



The Greek Crisis, its Resolution and Implications for the EU and Beyond

Gikas A. Hardouvelis*

JOINT VIENNA INSTITUTE

VIENNA, AUSTRIA, MAY 16, 2011

- * **Economic Adviser & Chief Economist , Eurobank EFG Group**
- * **Professor, Department of Finance, University of Piraeus**



JVI, Monday, May 16

8:30 a.m. - 9:00 a.m.		Administrative Briefing , Ms. Tatiana Bredniakova, JVI
9:00 a.m. - 9:15 a.m.		Opening Session Conducted by Mr. Eduard Hochreiter, Director, Joint Vienna Institute; and Mr. Alex Mourmouras, Chief, European Division, IMF Institute
9:30 a.m. - 9:40 a.m.	L-1	Public Lecture & Discussion
9:40 a.m. - 10:40 a.m.		Introduction by Mr. Hochreiter
10:40 a.m. - 12:15 p.m.		The Greek Crisis, its Resolution and Implications for the EU and beyond Lecture by Prof. Gikas Hardouvelis, Piraeus University and Chief Economist at Eurobank
		Panel Discussion on the European Debt Crisis and its Resolution Moderator Mr. Thorvaldur Gylfason, Professor, University of Iceland Panelists: Messrs. Hardouvelis, Athanasios Vamvakidis, Head, European G10 Foreign Exchange Strategy, Bank of America Merrill Lynch; Michael Landesmann, Director of Research, The Vienna Institute for International Economic Studies (WIIW)
2:00 p.m. - 3:30 p.m.	L-2	Capital Flows and Macroeconomic Policy: An Overview Lecture by Mr. Mourmouras
3:45 p.m. - 5:00 p.m.	L-3	Exchange Rates and Competitiveness Lecture by Mr. Gylfason



The Greek Crisis, its Resolution and Implications for the EU and Beyond

PRESENTATION CONTENTS

- I. THE EURO AREA CRISIS:
HOW DID WE GET TO HERE?**
- II. GREEK IMBALANCES IN MORE DETAIL**
- III. THE EU/IMF/ECB PROGRAM**
- IV. RISKS & OPPORTUNITIES**
- V. IMPLICATIONS FOR THE EU AND
BEYOND: A NEW ARCHITECTURE**

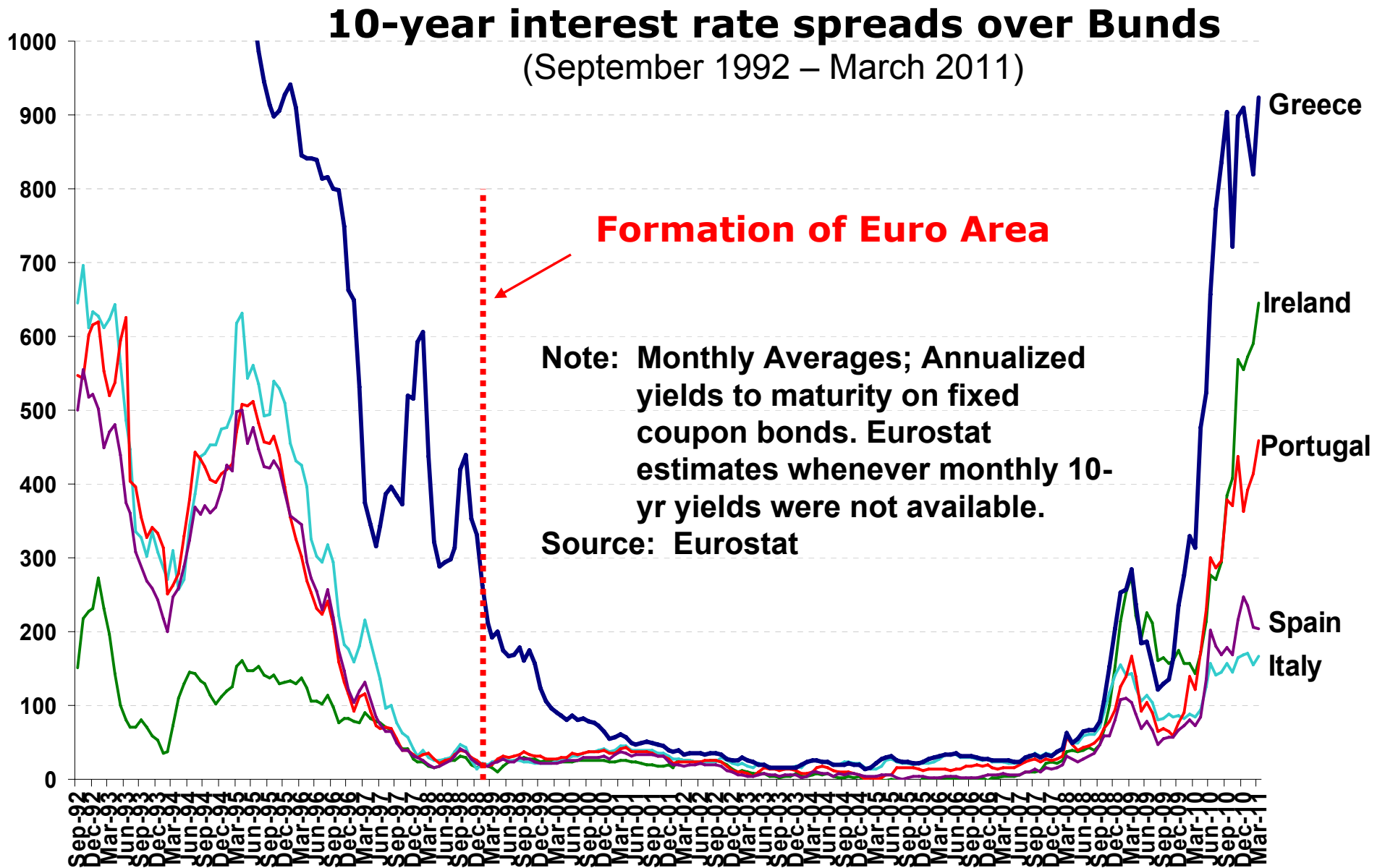


I. Risk premia rose following the international crisis

5-yr credit default swap rates for:	End-June 2007 PRE-CRISIS	End-August 2008 PRE-LEHMAN	End-March 2009 CRISIS PEAK	End-October 2009 PRE-GREEK CRISIS	May 9, 2011 TODAY
JP Morgan	19.3	143.9	201.1	63.2	83.8
Citigroup	11.7	305.5	631.5	179.8	150.2
USA	-	-	-	19.3	43.2
Germany	4.0	11.9	57.5	20.3	41.3
Japan	2.2	19.2	92.0	49.3	81.2
China	12.4	87.1	160.5	79.2	69.2
Turkey	145.8	297.1	401.6	188.7	155.4
Russia	43.2	261.5	501.1	190.2	134.2
UK	-	18.0	116.4	47.1	60.5
Spain	3.4	50.4	111.9	70.3	259.3
Greece	5.5	62.0	196.0	140.2	1457.2
Portugal	4.2	50.9	105.0	56.0	658.9
Italy	7.6	39.4	151.0	72.5	162.7
Ireland		11.0	264.1	133.2	682.0

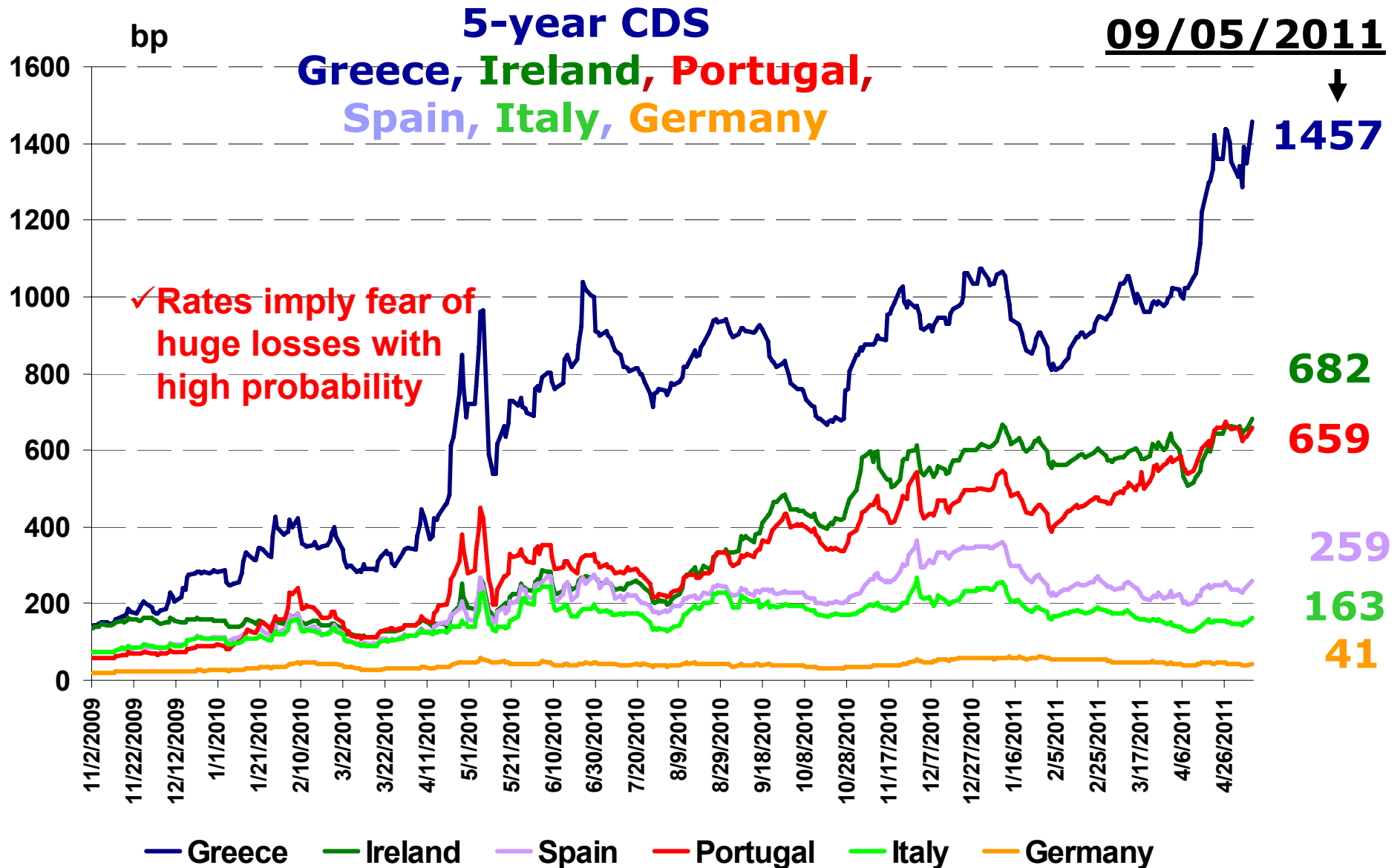


I. Markets woke up to Euro Area imperfections





I. Euro Area crisis begins at the end of 2009





I. Haircuts with their (risk-neutral) probabilities

Hair-cut	Greece		Ireland		Spain		Portugal		Italy		Germany	
	MP %	CP %	MP%	CP%	MP%	CP%	MP%	CP%	MP%	CP%	MP%	CP%
100%	14.4	50.2	6.7	27.6	2.6	11.5	6.5	26.8	1.6	7.4	0.4	1.9
90%	16.0	54.1	7.5	30.2	2.8	12.7	7.2	29.3	1.8	8.2	0.5	2.1
80%	18.0	58.4	8.4	33.3	3.2	14.2	8.1	32.3	2.0	9.1	0.5	2.4
70%	20.6	63.5	9.6	37.1	3.7	16.0	9.3	36.1	2.3	10.4	0.6	2.7
60%	23.9	69.5	11.2	41.8	4.3	18.5	10.8	40.7	2.7	12.0	0.7	3.2
50%	28.8	76.4	13.5	47.9	5.1	21.7	13.0	46.7	3.2	14.2	0.8	3.8
40%	36.0	84.3	16.8	56.0	6.4	26.4	16.3	54.7	4.0	17.5	1.0	4.7
30%	48.0	92.7	22.4	66.9	8.5	33.6	21.7	65.6	5.4	22.6	1.4	6.3
20%	71.9	99.2	33.6	82.0	12.8	46.2	32.5	80.8	8.0	32.0	2.0	9.3
10%	100.0	100.0	67.3	98.6	25.6	72.0	65.0	98.2	16.1	54.2	4.1	17.7

