Fiscal pain, inflation, bail-out or default?

Long-term fiscal legacy of crisis and recession in advanced industrial countries

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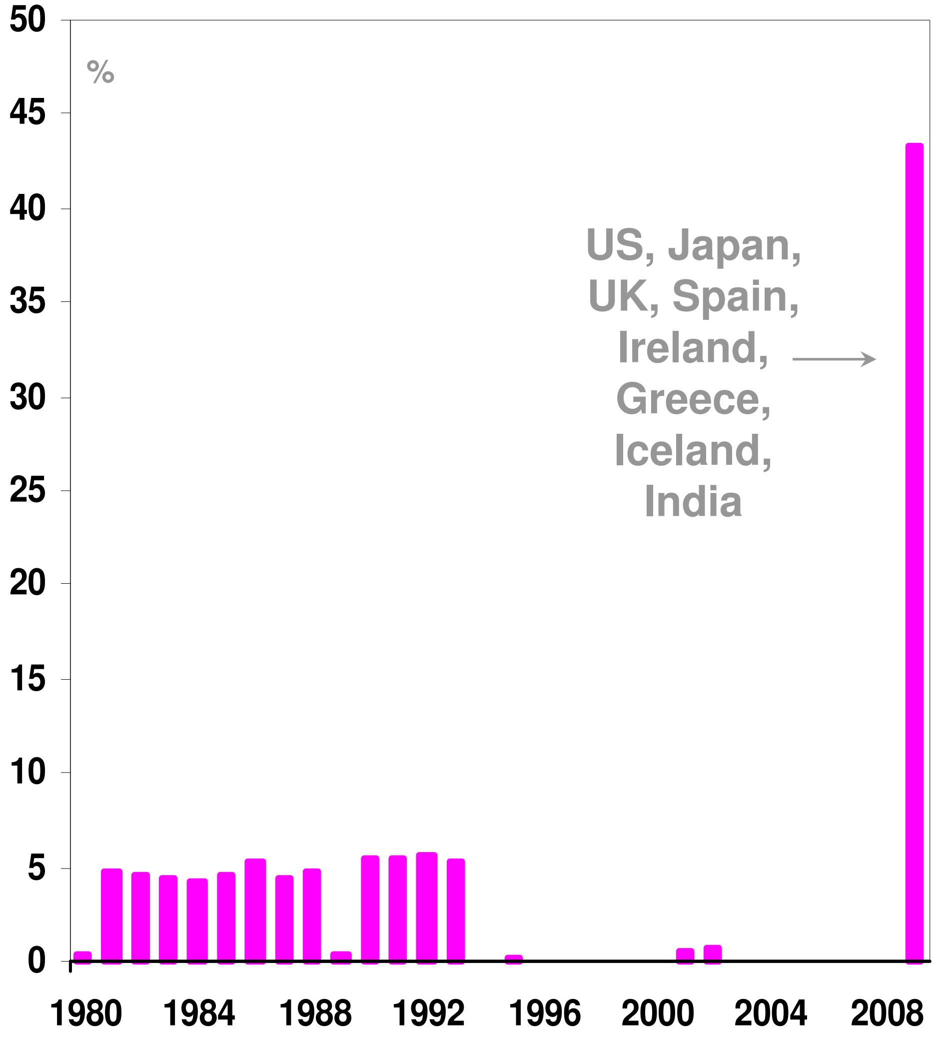
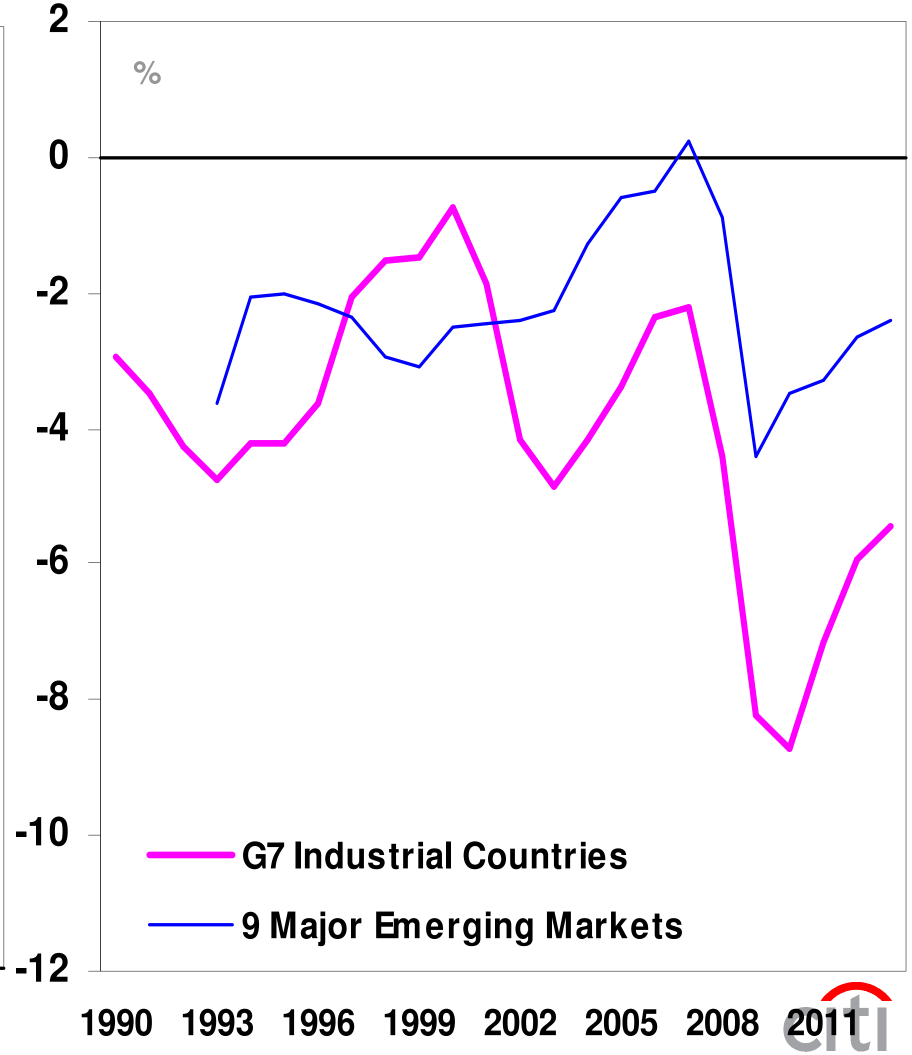
February 2010

