THE INTERNATIONAL FINANCIAL CRISIS & THE RECENT GREEK / EMU CRISIS

*Gikas A. Hardouvelis **

American College of Thessaloniki,
May 7, 2010

* *Professor, Department of Banking and Financial Management, Un. of Piraeus*
Chief Economist, Eurobank EFG Group

THE INTERNATIONAL FINANCIAL CRISIS & THE RECENT GREEK / EMU CRISIS

MAIN THEMES

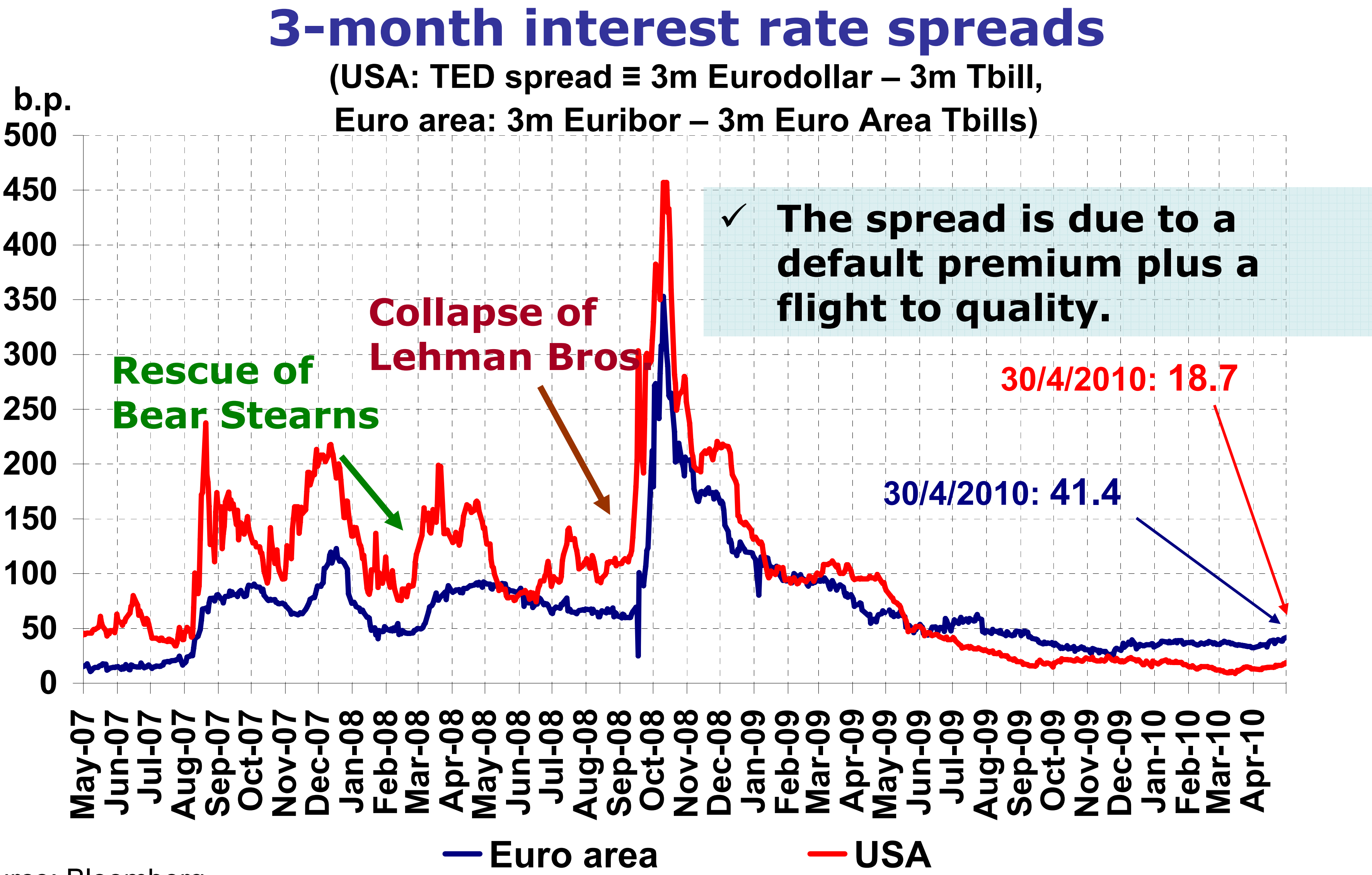
I.	IS THE INTERNATIONAL FINANCIAL CRISIS OVER?
II.	THE SPECIAL GREEK PROBLEMS
III.	GREECE IN THE EURO AREA
IV.	SUMMARY

I.

IS THE INTERNATIONAL FINANCIAL CRISIS OVER?

1) The 2007-2009 crisis
2) A fragile recovery ahead
3) Slower long-term global growth with restrictions on financial intermediation
4) Markets aware of risks

I.1 It began as a financial crisis



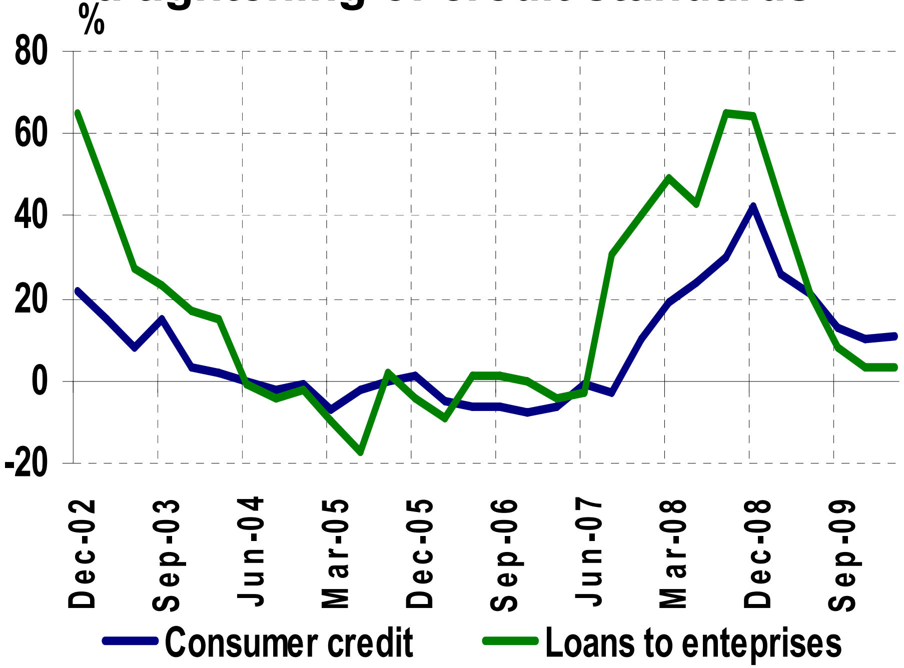
Source: Bloomberg

Note: Interest rates are annualized and their difference is in basis points

I.1 Illiquidity & Insolvency ⇨ de-leveraging ⇨ tightening of credit standards

Euro Area

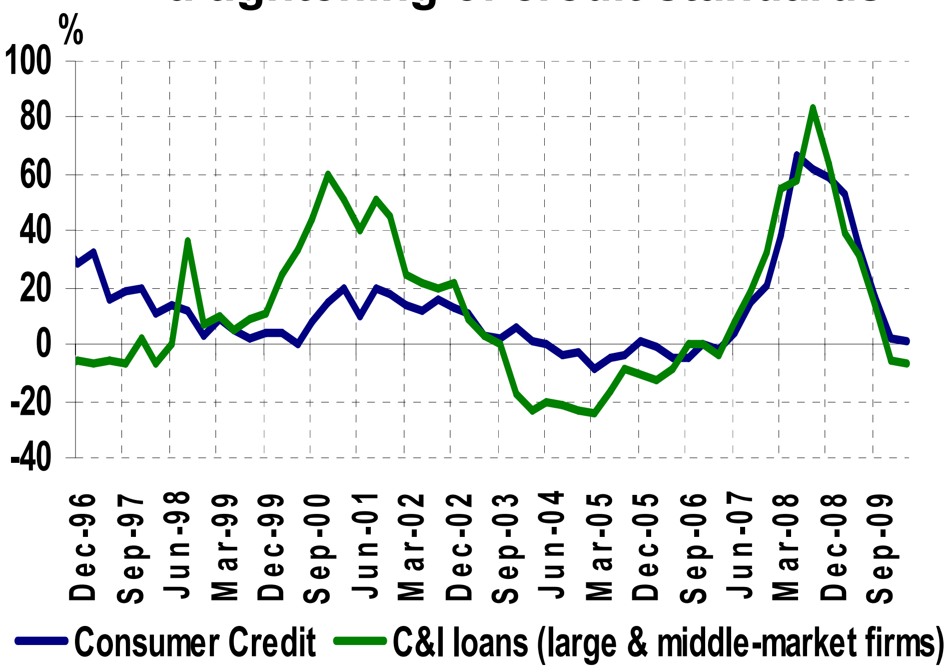
Net percentage of banks reporting a tightening of credit standards



Source: ECB, The Euro Area Bank Lending Survey, April 2010

USA

Net percentage of banks reporting a tightening of credit standards



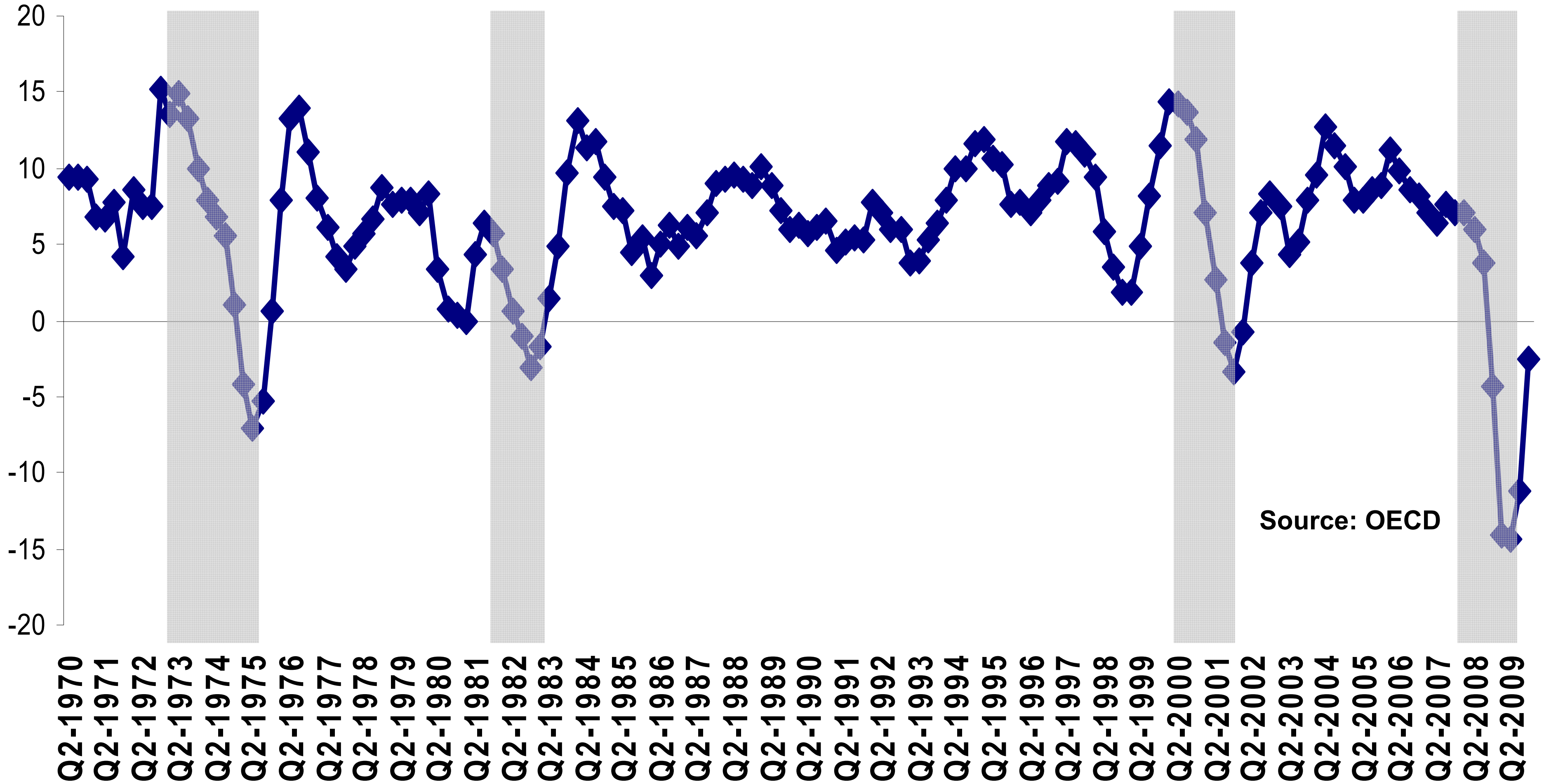
Source: Federal Reserve, The Senior Loan Officer Opinion Survey on Bank Lending Practices, April 2010