Based on 5-yr CDS rates on 09/5/2011 for risk-neutral investors

MP: Marginal Probability for 1-year ahead

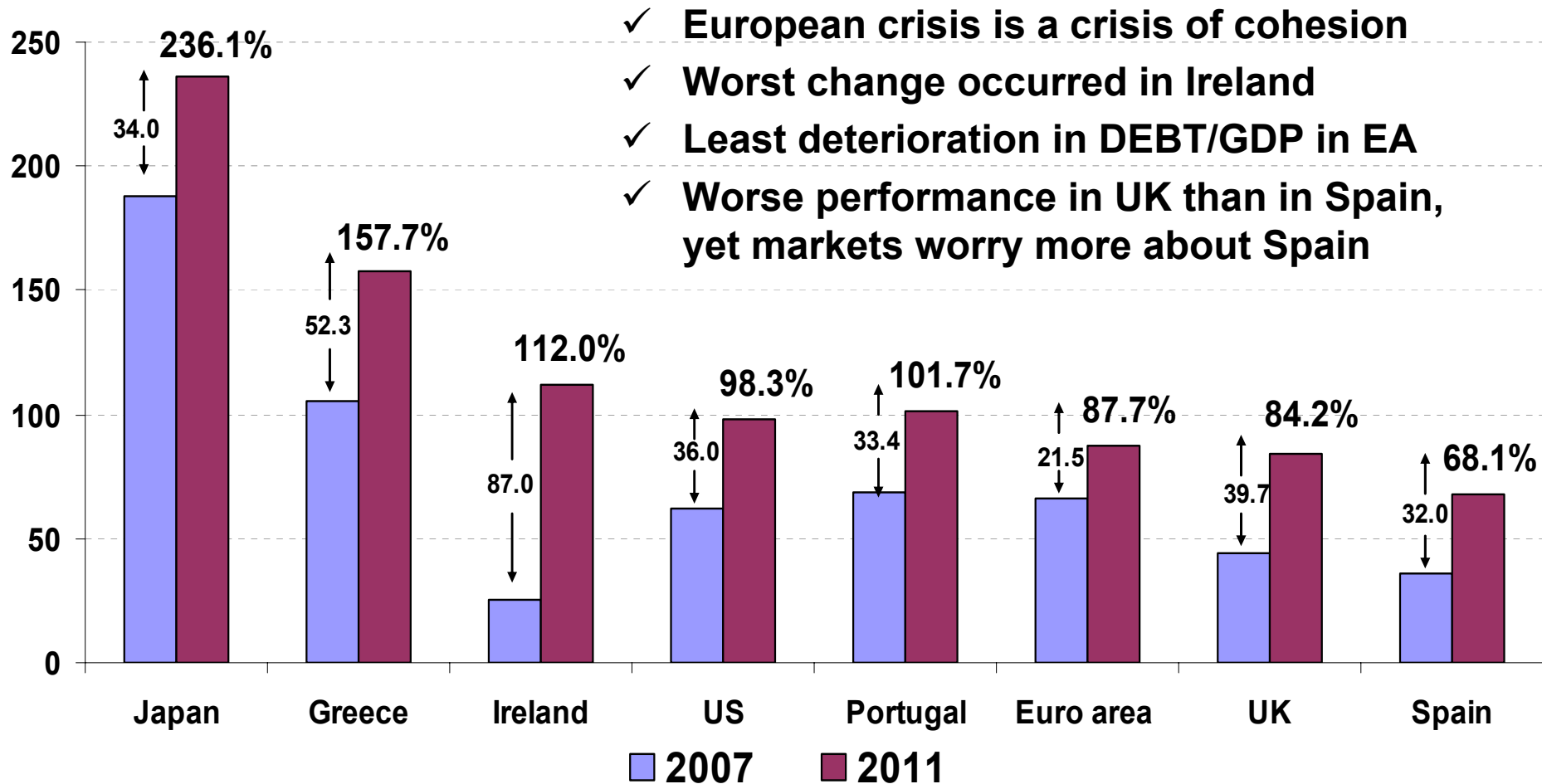
CP: Cumulative Probability for 5-years ahead



I. The change in Euro Area debt smaller than in other regions

General Government Debt

(% GDP & Change from 2007 to 2011 in pp GDP)



Source: European Commission, 2011 Spring Forecasts



I. Economic theory of Optimum Currency Areas was ignored

A political project. Academic literature on **Optimum Currency Areas** was ignored.

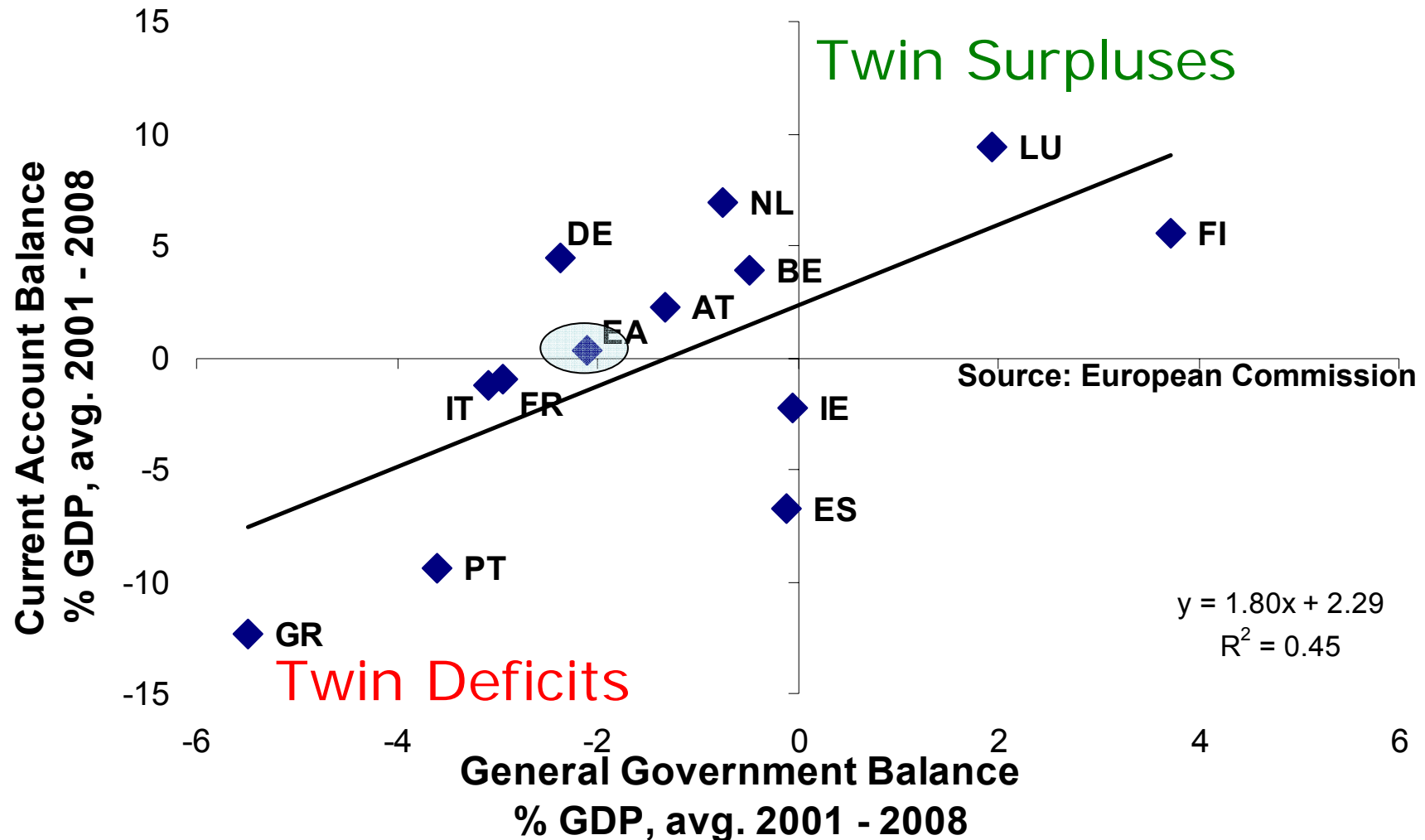
Necessary economic criteria were thought to adjust by themselves and converge once the common currency forms via a political path, i.e. market mechanism would automatically correct deviations from the competitiveness norm. **Criteria for OCA:**

- 1) **Open economies with highly interconnected external trade sectors**
 - 2) **Liberalized labor, capital and product markets**
 - 3) **Adequate degree of integration / uniformity of:**
 - ❖ Macro economic indicators and fiscal policies
 - ❖ The structure of the real economy and its development stage e.g. price and labor market flexibility, pension systems, competitiveness rules, uniform degree of state intervention in the private sector
 - 4) **Adequate synchronization of economic cycles**
 - ❖ Avoidance of asymmetric shocks in the participating countries (necessary measures include product differentiation, uniform/ integrated product markets (i.e. symmetric shocks in the terms of trade)).
 - 5) **Existence of a fiscal mechanism to smoothen the effects of the asymmetric shocks**
- ✓ The Stability and Growth Pact (SGP) together with the establishment of the independent European Central Bank (ECB) were considered as the **two main pillars for the Euro area stability**
 - ✓ **ECB independence worked, Stability & Growth Pact did not**
 - ✓ It was believed that SGP would be enforced due to the system of penalties and the **“No Bailout Clause” It did not work**



I. External and internal (fiscal) imbalances became large

- ❖ Uncompetitive South vs. competitive North
- ❖ Fiscal profligacy almost everywhere





I. Different euro area countries face different problems today

✓ IRELAND

- ↓ Housing market
- ↓ Banks → public debt ↑
- ↓ High private debt

✓ PORTUGAL

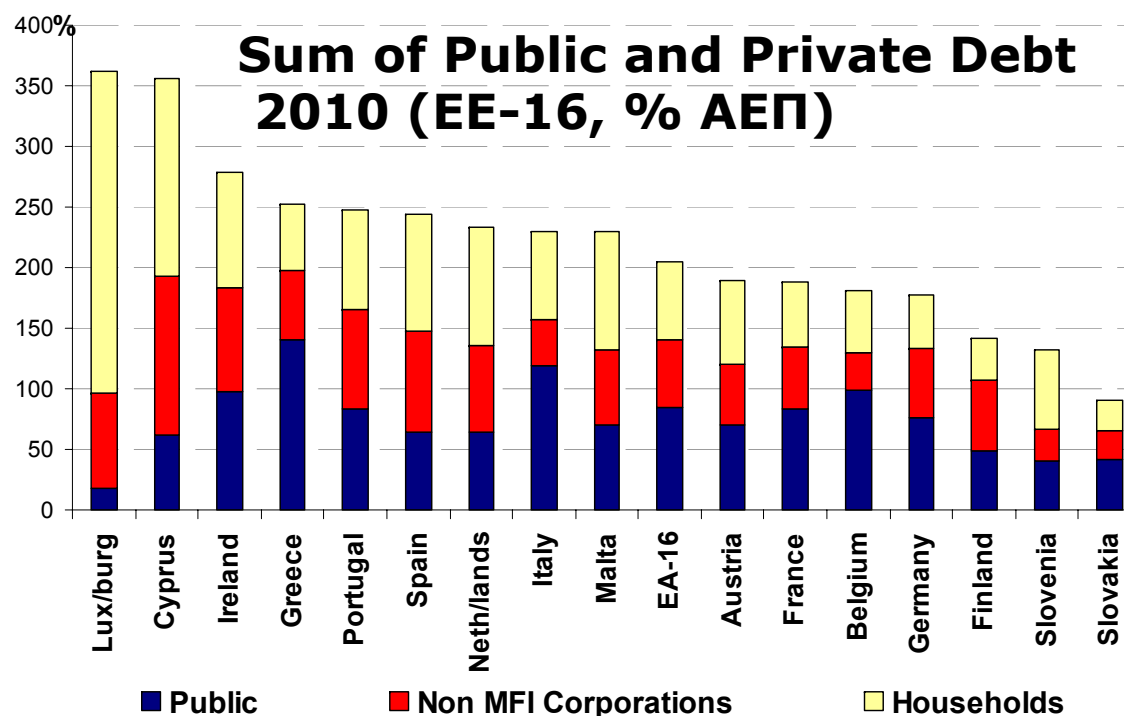
- ↓ Low competitiveness
- ↓ Large fiscal deficits, but not debt
- ↓ High private debt

✓ SPAIN

- ↓ Low competitiveness
- ↓ Housing market
- ↓ Small savings banks
- ↓ High private debt

GREECE

- ↓ Low competitiveness
- ↓ High fiscal deficits & debt
- ✓ In Greece Private Debt is low, below EA average, 9th largest
- ✓ The strong private sector has saved Greece from collapse





II.

I. THE EURO AREA CRISIS: HOW DID WE GET TO HERE?

II. GREEK IMBALANCES IN MORE DETAIL

III. THE EU/IMF/ECB PROGRAM

IV. RISKS & OPPORTUNITIES

V. IMPLICATIONS FOR THE EU AND BEYOND: A NEW ARCHITECTURE



II. Greece: General characteristics

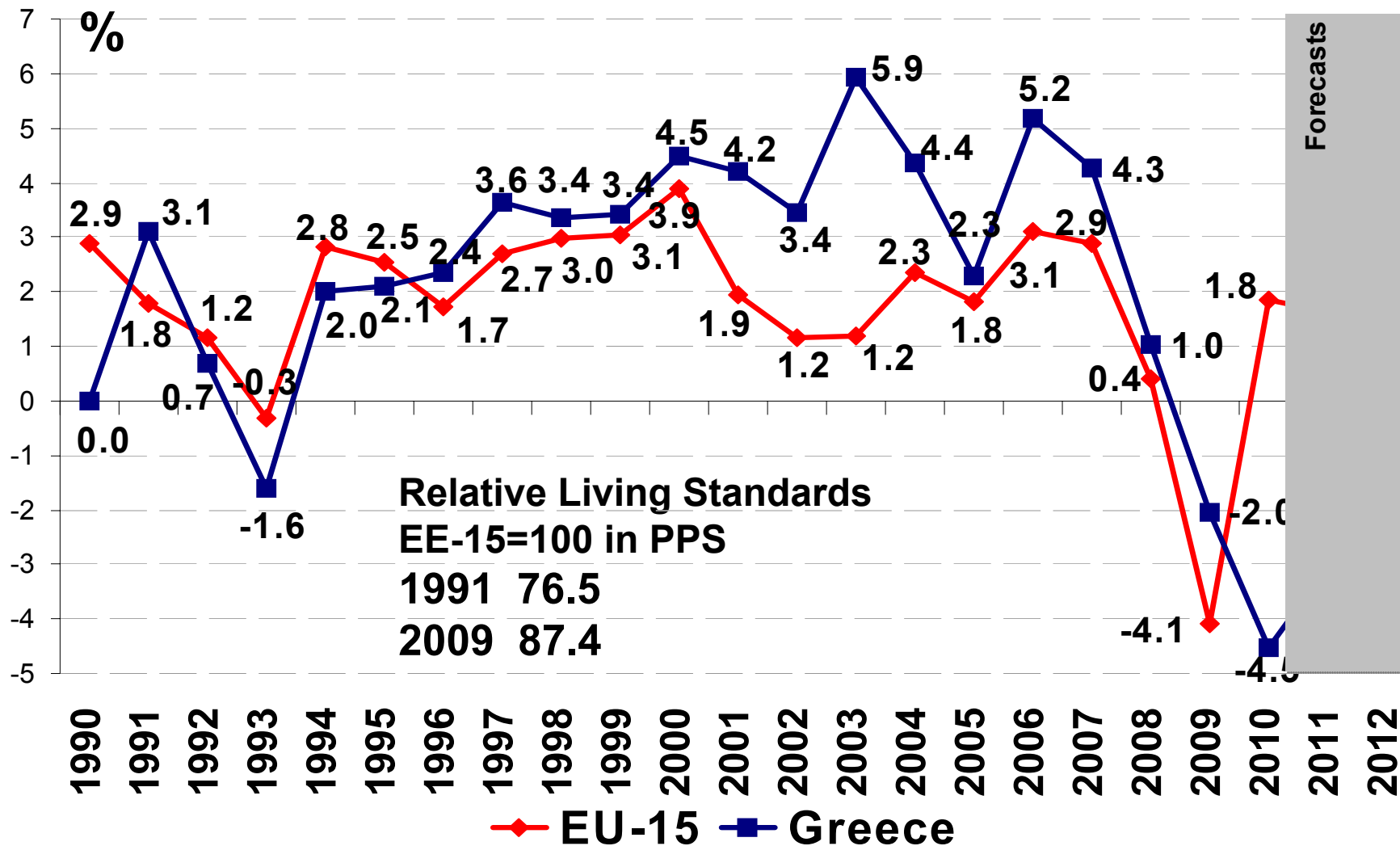
	2009	Greece	EA16	World
Population (mil.)		11.3	329.1	6,756.0
Geographical Area (km²)		132.0	2,578.8	510,072
GDP per capita (€)		20,820.9	27,218.9	7,704.9
Living standards (UN ranking among 182 countries)		25	17	
Life expectancy (years)		80	80.5	66.1
Cars per 1000 inhabitants (2006)		407	506	
Suicides / 100 thousand inhabitants		2.8	8.8	
Primary Sector (% GDP)		3.1	1.7	6.0
Secondary Sector (% GDP)		13.3	17.9	30.6
Tertiary Sector (% GDP)		79.1	74.2	63.4
Tourism (% GDP)		15.2	8.1*	9.3
Construction (% GDP)		4.5	6.3	
Public Sector (Gen. Gov. Expenditures % GDP)		52.7	50.8	
Exports (% GDP)		18.8	36.3	
Imports (% GDP)		29.6	35.0	
Private Consumption (% GDP)		73.5	58.2	
Gen. Gov. Debt (% GDP)		127.1	79.3	



II. Real growth rates in Greece were higher than in EU-15 from 1996 through 2009

Greece: From boom to bust. How come?

