

Walking the Debt and Deleveraging Tightrope: An Examination of Europe and the United States

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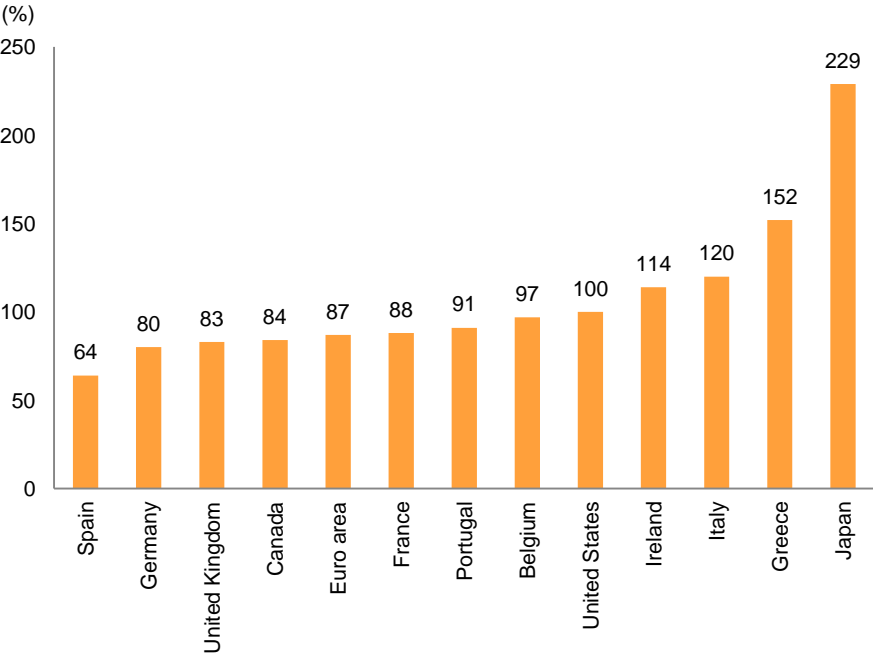
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Securities in certain non-domestic countries may be less liquid, more volatile, and less subject to governmental supervision than in one's home market. The values of these securities may be affected by changes in currency rates, application of a country's specific tax laws, changes in government administration, and economic and monetary policy. Emerging market securities carry special risks, such as less developed or less efficient trading markets, a lack of company information, and differing auditing and legal standards. The securities markets of emerging market countries can be extremely volatile; performance can also be influenced by political, social, and economic factors affecting companies in emerging market countries.

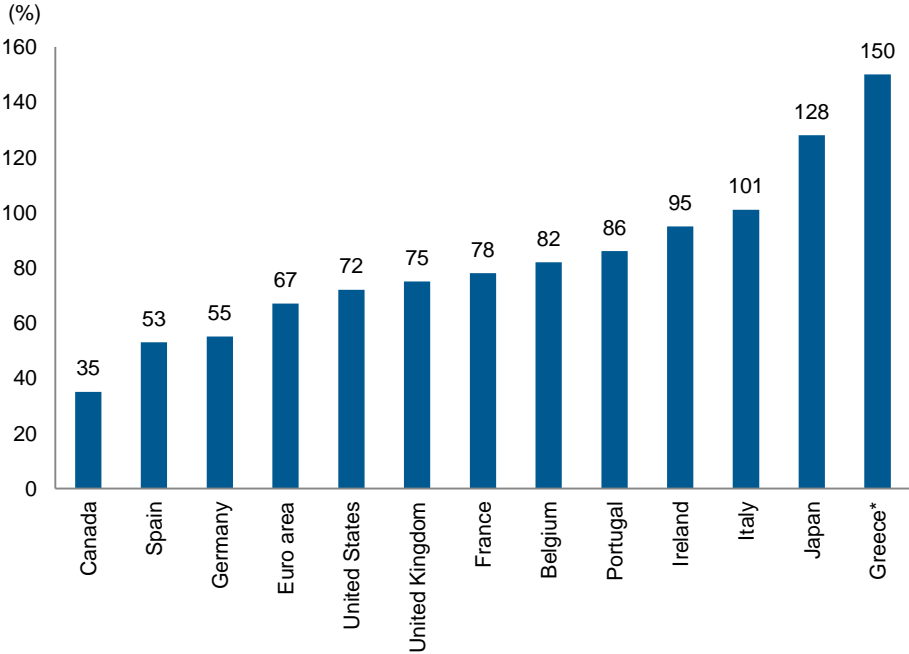
Government Debt is One Indicator of Risk

- The discussion of sovereign credit issues often starts by looking at government debt.
- While this approach seems sensible, it only presents part of the story.
- The higher levels of debt in some countries might simply reflect lack of desirable alternative investments to a domestic audience, or even crowding out of private sector borrowers, rather than heightened risk of a crisis.

Government Gross Debt 2011¹



Government Net Debt 2011^{1,2}



As of April 2011

¹ World Economic Outlook projections for 2011.

² Net general government debt is calculated as gross debt minus financial assets corresponding to debt instruments.

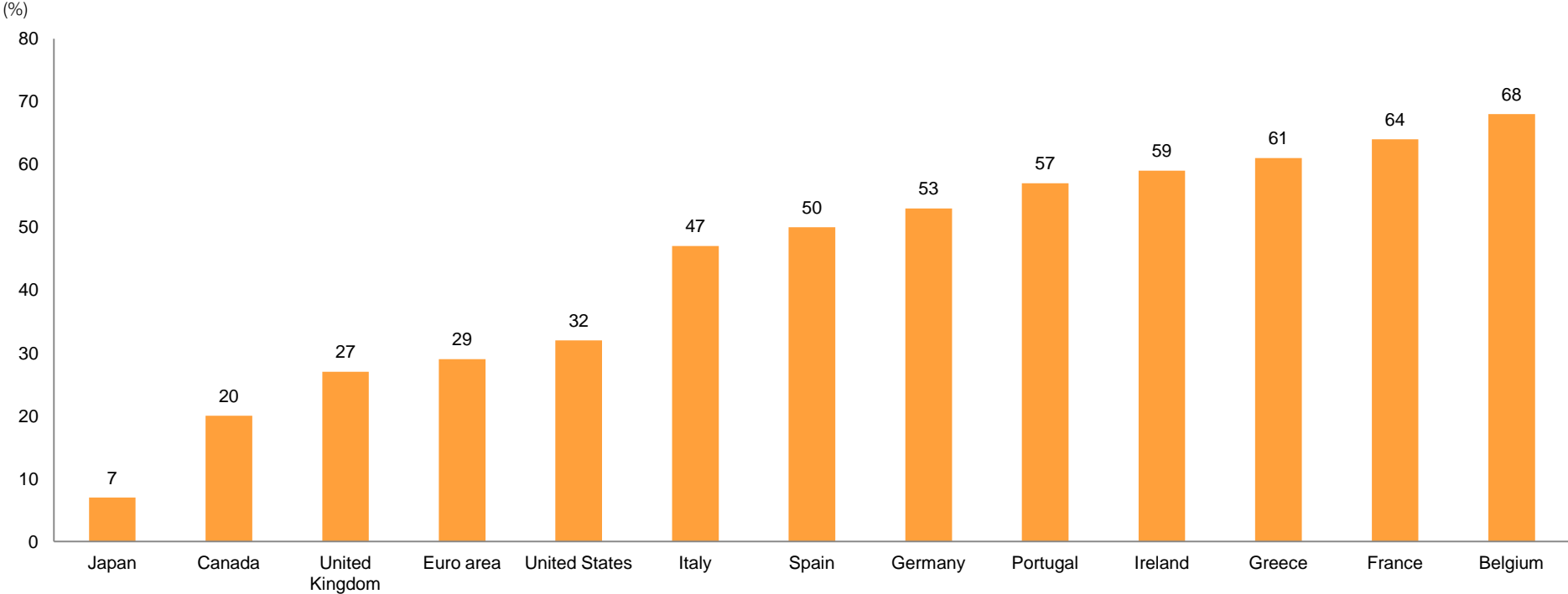
* Lazard estimate. Estimated data is not a promise or guarantee of future results and is subject to change.

