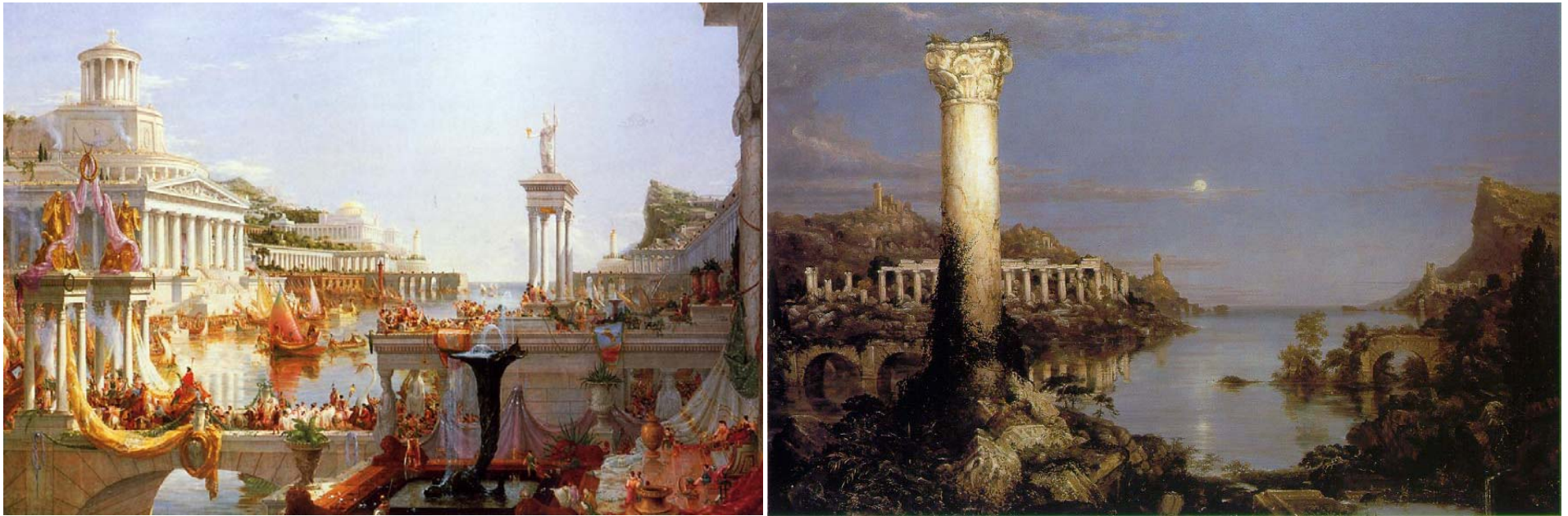


A Financial Greek Tragedy and a European Farce: The Crisis of the Eurozone in Historical Perspective

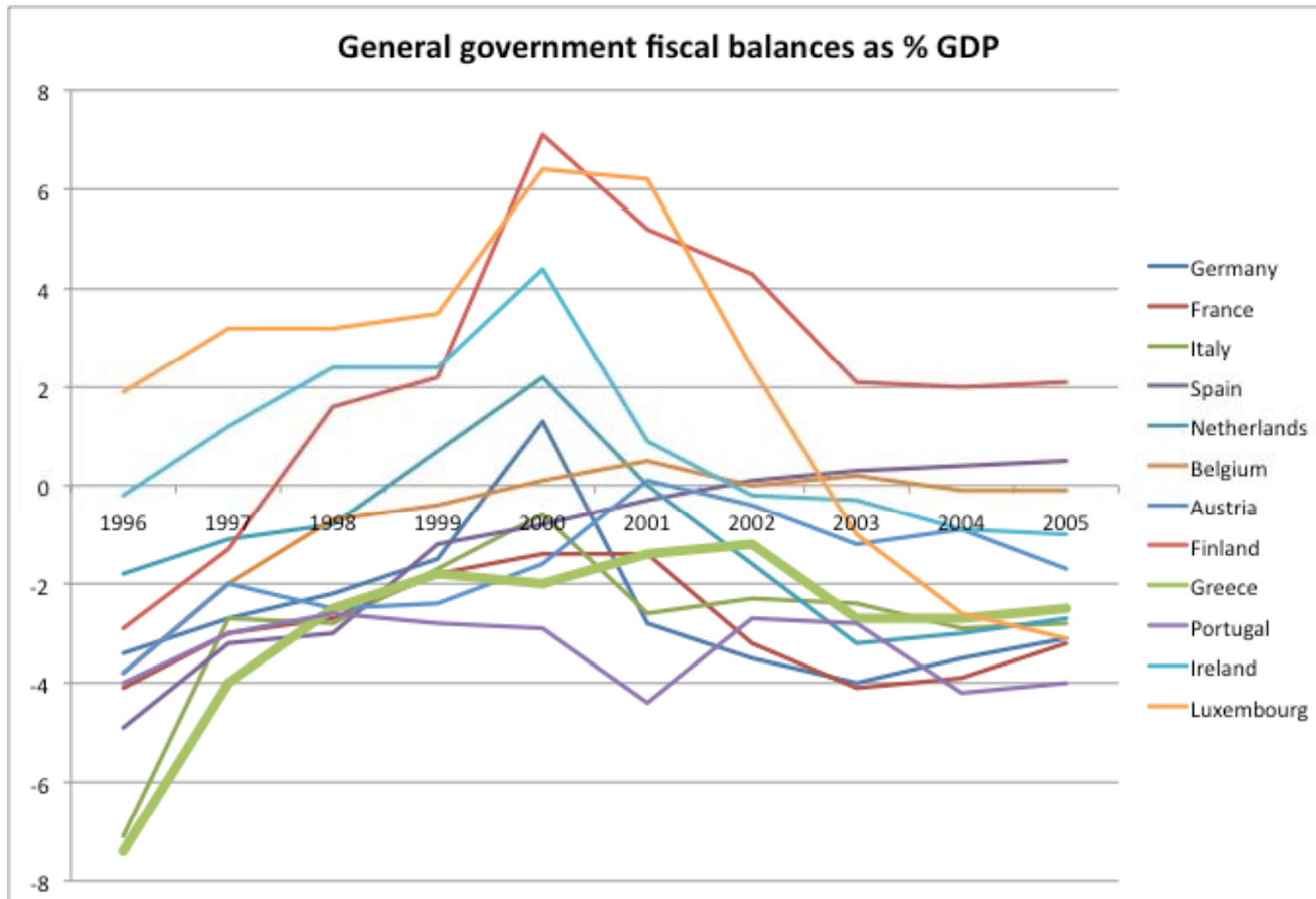


Athens, June 2010

Some prophetic words

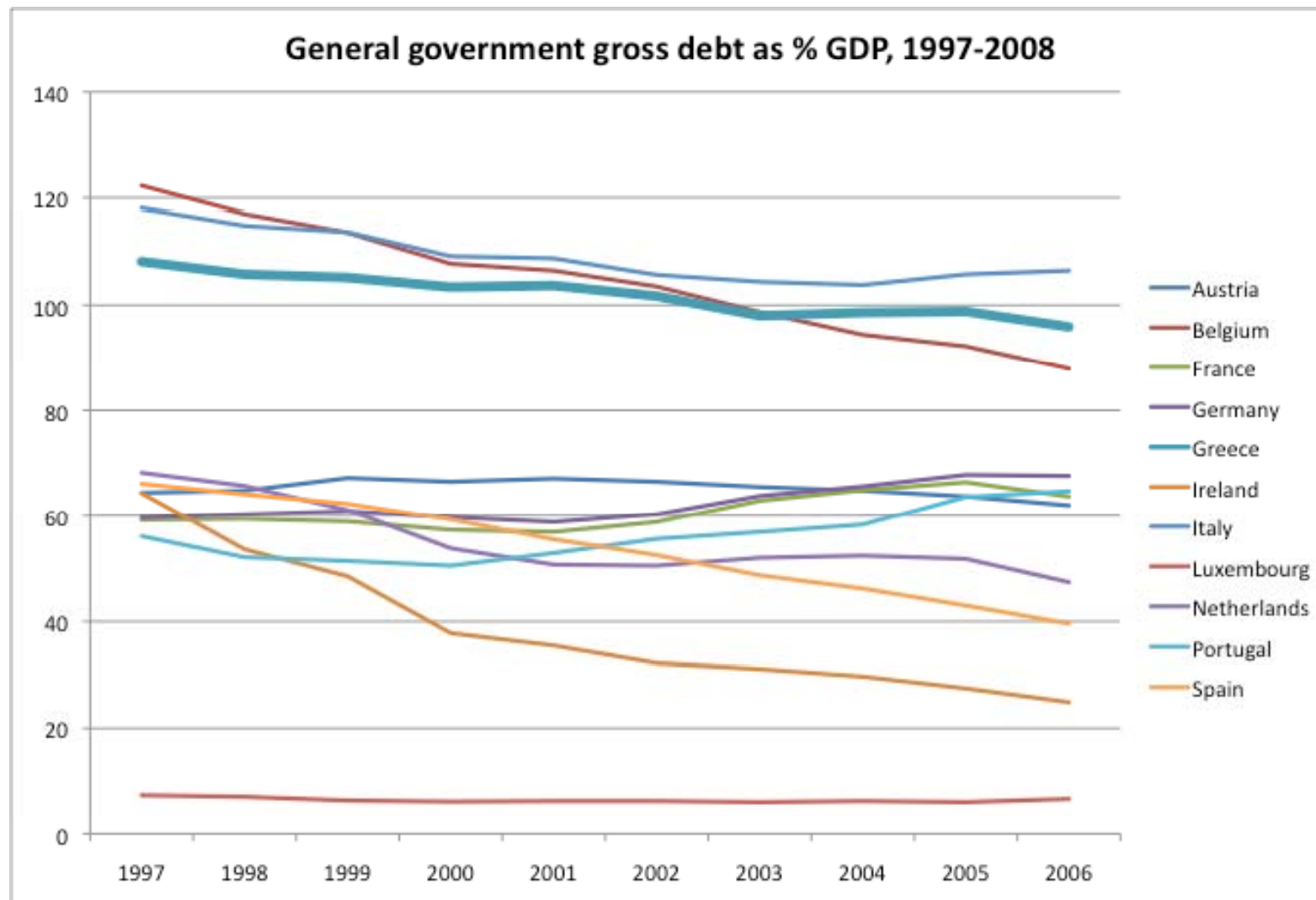
- “... History offers few examples of successful [fiscal] adjustments on the scale necessary in certain European countries today. What it does offer are several examples of monetary unions disintegrating when fiscal strains became incompatible with the unpleasant arithmetic of a single currency. ... EMU could degenerate—not overnight, but within the next decade.” —*Foreign Affairs*, March/April 2000