Answer: Not an equilibrium growth

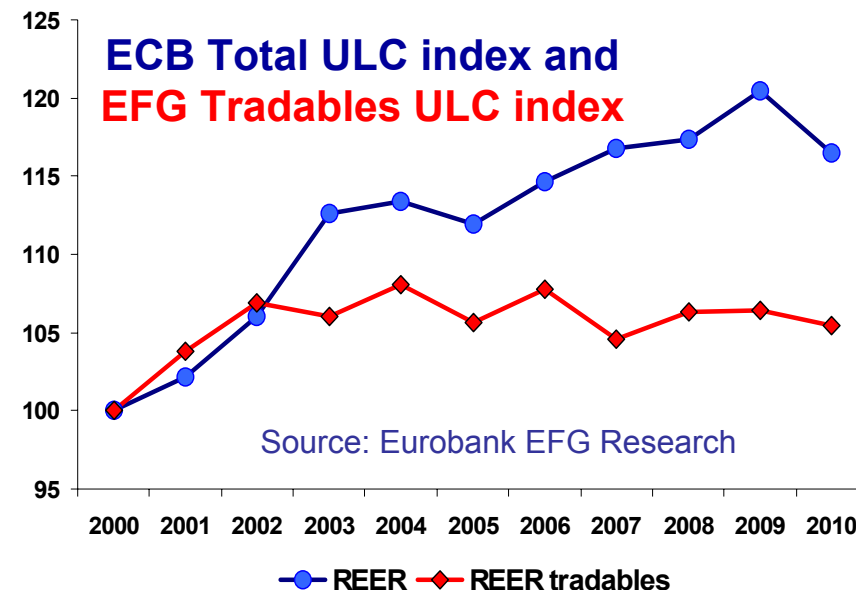
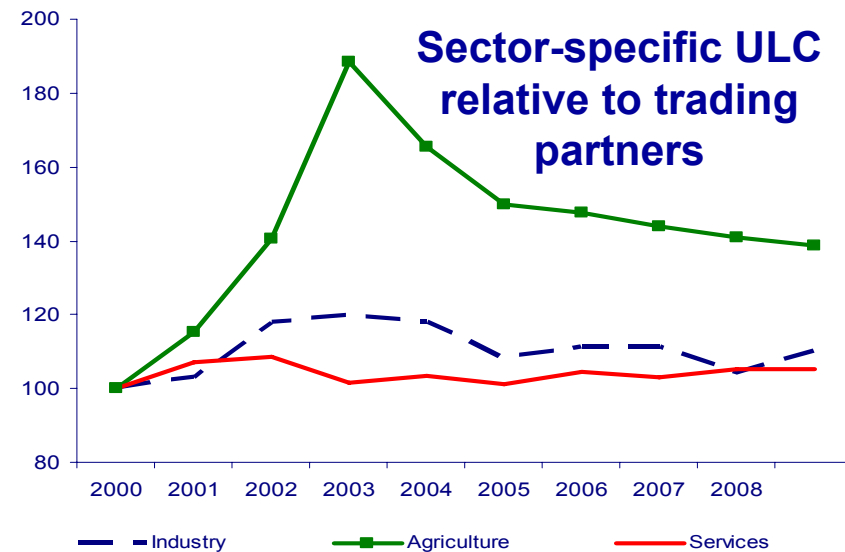


Source: EU, IMF, EFG Forecasts



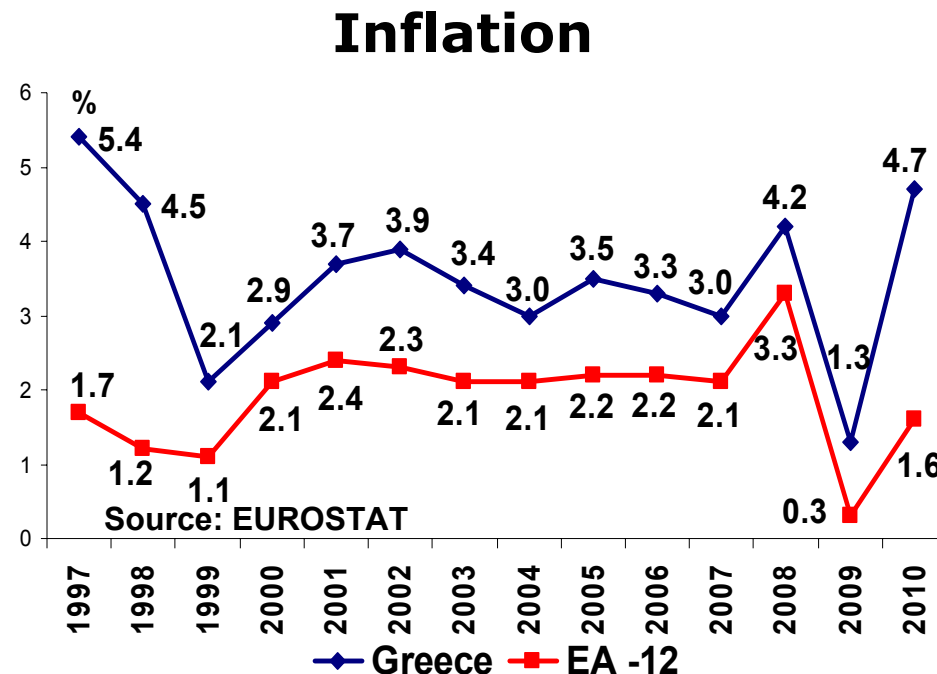
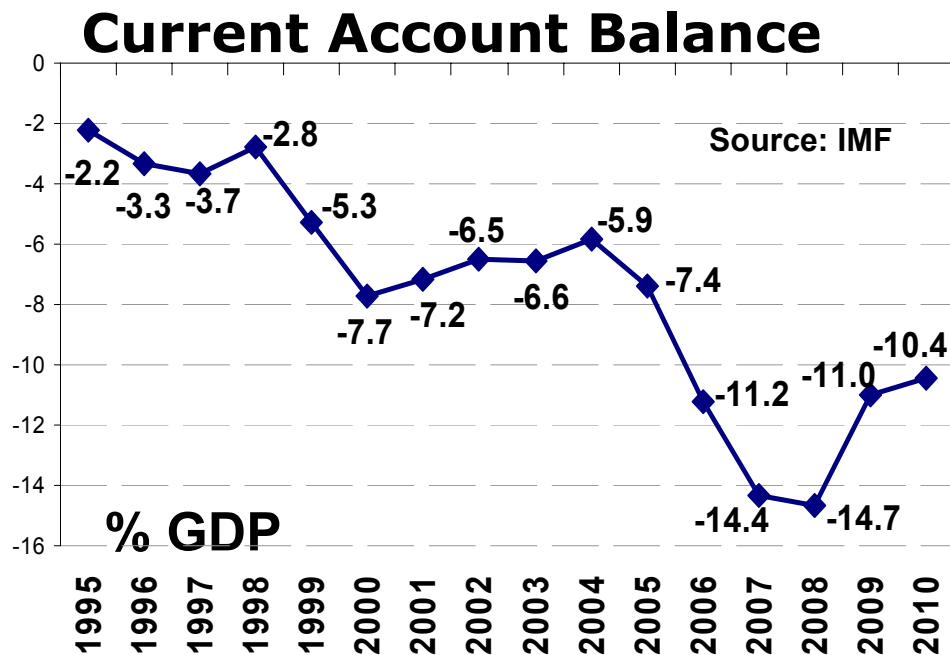
II. First disequilibrium: Loss in competitiveness

- ✓ Wide discrepancies in competitiveness across the sectors with largest loss in agriculture
- ✓ Prices and wages increased faster than productivity, especially in non-tradable sectors ⇒ motivated a migration of capital and labor away from tradables
- ✓ A real appreciation of 5.5% in tradables since 2000, whereas a corresponding appreciation of 16.5% in non-tradables ⇒ hence
 - ❖ A smaller part of the adjustment relates to internal devaluation in tradeables (occurring already, competitiveness losses to be reversed by 2012)
 - ❖ A larger part of the adjustment ought to occur in non-tradables, so that K, L relocate to tradables





II. Lack of competitiveness showed up in inflation differentials and deteriorated the current account



	€ mill.	% GDP
2010		
Current Account	-24,060.5	-10.4
Goods	-28,279.6	-12.3
Services	13,248.5	5.8
Income	-9,228.3	-4.0
Current Transfers	198.9	0.1



II. Ease of Doing Business rankings reveal lack of quality competitiveness

	Rank	Starting a business (days)	Cost of registering property (% p. value)	Protecting Investors (0-10)	Exporting Goods (days)	Paying Taxes (hours per year)
OECD		13.8	4.4	6.0	10.9	199.4
US	5	6	0.5	8.3	7	187
UK	4	13	4.1	8.0	7	110
GERMANY	22	15	5.1	5.0	7	215
Ireland	9	13	6.3	8.3	7	76
Portugal	47	7	7.4	7.0	15	218
Spain	49	47	7.1	5.0	9	197
Greece	109	19	12.7	3.3	20	224

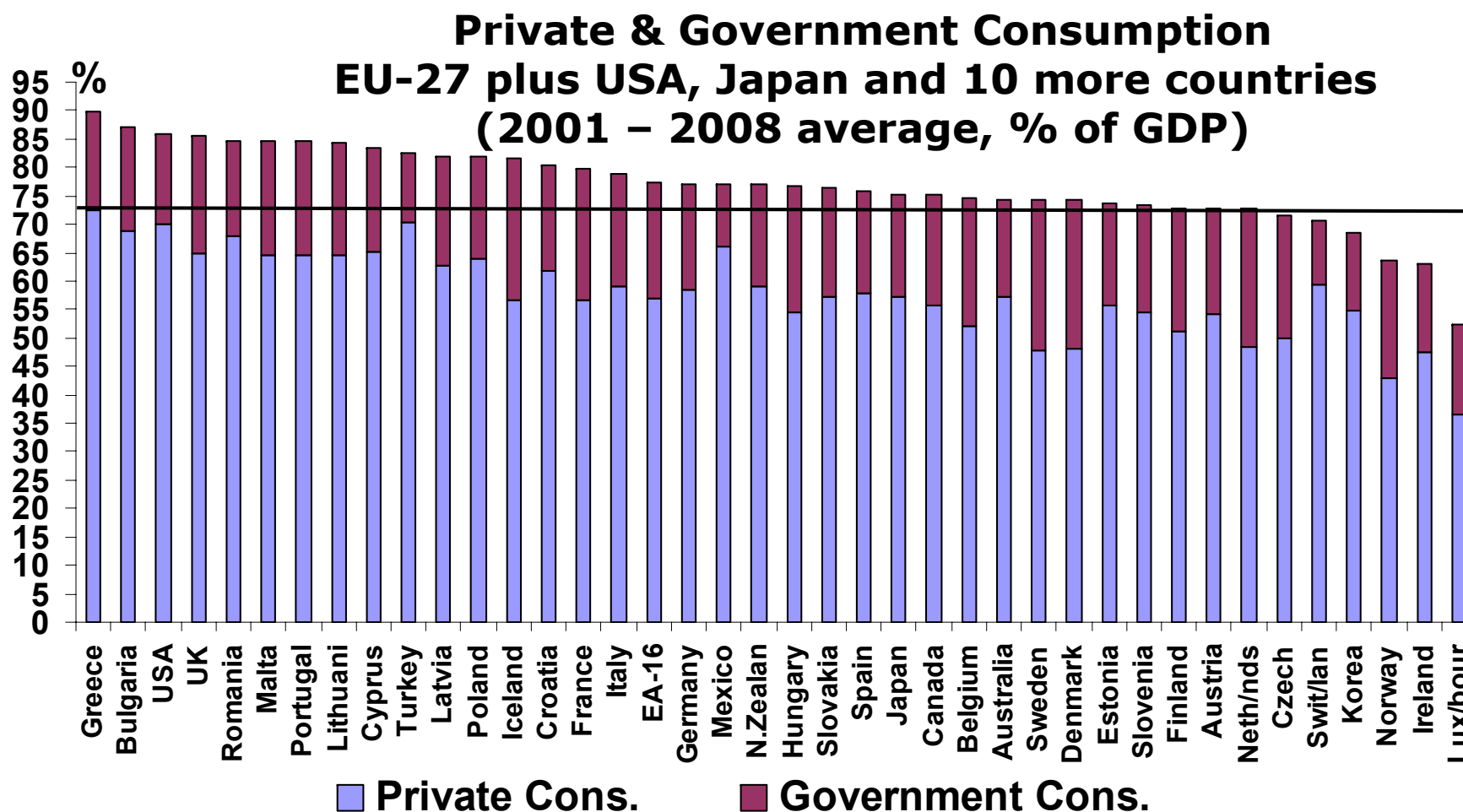
Source: World Bank, *Ease of Doing Business 2011*

- ✓ World Bank: In 2010 Greece ranked 109th out of 183 countries
- ✓ This was due to a) increased cost of registering property (from 1% to 10%)
b) Delays in the implementation of reforms aiming to boost competitiveness



