Eurobank EFG

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

Gikas A. Hardouvelis*

JOINT VIENNA INSTITUTE

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* 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
9:15 a.m. 9:15 a.m. - 9:25 a.m. 9:25 a.m. - 10:30 a.m. 10:45 a.m. - 12:15 p.m. 2:00 p.m. - 3:30 p.m.	L-1 L-2	**Public Lecture & Discussion** **Introduction** by Mr. Hochreiter **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. Thomas Wieser, Director General, Austrian Ministry of Finance **Panelists:** Messrs. Hardouvelis, Mourmouras; Thorvaldur Gylfason **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

PRESENTATION CONTENTS

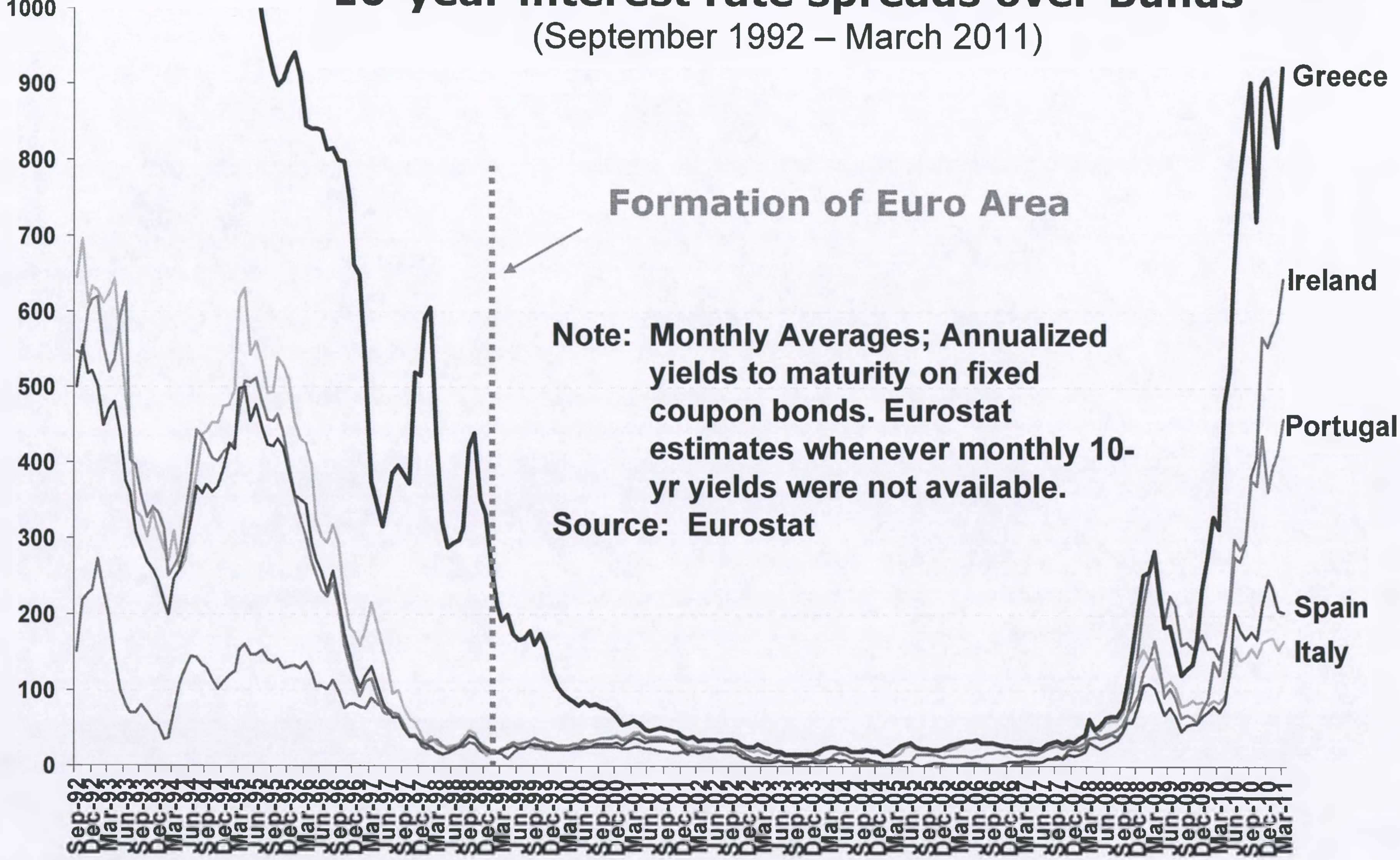
I. Risk premia rose following the international crisis

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

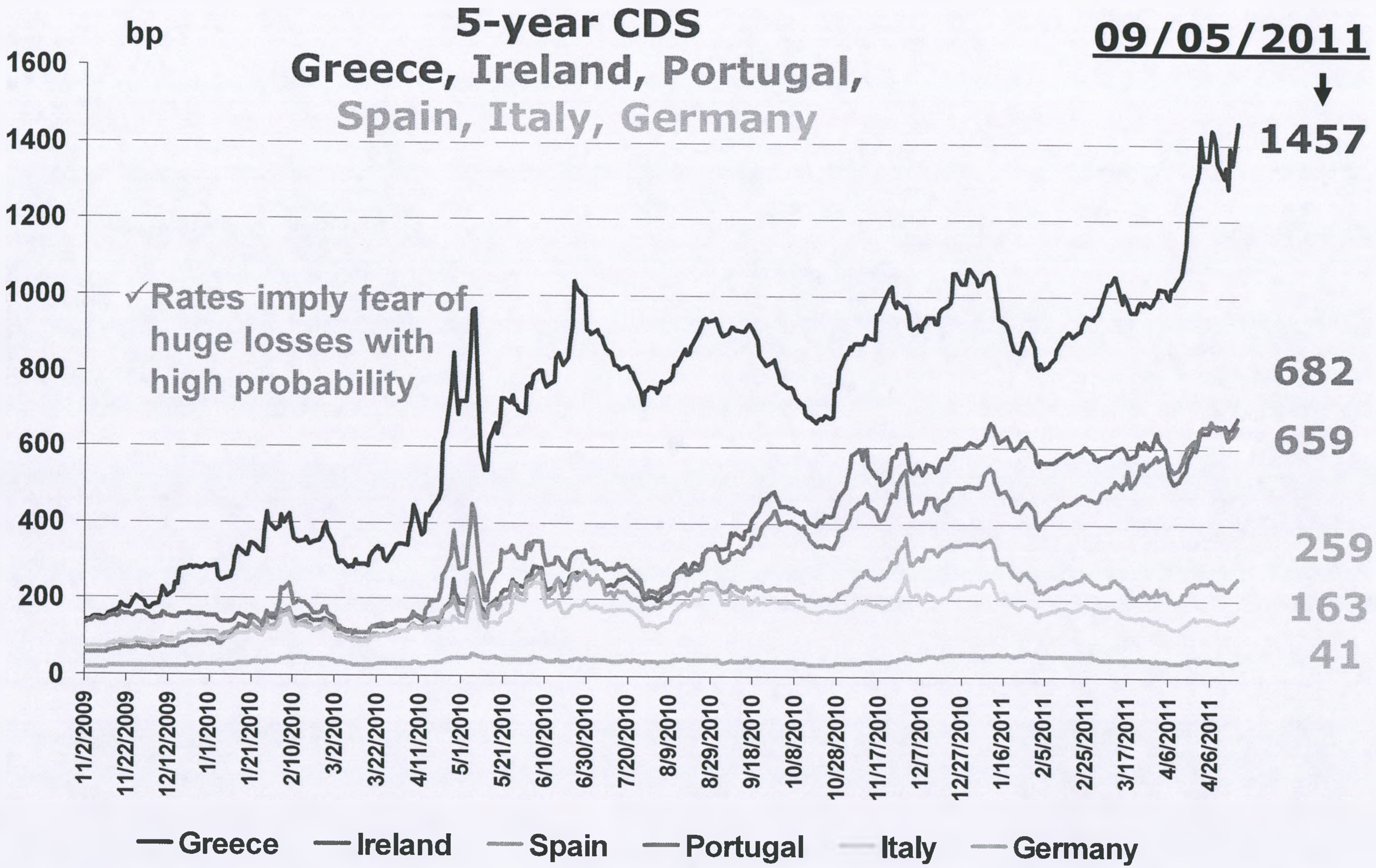
Source: Bloomberg

I. Markets woke up to Euro Area imperfections

10-year interest rate spreads over Bunds
(September 1992 – March 2011)



