

# **THE GREEK ECONOMY & ITS STABILITY PROGRAM**

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**A Eurobank EFG Presentation**

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# THE GREEK ECONOMY AND ITS STABILITY PROGRAM

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- I. THE EU/IMF/ECB STABILITY PROGRAM
- II. WHY RESTRUCTURING IS UNLIKELY
- III. HIDDEN SOURCES OF STRENGTH
- IV. SUMMARY
- V. APPENDIX A: MAIN FEATURES OF THE GREEK ECONOMY
- VI. APPENDIX B: GREEK BANKING

# I. EU/IMF/ECB adjustment program: Key characteristics

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- ✓ A well-balanced program, which draws on IMF's experience
- ✓ Key characteristics:
  - **Real growth resuming in 2012** but staying well below the 1996-2007 historical norm
  - **Inflation subdued**, even turning negative in 2011 (*now, revised upward for 2010-11*)
  - **Front-loaded** reforms and drastic first-year fiscal tightening with a large subsequent fiscal cushion, with only €1 bn annual revenues from privatizations in 2011-15, and with no zeal to ever zero the deficit
  - EU/IMF/ECB detailed **conditionalities** with quarterly targets as a strong disciplinary device
  - Effort to minimize the burden on the poor
  - Real **pension solution**, which controls for hidden future liabilities
- ✓ **Debt-to-GDP ratio declines to 119%** by year 2020 in the baseline scenario
- ✓ Yet, assuming real growth of 1% higher per year, which is closer to historical norm, EU/IMF forecasts that it would lead to a Debt-to-GDP ratio in 2020 of **80%**

# I. The EU/IMF/ECB adjustment program

## Assumptions

	2009	2010	2011	2012	2013	2014	2015	2020
GDP Growth (%)	-2.0	-4.0	-2.6	1.1	2.1	2.1	2.7	2.7
GDP deflator (%)	0.7	1.2	-0.5	1.0	0.7	1.0	1.1	1.5
Nom. GDP (€bn)	237	231	224	228	235	242	251	308
Int. Rate (%)	5.0	4.8	4.8	5.3	5.6	5.8	5.8	5.9
Bund Rate		175	275	350	350	350	350	350

## Sensitivity analysis

Debt-to-GDP	2009	2010	2011	2012	2013	2014	2015	2020
Baseline	115	133	145	149	149	144	139	119
Higher growth +1% per year	115	131	141	142	139	131	122	80
Lower growth -1% per year	115	135	150	156	160	159	158	166

Source: EU/IMF/ECB adjustment programme

# I. The EU/IMF/ECB program: Detailed forecasts

	2009	2010	2011	2012	2013	2014	2015	2020
Current Account (%GDP)	-11.2	-8.4	-7.1	-5.6	-4.0	-2.8	-1.9	---
Gen Gov Deficit (%GDP)	<b>-13.6</b>	<b>-8.1</b>	<b>-7.6</b>	<b>-6.5</b>	<b>-4.8</b>	<b>-2.6</b>	<b>-2.0</b>	<b>-1.0</b>
(€ bn)	-32.3	-18.6	-17.0	-14.7	-11.5	-6.2	-5.0	-3.1
Gen Gov Debt * (%GDP)	<b>115.1</b>	<b>133.3</b>	<b>145.1</b>	<b>148.6</b>	<b>149.1</b>	<b>144.3</b>	<b>138.8</b>	<b>119.2</b>
(€ bn)	273.4	307.5	324.7	339.7	350.4	353.8	348.4	367.5
Interest Expense (%GDP)	<b>5.1</b>	<b>5.6</b>	<b>6.5</b>	<b>7.5</b>	<b>8.1</b>	<b>8.4</b>	<b>8.1</b>	<b>7.0</b>
(€ bn)	11.9	13.0	14.9	17.1	18.9	20.4	20.3	21.5
Primary Surplus (%GDP)	<b>-8.6</b>	<b>-2.4</b>	<b>-0.9</b>	<b>1.0</b>	<b>3.1</b>	<b>5.9</b>	<b>6.0</b>	<b>6.0</b>
(€ bn)	-20.4	-5.5	-2.0	2.3	7.3	14.3	15.1	18.5

Source: EU/IMF/ECB adjustment programme

\* Debt numbers do not include the reducing effect of privatizations, neither the €26 bn or 11% of GDP of government guarantees (according to Eurostat rules)

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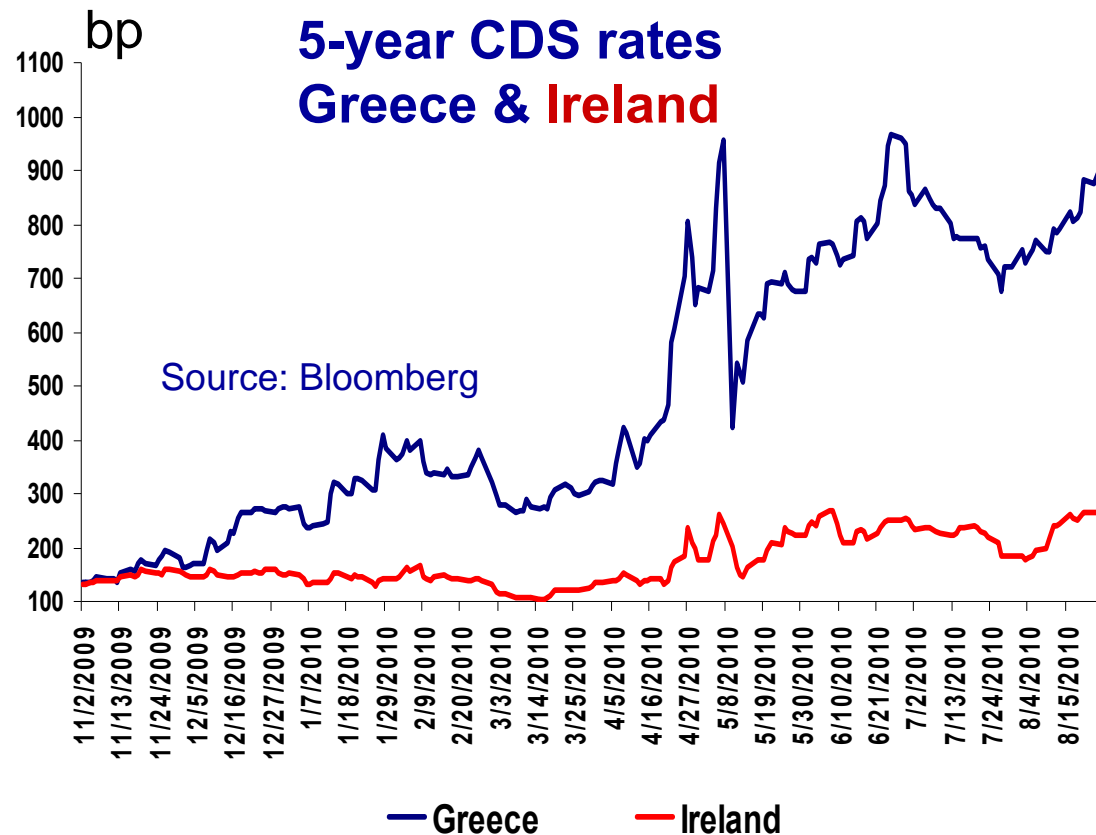
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## II. The market is extremely negative despite the rescue package

### A nervous market

- ✓ On August 25<sup>th</sup>, 5-yr CDS was **903 bps** implying
  - ❖ a cumulative risk-neutral **probability of 34.9%** for a **total capital loss** any time during the 5-year period,
  - ❖ or a **99.9% probability** for a **capital loss of 10%**
- ✓ Even more worrisome is the following: On August 25<sup>th</sup> the 2-year Greek Government bond yield was 11.8%, a spread of 1120 bps over Bunds!!
- ✓ Yet Greece does not need to go the market to get financed for 2.5 years! Illiquidity? Overreaction? The market seems to believe that:
  - ❖ Either the Greeks are incapable of absorbing the €110 bn rescue funds
  - ❖ Or the EMU members will not be able to deliver the funds



## II. What is the market afraid of? Material risks of failure

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- a) Will the recession end soon? As European belt-tightening is currently taking place, low European growth may cause Greek economic growth to stall  
*Yet, Greece is a relatively closed economy and over half of its exports are channeled outside the Euro Area. In addition, core EU still growing*
- b) High risk premia may persist, which could prohibit Greece from tapping the bond market in two years or so  
*Yet, if program is successful  $\Rightarrow$  risk premia ought to decline, while a lengthening of the maturity of the EMU €110 bn loan is likely (the IMF had originally suggested a maturity of 5 years)*
- c) Rising unemployment may cause a civilian backlash in a year or so  
*Yet, program is front-loaded and society understands seriousness of situation*
- d) Implementation risks originating from delays, sluggishness or incompetence of the bureaucracy or lack of a shared vision among governing politicians concerning the need for reforms  
*Yet, easy to pass legislature early on, easy to cut expenses, evidence of good execution thus far*



## II. Should Greece default if program were to succeed? (Scenario #1)

The argument goes that if the EU/IMF/ECB Program succeeds and **in 2012-2013** Greece begins generating the first **primary surpluses**, then it would be **tempted to restructure its huge debt**. However, this event cannot happen because:

1. A **Greek default would be an EMU decision**, not a Greek decision. Stakeholders of GGBs are primarily Greeks and other EMU members. They do not want a default.
  - i. Greek banks own approximately €45 bn, pension and other funds another €25bn, individuals around €15bn. Thus, a haircut would force the government to bail out its banking sector and its pension system
  - ii. EMU banks hold a major chunk of GGBs, most of it posted at the ECB as collateral. EMU members would object to a default. It may create FI bankruptcies in EA-16.
  - iii. The ECB holds significant amounts of GGBs both directly and in the form of collateral. Greece cannot go against its own lender of last resort
  - iv. EMU countries have given €80 bn in loans (& IMF €30 bn), on which Greece cannot default
2. Risks of **contagion** in the European financial sector with a possible spread of fear for EMU sustainability
3. Huge adjustment costs for Greek borrowing during the default/restructuring process and **inability to tap the markets** for a long time
4. **Interest costs** will increase for the Greek **private sector** as well, reducing growth

## II. The set of possible scenarios

- 1) **Main scenario – Eurobank view - Euro Area intact, Program succeeds**, then Greece has a choice to voluntarily implement or not implement a haircut.
    - i. A cost-benefit analysis would show that the cost – economic and political - overwhelms the benefits (of lower interest payments) from restructuring debt ⇒ No haircut
    - ii. A rescheduling of the EU/IMF €110 bn loan is more reasonable as it would provide additional time for adjustment
  - 2) **Remote scenario - Euro Area intact, Program fails** as Greeks prove incapable of handling belt-tightening ⇒ severe repercussions:
    - i. Either a new austerity program with stricter conditionalities ⇒ a worse recession and significant lowering of living standards - with **no haircut**
    - ii. Or a forced exit from EU ⇒ all hell breaks loose ⇒ no reversal in sight, with additional loss of political power in Europe, **default**
  - 3) **Extreme scenario - Euro Area collapses**
    - i. Turmoil in Greece and a severe lowering of living standards ⇒ **default** is likely, possible run on the banks ⇒ vicious cycle of deep economic recession and societal upheaval
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- ✓ In our view, case #1 is likely to prevail ⇒ Current credit default swap rates over-penalize lenders of the Greek government.

