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# WHAT THE EURO CRISIS MEANS FOR TAXPAYERS AND THE U.S. ECONOMY, PART 1

## DECEMBER 15, 2011

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United States House Committee on Oversight and Government Reform
Subcommittee on TARP, Financial Services and Bailouts of Public and Private Programs

Chairman McHenry, Ranking Member Quigely and Members of the Subcommittee, thank you for inviting me to testify today. My name is Anthony B. Sanders. I am the Distinguished Professor of Finance at George Mason University and senior scholar at the Mercatus Center. I was previously Director of asset-backed and mortgage-backed securities research at Deutsche Bank and the co-author of “Securitization” (along with Andrew Davidson) as well as many economic and finance publications.

## THE EURO CRISIS

The Eurozone is teetering on collapse and it has been decades in the making. The cause of their problems is 1) excessive government spending leading to 2) excessive government debt coupled with 3) slow GDP growth.

The core European countries (Germany, France, Italy, Spain, Netherlands, Belgium, Austria, Greece and Portugal) are expected to have real GDP growth of 1.3% for 2012 and unemployment in 2012 of 9.9% (see Figures 1 and 2). The IMF also produced a longer-term Real GDP forecast. I have outlined the core (France, Germany, Italy and Spain) and they are all projected to have Real GDP growth in 2016 of less than 2% (actually, France is forecast to barely break 2%). At the same time, the European core countries have excessively high Government Debt to GDP ratios (see Figure 3) with Greece at 145% and Italy at 118.4% Government Debt-to-GDP. The other Eurozone nations have Government Debt-to-GDP ratios in excess of 80%.

If we look at Household and Financial Debt in addition to Government Debt, the UK’s Debt to GDP ratio exceeds 900%. Japan is over 600% and Europe is almost 500% Debt to GDP. The U.S. is over 300%. In summary, Euro, Japan and the U.S. are drowning in debt. And a recent article from economists at the ECB that finds:

“…we analyse a wide set of 108 countries composed of both developed and emerging and developing countries, using a long time span running from 1970-2008, and employing different proxies for government size… Our results show a significant negative effect of the size of government on growth. …Interestingly, government consumption is consistently detrimental to output growth irrespective of the country sample considered (OECD, emerging and developing countries).”

The European Union will unify, break up or downsize. But regardless of what option they choose, they still have too much spending and debt relative to the ability to pay for it: GDP growth. But additional debt is not the answer. It is the problem.

The obvious solution is austerity (reduction in government spending). But making loans to the European Central Bank or individual countries doesn't solve the underlying structural problems; it only makes the Debt to GDP problem even worse. It is simply a short-term solution and actually encourages the Eurozone to delay making the hard decisions.

## THE FED'S PREDICIMENT

If Germany/France is successful in creating a fiscally integrated Eurozone, there will likely be less of a rush to purchase US Treasuries (leading Treasury rates to rise). Given that The Fed is already the largest purchaser of U.S. Treasuries, this could be a problem (see Figure 5). China is flat on Treasury purchases, but the UK and Japan continue to increase their purchases of Treasuries (see Figure 6). But the UK and Japan are not enough to pick up the slack from China's flat-lined Treasury purchases.

But what if the Germany/France plan fails? There will likely be a rush to US Treasuries (driving down our yields). The Fed will be watching that possible outcome very closely.

The Fed has been active in the Eurozone bailout starting in 2007 with its Discount Window operations (see Figure 7) that peaked in 2008.[1] The largest Eurozone borrower from The Fed was the failed Belgian bank Dexia. While most of the discount window loans have been repaid, we are still in the dark on the guarantees.

Recently, the ECB drew $552 million from The Fed's Dollar Swap Line in the last week of November. These are seven-day dollar swaps at an interest rate of 1.08%.[2] The central bank also borrowed the same amount in an eight-day swap arrangement in the prior week. It begs the question "How long will The Fed keep their swap line open?" While we cannot see the swap line in real time, the evidence indicates that the basis swap approach has a very short half-life (see Figure 8). The one year basis swap shows the same temporary impact (see Figure 9).

A recent disagreement about the size of The Fed's intervention (discount window and guarantees) was in the media between The Fed and Bloomberg Markets Magazine.[3] The Bloomberg article said the Fed had committed $7.77 trillion as of March 2009 to rescuing the financial system when all guarantees and lending limits were added up. The Fed disagreed and stated that on any given day, Fed credit from its emergency liquidity programs was never more than about $1.5 trillion. Whether we are looking at "any given day" or the cumulative impact, these are very large numbers indicating that The Fed is attempting a bailout of the Eurozone.

And yesterday, Fed Chair Bernanke announced that The Fed stands ready to provide further easing based on Eurozone risk.[4] Since The Fed can't really push down rates much further, The Fed must be contemplating expanding The Fed's balance sheet to provide additional liquidity and marginally lowering interest rates. Retirees and people living on fixed incomes will be further harmed by The Fed's reaction to the Eurocrisis.

On a related issue, The Fed and Treasury should save their bailout tools for the U.S. The GDP boost from additional Federal borrowing is almost zero (see Figure 10). The M1 Money multiplier continues to fall (see Figure 11). When we plot these Federal government intervention measures together (see Figure 10), it shows that intervention has lost effectiveness.

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[1] http://www.bloomberg.com/news/2011-04-01/foreign-banks-tapped-fed-s-lifeline-most-as-bernanke-kept-borrowers-secret.html

[2] http://online.wsj.com/article/BT-CO-20111201-714662.html

[3] http://www.reuters.com/article/2011/12/07/us-usa-fed-lending-idUSTRE7B51W420111207

[4] http://www.bloomberg.com/news/2011-12-14/bernanke-signals-risks-from-europe-crisis-keep-fed-ready-for-more-easing.html

On The Fed side, it is clear that guarantees to the Eurozone could be problematic to U.S. taxpayers. And the swaps with Europe could be costly as well. But since there is little transparency on The Fed's discount window and guarantees, it is difficult to measure taxpayer risk exposure.

## THE IMF

In addition to Fed operations, the International Monetary Fund (IMF) of which the U.S. is the largest stakeholder is also active in the Eurozone bailout. The U.S. has a line of credit approved for an IMF crisis fund in the amount of $100 billion. Given the structural fiscal problems of the Eurozone, there is little likelihood that the Eurozone won't continue to have problems since there is a lack of will to cut government spending and entitlements. So I would expect that the $100 billion LOC to be used and not paid back.

## SUMMARY

The Eurozone's structural problems cannot be solved by low interest loans and guarantees from The Fed and the IMF. In fact, engaging in a bailout of the Eurozone could jeopardize U.S. taxpayers.

The best way to protect U.S. taxpayers is to increase transparency at The Fed, take back the $100 billion line of credit at the IMF and undertake spending cuts ourselves in order to reduce our deficit and massive debt loan.

## APPENDIX: FIGURES

Figure 1.

Shaded cells indicate IMF staff estimates

| Country | Subject Descriptor | Units | Scale | Country/Series-specific Notes | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Austria | Gross domestic product, constant prices | Percent change | | | -3.888 | 2.128 | 3.282 | 1.640 | 2.037 | 2.040 | 1.899 | 1.779 |
| Belgium | Gross domestic product, constant prices | Percent change | | | -2.653 | 2.106 | 2.420 | 1.544 | 1.739 | 1.783 | 1.845 | 1.833 |
| Cyprus | Gross domestic product, constant prices | Percent change | | | -1.662 | 1.041 | -0.037 | 1.000 | 2.036 | 2.760 | 2.701 | 2.699 |
| Estonia | Gross domestic product, constant prices | Percent change | | | -13.899 | 3.105 | 6.549 | 4.005 | 4.156 | 3.728 | 3.782 | 3.804 |
| Finland | Gross domestic product, constant prices | Percent change | | | -8.227 | 3.644 | 3.459 | 2.245 | 2.056 | 2.007 | 2.014 | 1.976 |
| France | Gross domestic product, constant prices | Percent change | | | -2.632 | 1.384 | 1.652 | 1.399 | 1.867 | 2.099 | 2.062 | 2.081 |
| Germany | Gross domestic product, constant prices | Percent change | | | -5.078 | 3.562 | 2.725 | 1.273 | 1.502 | 1.499 | 1.295 | 1.293 |
| Greece | Gross domestic product, constant prices | Percent change | | | -2.339 | -4.354 | -5.000 | -2.000 | 1.500 | 2.300 | 3.000 | 3.296 |
| Ireland | Gross domestic product, constant prices | Percent change | | | -6.995 | -0.430 | 0.363 | 1.484 | 2.181 | 2.845 | 3.302 | 3.311 |
| Italy | Gross domestic product, constant prices | Percent change | | | -5.217 | 1.296 | 0.639 | 0.323 | 0.540 | 0.800 | 1.140 | 1.240 |
| Luxembourg | Gross domestic product, constant prices | Percent change | | | -3.639 | 3.516 | 3.575 | 2.741 | 2.676 | 2.931 | 2.902 | 3.118 |
| Malta | Gross domestic product, constant prices | Percent change | | | -3.299 | 3.149 | 2.450 | 2.199 | 2.170 | 2.327 | 2.306 | 2.349 |
| Netherlands | Gross domestic product, constant prices | Percent change | | | -3.529 | 1.634 | 1.630 | 1.345 | 1.528 | 1.648 | 1.806 | 1.828 |
| Portugal | Gross domestic product, constant prices | Percent change | | | -2.507 | 1.331 | -2.159 | -1.844 | 1.190 | 2.453 | 2.220 | 2.000 |
| Slovak Republic | Gross domestic product, constant prices | Percent change | | | -4.782 | 4.021 | 3.250 | 3.300 | 4.303 | 4.240 | 4.240 | 4.240 |
| Slovenia | Gross domestic product, constant prices | Percent change | | | -8.077 | 1.209 | 1.900 | 2.000 | 2.393 | 2.307 | 2.200 | 2.005 |
| Spain | Gross domestic product, constant prices | Percent change | | | -3.722 | -0.147 | 0.775 | 1.123 | 1.769 | 1.863 | 1.945 | 1.845 |

Figure 2.