I. Euro Area crisis begins at the end of 2009



Source: Bloomberg

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

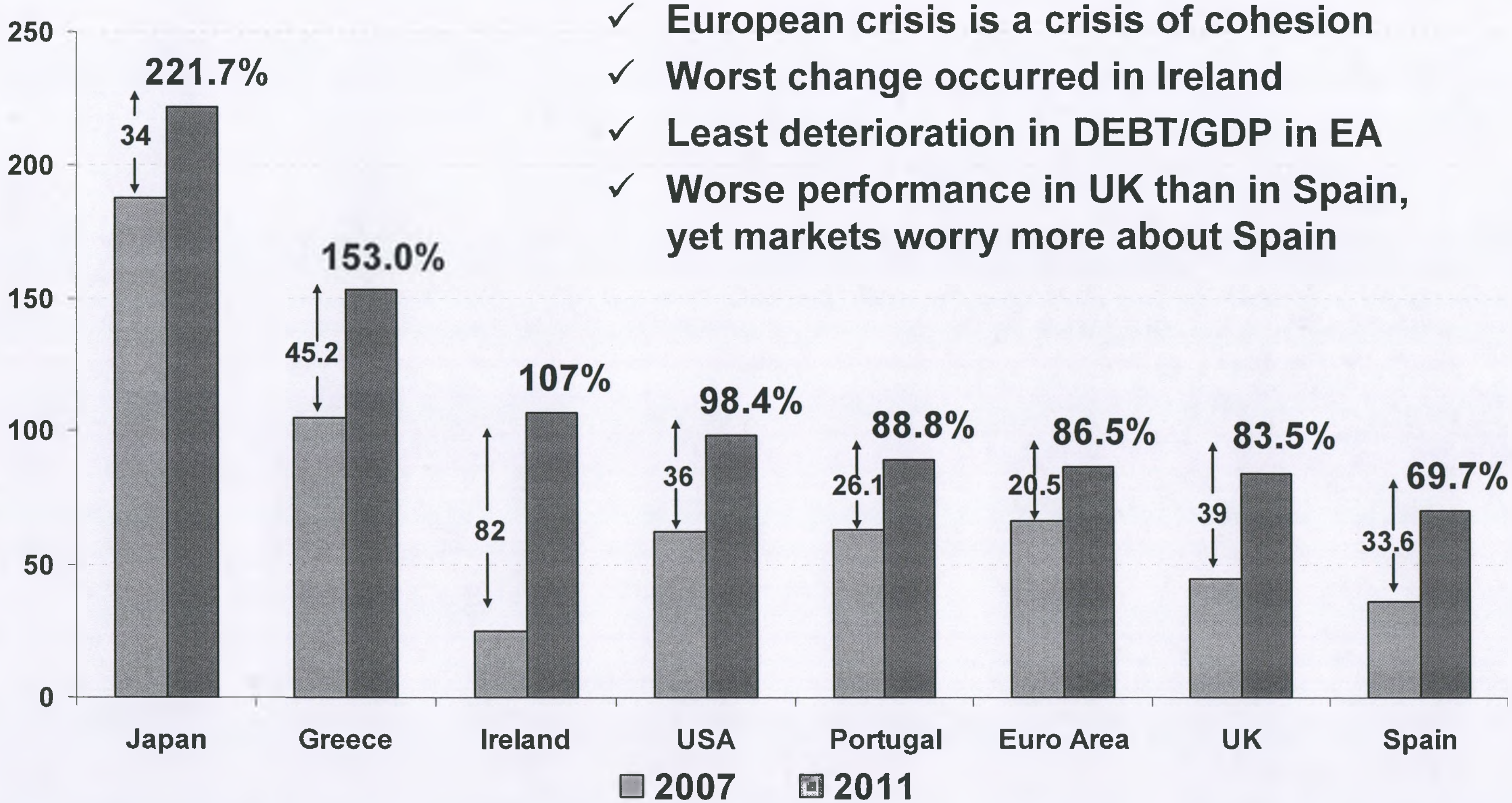
CP: Cumulative Probability for 5-years ahead

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

General Government Debt

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

- ✓ European crisis is a crisis of cohesion
- ✓ Worst change occurred in Ireland
- ✓ Least deterioration in DEBT/GDP in EA
- ✓ Worse performance in UK than in Spain, yet markets worry more about Spain



Source: European Commission

I. Economic theory of Optimum Currency Areas was ignored

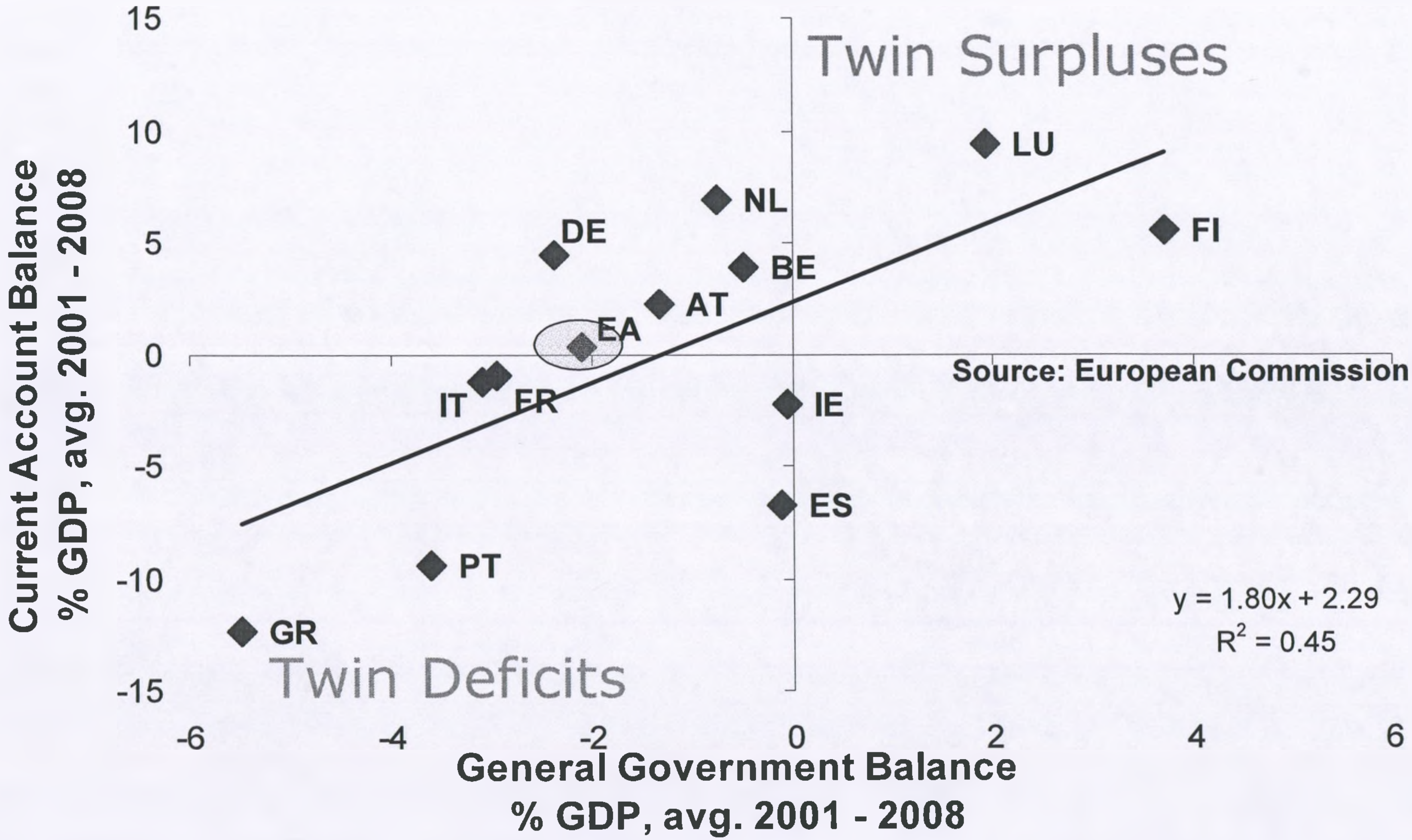
A political project. Academic literature on **Optimum Currency Areas** was ignored. Necessary economic criteria were thought to adjust by themselves and converge once the common currency forms via a political path, i.e. market mechanism would automatically correct deviations from the competitiveness 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. completive North
- ❖ Fiscal profligacy almost everywhere



I. Different euro area countries face different problems today

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✓ IRELAND

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

✓ PORTUGAL

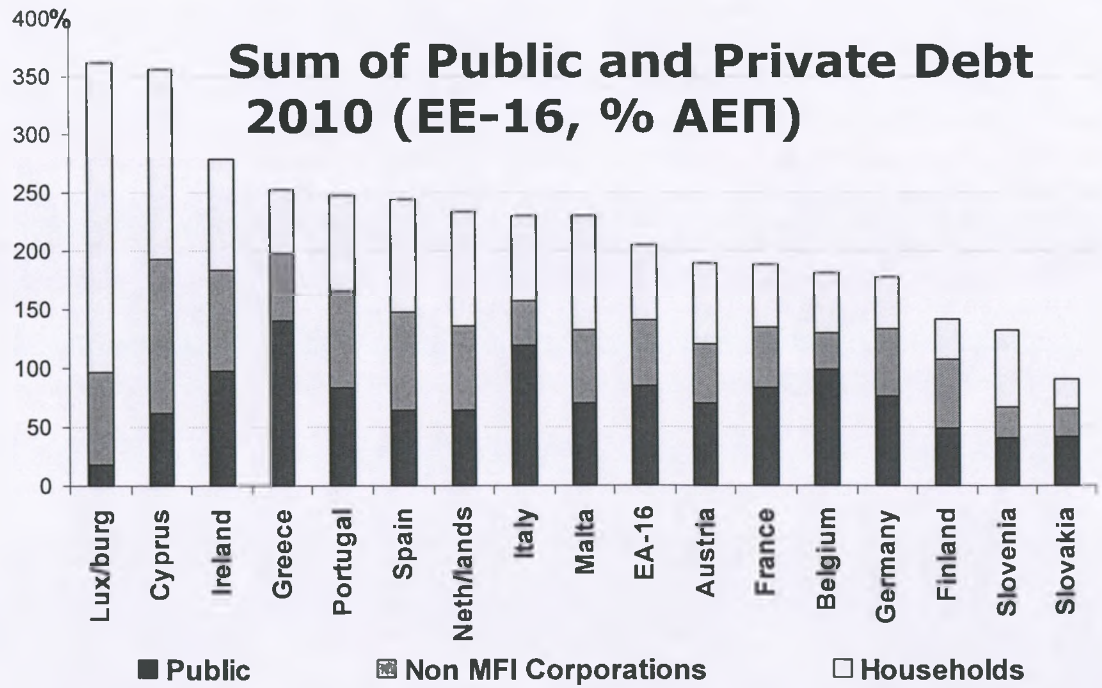
- ↓ Low competitiveness
- ↓ Large fiscal deficits, but not debt
- ↓ High private debt