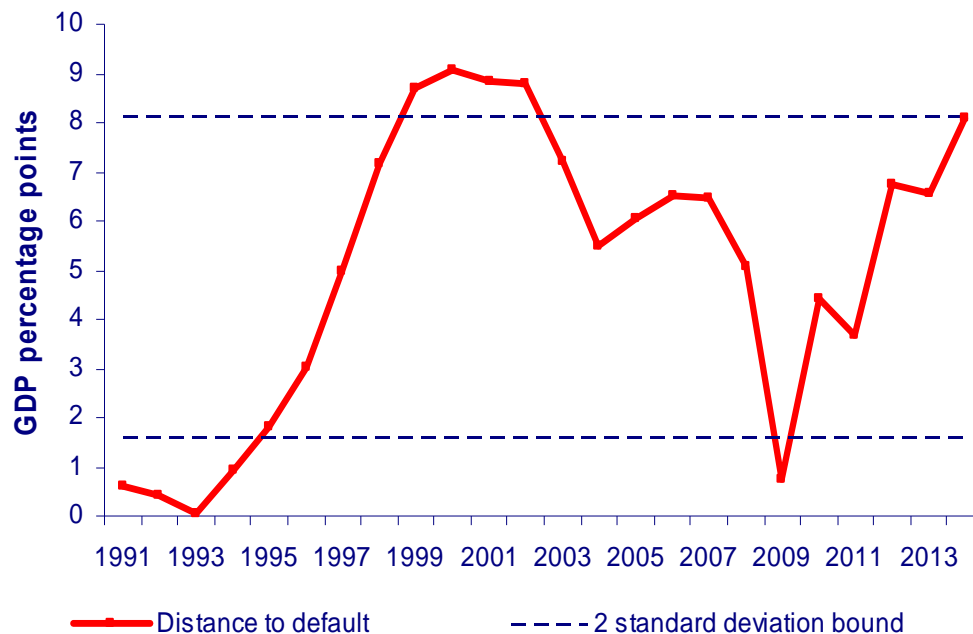
## II. In scenario #1 – program success – the distance to default increases with time

### Economic Distance to Default (% of GDP)

	Average 91-08	2009	2010	2011	2012	2013	2014
A. Net Revenue	12.6	5.7	10.0	10.2	14.2	14.5	16.5
B. Interest	7.5	5.0	5.6	6.6	7.5	8.1	8.4
C. Distance to Default: (A-B)	<b>5.1</b>	<b>0.7</b>	<b>4.4</b>	<b>3.6</b>	<b>6.7</b>	<b>6.4</b>	<b>8.1</b>

Note: 2010-2014 estimates based on central EU/IMF/ECB scenario

- ✓ Define **Distance to default** = (Net revenues – interest on debt)/GDP
- ✓ Net revenues are total revenues net of (inelastic) expenditures, necessary for the government and the economy to function, thus are defined as: **Total revenues – 90% of (public wages + pensions + social transfers + operating expenditures)**
- ✓ The above definition of net revenues essentially means that the government can cut down to zero defense expenditures and public investment



## II. Conservative Eurobank EFG baseline scenario on Government Debt Dynamics

	2009	2010	2011	2012	2013	2014	2015	2020
Real GDP (%)	-2.0	-4.0	-2.9	1.5	2.2	2.5	2.7	2.7
GDP deflator (%)	1.4	3.9	1.3	1.5	1.8	2.0	2.0	2.0
Nom. GDP (€bn)	237.5	236.9	233.0	240.1	249.8	261.1	273.5	345.0
Nom.GDP (%)	-0.7	-0.3	-1.6	3.0	4.0	4.5	4.8	4.8
Pr.Balance (€bn)	-20.4	-3.5	1.3	5.8	10.4	18.5	19.4	25.8
Pr Bal. (%GDP)	-8.6	-1.5	0.6	2.4	4.1	7.1	7.1	7.5
Int. cost (%GDP)	5.0	5.9	6.3	7.1	7.4	7.6	7.2	5.7
Int. cost (%Rev.)	13.6	14.6	14.9	16.7	17.7	18.1	17.7	15.4
Gen.Gov.Debt (% GDP)	122.0	129.7	137.6	138.2	136.2	130.7	124.9	<b>94.0</b>

Source: EU/IMF/ECB adjustment programme, Eurobank EFG Research projections

- ✓ **Debt-to- GDP** stabilizes in 2012 and in 2020 is **25ppts lower** than the EU/IMF/ECB baseline
- ✓ **Assumptions:**
  - 1) Average annual real GDP growth broadly in line with EU/IMF/ECB baseline
  - 2) **GDP deflator higher** than EU/IMF/ECB baseline, by 2.7 ppts in 2010 and 1.8 ppts in 2011, plus ca 0.85ppts for the 2012-2020 period
  - 3) Annual degree of implementation of revenue-side measures ~ 0.75%,
  - 4) Elasticity of tax revenue w.r.t. nominal GDP ~ 1.0 (in line with long-term average)

## II. More optimistic but feasible Eurobank EFG scenario on Government Debt Dynamics

	2009	2010	2011	2012	2013	2014	2015	2020
Real GDP (%)	-2.0	-3.1	-2.4	2.0	2.7	3.0	3.2	3.2
GDP deflator (%)	1.4	3.8	1.2	1.8	2.1	2.3	2.3	2.3
Nom. GDP (€bn)	237.5	238.8	235.9	244.8	256.5	270.2	285.1	373.0
Nom.GDP (%)	-0.7	0.5	-1.2	3.8	4.8	5.3	5.5	5.5
Pr.Balance (€bn)	-20.4	-2.6	2.7	7.9	13.3	22.2	23.8	34.0
Pr Bal. (% GDP)	-8.6	-1.1	1.1	3.2	5.2	8.2	8.3	9.1
Int. cost (%GDP)	5.0	5.8	6.2	6.9	7.1	7.1	6.7	4.5
Int. cost (% Rev.)	13.6	14.6	14.8	16.4	17.2	17.4	16.7	12.5
Gen.Gov.Debt (%GDP)	122.0	128.3	135.0	133.7	129.5	121.9	113.9	<b>71.8</b>

Source: EU/IMF/ECB adjustment programme, Eurobank EFG Research projections

- ✓ **Debt-to-GDP** ratio stabilizes in 2011 and reaches 72% in year 2020, ca **48ppts** lower than the baseline scenario of the EU/IMF/ECB Program
- ✓ Assumptions: **0.5ppts higher GDP growth & 0.25ppts/annum higher inflation relative to our baseline scenario**. Note that without the assumed inflation increase, Debt-to-GDP still declines to 76% in 2020.

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### III. Factors which markets may underestimate

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- 1) Reforms are **drastic & on time**, particularly the pension, labor and fiscal ones - Strong inertia for reforms - Government ahead of the curve
- 2) Unusually benevolent political environment
- 3) Program contains **big cushions** and is executed by the book thus far. Revenue generation remains in question but action is taken
- 4) An end of the recession by H2 2011 is within reach
- 5) In the intermediate-run, growth can come back - making the level of debt less onerous
  - i. There is a **strong growth potential** in Greece, especially if competitiveness is restored
  - ii. A strong private sector, which is under-levered with rich citizens, plus a conservative banking sector

## III.1 Pension reform is drastic

- ✓ New pension Law adopted on July 8. Contains safeguard clauses for parametric changes to be triggered in June 2011, pending full actuarial report.

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

Source: European Commission 2009

\* *Ratio of pensioners to contributors*

- ✓ Characteristics:
  - ❖ Fix system's parameters in order to 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 and every 3 years, and including a minimum contributory period of 40 years by 2015
  - ❖ **Early retirement** will be 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** (now: Best 5 years of last 10 of working life) and is price indexed, upper limit to be reduced
  - ❖ List of heavy and arduous professions to be reduced drastically, under a ceiling of 10% of labor force



## III.1 Labor reforms are drastic and continue ...

- ✓ Maximum of firings per month more than doubled to 5% for most large companies
- ✓ Minimum wage of new entrants in labor force expected to be reduced from €740/month by ca 16% to €621/month
- ✓ Reduce overtime premia
- ✓ Allow firm-level agreements to prevail over industry-level or country-level
- ✓ In public sector, wages & pensions bill down **-15%** yoy in 2010 (-1.6% of 2009 GDP)
- ✓ In private sector, minimum nominal wages freeze for 2010, increase in line with Euro Area inflation for 2011-2012

### Future developments:

- ✓ Symmetry in central arbitration
- ✓ Elimination of automatic extension of sectoral agreements to those not represented in the negotiations
- ✓ Local contracts in areas of high unemployment can now contain wages for new entrants at levels below minimum

2010 Q1	GR	EU16
<b>Employment</b>		
Total	<b>60.1</b>	<b>65.1</b>
Men	<b>71.8</b>	<b>70.8</b>
Women	<b>48.2</b>	<b>59.5</b>
Young (15-24)	<b>21.1</b>	<b>36.4</b>
<b>Unemployment</b>		
Total	<b>11.7</b>	<b>9.9</b>
Men	<b>9.1</b>	<b>10.2</b>
Women	<b>15.5</b>	<b>9.6</b>
Young (15-24)	<b>30.9</b>	<b>20.5</b>

## III.1 Fiscal reforms are drastic and continue ...

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- ✓ “Kalikrates” Law adopted in June, reforming public administration at the local level, reducing the number of municipalities from 1034 to 325, plus eliminating one layer of state bureaucracy (by dissolving 54 prefectures and transferring their powers to the existing 13 peripheries).
- ✓ New Financial Management Law adopted on July 29, amending the budget process:
  - ❖ 3-year fiscal strategy
  - ❖ Top-down budgeting with explicit ceilings for state budgets and expenditure estimates by line ministries
  - ❖ Standard contingency margins, commitment controls, supplementary budget for over spending
- ✓ By September, establish commitment register, publish monthly data on General Government, report all arrears monthly
- ✓ Single Payment Authority operational by December for Central Government and March for General Government.
- ✓ Simplify public sector remuneration following a Functional review by December
- ✓ Details of full general government (including local governments, pension funds, etc) to be revealed in the budget process
- ✓ Establish an OMB-equivalent in the Parliament and adopt a revenue rule by December
- ✓ Independence of the Statistical Agency established last December and new regulations for Statistical Action Plan by this December

## III.1 More reforms ...

### Taking place now:

- ✓ More fiscal measures (revenue increasing & cost cutting), in particular adoption of a new tax law in April to be effective on January 1, 2011 on incomes earned in 2010
- ✓ Competitiveness & Business environment measures (business start-ups, adoption of the services directive etc.)
- ✓ Liberalization of the road freight transport bill submitted to the Parliament
- ✓ New investment law
- ✓ Outsourcing the auditing of hospitals (currently 10 largest audited by PWC)
- ✓ Public sector enterprises: Balance sheets of 10 largest loss-makers on the internet, restructurings, limits on State guarantees of their borrowing

### Scheduled to be completed by the end of 2010:

- ✓ Restructuring of railroads, turning them profitable in 2011
- ✓ The actual implementation of the local administration reform
- ✓ The actual implementation of the Services Directive
- ✓ The opening up of the closed professions
- ✓ Measures to facilitate FDI and investment in strategic sectors of the Greek economy
- ✓ Strengthening the independence of the Hellenic Competition Committee
- ✓ Electronic registering of drug prescriptions, further reduction in drug costs, patient-doctor benchmarking to avoid unnecessary prescriptions

## III.1 Privatizations postponed for 2011 and beyond

- ✓ **Slow start** perhaps due to the bad market environment. In December we expect details on a privatization plan with dates and revenue guidelines
- ✓ EU/ECB/IMF program assumes **€1bn per year** for the 2011-2015 period
- ✓ **Yet** privatizations could easily bring more than **€10 bn** over a 4-year period. Main cash cows are: Ports (privatization or concession contracts), gambling (new casino licenses, internet gambling, 34% stake on OPAP), energy sector (natural gas companies) and real estate
- ✓ Presently, State claims it wants to **retain at least 51% in “strategic” firms** (e.g. PPC). Concession contracts to be used for real estate holdings, ports and airports
- ✓ The first planned privatizations are mainly soft and include full privatization of casino's, stock market listing through SPVs for 10 ports, concession contracts for the highway system, selling of EYDAP's 10%, EYATH's 23%, Hellenic Post's 39%, Railways: sell of TRAINOSE's 49% (passengers and freight services), real estate development through SPVs, concession contracts for the Athens and Thessalonica freight terminals
- ✓ State (Ministry of Finance) owns real estate assets worth over €270 bn. Most of it could be deployed through long-term leases
- ✓ The government will enable the effective liberalization of the wholesale electricity market.