Source: IMF, Global Financial Stability Report

Government Borrowing from non-Residents also Matters

- Assessing dependence on non-resident lenders can help assess the risk of a sovereign fiscal challenge.
- To the extent a government depends on “the kindness of strangers” it faces increased risk of losing its funding.

Government Debt Held Abroad¹



As of April 2011

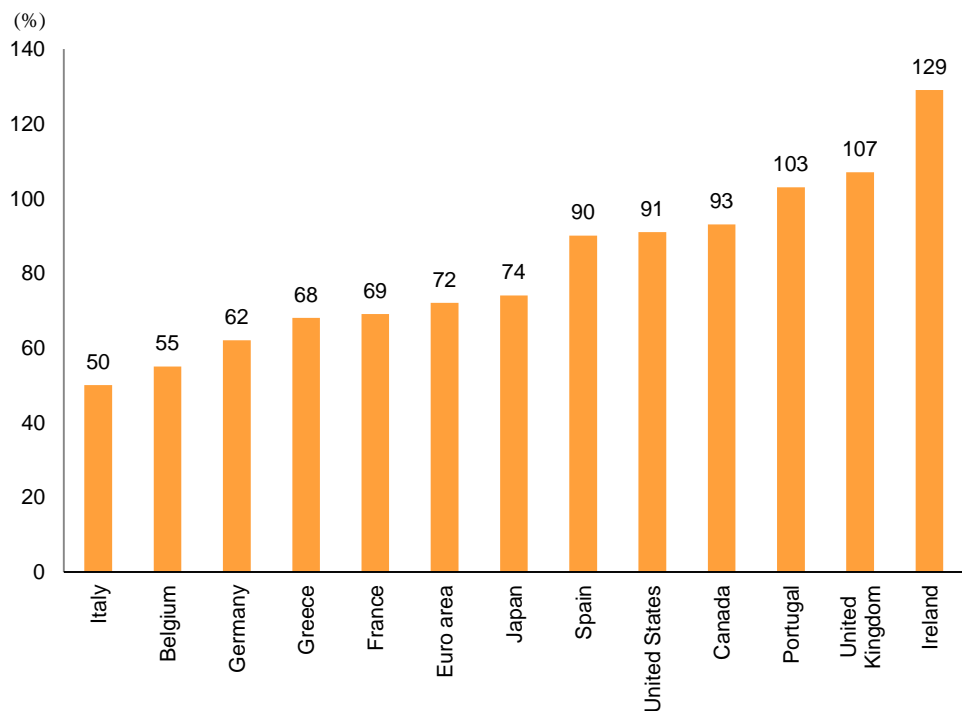
¹ Most recent data for externally held general government debt (from Joint External Debt Hub) divided by 2010 gross general government debt.

Source: IMF, Global Financial Stability Report

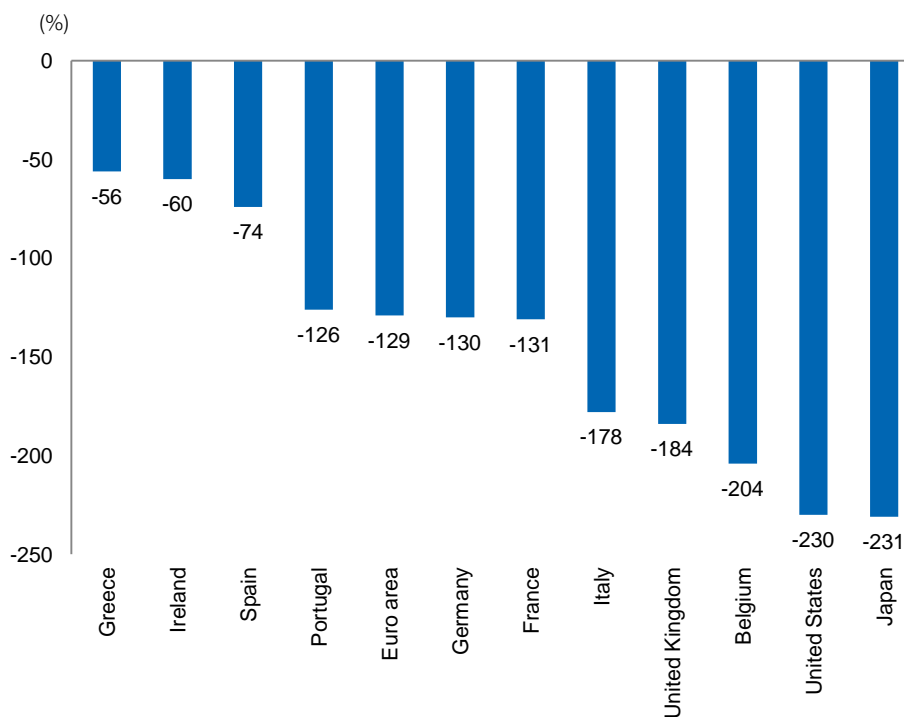
The Next Level of Assessment is the Household

- To the extent a government encounters fiscal stress, it can tap the wealth and income of its companies and citizens. Given that companies are themselves owned directly or indirectly by households, the ultimate backstop for any government is its citizens.
- Even here, assessing risk is not so simple, as gross household debt and net debt offer two very different pictures of capacity to support borrowing.