Unprecedented Fiscal Deterioration Across Industrial Countries

Pct of Global GDP In Countries With Fiscal Deficit of 10% of GDP Or More

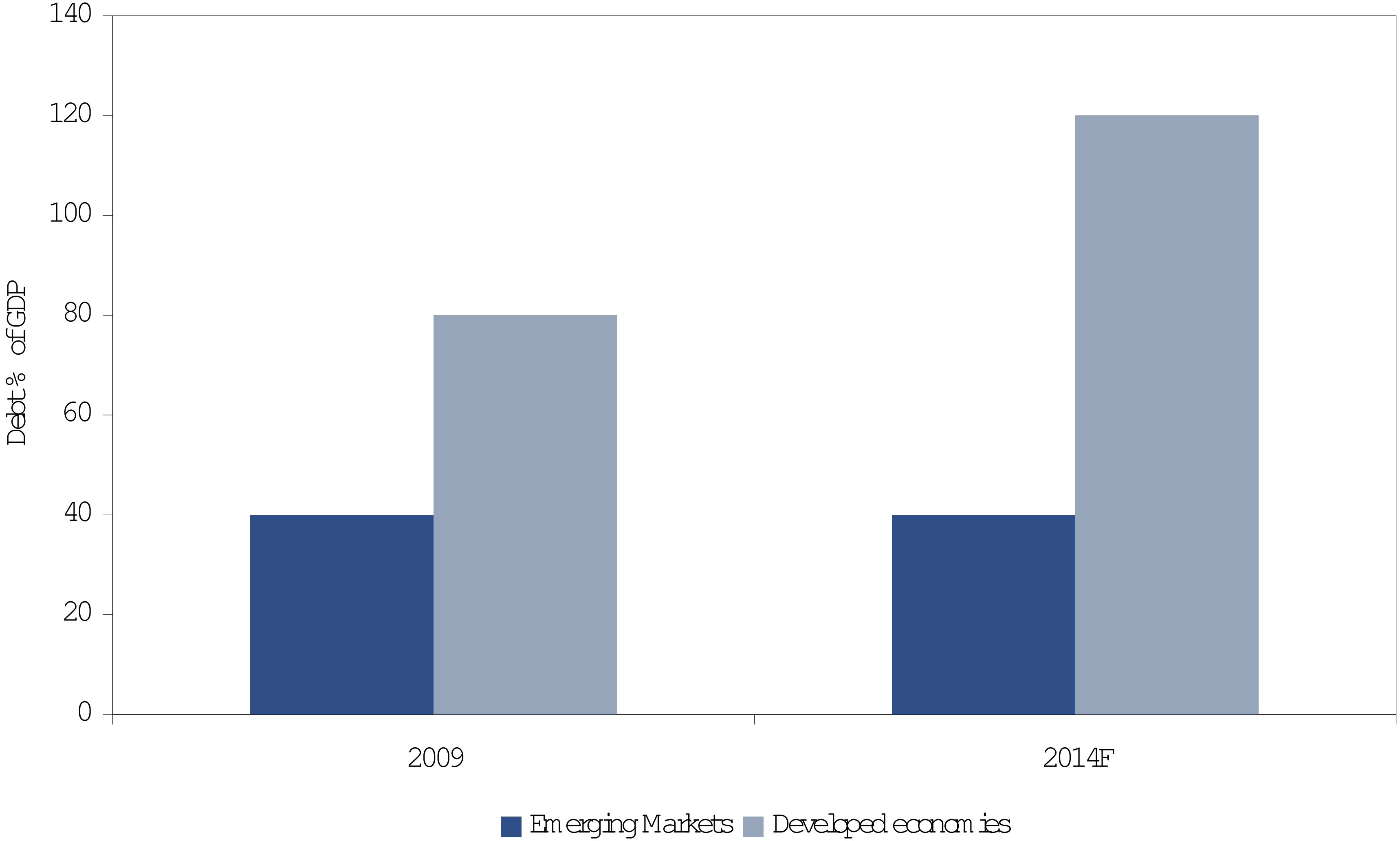


Fiscal Balances in Industrial Countries and Emerging Markets as Pct of GDP



Debt/GDP ratios: has “risk-free” shifted to emerging markets?