The illusion of fiscal convergence



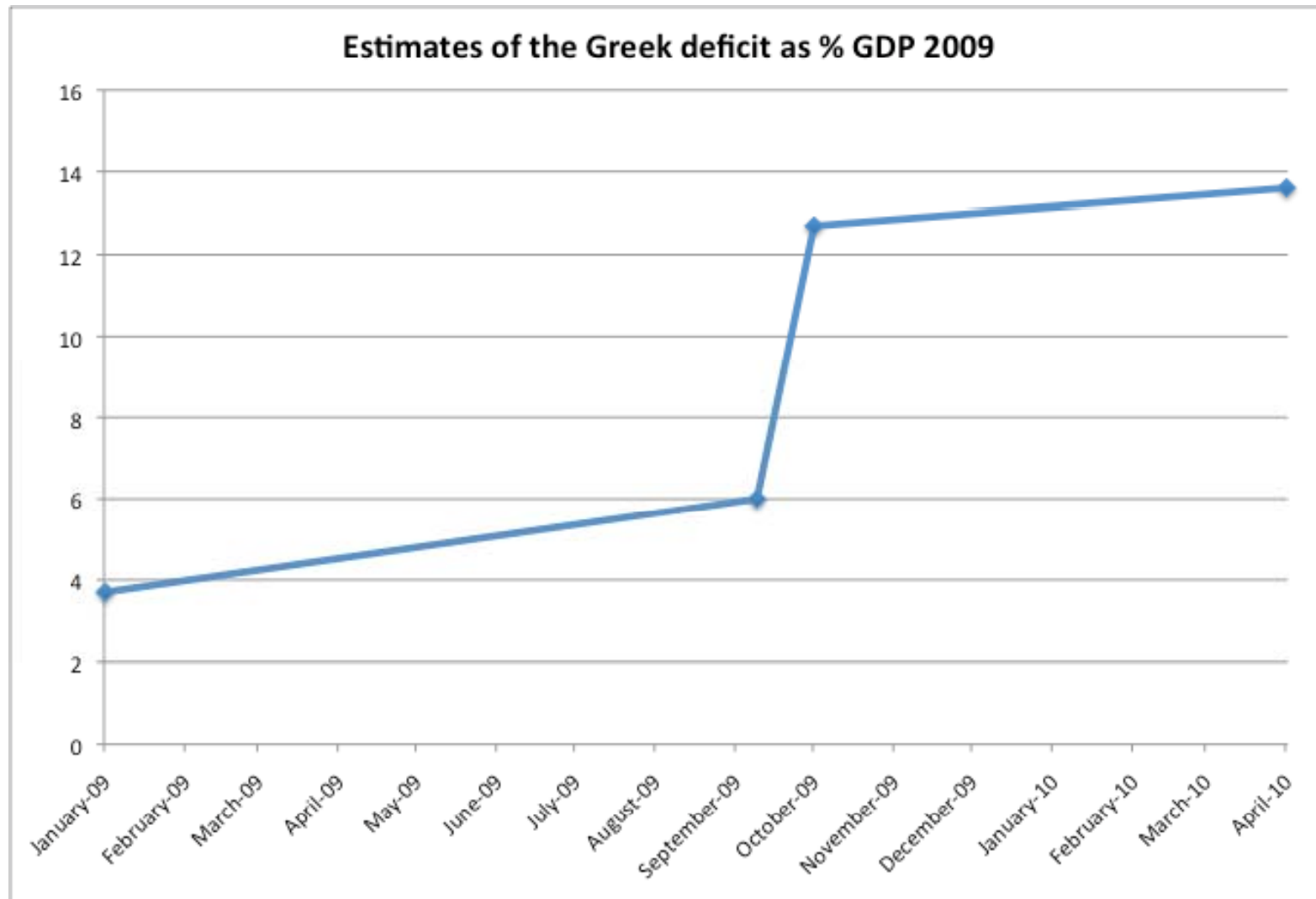
Source: IMF

The limits of fiscal convergence



Source: Eurostat

The impact of the (political) crisis



The ECB's secret bailout (1)

Total Borrowing From the ECB (Through March)

Country	Peak (€Bn)	Peak % NGDP	Peak % Banks Assets	Now (€Bn)	Now % NGDP	Now % Bank Assets	Repaid (€Bn)	% of Peak Repaid
Ireland	140	85%	8%	81	50%	5%	59	42%
Greece	67	27%	13%	67	27%	13%	0	0%
Netherlands	86	15%	4%	63	11%	3%	24	27%
Belgium	64	19%	5%	36	11%	3%	28	43%
Portugal	16	10%	3%	15	9%	3%	1	4%
Germany	294	12%	4%	207	9%	3%	86	29%
Spain	94	9%	3%	90	9%	3%	3	4%
Austria	41	15%	4%	20	7%	2%	21	51%
France	199	10%	3%	117	6%	1%	82	41%
Italy	50	3%	1%	25	2%	1%	25	50%
Finland	4	3%	1%	2	1%	1%	2	44%
Euroland Total*	897	10%	3%	725	8%	2%	171	19%

*Includes Slovenia, Slovakia, Malta

Source: Bridgewater

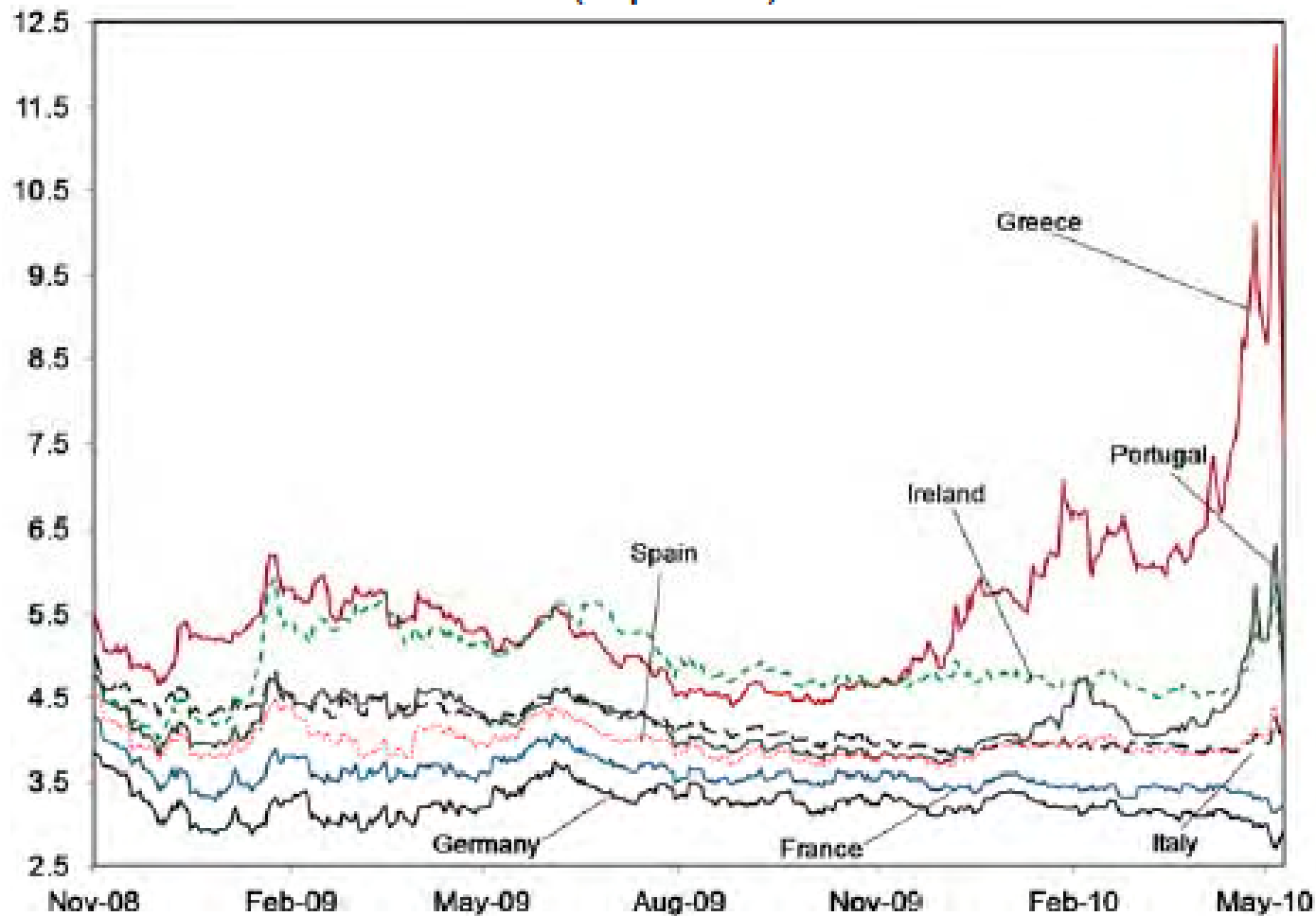
The ECB's secret bailout (2)