✓ *The results of the September 2009 bank lending surveys in the US and the EA indicate a declining trend in the net tightening of credit standards for loans to enterprises in Q3 09 compared to the previous quarter.*

I.1 World trade collapsed in 2008:Q4

Volume of International Trade in Goods & Services

(% yoy s.a., billions of 2000 US dollars)

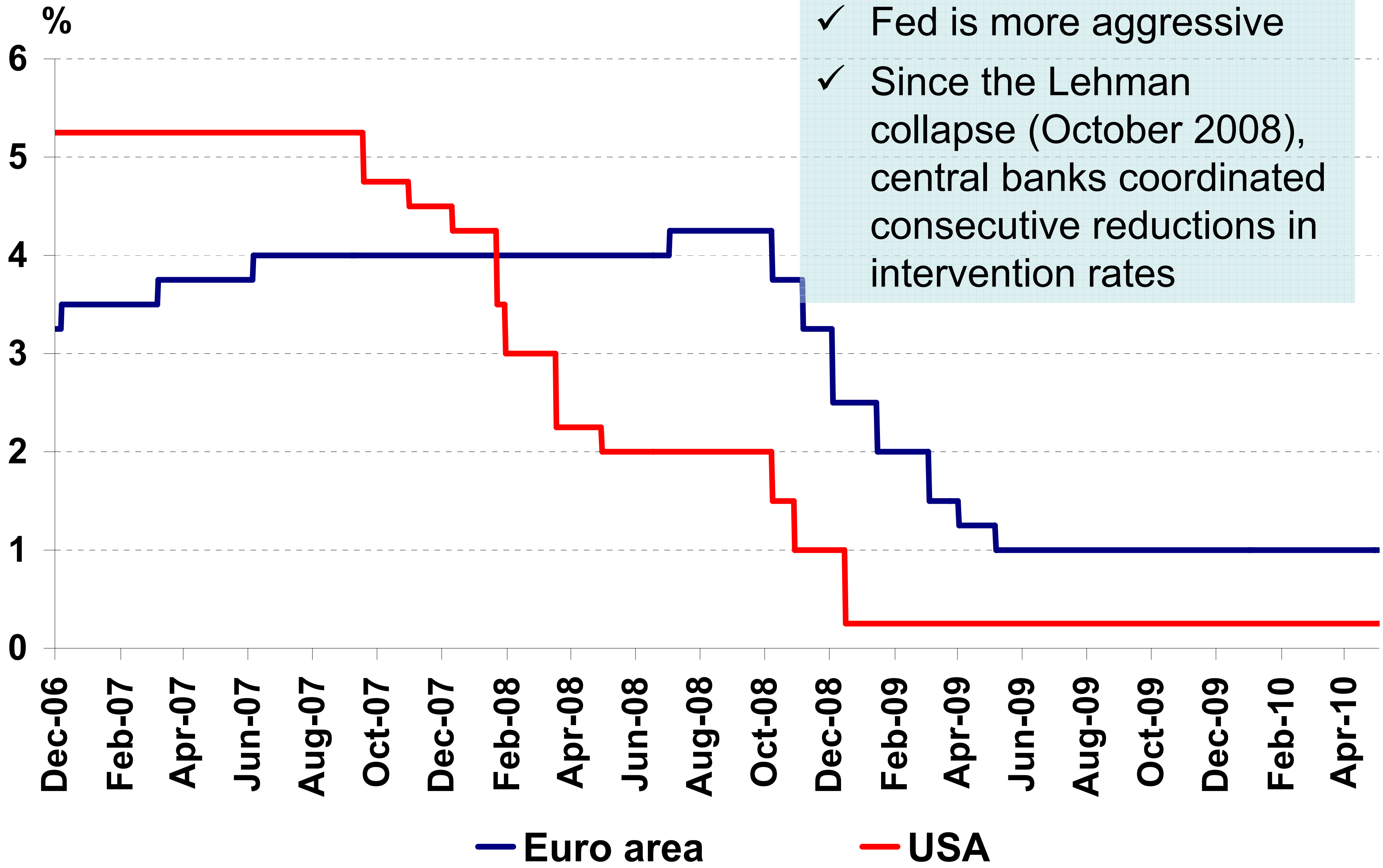


I.1 The Great Recession of 2009

Source: IMF, World Bank

✓ In 2009, global real GDP growth turned negative for the first time since 1930

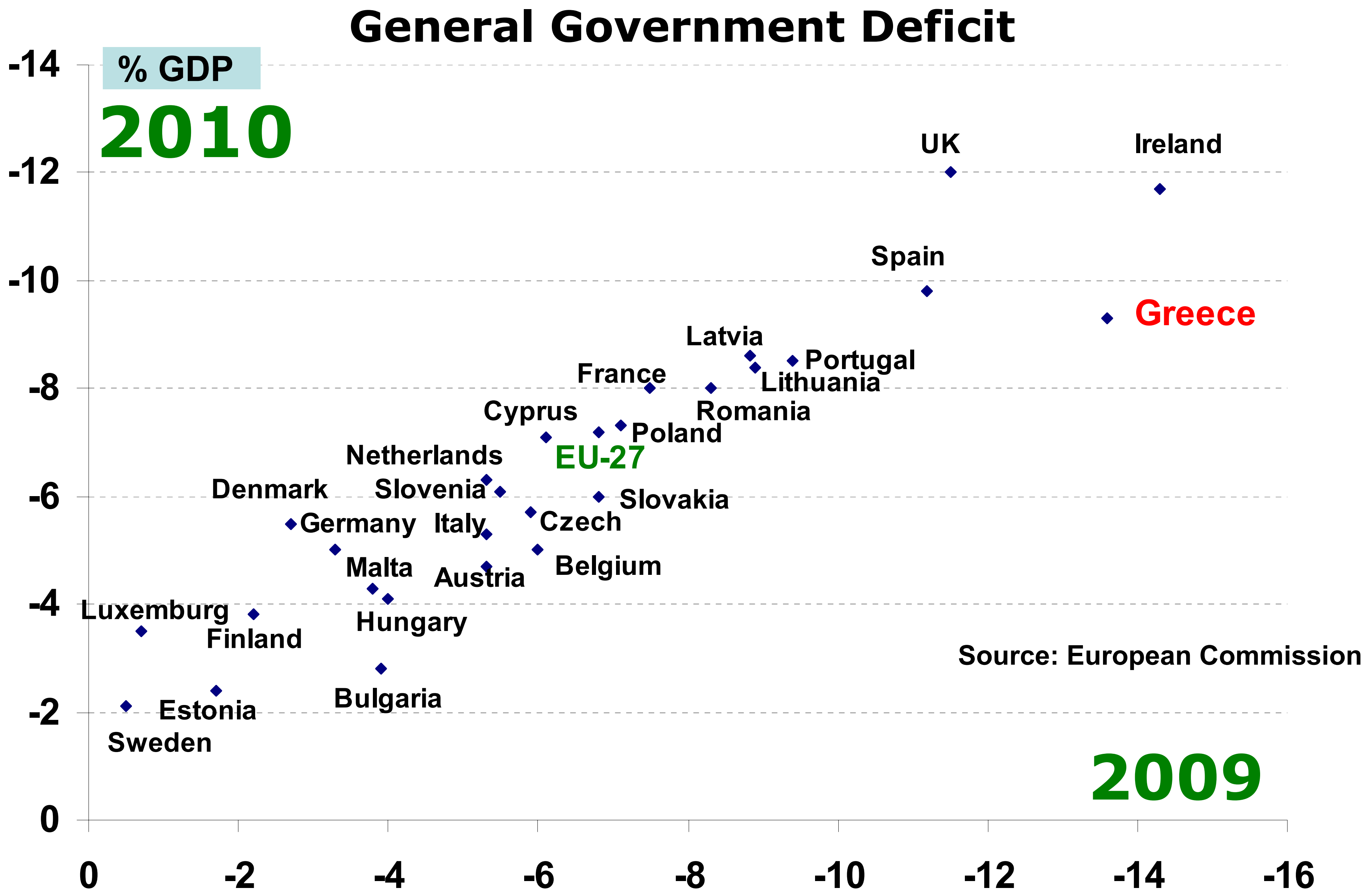
II.1 Policy makers responded



- ✓ Fed is more aggressive
- ✓ Since the Lehman collapse (October 2008), central banks coordinated consecutive reductions in intervention rates

Source: ECB, Federal Reserve

I.1 Fiscal authorities responded too



I.2 Output Forecasts

Real GDP	2009	2010e	2011f
USA	-2.4	3.0	3.2
Euro area	-4.1	1.1	2.0
Japan	-5.2	1.3	1.9
China	8.7	10.0	9.5
Brazil	-0.2	5.5	5.0
Russia	-7.9	4.5	5.0
India	6.5	8.0	8.5
Greece	-2.0	-4.0	-2.6
Bulgaria	-5.0	-0.3	2.0
Poland	1.8	2.7	3.3
Romania	-7.1	1.0	3.5
Serbia	-3.0	1.5	3.0
Turkey	-4.7	5.0	4.0

- ✓ Recovery almost everywhere
- ✓ Stronger recovery in the US than the Euro Area
- ✓ Sluggish recovery in our region, with Turkey showing the best prospects
- ✓ We avoided a repetition of the 1930’s by transferring the associated costs to the future