Public debt/GDP in 20 emerging economies and 20 developed economies



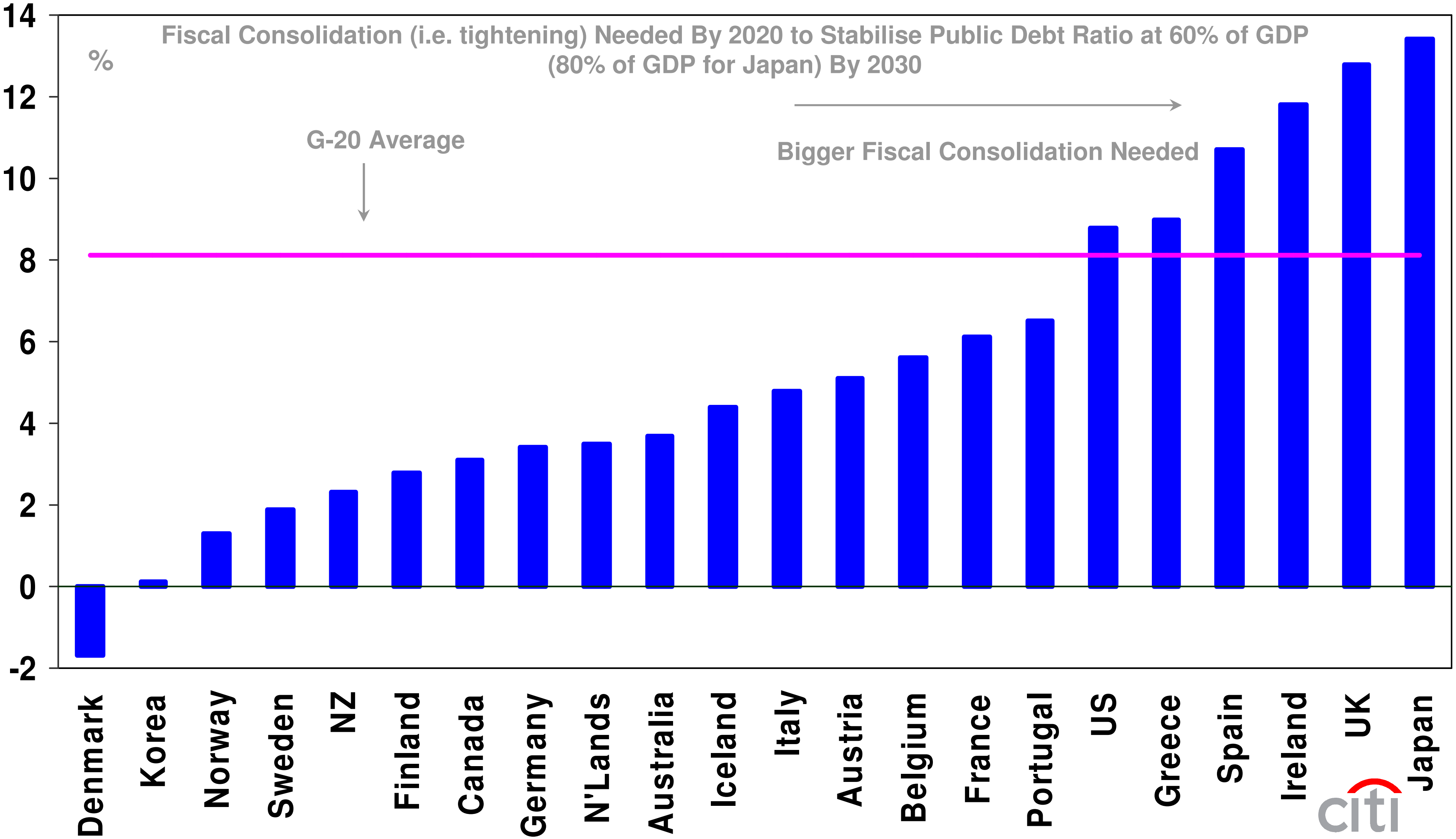
Source: IMF, Citi Investment Research and Analysis

Unsustainable public debt is not just a Euro Area problem

General Government Debt and Deficit Indices for Selected Countries, 2009. (% of GDP)				
	Gross Debt	Budget Balance	Primary Balance	Cyclically Adjusted Primary Balance
Greece	114.9	-6.4	-8.2	-6.1
Portugal	83.8	-6.9	-3.9	-2.2
Spain	59.3	-12.3	-8.5	-5.8
Ireland	65.8	-12.1	-11.6	-8.4
Italy	123.6	-5.6	-0.6	1.8
Belgium	101.2	-5.9	-2.1	0.4
Austria	72.9	-4.2	-2.1	-1.0
France	84.5	-7.0	-5.3	-3.9
Germany	77.4	-4.2	-0.9	0.1
Euro Area	81.8	-6.2	-3.4	-1.2
UK	71.0	-11.6	-10.2	-7.6
Latvia	33.2	-9.0	-7.6	-5.1
Hungary	85.0	-4.1	-0.4	2.3
Romania	21.8	-7.8	-6.2	-5.5
EU	73.0	-6.9	-4.2	-2.7
USA	83.9	-12.5	-9.6	-7.8
Japan	189.3	-10.5	-6.5	-5.5
Canada	82.8	-4.9	-4.0	-2.5
Sources: IMF, Eurostat and OECD				

Massive Challenge to Return to Fiscal Sustainability

(Source: IMF)