Households' Gross Debt^{1,2}



Households' Net Debt^{1,2}



As of April 2011

1 Most recent data divided by 2010 GDP.

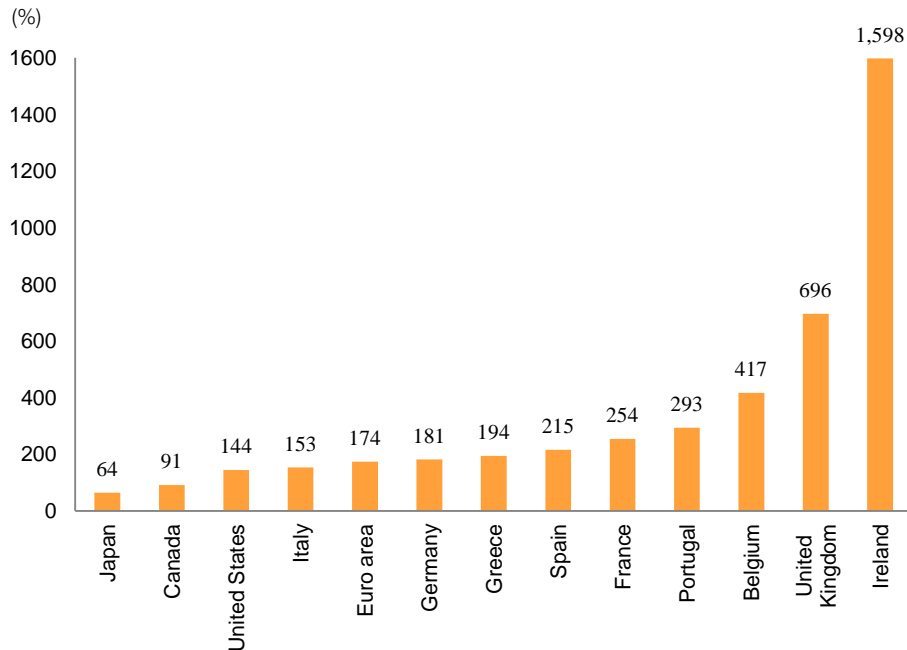
2 Household net debt is calculated using financial assets and liabilities from a country's flow of funds.

Source: IMF, Global Financial Stability Report

External Debt Across All Sectors is the Acid Test

- Building on the government and household debt, the ultimate ability of a nation to carry debt should consider the total debt owned by non-residents across the entire economy.
- Given the globalization of capital markets, countries typically owe and lend money to each other.
- The clearest litmus test for creditworthiness can be seen as net external debt. That said, even this assessment assumes assets and liabilities are liquid and mobile and ignores the likely differences in maturities.

Total Economy Gross External Liabilities^{1,2}



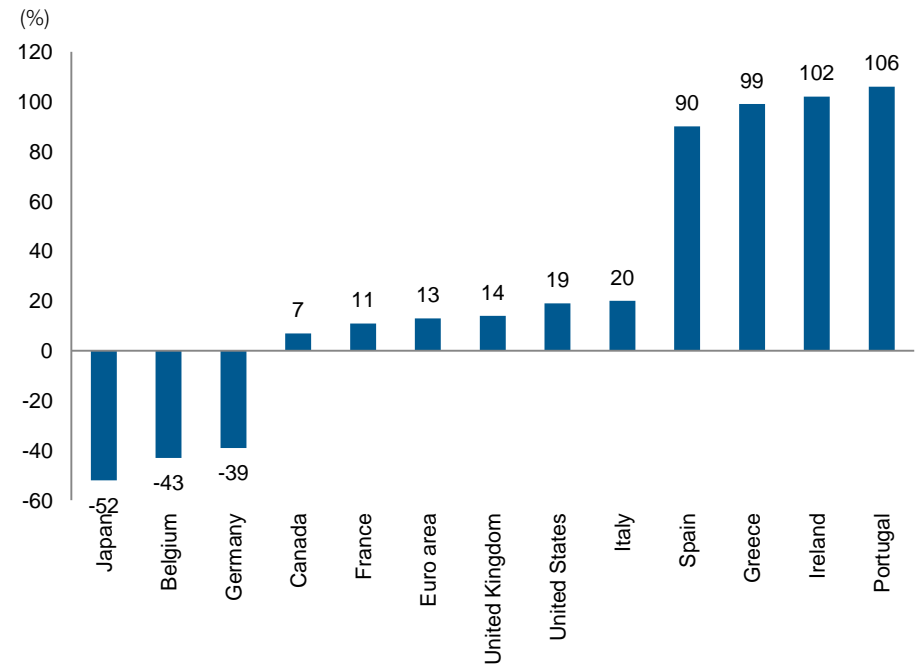
As of April 2011

1 Most recent data divided by 2010 GDP.

2 Calculated from assets and liabilities reported in a country's international investment position.

Source: IMF, Global Financial Stability Report

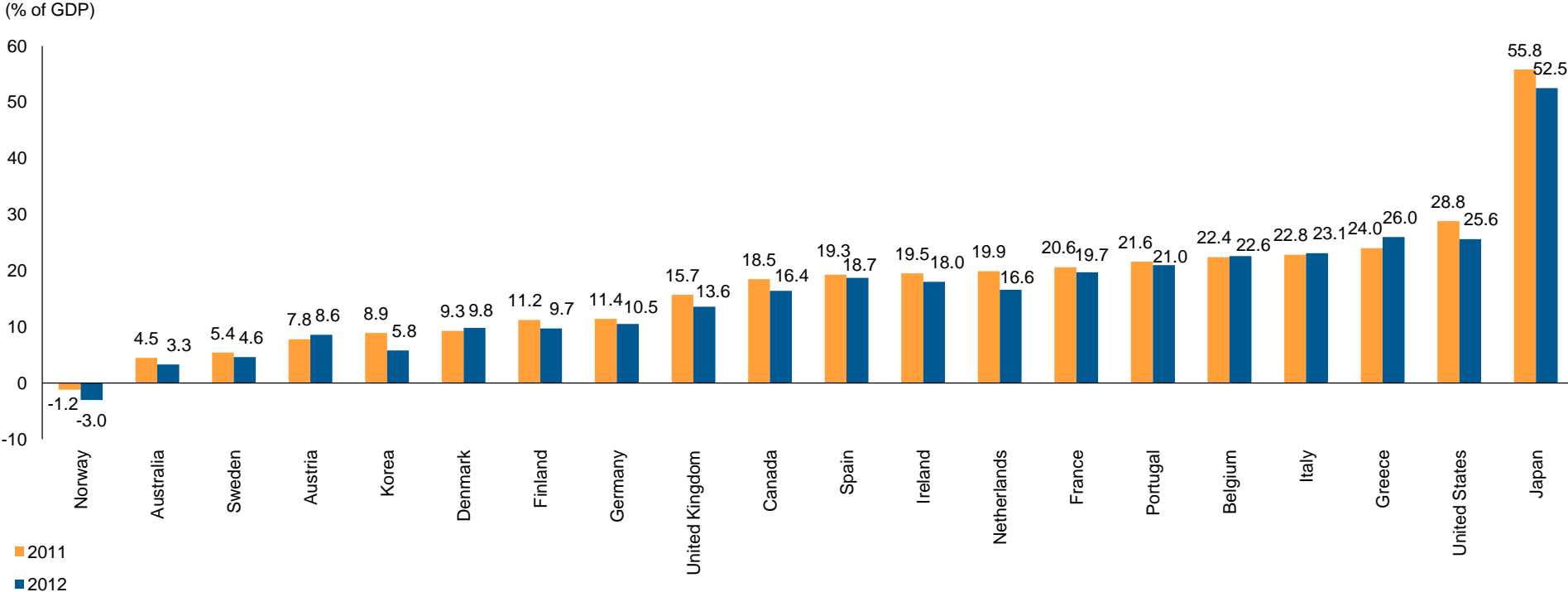
Total Economy Net External Liabilities^{1,2}



