

# Fiscal policies and financial markets

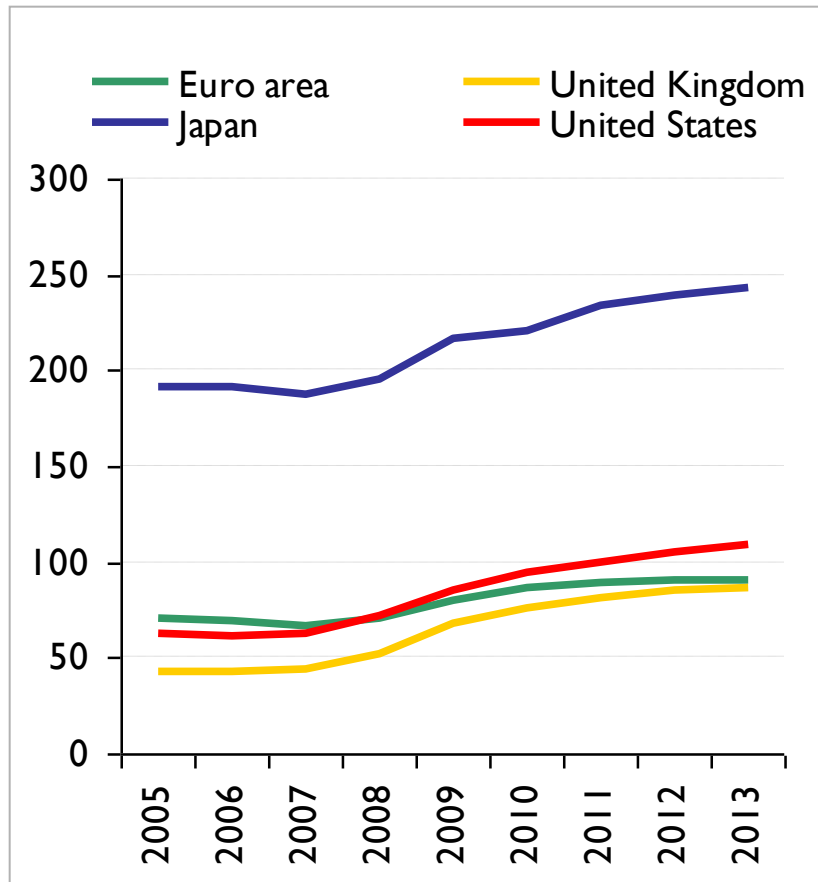
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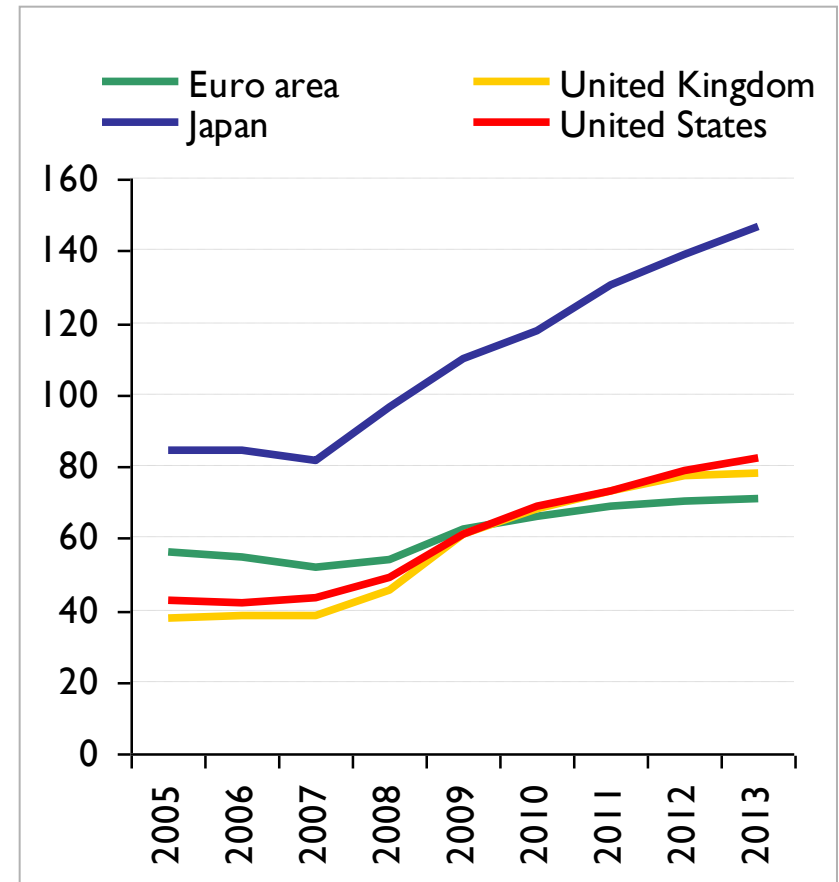
**2013/2014**

1. Fiscal developments
2. Financial markets
3. Sovereign risk
4. Sovereign ratings

**General government gross debt**  
(2005-2013, percentage of GDP)

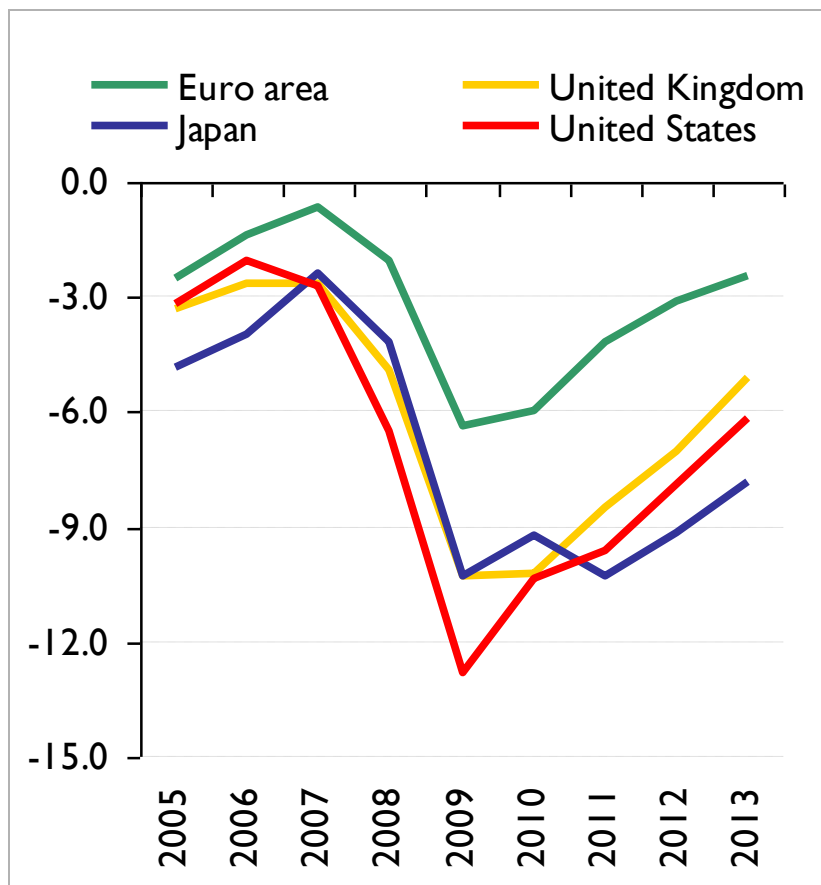


**General government net debt**  
(2005-2013, percentage of GDP)

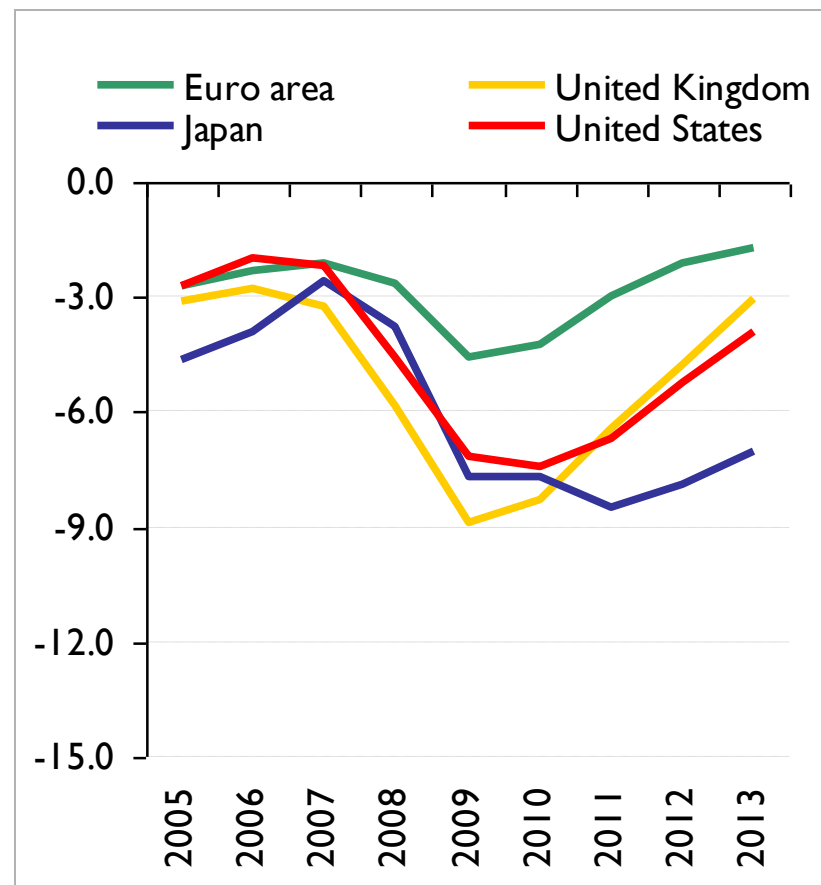


Source: IMF World Economic Outlook September 2011.