✓ 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



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	328.6	6,756.0
Geographical Area (km²)	**132.0**	**2,578.8**	**510,072**
GDP per capita (€)	21,082	27,271.4	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)	**4.0**	**2.2**	**6.0**
Secondary Sector (% GDP)	16.9	24.7	30.6
Tertiary Sector (% GDP)	**79.1**	**73.0**	**63.4**
Tourism (% GDP)	9.8	15.2	9.4
Construction (% GDP)	**4.5**	**5.3**	
Public Sector (Gen. Gov. Expenditures % GDP)	50.5	50.7	
Exports (% GDP)	**18.8**	**36.3**	
Imports (% GDP)	28.5	35	
Private Consumption (% GDP)	**72.6**	**57.6**	
Gen. Gov. Debt (% GDP)	115.1	78.7	

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

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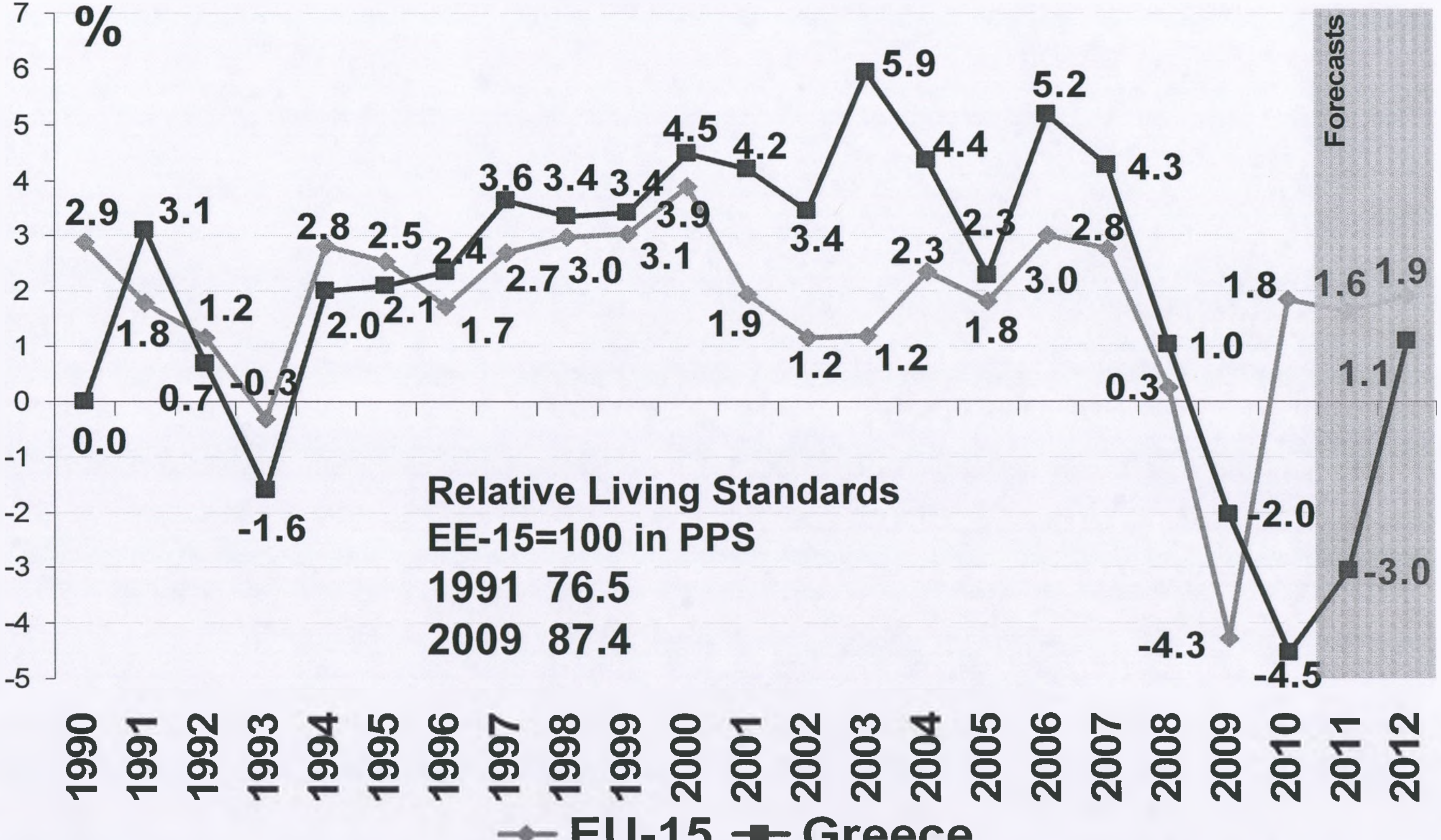
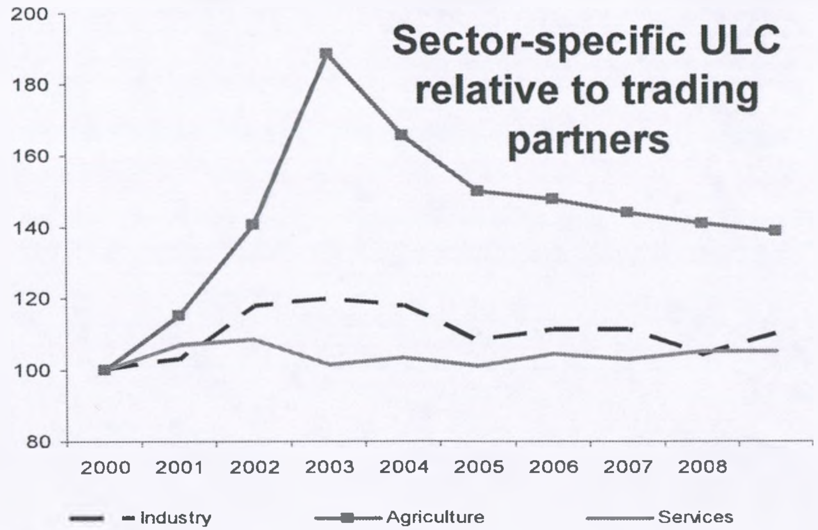
Greece: From boom to bust. How come?
Answer: **Not an equilibrium growth**

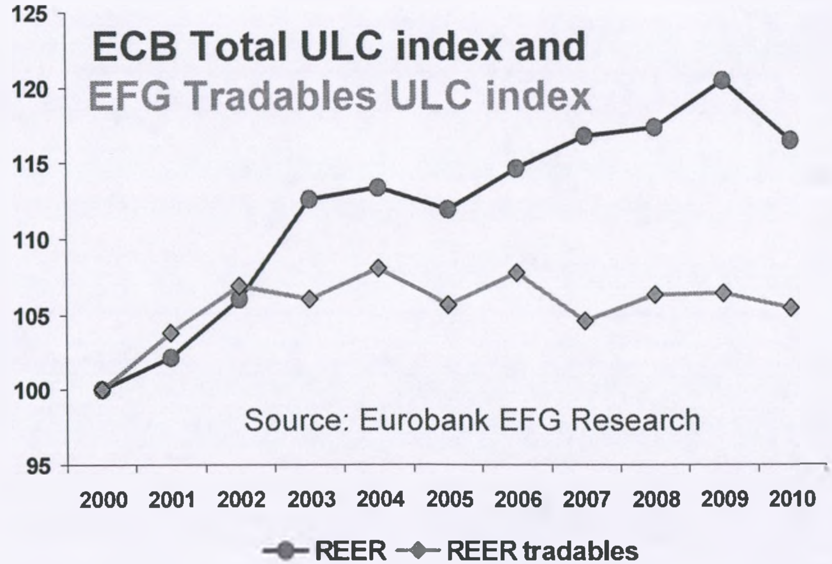


Source: EU, IMF, Eurobank Research

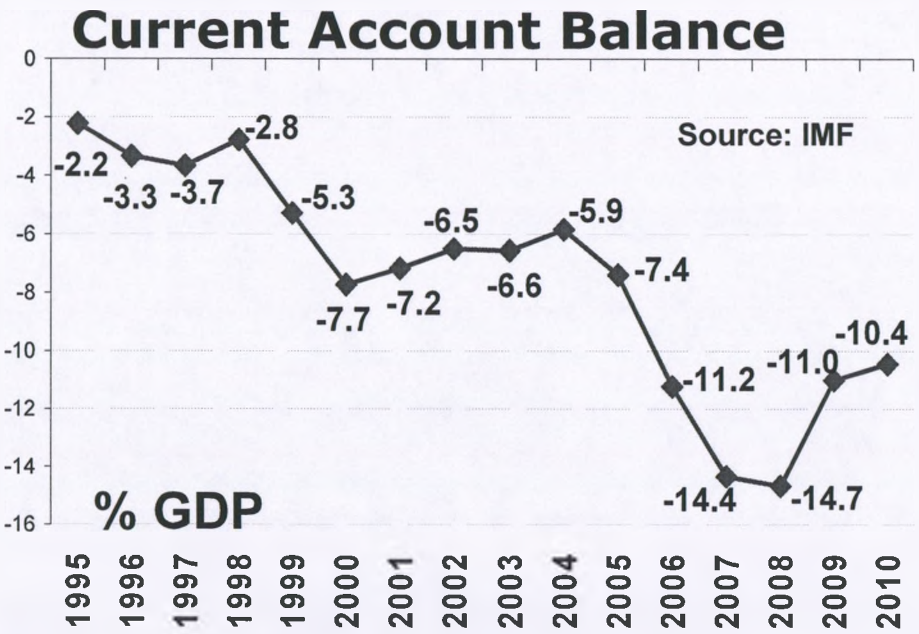
II. First disequilibrium: Loss in competitiveness