Annual Financing Needs Also Can Trigger a Crisis

- Beyond the total amount of debt outstanding, it is necessary to examine how much debt must be financed each year. This analysis should include net new borrowing as well as refinancing of maturing bonds.
- Large fiscal deficits combined with short-dated funding strategies have left Japan, the U.S., and the “PIIGS” at the vulnerable end of the spectrum.

Gross General Government Debt Maturing Plus Budget Deficit¹



As of April 2011

¹ As a proportion of projected GDP for the year. Assumes that short-term debt maturing in 2011 will be refinanced with new short-term debt that will mature in 2012.

Source: IMF, Global Financial Stability Report

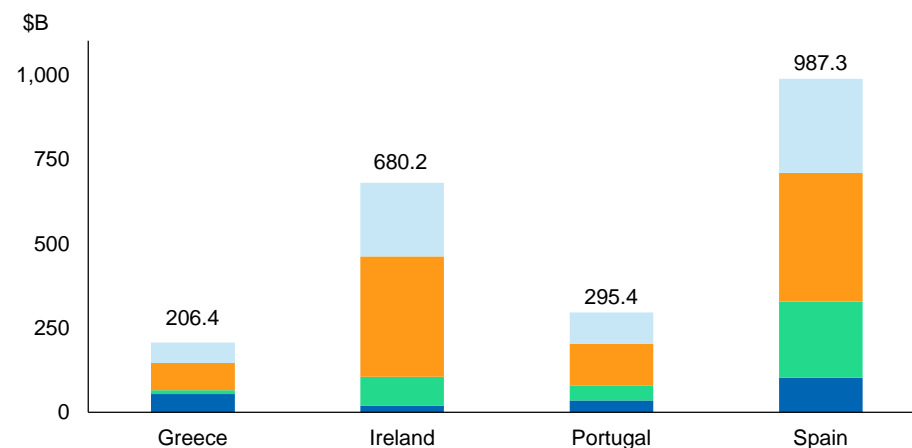
European Debt Issues Are One Focal Point

- Europe has an economic and political problem.
- Markets clearly indicate a lack of confidence in the solutions arranged to date.
- European Central Bank (ECB) quantitative easing (QE) might serve as a bridge, but not a solution.
- Ongoing conflict amongst European authorities has aggravated the crisis.
- The key question facing Europe is how to escape the vicious downward spiral
 - Integrate?
 - Disintegrate?
 - Is there another option?

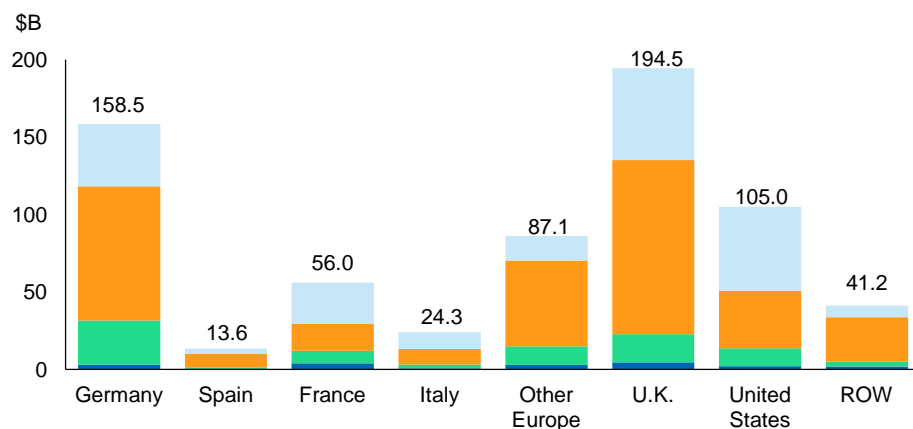
The Political and Economic Dimensions

- Ireland and Spain serve as great examples of the dilemma facing Europe.
- Banks and investors globally funded the borrowing in these countries.
- As a result, governments face a stark choice of either bailing out their neighbors or potentially being forced to bail out their banks.