Banks' Financing of Peripheral European Deficits via the ECB			
1Q 2009 - 1Q 2010	Greece	Portugal	Spain
% Govt Bond Issuance bought by Domestic Banks	36%	79%	64%
% Domestic Bank Purchases Funded by the ECB	100%	37%	0%
% Government Deficit Indirectly Funded by ECB	36%	29%	0%

Source: Bridgewater

The attack of the bond vigilantes

Figure 8. Bond Yields in Selected Euro Area Economies
(In percent)

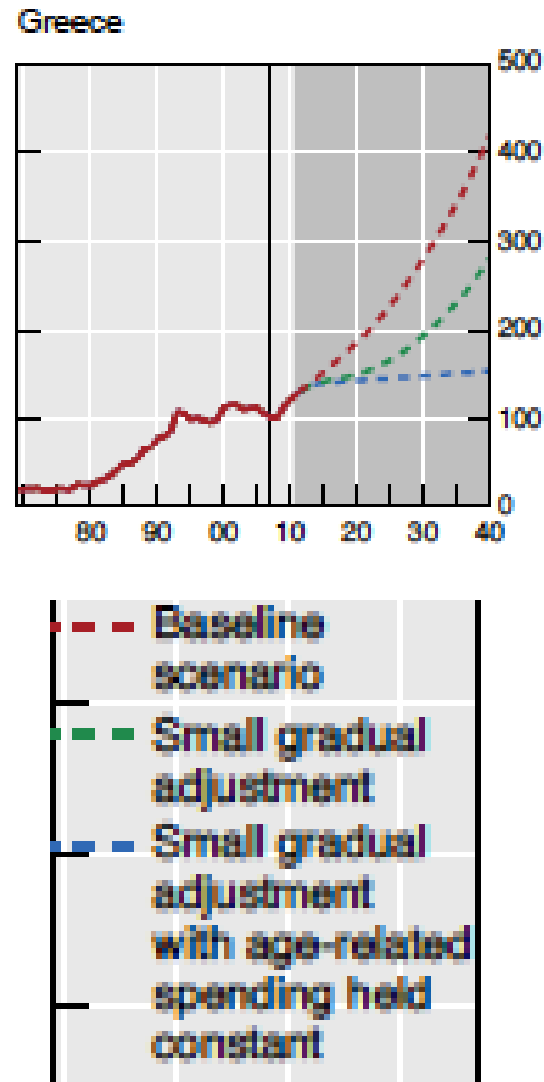


Source: DataStream (10-year maturity).

Papandreou's lament

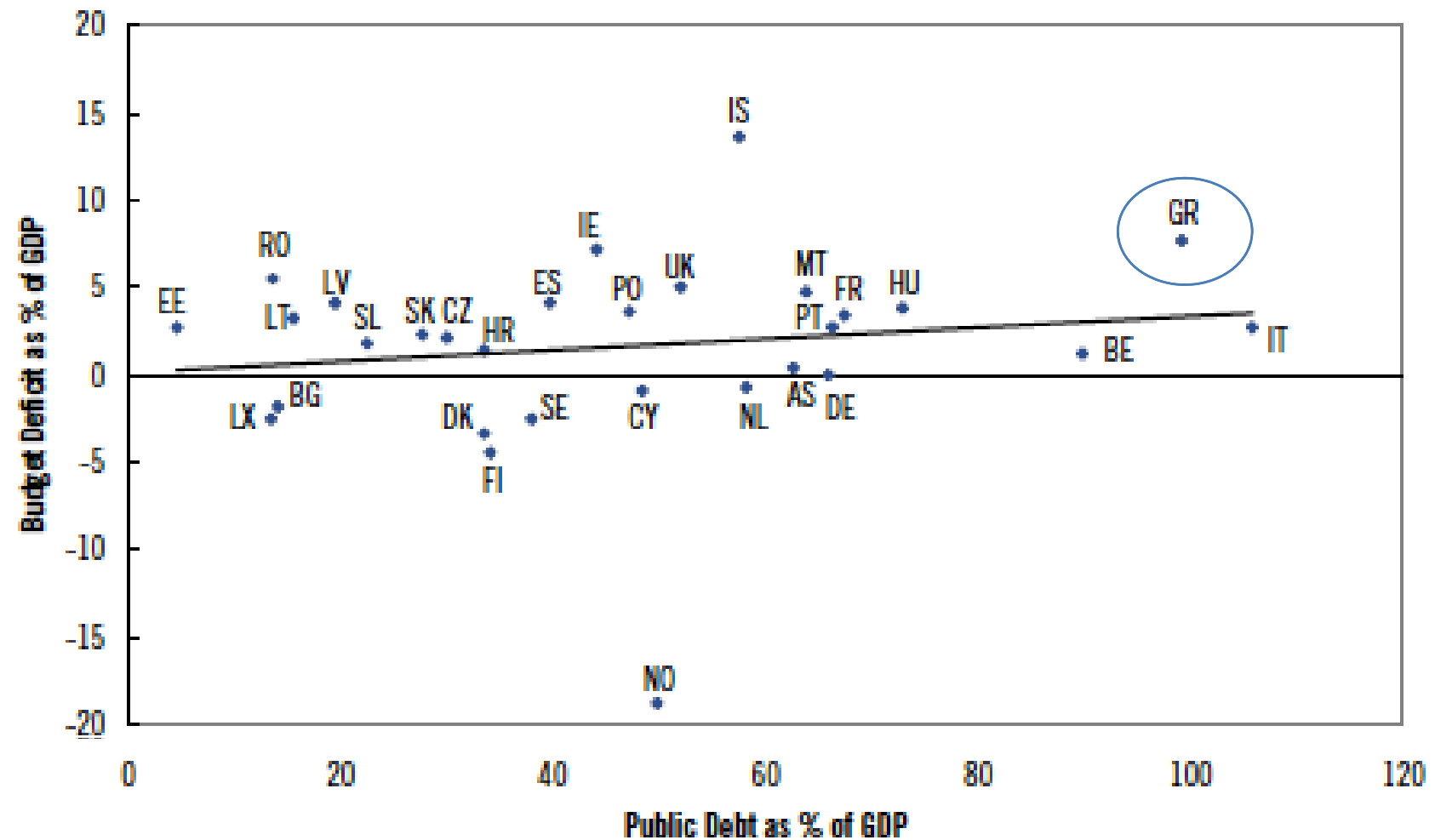
- “Because of the 2008 crisis, all the market players have become much more risk-averse, so they are on a hair trigger” ... Today’s market players are “like an animal that has been wounded, and so it recoils at the slightest motion. So any rumor about you can become a self-fulfilling prophecy.” These markets “are not even human anymore. Some of these things are computerized, and they just go into automatic mode” when they see a hint of trouble. ... Today “every Greek from age 3 to 93 knows what a ‘bond spread’ means. ‘What’s the spread today? Are they widening?’ People had never heard about this before ...” —*New York Times*, May 11, 2010

Rumors ... or projections?