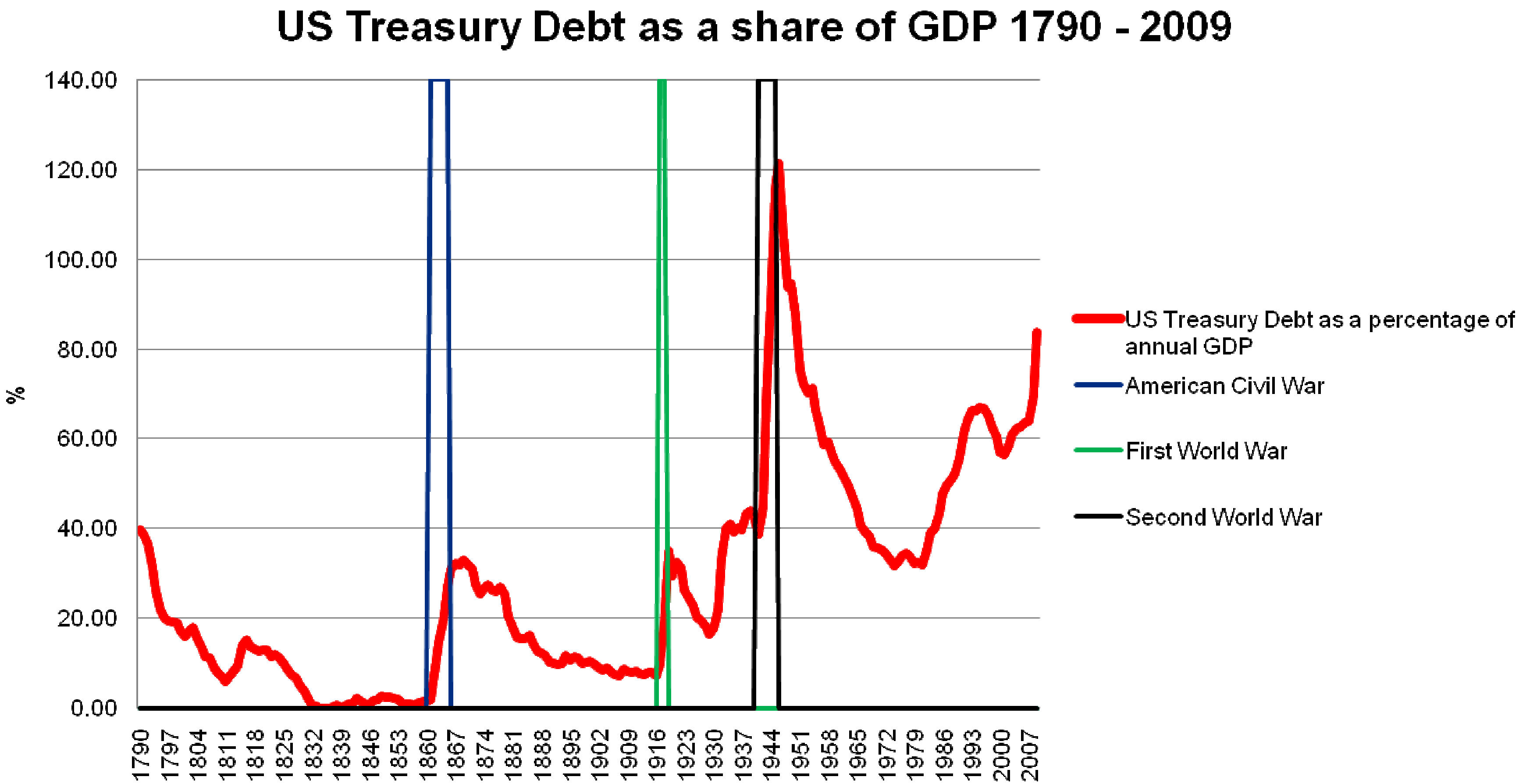


Sovereign credit crunch in advanced industrial countries

- SCC in advanced industrial countries logical final leg of financial crisis & global downturn
  - Outlays on bail-outs of financial sector relatively minor contributor (TARP)
  - Revenue losses from crisis & recession – some of which may become permanent
    - Pay attention to structural deficits & to initial debt stocks
  - Consider long-term trends (demographics, health care financing, etc.) not captured by cyclical deficit corrections

- For many countries, largest <u>peacetime</u> increase in public debt burden & public sector deficits

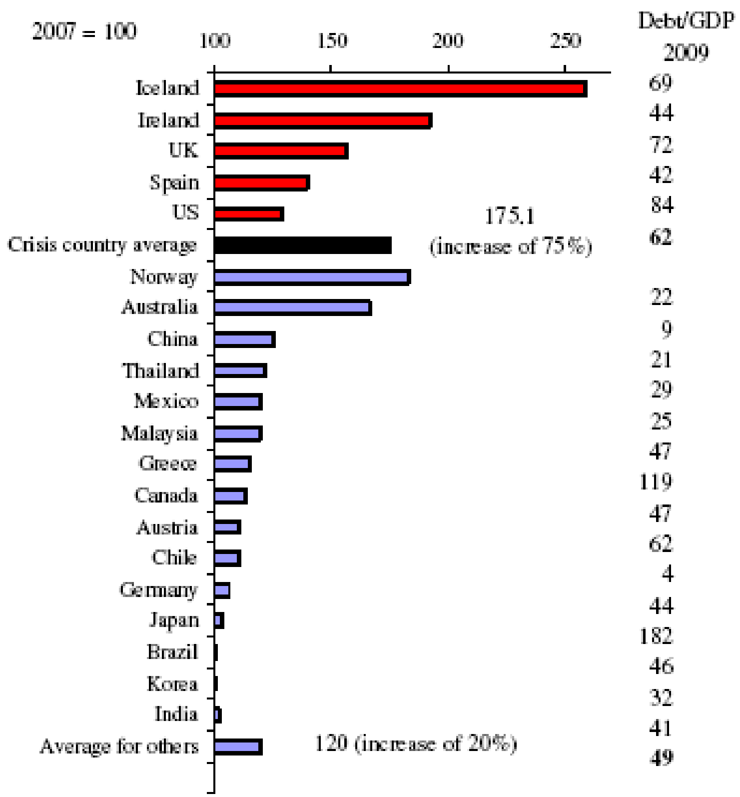
Public debt explosions used to be a wartime thing...



Source: US Nominal and Real GDP 1790-2008: Louis D. Johnston and Samuel H. Williamson, "What Was the U.S. GDP Then?" MeasuringWorth, 2008. URL: http://www.measuringworth.org/usgdp/
US Treasury securities outstanding: US Treasury

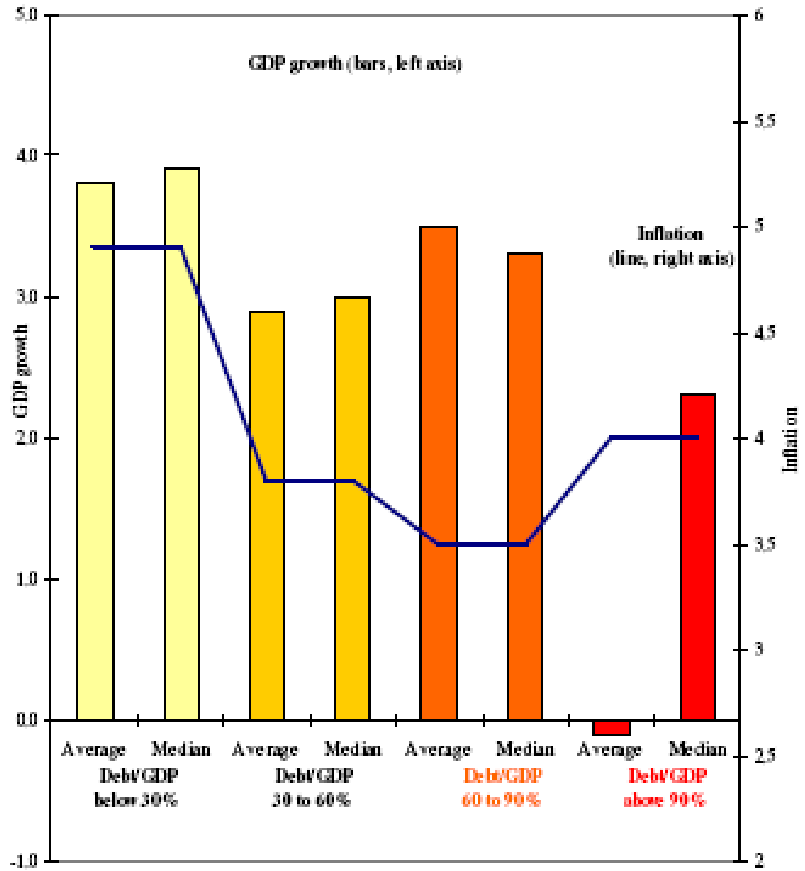
Crisis and aftermath did unpleasant things to public finances