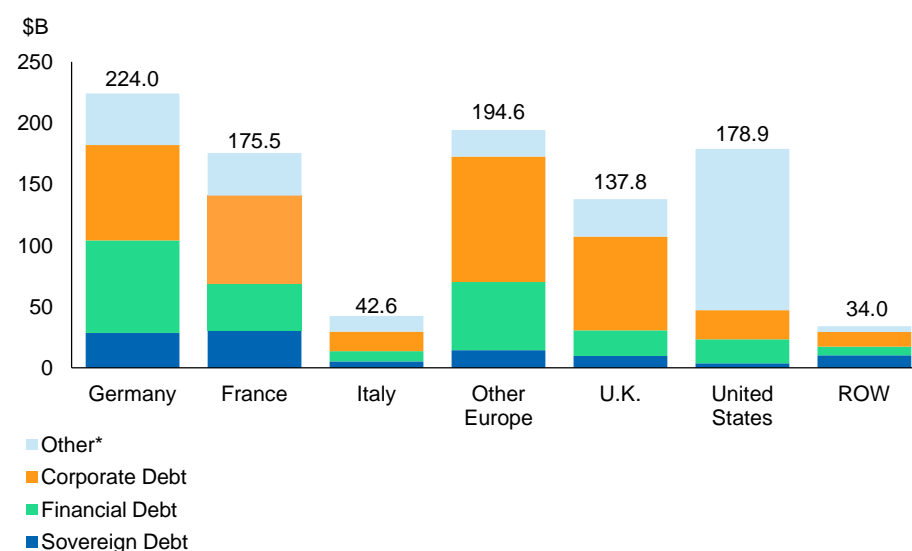
Foreign Exposure by Country



Exposure to Ireland by Country



Exposure to Spain by Country



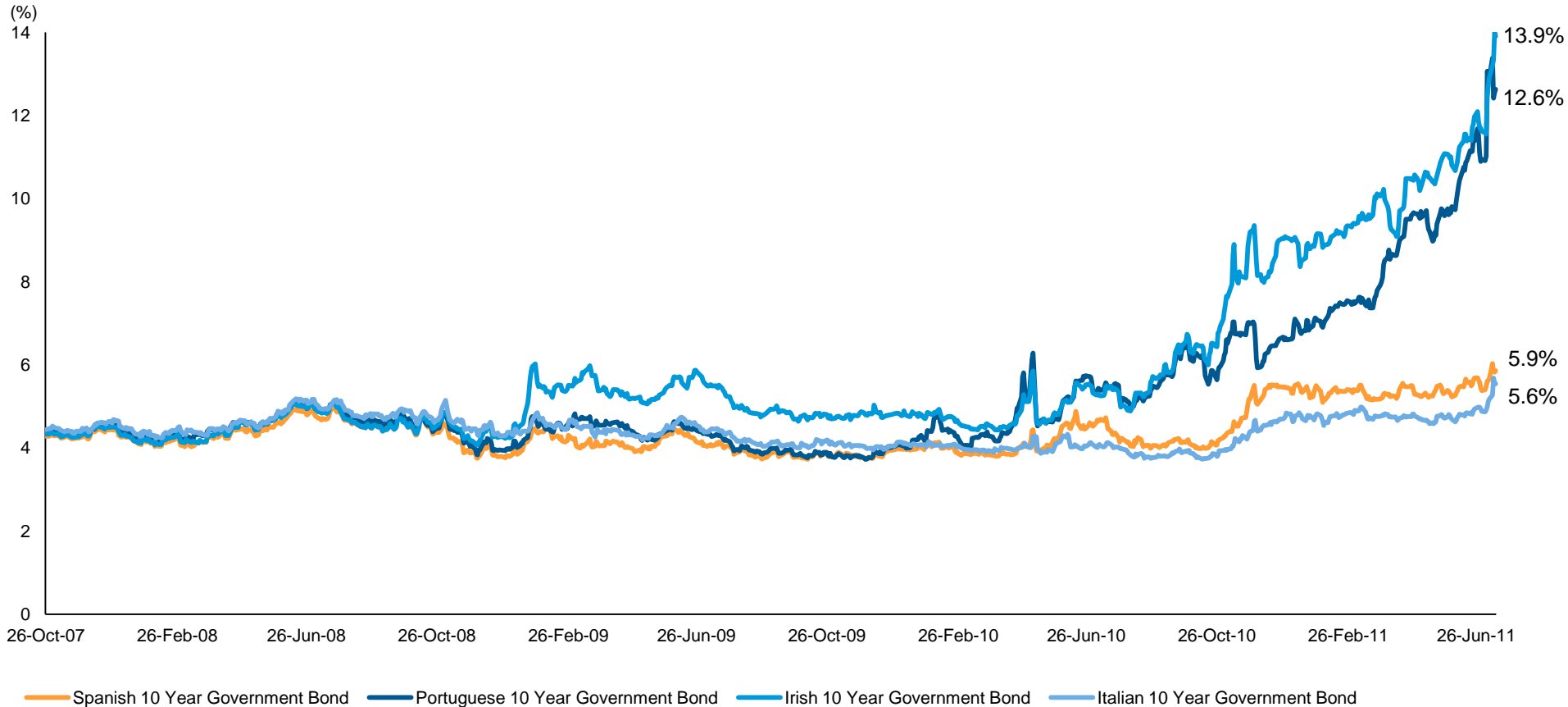
Data as of 31 December 2010

*Positive market value of derivative contracts, guarantees extended and credit commitments.