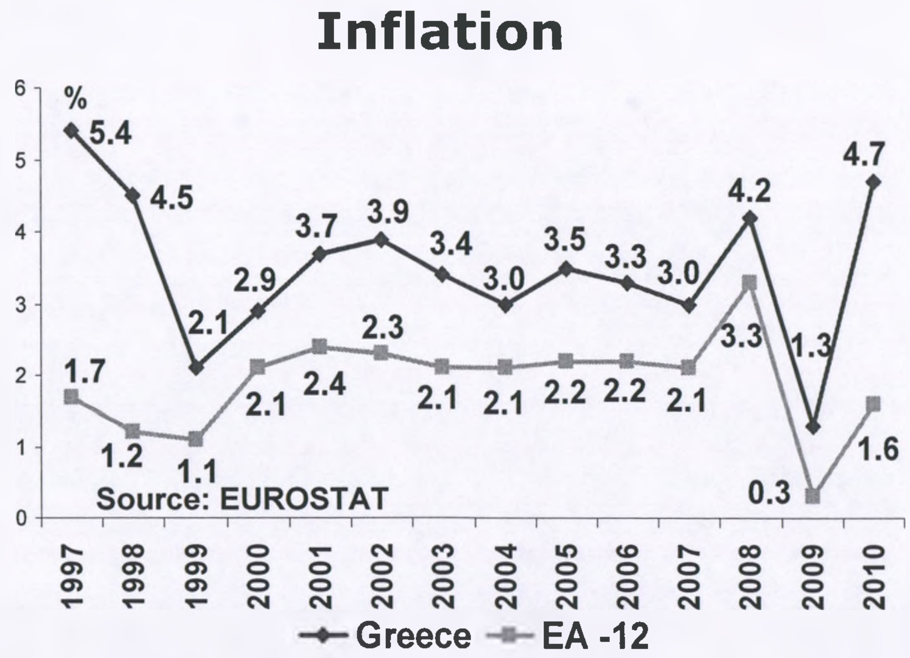
- ✓ Wide discrepancies in competitiveness across the sectors with largest loss in agriculture
- ✓ Prices and wages increased faster than productivity, especially in non-tradable sectors ⇨ motivated a migration of capital and labor away from tradables
- ✓ A real appreciation of 5.5% in tradables since 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





2010	€ mill.	% GDP
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

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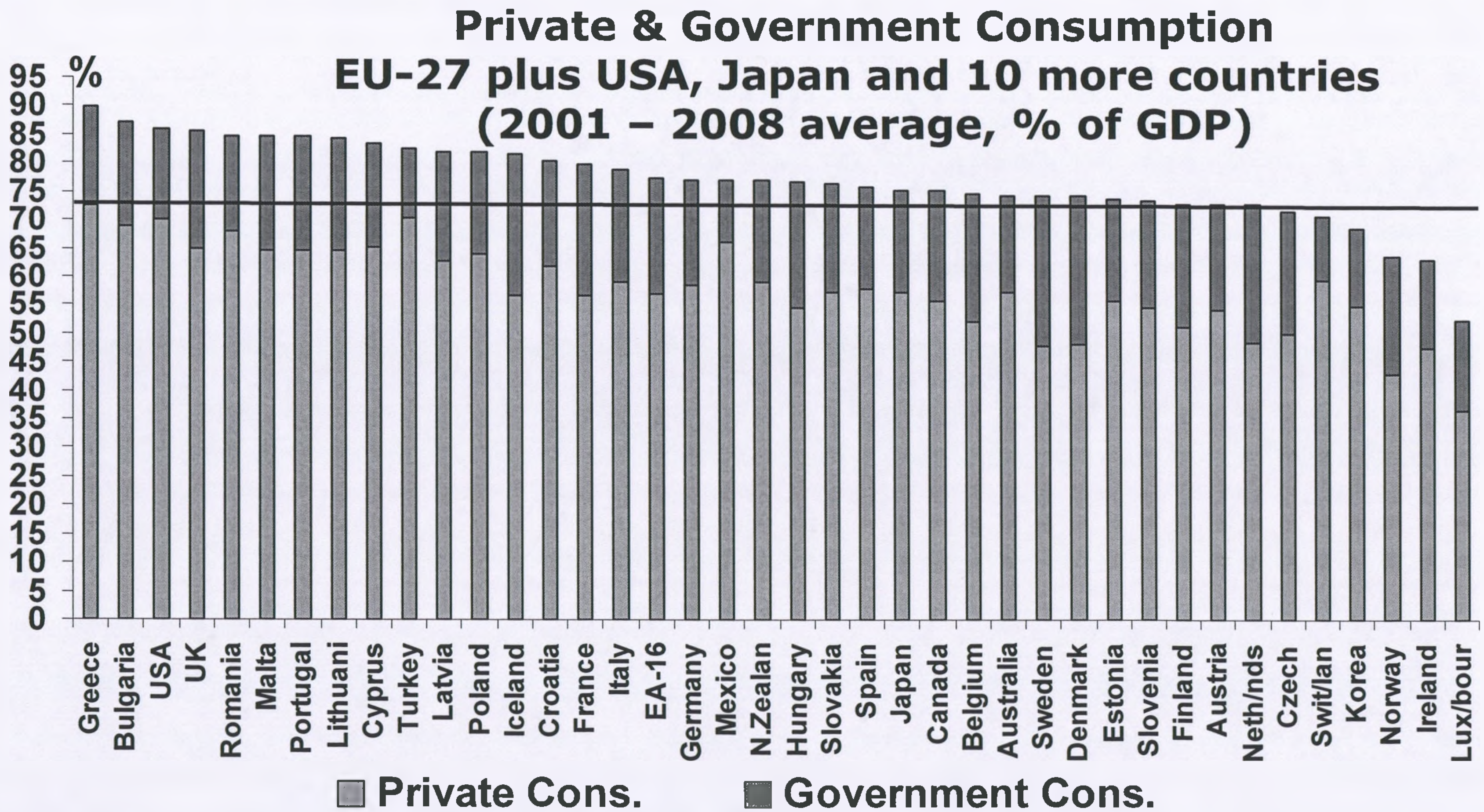
	Rank	Starting a business (days)	Cost of registering property (% p. value)	Protecting Investors (0-10)	Exporting Goods (days)	Paying Taxes (hours per year)
OECD		13.8	4.4	6.0	10.9	199.4
US	5	6	0.5	8.3	7	187
UK	4	13	4.1	8.0	7	110
GERMANY	22	15	5.1	5.0	7	215
Ireland	9	13	6.3	8.3	7	76
Portugal	47	7	7.4	7.0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

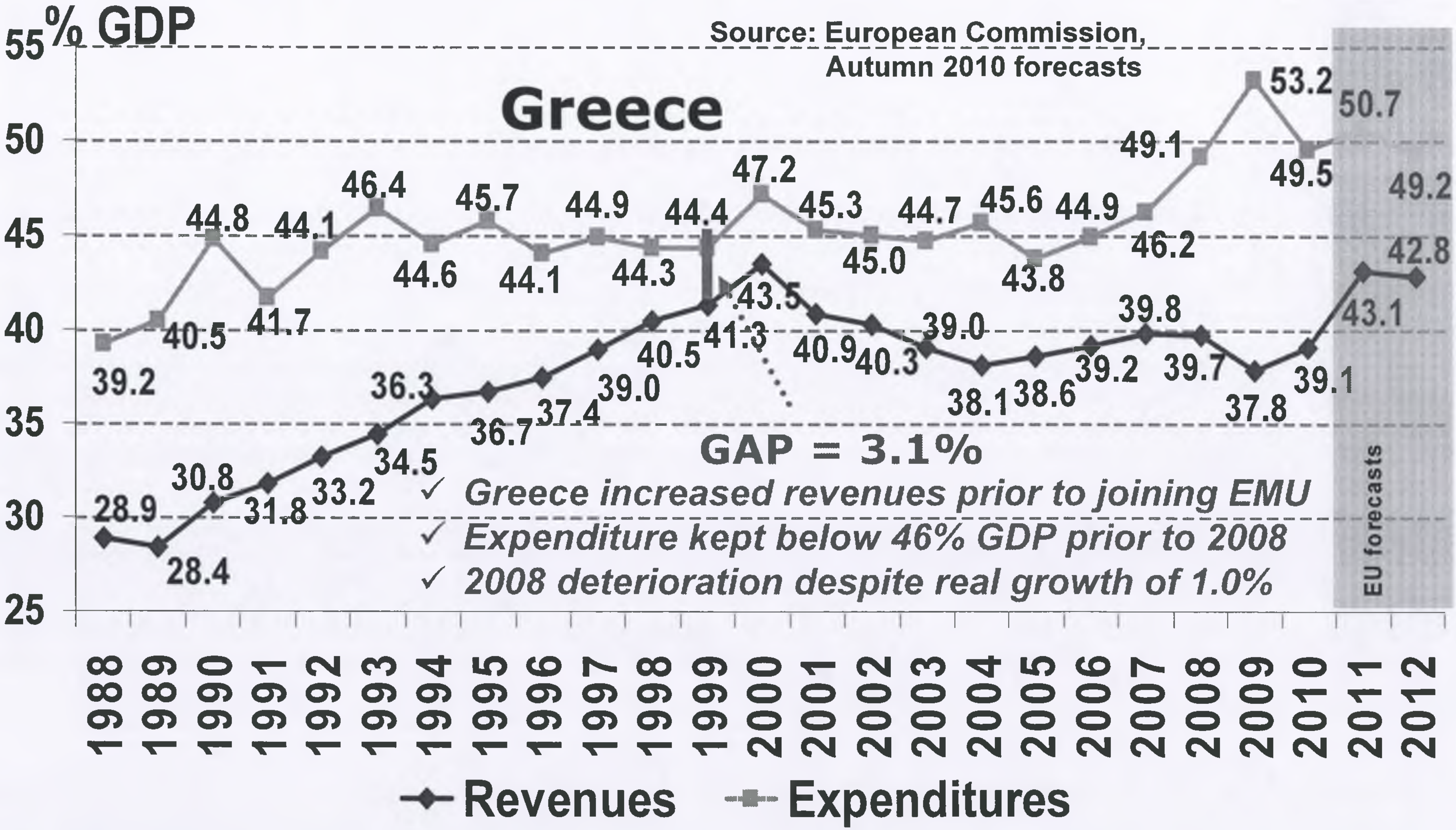
- ✓ World Bank: In 2010 Greece ranked 109th out of 183 countries
- ✓ This was due to a) increased cost of registering property (from 1% to 10%) b) Delays in the implementation of reforms aiming to boost competitiveness