Source: Eurobank EFG Research

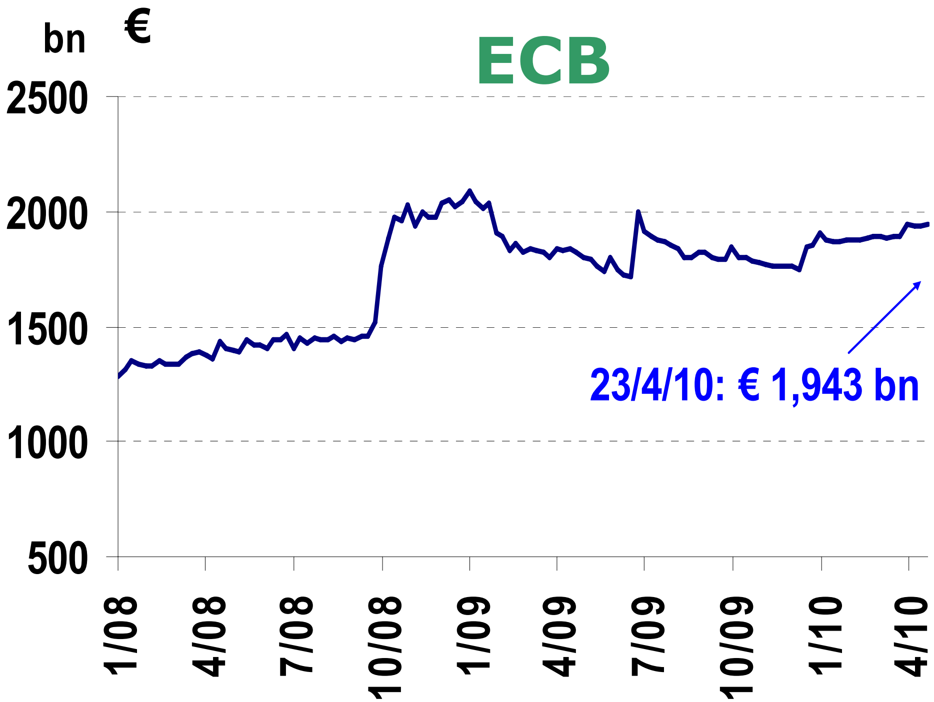
I.2 Consensus forecasts: Policy rates

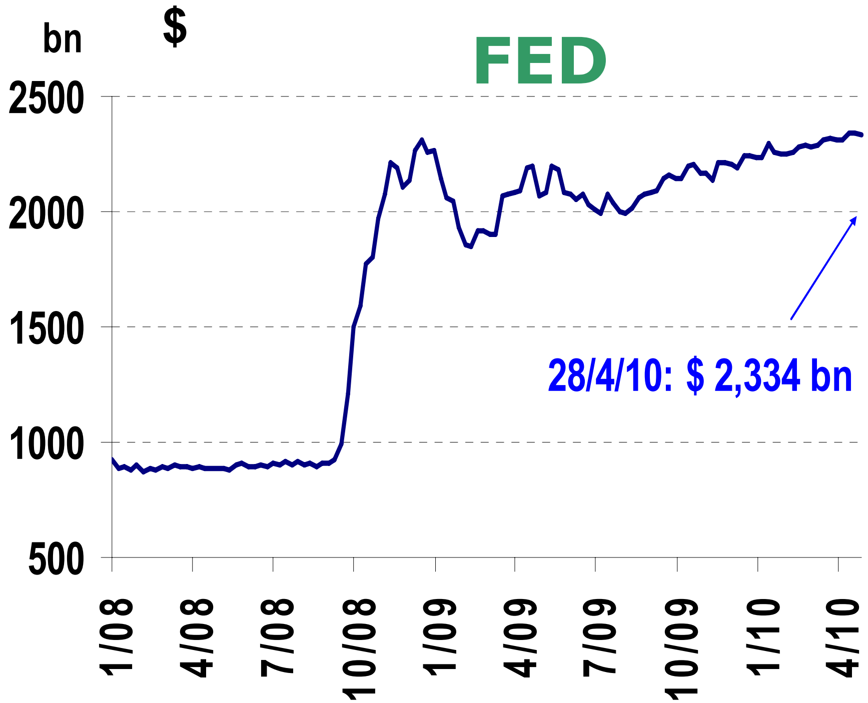
Policy Rates	2009	Current	Q2 10f	Q3 10f	Q4 10f
		End-of-period			
US	0.00-0.25	0.00-0.25	0.00-0.25	0.00-0.25	0.50
Euro Area	1.00	1.00	1.00	1.00	1.00
Japan	0.10	0.10	0.10	0.10	0.10
China	5.31	5.31	5.31	5.85	6.12
India	4.75	5.25	5.50	5.75	6.25
Russia	8.75	8.00	7.75	7.50	7.50
Brazil	8.75	9.50	10.00	10.75	11.25

* Bloomberg Survey, end-of quarter forecasts

I.2 Is the crisis over? The main risk of early liquidity withdrawal

Central bank balance sheets



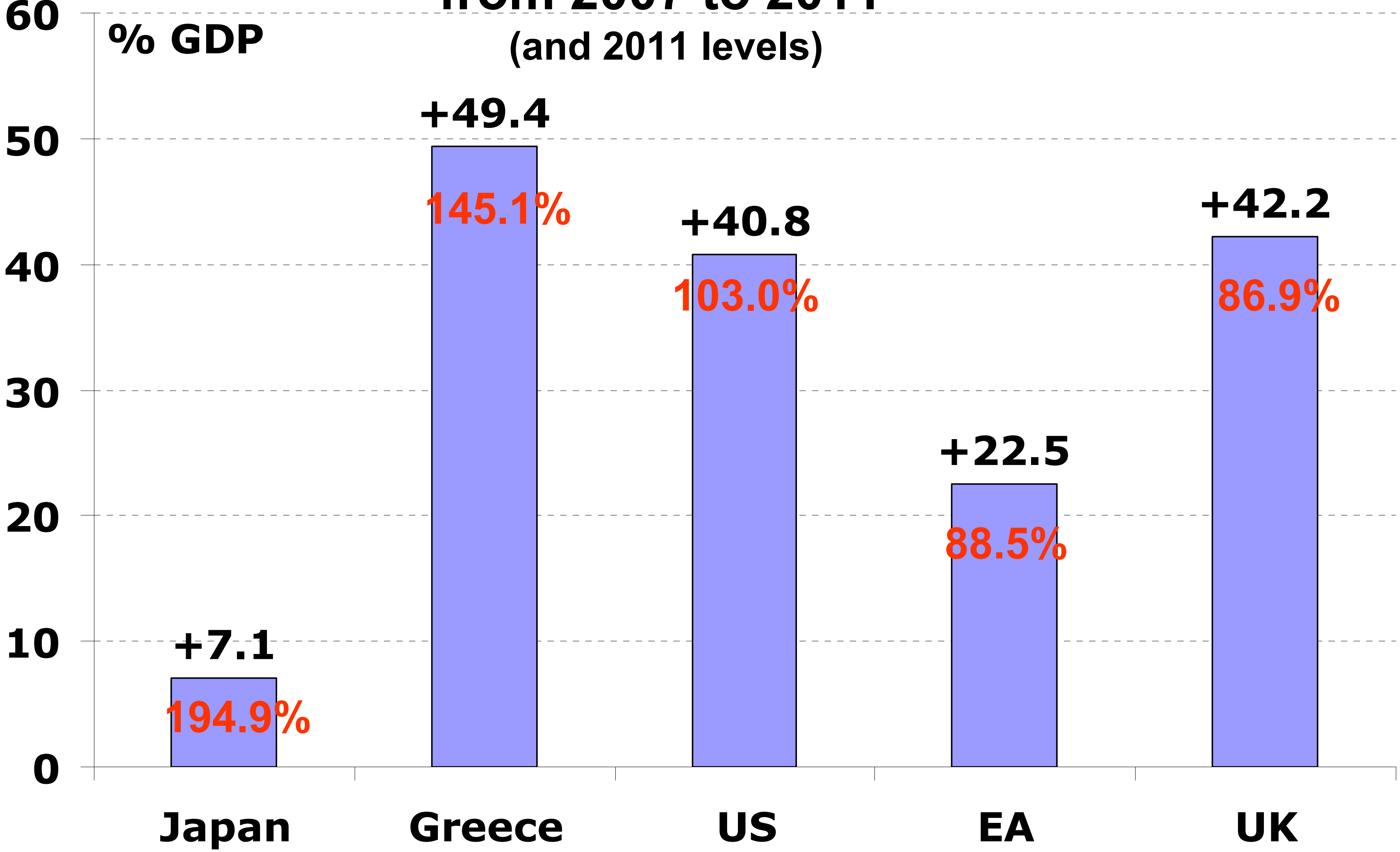


Source: ECB, Federal Reserve

- ✓ Central banks decreased their intervention rates and pioneered new ways to provide liquidity, especially post-Lehman (quantitative & qualitative easing).
- ✓ Recovery depends on the continuing support by central banks and governments
- ✓ ECB is more conservative than the Fed, will likely withdraw liquidity sooner

I.2 Will the financial crisis turn into a sovereign crisis?

Change in General Government Debt-to-GDP ratio from 2007 to 2011 (and 2011 levels)



Source: European Commission

I.3 Slower future world growth ahead

It was not the Great Depression or Capitalism's 1989, but this Great Recession is likely to leave its permanent marks

My long-term view is for lower growth than the period leading up to the crisis

1 Higher real interest rates ahead
   - ✓ Risk premia to stay high
   - ✓ Higher demand for new bank equity capital will increase the cost of intermediation
   - ✓ Fiscal debt will compete with private debt for funding
   - ✓ Central bank intervention interest rates expected to go back up

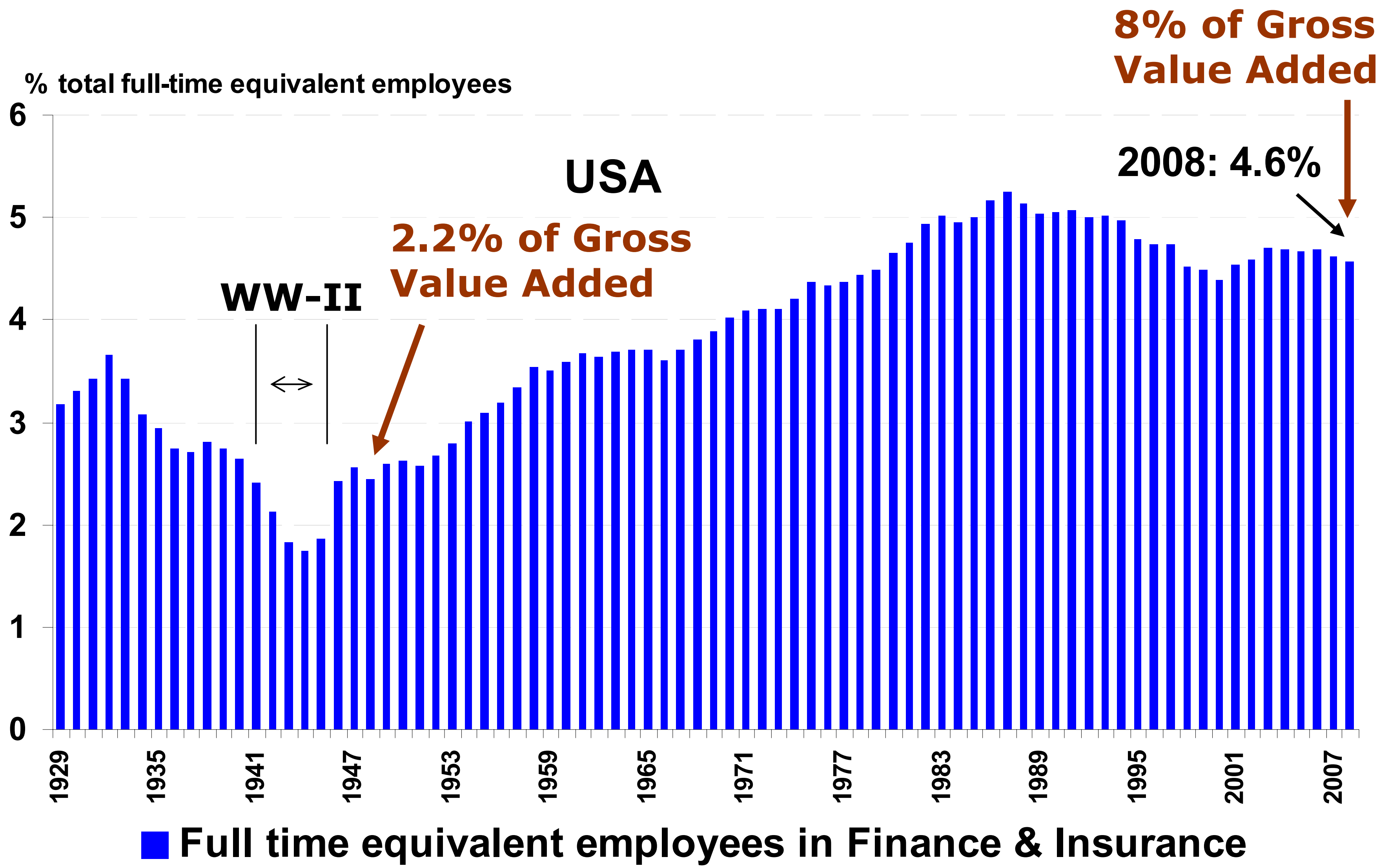
2. Future de-leveraging of the government sector, hence restrictive fiscal policy

3. Mediation of global imbalances: The US consumer is forced to reduce leverage and increase savings – hence lower exports by third countries to the US
   - ✓ The Chinese consumer is not ready to close the gap yet
   - ✓ India is still a closed economy
   - ✓ Europe depends on exports