### Subdued Social Unrest:

- ✓ When PM addressed the nation after the February Davos meetings and for the first time revealed a wage freeze and indirect tax increases, 2/3 of the population applauded.
- ✓ Demonstrations are 1/20 the size of earlier ones
- ✓ Citizens seem aware of the fiscal problem and of the years of public waste and ballooning debt and are ready for sacrifices, demanding equal distribution of burdens

### Strong government at the right moment in history:

- ✓ New government elected in October 2009 for four years ⇒ Government can pursue restrictive fiscal and tough structural policies without compromising its reelection objective, as long as economy recovers in 2012
- ✓ Strong parliamentary majority and strong leadership by the PM allows government to pursue its plans undeterred
- ✓ In contrast to past experience and thanks to the rising bond spreads, it only took five months for the newly elected government to gain control of the unraveling crisis ⇒ Now it is ahead of the MOU requirements

## III.3 Budget execution satisfactory

During the first 7 months of 2010:

- ✓ Deficit **down 39.7%** yoy vs. annual target of **-39.5%** yoy
- ✓ No discrepancy with numbers provided by BoG on a cash basis
- ✓ Primary expenses **down 13.2%** yoy vs. annual target of **- 5.8%** yoy
- ✓ **Yet**, net revenues **up by only 4.1%** yoy vs. annual target of **+13.7%** yoy

### Central Government Budget January-July 2010

Ordinary Budget	January-July 2010 (€bn)	January-July 2010 (%YoY)	Annual target (%YoY)
<b>1. Net Revenues (a-b)</b>	27.5	<b>4.1%</b>	13.7%
a. Gross revenue	30.4	3.3%	12.7%
b. Tax returns	2.8	-4.1%	3.0%
<b>2. Expenditure (α+β)</b>	42.0	-10.0%	-5.5%
α. Primary expenses	33.1	-13.2%	-5.8%
β. Interest costs	8.9	-0.2%	5.6%
<b>Public Investment Budget (PIB)</b>			
<b>3. Revenue</b>	1.0	23.8%	59.6%
<b>4. Expenditure</b>	6.6	-36.3%	-4.0%
<b>5. Central Government Balance (1-2+3-4)</b>	<b>-20.1</b>	<b>-39.7%</b>	<b>-39.5%</b>

## III.3 Government begins to address cracks in an outdated revenue collection mechanism

### Concerns about VAT receipts

- ✓ VAT receipts **only 0.01%** yoy in January-July 2010 vs. annual target of **+14.6%** yoy *based on the EU/ECB/IMF adjustment programme*
  - ❖ This may be due to a large fall of VAT in the month of July due to the customer officers' strike
  - ❖ VAT still higher than a year earlier and improving since February
  - ❖ Second leg of VAT increase effective on July 1st
  - ❖ Taxes on property & enterprises to be collected
- ✓ July VAT declined yoy, raising questions

Urgent need to improve tax collection mechanism. **5 task forces** are set up:

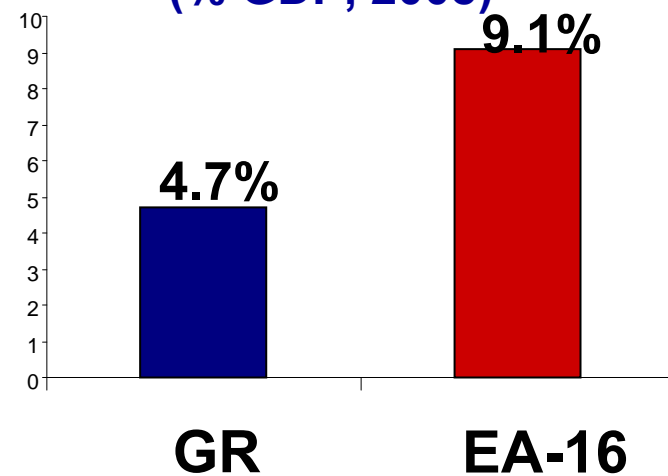
- 1) Collection of tax arrears
- 2) Reorganize large tax payers unit
- 3) Strengthen audits of high income and high net-worth individuals
- 4) Start prosecuting worst offenders
- 5) Strengthen filing and payment controls

# III.3 Existing cushions can absorb negative shocks and avoid a derailment of the program

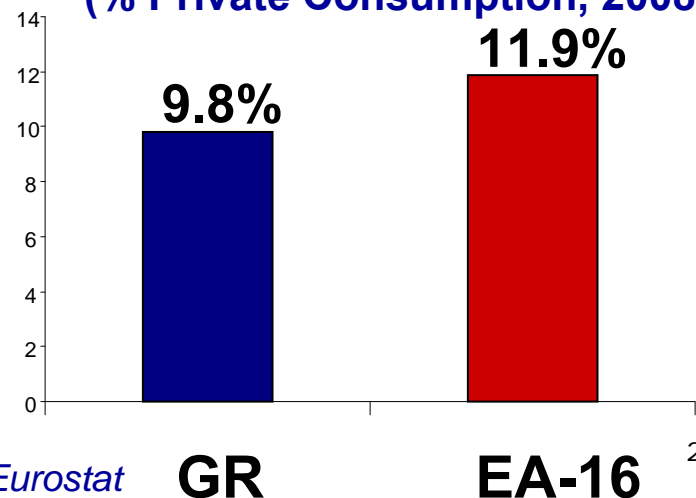
Program contains **big cushions**:

- ✓ 2010 fiscal measures outstrip target by **2.2%** GDP. Measures of 7.7 pps, yet target of 5.5 pps deficit reduction.
- ✓ For next year, opportunity to grab **tax evasion** through imputed income on self-employed, who are **36%** of labor force but contribute only **7.5%** of total tax revenues.
- ✓ Receipt revolution forces revelation of company revenues and raises VAT
- ✓ Measures up to 2014 ~ €42.5bn or ca 17.8% of 2009 GDP, larger than targeted reduction in deficit of 11% of GDP
- ✓ Public waste is huge, e.g. annual drug expenses of €9.2 bn is **3** times bigger per capita than in Spain – can be cut without affecting the economy

**Taxes on Household Income**  
(% GDP, 2008)



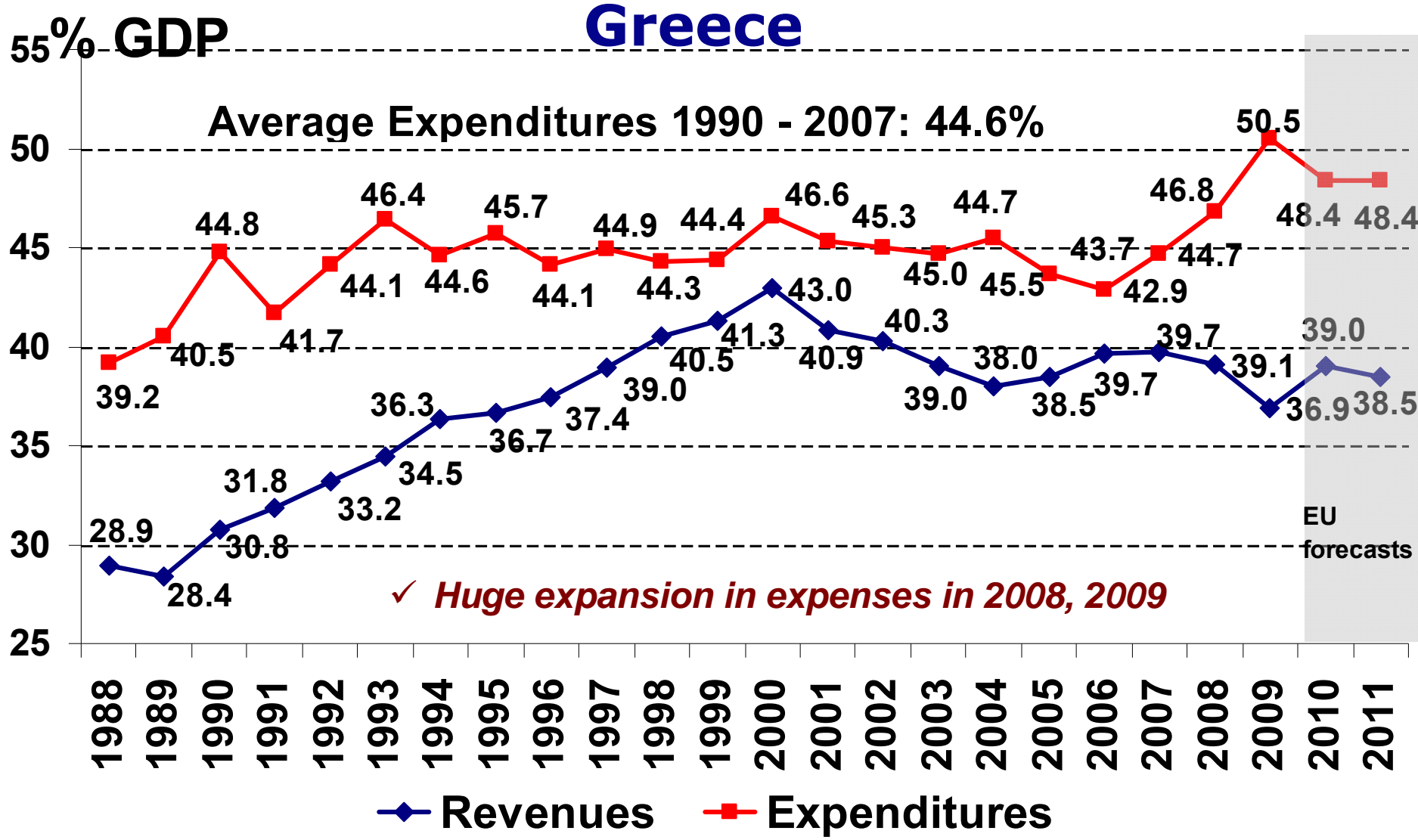
**VAT receipts**  
(% Private Consumption, 2008)