**General government budget balance**  
(2005-2013, percentage of GDP)

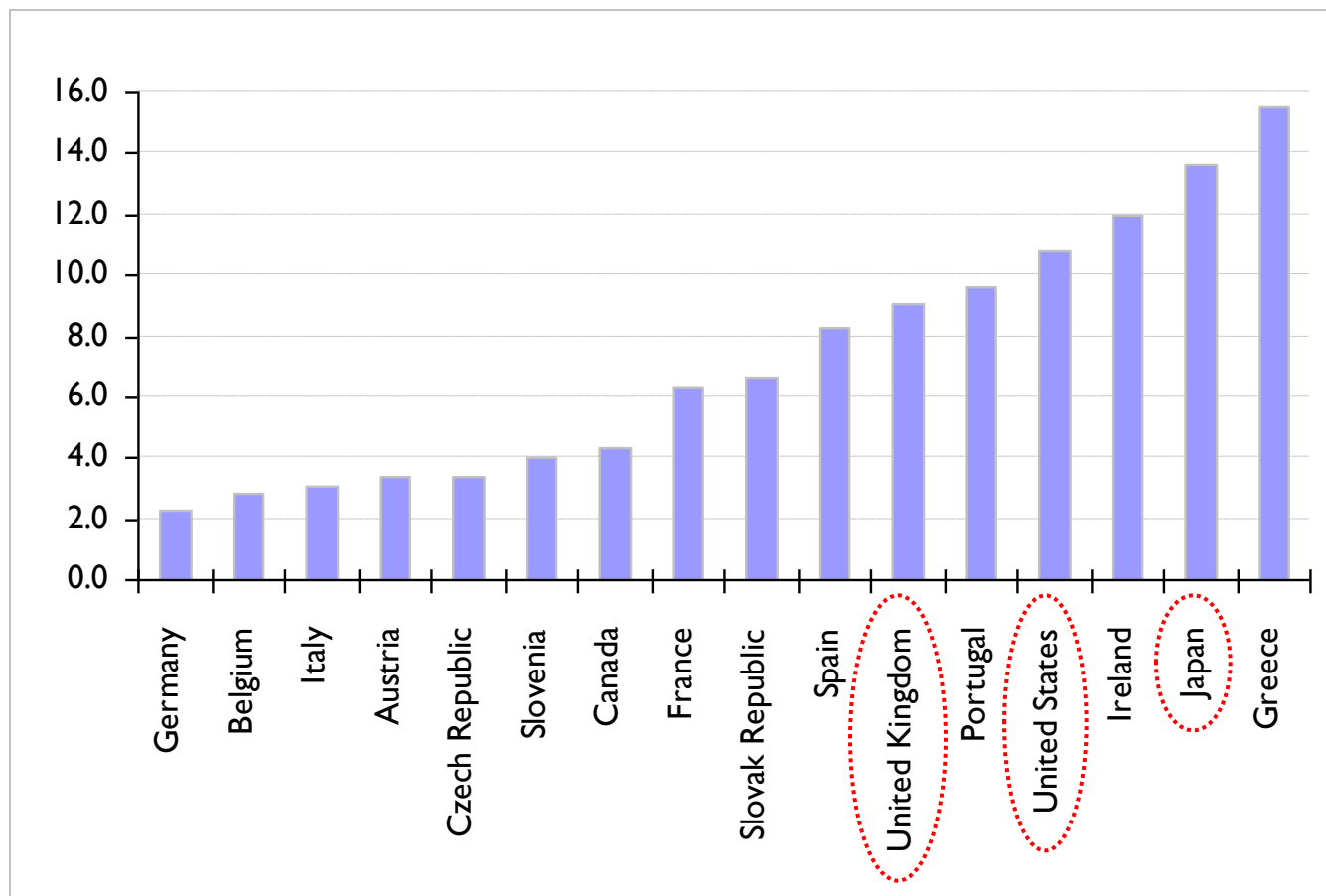


**General government structural balance**  
(2005-2013, percentage of GDP)



Source: IMF World Economic Outlook September 2011.

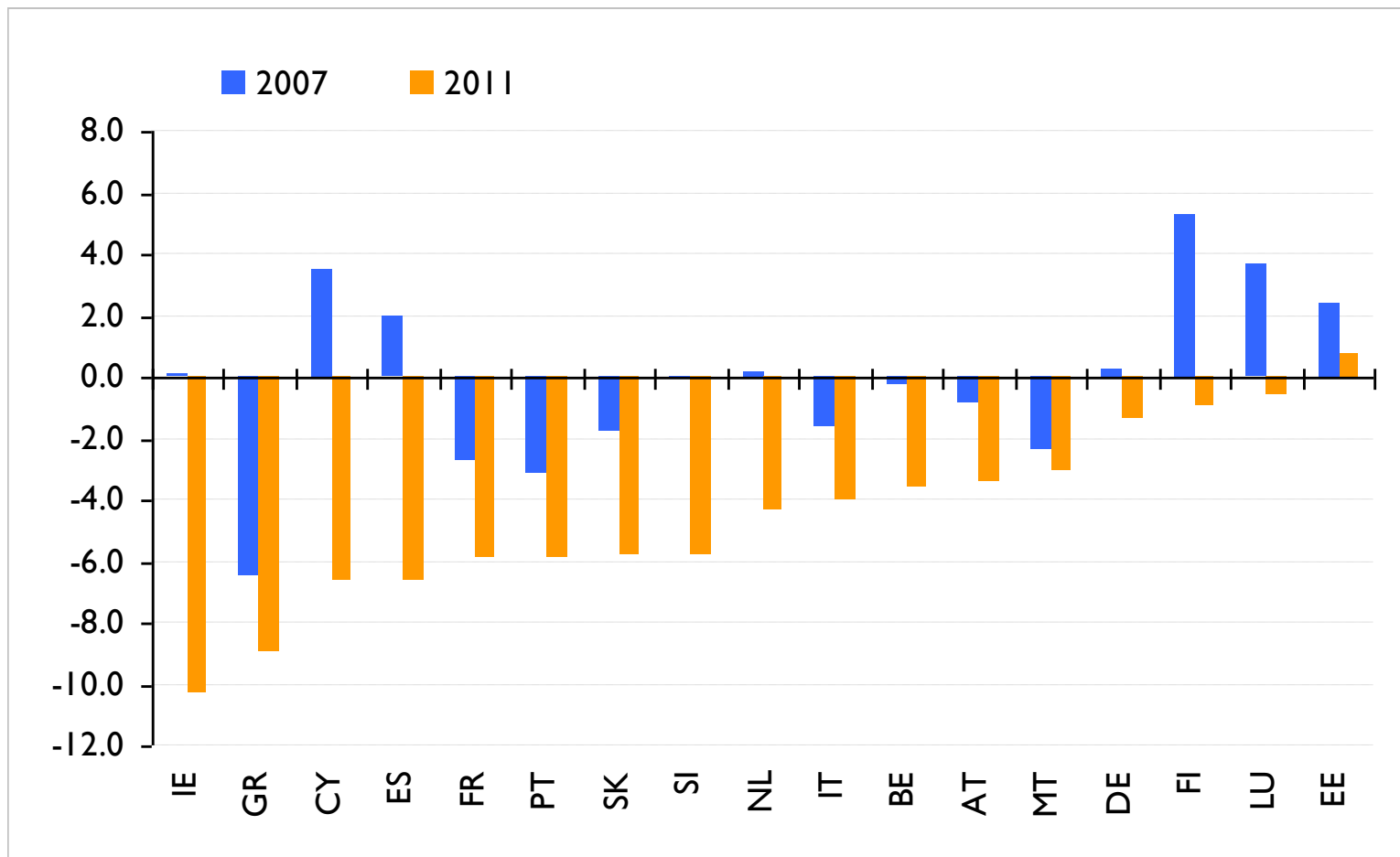
## Projected fiscal adjustment needs for selected economies (% of GDP)



Source: IMF Fiscal Monitor (September 2011).

Note: The chart presents the estimated adjustment needs between 2010 and 2020 to achieve debt targets in 2030. The targets are defined by stabilisation of debt at the end-2012 level by 2030 if the respective debt-to-GDP ratio is less than 60 percent, or bringing the debt ratio to 60 percent in 2030.