I.3 A different world ahead

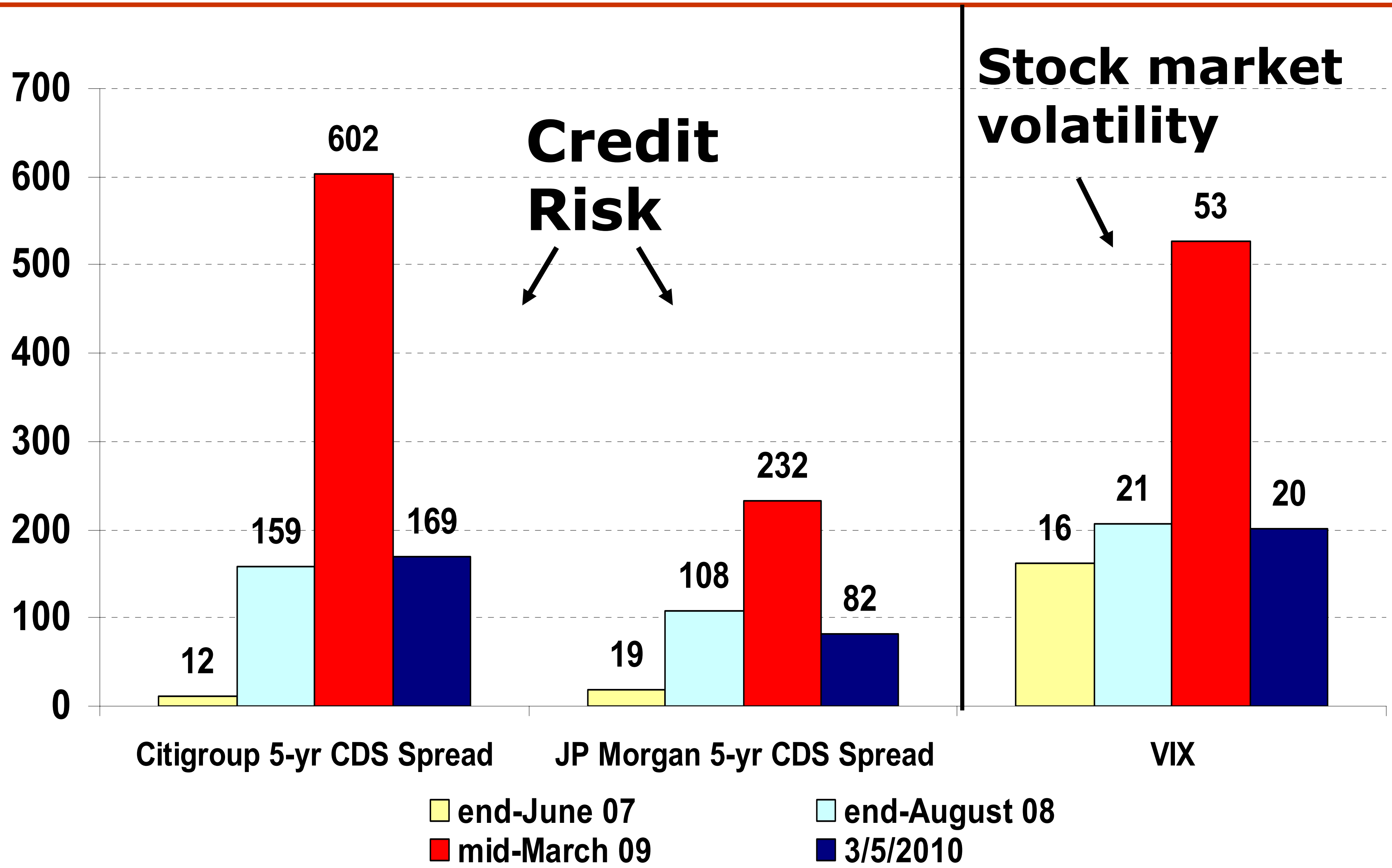
- ✓ Economics: **Slower global growth due to the crisis:** We are trading off current & future stability against future average growth
- ✓ Politics: Economic & political power ➔ Asia and G-20, with the **crisis expediting the shift**
- ✓ Global Regulation: The Financial Stability Board gains power among IFIs
- ✓ **A different financial landscape,** as G-20 decisions will affect banks and increase the cost of financial intermediation
  - ✶ Aim should be to avoid the excesses of the financial sector without imposing too much unnecessary cost
  - ✶ **Capital is costly**. Some smart proposals by academics that bear a minimum cost, e.g. *during economic expansions, instead of forcing banks to issue additional equity, which is costly, force them to issue debt convertible to equity during a crisis*
  - ✶ More **countercyclical** regulation on capital requirements, leverage ratios, maximum loan-to-value ratios
  - ✶ Additional capital requirements for **large institutions** and greater emphasis on host country regulation
- ✓ **Wall Street** continues to hold considerable **political power <u>against future regulatory restrictions</u>**

I.3 Will the expanding financial industry suffer?



Source: Bureau of Economic Analysis

I.4 Is the crisis over? Spreads down but not at pre-crisis levels

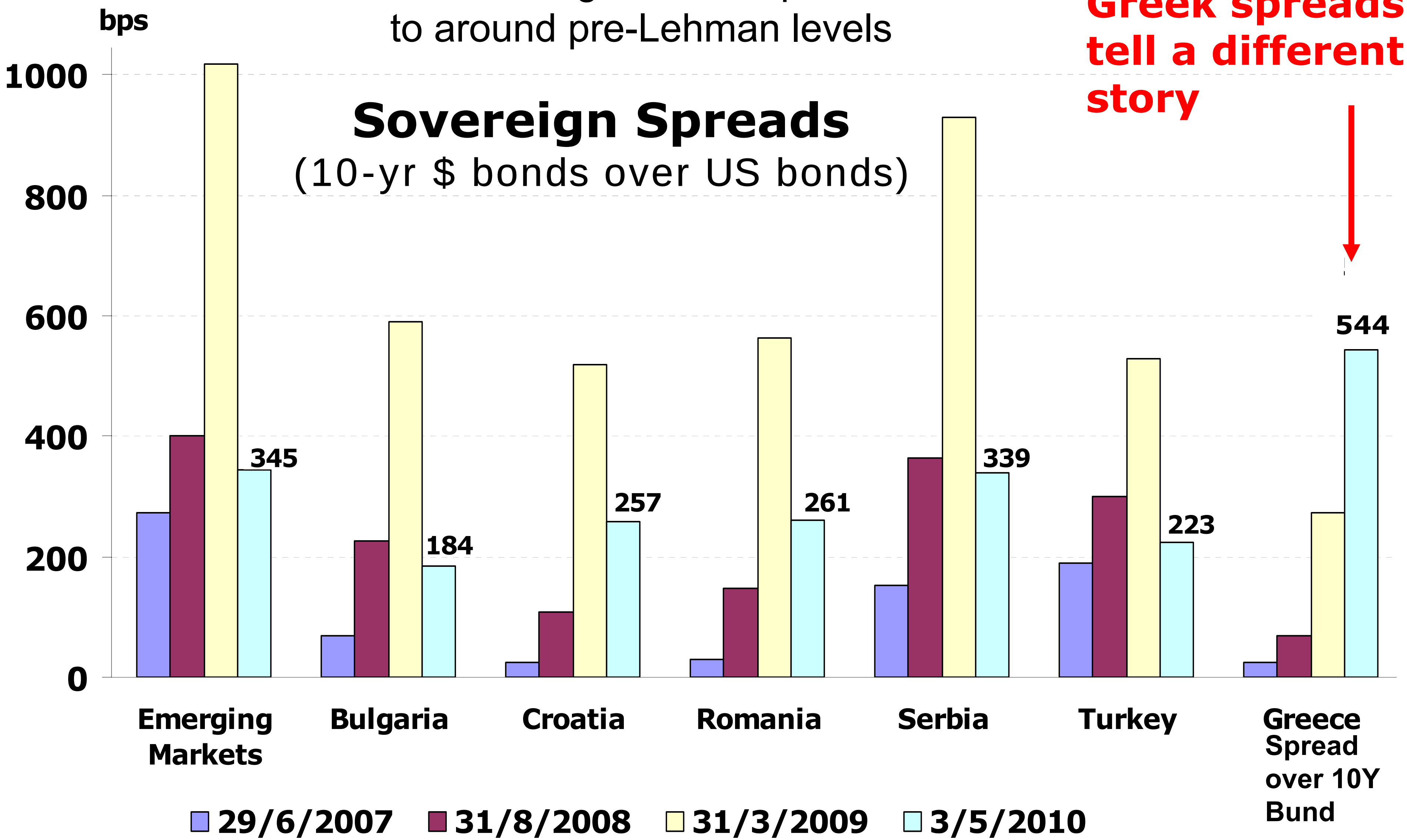


Source: Bloomberg

I.4 The market view in our region: Spreads are down

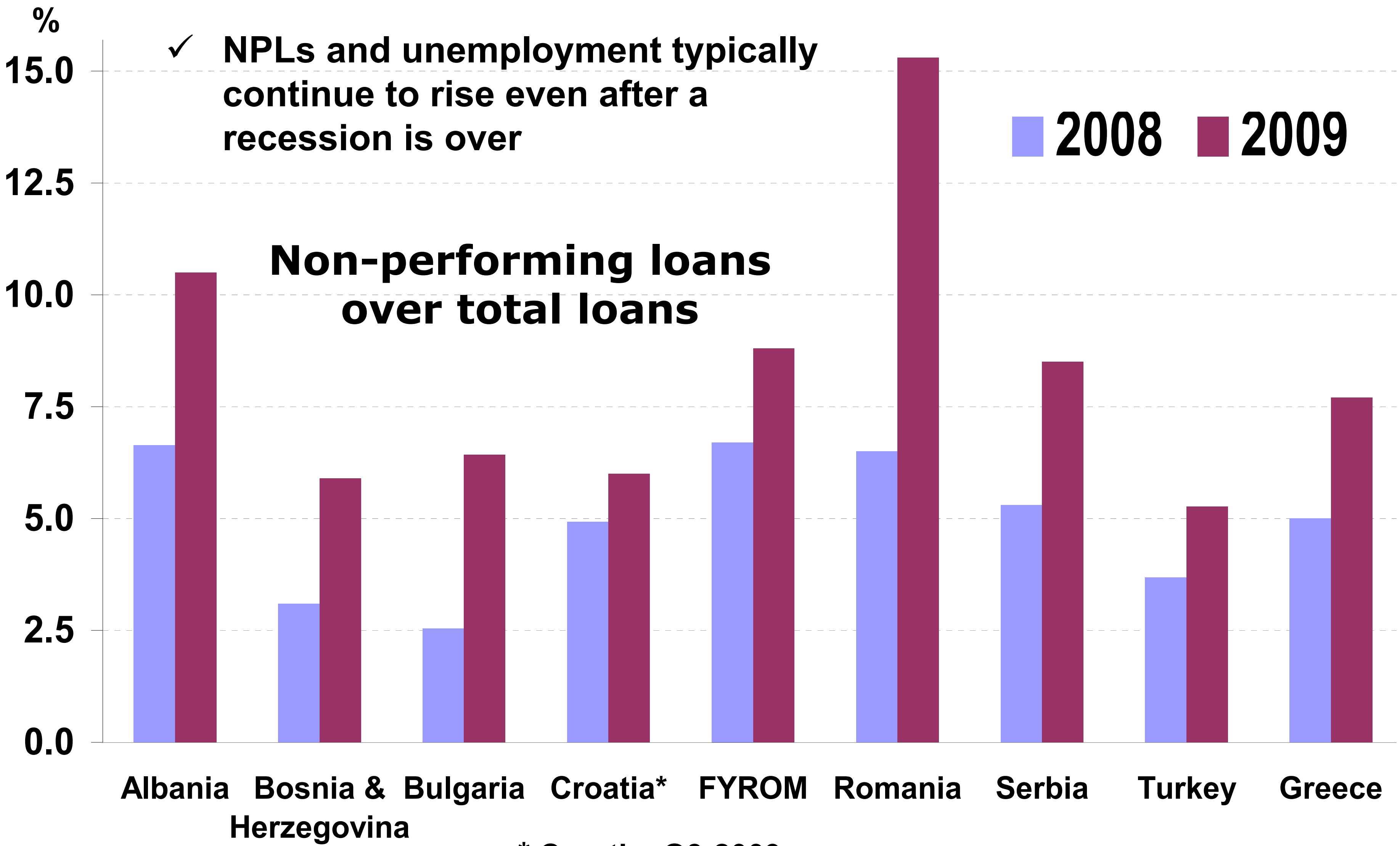
✓ IMF funding reduces spreads to around pre-Lehman levels