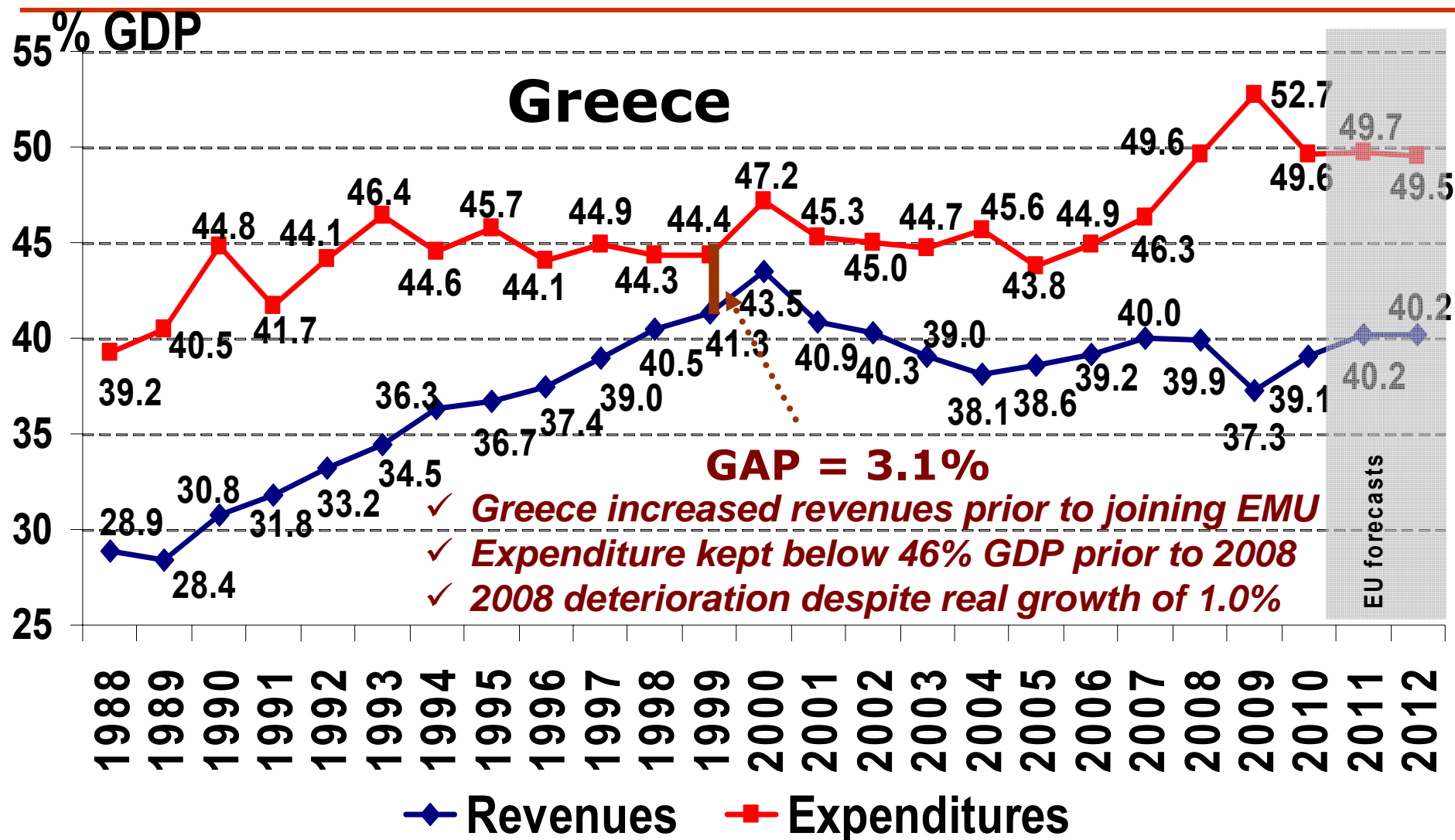
II. Second disequilibrium: Over consumption

- ✓ Excessively optimistic expectations about future income motivated borrowing (facilitated by low interest rates) and consumption
- ✓ Fiscal laxity is a separate imbalance





II. Third disequilibrium: Fiscal laxity

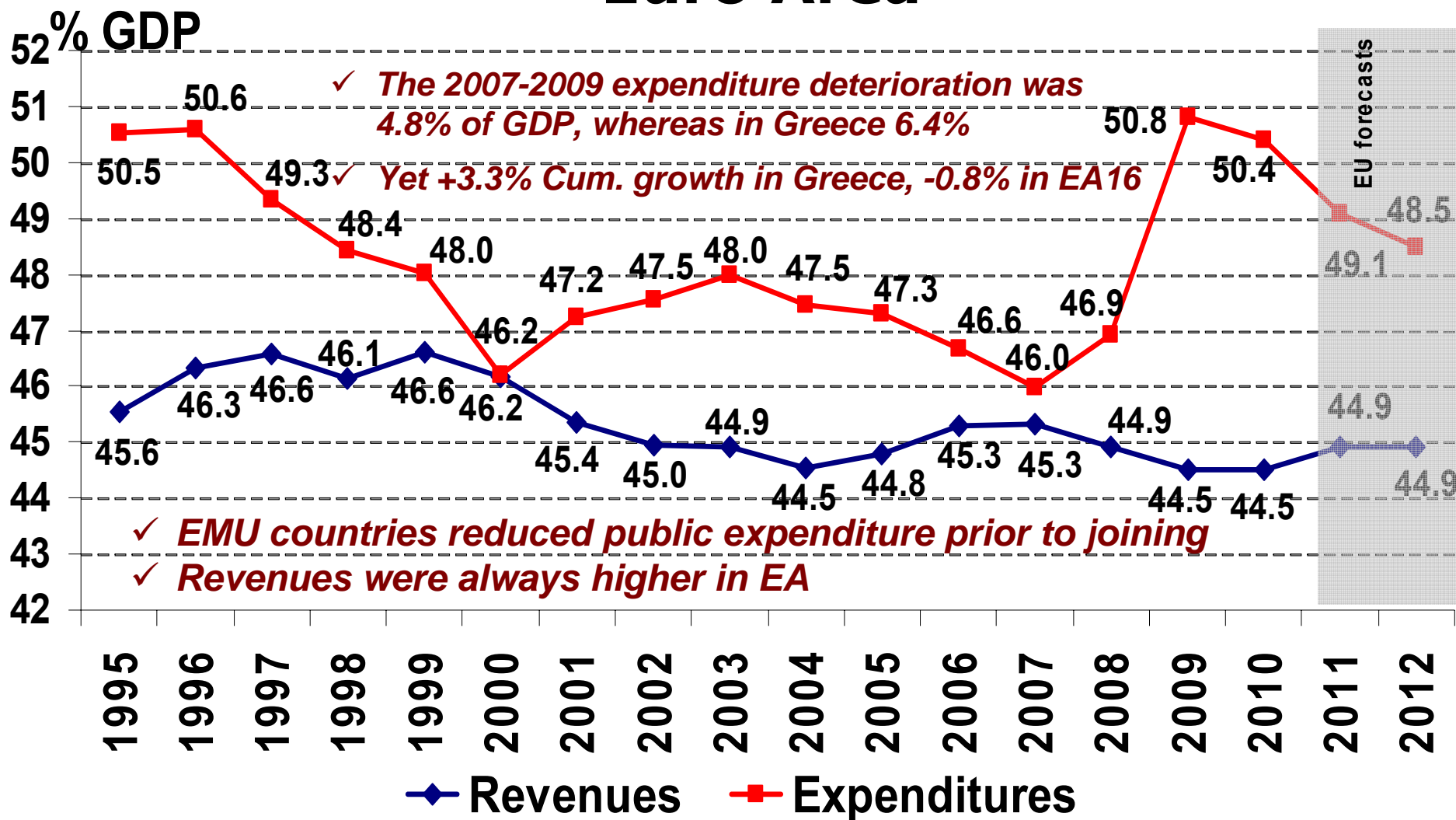


- ✓ Greece was almost always in fiscal trouble, but fiscal mess grew prior to the onset of the 2009 recession



II. Smaller 2007-2009 fiscal deterioration in EA16 despite worse economic conditions then

Euro Area





II. A fourth related long-run disequilibrium: An imbalanced pension system

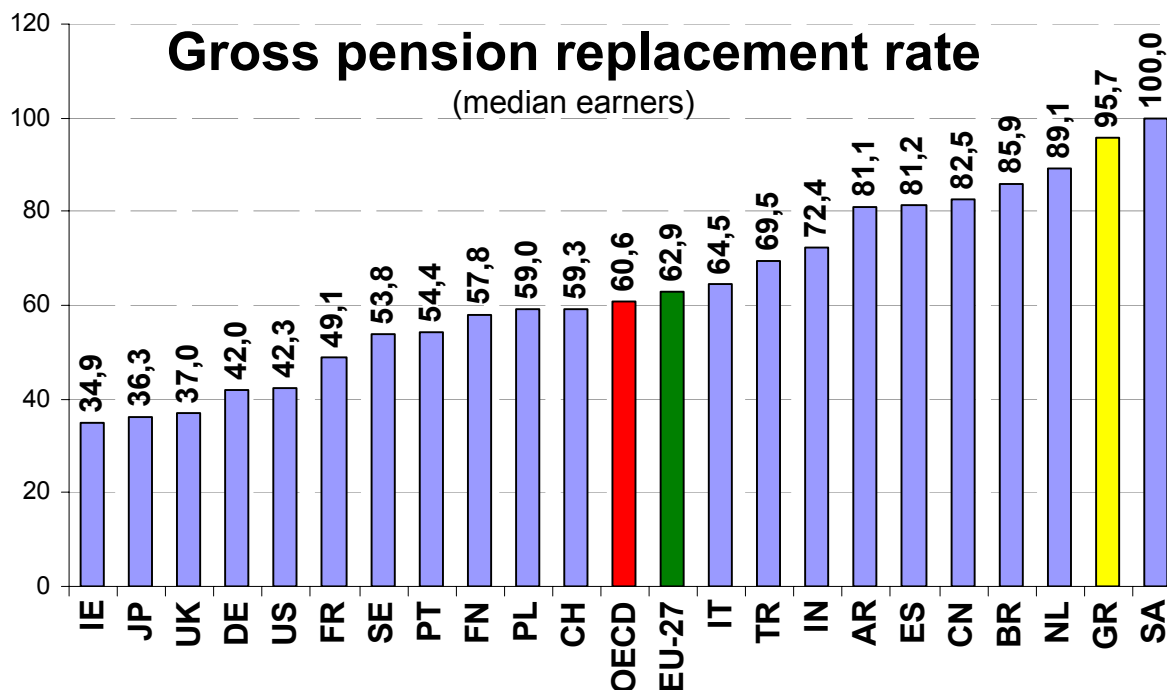
New pension Law adopted on July 2010:

- ❖ Fix system's parameters ⇒ reduce the expected increase in future annual state pension liabilities (by 2060) from 12.5% of GDP to 2.5% of GDP.
- ❖ Retirement age for **everyone** at 65 by 2015, increasing in line with life expectancy after 2020 with minimum contributory period of 40 years by 2015
- ❖ **Early retirement** restricted to the age of **60** by 2015, will be penalized more than before (6% loss per year, including those insured prior to 1993)
- ❖ Size of pension linked to **lifetime contributions**
- ❖ List of heavy and arduous professions to be reduced drastically, under a ceiling of 10% of labor force

Old Regime	2010	2020	2035	2060
Pension Exp. (% GDP) GR	11.6	13.2	19.4	24.1
Dependency*	56	59	78	102
Pension Exp. (% GDP) EA	11.2	11.6	13.2	13.9

Source: European Commission 2009

* Ratio of pensioners to contributors

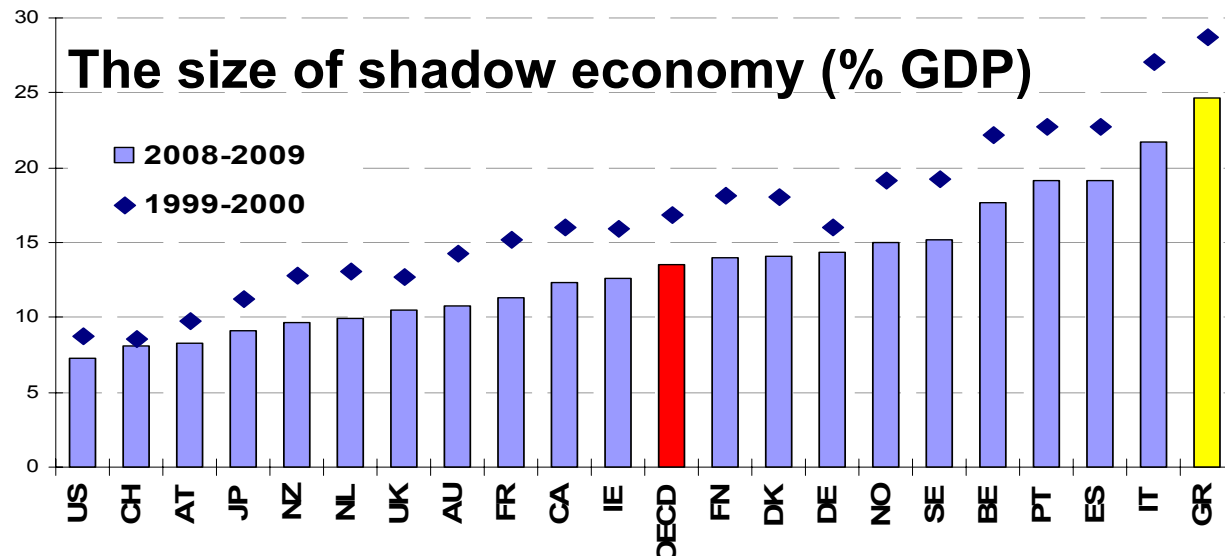


Source: OECD Pensions at a glance 2011

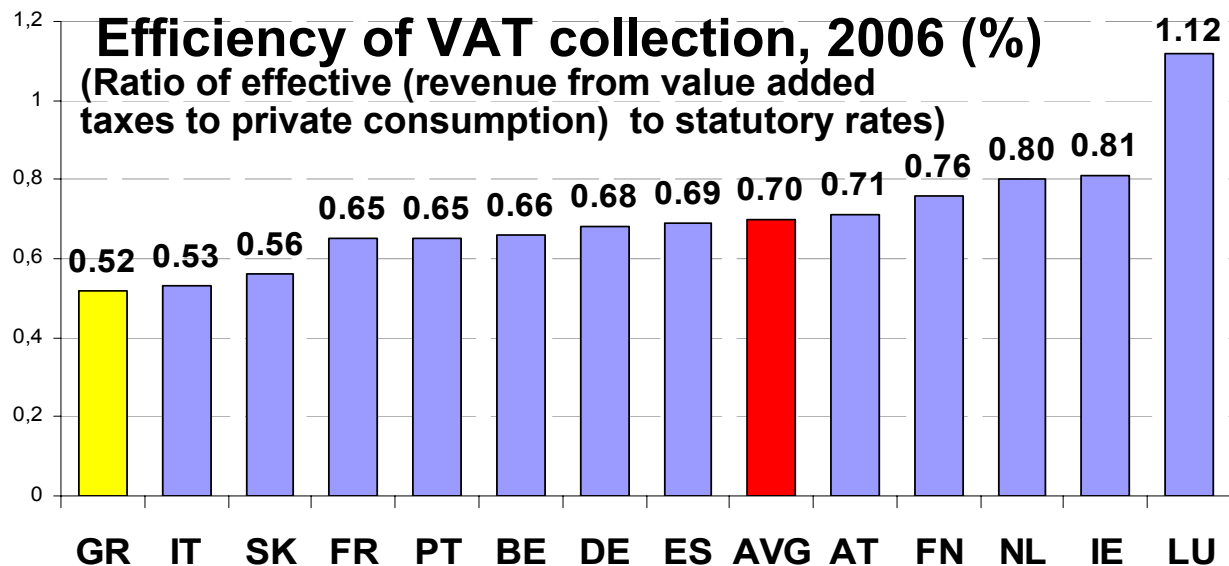


II. Is there a common denominator among the disequilibria after EMU entrance?

- ❖ Yes, lack of structural reforms and in particular, the disorganized & neglected inefficient public sector
- ❖ EMU acted as a **sleeping pill** not to do the required structural reforms, exactly when most needed
- ✓ The disorganization of the public sector is evident in the size of the underground economy or in the lack of ability to collect taxes