**Table 2.2. Selected European Economies: Real GDP, Consumer Prices, Current Account Balance, and Unemployment**

*(Annual percent change unless noted otherwise)*

| | Real GDP | | | Consumer Prices[1] | | | Current Account Balance[2] | | | Unemployment[3] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Projections | | | Projections | | | Projections | | | Projections | |
| | 2010 | 2011 | 2012 | 2010 | 2011 | 2012 | 2010 | 2011 | 2012 | 2010 | 2011 | 2012 |
| **Europe** | **2.2** | **2.0** | **1.5** | **2.4** | **3.1** | **2.1** | **0.3** | **0.1** | **0.4** | . . . | . . . | . . . |
| **Advanced Europe** | **1.8** | **1.6** | **1.3** | **1.9** | **2.8** | **1.7** | **0.8** | **0.8** | **1.0** | **9.4** | **9.2** | **9.1** |
| Euro Area[4,5] | 1.8 | 1.6 | 1.1 | 1.6 | 2.5 | 1.5 | –0.4 | 0.1 | 0.4 | 10.1 | 9.9 | 9.9 |
| Germany | 3.6 | 2.7 | 1.3 | 1.2 | 2.2 | 1.3 | 5.7 | 5.0 | 4.9 | 7.1 | 6.0 | 6.2 |
| France | 1.4 | 1.7 | 1.4 | 1.7 | 2.1 | 1.4 | –1.7 | –2.7 | –2.5 | 9.8 | 9.5 | 9.2 |
| Italy | 1.3 | 0.6 | 0.3 | 1.6 | 2.6 | 1.6 | –3.3 | –3.5 | –3.0 | 8.4 | 8.2 | 8.5 |
| Spain | –0.1 | 0.8 | 1.1 | 2.0 | 2.9 | 1.5 | –4.6 | –3.8 | –3.1 | 20.1 | 20.7 | 19.7 |
| Netherlands | 1.6 | 1.6 | 1.3 | 0.9 | 2.5 | 2.0 | 7.1 | 7.5 | 7.7 | 4.5 | 4.2 | 4.2 |
| Belgium | 2.1 | 2.4 | 1.5 | 2.3 | 3.2 | 2.0 | 1.0 | 0.6 | 0.9 | 8.4 | 7.9 | 8.1 |
| Austria | 2.1 | 3.3 | 1.6 | 1.7 | 3.2 | 2.2 | 2.7 | 2.8 | 2.7 | 4.4 | 4.1 | 4.1 |
| Greece | –4.4 | –5.0 | –2.0 | 4.7 | 2.9 | 1.0 | –10.5 | –8.4 | –6.7 | 12.5 | 16.5 | 18.5 |
| Portugal | 1.3 | –2.2 | –1.8 | 1.4 | 3.4 | 2.1 | –9.9 | –8.6 | –6.4 | 12.0 | 12.2 | 13.4 |
| Finland | 3.6 | 3.5 | 2.2 | 1.7 | 3.1 | 2.0 | 3.1 | 2.5 | 2.5 | 8.4 | 7.8 | 7.6 |
| Ireland | –0.4 | 0.4 | 1.5 | –1.6 | 1.1 | 0.6 | 0.5 | 1.8 | 1.9 | 13.6 | 14.3 | 13.9 |
| Slovak Republic | 4.0 | 3.3 | 3.3 | 0.7 | 3.6 | 1.8 | –3.5 | –1.3 | –1.1 | 14.4 | 13.4 | 12.3 |
| Slovenia | 1.2 | 1.9 | 2.0 | 1.8 | 1.8 | 2.1 | –0.8 | –1.7 | –2.1 | 7.3 | 8.2 | 8.0 |
| Luxembourg | 3.5 | 3.6 | 2.7 | 2.3 | 3.6 | 1.4 | 7.8 | 9.8 | 10.3 | 6.2 | 5.8 | 6.0 |
| Estonia | 3.1 | 6.5 | 4.0 | 2.9 | 5.1 | 3.5 | 3.6 | 2.4 | 2.3 | 16.9 | 13.5 | 11.5 |
| Cyprus | 1.0 | 0.0 | 1.0 | 2.6 | 4.0 | 2.4 | –7.7 | –7.2 | –7.6 | 6.4 | 7.4 | 7.2 |
| Malta | 3.1 | 2.4 | 2.2 | 2.0 | 2.6 | 2.3 | –4.8 | –3.8 | –4.8 | 6.9 | 6.3 | 6.2 |
| United Kingdom[5] | 1.4 | 1.1 | 1.6 | 3.3 | 4.5 | 2.4 | –3.2 | –2.7 | –2.3 | 7.9 | 7.8 | 7.8 |
| Sweden | 5.7 | 4.4 | 3.8 | 1.9 | 3.0 | 2.5 | 6.3 | 5.8 | 5.3 | 8.4 | 7.4 | 6.6 |
| Switzerland | 2.7 | 2.1 | 1.4 | 0.7 | 0.7 | 0.9 | 15.8 | 12.5 | 10.9 | 3.6 | 3.4 | 3.4 |
| Czech Republic | 2.3 | 2.0 | 1.8 | 1.5 | 1.8 | 2.0 | –3.7 | –3.3 | –3.4 | 7.3 | 6.7 | 6.6 |
| Norway | 0.3 | 1.7 | 2.5 | 2.4 | 1.7 | 2.2 | 12.4 | 14.0 | 12.8 | 3.6 | 3.6 | 3.5 |
| Denmark | 1.7 | 1.5 | 1.5 | 2.3 | 3.2 | 2.4 | 5.1 | 6.4 | 6.4 | 4.2 | 4.5 | 4.4 |
| Iceland | –3.5 | 2.5 | 2.5 | 5.4 | 4.2 | 4.5 | –10.2 | 1.9 | 3.2 | 8.1 | 7.1 | 6.0 |
| **Emerging Europe[6]** | **4.5** | **4.3** | **2.7** | **5.3** | **5.2** | **4.5** | **–4.6** | **–6.2** | **–5.4** | . . . | . . . | . . . |
| Turkey | 8.9 | 6.6 | 2.2 | 8.6 | 6.0 | 6.9 | –6.6 | –10.3 | –7.4 | 11.9 | 10.5 | 10.7 |
| Poland | 3.8 | 3.8 | 3.0 | 2.6 | 4.0 | 2.8 | –4.5 | –4.8 | –5.1 | 9.6 | 9.4 | 9.2 |
| Romania | –1.3 | 1.5 | 3.5 | 6.1 | 6.4 | 4.3 | –4.3 | –4.5 | –4.6 | 7.6 | 5.0 | 4.8 |
| Hungary | 1.2 | 1.8 | 1.7 | 4.9 | 3.7 | 3.0 | 2.1 | 2.0 | 1.5 | 11.2 | 11.3 | 11.0 |
| Bulgaria | 0.2 | 2.5 | 3.0 | 3.0 | 3.8 | 2.9 | –1.0 | 1.6 | 0.6 | 10.3 | 10.2 | 9.5 |
| Serbia | 1.0 | 2.0 | 3.0 | 6.2 | 11.3 | 4.3 | –7.2 | –7.7 | –8.9 | 19.6 | 20.5 | 20.6 |
| Croatia | –1.2 | 0.8 | 1.8 | 1.0 | 3.2 | 2.4 | –1.1 | –1.8 | –2.7 | 12.2 | 12.7 | 12.2 |
| Lithuania | 1.3 | 6.0 | 3.4 | 1.2 | 4.2 | 2.6 | 1.8 | –1.9 | –2.7 | 17.8 | 15.5 | 14.0 |
| Latvia | –0.3 | 4.0 | 3.0 | –1.2 | 4.2 | 2.3 | 3.6 | 1.0 | –0.5 | 19.0 | 16.1 | 14.5 |

Figure 3. European Debt to GDP

Hit # <GO> to select an index or <TAB> to change date.