Source: Eurostat

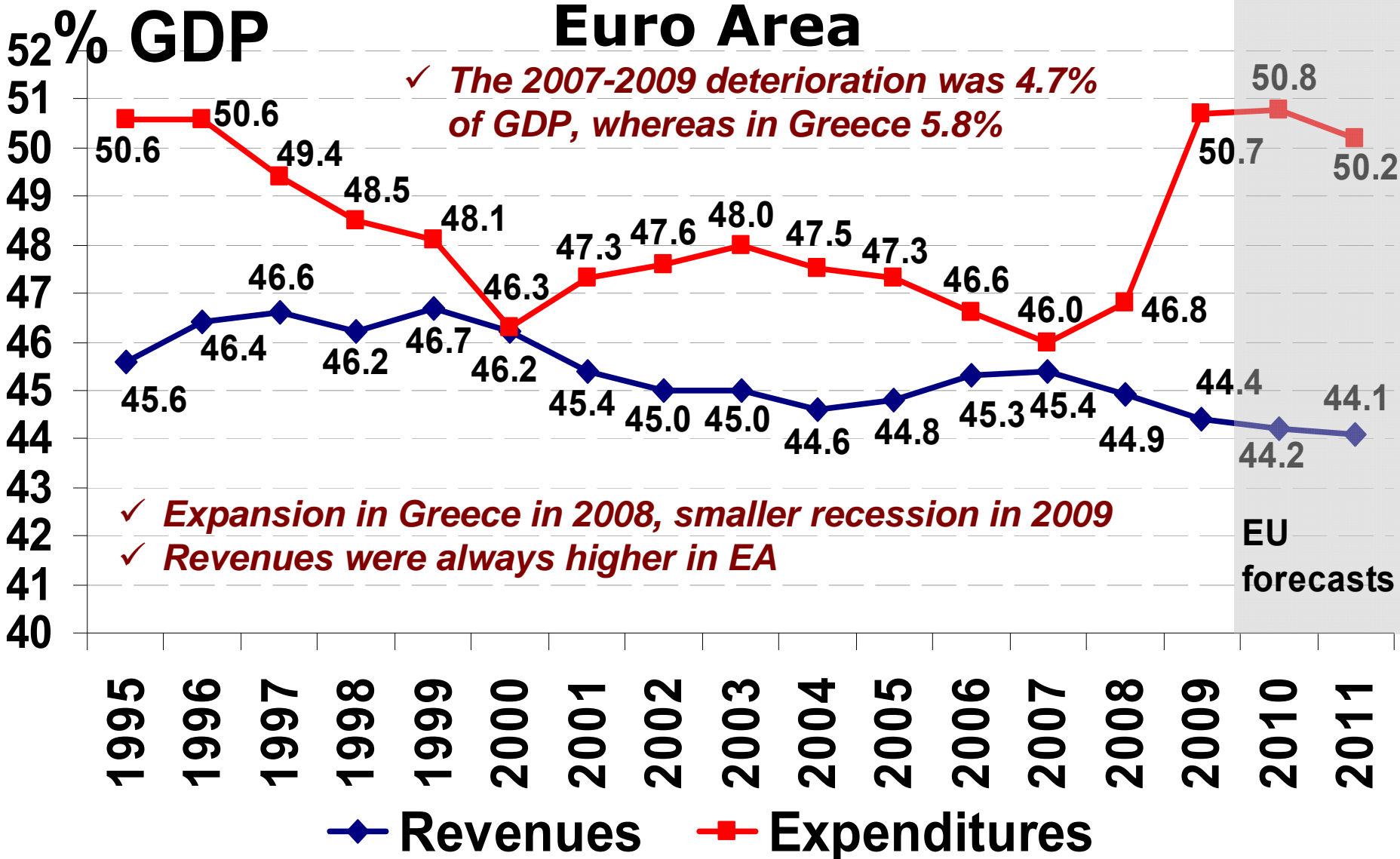


# III.3 A macro view: The 2008-09 deterioration in Gov. expenditure suggests presence of significant fat



Source: European Commission, Spring 2010 forecasts

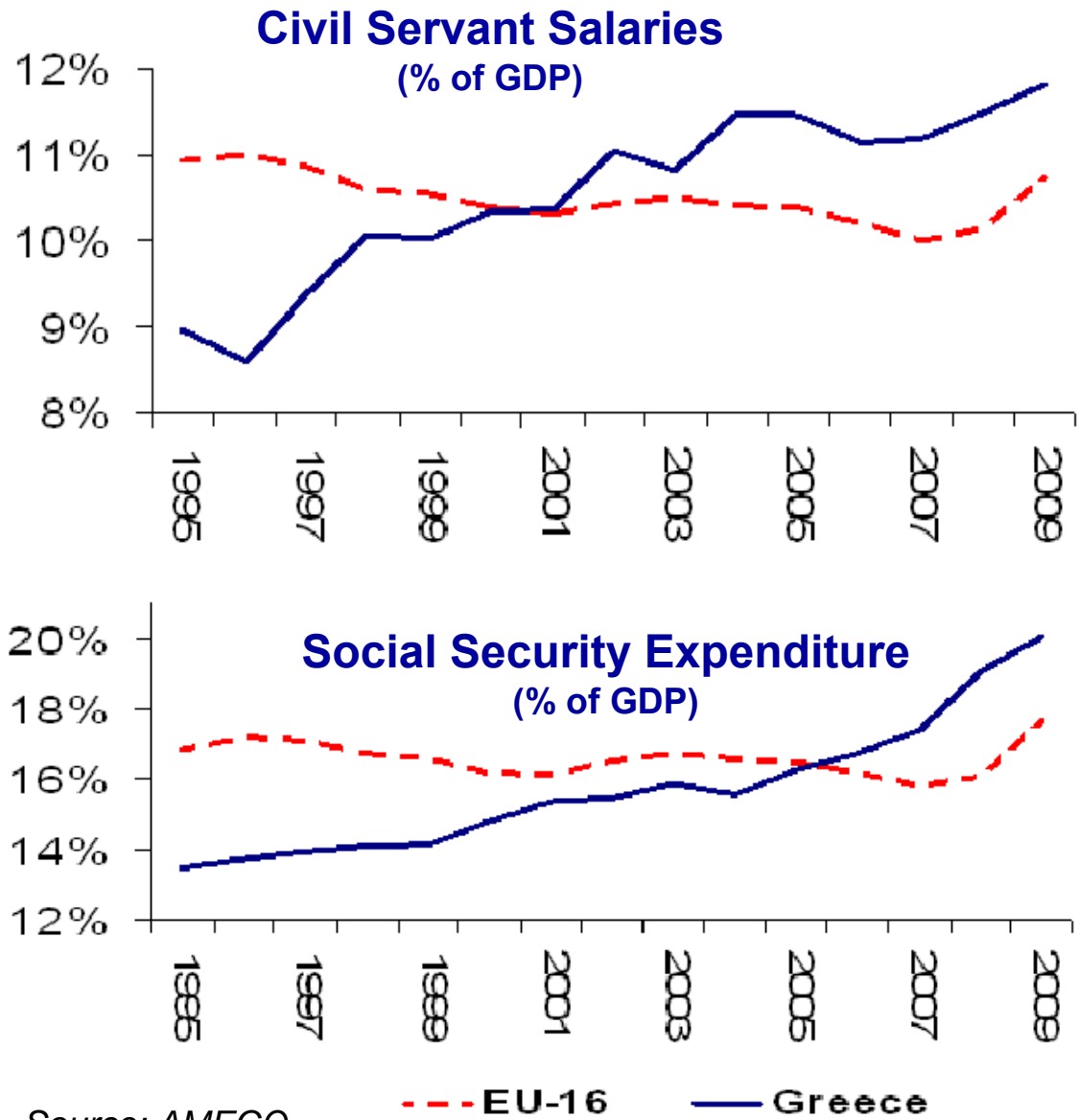
# III.3 Deterioration was not due just to the recession as a comparison with EA16 reveals



Source: European Commission, Spring 2010 forecasts

### III.3 A micro view: Past expenditure derailment in specific items is evident – now cured

- ✓ Civil servant salaries kept rising as a share of GDP. This has stopped
- ✓ Subsidies to the social security system from the budget, social benefits and solidarity benefits, were all given out with little targeting or efficiency evaluation
- ✓ The new Law on social security ensures viability



Source: AMECO

# III.4 Escaping the recession in 2012: Investment plus the external sector

- ✓ When the economic climate **stabilizes** and government pushes with its projects, **investment** should turn positive
- ✓ Contraction of private consumption in 2010-11 will lead to a substantial decline of imports
- ✓ Real imports further **↓** 10% in 2010 -11, contributing 3% to GDP growth, i.e. 1.5% per annum
- ✓ Real Exports **↑** 10% in 2010-11; since an 1% increase in exports increases medium term GDP by 0.23 ppts, the contribution to GDP can be potentially as high as 2%, i.e. 1% per annum
  - Recovery of global trade related to real Greek Exports **↑** by 10% over 2010-11
  - Productivity **↑**(3%), plus real wage cuts in the private sector (5%)  $\Rightarrow$  ULCs **↓** ~8%
  - With euro remaining ~10% cheaper relative to 2009 (~1.30 against USD), and 57% of exports going outside the EMU, competitiveness of Greek exports is expected to increase by ~14%  $\Rightarrow$  exports **↑** (if exports rise by 10% real GDP **↑** 2%)

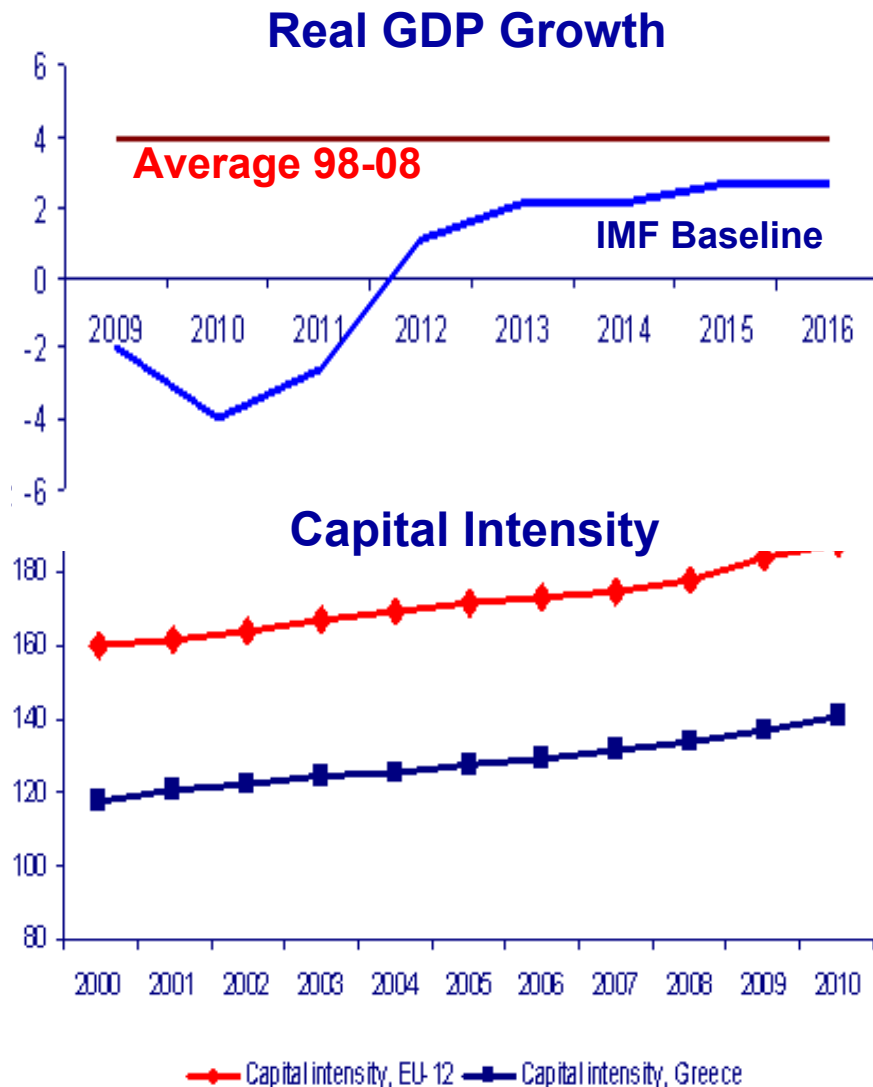


Source: IMF dots, Eurobank EFG Research

## III.5 Strong growth can resume in the future

High productivity growth can continue in the future, once the recession is over, for a number of reasons:

- ✓ Capital intensity lower than EU average, infrastructure projects needed, funding is available
- ✓ Real wages are declining by over 10%, improving competitiveness
- ✓ Structural reforms & institutions building will result in a more export-oriented and competitive economy, with gains estimated by some researchers at around 20% of GDP
- ✓ Public sector crowding in
- ✓ Capturing the underground economy, which is close to 30% of GDP, will improve all debt magnitudes. EUROSTAT revisions expected soon.