Source: Schneider, F. (2009) "The size of the Shadow Economy in 21 OECD Countries Using the MIMIC and Currency Demand Approach"



Source: OECD Economic Surveys Greece 2009



III.

- I. THE EURO AREA CRISIS:
HOW DID WE GET TO HERE?**
- II. GREEK IMBALANCES IN MORE DETAIL**
- III. THE EU/IMF/ECB PROGRAM**
- IV. RISKS & OPPORTUNITIES**
- V. IMPLICATIONS FOR THE EU AND
BEYOND: A NEW ARCHITECTURE**



III. The EU/IMF/ECB loan

- ✓ Half of the loan is disbursed in the first year
 - ❖ Implying the need to begin using the market for new funds in 2012
- ✓ The million dollars question: Have we simply kicked the can forward?
 - ❖ Markets seem to think so
 - ❖ Greece has the onerous task of disproving the overwhelming majority of doubters

Past loan disbursements (€ bn)						
Euro Area			IMF		Total	
1st tranche	18-May-10	14.5	12-May-10	5.5	20.0	
2nd tranche	13-Sep-10	6.5	14-Sep-10	2.5	9.0	
3rd tranche	19-Jan-10	6.5	21-Dec-10	2.5	9.0	
4th tranche	Mar-11	10.9	14-Mar-11	4.1	15.0	
Total		38.4		14.6	53.0	
Future loan disbursements (€ bn)						
5th tranche	Jun-11	8.7	Jun-11	3.3	12.0	
6th tranche	Sep-11	5.8	Sep-11	2.2	8.0	
7th tranche	Dec-11	3.6	Dec-11	1.4	5.0	
8th tranche	Mar-12	7.3	Mar-12	2.7	10.0	
9th tranche	Jun-12	4.4	Jun-12	1.6	6.0	
10th tranche	Sep-12	4.4	Sep-12	1.6	6.0	
11th tranche	Dec-12	1.5	Dec-12	0.5	2.0	
12th tranche	Mar-13	4.4	Mar-13	1.6	6.0	
13th tranche	Jun-13	1.5	Jun-13	0.5	2.0	
Total		41.6		15.4	57.0	
Total Program		80.0		30.0	110.0	

Source: EU Commission, IMF



III. Main characteristics of the EU/IMF/ECB program

- ✓ **Greek economy:**
 - ❖ Real GDP growth around **2.8%** from 2015 on, below the 1996-2008 average.
 - ❖ Inflation subdued, never above ECB target of 2%: Its necessary to break up oligopolistic market structures
 - ❖ Current Account Balance of **-4.4%** GDP in 2015 (still no external equilibrium)
- ✓ **Downsizing of the public sector:**
 - ❖ Primary Expenditure from 47.9% of GDP in 2009 to 30.5% in 2020, meaning a huge reduction in the relevant size of the public sector.
 - ❖ Primary Balance (-10.1% GDP in 2009) from -3.2% GDP in 2010 to 6.0% in 2014, a huge change of 9.3 b.p. of GDP between 2010 – 2014
 - ❖ Interest expense from €**14.6** bn in 2010 to **21.4** in 2015, **23.7** in 2020 or 7.3% of GDP
- ✓ **Interest rates follow a decreasing course:**
 - ❖ Spread over Bunds 300 b.p. in 2013, 250 b.p. in 2020: a conservative assumption
The expected increase of the Bund rate to 3.5% points towards the right direction.
 - ❖ **Negative snowball effect:** Nominal interest rate at 5.7% - 6.0% which is higher than the nominal growth rate (4.2 – 4.8%): Huge primary surpluses needed in order to obtain fiscal sustainability. **Challenge to reverse** the current nominal interest rates – nominal GDP growth relation
- ✓ **The public debt burden eases gradually as a % of GDP from 2013 onwards**
 - ❖ Public debt at **130%** of GDP in 2020. With 1 ppt higher growth each year 2020 public debt at **91%**. Alternatively, if only privatizations are used as debt reduction mechanism 2020 public debt at **112%**.



III. Greece: EU/IMF/ECB baseline scenario

	2009	2010	2011	2012	2013	2014	2015	2020
GDP Growth (%)	-2.0	-4.5	-3.0	1.1	2.1	2.1	2.7	3.0
GDP deflator (%)	1.5	2.3	1.6	0.4	0.8	1.2	0.6	1.8
Nominal GDP (€ bn)	235	229	226	229	236	244	252	315
Current Account (% GDP)	-11.0	-10.5	-8.2	-7.1	-6.6	-5.5	-4.4	----
Interest Rate (%)	4.8	4.9	4.6	5.0	5.4	5.7	5.7	5.9
Bund Rate (bps)	----	225	275	350	350	350	350	350
Spread over Bund (bps)	----	550	525	350	300	300	300	250
Interest Expense (€ bn)	12.4	14.6	15.1	17.3	19.7	21.2	21.4	23.7
Interest Expense (% GDP)	5.3	6.4	6.7	7.5	8.3	8.7	8.5	7.5
Primary Expenditure (% GDP)	47.9	43.5	44.0	41.7	38.5	33.2	32.2	30.5
General Gov Revenues (% GDP)	37.8	40.4	43.1	42.8	42.0	39.3	38.5	36.5
Primary Balance (% GDP)	-10.1	-3.2	-0.9	1.0	3.5	6.0	6.3	5.9
General Gov Deficit (% GDP)	-15.4	-10.5*	-7.5	-6.5	-4.8	-2.6	-2.1	-1.6
General Gov Deficit (€ bn)	-36.2	-22.0	-16.9	-14.9	-11.3	-6.3	-5.3	-5.0
General Gov Debt (% GDP)	127	143	153	159	158	154	151	130
General Gov Debt (€ bn)	298	327	345	364	373	375	381	409

* After Eurostat's recent revision (26/04/2011) EC/ECB/IMF Adjustment programme, Eurobank EFG Research



III. A simulation exercise shows the Debt/GDP reduction is not inconceivable

Source: Eurobank EFG Research		Public Debt Scenarios						
	2009	2010	2011	2012	2013	2014	2015	2020
Nom. GDP Growth (%)	-0.7	-1.3	-1.5	1.5	2.9	3.3	4.0	4.5
Int. Rate Costs (% GDP)	5.3	6.3	6.6	7.5	8.3	8.6	8.5	7.4
Primary Balance (% GDP)	-10.1	-3.3	-0.1	1.7	3.5	6.5	6.4	6.6
Baseline(*)								
Public Debt (% of GDP)	127.0	141.2	151.5	156.8	156.8	152.1	147.7	126.7
Baseline + 0.05ppts average nominal GDP growth in 2011-2020								
Public Debt (% of GDP)	127.0	141.2	150.6	155.0	154.0	148.0	142.7	116.2
Previous scenario + € 50bn privatization receipts								
Public Debt (% of GDP)	127.0	141.2	150.6	153.6	150.9	143.7	136.9	103.0

(*) Baseline scenario incorporates

- ✓ Similar to EU/IMF December 2010 program's baseline projections for real GDP, inflation and interest rates
- ✓ Broadly full implementation of EU/IMF-agreed expenditure measures in 2011-2014
- ✓ 70% implementation of EU/IMF-agreed revenue measures in 2011-2014
- ✓ Elasticity of revenue w.r.t. nominal GDP = 1
- ✓ Primary expenditure growth in 2015-2020 = 2% YoY
- ✓ Privatization revenue, stock flows adjustments & other debt-creating flows in line with the December 2010 MoU projections



III. A new nation must be born

- ✓ Pension reform is drastic: Long-term saving of 10% of GDP p.a.
- ✓ Product market reforms required
- ✓ Labor market reform is drastic:
 - ❖ Minimum wage down 16%
 - ❖ Flexibility of firings
 - ❖ Introduction of firm-level agreements, symmetry in central arbitration
- ✓ Tax reform: Opportunity to capture tax evasion and corruption
- ✓ Fiscal reform is ambitious:
 - ❖ Kalikrates Law, Single Payment Authority, Restructuring of public enterprises
- ✓ Potential for cost improvement is large given size of public waste and corruption
 - ❖ Health system
 - ❖ Local governments
 - ❖ Public sector enterprises
- ✓ Reforms aiming to boost-competitiveness
 - ❖ “fast track” law
 - ❖ Investment Law
 - ❖ Implementation of the business start-up law



III. Fiscal consolidation effort 2012-2015

Source: Ministry of Finance	Type of Adjustment	% GDP
1.	Streamlining the public wage bill	0.9
2.	Reduction in Operational Expenses	1.1
3.	Closure/Merger of Public Entities	0.5
4.	Restructuring of State-owned Enterprises	1.0
5.	Reduction in Defense Spending	0.5
6.	Streamlining health expenditure	0.5
7.	Streamlining of Pharmaceutical Expenditure	0.7
8.	Reduction in Social Security Fund expenditures and streamlining of other social spending	1.1
9.	Strengthening of other social spending	1.5
10.	Reduction in Tax Exemptions	0.9
11.	Increase in Social Security Fund revenues and tackling social insurance contribution evasion	1.5
12.	Increase in Local Government Revenues	0.3
13.	Other Expenditure	0.9
	Total	€23 bn or 11.4

In addition, the plan includes measures of € 3 bn to address the 2011 fiscal risks (2010 deficit revision to 10.5% from 9.6% and the higher than expected economic recession in 2010) so as to achieve the 2011 deficit target of 7.5% of GDP



III. Privatizations Program

Potential revenue sources of the privatization program

- ❖ € 10 -15 bn from publicly owned organizations & firms and from infrastructure
- ❖ € 25-35 bn from strategic management of rights and real estate development

Timing of the privatization program

- ❖ €15 bn. until 2013 (€2.0 – 4.0 bn in 2011, €5.5 – 7.0 bn in 2012 and €4.5 – 5.0 bn in 2013)
- ❖ € 50 bn for the 2011-2015 period

The 2011-2013 privatization program includes:

- ❖ Extension of the concession agreement for the Athens International Airport
- ❖ Concession agreements for the regional airports and ports
- ❖ Securitization of toll revenues, concession agreements for existing motorways (Egnatia etc)
- ❖ Strategic investors/ privatization of TRAINOSE, LARKO, ODIE, OPAP, EAB, Casinos, ELTA, EYDAP, EYATH ELBO, national lottery.
- ❖ Sale of government stakes in DEPA, OTE, DEH, ALPHA BANK, Piraeus Bank, Attiki Bank
- ❖ Strategic Investor for ATE BANK and TT as well as for the commercial department of the Consignment Fund
- ❖ Extension of mobile telecommunications licenses, development of the frequency spectrum and digital dividend
- ❖ Development of the State real estate assets



IV.

- I. THE EURO AREA CRISIS:
HOW DID WE GET TO HERE?**
- II. GREEK IMBALANCES IN MORE DETAIL**
- III. THE EU/IMF/ECB PROGRAM**
- IV. RISKS & OPPORTUNITIES**
- V. IMPLICATIONS FOR THE EU AND
BEYOND: A NEW ARCHITECTURE**



IV. Turning the risks into opportunities in Greece

i. Will the recession end soon?

Growth may resume through an increase in exports, the stabilization of the economic climate, an increase in investments and a resolution to the EMU crisis

ii. Will the economy attain the growth rates of the past?

Zonzilos (2010), Buis & Duval (2011) estimate an increase in GDP of 17%.

iii. Will the Greek banking system remain stable and strong?

Depends on the continuing support from the ECB (€ 88 bn), the opening up of the interbank market for Greek banks

iv. Will Greece be able to tap the market in March 2012?