Cumulative increase in real public debt since 2007, selected countries



Source: Reinhart and Rogoff (2009)

Government debt, growth and inflation, 20 advanced economies, 1946-2009



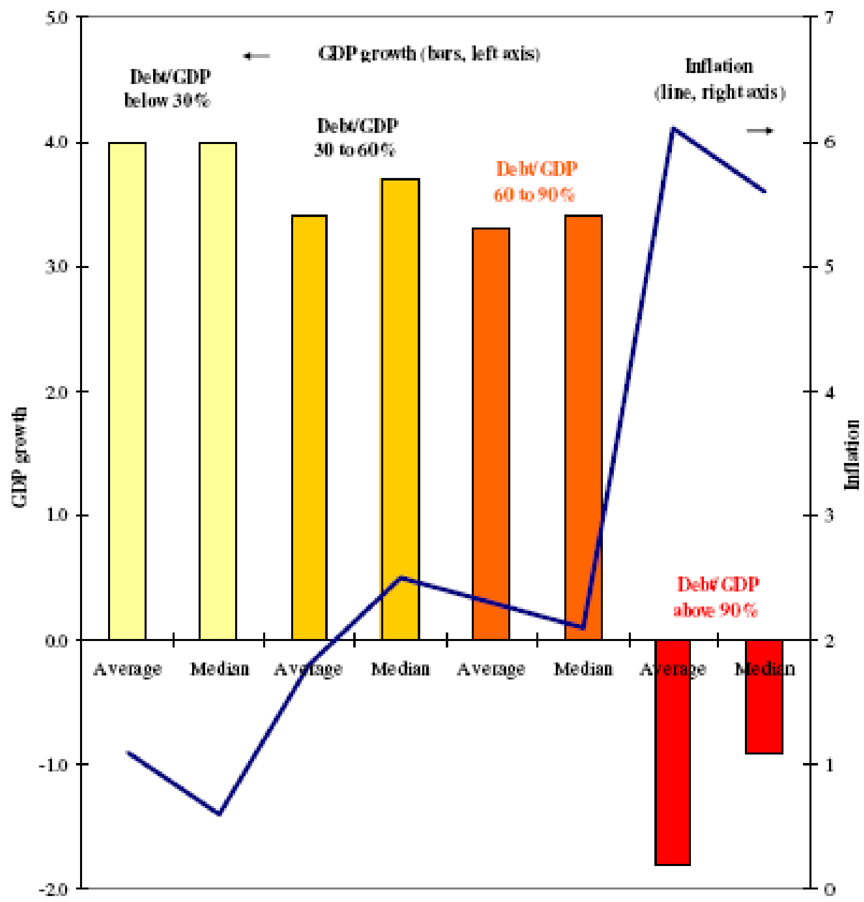
Not much correlation between public debt and growth, except at very high debt levels

Not much correlation between debt and inflation – but for exception see next slide!

Source: Reinhart and Rogoff (2009)

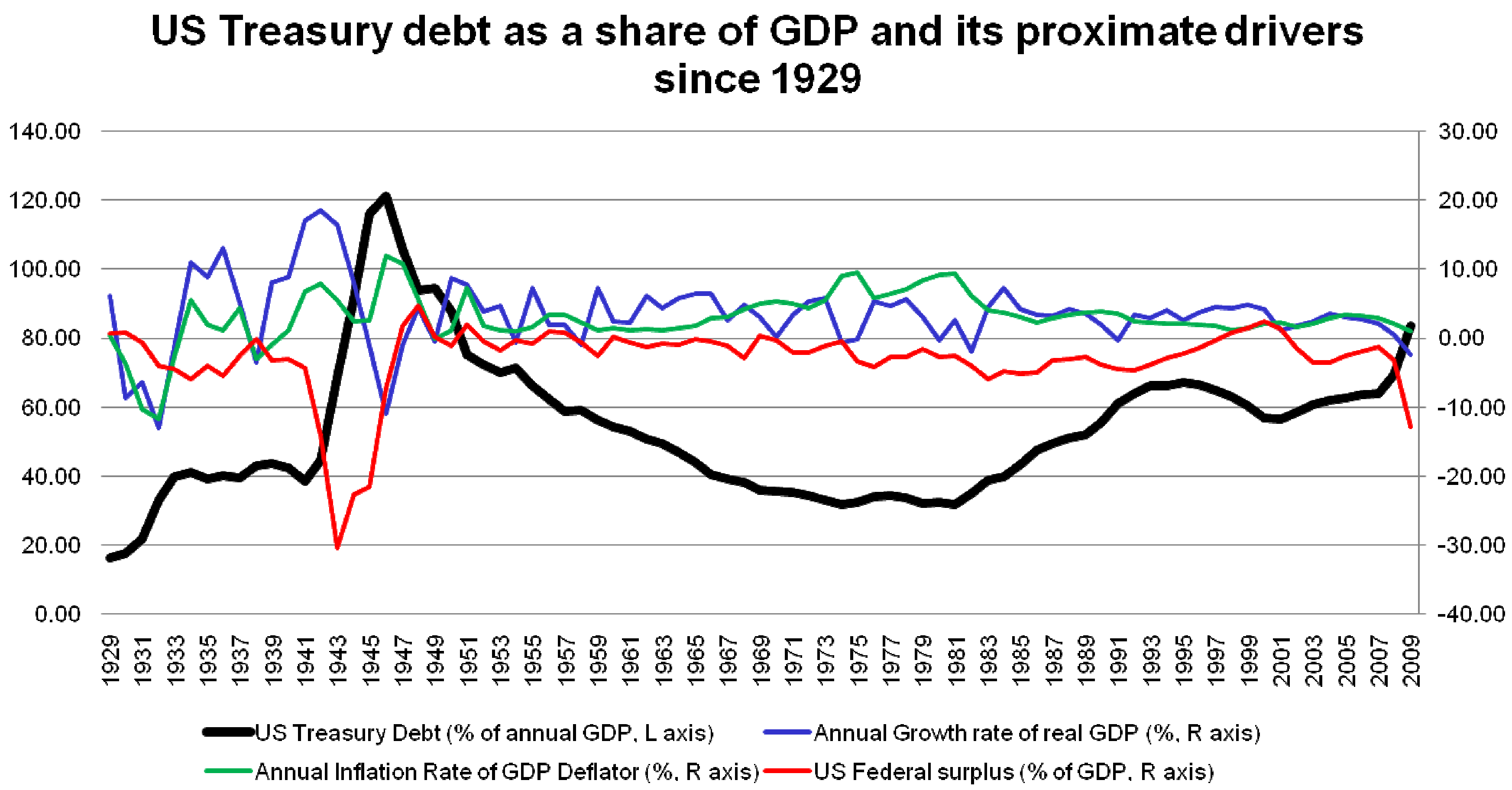
The US has historically inflated its way out of public debt traps