**EU Govt Debt as % of GDP** Page 1/2

| Source Copyright European Communities 1995-2010 | | Current Value | Current Date | Previous Value | Previous 12/31/09 Date | Pct Chng |
|---|---|---|---|---|---|---|
| 1) Debt as % of GDP Belgium | EUDB60BE | 96.20 | 12/10 | 95.90 | 12/09 | .31 |
| 2) Debt as % of GDP Germany | EUDB60DE | 83.20 | 12/10 | 74.40 | 12/09 | 11.83 |
| 3) Debt as % of GDP Spain | EUDB60ES | 61.00 | 12/10 | 53.80 | 12/09 | 13.38 |
| 4) Debt as % of GDP France | EUDB60FR | 82.30 | 12/10 | 79.00 | 12/09 | 4.18 |
| 5) Debt as % of GDP Ireland | EUDB60IE | 92.50 | 12/10 | 65.20 | 12/09 | 41.87 |
| 6) Debt as % of GDP Italy | EUDB60IT | 118.40 | 12/10 | 115.50 | 12/09 | 2.51 |
| 7) Debt as % of GDP Luxembourg | EUDB60LU | 19.10 | 12/10 | 14.80 | 12/09 | 29.05 |
| 8) Debt as % of GDP Netherland | EUDB60NL | 62.90 | 12/10 | 60.80 | 12/09 | 3.45 |
| 9) Debt as % of GDP Austria | EUDB60AT | 71.80 | 12/10 | 69.50 | 12/09 | 3.31 |
| 10) Debt as % of GDP Portugal | EUDB60PT | 93.30 | 12/10 | 83.00 | 12/09 | 12.41 |
| 11) Debt as % of GDP Finland | EUDB60FI | 48.30 | 12/10 | 43.30 | 12/09 | 11.55 |
| 12) Debt as % of GDP Eurozone | EUDBEURO | 85.30 | 12/10 | 79.80 | 12/09 | 6.89 |
| 13) Debt as % of GDP Greece | EUDB60GR | 144.90 | 12/10 | 129.30 | 12/09 | 12.06 |
| 14) Debt as % of GDP EU 15 | EUDB6015 | 60.40 | 12/07 | 62.80 | 12/06 | -3.82 |
| 15) Debt as % of GDP Denmark | EUDB60DK | 43.70 | 12/10 | 41.80 | 12/09 | 4.55 |
| 16) Debt as % of GDP Sweden | EUDB60SE | 39.70 | 12/10 | 42.70 | 12/09 | -7.03 |
| 17) Debt as % of GDP UK | EUDB60UK | 79.90 | 12/10 | 69.60 | 12/09 | 14.80 |
| 18) Debt as % of GDP Slovakia | EUDBSK | 41.00 | 12/10 | 35.50 | 12/09 | 15.49 |
| 19) Debt as % of GDP Slovenia | EUDBSI | 38.80 | 12/10 | 35.30 | 12/09 | 9.92 |
| 20) Debt as % of GDP Poland | EUDBPL | 54.90 | 12/10 | 50.90 | 12/09 | 7.86 |



Figure 4. Global Debt as Percentage of GDP

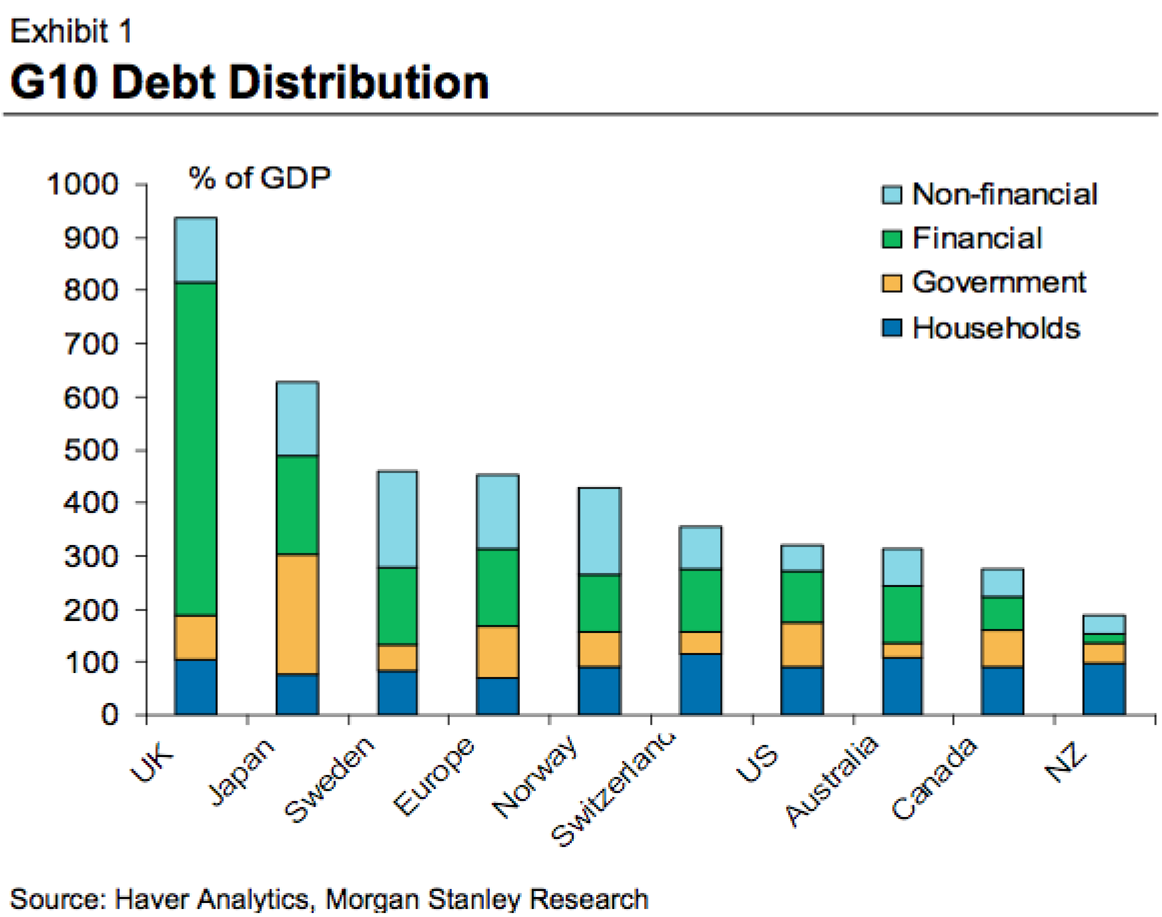


Figure 5. The Fed's Balance Sheet

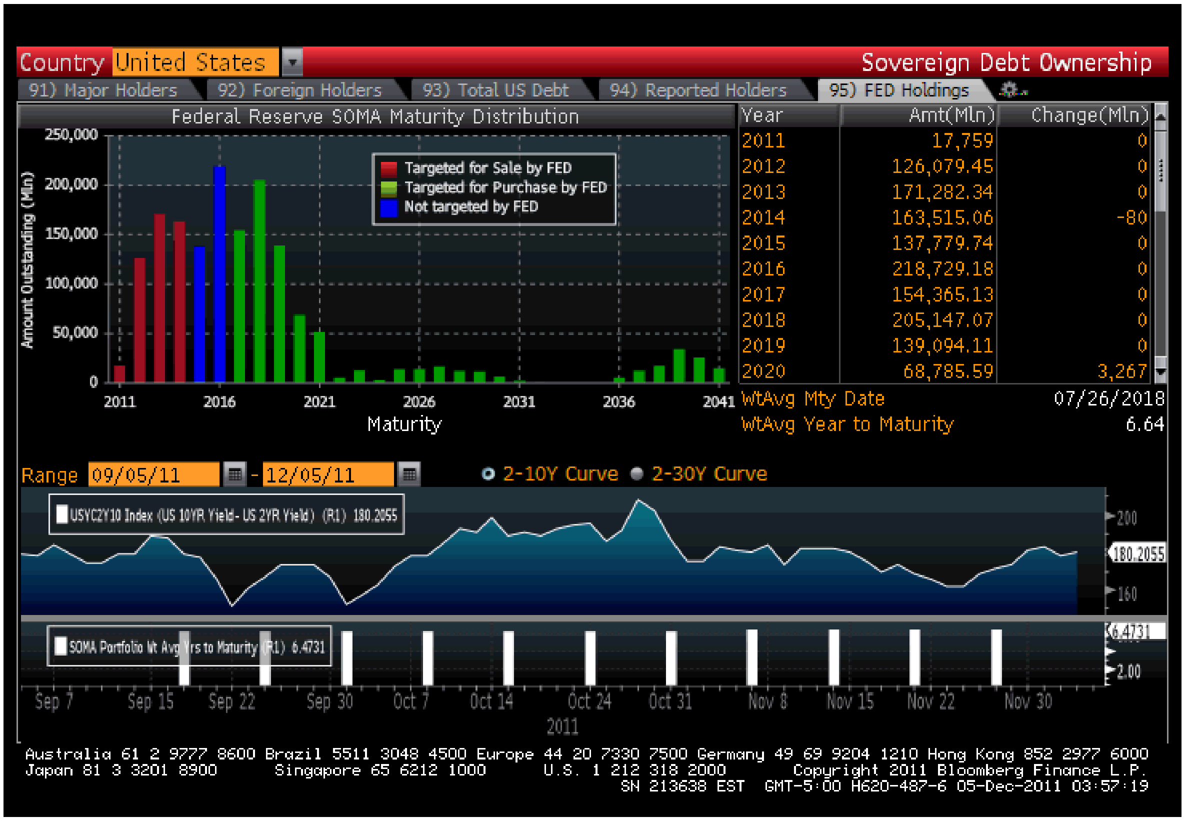



Figure 6. Who Owns Our Treasury Debt?