Greek spreads tell a different story



Source: JP Morgan EMBIG, Bloomberg

I.4 Is the crisis over? The rise in NPLs



* Croatia: Q3:2009

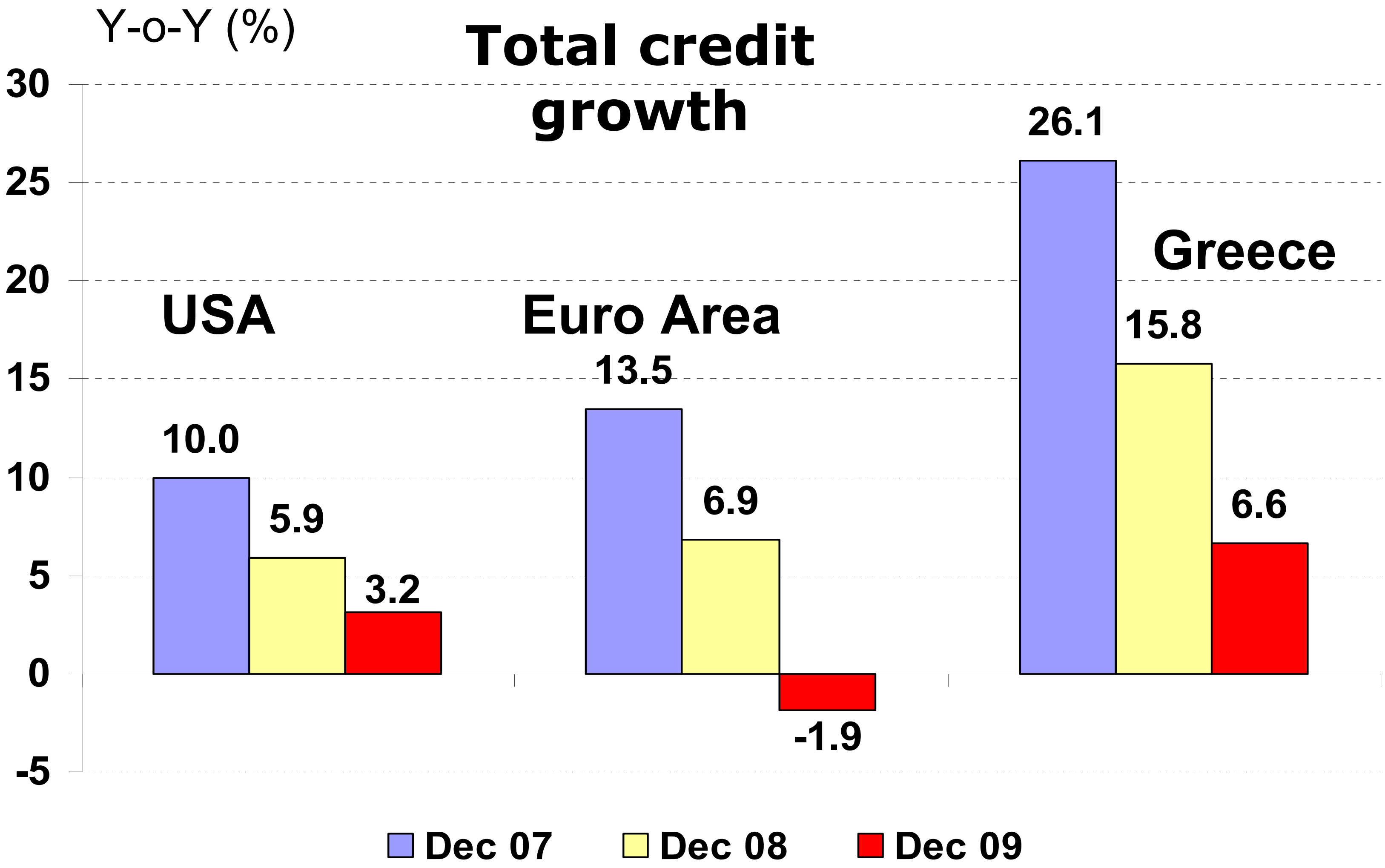
Source: Central Banks, IMF, Eurobank Research

II.

THE SPECIAL GREEK PROBLEMS

1) **The imported international crisis**
2) **Greece faces two major idiosyncratic risks**
   i. **Lack of Competitiveness**
   ii. **Fiscal laxity**
3) **The rating agencies alter their view on Greek debt sustainability**

II.1 Credit growth still positive in Greece …

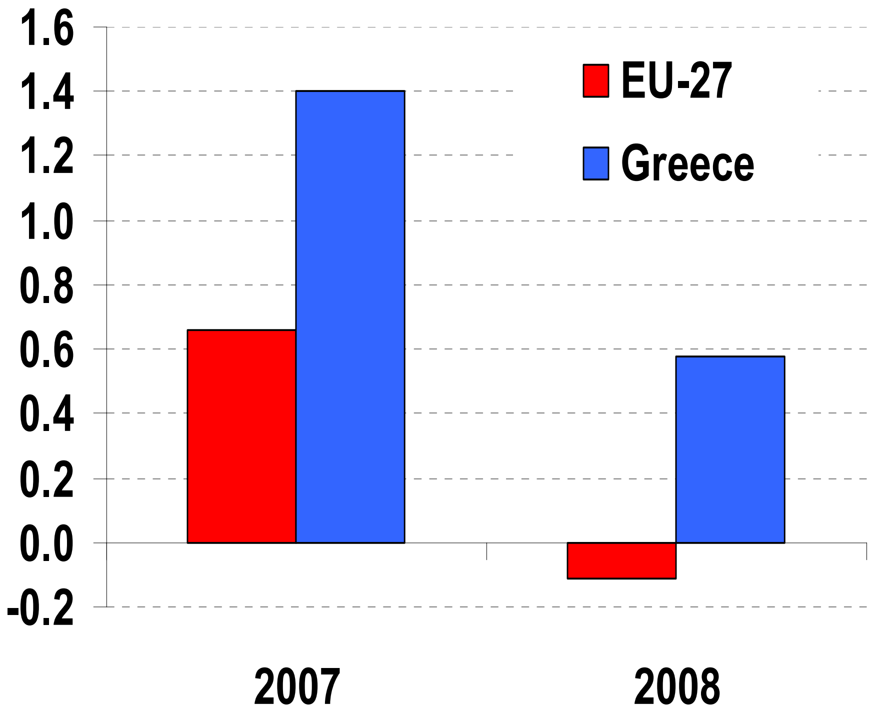


Source: ECB, Fed

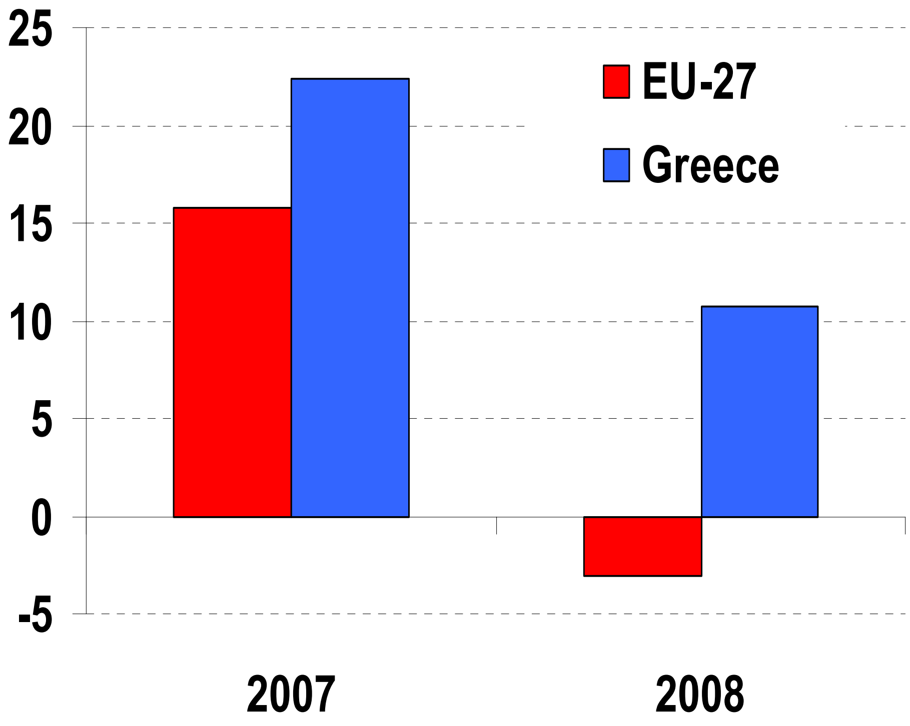
II.1 … as Greek banks, unlike US & European FIs, remained strong

