities in 1995 is adjusted.
All entries are four-quarter moving averages. For the latest figures, four-quarter averages ending in 2014 Q1 are used.
Source: Nomura Research Institute, based on the data of Bundesbank and Eurostat
Exhibit 15. German Households Stopped Borrowing altogether after the Dotcom bubble

Note: Seasonal adjustments by Nomura Research Institute. Latest figures are for 2014 Q1.
Sources: Nomura Research Institute, based on flow of funds data from Bundesbank and Eurostat
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Notes: Seasonal adjustments by Nomura Research Institute. Latest figures are for 2014 Q2.
Sources: Nomura Research Institute, based on flow of funds data from Banco de España and National Statistics Institute, Spain.
Exhibit 17. Irish Households Increased Borrowings after the Dotcom Bubble: Now They Are Deleveraging

Notes: Seasonal adjustments by Nomura Research Institute. Latest figures are for 2014 Q1. Source: Nomura Research Institute, based on flow of funds data from Central Bank of Ireland and Central Statistics Office, Ireland
Exhibit 18. German-Eurozone (ex. Germany) Competitiveness Gap Has Macro (50.2%) and Micro (49.8%) Factors

Hypothetical Eurozone ULC (ex. Germany) if its M3 growth was the same as in Germany*

German ULC

Eurozone M3 (ex. Germany)

Eurozone ULC (ex. Germany)

Hypothetical Eurozone ULC (ex. Germany)

Note: * Parameters obtained from the regression result on Eurozone ULC (ex. Germany) on Eurozone M3 (ex. Germany), \( \log(\text{Eurozone ULC (ex.Germany)}) = 3.155506 + \log(\text{Eurozone M3 (ex.Germany)}) \times 0.318227 \), applied to German M3 data indexed to 1Q 2000 = 100.

Sources: Nomura Research Institute, based on ECB, Eurostat and Deutsche Bundesbank data
Exhibit 19. Germany Recovered from Post-Dotcom Balance Sheet Recession by Exporting to other Eurozone Countries

German Balance of Trade

Driven by Eurozone housing bubble
Driven by weaker Euro

Source: Deutsche Bundesbank
Two Structural Deficiencies of the Eurozone

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
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<td>(1) Maastricht Treaty restricted fiscal stimulus needed to fight</td>
<td>(2) Procyclical and destabilizing capital flows between gov. bond markets</td>
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<td>balance sheet recessions</td>
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<td>Countries suffering from balance sheet recessions fall into</td>
<td>Excessively low gov. bond yields during bubbles</td>
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<td>deflationary spirals, while excessive easings by the ECB create</td>
<td>Excessively high gov. bond yields during balance sheet recessions</td>
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<td>bubbles elsewhere</td>
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<tr>
<td>Allow countries in balance sheet recessions to implement</td>
<td>Introduce different risk weights for holdings of domestic vs foreign</td>
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<td>sufficient fiscal stimulus with blessings from the Troika</td>
<td>gov. bonds to keep domestic savings at home</td>
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Exhibit 20. Two Modifications to Euro Requiring No German Money Are Sufficient to Resurrect Eurozone Economies
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<td>Adam Smith's &quot;invisible hand&quot;</td>
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<td>2</td>
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<td>3</td>
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<td>Prices</td>
<td>Inflationary</td>
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<td>Interest rates</td>
<td>Normal</td>
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<td>9</td>
<td>Savings</td>
<td>Virtue</td>
</tr>
</tbody>
</table>
| 10 | 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  
Gov. capital injection |

11) Maastricht 3% gov. deficit rule: Stability and growth enhancing  
Instability and depression inducing

Appendix A-1

Any Authors named on this report are Research Analysts unless otherwise indicated

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