### General government budget balance in the euro area countries (2007, 2011; percentage of GDP)



Source: European Commission's autumn 2011 economic forecast.

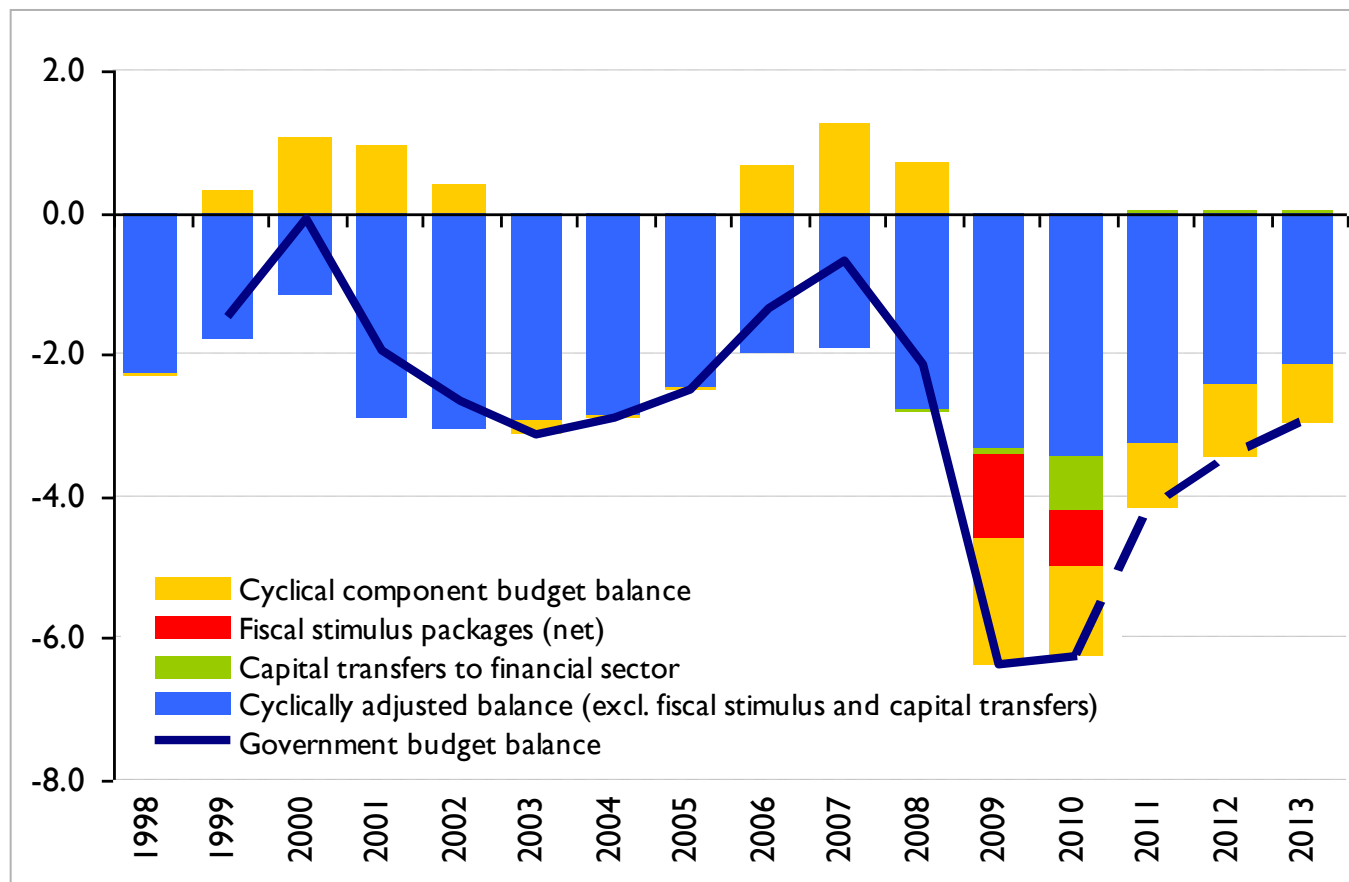
% of GDP	budget balance				gross debt			
	2010	2011	2012	2013	2010	2011	2012	2013
Belgium	-4.1	-3.6	-4.6	-4.5	96.2	97.2	99.2	100.3
Germany	-4.3	-1.3	-1.0	-0.7	83.2	81.7	81.2	79.9
Estonia	0.2	0.8	-1.8	-0.8	6.7	5.8	6.0	6.1
Ireland	-31.3	-10.3	-8.6	-7.8	94.9	108.1	117.5	121.1
Greece	-10.6	-8.9	-7.0	-6.8	144.9	162.8	198.3	198.5
Spain	-9.3	-6.6	-5.9	-5.3	61.0	69.6	73.8	78.0
France	-7.1	-5.8	-5.3	-5.1	82.3	85.4	89.2	91.7
Italy	-4.6	-4.0	-2.3	-1.2	118.4	120.5	120.5	118.7
Cyprus	-5.3	-6.7	-4.9	-4.7	61.5	64.9	68.4	70.9
Luxembourg	-1.1	-0.6	-1.1	-0.9	19.1	19.5	20.2	20.3
Malta	-3.6	-3.0	-3.5	-3.6	69.0	69.6	70.8	71.5
Netherlands	-5.1	-4.3	-3.1	-2.7	62.9	64.2	64.9	66.0
Austria	-4.4	-3.4	-3.1	-2.9	71.8	72.2	73.3	73.7
Portugal	-9.8	-5.8	-4.5	-3.2	93.3	101.6	111.0	112.1
Slovenia	-5.8	-5.7	-5.3	-5.7	38.8	45.5	50.1	54.6
Slovakia	-7.7	-5.8	-4.9	-5.0	41.0	44.5	47.5	51.1
Finland	-2.5	-1.0	-0.7	-0.7	48.3	49.1	51.8	53.5
Euro area	-6.2	-4.1	-3.4	-3.0	85.6	88.0	90.4	90.9

Source: European Commission's autumn 2011 economic forecast.

**Projections pointed to some improvement in deficit compliance with SGP (debt-to-GDP ratios still at elevated levels) .**

**- 10 euro area Member States are expected to record deficits above the 3% of GDP deficit threshold in 2012**  
**- debt ratios above 60% of GDP expected in 12 euro area countries.**

## Government net lending / borrowing in the euro area (% of GDP)



Sources: European Commission's autumn 2011 economic forecast, EC's estimates for net fiscal stimulus and ECB's estimates for capital transfers to financial sector.

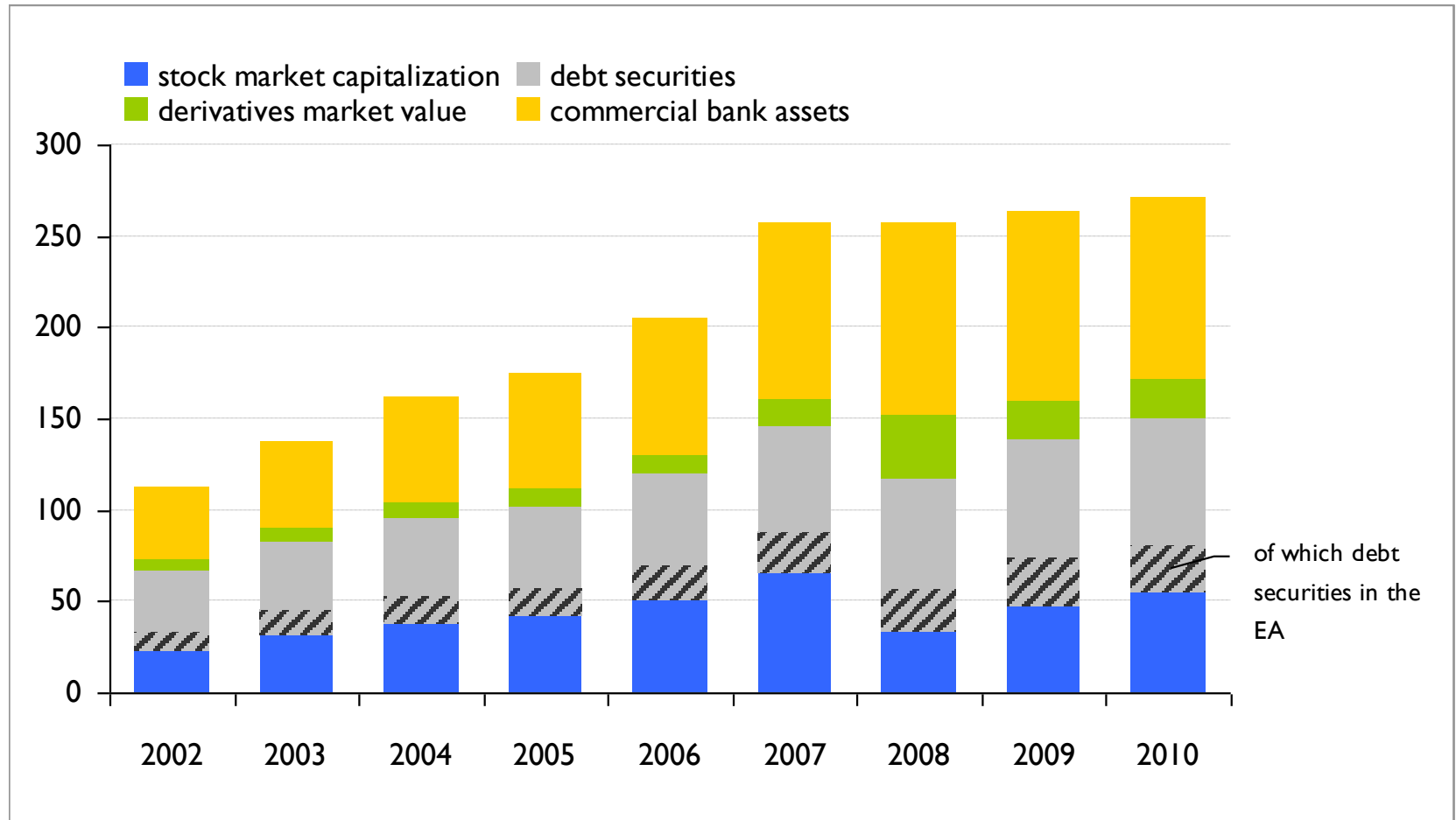
Note: Fiscal stimulus package is net of consolidation measures.