✓ **Less of a problem in Greece relative to EU-27**

Return On Assets



Return On Equity



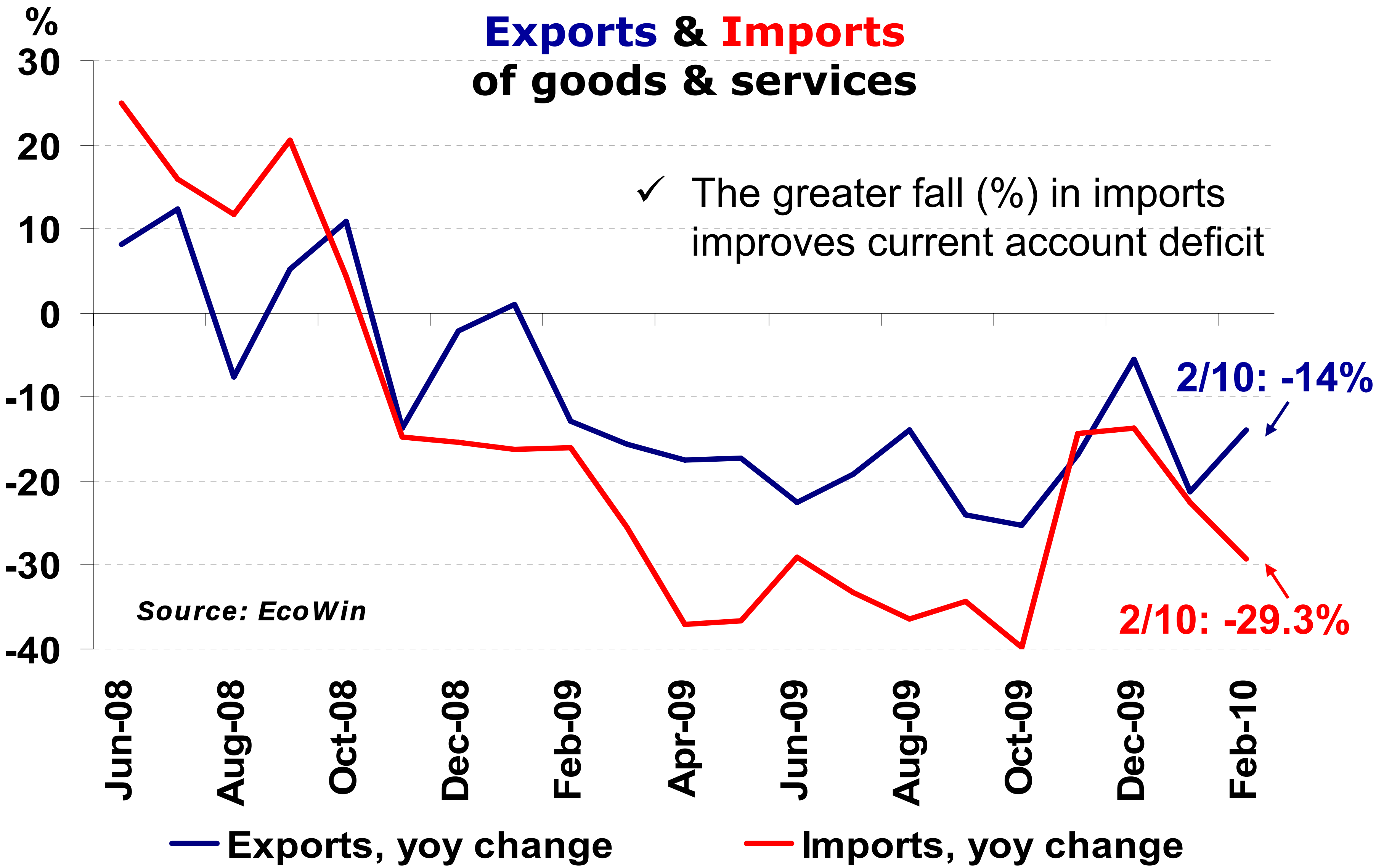
Source: ECB

Bank Groups in Greece

	1H 2008	1H 2009
ROA	1.1	0.5
ROE	15.7	7.7

Source: Bank of Greece

II.1 Greece: Collapse of Trade in Q4-2008



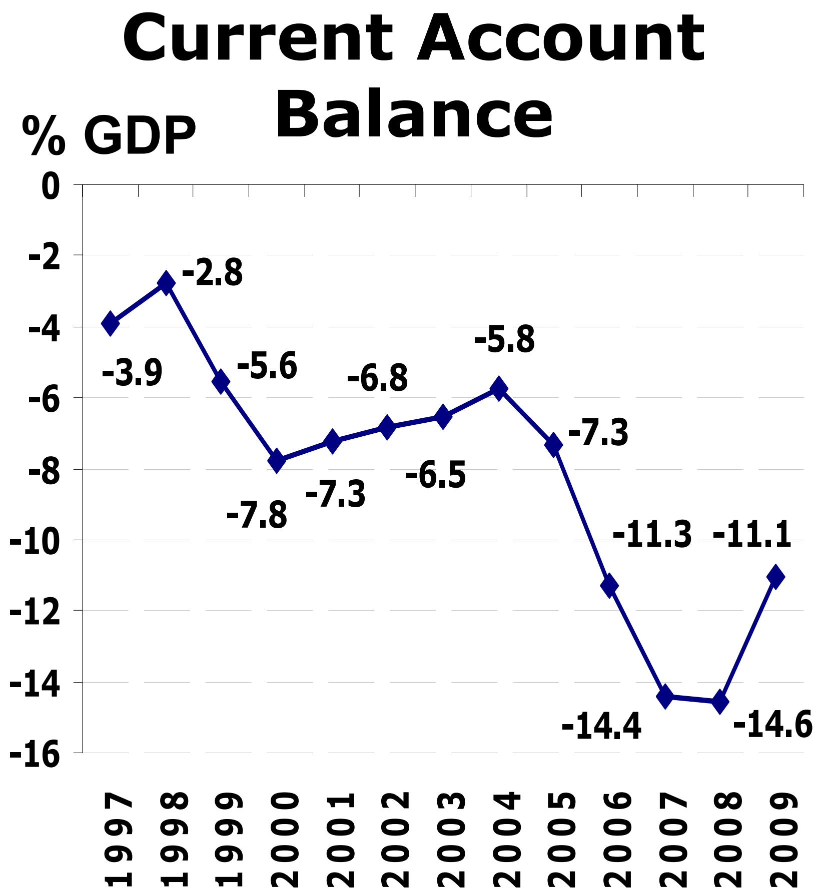
II.2 Ease of Doing Business rankings reveal lack of competiveness

- **World Bank:**
  In 2009 Greece ranked 109th out of 183 countries

	Rank	Starting a business (days)	Difficulty of hiring (0-100)	Protecting Investors (0-10)	Exporting Goods (days)	Paying Taxes (hours per year)
Greece	109	19	44	3.3	20	224
OECD		13	26.4	5.8	10.5	194.1
Portugal	48	6	33	6	16	328
Czech Rep.	74	15	33	5	17	613
Turkey	73	6	44	5.7	14	223
Bulgaria	44	18	17	6	23	616
Romania	55	10	67	6	12	202

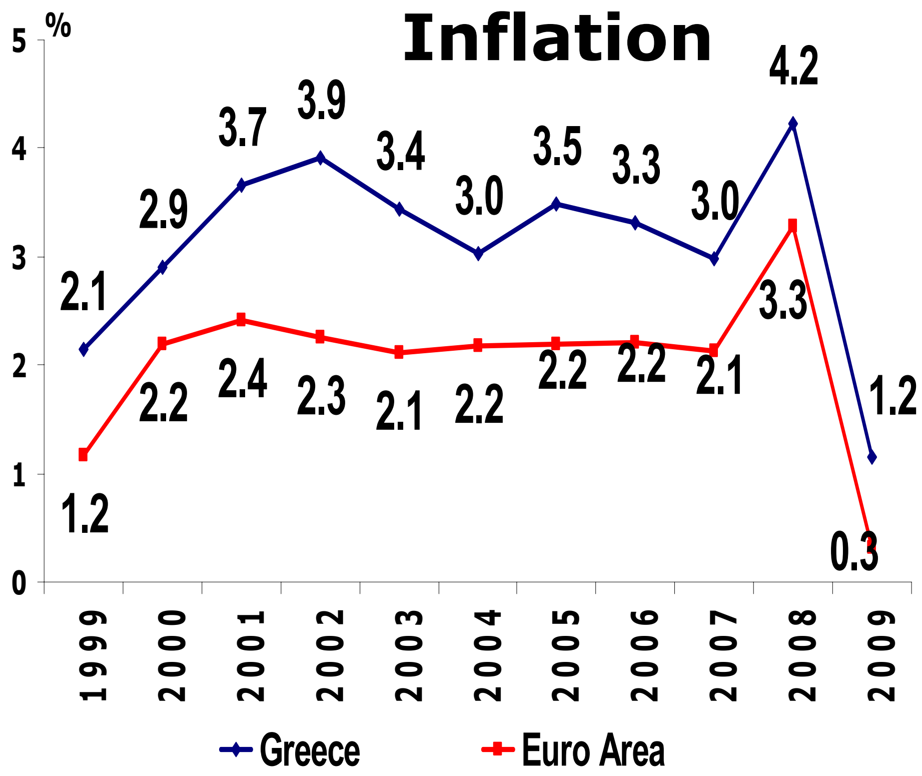
Source: World Bank *Ease of doing business 2010*

II.2 Lack of competitiveness shows up in current account as well as in inflation differential



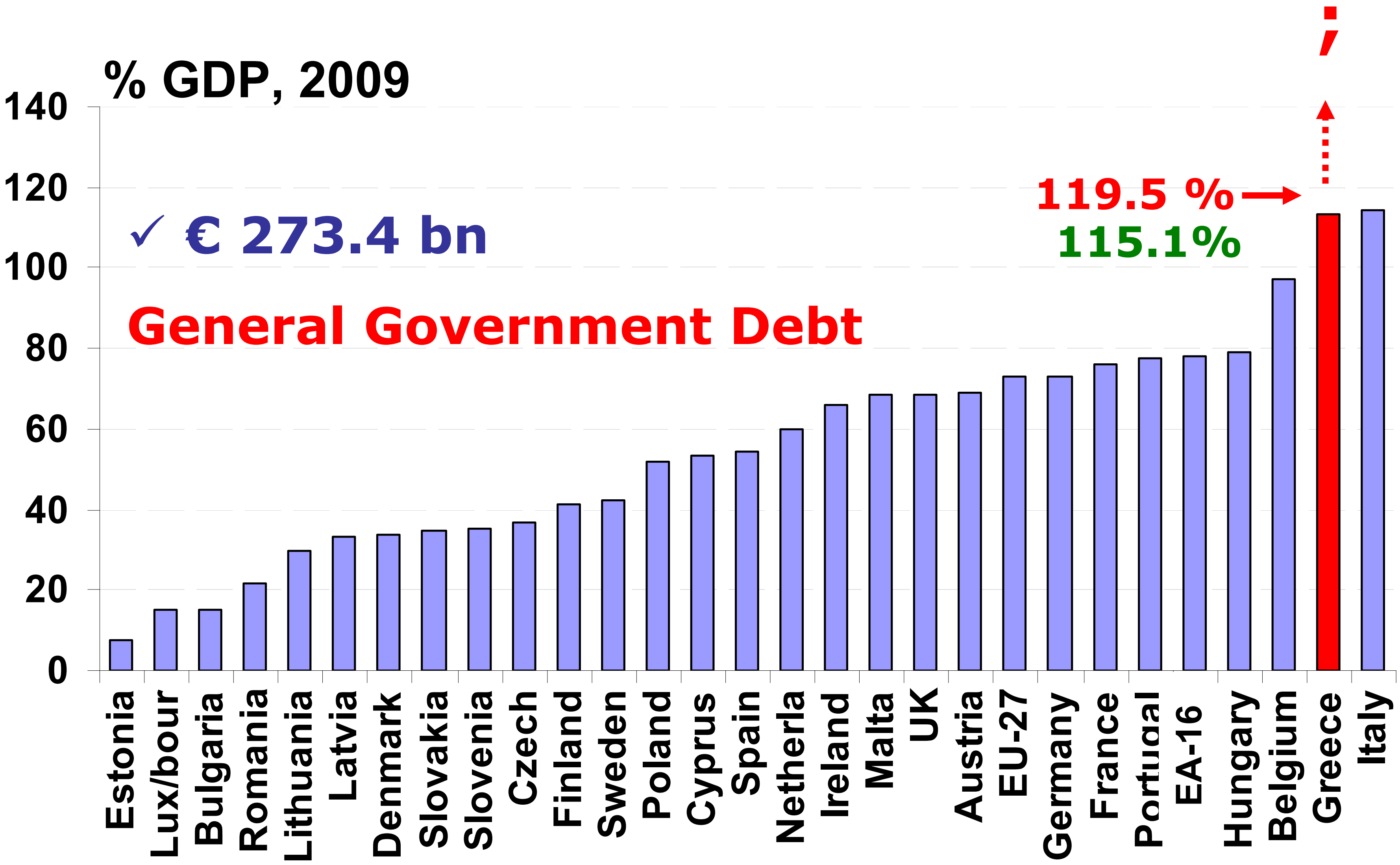
Source: Bank of Greece

- ✓ In every single month, inflation in Greece was higher than the Euro Area average