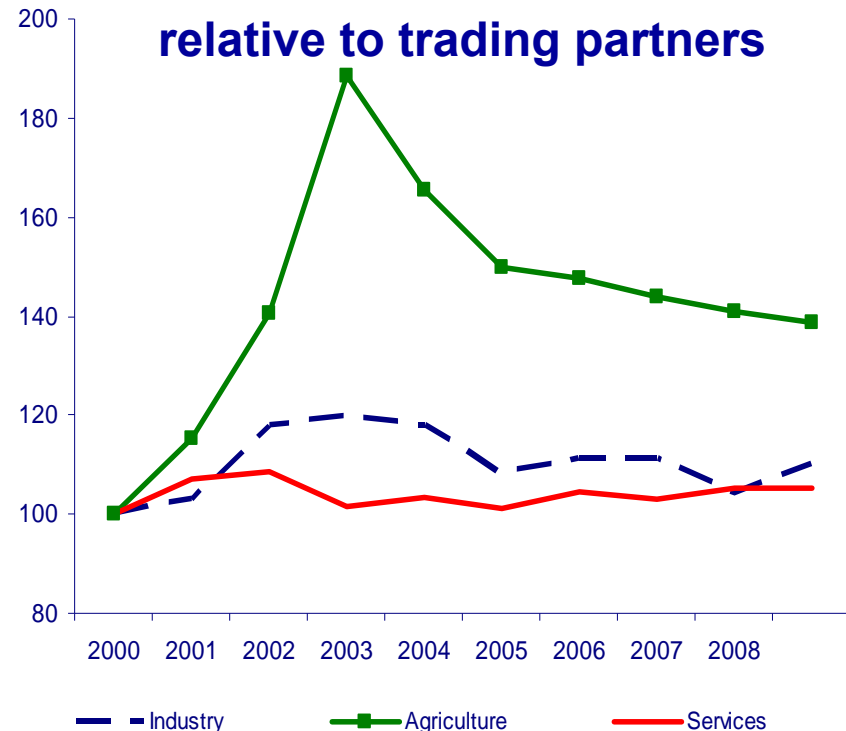


## III.5 Competitiveness can be restored

**Past losses** mainly in agriculture and industrials, **not in services**

- ✓ In agriculture, ULCs ↑ 39% since 2000 relative to trading partners. However, agriculture accounts for only 4% of GDP and 9% of exports
- ✓ In industrials, competitiveness has deteriorated by 10% since 2000 due to higher productivity growth, which has kept the increase in ULCs low
- ✓ Our indicator of competitiveness **in the service industry** compares Greece with its 6 major competitors in Tourism, such as Italy, Spain, Turkey, Cyprus, Croatia and Portugal
- ✓ Measured against its major competitors, Greece's service sector competitiveness has declined by 5.5% since 2000. In contrast, standard measures suggest a deterioration of 19% over the same period

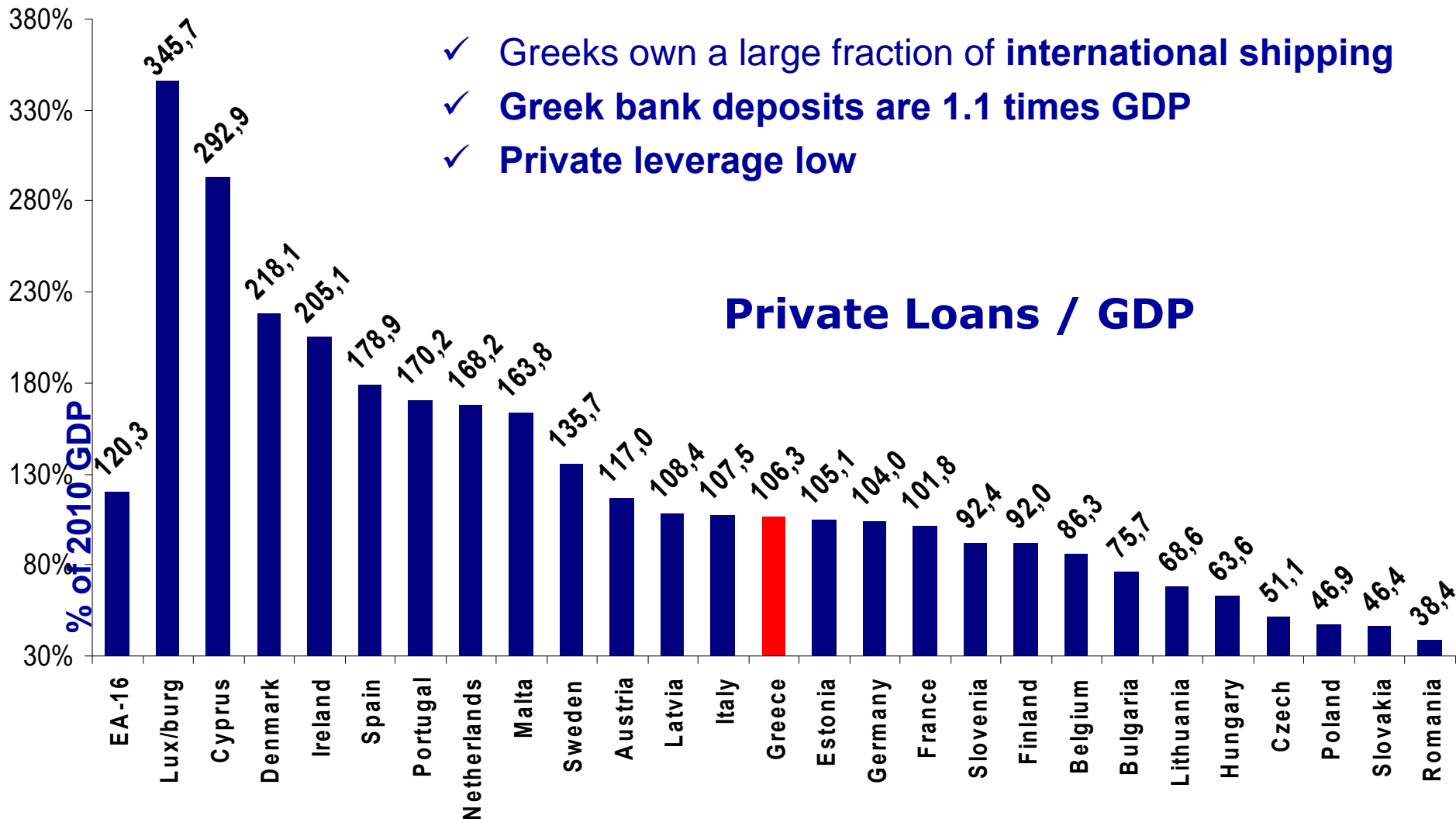
### Growth in Unit Labor Costs relative to trading partners



Source: Eurobank EFG Research

- ❖ Competitiveness indices of industry and agriculture are based on Unit Labor Cost relative to 12 major trading partners
- ❖ Competitiveness of service sector is based on Unit Labor Costs relative to 6 major competitor countries

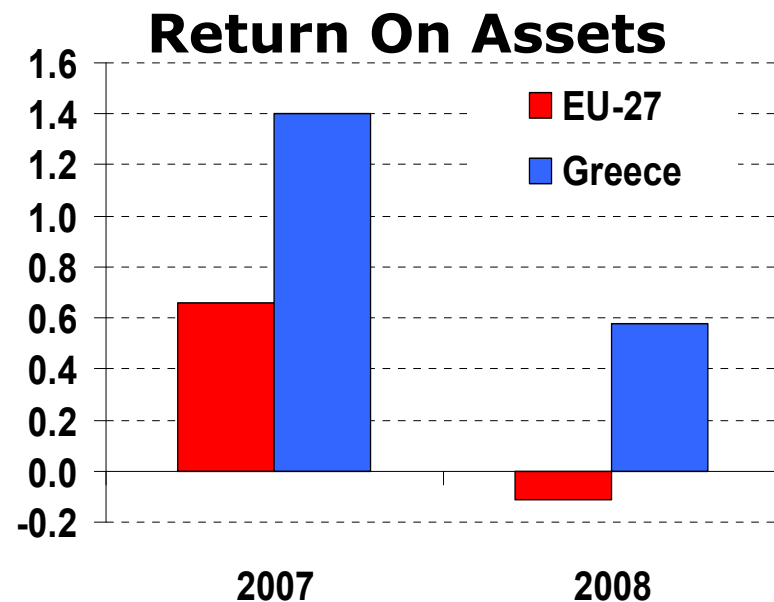
# III.5 Greek private sector is rich and under-levered



*Loans to non MFIs excl. Gen. Government from MFIs excl. Eurosystem, June 2010, % of 2010 GDP (EU forecasts)*

## III.5 A solid banking sector: Greek banks prudent and strongly capitalized

- ✓ Greek banks did not cause the recession in the country like it occurred in the US or in Western Europe
- ✓ The banking system is **deposit rich** (L/D 118% for banking groups); ECB offers strong support, while contingent liquidity (now over 20% of deposits) will be further boosted (covered bonds, government's liquidity scheme, limited refinancing needs)
- ✓ Greek banks strongly capitalized (CAD ratio at 11.7%, Tier I at 11.0%)
- ✓ Asset quality worries seem overblown (NPLs at 8.2% in 2010-Q1, experience of two crisis years, NE countries); Greek private sector is not over-leveraged; Pre-provision margins 40% wider than EU; absence of toxic assets and no real estate bubble
- ✓ Substantial CEE/SEE exposure offsets Greek strain; profits to track economic recovery in the region
- ✓ Greek banks have annual net revenue buffers in excess of €3.5bn, including: 2010 profitability run-rate, further re-pricing in Greek loan segments, streamlining of operations and cost containment as well as synergies from potential sector consolidation