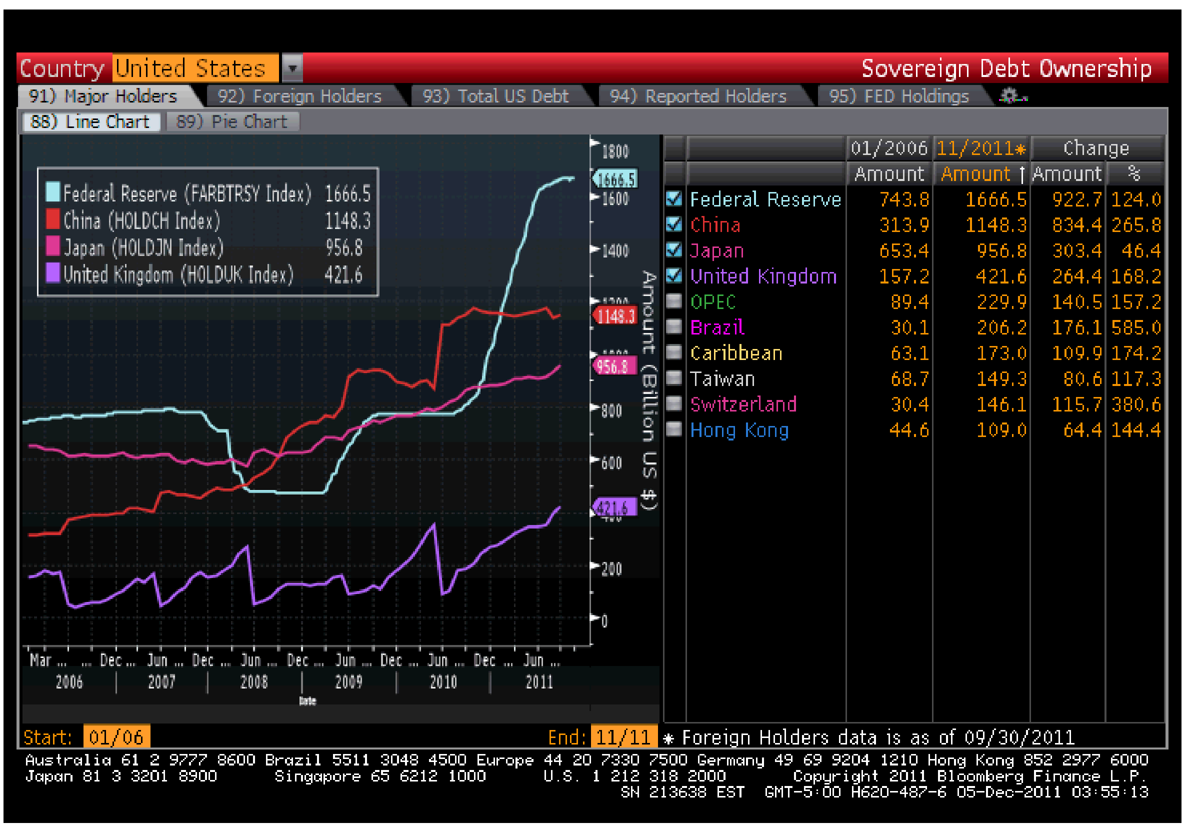


Figure 7. The Fed's Discount Window Operations

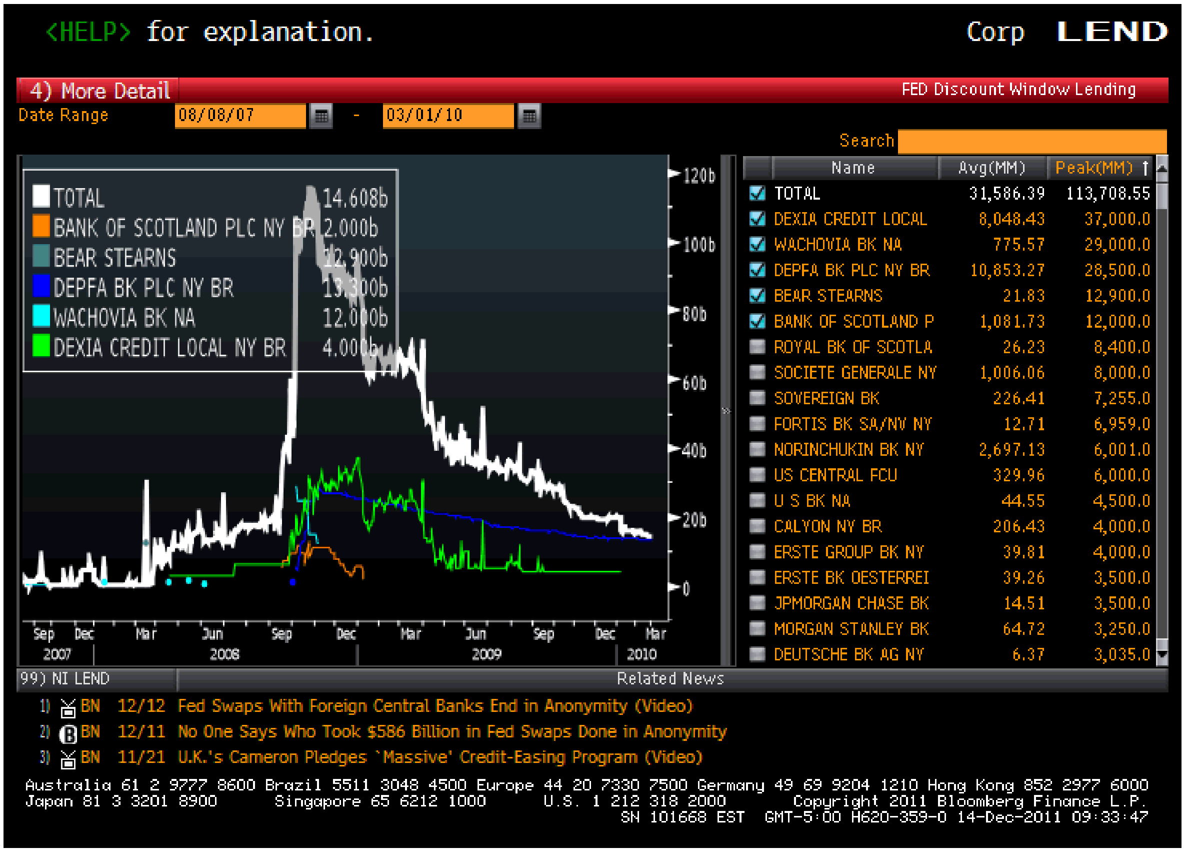



Figure 8. 3 Month Basis Swap Dropping Back to November 30 Levels

Figure 9. One year Basis Swaps


Figure 10. Marginal Impact of Additional Federal Debt on Real GDP

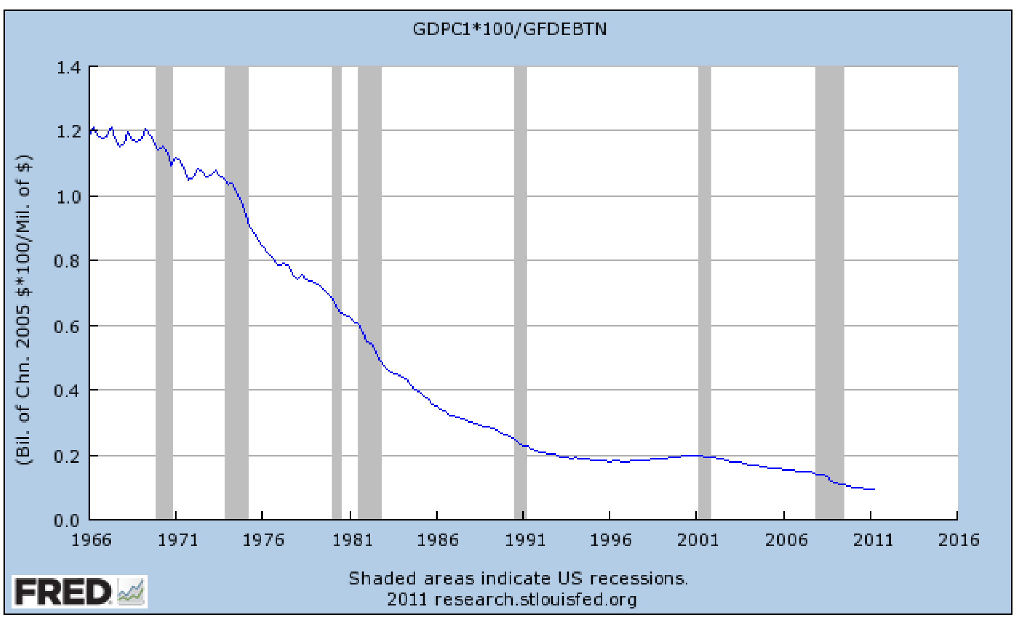


Figure 11 APPENDIX: FIGURES

Figure 1.