## Role of financial markets

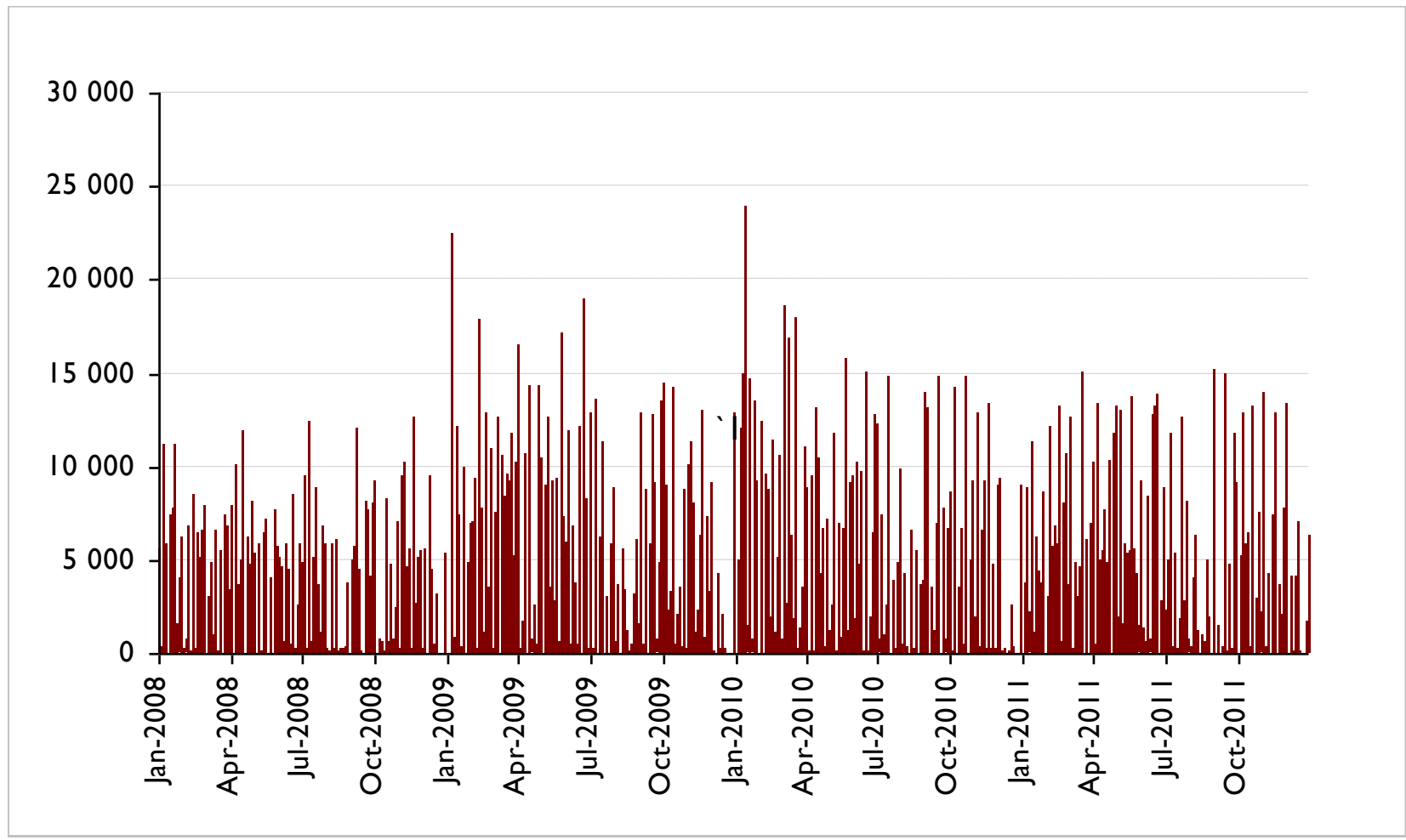
- Monitor fiscal policies by attaching a price to tradable government obligations
  - distinct from rules-based approach to guide policy makers;
- Outstanding size of government bond markets;
- Annual roll-over needs;
- Continuous trade in secondary market generates real-time pricing of sovereign risk
  - bond spreads;
  - CDS;
- Rating agencies.

### Selected indicators on the size of the capital markets (2002 - 2010; trillions of U.S. dollars)



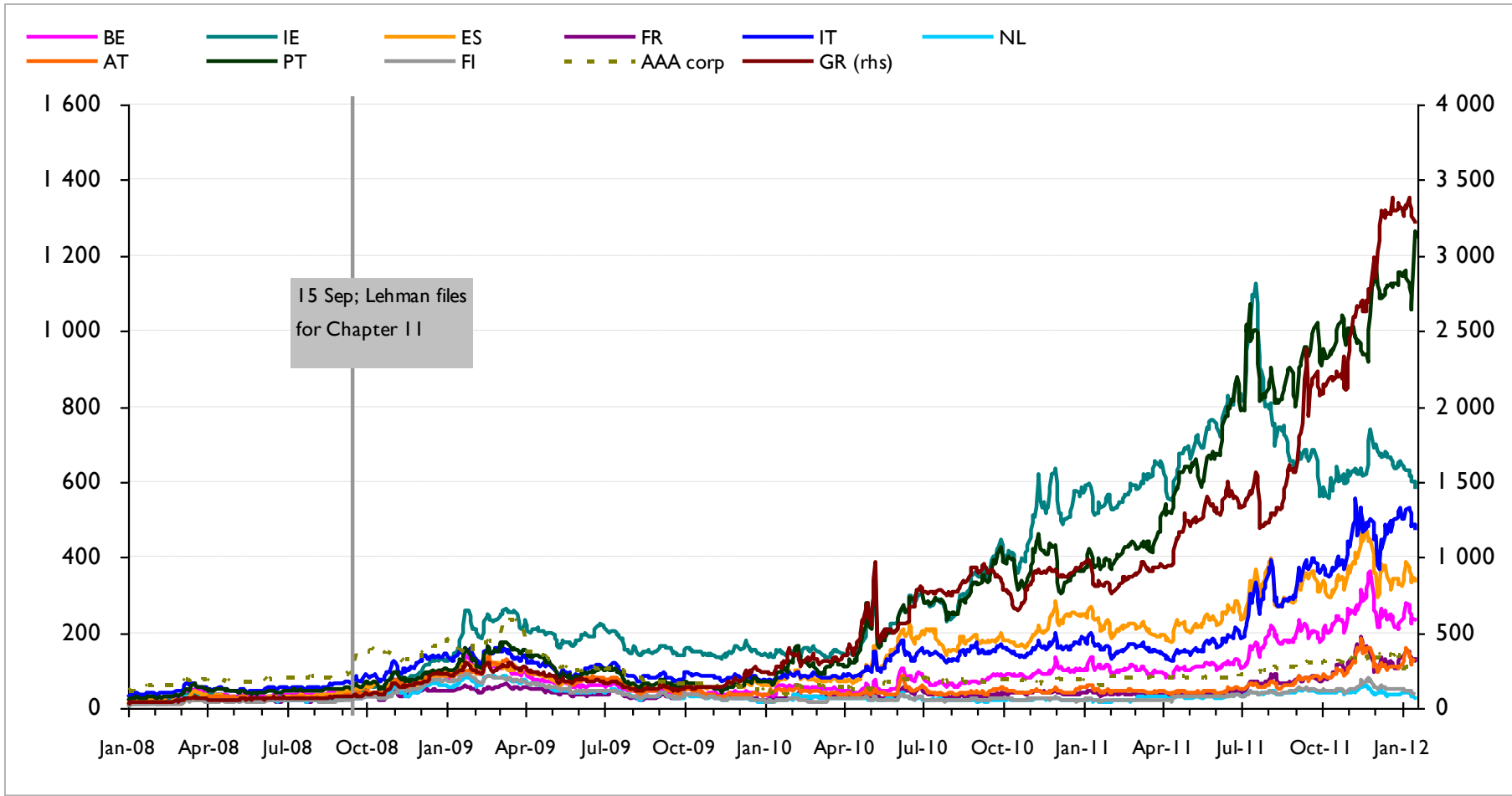
Sources: Bank for International Settlements and International Monetary Fund.  
 Note: Derivatives market value is the gross market value of OTC traded derivatives.