A restructuring discussion began following the internal German debate



IV.1 A consistency check on the EU/ECB/IMF program of short-term real GDP growth

This is not a forecast; only a consistency check

% Real rates of change	% of GDP	2011	% of GDP	2012
Private consumption	(76.1)	-4.7	(73.4)	0.8
Gvnt consumption	(17.2)	-8.6	(17.0)	-6.0
Final consumption	(93.3)	-5.1	(90.4)	-0.4
Gross Fixed Capital Formation	(14.8)	-8	(14.6)	5.0
Domestic demand	(108.7)	-6	(104.5)	-0.4
Exports of g&s	(20.3)	5.5	(20.6)	4.6
Imports of g&s	(27.6)	-8.7	(27.0)	1.4
Real GDP growth		-2.7		0.9
GDP Deflator (% Δ)		1.5		0.5

Source: Eurobank EFG Research

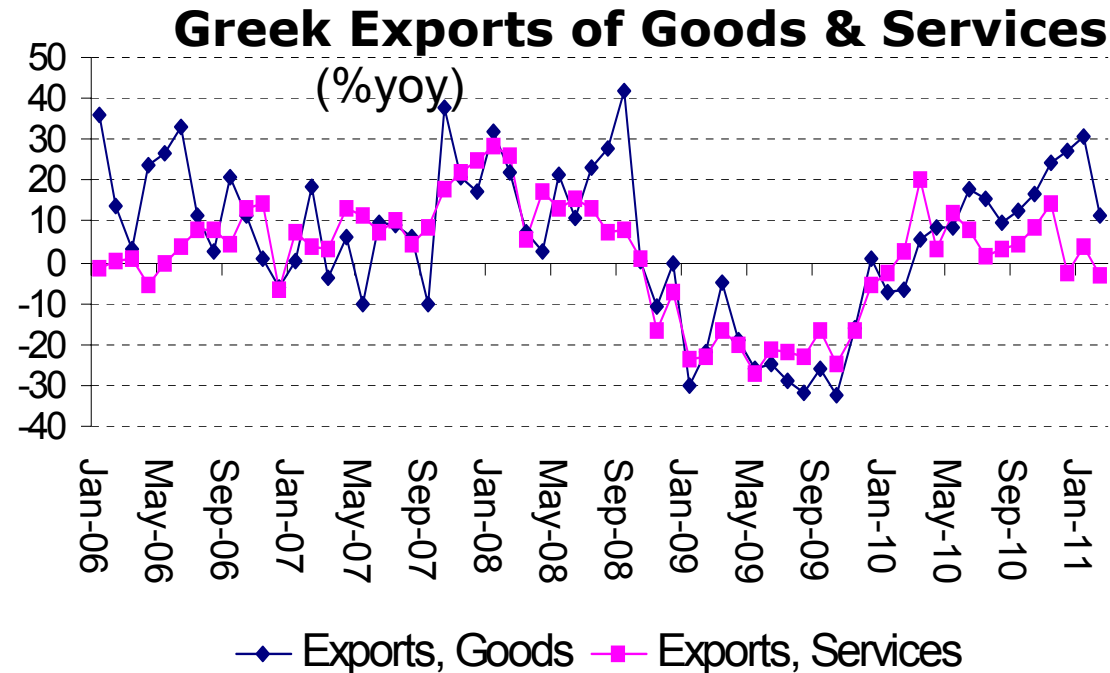
Our Assumptions: Real disposable income -6.7% in 2011, +1.1% in 2012, Δ (consumption) = 70% Δ (disposable income) [intertemporal consumption smoothing], Exports a function of ULCs & unitary elasticity w.r.t. trading partners' growth rates, elasticity of imports w.r.t. net disposable income: 1.3 (2000-2008 average)

Hence, the program has internal consistency



IV.1 Will the recession end soon?

- ❖ If **Investment** returns to positive territory in 2012; privatizations and public property exploitation schemes can jump start the process (attract FDI, improve confidence in debt sustainability / growth prospects).
- ❖ If cracking down of tax evasion & restructuring of loss-making public utilities ⇒ no additional measures that would hurt disposable incomes of low-income earners (who have higher propensity to consume)
- ❖ External Sector leads the recovery and counterbalances a projected 2011 decrease in consumption (IMF: public-8.5%, private -4.6%)
 - ✓ imports expected to shrink by another 6%, exports can outperform the projected +6.3% due to ULC gains (just -0.5% projected by IMF),
 - ✓ positive indications in tourism (increased reservations), shipping fares increasing, recovery of global economy and trade continue.
 - ✓ 30% of Greek firms already export part of their production, hence expansion possible without huge initial costs (distribution channels, knowledge of markets)





IV.2 Long-term growth

Long term: an export-led paradigm of growth (to replace the failed consumption-led one) depends on improving price- and quality-competitiveness. Also, the smooth reduction in the size of the public sector requires care.

Elements of strategy:

- ❖ Accelerate structural reforms; a critical mass needs to be reached quickly to boost the supply side (reducing bureaucratic cost to business, opening-up of markets and closed professions, emphasis on education and R&D)
- ❖ Supporting switch from non-tradeables to tradeables sectors; happens already, more energetic policies needed (info campaigns, PPPs, free-up resources from the public sector, credit to tradeables)
- ❖ Normalization of business climate and interest rates (reduction in spreads) to support investment and interest rate-sensitive parts of consumption: only when markets are convinced about Greek commitment on fiscal adjustment and continuation of EU support.
 - ✓ However, FDI does not depend on domestic interest rates; institutional factors important (fight on corruption, simplification and transparency of legislation, stability of tax regimes)
 - ✓ Improving absorption of Cohesion Funds' resources



IV.2 Structural reforms can boost growth potential

- ✓ Labour and product market reforms:
 - ❖ IOBE (2010): increase of GDP by 17% from structural reforms
 - ❖ EU-Commission (2010) estimates that a permanent real wage cut of 1% leads to a 4% increase in GDP in four years
 - ❖ A decline in price mark-up of firms by 5% leads to a 2.5% increase in GDP in five years
 - ❖ A reduction in GGB spreads by 100 bps has an immediate impact of 1.5% of GDP in the same year
- ✓ Crowding-in of the shrinking public sector
- ✓ Capturing the underground economy (25-30% of GDP) will most likely improve efficiency, not only statistics
- ✓ For reforms to work, they have to be instituted soon



IV.2 The execution side of reforms is anxiously waited

Fiscal Reforms passed already from the Parliament

- ✓ “Kalikrates” Law for local authorities
- ✓ New Financial Management Law that amends the budget process
- ✓ 3-yr Budgeting process with specific fiscal conditionalities (see Medium Term Fiscal Plan 2012-2015)
- ✓ Single Payment Authority becomes gradually operational
- ✓ Monthly data on general government budget execution became publicly available
- ✓ OMB-equivalent in the Parliament and a budget revenue rule
- ✓ Independence of the Statistical Agency
- ✓ Reform of the tax legislation in order to fight tax evasion
- ✓ Reform of Public sector enterprises and the railroads sector
- ✓ Healthcare reform

Reforms aiming to boost the competitiveness of the Greek economy

- ✓ Competitiveness & Business environment measures (business start-ups, adoption of the Services Directive, general electronic commercial registry, one stop shops for start ups, etc)
- ✓ New investment law and the “fast track” law for large investment projects
- ✓ Opening up of the closed professions and liberalization of the road freight transport
- ✓ Law strengthening the independence of the Hellenic Competition Committee

For the immediate period the focus of the government should be on the actual implementation of the reforms agenda



IV.2 Will privatizations start soon?

Privatizations are slowly put on the agenda

- ✓ Ongoing reform programmes in Public Firms and organizations will improve their chances for privatizations
- ✓ The registering and evaluation of the State's real estate assets already started by the appointed financial advisors
- ✓ A first list of real estate assets ready for development will be presented to the EC/ECB/IMF officials by mid-May 2011, ahead of the planned delivery of the first portfolio of real estate assets (June 2011)

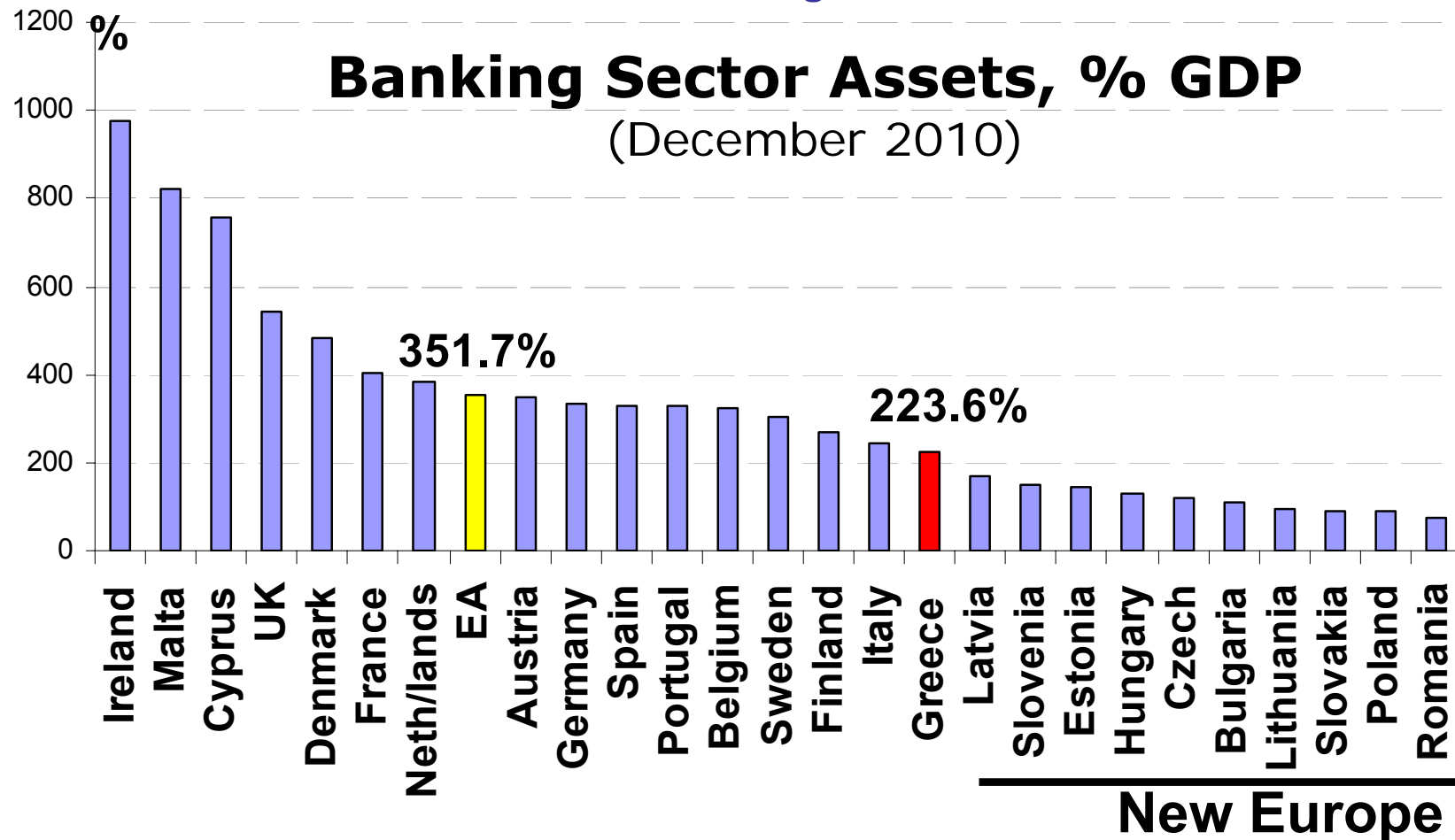
But

- ✓ Given the strong doubts expressed by analysts and the markets, the government **has to over-privatize** to regain the lost credibility
- ✓ Many Politicians and Unions seem to resist the implementation of privatizations
- ✓ Legal impediments exist in many real estate assets
- ✓ Certain Local Authorities are opposed to the planned real estate development
- ✓ Huge bureaucracy problems
- ✓ Despite the December 2011 fast track law, nothing has yet to come out of it



IV.3 Financial risk in Greece is not in the banks

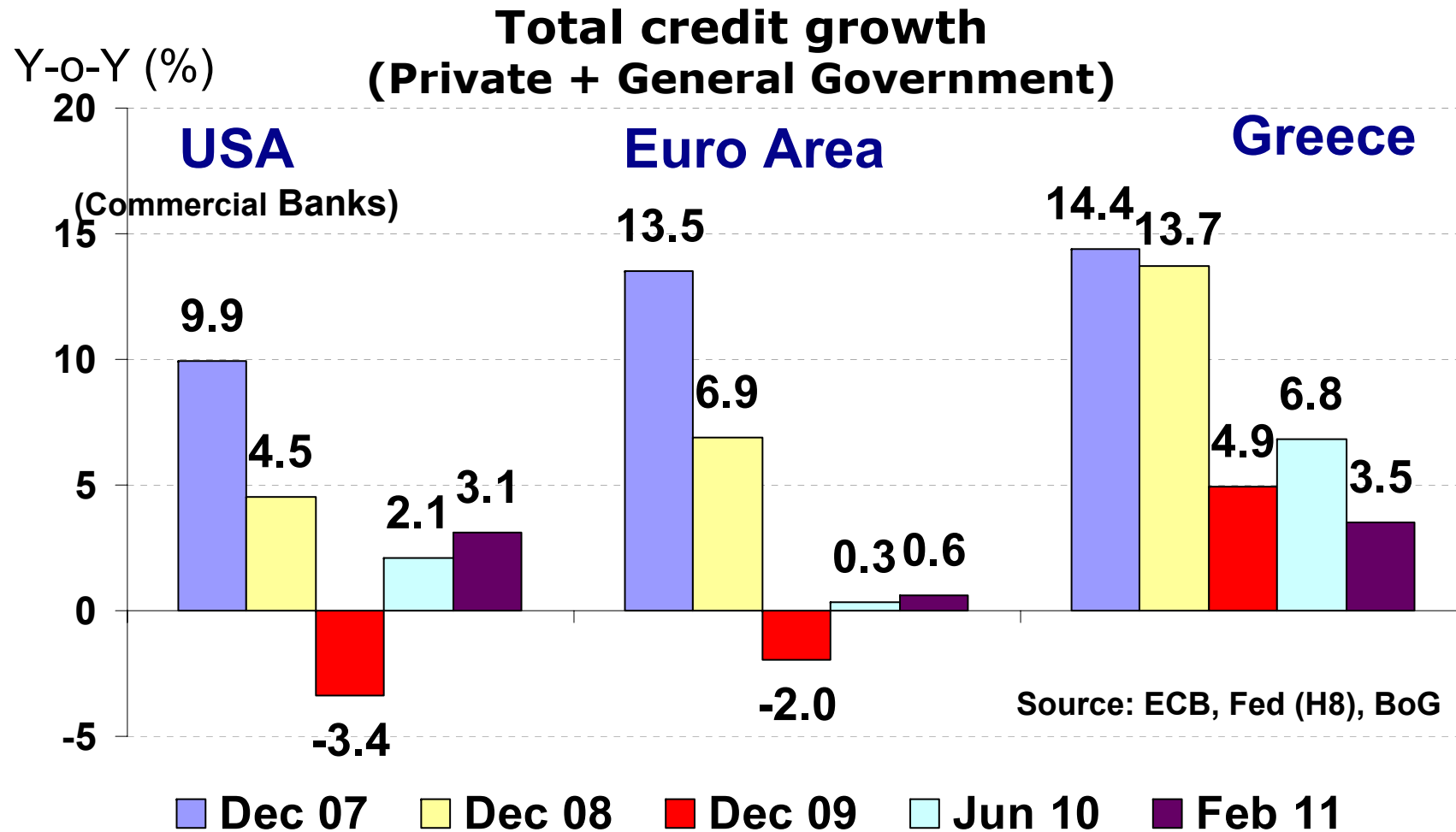
- ✓ Greek banks **did not over-expand and did not hold toxic assets**; they were not affected by the international financial crisis
- ✓ This is one reason the recession came to Greece with a lag
- ✓ **The financial risk is due to the sovereign**