Shaded cells indicate IMF staff estimates

| Country | Subject Descriptor | Units | Scale | Country/Series-specific Notes | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Austria | Gross domestic product, constant prices | Percent change | | | -3.888 | 2.128 | 3.282 | 1.640 | 2.037 | 2.040 | 1.899 | 1.779 |
| Belgium | Gross domestic product, constant prices | Percent change | | | -2.653 | 2.106 | 2.420 | 1.544 | 1.739 | 1.783 | 1.845 | 1.833 |
| Cyprus | Gross domestic product, constant prices | Percent change | | | -1.662 | 1.041 | -0.037 | 1.000 | 2.036 | 2.760 | 2.701 | 2.699 |
| Estonia | Gross domestic product, constant prices | Percent change | | | -13.899 | 3.105 | 6.549 | 4.005 | 4.156 | 3.728 | 3.782 | 3.804 |
| Finland | Gross domestic product, constant prices | Percent change | | | -8.227 | 3.644 | 3.459 | 2.245 | 2.056 | 2.007 | 2.014 | 1.976 |
| France | Gross domestic product, constant prices | Percent change | | | -2.632 | 1.384 | 1.652 | 1.399 | 1.867 | 2.099 | 2.062 | 2.081 |
| Germany | Gross domestic product, constant prices | Percent change | | | -5.078 | 3.562 | 2.725 | 1.273 | 1.502 | 1.499 | 1.295 | 1.293 |
| Greece | Gross domestic product, constant prices | Percent change | | | -2.339 | -4.354 | -5.000 | -2.000 | 1.500 | 2.300 | 3.000 | 3.296 |
| Ireland | Gross domestic product, constant prices | Percent change | | | -6.995 | -0.430 | 0.363 | 1.484 | 2.181 | 2.845 | 3.302 | 3.311 |
| Italy | Gross domestic product, constant prices | Percent change | | | -5.217 | 1.296 | 0.639 | 0.323 | 0.540 | 0.800 | 1.140 | 1.240 |
| Luxembourg | Gross domestic product, constant prices | Percent change | | | -3.639 | 3.516 | 3.575 | 2.741 | 2.676 | 2.931 | 2.902 | 3.118 |
| Malta | Gross domestic product, constant prices | Percent change | | | -3.299 | 3.149 | 2.450 | 2.199 | 2.170 | 2.327 | 2.306 | 2.349 |
| Netherlands | Gross domestic product, constant prices | Percent change | | | -3.529 | 1.634 | 1.630 | 1.345 | 1.528 | 1.648 | 1.806 | 1.828 |
| Portugal | Gross domestic product, constant prices | Percent change | | | -2.507 | 1.331 | -2.159 | -1.844 | 1.190 | 2.453 | 2.220 | 2.000 |
| Slovak Republic | Gross domestic product, constant prices | Percent change | | | -4.782 | 4.021 | 3.250 | 3.300 | 4.303 | 4.240 | 4.240 | 4.240 |
| Slovenia | Gross domestic product, constant prices | Percent change | | | -8.077 | 1.209 | 1.900 | 2.000 | 2.393 | 2.307 | 2.200 | 2.005 |
| Spain | Gross domestic product, constant prices | Percent change | | | -3.722 | -0.147 | 0.775 | 1.123 | 1.769 | 1.863 | 1.945 | 1.845 |

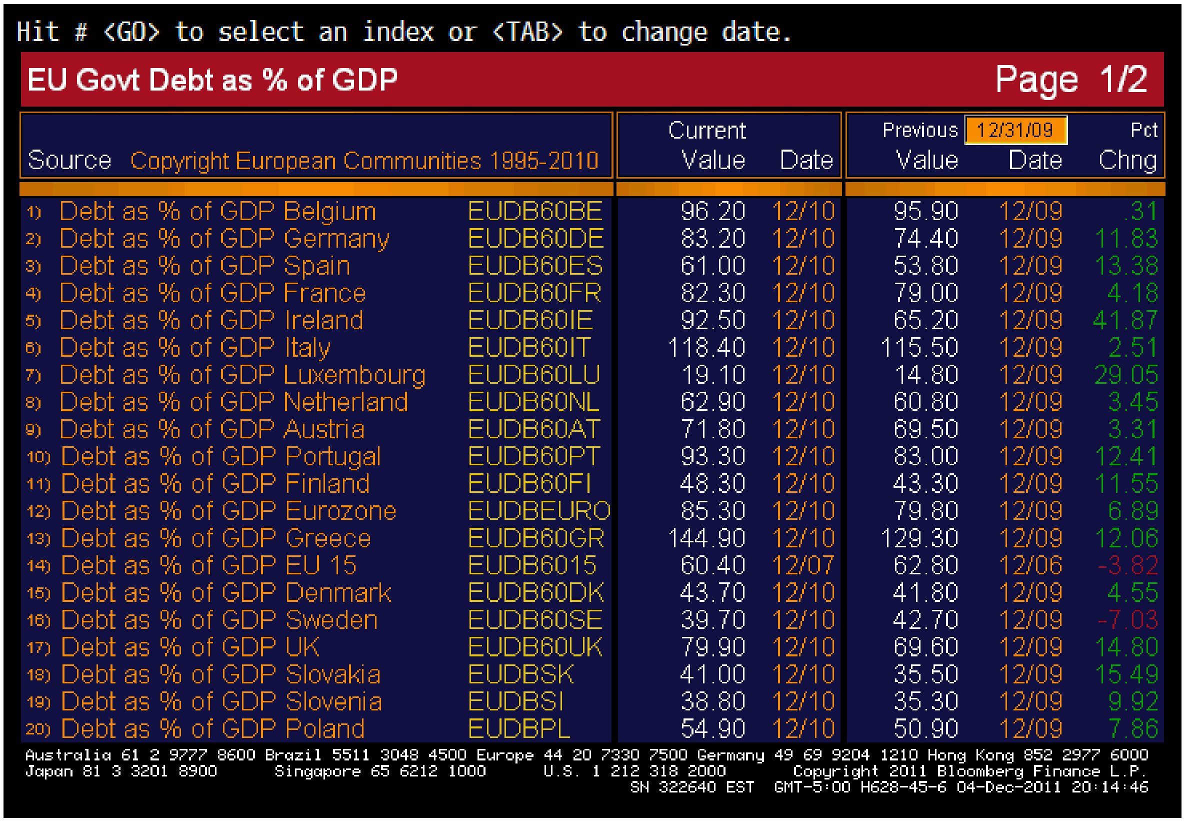
Figure 2.