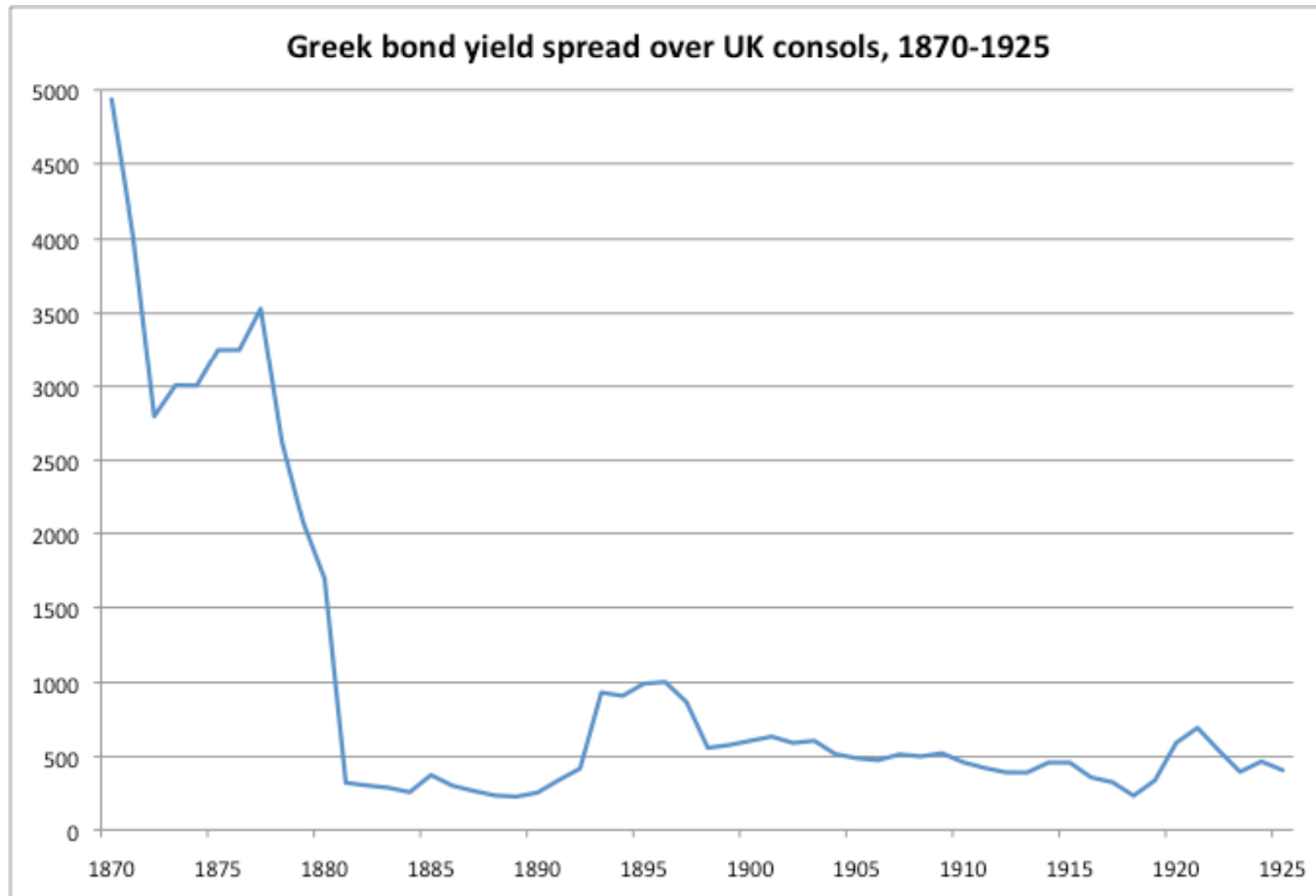
Source: BIS

Figure 19. Europe – General Government Deficit and Debt (Pct. of GDP), 2008



Note: Negative budget deficit means a surplus. Sources: Eurostat and Citi Investment Research and Analysis

Not to mention lessons of history



The Greek bailout and its conditions

- €110bn (c. 1/3 of Greece's outstanding debt), €30bn from IMF, rest from Eurozone
- Greece promises a fiscal consolidation of 11% of GDP over 3 years, to reach a 3% deficit by 2014, down from 13.6% in 2009
- Cuts of 5¼% of GDP over three years
 - Public sector incomes down 20% this year
 - Retirement age from 58 to 65
 - Pension from 90% to 70% of final salary
- Tax hikes to yield 4% of GDP

Is this really do-able?

- Debt is forecast to peak at 150% of GDP
- GDP is set to shrink -4% this year and -2.6% next year
- 21.5% of government revenues already going on interest payments
- Unemployment is 11.7%

Who really got bailed out?

Figure 16. Claims of European Banks on Greece, USD Bn, September 2009

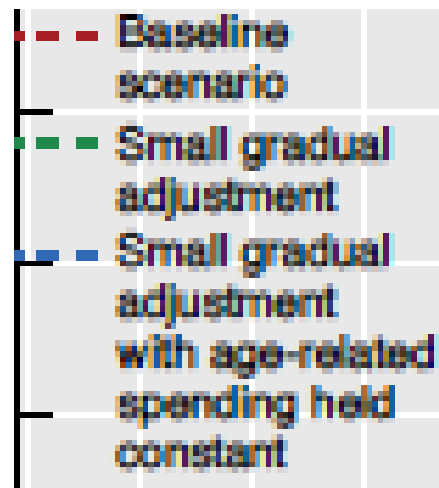
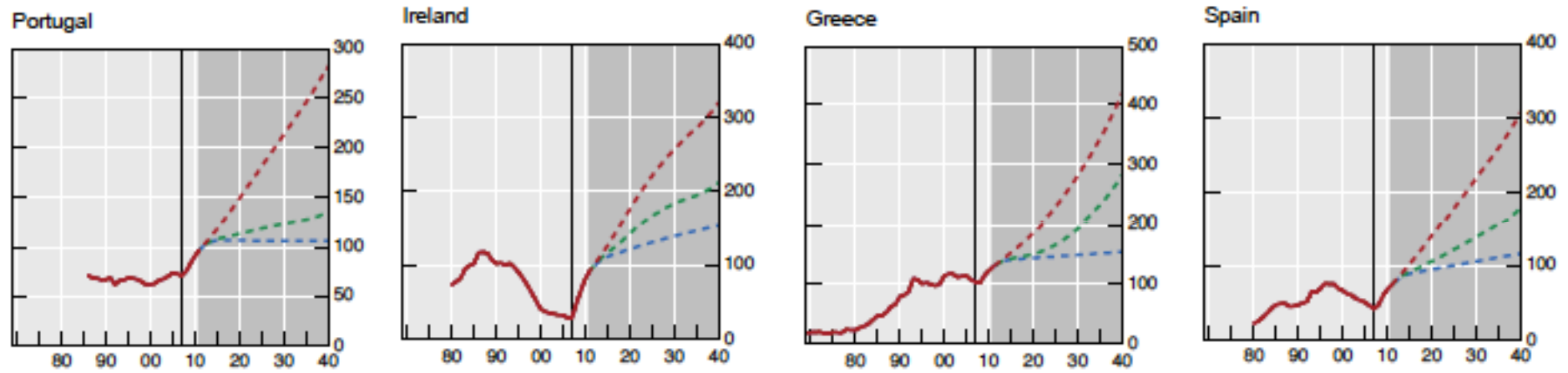
	Q3 2009		Q4 2009	
	Total USD Bn	% of European Banks Total	Total USD Bn	% of European Banks Total
European Banks	272.4		193.1	
France	78.9	29.0	78.8	40.8
Switzerland	78.6	28.9	3.7	1.9
Germany	43.2	15.9	45.0	23.3
United Kingdom	12.5	4.6	15.4	8.0
Netherlands	12.1	4.4	12.2	6.3
Portugal	10.5	3.8	9.8	5.1
Ireland	8.7	3.2	8.6	4.5
Italy	8.6	3.1	6.9	3.6
Belgium	8.3	3.0	3.8	2.0
Austria	6.3	2.3	4.8	2.5
Spain	1.2	0.4	1.2	0.6
Sweden	1.0	0.4	0.7	0.4
Turkey	0.5	0.2	0.3	0.2

Note: European banks refer to domestically owned banks of European countries that report claims on an ultimate risk basis (i.e. Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey and the United Kingdom). Sources: BIS (2010), <http://www.bis.org/statistics/consstats.htm>, Table 9D, and Citi Investment Research and Analysis