US Federal Government debt, GDP growth and Inflation, 1790 - 2009



Source: Reinhart and Rogoff (2009)

Surpluses, growth and inflation: three proximate drivers of changes in the public debt burden



Source: Haver

The arithmetic of debt burden reductions in the US

- How did US reduce Treasury debt to GDP ratio from 121.20% of GDP in 1946 to 31.67% of GDP in 1974?
- Arithmetically, of the 89.53 percentage points reduction in the public debt burden:
  - Inflation accounted for 52.63 percentage points
  - Real growth accounted for 55.86 percentage points
  - Interaction between real growth and inflation accounted for 1.55 percentage points
  - And Federal surpluses accounted for -20.51 percentage points
    - There were surpluses in individual years (1947, 1948, 1949, 1951, 1956, 1957, 1960, 1969)
    - The only surpluses since 1969 have been the four years 1998-2001

Sovereign indebtedness as a constraint on future bail-outs

- Surviving cross-border financial institutions may consider themselves <u>too big to fail</u>
- Because of the worsening public finances, they are more likely to be <u>too big to save</u>
- Political willingness to engage in another rescue in the next 5 to 10 years likely minimal
- The new inconsistent quartet
  1. Small open economy
  2. Large, internationally exposed banking/financial sector
  3. Own minor-league currency
  4. Limited fiscal capacity
- Ergo: the ‘Iceland problem’: will only large countries (with large fiscal capacities) be able to support large cross-border banks?

Historical record of sovereign default/restructuring/rescheduling

- Sovereign defaults are quite common
  - External debt
    - 1900 -2009
      - Argentina (1951, 1956, 1982, 1989, 2001)
      - Brazil (1902, 1914, 1931, 1937, 1961, 1964, 1983)
      - Mexico (1914, 1928, 1982)
    - 1945-2009
      - India (1958, 1969, 1972)
      - Indonesia (1966, 1998, 2000, 2002).
      - Poland (1981)
      - Romania (1981, 1986)
      - Russia (1991)
      - Turkey (1978, 1982)

Historical record of sovereign default/restructuring/rescheduling

- Default on domestically held sovereign debt less common than on foreign-held debt.
  - Abrogation of the gold clause by the US in 1933
  - Consolidation of most UK World War I debt into a perpetual annuity in 1932
  - German monetary reform in 1948
  - Croatia (1993-1996, war w. Serbia)
  - Kuwait (1991; Iraqi invasion)
  - Russia (1998-1999)
  - Ukraine (1998-2000)
  - Argentina (1982, 1989-1990 & 2002-2005)
  - Brazil (1986-1987, 1990)

Escape from serial defaulter status is possible (Brazil)!

Four policy exits from unsustainable public debt trajectories

1. Fiscal pain:

   Ensure that present value of future primary (non-interest) government surpluses is at least equal to face value of the outstanding debt

   Problem: fear of sovereign default raises sovereign borrowing rates (see 5-year CDS rates or 10-years spreads over Bunds). Can create explosive debt-deficit spiral

2. Bail-out ((1), (3) or (4) for someone else ...)

3. Default (moratorium, stand-still, rescheduling, restructuring, …, repudiation)

4. Inflation
   - Real value of monetary base eroded by both anticipated and unanticipated inflation
   - Real value of servicing nominal interest-bearing debt only reduced by inflation surprises (unanticipated inflation tax)
   - Issuing TIPs & foreign-currency denominated debt are a credible commitment against choosing an inflationary solution

5. and Growth?

Which country might choose which solution?

- Growth is (unfortunately) not a policy instrument
- Fiscal pain
  - Requires social and political cohesion/solidarity, willingness to engage in fiscal burden sharing
  - Requires political system capable of swift, radical action
- Default
  - Last resort
  - Weak governments/government institutions
  - Little social cohesion, political polarisation
  - Earlier defaults (serial defaulters)
- Inflation
  - Domestic-currency-denominated debt (preferably long-maturity and held abroad)
  - A pliable central bank (Fed less independent of Executive and Legislative branches of government than Bank of England, which is in turn less independent than the ECB).