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

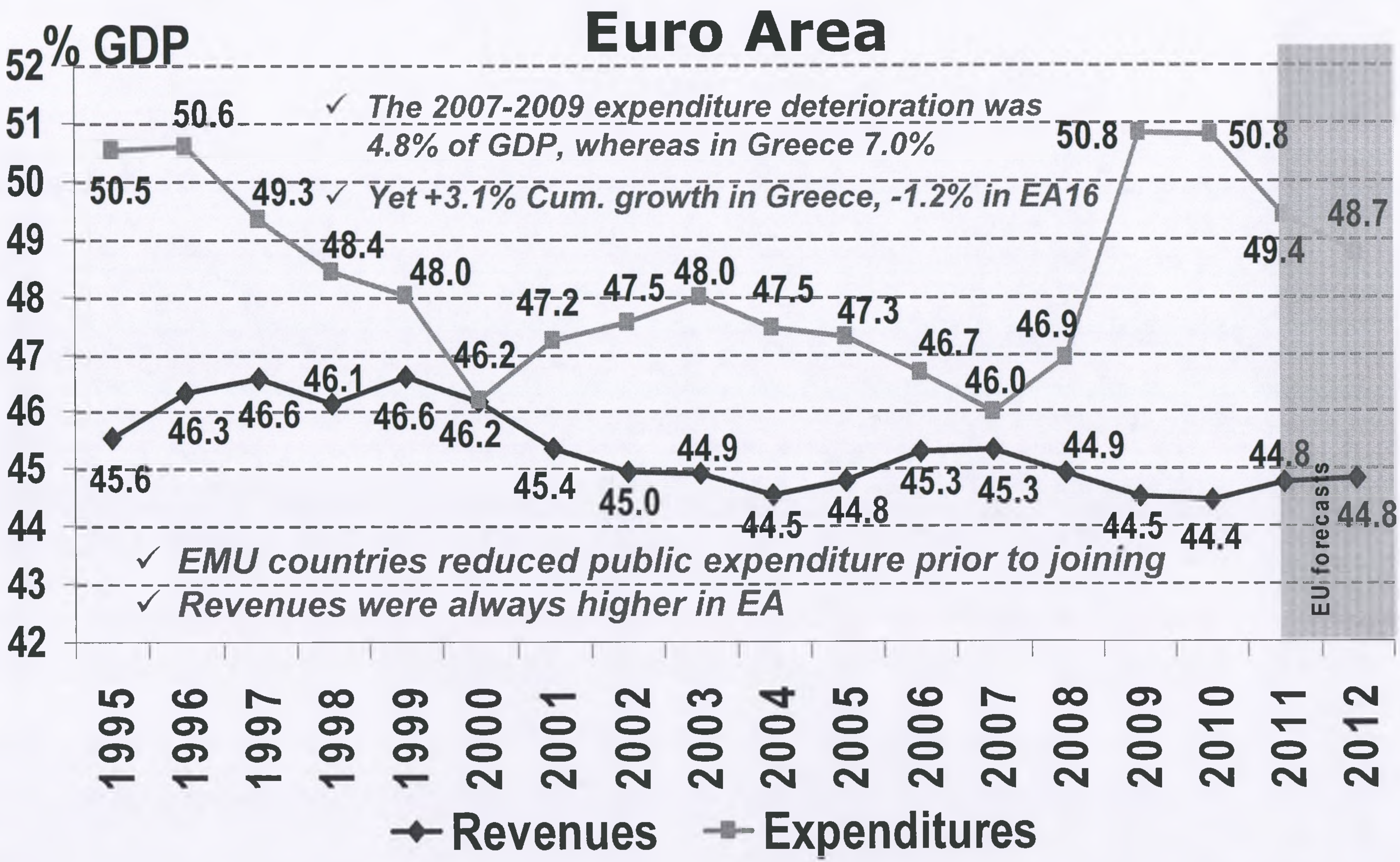


II. Third disequilibrium: Fiscal laxity



✓ 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



Source: European Commission, Autumn 2010 forecasts

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

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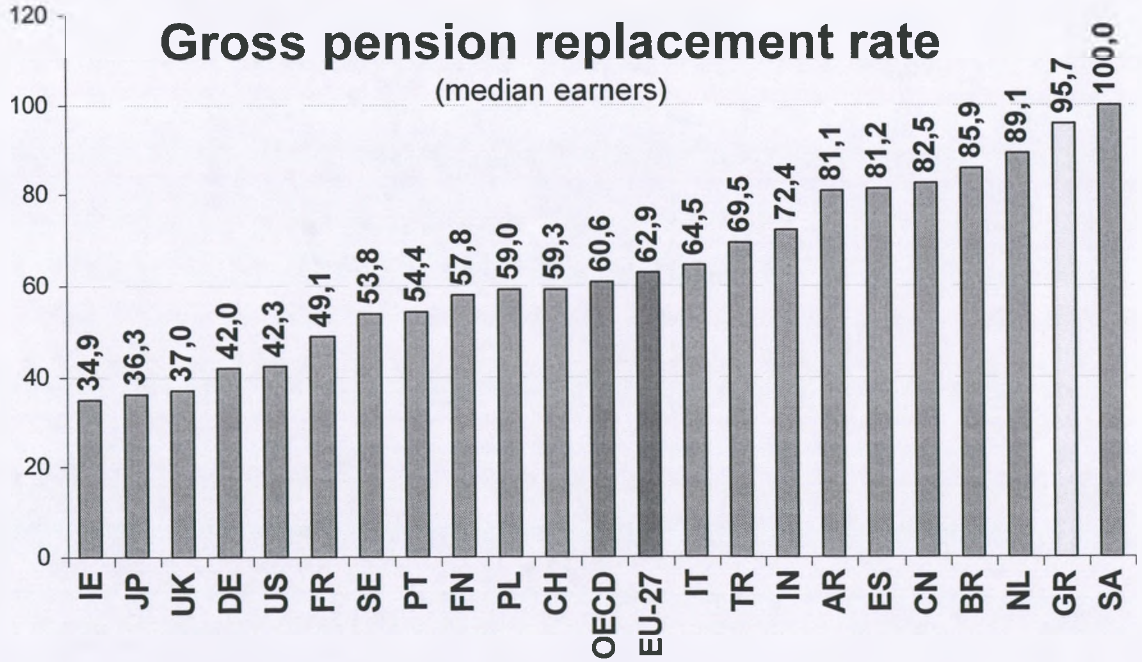
New pension Law adopted on July 2010:

- Fix system's parameters ⇨ reduce the expected <u>increase</u> 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 **life-time 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