Source: BIS Quarterly Review – June 2011

Markets Continue to Shun Certain Issuers

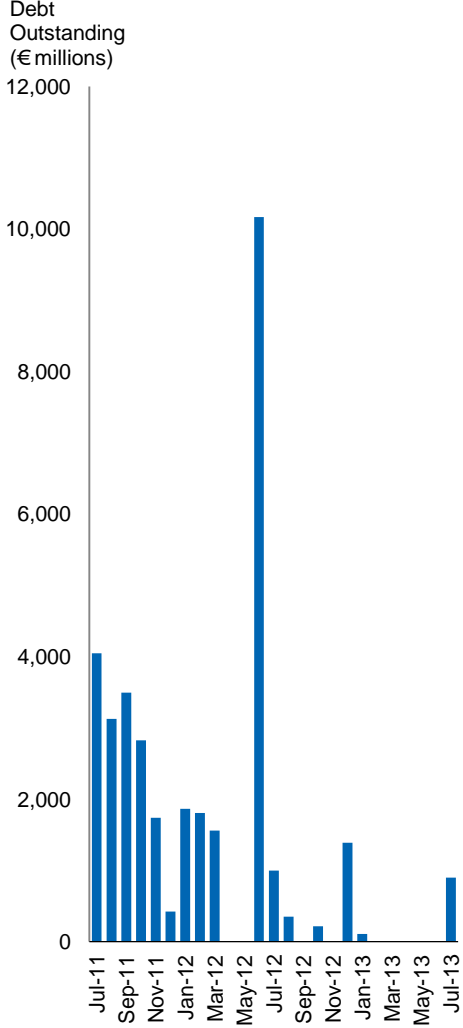
Greek debt now yields over 17%



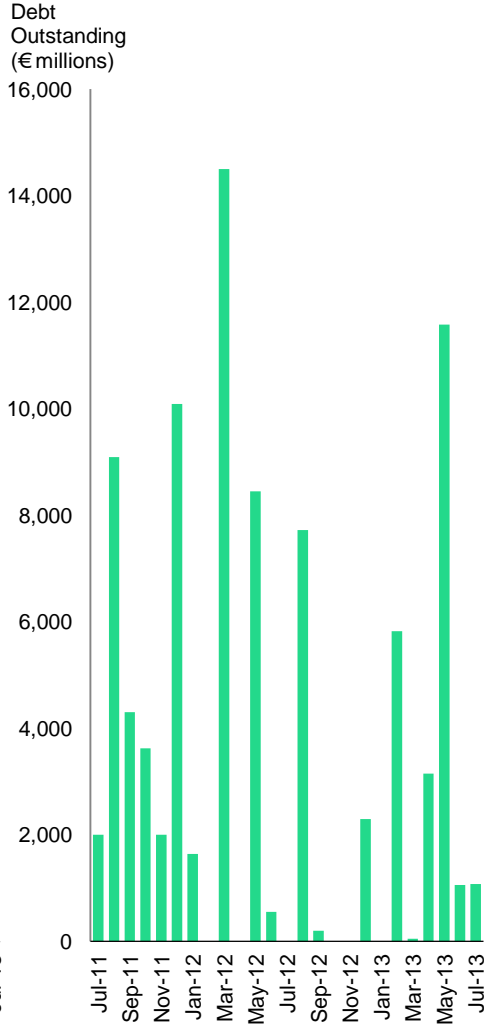
As of 14 July 2011
Source: Bloomberg

The Refinancing Calendar is Foreboding

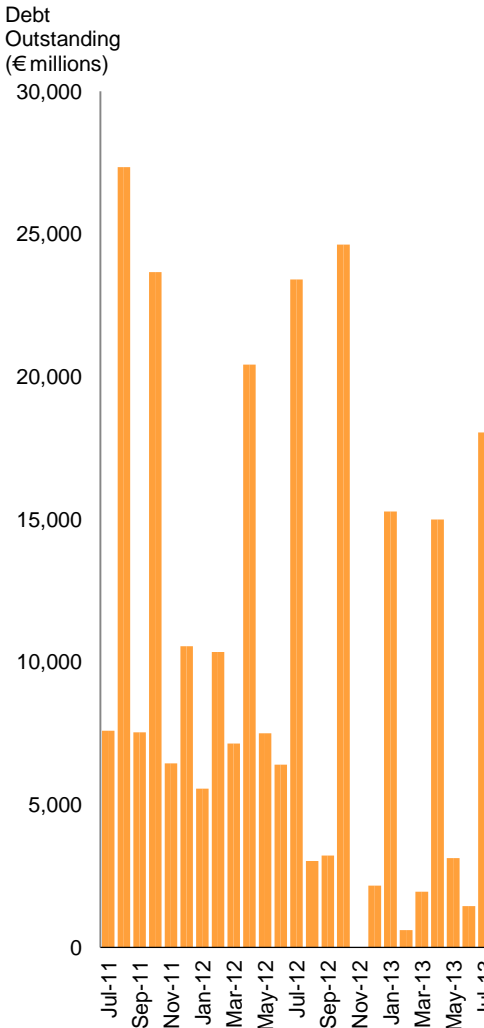
Portugal¹



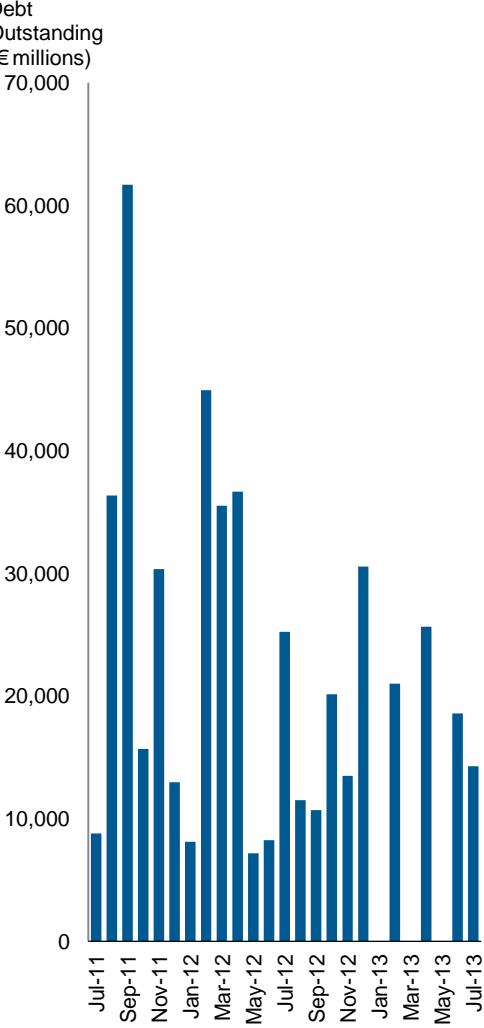
Greece²



Spain³



Italy⁴



1 As of July 2011; Source: Instituto Nacional de Estadística, Bloomberg

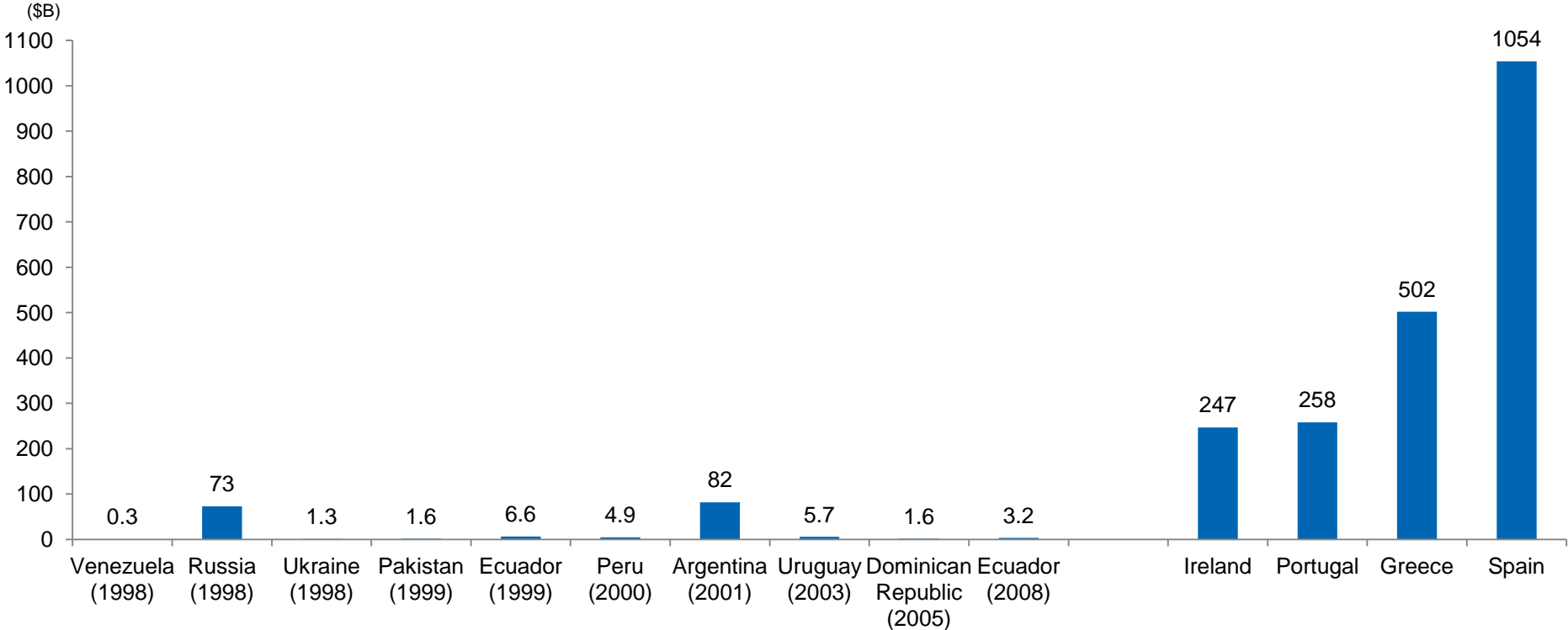
2 As of July 2011; National Statistical Service, Bloomberg