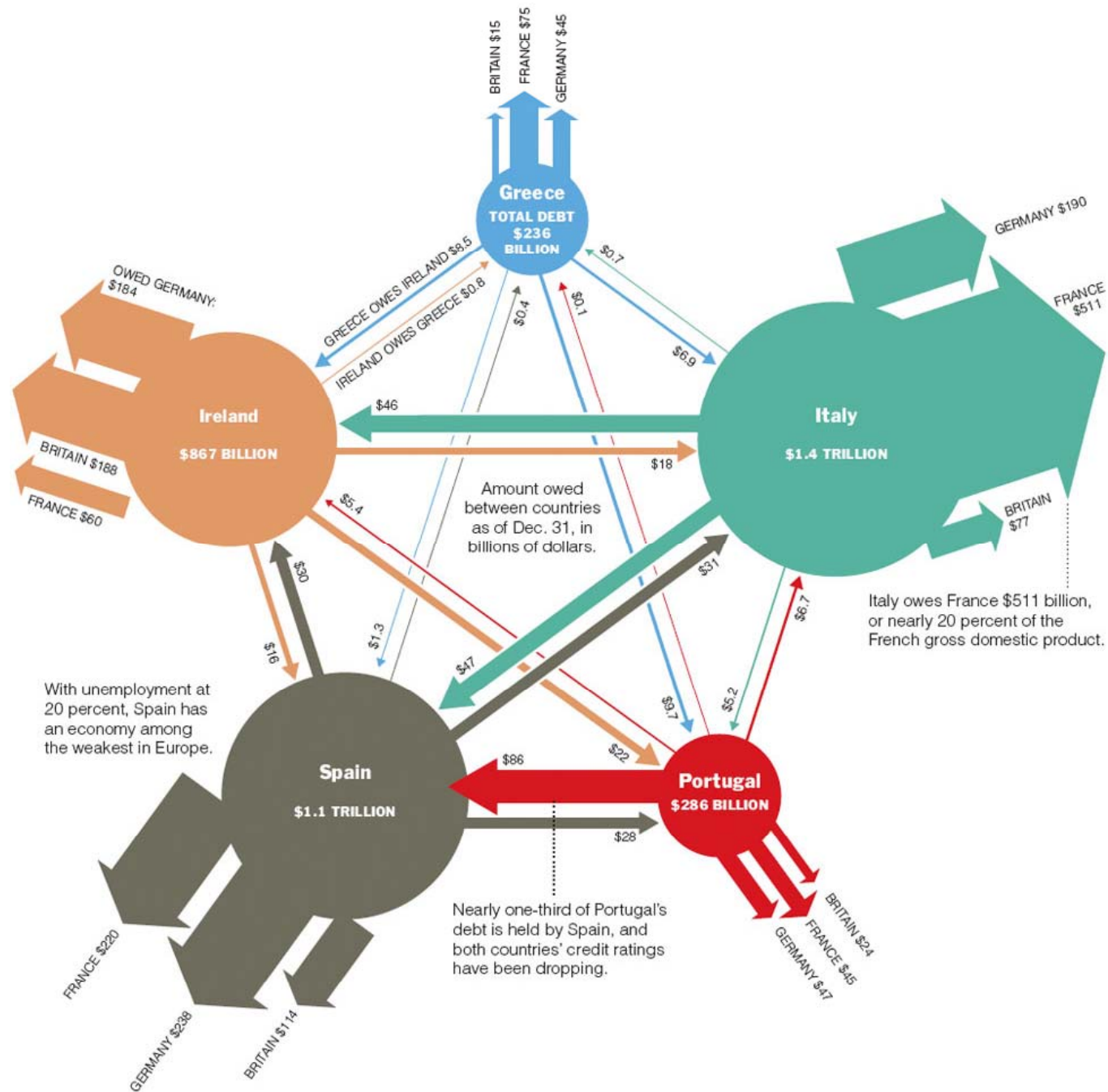
And who bails out ... the bailers?

Impact of Euro Greek Lending Program on Sovereign Bond Issuance through End of Year, Euro Bn			
Country	Funding for Greece	Funding for Deficit	Increase in Expected Net Issuance
Germany	8.4	62	14%
France	6.1	56	11%
Spain	3.6	65	5%
Italy	5.4	51	11%
Netherlands	1.7	20	9%
Belgium	1.1	5	21%
Austria	0.8	13	6%
Ireland	0.5	11	4%
Portugal	0.8	8	9%
Finland	0.5	7	8%
Other EU	1.2	-	-

Greece in perspective: The “PIGS”



Source: BIS

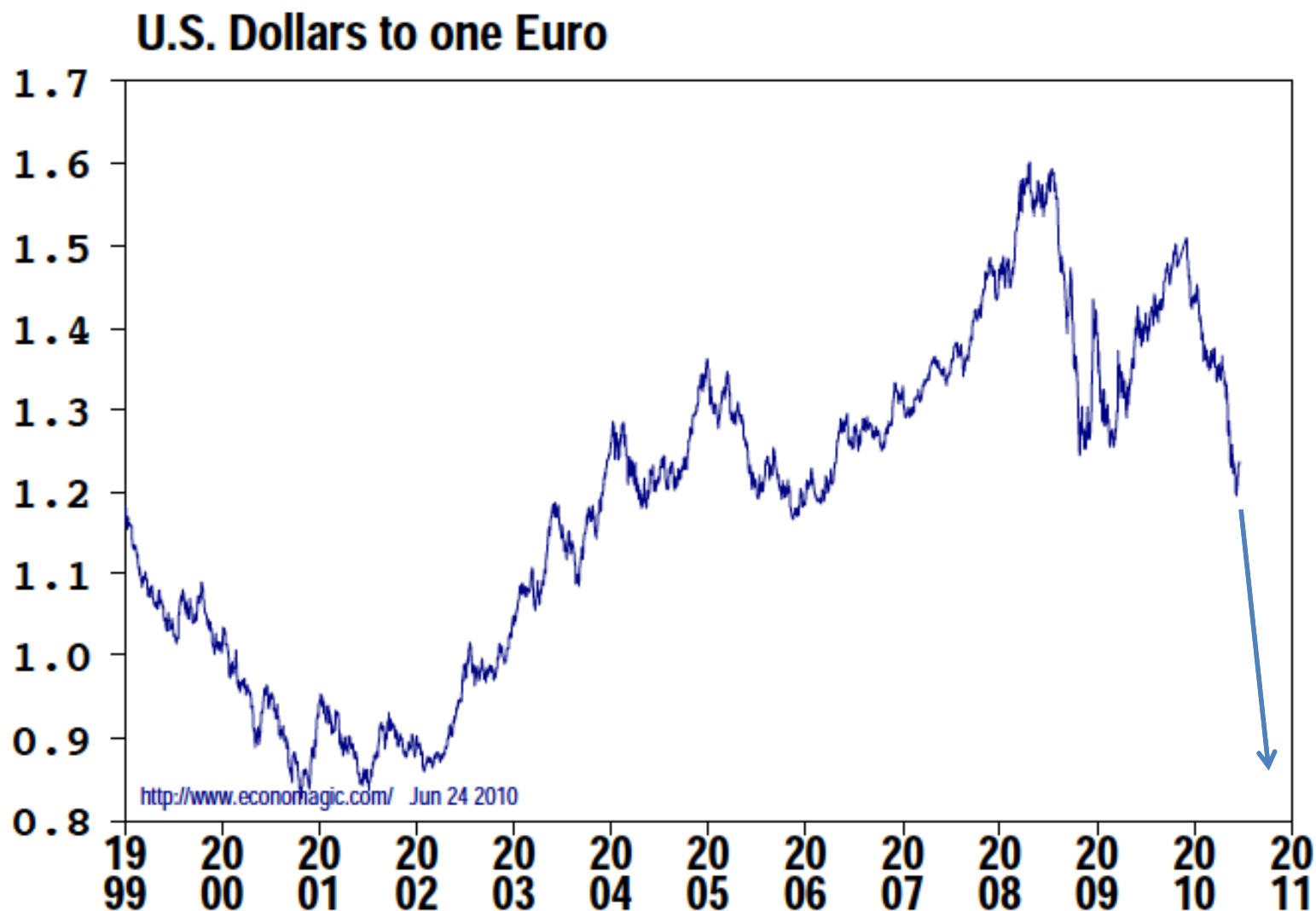


Source:NYT

Hence the need for “Euro TARP”

- “PIGS” and others can borrow up to €750bn
 - EU emergency balance of payments facility fund (+€60bn to €110bn)
 - Contributions from the individual Eurozone countries (€440bn) – from off-balance-sheet vehicle
 - The IMF (€200bn)
- ECB to buy bonds in the secondary market “to ensure depth and liquidity” but plans to sterilize

The obvious implications



Now let me make you feel better

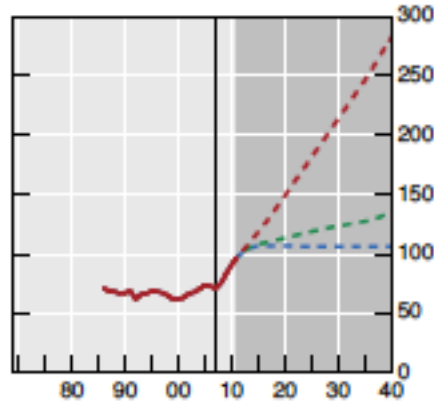


The future's cloudy. Dana Summers/Orlando Sentinel

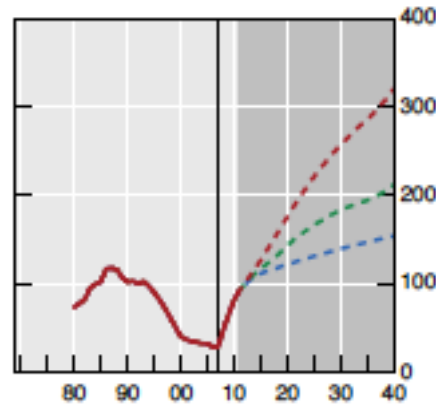
<http://www.orlandosentinel.com/news/opinion/orl-cartgal-dana-summers.0.2819642.cartoongallery>

Beyond the “PIGS” ...