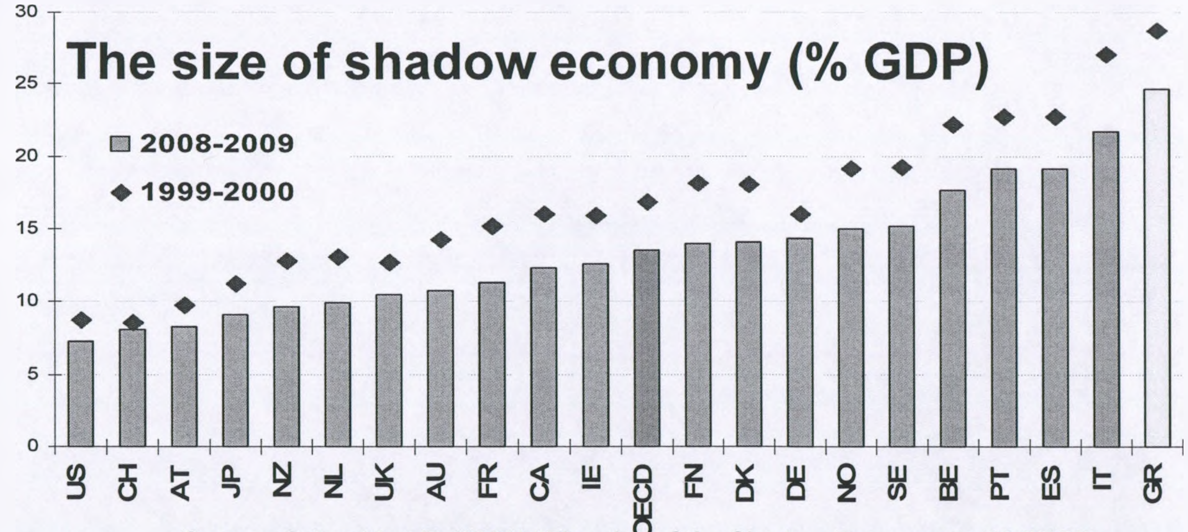
** Ratio of pensioners to contributors*



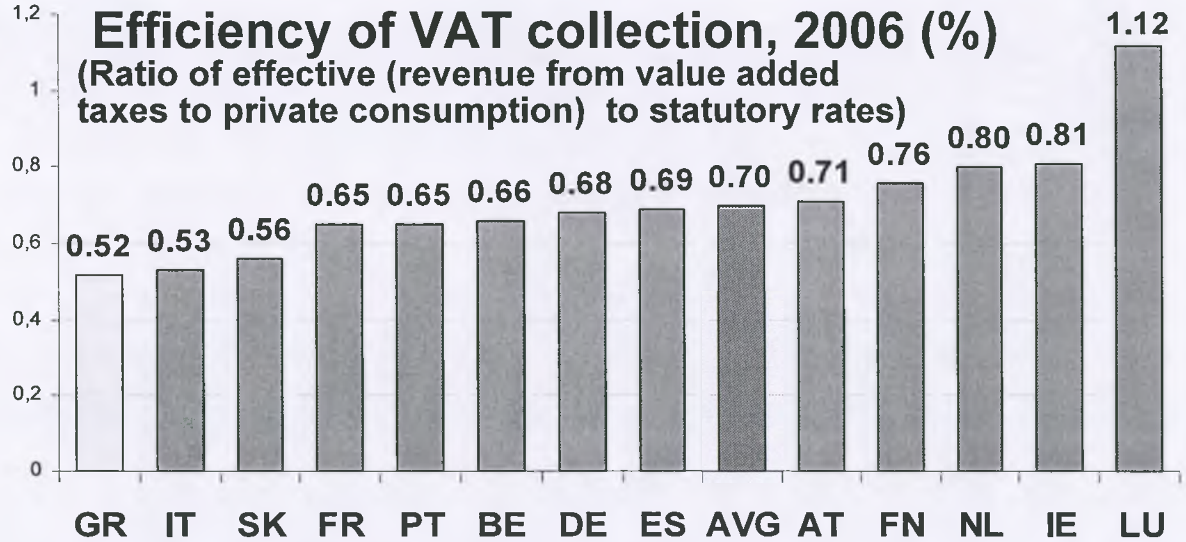
Source: OECD Pensions at a glance 2011

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.

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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

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- ✓ **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. With1 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

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	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

EC/ECB/IMF Adjustment programme, Eurobank EFG Research

*** After Eurostat's recent revision (26/04/2011)**

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.
- ✓ 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
- ✓ Fiscal reform is drastic:
  - ❖ Kalikrates Law, Single Payment Authority, Restructuring of public enterprises
- ✓ Potential for cost improvement is large given size of public waste
  - ❖ 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?

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III. THE EU/IMF/ECB PROGRAM

IV. RISKS & OPPORTUNITIES

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

IV. The major risks

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 Greek banking system remain stable and strong?*

Depends on the continuing support from the ECB (€ 91 bn), the opening up of the interbank market for Greek banks

iii. *Will Greece be able to reduce the huge public debt in other ways?*

A target has already been set to collect €50 bn through privatizations

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

A restructuring discussion began following the internal German debate

v. *Will the expected growth benefits from structural reforms materialize;*

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

vi. *Will the public sector achieve primary surpluses of around 6% for an extended period of time?*

The new Pact for the Euro helps maintain fiscal discipline for a long time

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

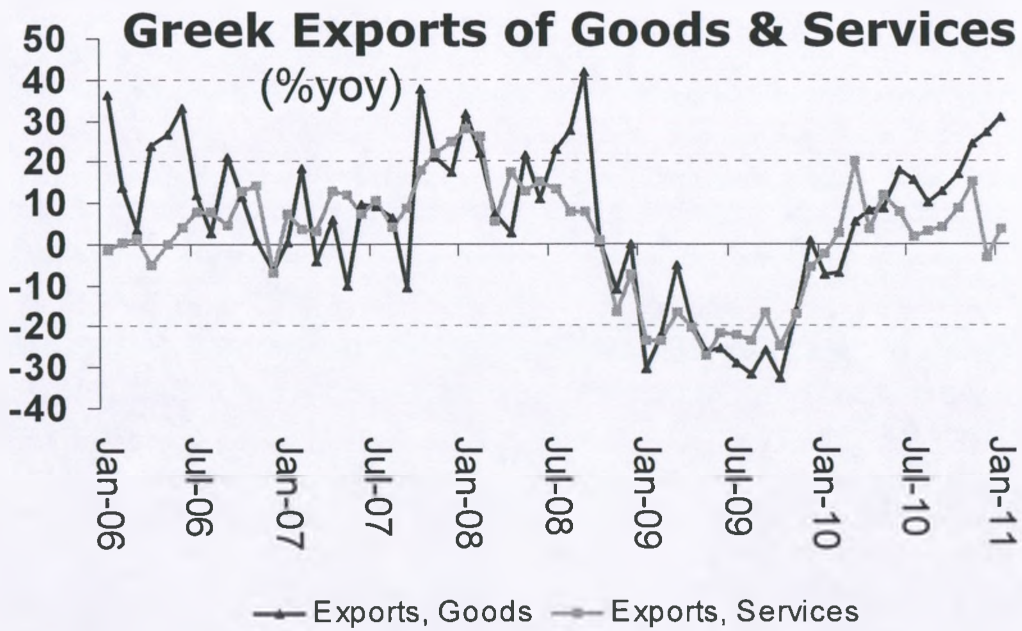
Source: Eurobank EFG Research

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

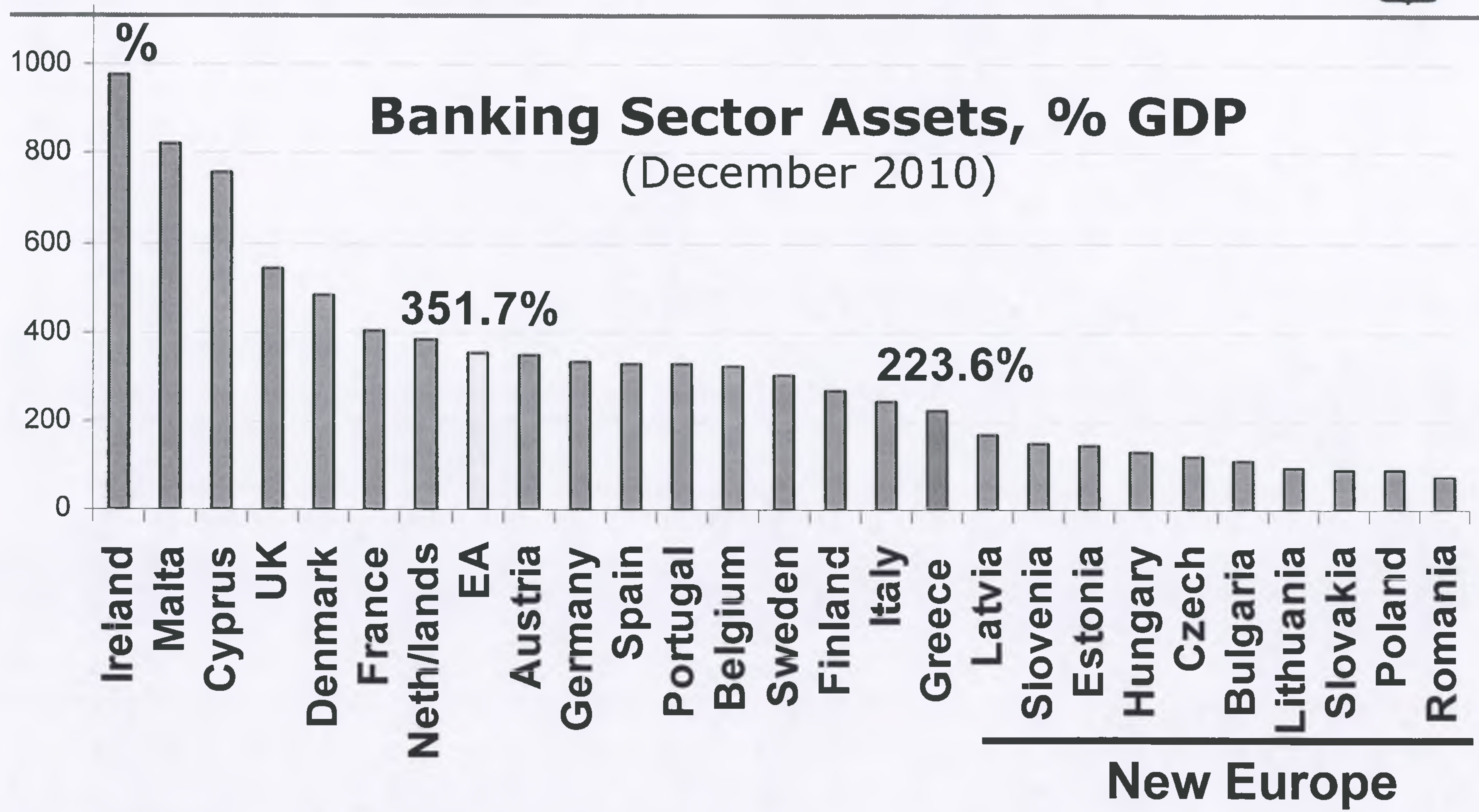
IV.1 Will the recession end soon?