**Euro area daily sovereign bond issuance**  
 (1 Jan 2008 – 31 Dec 2011; millions of EUR)



Sources: Dealogic DCM Analytics and ECB calculations.

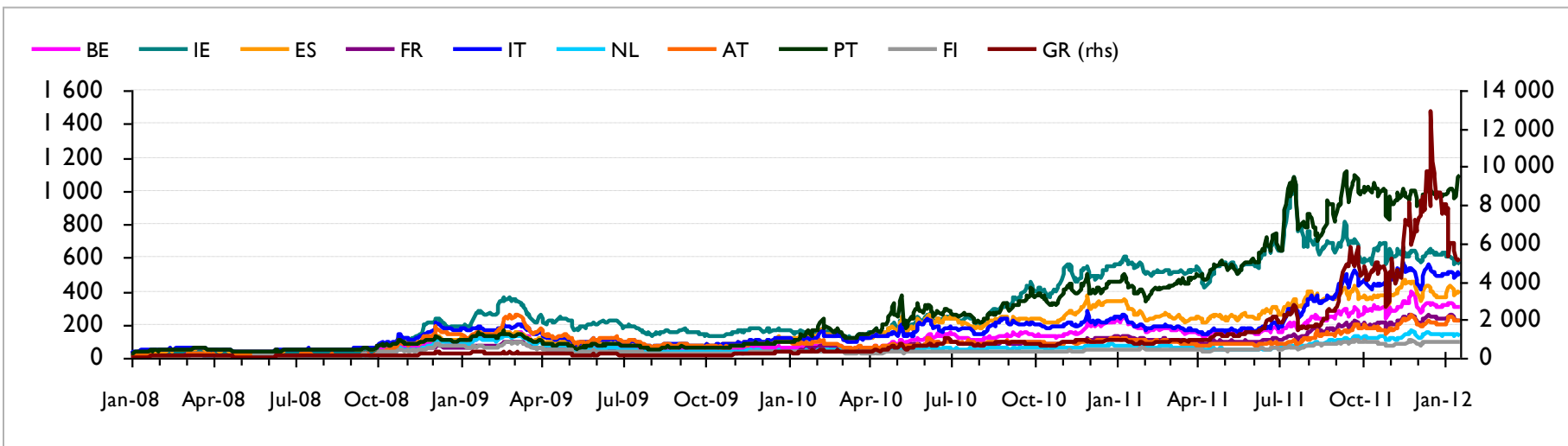
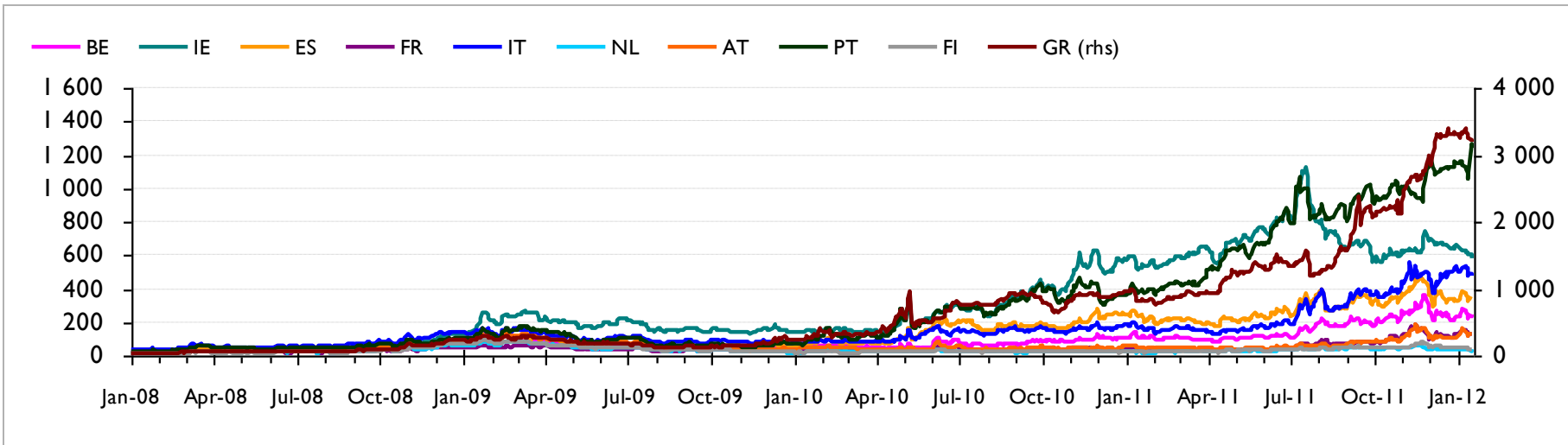
# 10-year sovereign bond spreads (1 Jan 2008 – 17 Jan 2012; basis points)



Sources: Bloomberg, Thomson Reuters Datastream and ECB calculations.

### 10-yr sovereign bond spreads (upper chart) and CDS spreads on sovereign 10Y debt (lower chart)

(1 Jan 2008 – 17 Jan 2012; basis points)



Sources: Bloomberg and Thomson Reuters Datastream.

## Risks determine spreads in government bond markets

1. Exchange rate risk: unexpected exchange rate changes (ceased for euro area investors).
2. Liquidity risk: ability to carry out transactions without affecting the price.
3. Credit risk: default event.
4. Other factors (e.g., taxes, issuance procedures).

Crucial for bond pricing: quantity of risks and market price of risk taking (global risk aversion).

- Objective: **indicator for default risk of sovereign issuer.**
- Ratings by major agencies (S&P, Moody's, Fitch) are required quality signal for many investors.
- Main aspects:
  - consistency across countries;
  - medium-term approach: “rating through the cycle”
  - comprehensive assessment of financial strength: macroeconomics, institutions, policies, possible shocks.

Ratings' methodology (e.g. Moody's): condense all information that may affect default risk into one indicator: qualitative decision

- Macroeconomics;
- Institutional development;
- Financial strength;
- Vulnerability to shocks.

Decision making by committee

- Proposal by lead analyst;
- Peer review by sovereign but also non-sovereign experts.



## Caveats of ratings

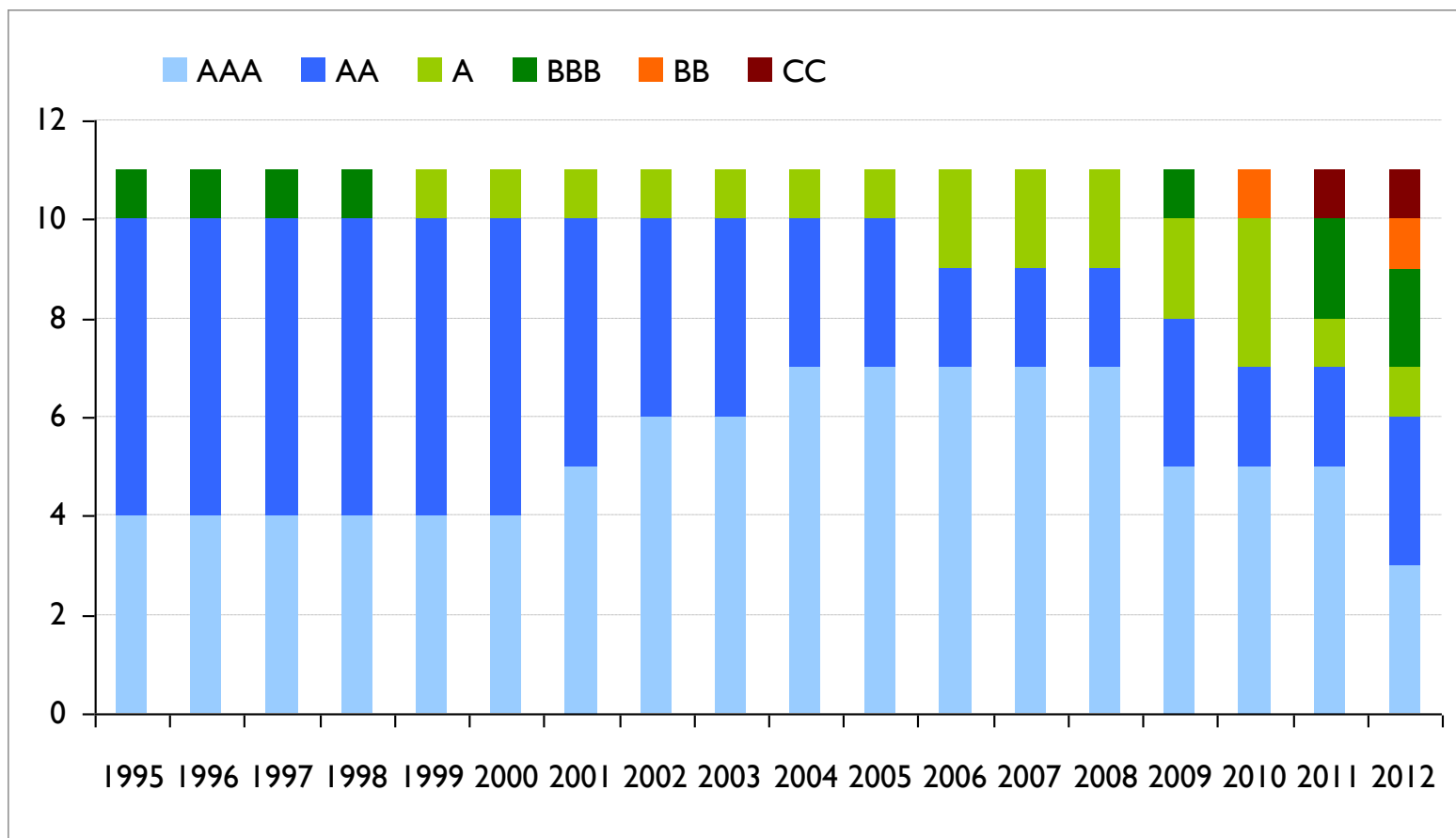
- Few suppliers of global sovereign bond ratings (S&P, Moody's, Fitch);
- Accounting rules give much power to ratings agencies;
- In the past little supervision of ratings agencies;
- Bond issuer pays for rating: conflict of interest;
- Accuracy of sovereign ratings difficult to quantify (lack of observations).