### Table 2.2. Selected European Economies: Real GDP, Consumer Prices, Current Account Balance, and Unemployment

*(Annual percent change unless noted otherwise)*

| | Real GDP | | | Consumer Prices[1] | | | Current Account Balance[2] | | | Unemployment[3] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Projections | | | Projections | | | Projections | | | Projections | |
| | 2010 | 2011 | 2012 | 2010 | 2011 | 2012 | 2010 | 2011 | 2012 | 2010 | 2011 | 2012 |
| **Europe** | **2.2** | **2.0** | **1.5** | **2.4** | **3.1** | **2.1** | **0.3** | **0.1** | **0.4** | . . . | . . . | . . . |
| **Advanced Europe** | **1.8** | **1.6** | **1.3** | **1.9** | **2.8** | **1.7** | **0.8** | **0.8** | **1.0** | **9.4** | **9.2** | **9.1** |
| Euro Area[4,5] | 1.8 | 1.6 | 1.1 | 1.6 | 2.5 | 1.5 | –0.4 | 0.1 | 0.4 | 10.1 | 9.9 | 9.9 |
| Germany | 3.6 | 2.7 | 1.3 | 1.2 | 2.2 | 1.3 | 5.7 | 5.0 | 4.9 | 7.1 | 6.0 | 6.2 |
| France | 1.4 | 1.7 | 1.4 | 1.7 | 2.1 | 1.4 | –1.7 | –2.7 | –2.5 | 9.8 | 9.5 | 9.2 |
| Italy | 1.3 | 0.6 | 0.3 | 1.6 | 2.6 | 1.6 | –3.3 | –3.5 | –3.0 | 8.4 | 8.2 | 8.5 |
| Spain | –0.1 | 0.8 | 1.1 | 2.0 | 2.9 | 1.5 | –4.6 | –3.8 | –3.1 | 20.1 | 20.7 | 19.7 |
| Netherlands | 1.6 | 1.6 | 1.3 | 0.9 | 2.5 | 2.0 | 7.1 | 7.5 | 7.7 | 4.5 | 4.2 | 4.2 |
| Belgium | 2.1 | 2.4 | 1.5 | 2.3 | 3.2 | 2.0 | 1.0 | 0.6 | 0.9 | 8.4 | 7.9 | 8.1 |
| Austria | 2.1 | 3.3 | 1.6 | 1.7 | 3.2 | 2.2 | 2.7 | 2.8 | 2.7 | 4.4 | 4.1 | 4.1 |
| Greece | –4.4 | –5.0 | –2.0 | 4.7 | 2.9 | 1.0 | –10.5 | –8.4 | –6.7 | 12.5 | 16.5 | 18.5 |
| Portugal | 1.3 | –2.2 | –1.8 | 1.4 | 3.4 | 2.1 | –9.9 | –8.6 | –6.4 | 12.0 | 12.2 | 13.4 |
| Finland | 3.6 | 3.5 | 2.2 | 1.7 | 3.1 | 2.0 | 3.1 | 2.5 | 2.5 | 8.4 | 7.8 | 7.6 |
| Ireland | –0.4 | 0.4 | 1.5 | –1.6 | 1.1 | 0.6 | 0.5 | 1.8 | 1.9 | 13.6 | 14.3 | 13.9 |
| Slovak Republic | 4.0 | 3.3 | 3.3 | 0.7 | 3.6 | 1.8 | –3.5 | –1.3 | –1.1 | 14.4 | 13.4 | 12.3 |
| Slovenia | 1.2 | 1.9 | 2.0 | 1.8 | 1.8 | 2.1 | –0.8 | –1.7 | –2.1 | 7.3 | 8.2 | 8.0 |
| Luxembourg | 3.5 | 3.6 | 2.7 | 2.3 | 3.6 | 1.4 | 7.8 | 9.8 | 10.3 | 6.2 | 5.8 | 6.0 |
| Estonia | 3.1 | 6.5 | 4.0 | 2.9 | 5.1 | 3.5 | 3.6 | 2.4 | 2.3 | 16.9 | 13.5 | 11.5 |
| Cyprus | 1.0 | 0.0 | 1.0 | 2.6 | 4.0 | 2.4 | –7.7 | –7.2 | –7.6 | 6.4 | 7.4 | 7.2 |
| Malta | 3.1 | 2.4 | 2.2 | 2.0 | 2.6 | 2.3 | –4.8 | –3.8 | –4.8 | 6.9 | 6.3 | 6.2 |
| United Kingdom[5] | 1.4 | 1.1 | 1.6 | 3.3 | 4.5 | 2.4 | –3.2 | –2.7 | –2.3 | 7.9 | 7.8 | 7.8 |
| Sweden | 5.7 | 4.4 | 3.8 | 1.9 | 3.0 | 2.5 | 6.3 | 5.8 | 5.3 | 8.4 | 7.4 | 6.6 |
| Switzerland | 2.7 | 2.1 | 1.4 | 0.7 | 0.7 | 0.9 | 15.8 | 12.5 | 10.9 | 3.6 | 3.4 | 3.4 |
| Czech Republic | 2.3 | 2.0 | 1.8 | 1.5 | 1.8 | 2.0 | –3.7 | –3.3 | –3.4 | 7.3 | 6.7 | 6.6 |
| Norway | 0.3 | 1.7 | 2.5 | 2.4 | 1.7 | 2.2 | 12.4 | 14.0 | 12.8 | 3.6 | 3.6 | 3.5 |
| Denmark | 1.7 | 1.5 | 1.5 | 2.3 | 3.2 | 2.4 | 5.1 | 6.4 | 6.4 | 4.2 | 4.5 | 4.4 |
| Iceland | –3.5 | 2.5 | 2.5 | 5.4 | 4.2 | 4.5 | –10.2 | 1.9 | 3.2 | 8.1 | 7.1 | 6.0 |
| **Emerging Europe[6]** | **4.5** | **4.3** | **2.7** | **5.3** | **5.2** | **4.5** | **–4.6** | **–6.2** | **–5.4** | . . . | . . . | . . . |
| Turkey | 8.9 | 6.6 | 2.2 | 8.6 | 6.0 | 6.9 | –6.6 | –10.3 | –7.4 | 11.9 | 10.5 | 10.7 |
| Poland | 3.8 | 3.8 | 3.0 | 2.6 | 4.0 | 2.8 | –4.5 | –4.8 | –5.1 | 9.6 | 9.4 | 9.2 |
| Romania | –1.3 | 1.5 | 3.5 | 6.1 | 6.4 | 4.3 | –4.3 | –4.5 | –4.6 | 7.6 | 5.0 | 4.8 |
| Hungary | 1.2 | 1.8 | 1.7 | 4.9 | 3.7 | 3.0 | 2.1 | 2.0 | 1.5 | 11.2 | 11.3 | 11.0 |
| Bulgaria | 0.2 | 2.5 | 3.0 | 3.0 | 3.8 | 2.9 | –1.0 | 1.6 | 0.6 | 10.3 | 10.2 | 9.5 |
| Serbia | 1.0 | 2.0 | 3.0 | 6.2 | 11.3 | 4.3 | –7.2 | –7.7 | –8.9 | 19.6 | 20.5 | 20.6 |
| Croatia | –1.2 | 0.8 | 1.8 | 1.0 | 3.2 | 2.4 | –1.1 | –1.8 | –2.7 | 12.2 | 12.7 | 12.2 |
| Lithuania | 1.3 | 6.0 | 3.4 | 1.2 | 4.2 | 2.6 | 1.8 | –1.9 | –2.7 | 17.8 | 15.5 | 14.0 |
| Latvia | –0.3 | 4.0 | 3.0 | –1.2 | 4.2 | 2.3 | 3.6 | 1.0 | –0.5 | 19.0 | 16.1 | 14.5 |

Figure 3. European Debt to GDP



Hit # <GO> to select an index or <TAB> to change date.

EU Govt Debt as % of GDP Page 1/2

| Source Copyright European Communities 1995-2010 | | Current Value | Current Date | Previous 12/31/09 Value | Previous Date | Pct Chng |
|---|---|---|---|---|---|---|
| 1) Debt as % of GDP Belgium | EUDB60BE | 96.20 | 12/10 | 95.90 | 12/09 | .31 |
| 2) Debt as % of GDP Germany | EUDB60DE | 83.20 | 12/10 | 74.40 | 12/09 | 11.83 |
| 3) Debt as % of GDP Spain | EUDB60ES | 61.00 | 12/10 | 53.80 | 12/09 | 13.38 |
| 4) Debt as % of GDP France | EUDB60FR | 82.30 | 12/10 | 79.00 | 12/09 | 4.18 |
| 5) Debt as % of GDP Ireland | EUDB60IE | 92.50 | 12/10 | 65.20 | 12/09 | 41.87 |
| 6) Debt as % of GDP Italy | EUDB60IT | 118.40 | 12/10 | 115.50 | 12/09 | 2.51 |
| 7) Debt as % of GDP Luxembourg | EUDB60LU | 19.10 | 12/10 | 14.80 | 12/09 | 29.05 |
| 8) Debt as % of GDP Netherland | EUDB60NL | 62.90 | 12/10 | 60.80 | 12/09 | 3.45 |
| 9) Debt as % of GDP Austria | EUDB60AT | 71.80 | 12/10 | 69.50 | 12/09 | 3.31 |
| 10) Debt as % of GDP Portugal | EUDB60PT | 93.30 | 12/10 | 83.00 | 12/09 | 12.41 |
| 11) Debt as % of GDP Finland | EUDB60FI | 48.30 | 12/10 | 43.30 | 12/09 | 11.55 |
| 12) Debt as % of GDP Eurozone | EUDBEURO | 85.30 | 12/10 | 79.80 | 12/09 | 6.89 |
| 13) Debt as % of GDP Greece | EUDB60GR | 144.90 | 12/10 | 129.30 | 12/09 | 12.06 |
| 14) Debt as % of GDP EU 15 | EUDB6015 | 60.40 | 12/07 | 62.80 | 12/06 | -3.82 |
| 15) Debt as % of GDP Denmark | EUDB60DK | 43.70 | 12/10 | 41.80 | 12/09 | 4.55 |
| 16) Debt as % of GDP Sweden | EUDB60SE | 39.70 | 12/10 | 42.70 | 12/09 | -7.03 |
| 17) Debt as % of GDP UK | EUDB60UK | 79.90 | 12/10 | 69.60 | 12/09 | 14.80 |
| 18) Debt as % of GDP Slovakia | EUDBSK | 41.00 | 12/10 | 35.50 | 12/09 | 15.49 |
| 19) Debt as % of GDP Slovenia | EUDBSI | 38.80 | 12/10 | 35.30 | 12/09 | 9.92 |
| 20) Debt as % of GDP Poland | EUDBPL | 54.90 | 12/10 | 50.90 | 12/09 | 7.86 |

Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2011 Bloomberg Finance L.P.
SN 322640 EST GMT-5:00 H628-45-6 04-Dec-2011 20:14:46