Source: ECB, BoG



## IV. Summary

- ✓ Despite significant risks, the **EU/IMF/ECB Program has a high chance to succeed** as fiscal consolidation proceeds as planned, drastic structural reforms are ahead of the EU/IMF/ECB conditionality dates, the public is not responding negatively to belt-tightening and the governing center-left political party has strong parliamentary majority and can stay in office for additional 3 full years.
- ✓ **Markets presently discount a significant haircut** in Greek government bonds. **Yet**, once primary surpluses become feasible in 2012-13, debt restructuring would not be optimal as the **stakeholders are Greek or other EMU members**. Our baseline scenario predicts a debt-to-GDP ratio of **94%** in 2020 relative to EU/ECB/IMF's 119%.
- ✓ The recession is expected to be over by 2011 H2, once investment spending stabilizes and the net export sector improves its share in domestic value added.
- ✓ Long-term growth can gradually recover:
  - From expected further productivity gains coming through faster capital accumulation, lower real wages, public sector crowding in, product market reforms plus a gradual capturing of the underground economy
  - The strength of the under-levered and wealthy private sector and the strength of the banking sector
- ✓ The current account imbalance and competitiveness can improve thanks to on going product and labor market reforms and the re-organization of the public sector
- ✓ This is **commencement time** for the Greek economy, to be built on consensus

# THANK YOU FOR YOUR ATTENTION !

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# THE GREEK ECONOMY AND ITS STABILITY PROGRAM

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- I. THE EU/IMF/ECB STABILITY PROGRAM
- II. WHY RESTRUCTURING IS UNLIKELY
- III. HIDDEN SOURCES OF STRENGTH
- IV. SUMMARY
- V. **APPENDIX A: MAIN FEATURES OF THE GREEK ECONOMY**
- VI. **APPENDIX B: GREEK BANKING**

# A. Greece: general characteristics

	2009	Greece	EA16	World
<b>Population (mil.)</b>		<b>11.3</b>	<b>328.6</b>	<b>6,756.0</b>
<b>Geographical Area (km<sup>2</sup>)</b>		<b>132.0</b>	<b>2,578.8</b>	<b>510,072</b>
<b>GDP per capita (€)</b>		<b>21,082</b>	<b>27,271.4</b>	<b>7,704.9</b>
<b>Living standards (UN ranking among 182 countries)</b>		<b>25</b>	<b>17</b>	
<b>Life expectancy (years)</b>		<b>80</b>	<b>80.5</b>	<b>66.1</b>
<b>Cars per 1000 inhabitants (2006)</b>		<b>407</b>	<b>506</b>	
<b>Suicides / 100 thousand inhabitants</b>		<b>2.8</b>	<b>8.8</b>	
<b>Primary Sector (% GDP)</b>		<b>4.0</b>	<b>2.2</b>	<b>6.0</b>
<b>Secondary Sector (% GDP)</b>		<b>16.9</b>	<b>24.7</b>	<b>30.6</b>
<b>Tertiary Sector (% GDP)</b>		<b>79.1</b>	<b>73.0</b>	<b>63.4</b>
<b>Tourism (% GDP)</b>		<b>9.8</b>	<b>15.2</b>	<b>9.4</b>
<b>Construction (% GDP)</b>		<b>4.5</b>	<b>5.3</b>	
<b>Public Sector (Gen. Gov. Expenditures % GDP)</b>		<b>50.5</b>	<b>50.7</b>	
<b>Exports (% GDP)</b>		<b>18.8</b>	<b>36.3</b>	
<b>Imports (% GDP)</b>		<b>28.5</b>	<b>35</b>	
<b>Private Consumption (% GDP)</b>		<b>72.6</b>	<b>57.6</b>	
<b>Gen. Gov. Debt (% GDP)</b>		<b>115.1</b>	<b>78.7</b>	

## A. Greek GDP breakdown

<b>2009</b>	<b>Value</b> (mil. €)	<b>% GDP</b>
<b>1. Private Consumption</b>	172,341	72.6%
<b>2. Public Consumption</b>	45,167	19.0%
<b>3. Gross Fixed Capital Formation</b>	39,900	16.8%
<b>3.a By inv. product: Construction</b>	17,750	7.5%
<b>3.b Equipment</b>	19,721	8.3%
<b>3.c Other</b>	2,429	1.0%
<b>4. Inventories</b>	3,142	1,5%
<b>5. Domestic Demand</b> (1+2+3+4)	<b>260,550</b>	<b>109.7%</b>
<b>GDP</b>	<b>237,494</b>	<b>100%</b>

## A. Greek GDP breakdown (continued)

<b>2009</b>	<b>Value</b>	<b>% GDP</b>
	(mil. €)	
<b>6. Exports</b>	44,724	18.8%
<b>6.1 Goods</b>	19,231	8.1%
<b>6.2 Services</b>	25,493	10.7%
<b>6.3 Expenditure by non-residents</b>	10,369	4.4%
<b>7. Final Demand (5+6)</b>	305,274	128.5%
<b>8. Imports</b>	67,781	28.5%
<b>8.1 Goods</b>	52,503	22.1%
<b>8.2 Services</b>	15,278	6.4%
<b>8.3 Expenditure by residents abroad</b>	2,466	1,0%
<b>GDP</b>	<b>237,494</b>	<b>100%</b>

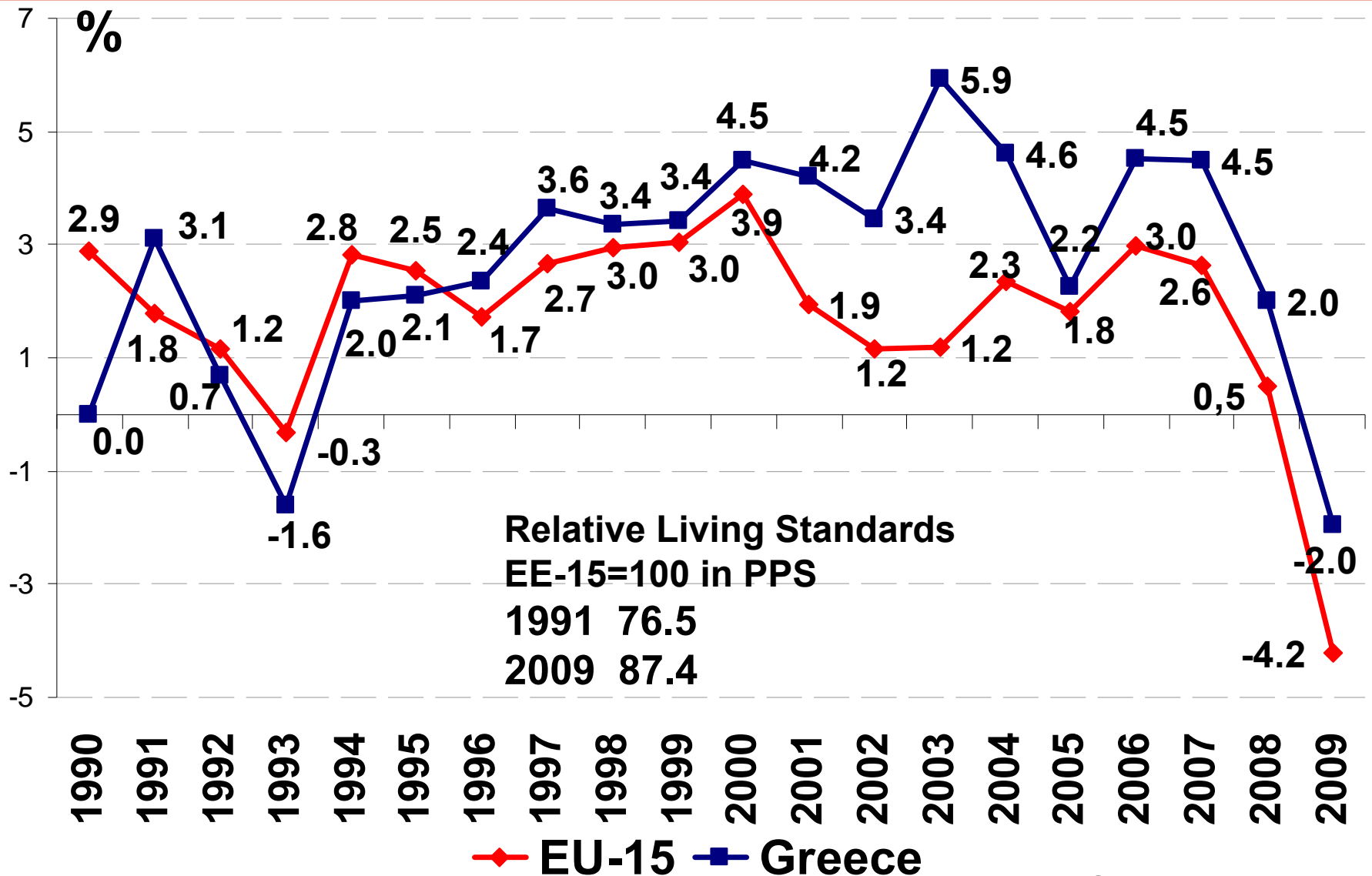
Source: EL.STAT.

## A. Population, Employment

<b>1<sup>st</sup> Quarter 2010</b>	<b>thousands</b>
1. Population of 15 years old and over	<b>9,292</b>
2. Population 15 – 64 years old	<b>7,229</b>
3. Labour Force	<b>5,012</b>
4. Employment	<b>4,426</b>
Primary Sector	<b>562</b>
Secondary Sector	<b>894</b>
Tertiary Sector	<b>2,969</b>
5. % participation in the labour force (3 / 2)	<b>69.3%</b>
6. % employment (15-64)	<b>60.1%</b>
7. Unemployment (% of labour force)	<b>11.7%</b>

Source: EL.STAT.