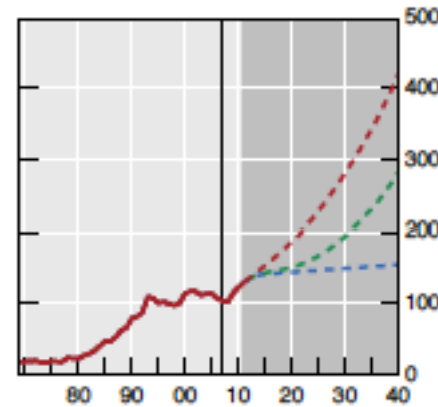
Portugal



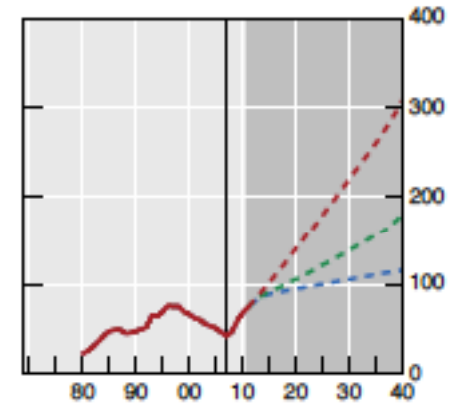
Ireland



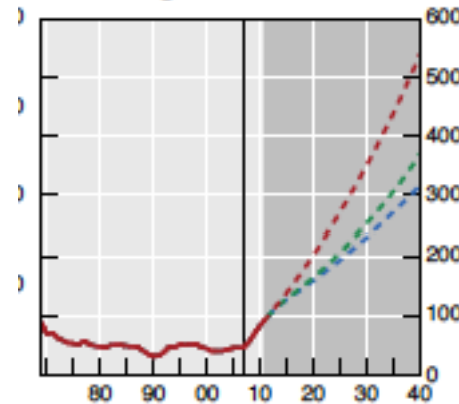
Greece



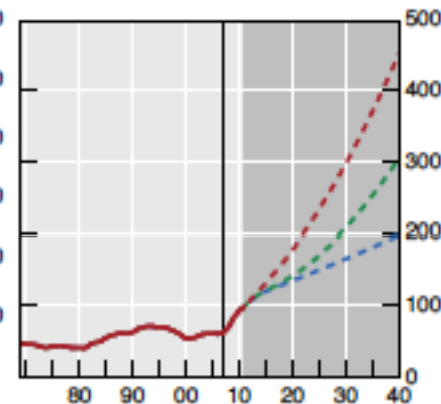
Spain



United Kingdom



United States



Source: BIS

PIGS

'R'

US

The metrics of doom (1)

	Net_Debt	Cyclically_Adjusted_Primary_Balance
Italy	97.4	1.9
Japan	96.5	-5.6
Greece	86.1	-6.0
Belgium	81.3	0.4
Hungary	58.8	2.3
United_States	56.4	-7.3
Portugal	55.6	-2.8
France	53.1	-3.7
Germany	50.2	0.3
United_Kingdom	46.9	-6.8

The metrics of doom (2)

	Gross debt as % GDP	Fiscal adjustmen t 2010- 2020 to attain 60% of GDP by 2030
Japan	227.0	13.4
United_Kingdom	81.7	12.8
Ireland	75.7	11.8
Spain	69.6	10.7
Greece	115.0	9.0
United_States	93.6	8.8
Portugal	81.9	6.5
France	85.4	6.1
Belgium	102.7	5.6
Austria	74.9	5.1

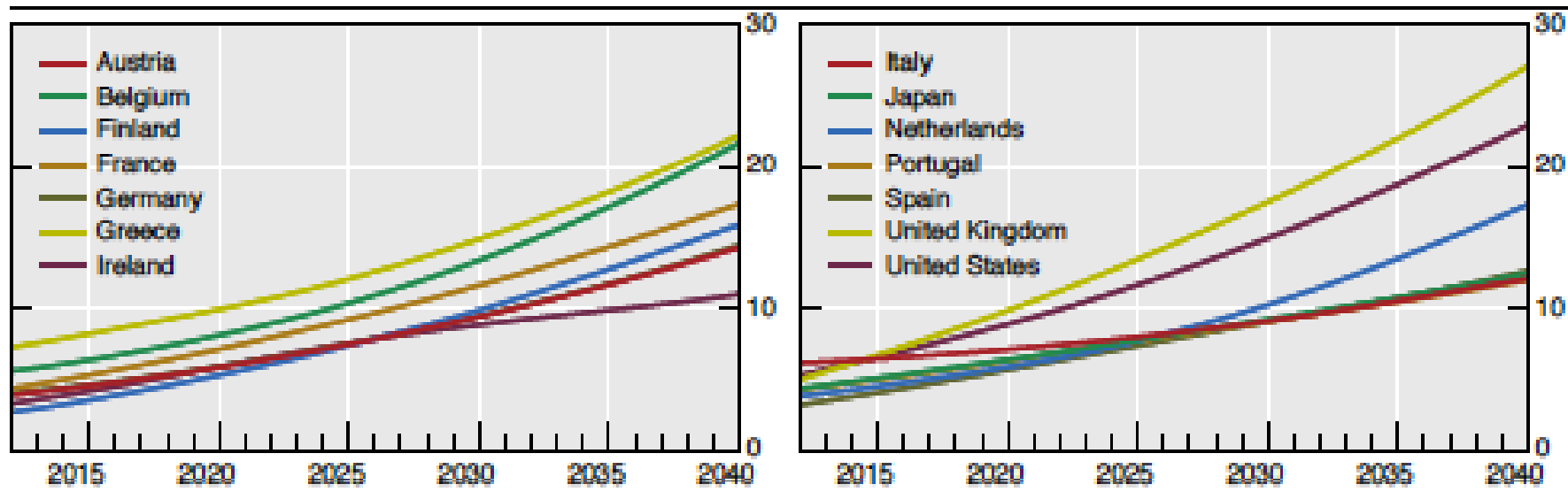
NB Japan's target: 80%

Source: IMF

The metrics of doom (3)

Projected interest payments as a fraction of GDP

In per cent



Sources: OECD; authors' projections.

Memo: CBO extended baseline for total federal revenues in 2040: 22.3% of GDP

Source: BIS

A crisis of Western public finance

- Demographic trends (ageing) +
- Over-generous welfare states +
- Insufficient taxation +
- Democratic gridlock
=
- Structural deficits
- Excessive leverage in the household and financial sector +
- Excessively loose monetary policy
=
=>
- A financial crisis
- Big bailouts and lower tax revenues

In theory, 7 ways out

- 1 Higher growth
- 2 Lower interest rate on the public debt
- 3 Bailout
- 4 Austerity
- 5 Inflation
- 6 Default
- 7 Asset sales

In practice, Greece has chosen 2

~~1 Higher growth~~

~~2 Lower interest rate on the public debt~~

3 Bailout

4 Austerity

~~5 Inflation~~

~~6 Default~~

~~7 Asset sales~~

The U.S. is hoping for another 2

- 1 Higher growth
- ~~2 Lower interest rate on the public debt~~
- ~~3 Bailout~~
- ~~4 Austerity~~
- 5 Inflation
- ~~6 Default~~
- ~~7 Asset sales~~

Lessons of history (1)

- What Greece and other South European states need to do next
 - Reduce marginal tax rates on income and corporate profits to stimulate growth
 - Incentivize investment and job creation in the private sector
 - Strengthen rule of law
 - Clamp down on public sector waste and corruption

What the Greek economy needs

- Not just

LITOTIS
(AUSTERITY)

What the Greek economy needs

- Not just
- Also

LITOTIS

(AUSTERITY)