Drivers of national policies to ‘pay down’ public debt

- Government capable of decisive fiscal action implies fiscal pain more likely
  - Depends on personalities, governments, institutions, social cohesion and culture
  - High: Ireland (sense of crisis) & UK (powerful executive, de-facto unicameral system + first past the post in one-member constituencies; but beware of hung Parliament)
  - Medium: Spain – disfunctional fiscal relationship between centre, autonomous regions & munis
  - Low: US – checks & balances aka gridlock; high degree of political and social polarisation
- Large private financial wealth & net external assets make fiscal pain more likely
  - High: Japan, Italy
  - Low: US, UK, Greece
- Domestic-currency-denominated debt inflation more likely
  - reinforced by
    - foreign ownership of debt
    - longer maturity
    - More of an initial stock (debt) than a flow (structural deficit) problem
- Independent monetary authority rules out inflation option
  - Especially relevant in Eurozone (Greece, Ireland, Spain, Italy).
- Exchange rate & balance sheet consequences of sharp currency depreciation make inflation option unattractive in UK
- Large private nominal debt stocks (internally and/or externally held) may make inflation solution more attractive

Reserve currency status of US$ & the 3 public debt reduction options

- Anticipated inflation tax falls largely on foreign holders of $ currency (60-70% of total US currency stock (around $950 bn) held abroad)
- Unanticipated inflation tax falls to significant extent on foreign owners (at least 40% of US Treasuries held abroad – about $3.2 trillion out of $7.9 trillion at end of 2009)
- But: if sharp reduction in purchasing power and external value of US$ were to cause lasting reduction in demand for US$ currency and US$-denominated debt (and/or raise interest rates materially & lastingly), loss of <u>future</u> external seigniorage & other future benefits from 'exorbitant privilege' could act as deterrent.
- Old reserve currencies don't die, they just fade away....
- But...reserve currency status of US$ could be materially affected by burst of inflation & exchange rate depreciation

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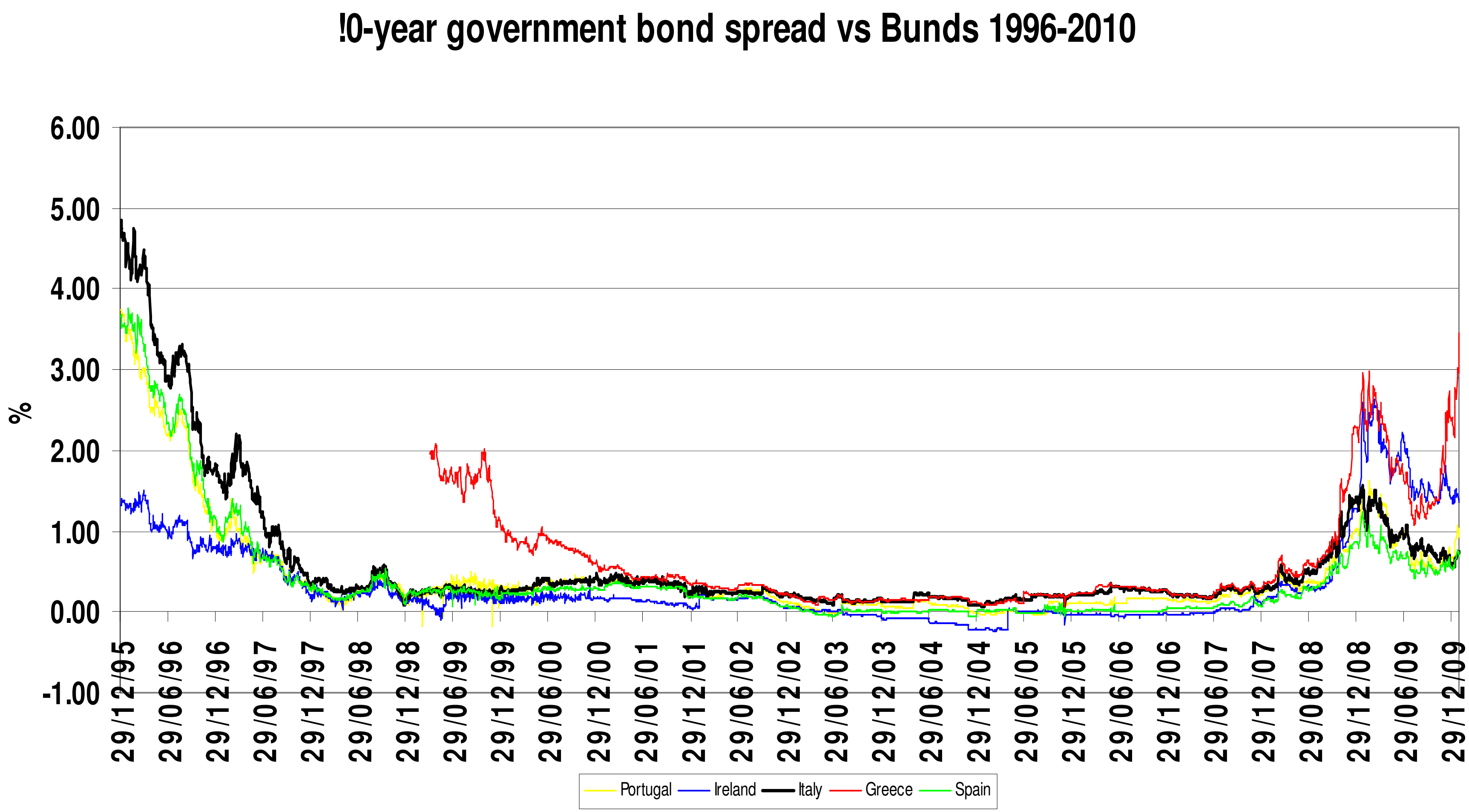
Eurozone fiscal problems are long-standing