# A. Real Growth Rates: Greece & EU-15 (1990–2009)



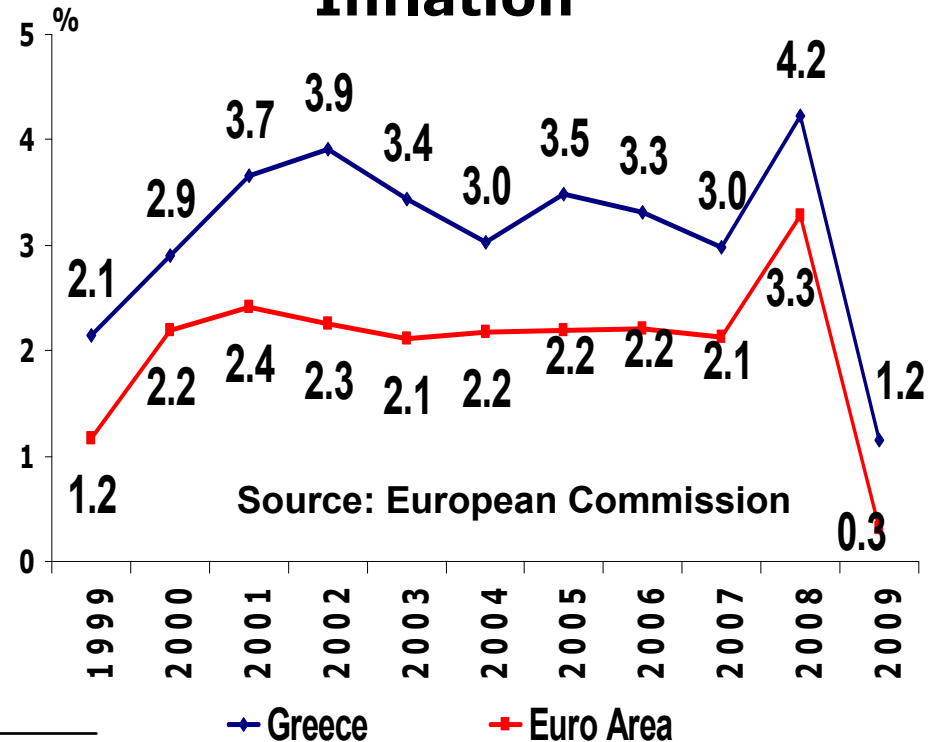


# A. Lack of competitiveness shows up in current account as well as in inflation differential

## Current Account Balance



## Inflation



<b>Current Account (€ mil)</b>	<b>-26,630.9</b>
Goods	-30,760.3
Services	12,640.2
Income	-9,803.5
Current Transfers	1,292.6

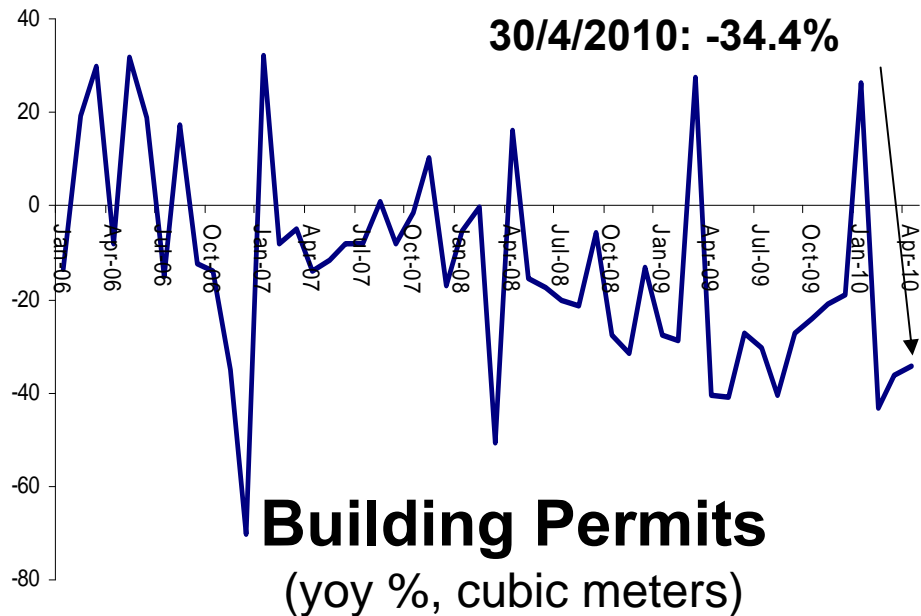
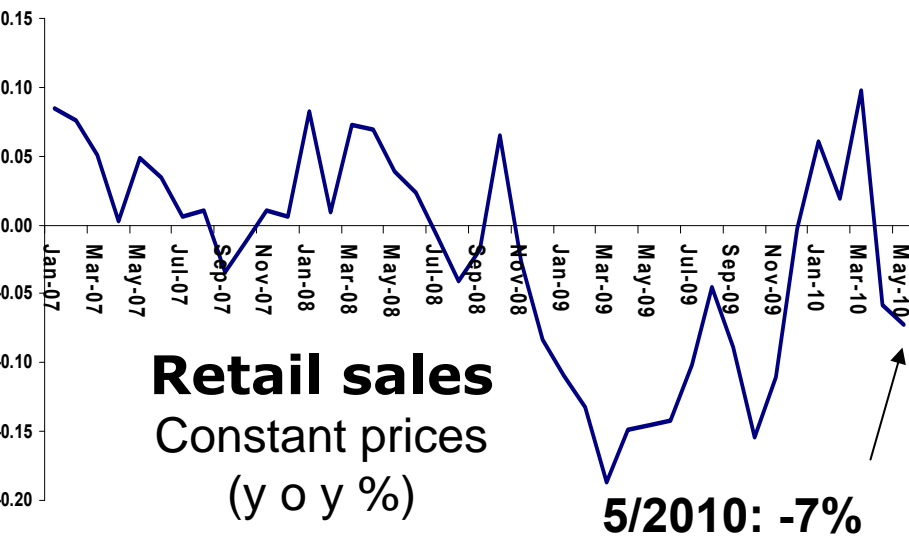
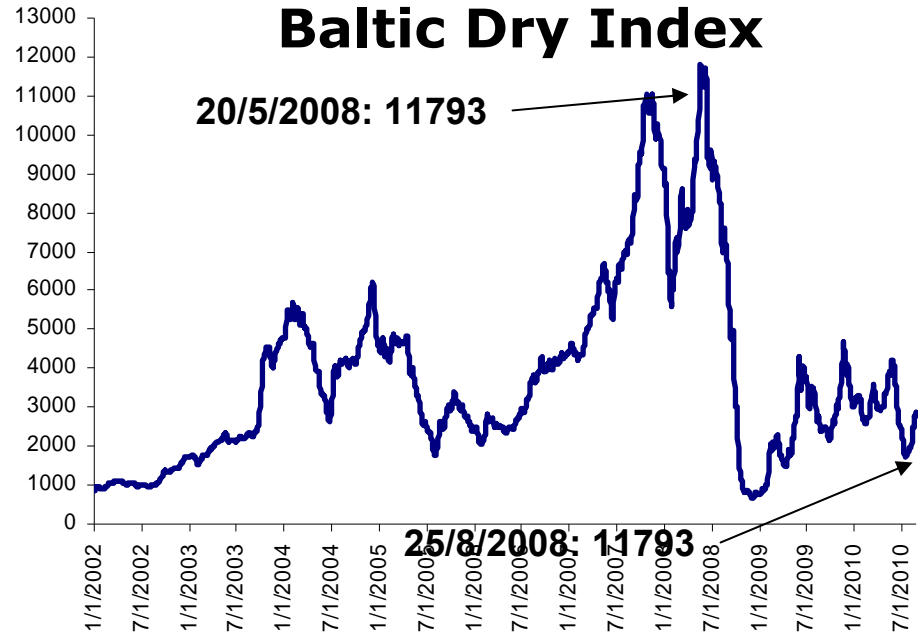
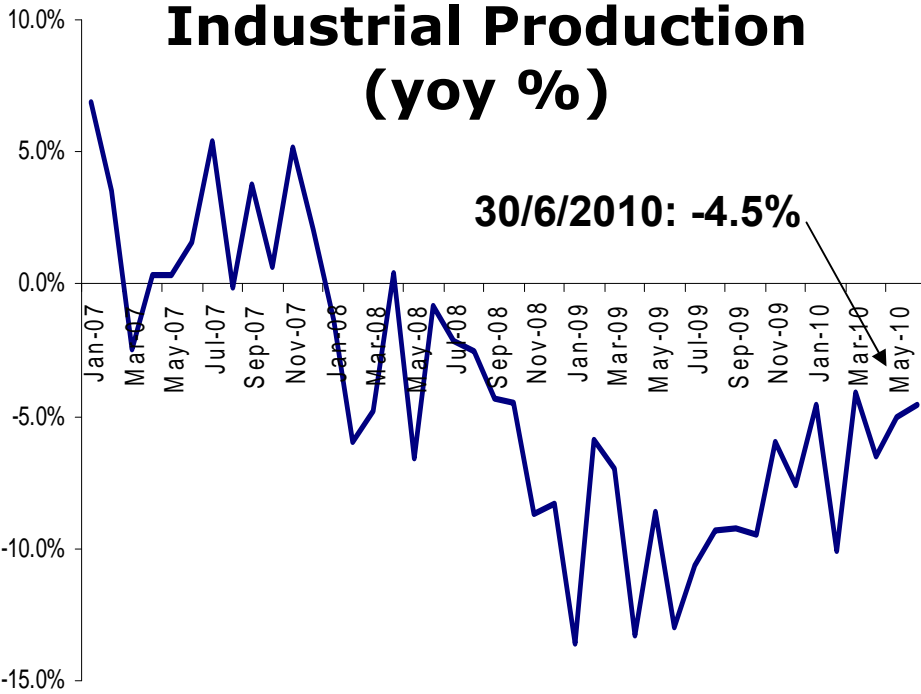
2009

# A. Ease of Doing Business rankings reveal lack of competitiveness

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

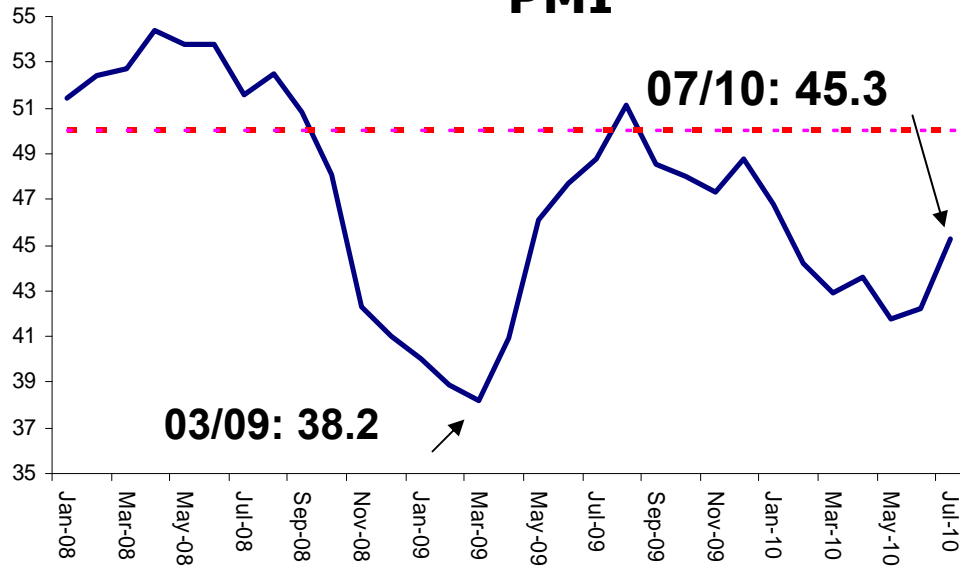
✓ World Bank: **In 2009 Greece ranked 109<sup>th</sup> out of 183 countries**