- Currently the European Securities and Markets Authority (ESMA) is exclusively responsible for the registration and supervision of Credit Rating Agencies in the European Union.
- In addition, ESMA also carries out policy work to prepare future legislation, such as regulatory technical standards, and guidelines. This work is undertaken through the CRA technical committee, which has representatives from all the national competent authorities.

Characterization of debt and issuer (source: Moody's)		Rating			
		S&P	Moody's	Fitch	Scale
Highest quality	Investment grade	AAA	Aaa	AAA	17
High quality		AA+	Aa1	AA+	16
		AA	Aa2	AA	15
		AA-	Aa3	AA-	14
Strong payment capacity		A+	A1	A+	13
		A	A2	A	12
		A-	A3	A-	11
Adequate payment capacity		BBB+	Baa1	BBB+	10
		BBB	Baa2	BBB	9
	BBB-	Baa3	BBB-	8	
Likely to fulfil obligations, ongoing uncertainty	BB+	Ba1	BB+	7	
	BB	Ba2	BB	6	
	BB-	Ba3	BB-	5	
High credit risk	B+	B1	B+	4	
	B	B2	B	3	
	B-	B3	B-	2	
Very high credit risk	CCC+	Caa1	CCC+	1	
	CCC	Caa2	CCC		
	CCC-	Caa3	CCC-		
Near default with possibility of recovery	CC	Ca	CC		
			C		
Default	SD	C	DDD		
	D		DD		
			D		

## Sovereign ratings of the euro area countries by S&P (1995 – 2012)

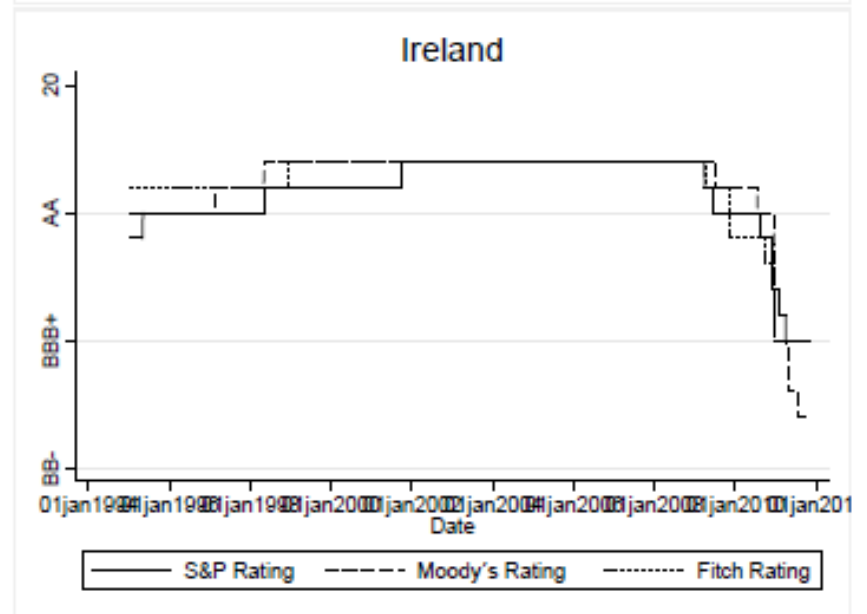
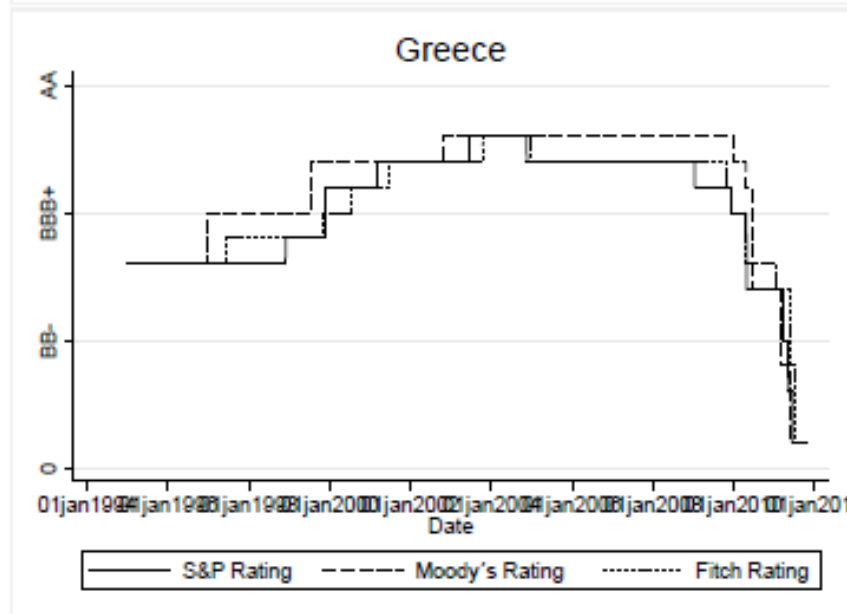
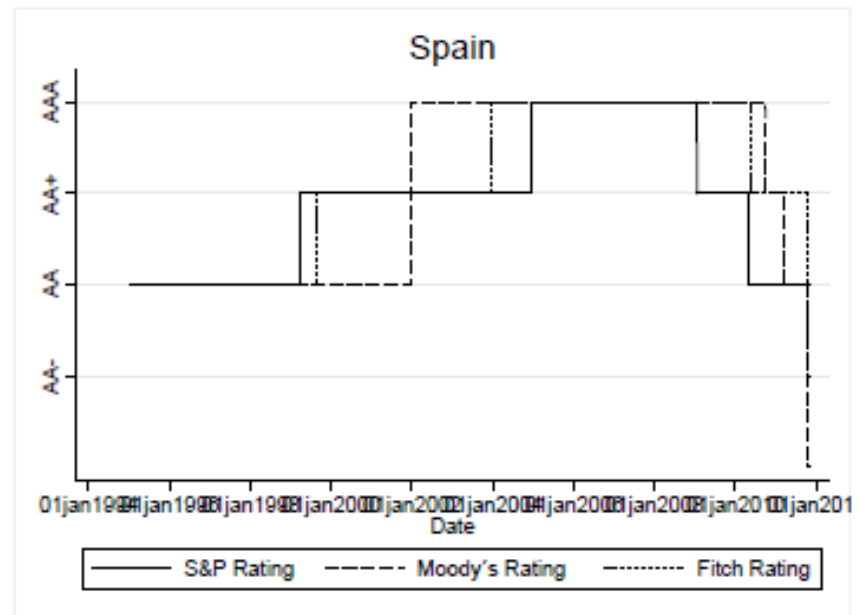
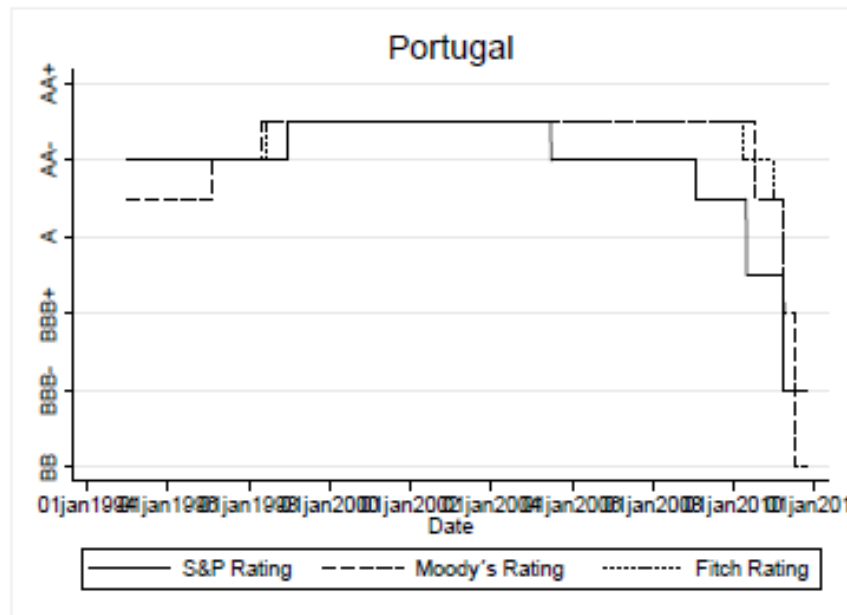
Sovereign ratings (5/11)