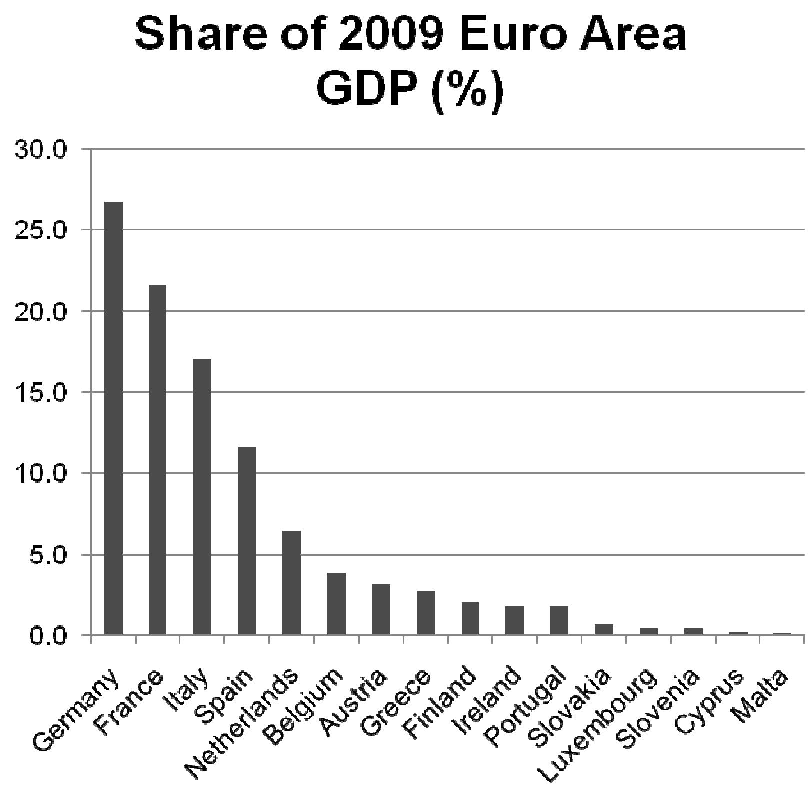


- **Inflation and exchange rate depreciation driving spreads over Bunds before EMU**
- **A lull from 1999/2001 to 2007**
- **Sovereign default risk driving spreads over Bunds in EMU after 2007**

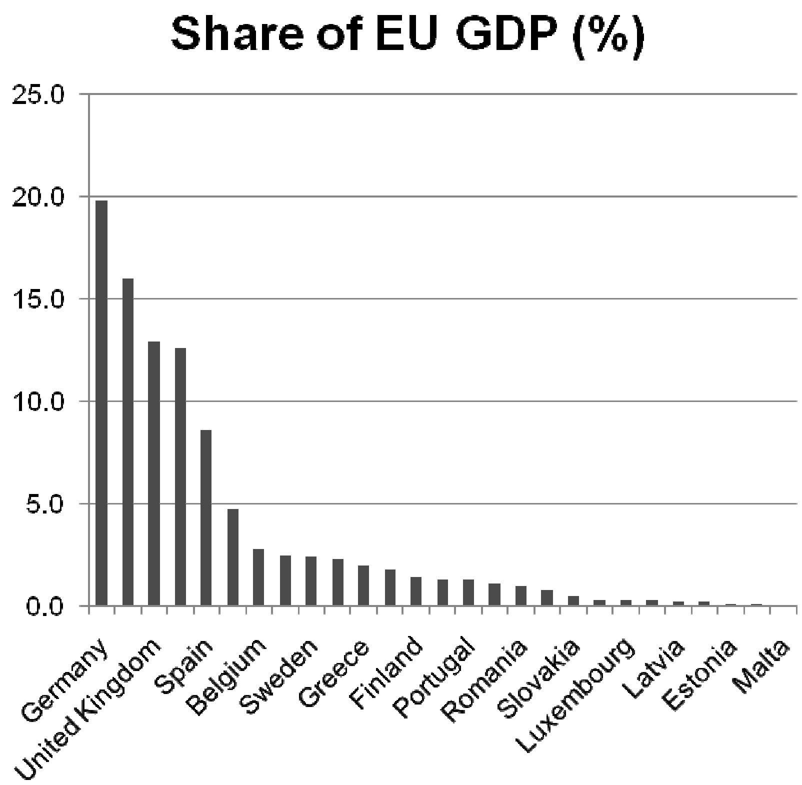
Source: Datastream

Can Greece be bailed?

Greece is small...



...very small



Default of Eurozone sovereign ≠ break-up of Euro Area

- Would sovereign default be more or less costly out of the Euro Area?
  - Existing stock of debt: no difference
  - New borrowing: more costly out of the Euro Area
  - Competitiveness gain: short-term gain out of the Euro Area
  - Balance sheet disruption for private sector: worse out of the Euro Area
- No Euro Area or EU fiscal support out of the Euro Area
- Out of the Eurozone means out of the EU (Acquis! See Athanassiou (2009))
- A country cannot be expelled from the Eurozone (or the EU)
- Only real threat to Euro Area integrity is if the strongest members (Germany) were to leave
- Any rational would-be sovereign defaulter would stay in the Euro Area
  - Risks:
    - Errors/misunderstandings among fragile sovereigns, EU and IMF
    - Populist/nationalist temporary irrationality in fragile states
    - Too large to save (Spain & Italy vs Greece, Portugal & Ireland)

Conclusions

- Current fiscal problems of advanced industrial countries unprecedented in peace time
- Fiscal sustainability can be undermined by economic shocks, political developments or 'acts of God' – wars, natural disasters etc.
- Most countries will, eventually, choose <u>fiscal pain</u> option for eliminating unsustainable public sector debt and deficits
- "<u>Growing your way out</u> of excessive debt" is not a plausible option for advanced industrial countries
- <u>Inflationary solution</u> unlikely in advanced industrial countries, but not impossible
- <u>Sovereign default</u> highly unlikely in advanced industrial countries, but not impossible
- <u>Bail out</u> more likely than default in Eurozone/EU
- <u>Too large to save</u> problem exists but overstated in Eurozone
- (Threat of) sovereign default in Eurozone member state will not make that country more likely to leave Eurozone

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- Reinhart, Carmen and Kenneth Rogoff (2009), "Growth in a time of debt", *American Economic Association, Papers and Proceedings*, forthcoming.
- Athanassiou, Phoebus (2009), "Withdrawal and Expulsion from the EU and EMU", European Central Bank Legal Working Paper Series No. 10, December 2009.

Appendix A-1

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