Figure 4. Global Debt as Percentage of GDP

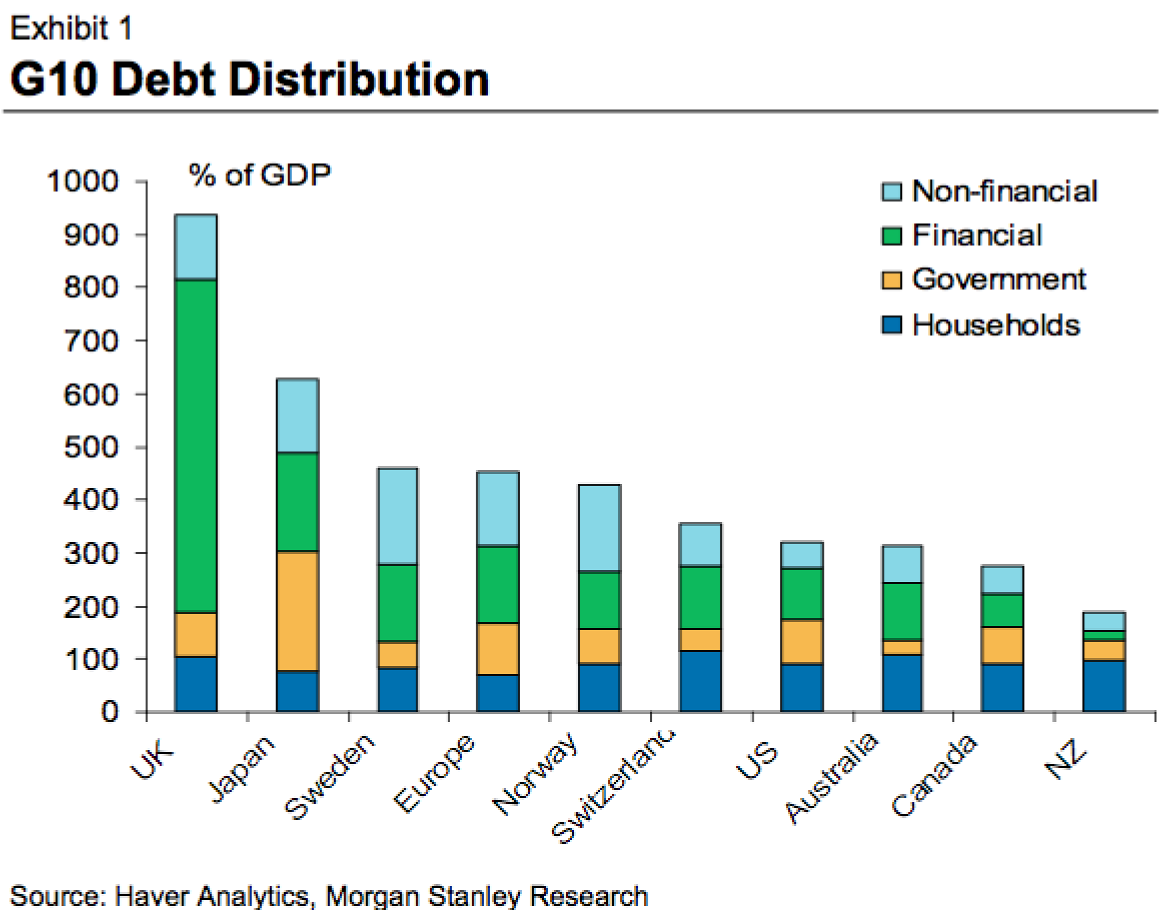


Figure 5. The Fed's Balance Sheet

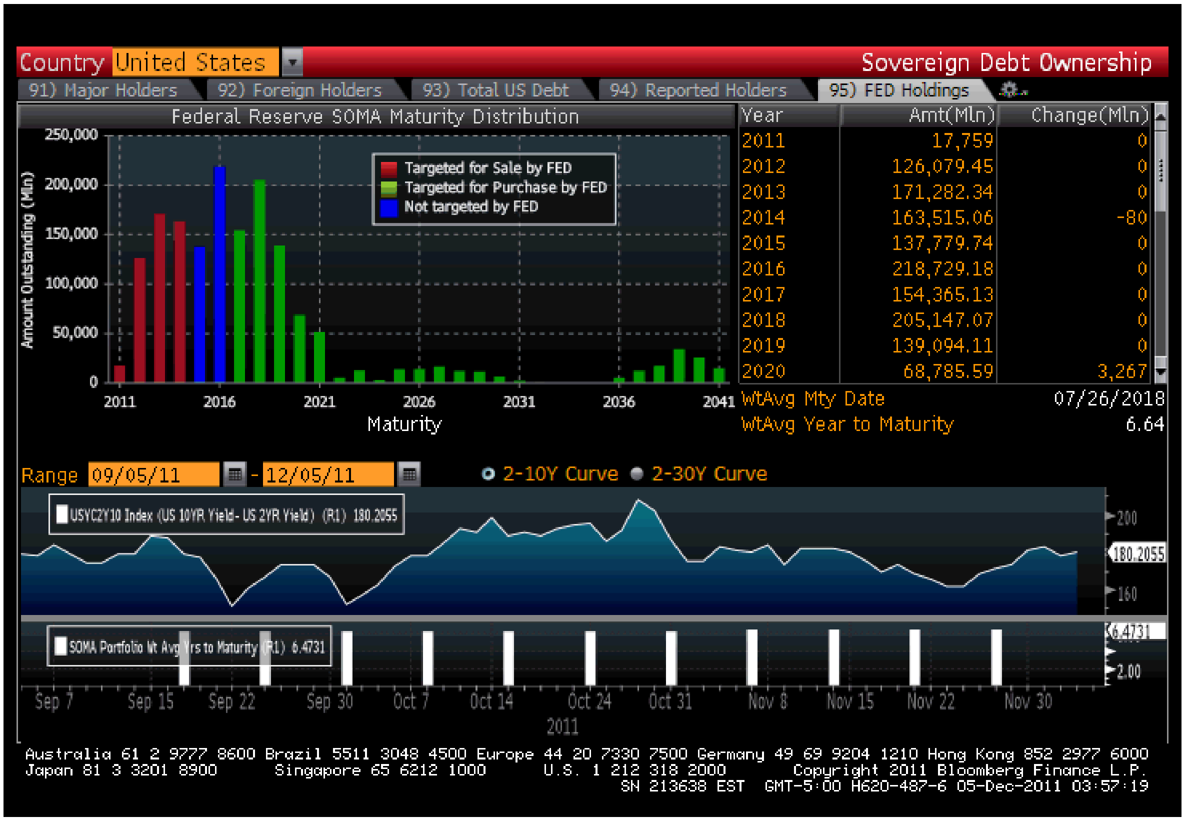



Figure 6. Who Owns Our Treasury Debt?