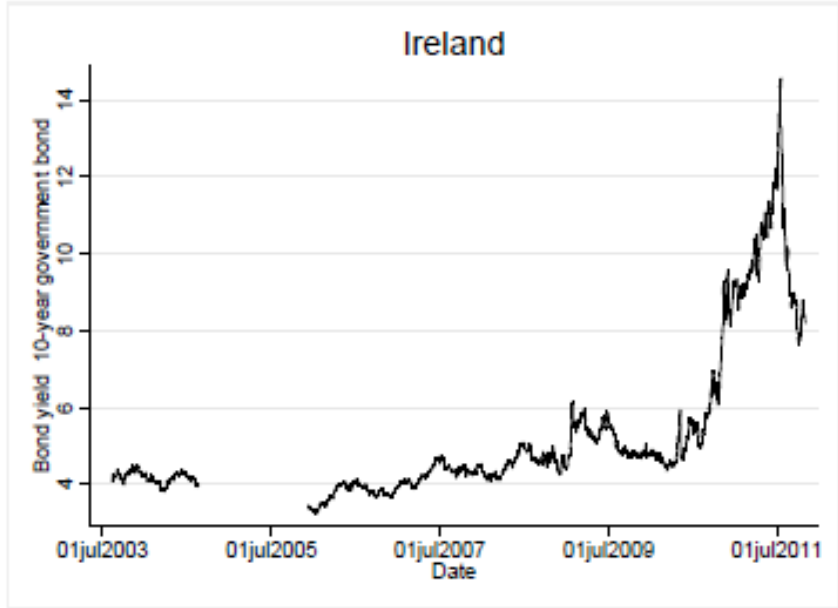
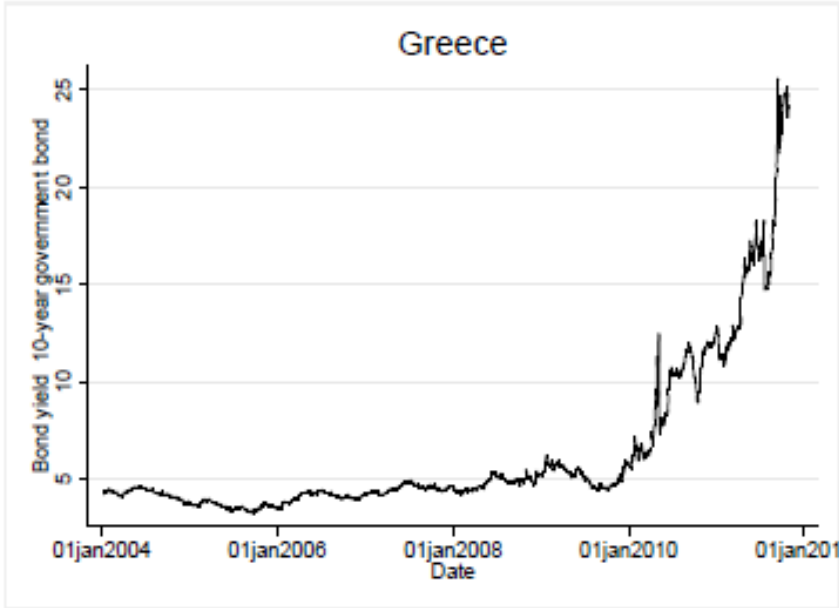
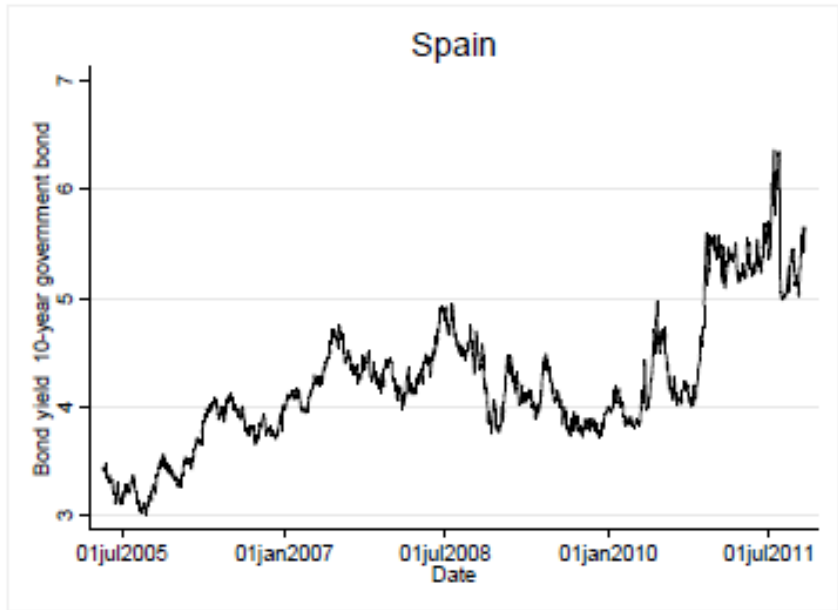
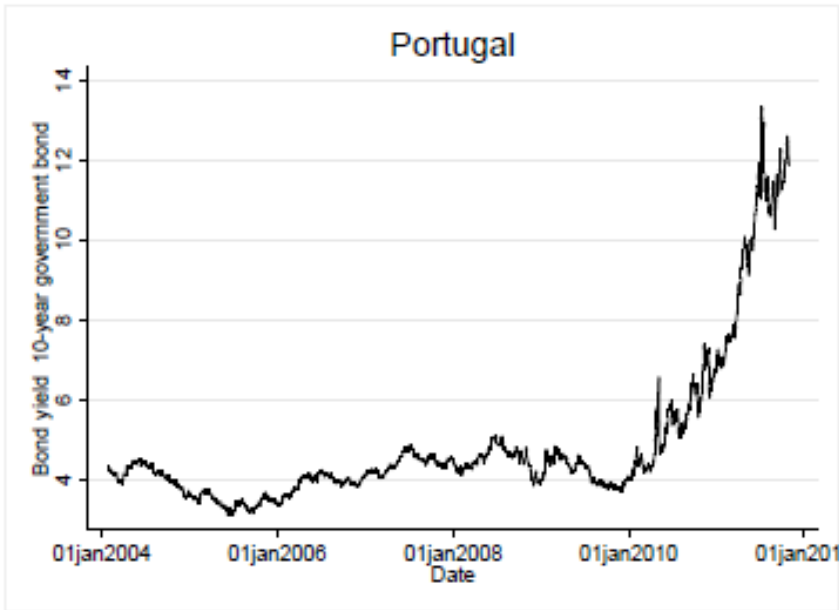


Source: Thomson Reuters.

Notes: The euro area countries consist of the EA12 member states excluding Luxembourg. The ratings are end-year observations except for 2012 in the case of which the ratings are equal to these observed on January 16, 2012.

- Bond spreads, CDS rates and sovereign ratings convey information about the sustainability of fiscal policies.
- But exclusive reliance on market signals can be problematic:
  - markets overreact; risks of complacency/panic;
  - market participants have different objectives (e.g. projection horizon);
  - importance of global risk factors – difficult to explain;
  - distorted signals: lack of market liquidity for small countries (including lack of markets for other risks);
  - government reaction to market signals uncertain.
- Market discipline depends on fiscal framework (market access; no-bail out; transparency).