IV.3 In contrast to Ireland, Greek banks are victims of the sovereign

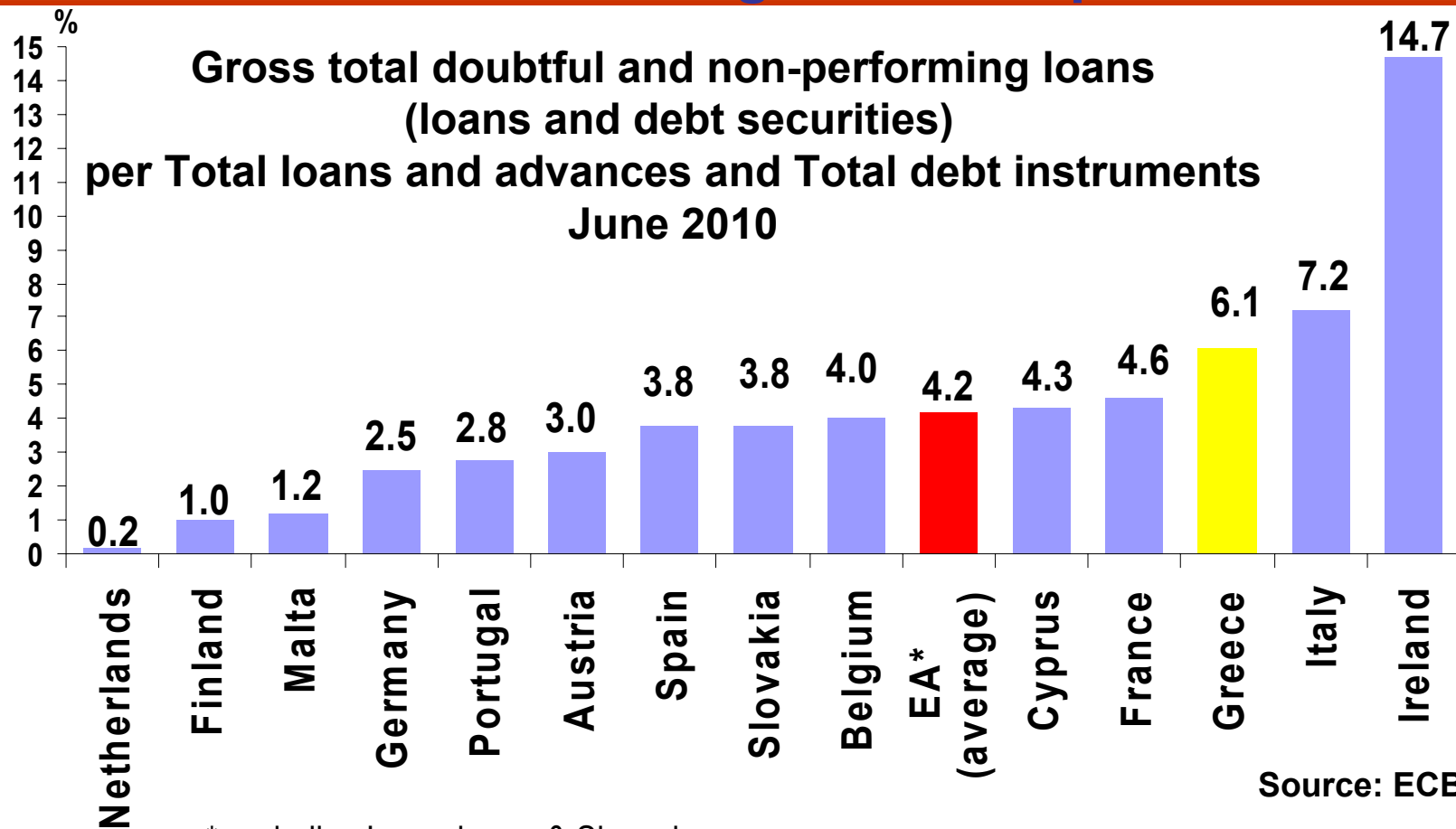
- ✓ Yet, despite the recession, Greek banks have managed to maintain credit expansion



Greece: Domestic private sector credit growth decelerated further to -0.4% yoy in March 2011, from -0.3% in February 2011 and 0.0% in December 2010



IV.3 Non-Performing Loans held in check as extensive restructuring has taken place

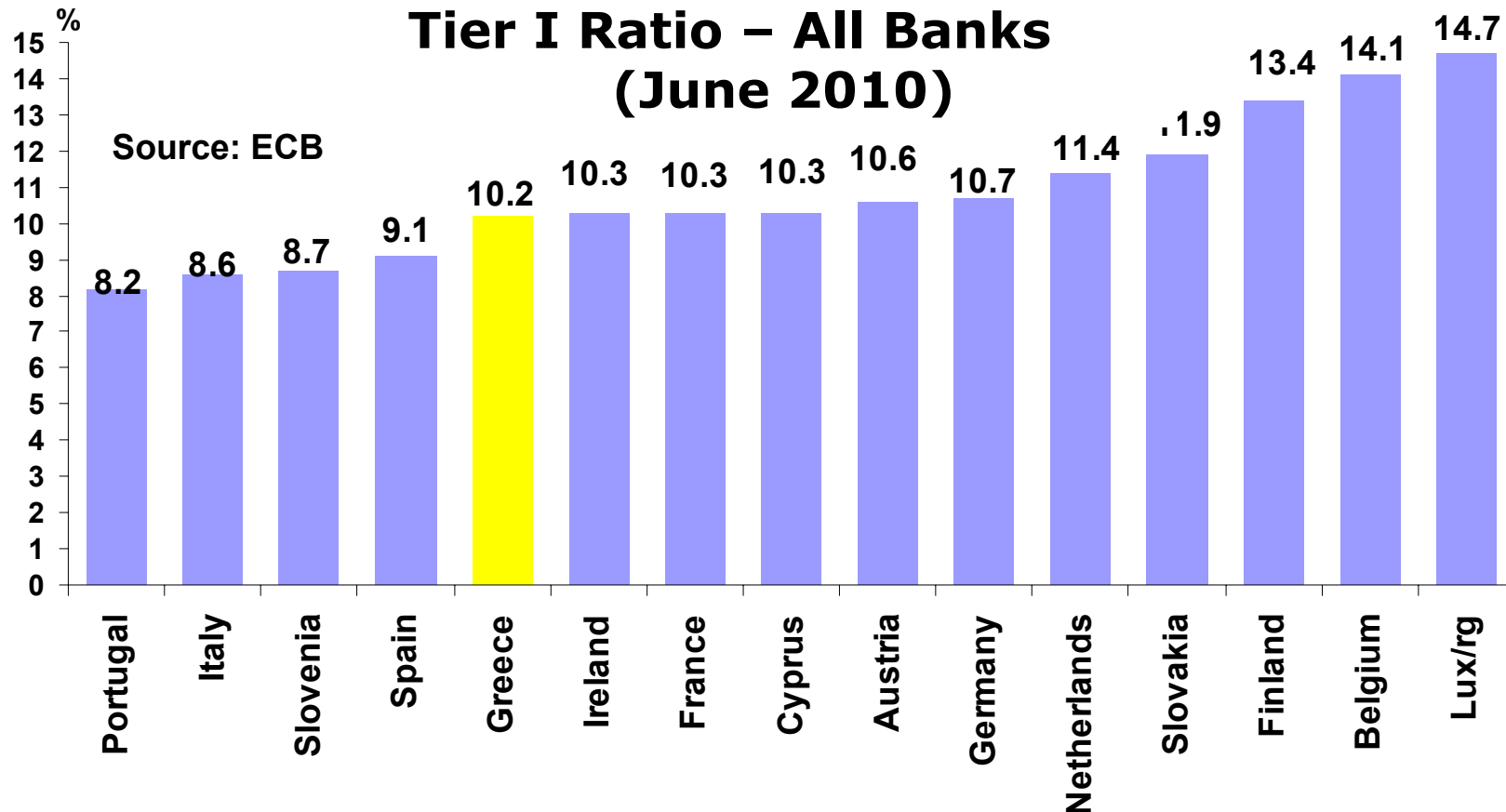


* excluding Luxembourg & Slovenia

- ✓ Despite the recession NPLs under control; According to BoG, as of Dec 2010, NPLs in Greece rose to 10.4% from 7.7% in June 2010
- ✓ Banks hold €49 bn of GGBs, which became their toxic assets and lost their earlier collateral value for interbank borrowing



IV.3 Tier I Capital Ratio remains decent



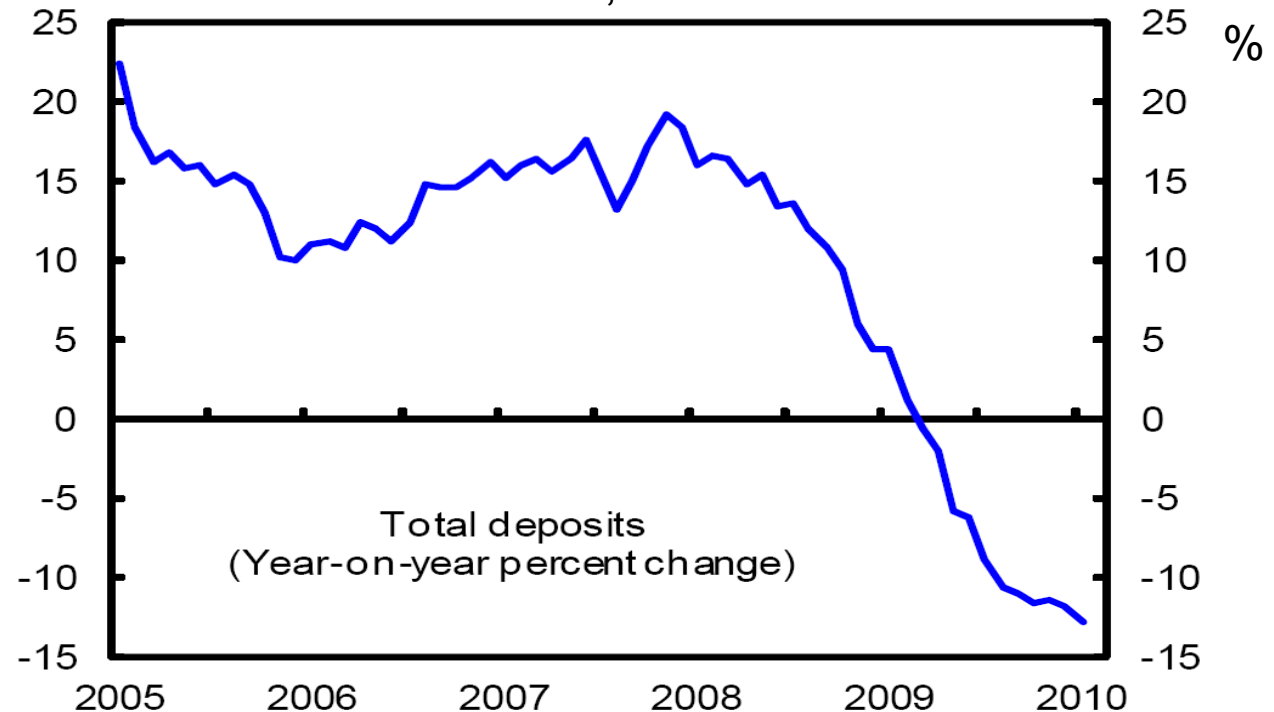
- ✓ Most major Greek banks pursued capital increases and, according to the latest data, the Tier I ratio is at **10.9%**
- ✓ The large banks can easily absorb a GGB haircut
- ✓ EMU/IMF loan earmarks €10 bn for bank recapitalization



IV.3 Deposit deceleration poses risk to banks but is driven primarily by the recession

- ✓ **Need to rebuild confidence**, which rests on further action by the government
- ✓ The risk to banks originates from the State's inadequacies and its lack of credibility
- ✓ Citizens typically confuse the State's bond restructuring discussion with a loss of their personal deposits
- ✓ March 2011: Deposits & repos of non MFIs €275.7 bn or 119.8% of GDP
- ✓ Of this amount, €199.2 bn or 86.5% of GDP belong to domestic residents

Source: IMF, March 2011



- ✓ **Only a small part of the drop in deposits is reflected in capital outflows**, since households and corporations are using deposits as a cushion to declining incomes and/or credit restrictions
- ✓ Most of the bad information is out ⇒ the knee-jerk reaction of scared citizens is absorbed ⇒ so the expectation is for deceleration of withdrawals



IV.3 High dependence on the ECB due to the sovereign

- ✓ Contrast June-07 with June-10 and Mar-11
- ✓ Deceleration in ECB lending after June-10
- ✓ It used to be German banks needing support
- ✓ Now, Greek banks cannot use €50 bn of GGB collateral, plus have lost €40 bn of deposits: It is all the State's fault
- ✓ **De-leveraging abroad is not a solution for Greek banks** as current profitability comes from abroad, exactly where the liquidity need arises

	Borrowing from the ECB			EA-16			Greece		
	a	b	c	a	b	c	a	b	c
Jun-07	464.6	28,026	1.7	4.3	353.0	1.2			
Dec-07	637.1	29,494	2.2	8.8	391.3	2.2			
Jun-08	483.0	30,839	1.6	11.6	424.5	2.7			
Dec-08	843.2	31,830	2.6	40.6	464.5	8.7			
Jun-09	896.8	31,803	2.8	54.0	490.6	11.0			
Dec-09	728.6	31,145	2.3	49.7	491.9	10.1			
Jun-10	870.4	32,564	2.7	94.3	543.2	17.4			
Dec-10	546.7	32,205	1.7	97.8	514.1	19.0			
Mar-11	435.7	31,697	1.4	88.0	498.6	17.6			

(a) Total Lending from the ECB (€ bn), (b) Total Banks Assets (€ bn), (c) % ratio a/b