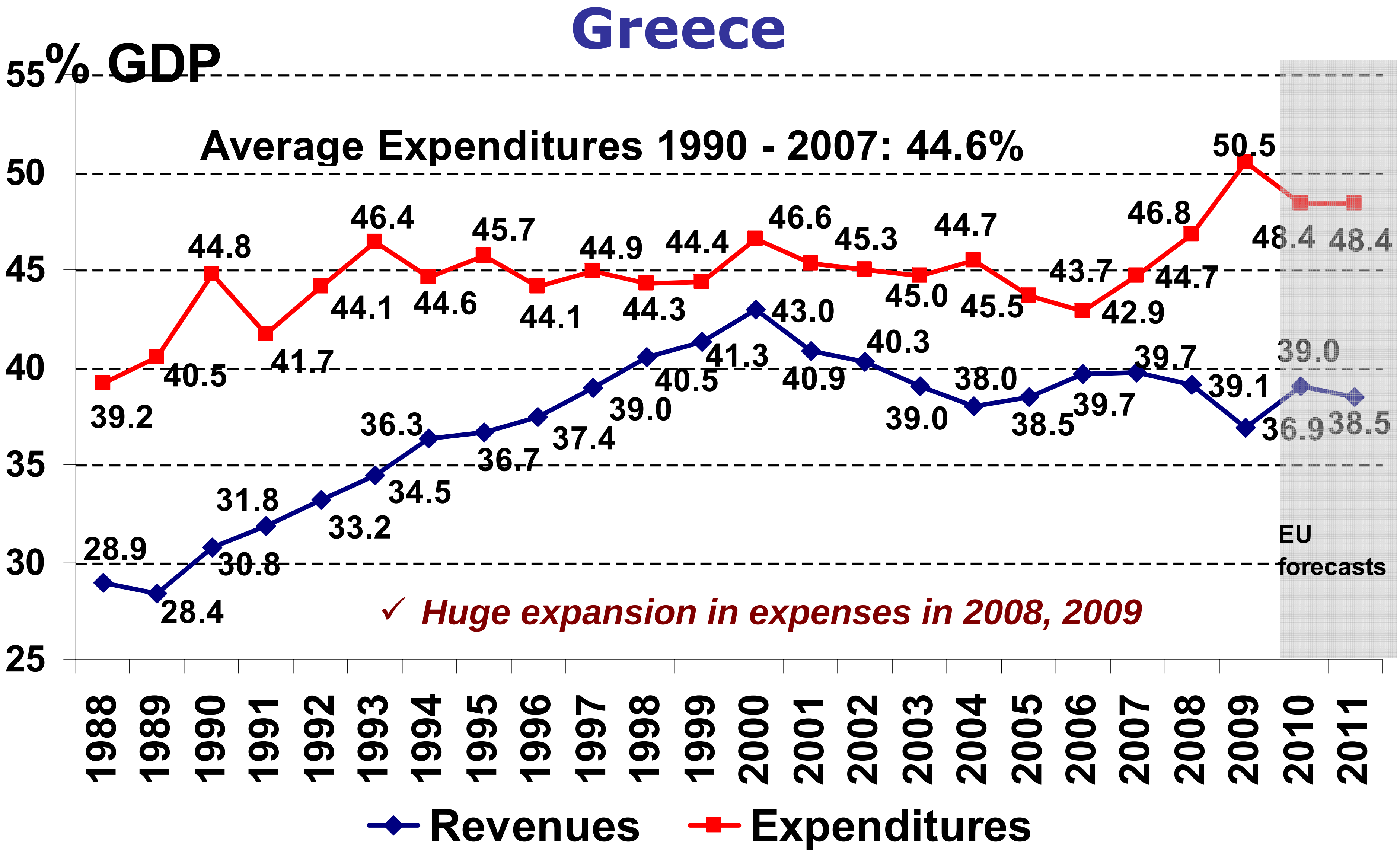
Source: European Commission

II.2 The most indebted country in EU-27



Source: European Commission

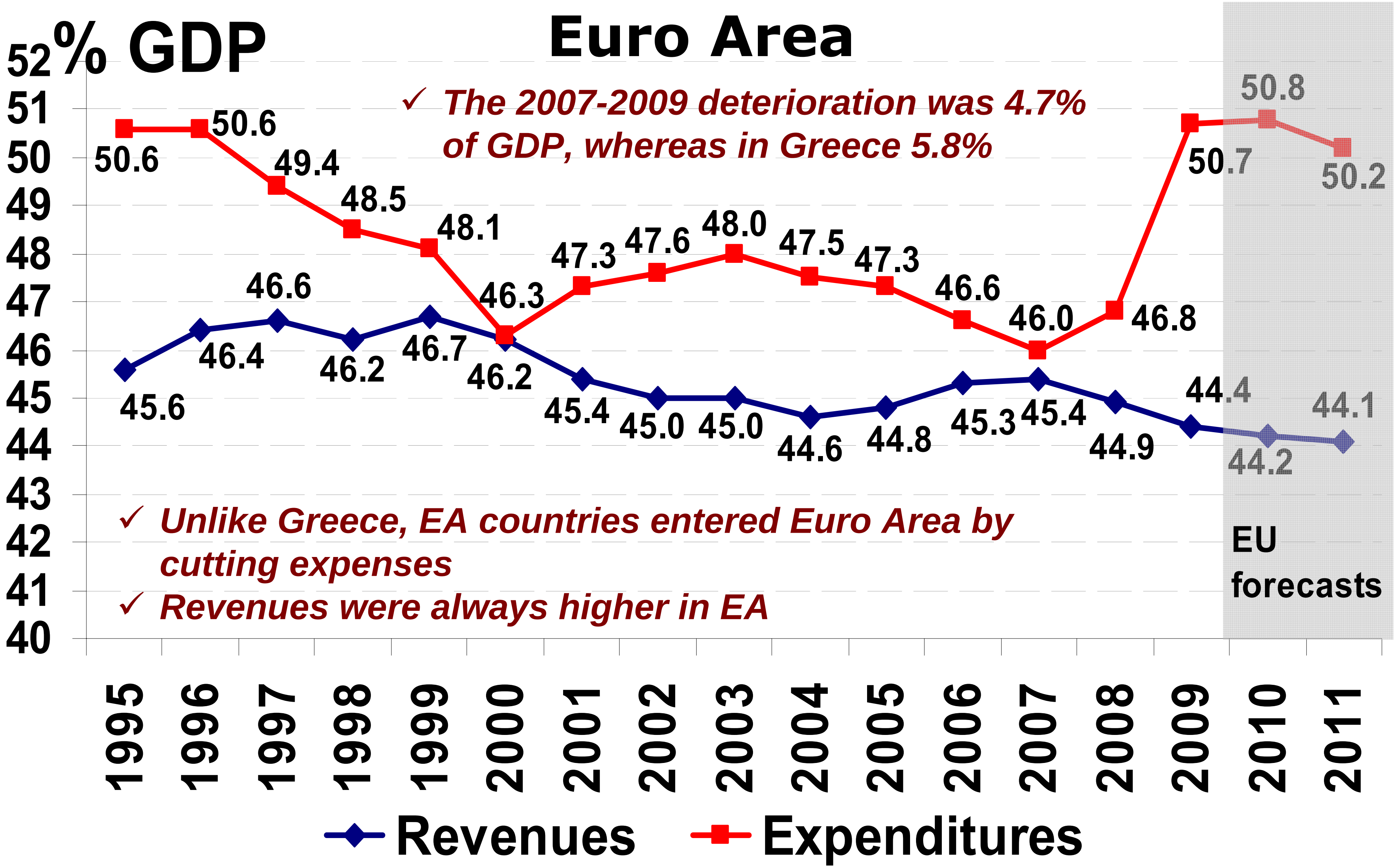
II.2 The devastating years 2008 & 2009



Gikas A. Hardouvelis, May 7, 2010

Source: European Commission, Spring 2010 forecasts

II.2 Euro Area expenses show smaller deterioration despite the bigger recession



Source: European Commission, Spring 2010 forecasts

II.2 Additional fiscal burdens

- ✓ *Greek deficits were the largest in 2008 and 2009*
- ✓ *Greek debt is now the largest in EU-27 and is explosive*
- ✓ *Pension system future pressures bigger in Greece*
- ✓ *Lack of credibility of Greek fiscal statistics*

Greece

	2010	2020	2035	2060
Pension Expenditure (% GDP)	11.6	13.2	19.4	24.1
Pension system dependency ratio (%)*	56	59	78	102

Euro Area

	2010	2020	2035	2060
Pension Expenditure (% GDP)	11.2	11.6	13.2	13.9

* number of pensioners relative to the number of contributors in public pension schemes

Source: European Commission 2009

II.3 Credit Ratings as of May 5, 2010

Greece's sovereign credit rating (foreign currency LT debt)

Moody's	S&P	Fitch
Aaa	AAA	AAA
Aa1	AA+	AA+
Aa2	AA	AA
Aa3	AA-	AA-
A1	A+	A+
A2	A	A
A3 (outlook: negative)	A-	A-
Baa1	BBB+	BBB+
Baa2	BBB	BBB
Baa3	BBB-	**BBB-(outlook: negative)**
Ba1	**BB+(outlook: negative)**	BB+
Ba2	BB	BB
Ba3	BB-	
B1	B+	
B2	B	
	B-	
	CCC+	
	CCC	
	CCC-	
	CC	
C	C	
WR	D	
	NR	

Pre-crisis ECB line

Current ECB line. The ECB has decided to suspend the application of the minimum credit rating threshold for Greece until further notice

- ✓ **Downgrades by all three rating agencies in 2009 and 2010**
- ✓ **S&P and Fitch are very harsh, bringing Greece down by four and five notches respectively, perhaps becoming conservative from earlier failure to foresee the subprime problem**

Note: Investment grade above dotted line

Source: Bloomberg

II.3 Ratings will be slow to adjust upward

- ✓ Continuous upgrades 1994-2003:

BBB- → A+

- ✓ First downgrade in 2004
- ✓ In 2009, downgrades associated with negative outlooks by FITCH and S&P (-2 steps), MOODY´S (-1 step)
- ✓ In April 2010 further downgrades FITCH (-2 steps), S&P (-3 steps) and MOODY´S (-1 step)
- ✓ Unchartered territory today

	S&P	MOODY'S	FITCH
2010	BB+	A3	BBB-
2009	BBB+	A2	BBB+
2008	A	A1	A
2007	A	A1	A
2006	A	A1	A
2005	A	A1	A
2004	A	A1	A
2003	A+	A1	A+
2002	A	A1	A
2001	A	A2	A
2000	A-	A2	A-
1999	A-	A2	BBB+
1998	BBB	Baa1	BBB
1997	BBB-	Baa1	BBB
1996	BBB-	Baa1	BBB-
1995	BBB-	Baa3	BBB-
1994	BBB-	Baa3	
1993	BBB-		

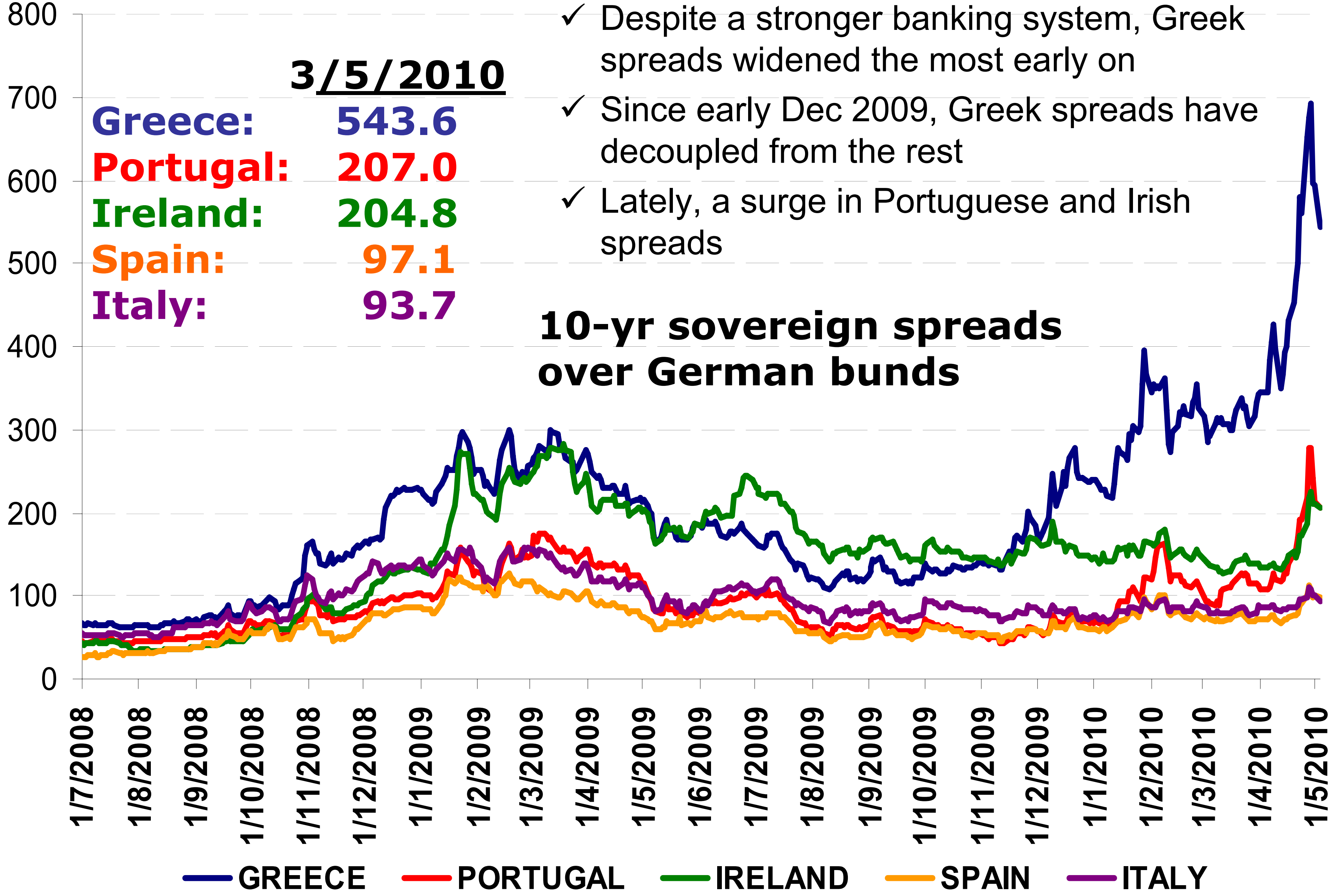
Source: Bloomberg

III.