## Sovereign credit rating in the euro area countries (17 May 2012)

Sovereign ratings (9/11)

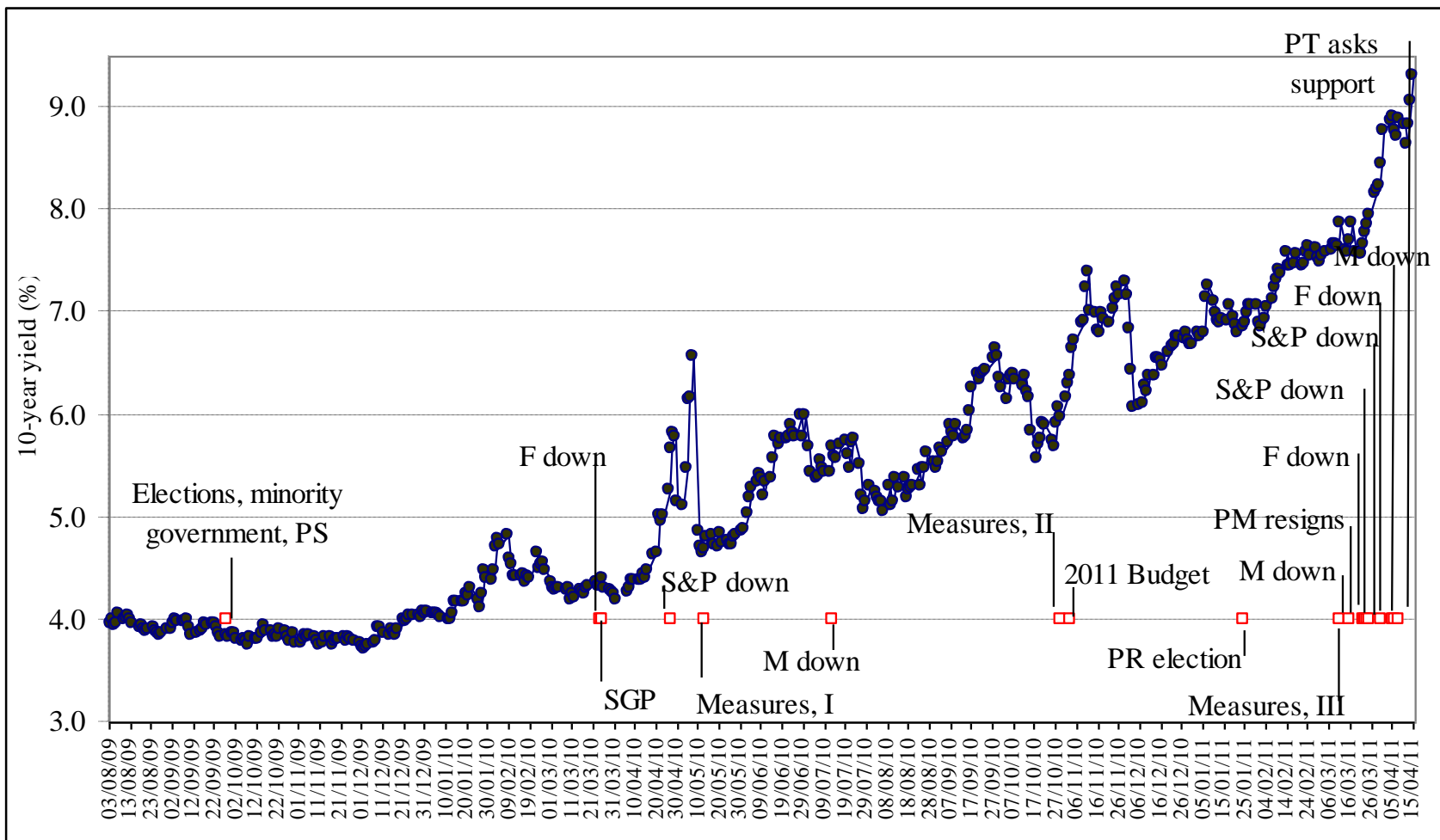
Characterization of debt and issuer	Ratings					
	S&P	Countries	Moody's	Countries	Fitch	Countries
Highest quality	AAA	DE, FI, LU, NL	Aaa	AT, DE, FI, FR, LU, NL	AAA	AT, DE, FI, FR, LU, NL
High quality	AA+	AT, BE, FR	Aa1		AA+	ES
	AA	BE	Aa2		AA	BE, SI
	AA-	EE	Aa3	BE	AA-	
Strong payment capacity	A+	SI	A1	EE	A+	EE, MT, SK
	A	CY, SK	A2	CY, SI, SK	A	ES, SI
	A-	MT	A3	ES, IT, MT	A-	IT
Adequate payment capacity	BBB+	ES, IE, IT	Baa1		BBB+	IE
	BBB		Baa2		BBB	
	BBB-		Baa3		BBB-	CY
Likely to fulfil obligations	BB+	CY	Ba1	CY, IE	BB+	PT
	BB	PT	Ba2		BB	
	BB-		Ba3	PT	BB-	
High credit risk	B+		B1		B+	
	B		B2		B	
	B-		B3		B-	GR
Very high credit risk	CCC	GR	Caa1		CCC	
Default			C	GR	C	24



# Portugal

3 Aug 2009 – 15 Apr 2011

Sovereign ratings (10/11)

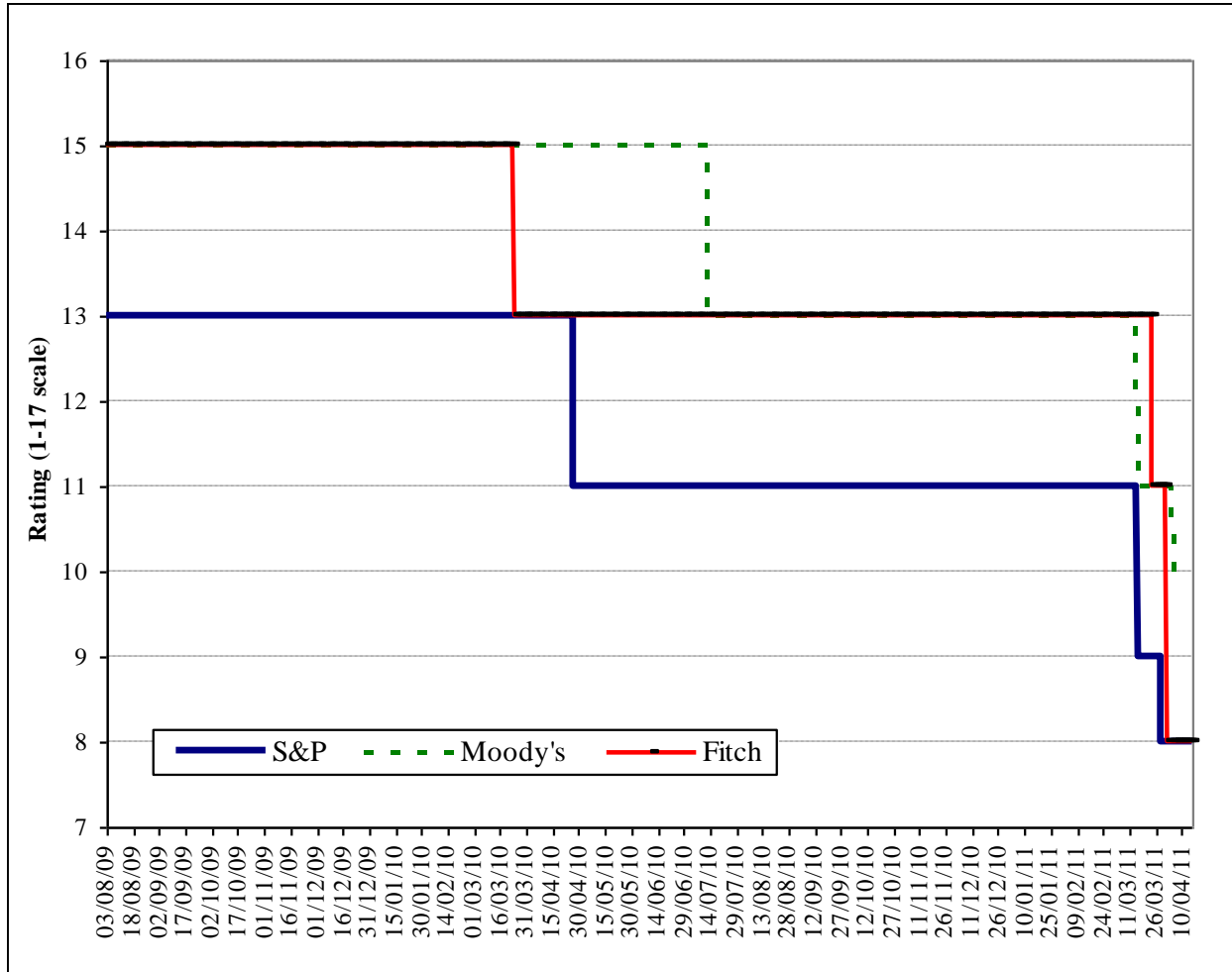


Note: daily yields from Reuters.

# Portugal, sovereign ratings

3 Aug 2009 – 15 Apr 2011

Sovereign ratings (11/11)



	S&P	Moody's	Fitch
15	AA	Aa2	AA
14	AA-	Aa3	AA-
13	A+	A1	A+
12	A	A2	A
11	A-	A3	A-
10	BBB+	Baa1	BBB+
9	BBB	Baa2	BBB
8	BBB-	Ba3	BBB-