- ✓ **Continued support from the ECB is required for the stability of the system**



IV.3 ECB lending to banks

	Ireland			Spain			Portugal		
	<u>a</u>	<u>b</u>	<u>c</u>	<u>a</u>	<u>b</u>	<u>c</u>	<u>a</u>	<u>b</u>	<u>C</u>
Jun-07	25.5	1,604	1.6	18.2	2,761	0.7	0.2	416	0.1
Dec-07	39.5	1,663	2.4	44.1	3,005	1.5	2.5	440	0.6
Jun-08	38.4	1,787	2.1	47.1	3,221	1.5	2.5	457	0.5
Dec-08	88.6	1,731	5.1	63.6	3,409	1.9	10.2	482	2.1
Jun-09	130.4	1,713	7.6	70.7	3,485	2.0	10.6	507	2.1
Dec-09	91.9	1,634	5.6	76.1	3,447	2.2	16.1	520	3.1
Jun-10	94.8	1,690	5.6	126.3	3,488	3.6	40.2	549	7.3
Dec-10	132.0	1,527	8.6	67.0	3,471	1.9	40.9	560	7.3
Mar-11	114.5	1,451	7.9	40.1	3,458	1.2	39.1	557	7.0

(a) Total Lending from the ECB (€ bn), (b) Total Banks Assets (€ bn), (c) % ratio a/b

- ✓ Irish banks borrow from the ECB more than Greek banks, but the amount represents a smaller percentage of their asset size



IV.3 ECB lending to banks

	Germany			France			Italy			Austria		
	<u>a</u>	<u>b</u>	<u>c</u>	<u>a</u>	<u>B</u>	<u>c</u>	<u>a</u>	<u>b</u>	<u>c</u>	<u>a</u>	<u>b</u>	<u>c</u>
Jun-07	243.4	7,381	3.3	39.0	6,879	0.6	20.8	3,092	0.7	14.8	848	1.7
Dec-07	268.0	7,592	3.5	82.9	7,120	1.2	28.1	3,407	0.8	14.8	885	1.7
Jun-08	192.4	7,689	2.5	75.4	7,316	1.0	16.7	3,583	0.5	14.2	955	1.5
Dec-08	277.7	7,893	3.5	190.6	7,711	2.5	50.5	3,694	1.4	41.3	1,060	3.9
Jun-09	273.5	7,711	3.5	130.7	7,798	1.7	34.4	3,752	0.9	28.1	1,048	2.7
Dec-09	223.6	7,436	3.0	129.0	7,657	1.7	27.5	3,748	0.7	21.7	1,030	2.1
Jun-10	225.6	7,641	3.0	133.1	8,191	1.6	36.0	3,991	0.9	24.2	1,029	2.4
Dec-10	103.1	8,305	1.2	42.1	7,830	0.5	50.6	3,796	1.3	9.5	979	1.0
Mar-11	71.7	7,955	0.9	*30.4	7,905	0.4	36.3	3,791	1.0	6.4	989	0.6

(a) Total Lending from the ECB (€ bn), (b) Total Banks Assets (€ bn), (c) % ratio a/b

* February data

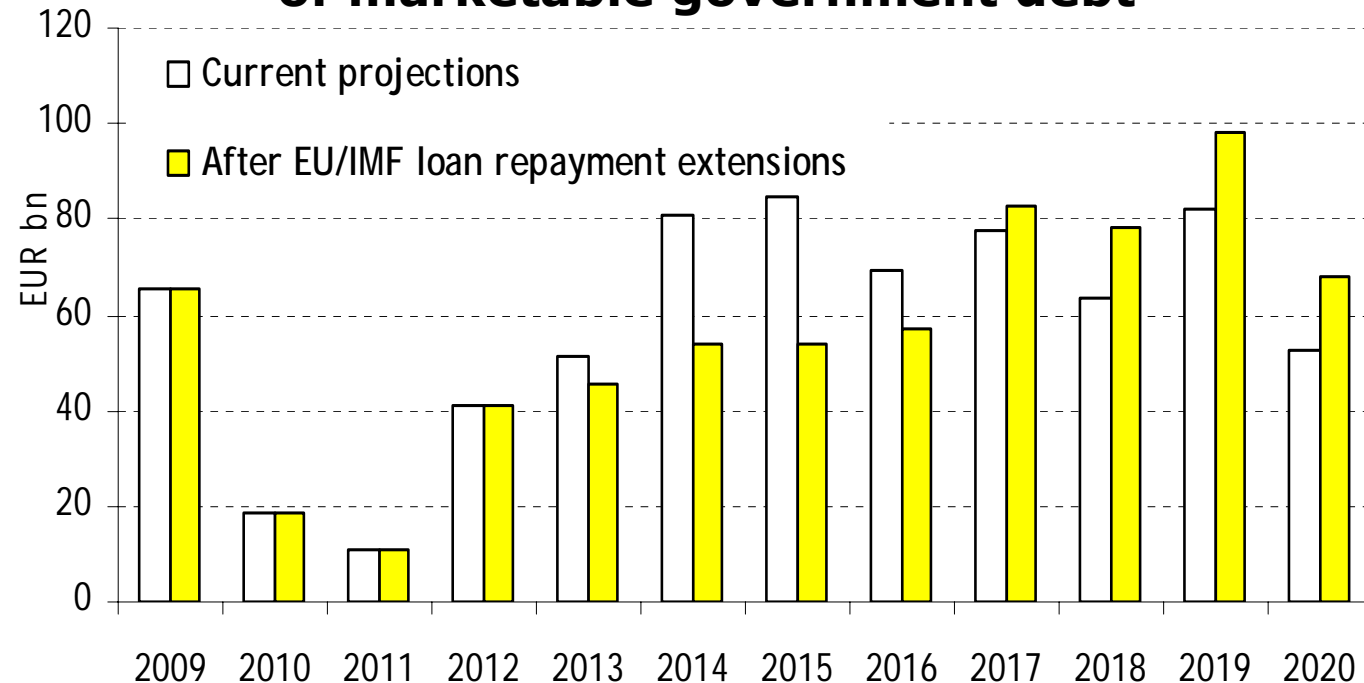
- ✓ German banks drastically reduced their ECB dependence since last June
- ✓ A reduction occurred in other countries as well, including Spain
- ✓ Does this imply added ECB pressure on Greek and Irish banks in the future?



IV.4 Can the market be tapped in 2012?

- ❖ Only if Greece were to gain credibility on the sustainability of its debt profile
- ❖ This appears difficult in the short-run, hence another solution has to be found
- ❖ The solution will be an EMU decision
- ❖ Secretive meetings in Luxemburg over the weekend of May 6-7

Required issuance of marketable government debt



Source: EC/ECB/IMF Dec. 2010 forecasts, Greek Finance Ministry, Eurobank EFG

- o Calculations do not incorporate potential receipts from privatization and other asset sales
- o Calculations do not incorporate savings from lower interest rates on EU loans (~€6bn)

- ❖ The solution has to be credible to markets and for this to happen Greece has to follow its **fiscal consolidation and privatization program at a faster pace** than up to now, and show concrete results



IV. 4 GGB restructuring debate, particularly following revelation of secretive meetings

- ✓ Financial market analysts (W. Buiter (10/05/2011), N. Rubini (10/5/2011), C. Wyplosz (29/04/2011) among others) are in favor of a restructuring solution for the Greek issue. Reprofitting is considered as a half-measure.
- ✓ On the other hand the IMF, the European Commission, the European Central Bank and other Eurozone member states' officials are strictly against the restructuring solution (see D. Strauss-Kahn (05/04/2011), O. Rehn (10/04/2011), J-C. Trichet (10/04/2011), J-C. Juncker (27/04/2011), C. Lagarde (14/04/2011) among others).
- ✓ Previously, a number of German officials and analysts were in favor of a Greek restructuring (see W. Schaeuble (14/04/2011), W. Hoyer (15/04/2011), L. Feld (09/05/2011) among others).
- ✓ Nevertheless, the German government changed its tone recently. M. Meister, the parliamentary finance spokesman for Merkel's Christian Democratic Union, said on May 10th that Germany would consider more aid to avoid restructuring and its consequences
- ✓ O. Rehn, the European Union Economic and Monetary Commissioner, on May 10, 2011, did not rule out a new loan decision for Greece but postponed the necessary decisions until early June 2011.
- ❖ Restructuring discussions trigger further downgrades by rating agencies
- ❖ Restructuring often acts as a pretext in Greece to stall the reforms



V.

- I. THE EURO AREA CRISIS:
HOW DID WE GET TO HERE?**
- II. GREEK IMBALANCES IN MORE DETAIL**
- III. THE EU/IMF/ECB PROGRAM**
- IV. RISKS & OPPORTUNITIES**
- V. IMPLICATIONS FOR THE EU AND
BEYOND: A NEW ARCHITECTURE**



V. Need for a new architecture

✓ Euro Area, a **political undertaking** based on **two pillars**:

- 1) The independence of the European Central Bank
- 2) The Stability and Growth Pact
plus the NO BAILOUT threat

What is there to do? Not politically possible:

- I. Dissolve EMU
- II. Establish a fiscal union with fiscal transfers & little national authority

Hence,

✓ Euro Area needs a new architecture based on the following issues:

- 1) Conflict resolution mechanism
- 2) Fiscal coordination
- 3) Competitiveness divergences among EMU members
- 4) Stability of the financial system

✓ Therefore, a four-front approach:

- 1) Permanent European Stability Mechanism
- 2) Strengthening of the SGP with the inclusion of the Van Rompuy proposals
- 3) Euro + : Decrease the competitiveness gap among the Eurozone members
- 4) Stricter supervision of the Financial sector



V. Discussion on the new Euro Area architecture

- 1) Stricter fiscal discipline - **Van Rompuy proposals** to be made concrete by June. (reverse majority rule, debt reduction = 5% of excess debt, stricter surveillance, fiscal rules, better policy coordination – “European semester” etc.)
 - 2) **Euro Plus Pact** will further strengthen the economic pillar of EMU, with the objective of improving competitiveness, fostering employment, enhancing public finances sustainability and financial stability: Common objectives, progress monitoring on the basis of indicators, concrete yearly commitments (*reviewing of wage setting arrangements, wages to follow productivity, opening of sheltered sectors, improve education systems and promote R&D, improve the business environment, “flexicurity”, aligning of pension systems to the national demographic situation, national fiscal rules “debt brake“, tax policy coordination etc*).
 - 3) **European Stability Mechanism**: €500bn, IMF participation, no-bailout clause is gone, ability to intervene in primary markets, private sector participation, Collective Action Clauses
 - 4) Stricter supervision of the Financial sector (Basel III: stricter capital requirements, new leverage and liquidity ratios; European Systemic Risk Board plus 3 European Authorities for Banks, Insurance companies and financial markets from January 2011)
- ✓ Eurobonds seem to be out (Objections that they reduce the incentive for compliance; Yet Eurobonds can be issued for European Infrastructure projects; They are created indirectly through the ESM loans)



V. Greek choices in the new Euro Area architecture

- ✓ The new Euro Area architecture aims to improve coherence and overall competitiveness; it is not a zero-sum game
- ✓ The **new architecture does not impose additional restrictions** on Greece
 - ❖ Those restrictions are already present, triggered by the Greek crisis and the subsequent Economic Adjustment Program.
 - ❖ The discipline enforced by the creditors (EC/ECB/IMF) is more severe than the requirements of the new Euro Area architecture.
- ✓ As a result Greece is in favor of the new Euro Area architecture
- ✓ The new strict Euro Area architecture imposes **long term discipline** even after a decade, when Greece will hopefully have freed itself from the debt burden
- ✓ As a result, the new Euro Area architecture implies that the current adjustment process of the Greek economy **will not derail**; it is an one-way road



VI. Summary: The crisis as an opportunity for change

- ✓ The EMU crisis is an opportunity for fixing its internal fiscal mechanism
 - ❖ Van Rompuy Task Force proposals will bring added fiscal discipline, plus ESM could bring long-run stability; E-bonds could materialize in the future
- ✓ Greece is in a transitional stage:
 - ❖ It either does nothing and gets trapped in a prolonged period of stagnation and huge unemployment, with contracting living standards
 - ❖ or uses the 3-year EU/ECB/IMF lending window efficiently to fix itself up, yet carrying the burden of past sins in the form of both higher unemployment and higher debt
- ✓ Indeed, the Greek crisis is an opportunity to fix its long neglected general public sector and pursue the structural reforms that were avoided for decades
 - ❖ Despite huge risks and sacrifices, Greek society is ready
 - ❖ Yet wide-spread political support for the adjustment process is required
 - ❖ Pension reform a big plus, but its adversity has not been tested yet
 - ❖ Labor reforms induce flexibility but the main task is on product market reforms
 - ❖ Many reforms still pending: Health sector, Public sector enterprises, Local governments, Educational reform
 - ❖ Privatizations can instill confidence among foreign investors and help on two fronts: Jump-start the economy and reduce the nominal value of debt
 - ❖ State has to capture the underground economy, simplify the tax system and, subsequently, reduce marginal tax rates
- ✓ The stricter the EU supervision, the more likely it is for Greece to succeed



THANK YOU FOR YOUR ATTENTION !

www.eurobank.gr/research

I wish to thank my colleagues at Eurobank EFG for their comments

Disclaimer

This report has been issued by EFG Eurobank Ergasias S.A. (Eurobank EFG), and may not be reproduced or publicized in any manner. The information contained and the opinions expressed herein are for informative purposes only and they do not constitute a solicitation to buy or sell any securities or effect any other investment. EFG Eurobank Ergasias S.A. (Eurobank EFG), as well as its directors, officers and employees may perform for their own account, for clients or third party persons, investments concurrent or opposed to the opinions expressed in the report. This report is based on information obtained from sources believed to be reliable and all due diligence has been taken for its process. However, the data have not been verified by EFG Eurobank Ergasias S.A. (Eurobank EFG), and no warranty expressed or implicit is made as to their accuracy, completeness, or timeliness. All opinions and estimates are valid as of the date of the report and remain subject to change without notice. Investment decisions must be made upon investor's individual judgement and based on own information and evaluation of undertaken risk. The investments mentioned or suggested in the report may not be suitable for certain investors depending on their investment objectives and financial condition. The aforesaid brief statements do not describe comprehensively the risks and other significant aspects relating to an investment choice. EFG Eurobank Ergasias S.A. (Eurobank EFG), as well as its directors, officers and employees accept no liability for any loss or damage, direct or indirect, that may occur from the use of this report.