- 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)



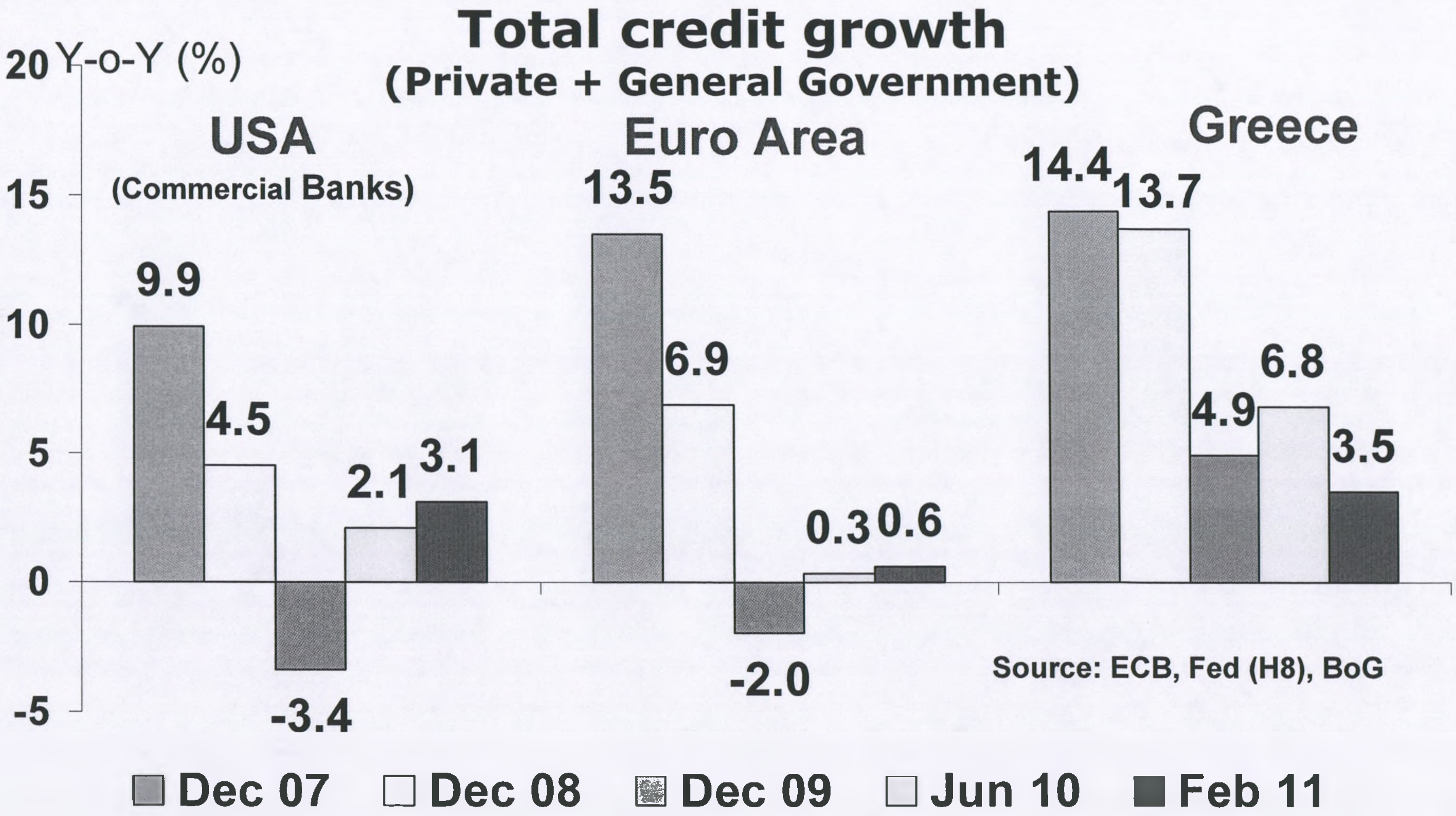
- External Sector leads the recovery and counterbalances a projected 2011 decrease in consumption (IMF: public-8.5%, private -4.6%)
  - ✓ imports expected to shrink by another 6%, exports can outperform the projected +6.3% due to ULC gains (just -0.5% projected by IMF),
  - ✓ positive indications in 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 Small size of banking sector in Greece



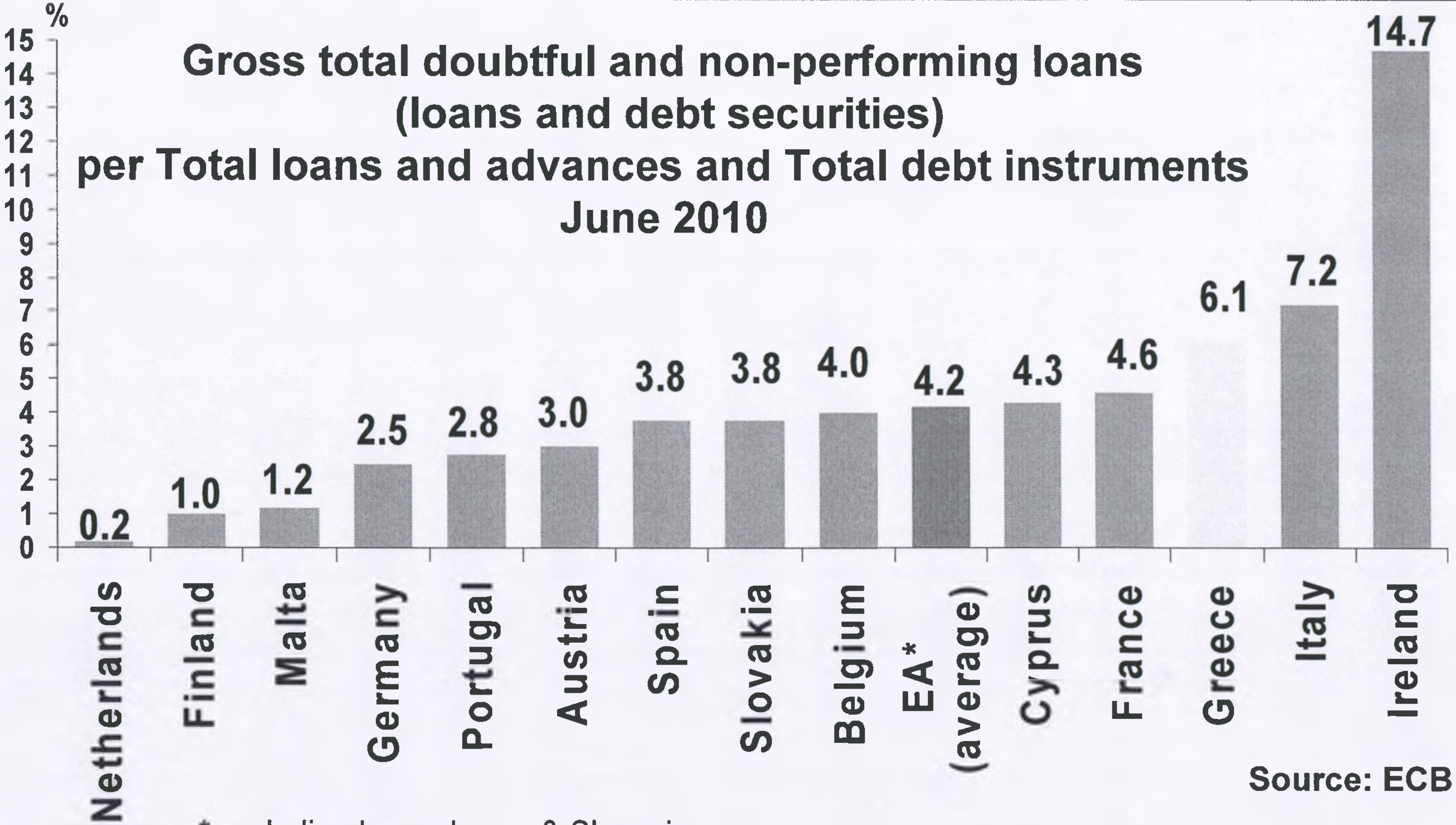
✓ Greek banks did not over-expand and did not hold toxic assets; they were not affected by the international financial crisis