3 As of July 2011; INE, Bloomberg

4 As of July 2011; ISTAT, Bloomberg

Historically Significant Defaults

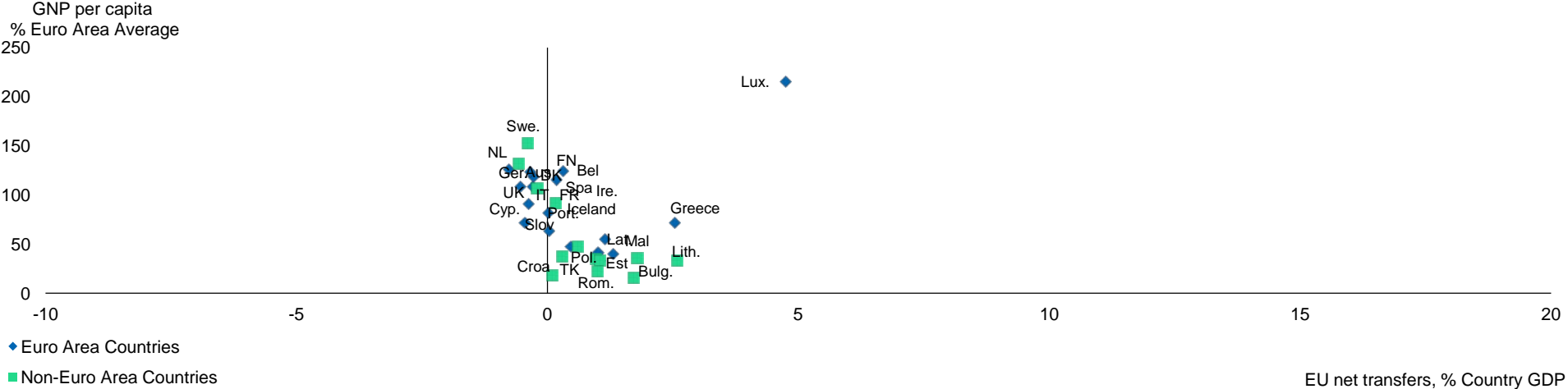
Sovereign Debt Defaults Since 1983 and Current Sovereign Debt of “PIGS”



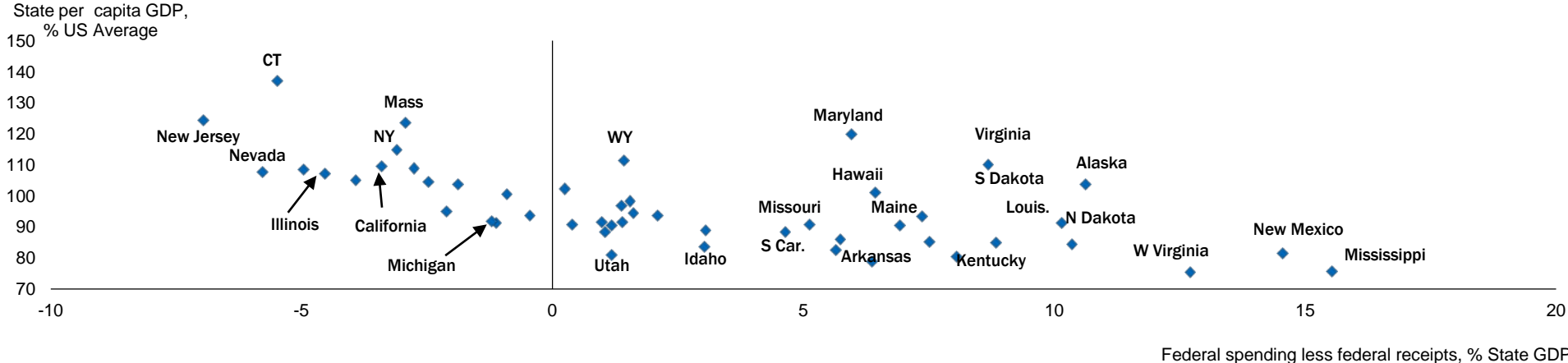
As of June 2011
 Source: Barclays Capital, IMF, BIS

One Solution Might be Fiscal Integration

Euro Area



U.S.



Euro area data as of 2008; U.S. data as of 2005
Source: Barclays Capital

The Other Choices Range from Unpalatable to Unknown

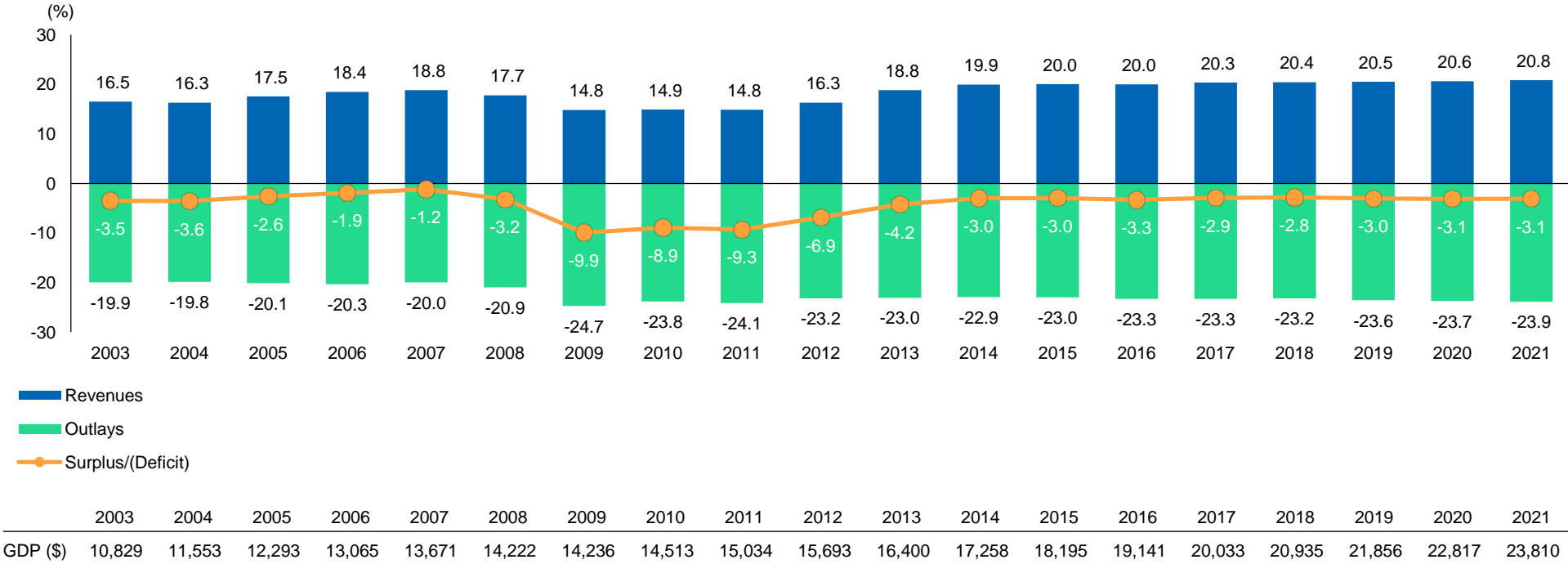
- Disintegration could create significant turmoil
- Other options actually are quite numerous, but generally lead ultimately to integration. They include, but are not limited to:
 - Change ECB charter to a dual mandate focused on inflation and unemployment
 - Guarantee that the ECB will buy all of the debt issued by member nations at a penalty rate
 - Issue a European bond that funds sovereign debt up to a maximum percentage of GDP