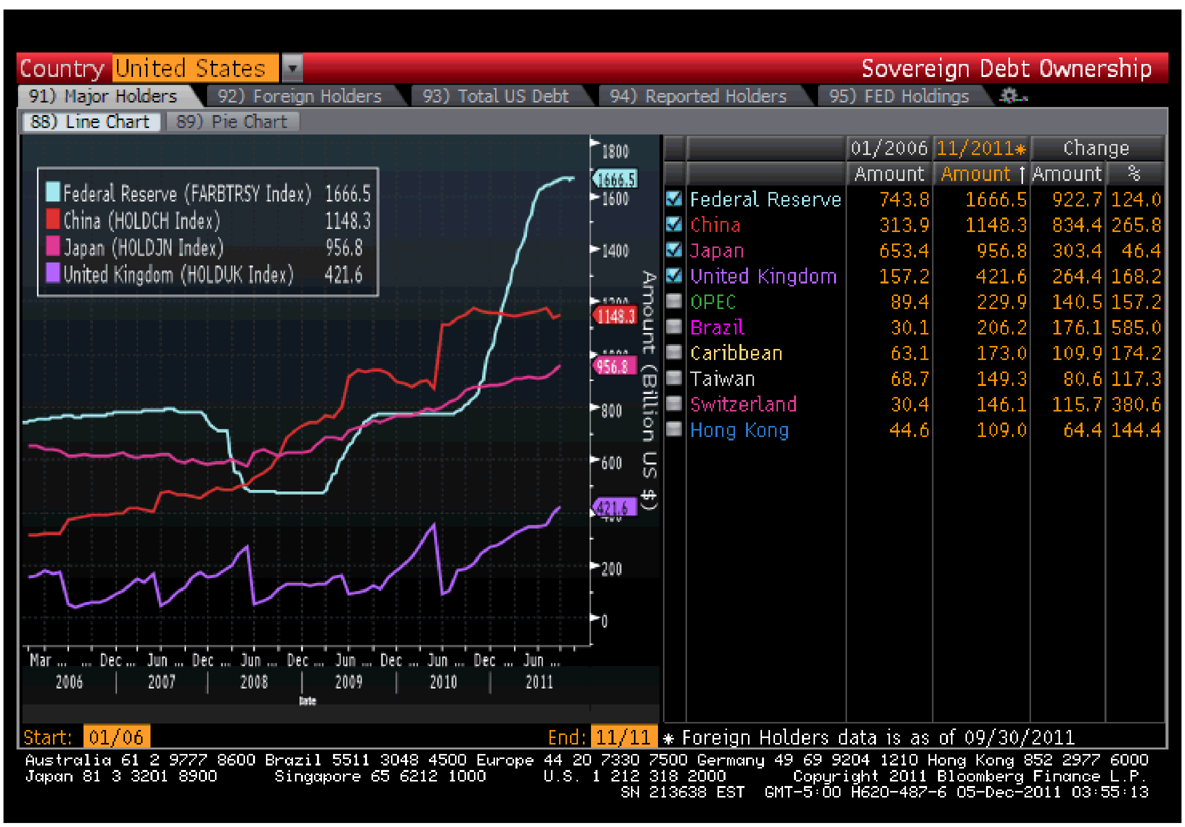


Figure 7. The Fed's Discount Window Operations

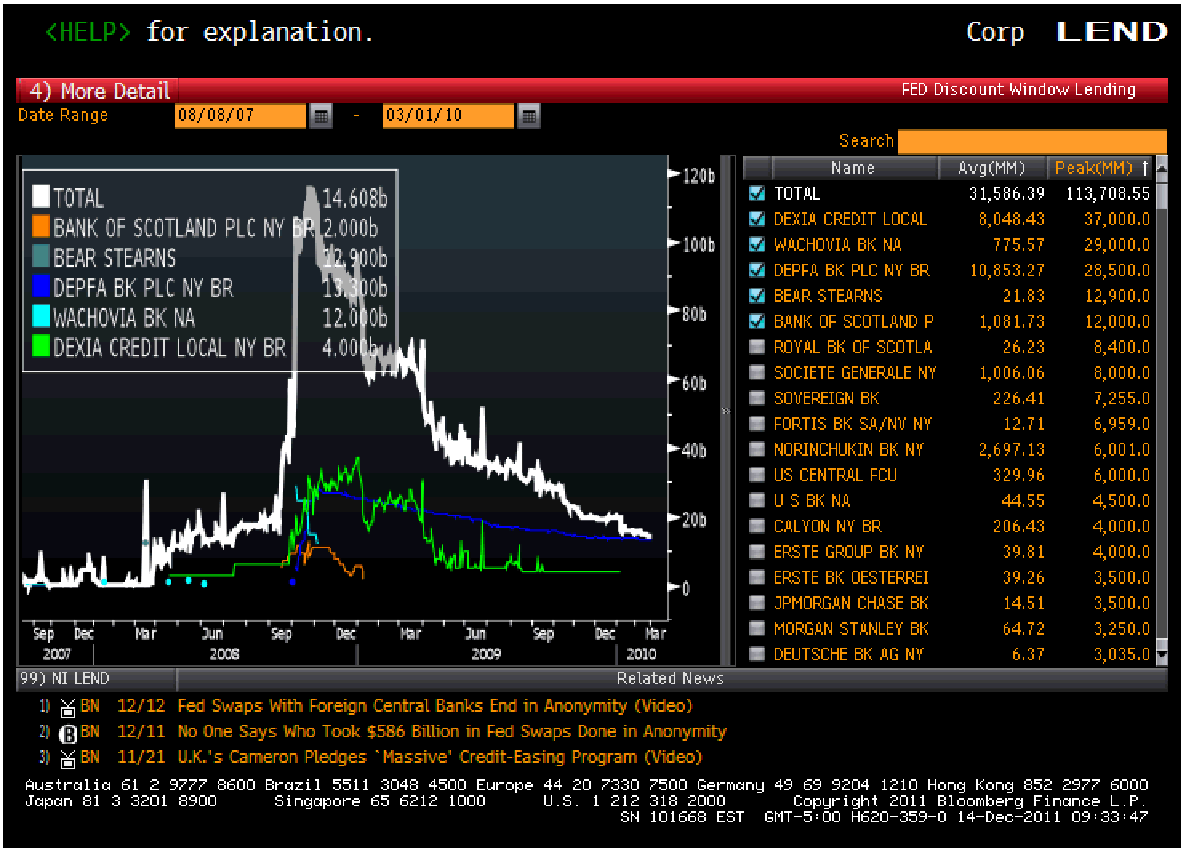



Figure 8. 3 Month Basis Swap Dropping Back to November 30 Levels

Figure 9. One year Basis Swaps


Figure 10. Marginal Impact of Additional Federal Debt on Real GDP

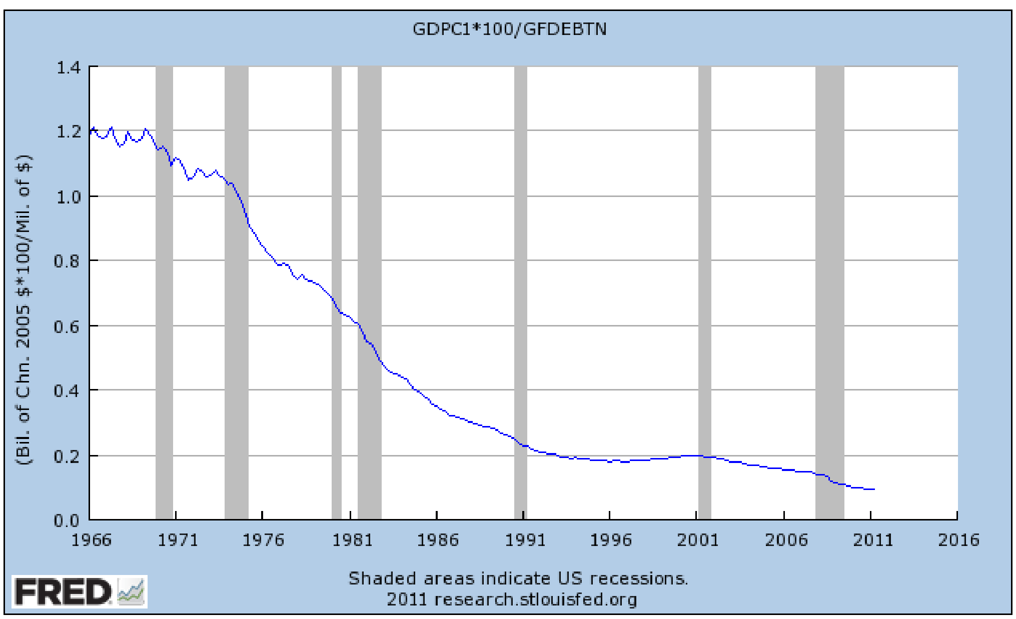
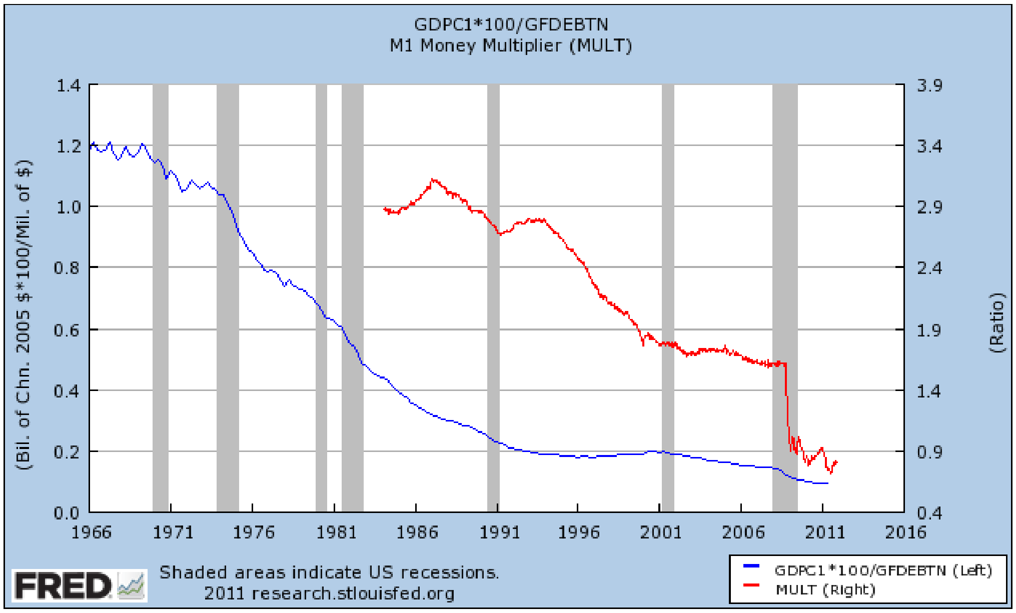


Figure 11. Marginal Impact of Additional Federal Debt on Real GDP and M1 Money Mulitplier



# Anthony B. Sanders

- Mercatus Center Senior Scholar
- Distinguished Professor of Real Estate Finance
- Member, Financial Markets Working Group

Anthony B. Sanders is a senior scholar at the Mercatus Center at George Mason University. He is a professor of finance in the School of Management at George Mason University where he is the Distinguished Professor of Real Estate Finance. He has previously taught at University of Chicago (Graduate School of Business), University of Texas at Austin (McCombs School of Business) and The Ohio State University (Fisher College of Business). In addition, he served as Director and Head of Asset-backed and Mortgage-backed Securities Research at Deutsche Bank in New York City.

His research and teaching focuses on financial institutions and capital markets with particular emphasis on real estate finance and investment. He has published articles in *Journal of Finance, Journal of Financial and Quantitative Analysis, Journal of Business, Journal of Financial Services Research, Journal of Housing Economics* and other journals. Professor Sanders has received 6 teaching awards and 3 research awards. He serves as Associate Editor for several leading journals. Recently, he has given presentations to the European Central Bank in Frankfurt, Exane BNP Paribas in Paris and Geneva and the Bank of Japan on the subject of the housing bubble and commercial real estate in the U.S. and the mortgage market. He has given other presentations in Chile, Japan, China, Poland, England and Mexico in recent years. Professor Sanders has testified in the U.S. Senate and U.S. House of Representatives on the U.S. real estate asset and debt markets. Also, he was an invited speaker to the FTC on the subject of predatory lending.

Dr. Sanders earned his PhD and MA from the University of Georgia.

**Committee on Oversight and Government Reform**
**Witness Disclosure Requirement – "Truth in Testimony"**
**Required by House Rule XI, Clause 2(g)(5)**

Name: ANTHONY B. SANDERS

1. Please list any federal grants or contracts (including subgrants or subcontracts) you have received since October 1, 2009. Include the source and amount of each grant or contract.

NONE.

2. Please list any entity you are testifying on behalf of and briefly describe your relationship with these entities.

MYSELF AND THE MERCATUS CENTER WHERE I AM SENIOR SCHOLAR.

3. Please list any federal grants or contracts (including subgrants or subcontracts) received since October 1, 2008, by the entity(ies) you listed above. Include the source and amount of each grant or contract.

NONE.

*I certify that the above information is true and correct.*
Signature:

Date: 12/14/11