IV.2 Adequate credit growth given the recession



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.2 Non-Performing Loans

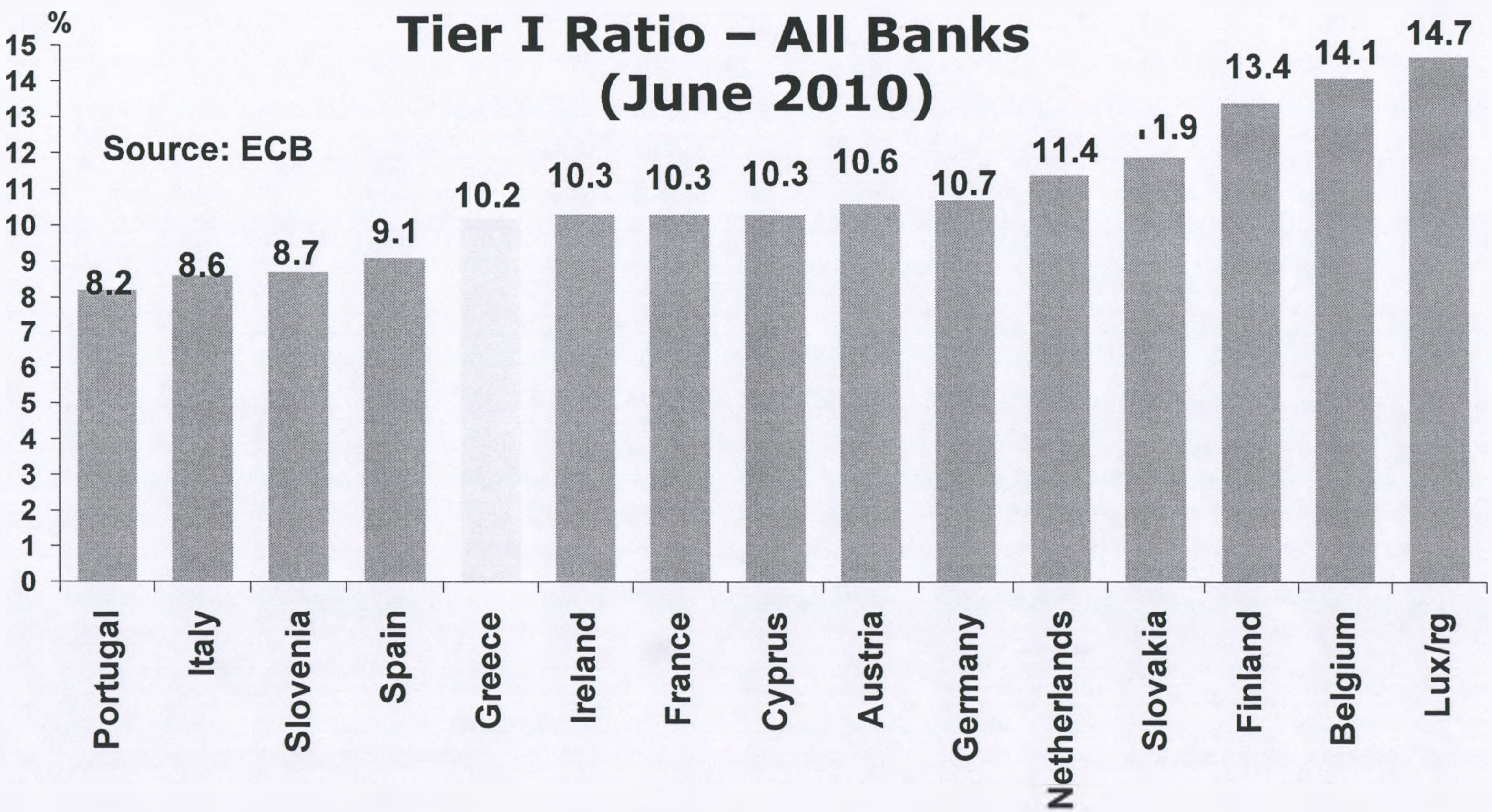


Source: ECB

* 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.2 Tier I Capital Ratio

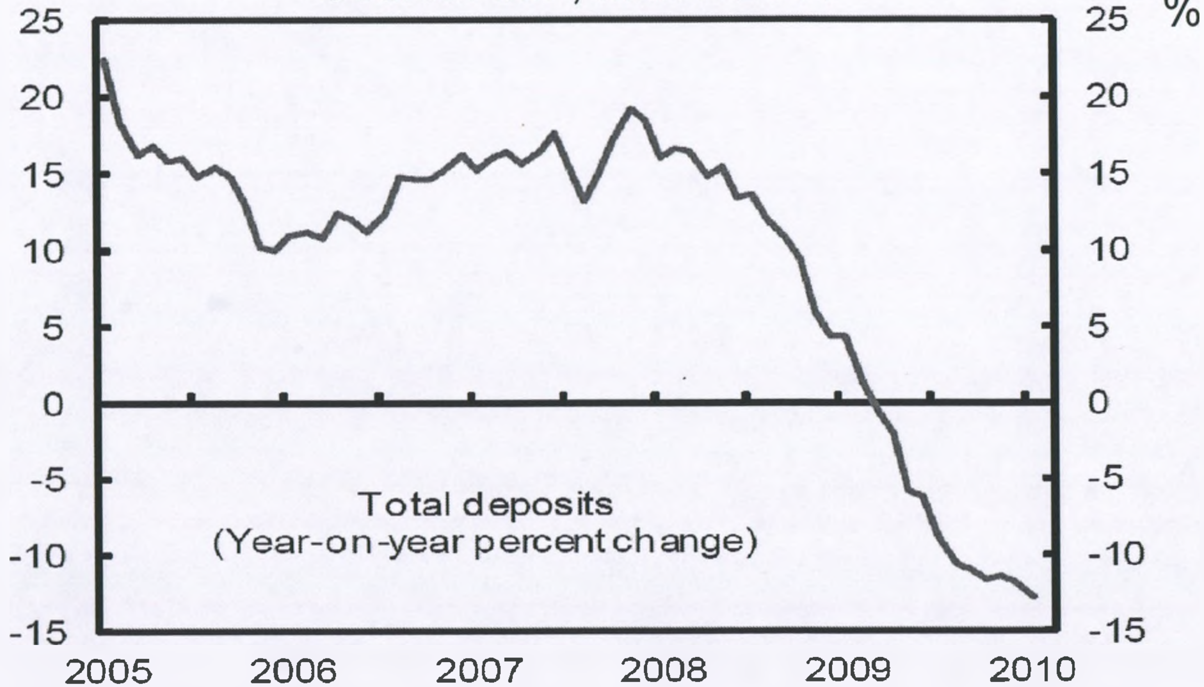


- ✓ Most major Greek banks pursued capital increases and, according to the latest data, the Tier I ratio is at **10.9%**
- ✓ The large banks can easily absorb a GGB haircut
- ✓ EMU/IMF loan earmarks €10 bn for bank recapitalization

IV.2 Deposit deceleration poses risk to banks but is driven primarily by the recession

- ✓ February 2011: Deposits & repos of non MFIs €273.4 bn or 118.8% of GDP
- ✓ Of this amount, €206.5 bn belong to domestic residents
- ✓ Citizens typically confuse the bond restructuring discussion with a loss of their personal deposits

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
- ✓ Yet, trust in institutions among citizens has to come back

IV.2 High dependence on the ECB

Borrowing from the ECB	EA-16			Greece		
	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
Feb-11	458.4	32,109	1.4	90.6	503.3	18.0

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

- ✓ De-leveraging abroad is not a solution for Greek banks as current profitability comes from abroad, exactly where the liquidity need arises
- ✓ Continued support from the ECB is required for the stability of the system

IV.2 ECB lending to banks

	Ireland			Spain			Portugal		
	a	b	c	a	b	c	a	b	C
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
Feb-11	116.9	1,494	7.8	49.2	3,446	1.4	41.1	562	7.3

(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.2 ECB lending to banks

	Germany			France			Italy			Austria		
	a	b	c	a	B	c	a	b	c	a	b	c
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
Feb-11	74.9	8,142	0.9	30.4	7,905	0.4	42.8	3,821	1.1	6.9	1,000	0.7

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

- ✓ 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.3 Is there evidence on privatizations gaining momentum?

Privatizations gain some momentum

- ✓ 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 planed delivery of the first portfolio of real estate assets (June 2011)

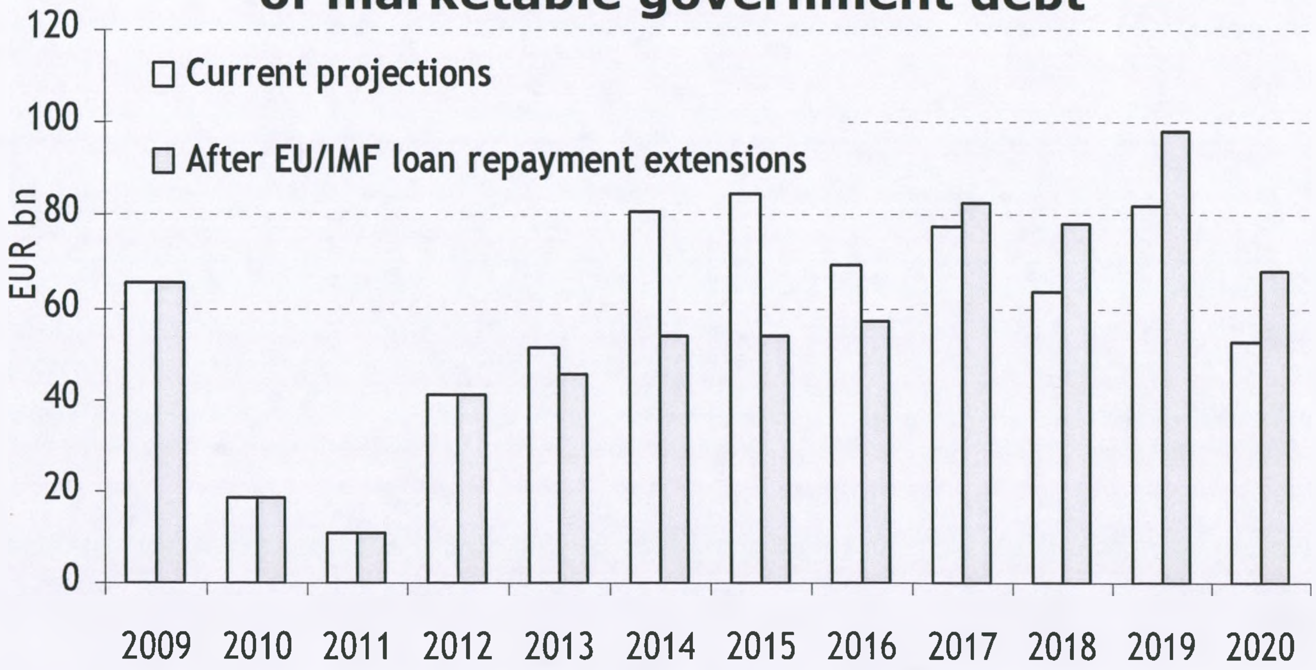
But

- ✓ 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.4 Can the market be tapped in March 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

- Calculations do not incorporate potential receipts from privatization and other asset sales
- 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. Reprofiling 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 acts as a pretext in Greece to stall the reforms**

IV.5 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.5 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

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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
- ✓ 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, Greek society is ready
  - ❖ Pension reform a big plus and can be supplemented; Labor reforms induce flexibility
  - ❖ Many reforms still pending: Health sector, Public sector enterprises, Local governments, Educational reform
  - ❖ 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 !