The U.S. Faces a very Different Situation

- The U.S. faces serious challenges, but the dynamics are entirely different
- The U.S. benefits from several factors that are absent in Europe:
 - Reserve currency status
 - Alignment of fiscal and monetary capabilities from numerous perspectives
 - Simplified governance structures
- In spite of being less imminently in danger, the U.S. must address its own fiscal imbalances
- The current run-rate of deficits is unsustainable
- Decisions being made in Washington in the weeks ahead could make progress or aggravate our long-term problems

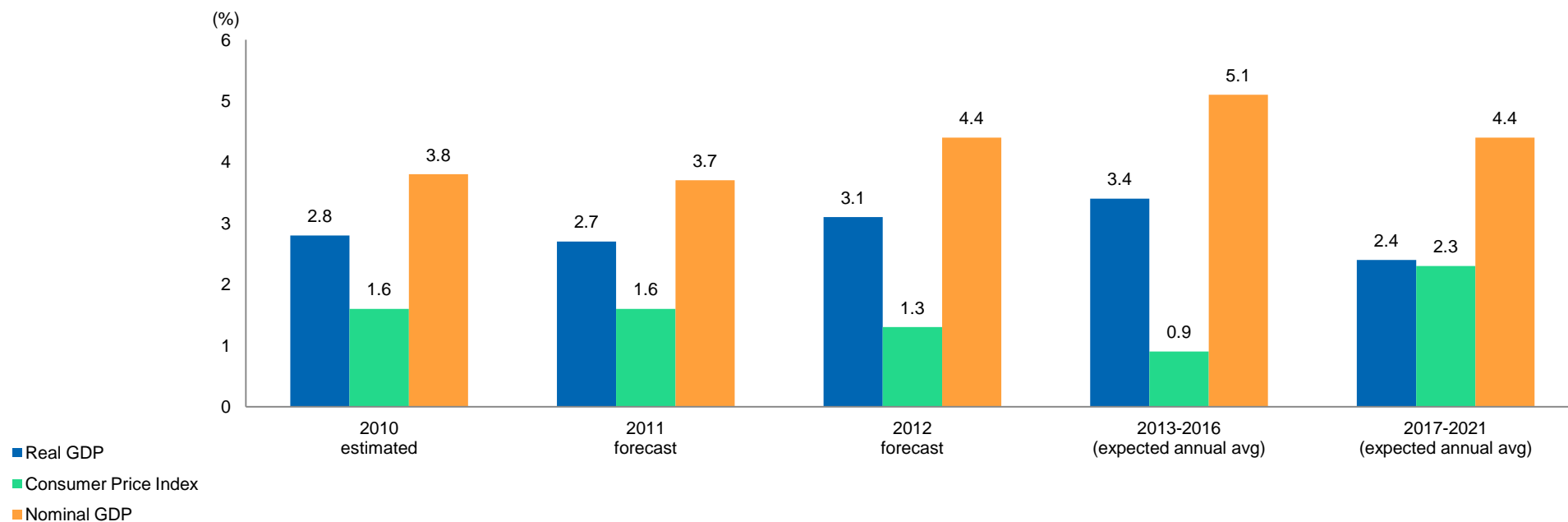
U.S. Fiscal Policy — The Past and Projections of the Future

- The current fiscal situation is the result of a decade of decisions that take reduced tax revenue as a percentage of GDP to the lowest level in 60 years while raising spending to the highest level in over 60 years.
- The situation is simply untenable without higher revenue AND lower spending.
- If no action is taken, we believe the situation will get even worse in the years ahead as the population ages and entitlement spending balloons further.



As of January 2010
 All fiscal years ending 9/30 (e.g., fiscal year 2009 ended 9/30/09)
 Source: Congressional Budget Office baseline projections. Projections are subject to change.

Assumptions Underlying Deficit Forecasts Appear too Rosy



Calendar Year Average

Three-month Treasury Bill	0.1	0.3	1.1	3.6	4.4
Ten-year Treasury Note	3.2	3.4	3.8	4.7	5.4
Unemployment Rate (%)	9.6	9.4	8.4	6.4	5.2
Nominal GDP (\$B)	14,649	15,184	15,858	19,362 ¹	24,064 ²

As of January 2011

¹ Value for 2016

² Value for 2021

Source: Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2011 to 2021*, p. 29.

Estimated and forecasted data are not a promise or guarantee of future results and are subject to change.

Assumptions Regarding Income and Outlays are Questionable

- Recoveries from financial crises have been somewhat lethargic across a range of countries in the past.
- History offers few parallels to the current situation, making economic growth and unemployment difficult to predict with confidence in a period of sustained deleveraging and re-regulation.
- Perhaps most importantly, the forecasts currently used to project deficits leave little room for negative exogenous events including a bad outcome in Europe.
- The Congressional Budget Office (CBO) is required to assume that all laws scheduled to expire are not extended. Hence, revenue assumptions tend to be too high even while expense assumptions tend to be too low.

	Actual		Projected		
	2000 – 2009 (%)	2010 (%)	2011 (%)	2012 (%)	2013 – 2021 (%)
Total Revenues	1.4	2.7	3.1	14.7	7.6
Total Outlays	7.5	-1.8	5.0	0.3	5.1
Total Outlays Excluding Net Interest	8.5	-2.2	4.8	-1.0	4.1

As of January 2011

Source: Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2011 to 2021*, p. 7.

Projected data are subject to change.

The Immediate Road Ahead of the U.S.

- U.S. policymakers appear to have backed themselves into a political corner of their own choosing by making rigid pledges with little room for compromise.
- The potential damage from a downgrade of the U.S. credit rating from AAA is underappreciated and has implications for:
 - Consumer spending and business investment
 - The U.S. dollar's reserve currency status, and
 - How the global financial system handles collateral, how banks' risk-weighted assets are assessed, and which investors can own Treasuries.
- Failing to raise the debt ceiling could push the economy to new lows.
- Actual default could have severe consequences.