GREECE IN THE EURO AREA

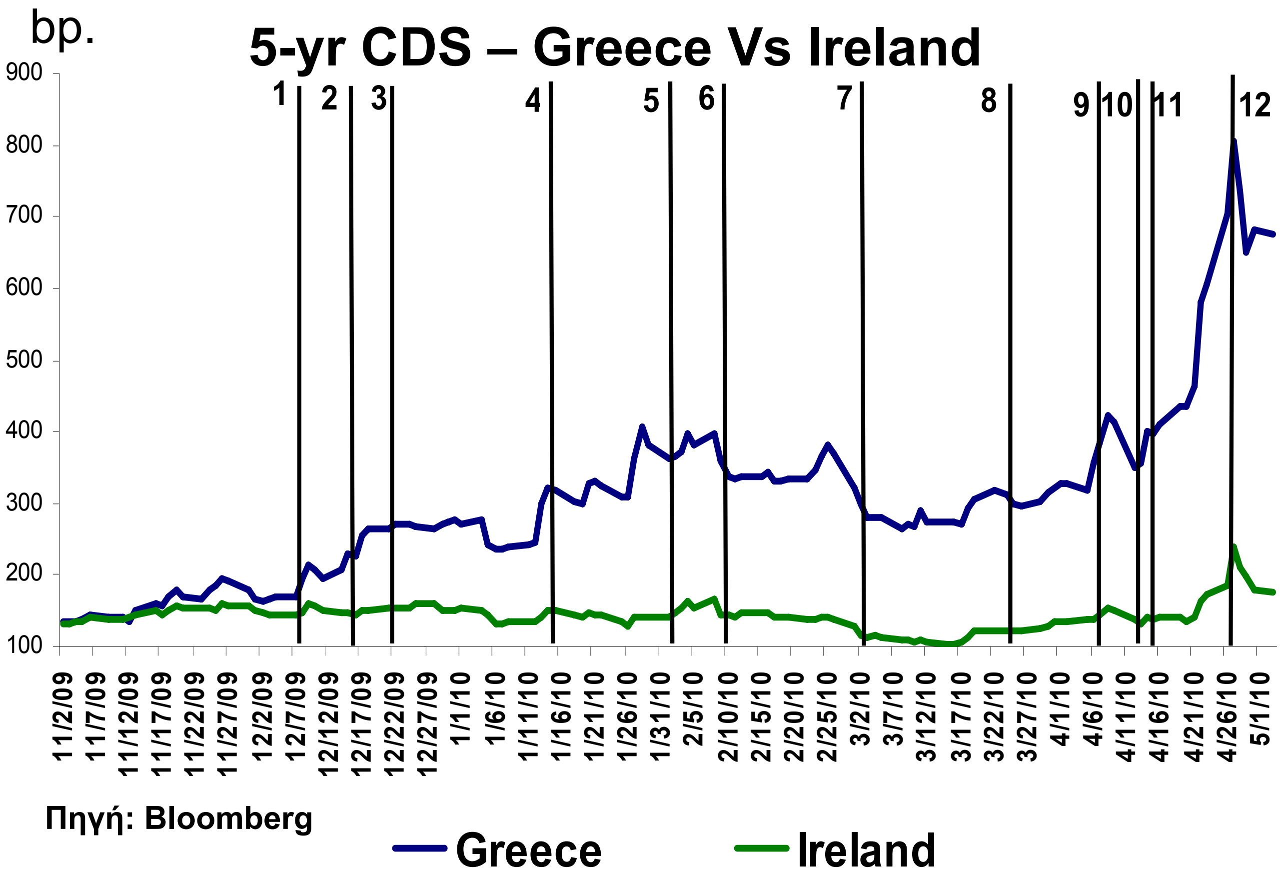
III. Pressure from bond spreads

- ✓ Despite a stronger banking system, Greek spreads widened the most early on
- ✓ Since early Dec 2009, Greek spreads have decoupled from the rest
- ✓ Lately, a surge in Portuguese and Irish spreads



Source: Bloomberg

III. Credit Default Swap spreads widen since December 2009



1.	8 /12/2009	FITCH downgrading (A- to BBB+)
2.	16/12/2009	S&P downgrading (A- to BBB+)
3.	22/12/2009	Moody's downgrading (A1 to A2)
4.	15/1/2010	SGP announcement
5.	2/2/2010	PM announces the first package of additional measures.
6.	11/2/2010	Eurogroup leaders approve SGP.
7.	3/3/2010	Second package of measures.
8.	25/3/2010	EU Decides on fiscal aid plan for Greece
9.	8/4/2010	ECB announcement on accepted collateral after 1/1/11
10.	12/4/2010	Details of the EU/IM fiscal aid plan
11.	15/4/2010	Finance Minister's letter to EU, IMF, ECB
12.	27/4/2010	S&P downgrading (BBB- to BB+)

- ✓ CDS market capitalization €80 bn
- ✓ On May 3, 2010 the required premium against a Greek State default was $674,500 annually for 5 years (based on 5-yr GGB with face value € 10 ml.

III. Not very cheap EU borrowing

If weighted average swap rates for 3, 5, 10 years are: 1.90%, 2.20%, 3.55%

Then,

3-yr fixed = 190 + 300 + 50/3 = 5.07%

5-yr fixed = 250 + 300 + 50/5 = 5.60%

10-yr fixed = 355 + 300 + 50/10 = 6.60%

Add 100 b.p. after the first 3 years.

III. An EU/IMF/ECB adjustment program

	2009	2010	2011	2012	2013	2014
CPI Inflation (%)	1.3	1.9	-0.4	1.2	0.7	0.9
GDP Growth (%)	-2.0	-4.0	-2.6	1.1	2.1	2.1
Current Account	-11.1	-9.0	-7.5	-5.9	-4.4	-3.1
Deficit	-13.6	-8.1	-7.6	-6.5	-4.9	-2.6
Debt	119.5	133.3	145.1	148.6	149.1	144.3
Interest	5.1	5.6	6.5	7.5	8.0	8.5
Primary Surplus	-8.5	-2.4	-1.1	1.0	3.1	5.9

- If not otherwise indicated, all numbers are in % GDP
- General Government figures
- Debt numbers do not include €26 bn or 11% of GDP of government guarantees to public sector enterprises
- **[DEBT/GDP](t) – [DEBT/GDP](t-1) =**

  [PRIMARY/GDP](t) + [(i-g)/(1+g)](t) [DEBT/GDP](t-1)

III. Greece looks more like Lehman Brothers

Lehman (15/9/2008)

1) **Systemic problem** (market maker, debt dispersion)
   - Debt: $ 613 bn.
   - $155 bn. in bonds (held by 3 banks), the rest were short term securities (held by 100.000 private entities).
2) **no "lender of last resort" mechanism:**
   - As an investment bank, **could not utilize Fed facilities**
   - **No lending** from the private sector
3) Before bankruptcy
   - **Deficient audit**
   - **Creative accounting**
   - **Short term borrowing**
   - **High risk strategy**: LB took more risk because of its «too big to fail» belief

Greece (31/12/2009)

1) **Systemic problem** (EMU)
   - Debt: €273.4 bn or $366,4 bn
   - 82% is held by foreign investors, average maturity 8 years.
2) **EMU " No bailout clause"**
   - **Although ECB provides liquidity**
   - **Expensive borrowing** from private sector, even **credit rationing**
3) In the past
   - **Deficient EU audit**
   - **Creative accounting**
   - **Long term borrowing**
   - **High risk strategy** in 2004-2007: «Preserve growth with no structural reforms». In 2008-2009: "Spend and increase the deficit"

III. … than it does like Argentina

- ✓ In December 2001 Argentina defaulted on its sovereign debt.
- ✓ In January 2002 the government abandoned the convertibility regime, under which the peso had been pegged at parity **(1:1)** with the U.S. dollar since 1991and devalued the peso (by the end of 2002 the peso was trading at **3.4 peso/ $**)

	1997	1998	1999	2000	2001	2002
GDP (% yoy, real prices)	8.1	3.8	-3.4	-0.8	-4.4	-10.9
CPI Inflation (y-end)	0.3	0.7	-1.8	-0.7	-1.5	41.0
CA Balance (% GDP)	-4.2	-4.9	-4.2	-3.1	-1.7	3.1
Public Debt (% GDP)	37.7	40.9	47.6	50.9	62.2	…
External Debt (% GDP)	42.7	47.5	51.2	51.6	52.2	42.9
International Reserves ($ bn)	22.3	24.8	26.3	25.1	14.6	10.5
REER (1990=100)	175.8	170.6	177.6	184.8	184.7	71.6
General Government balance (% GDP)	-2.1	-2.1	-4.2	-3.6	-6.2	-12.8
Primary balance (% GDP)	0.3	0.8	-0.8	0.5	-1.4	0.3
Sovereign Spreads *	456	705	533	770	5363	6342
Unemployment	14.9	12.8	14.1	15.0	17.4	19.6

* EMBI Global Argentina Stripped Spreads over US treasuries – year end

III. Argentina: Similarities with Greece

In the early 90's, Argentina, after a decade of hyperinflation and economic stagnation, embarked on a series of structural reforms with the support of the IMF.

- ✓ **The peso was pegged to the US dollar at parity (1:1) – currency board**
- ✓ **As a result inflation declined dramatically and economic performance improved.**

But, as was the case in Greece:

1) **Structural reforms were never completed**
2) **Competitiveness deteriorated**
3) **Fiscal policy, though much improved, remained weak and public debt continued to increase**

III. Argentina: Significant differences with Greece

1) The largest component of Argentina's public debt was denominated in foreign currency (around 90% in the end of the 90s) and servicing it was becoming extensively difficult under the pressure of preserving the convertibility regime
2) A Currency Board is not a Monetary Union
3) Extensive dollarization of the Argentinean economy
4) Deflation in Argentina
5) Extensive political instability before the default in Argentina
6) The banking system in Argentina, despite its modernization in the 90s, remained exposed to extensive risks:
    i. Low profitability – vulnerable to recession
    ii. Corporations and households were borrowing in dollars while their incomes were in pesos – currency mismatch – exposed to devaluation risk
    iii. 20% of assets were in government bonds
    iv. 1/3 of the banking system under state control, held 50% of the NPLs

III. Euro area soul searching

- ✓ The "no bail out" or so clause failed
- ✓ The "stability and growth pact" failed
- ✓ Will the euro area experiment fail? In Spanish hands?
- ✓ Can a new fiscal mechanism be created?
  - ❖ Bail out mechanism
  - ❖ Funding the supporting pool
  - ❖ Ways to reduce intra-EMU imbalances

IV. Summary

- ✓ **A weak global recovery in 2010 and lower world growth in the next 5-7 years with strong pressures on international banking**
- ✓ **Strength of recovery depends on continued provision of central bank liquidity and fiscal stimulus**
- ✓ **The crisis was imported in the region in 2008Q4**
- ✓ **The crisis uncovered the two major imbalances of the Greek economy, the lack of competitiveness and the lack of fiscal discipline – two related problems**
- ✓ **Since December 2009 increased market pressure led to a bailout by the EU/IMF/ECB**
- ✓ **EU/IMF/ECB conditionalities carry implementation risks**
- ✓ **The risk of high market interest rates remains**
- ✓ **A contagion is now evident in the Euro Area as its future is put to question ⇨ Euro Area future in Spanish hands?**