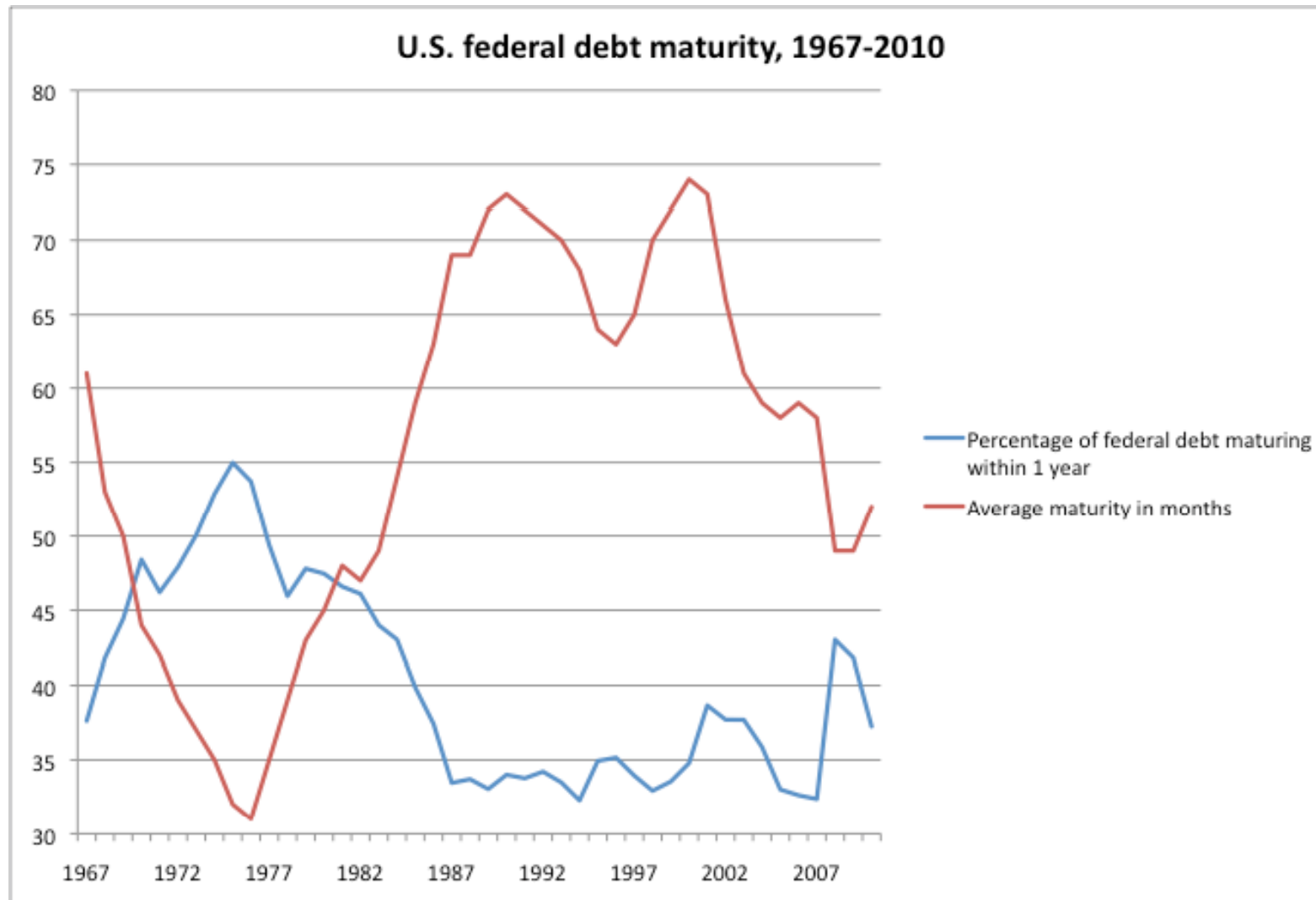
ELPIDA

(HOPE)

Lessons of history (2)

- What the U.S. needs to fear
 - With relatively short debt term-structures and bond vigilantes, nominal yields may well rise *ahead* of inflation
 - That could mean *rising* real long rates
 - Which would be seriously negative for growth in highly leveraged economies
 - Leading to intense domestic political conflicts
 - And the liquidation of overseas military commitments

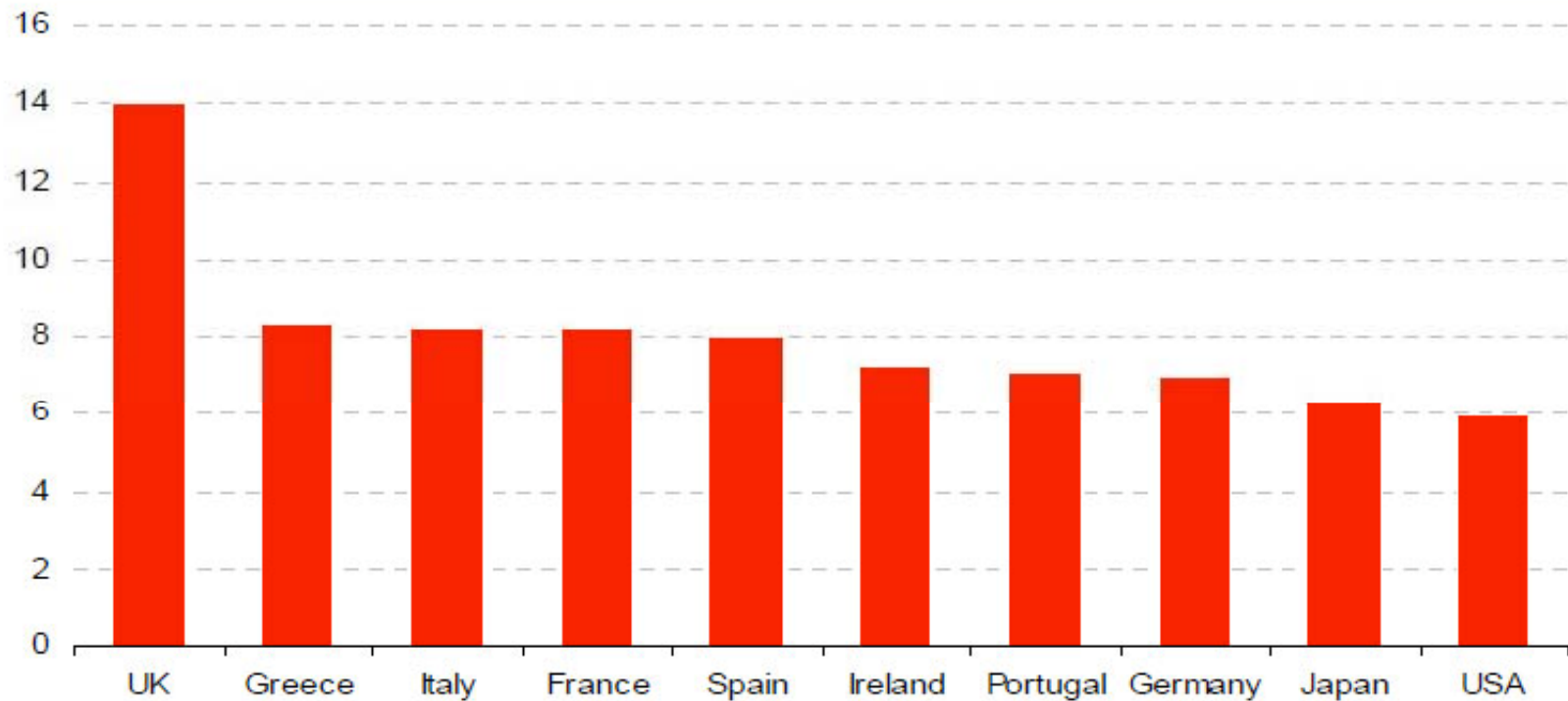
The rollover risk is real for the U.S.



Source: White House

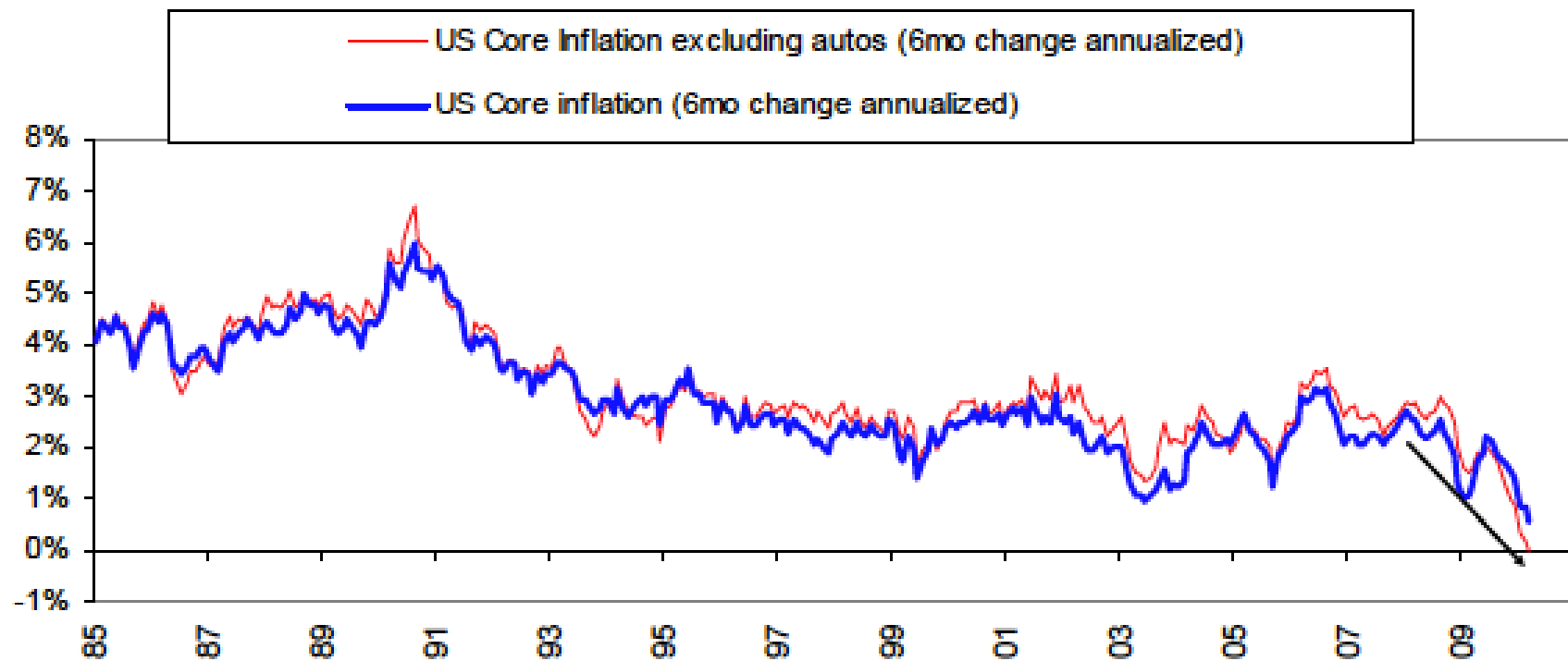
Look who's living in borrowed time

Greece isn't that different 2: its maturity of existing debt is one of the longest in the OECD (yrs)



Source: SG Cross Asset Research, Bloomberg

Inflation can't help

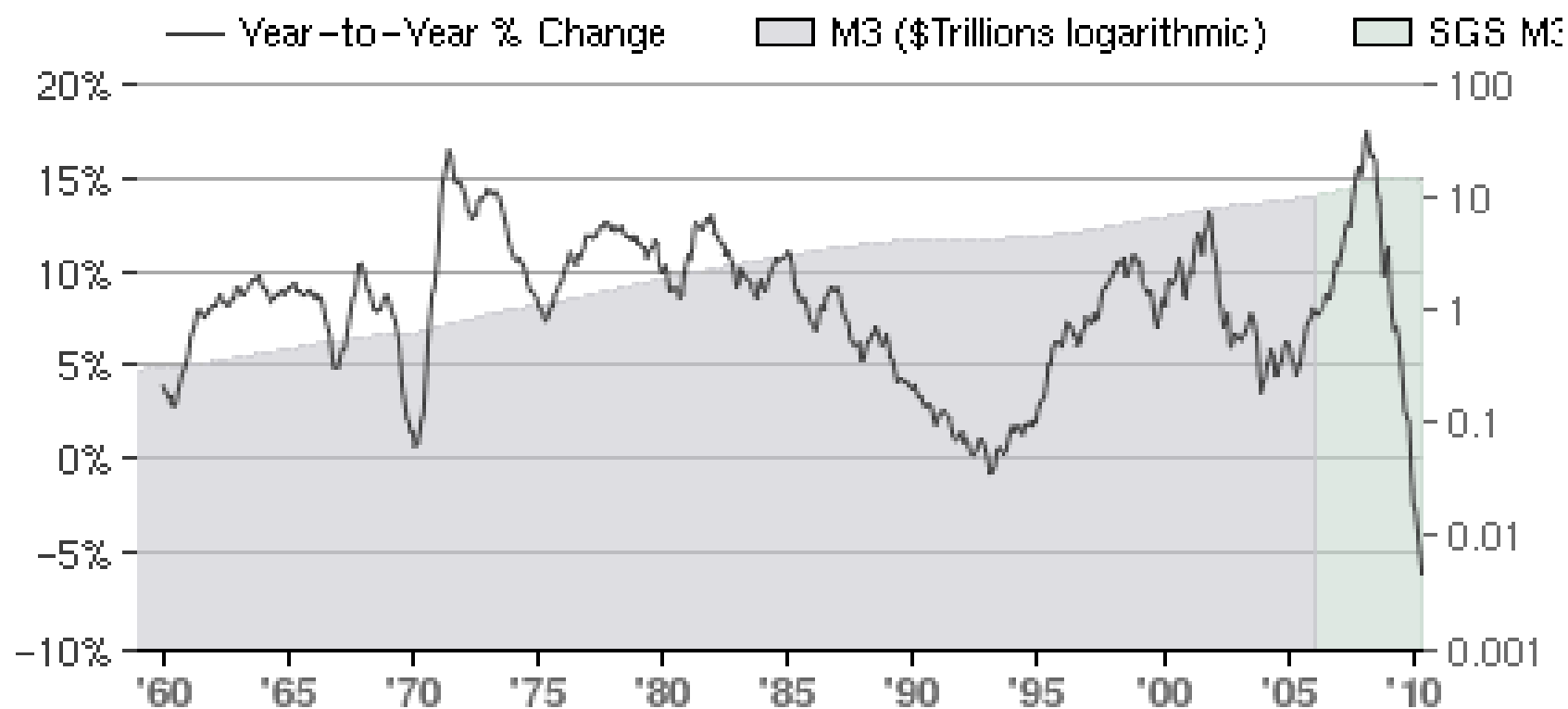


Source: Bridgewater

It's a monetarist contraction

M3 Money Supply with SGS Continuation

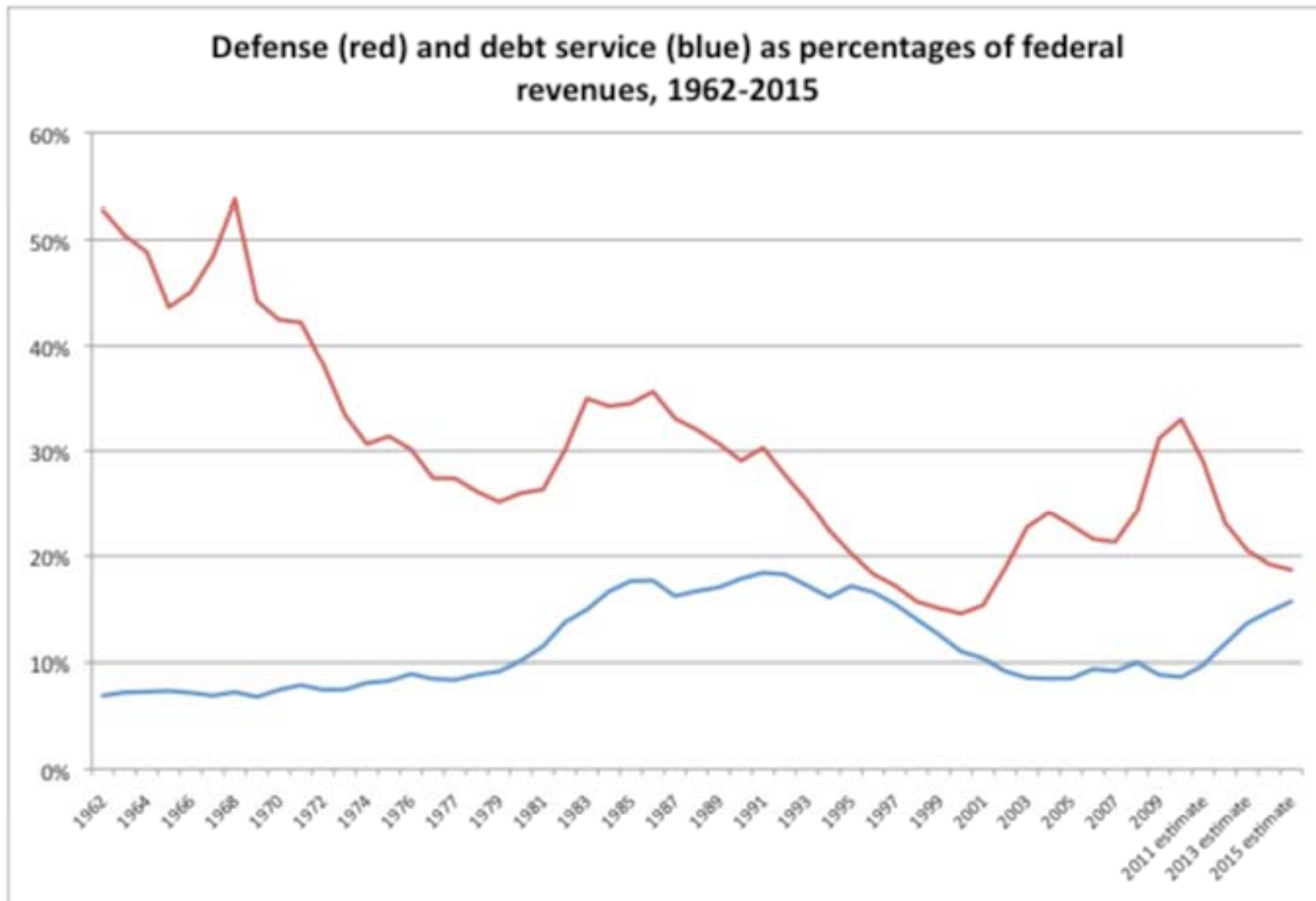
Mthly Avg. Seasonally Adj. Jan. 1959 - May 2010 (Source: St. Louis Fed)



Published: June 15, 2010

shadowstats.com

The big crossover is approaching



It's quite a short ride from here ...



... to here



Or from here ...



... to here



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