# A. Greek Recession: Basic Indicators

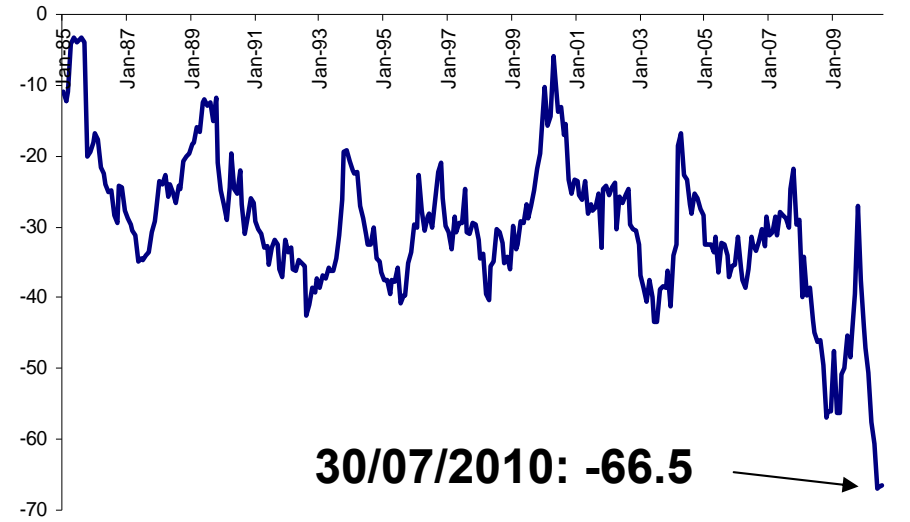


# A. Greek Recession: Basic Indicators

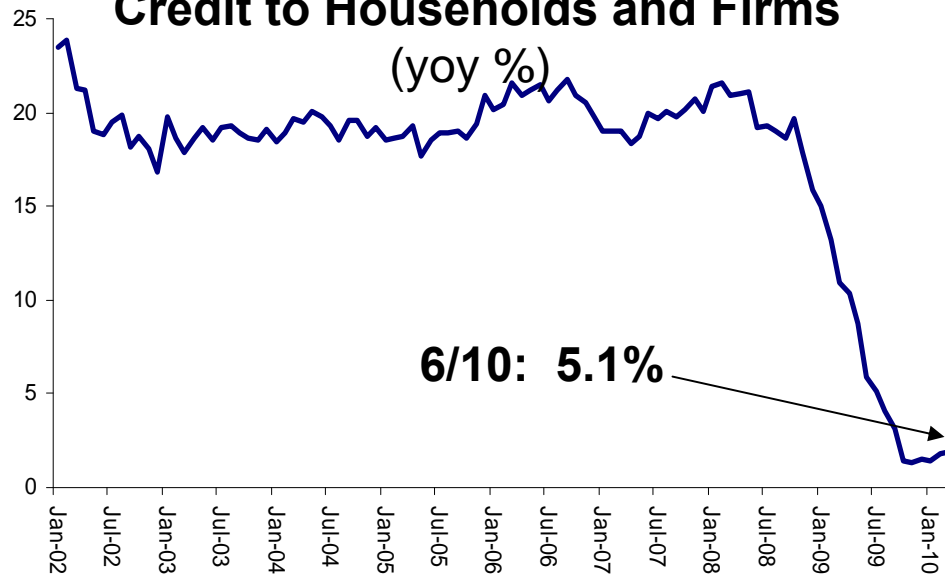
## PMI



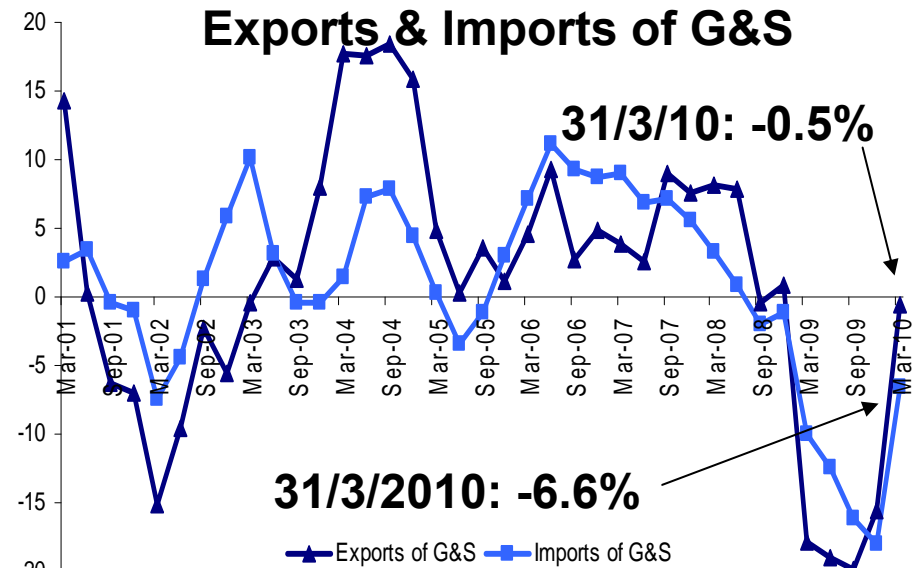
## Consumer Confidence Index



## Credit to Households and Firms (yoy %)



## Exports & Imports of G&S



# A. The history of ratings

- ✓ Continuous upgrades 1994-2003:

**BBB-** → **A+**

- ✓ First downgrade in 2004

	S&P	MOODY'S	FITCH
<b>2010</b>	<b>BB+</b>	<b>Ba1</b>	<b>BBB-</b>
<b>2009</b>	<b>BBB+</b>	<b>A2</b>	<b>BBB+</b>
<b>2008</b>	<b>A</b>	<b>A1</b>	<b>A</b>
<b>2007</b>	<b>A</b>	<b>A1</b>	<b>A</b>
<b>2006</b>	<b>A</b>	<b>A1</b>	<b>A</b>
<b>2005</b>	<b>A</b>	<b>A1</b>	<b>A</b>
<b>2004</b>	<b>A</b>	<b>A1</b>	<b>A</b>
<b>2003</b>	<b>A+</b>	<b>A1</b>	<b>A+</b>
<b>2002</b>	<b>A</b>	<b>A1</b>	<b>A</b>
<b>2001</b>	<b>A</b>	<b>A2</b>	<b>A</b>
<b>2000</b>	<b>A-</b>	<b>A2</b>	<b>A-</b>
<b>1999</b>	<b>A-</b>	<b>A2</b>	<b>BBB+</b>
<b>1998</b>	<b>BBB</b>	<b>Baa1</b>	<b>BBB</b>
<b>1997</b>	<b>BBB-</b>	<b>Baa1</b>	<b>BBB</b>
<b>1996</b>	<b>BBB-</b>	<b>Baa1</b>	<b>BBB-</b>
<b>1995</b>	<b>BBB-</b>	<b>Baa3</b>	<b>BBB-</b>
<b>1994</b>	<b>BBB-</b>	<b>Baa3</b>	
<b>1993</b>	<b>BBB-</b>		

Source: Bloomberg

# A. Ratings will be slow to adjust upward

- ✓ In 2009, downgrades with negative outlooks by Fitch and S&P (2 steps), Moody's (1 step)
- ✓ In April 2010, further downgrades by Fitch (2 steps), S&P (3 steps) and Moody's (1 step)
- ✓ In June 2010, Moody's downgrades (4 steps) to Ba1

## Downgrades in 2009 – 2010

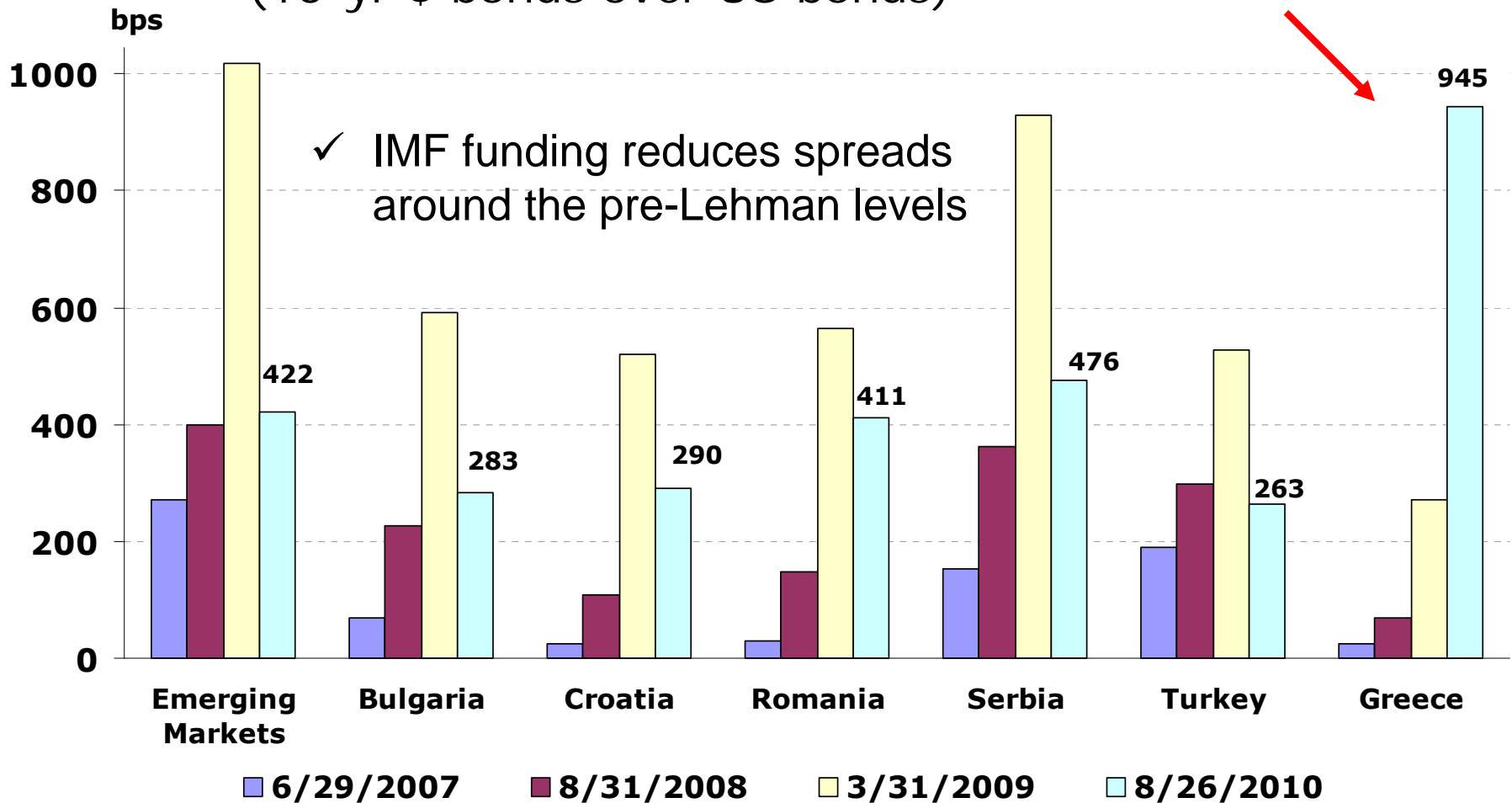
	S&P	Moody's	Fitch
<b>14/01/2009</b>	<b>A-</b>		
<b>22/10/2009</b>			<b>A-</b>
<b>08/12/2009</b>			<b>BBB+</b>
<b>16/12/2009</b>	<b>BBB+</b>		
<b>22/12/2009</b>		<b>A2</b>	
<b>09/04/2010</b>			<b>BBB-</b>
<b>22/04/2010</b>		<b>A3</b>	
<b>27/04/2010</b>	<b>BB+</b>		
<b>14/06/2010</b>		<b>Ba1</b>	

Source: Bloomberg

# A. The crisis is global but Greece differs

## Sovereign Spreads

(10-yr \$ bonds over US bonds)



# A. CDSs incorporate the possibility of a significant haircut in Greek debt obligations

A **haircut** is the % loss of the promised total payment by the government  
**5 yr CDS premium on August 25, 2010: 902.82 bps**

Haircut	Marginal 1-yr Risk-Neutral Probability	Cumulative 5-yr Risk-Neutral Probability
<b>100%</b>	<b>9.0%</b>	<b>34.9%</b>
<b>90%</b>	<b>10.0%</b>	<b>38.0%</b>
<b>80%</b>	<b>11.3%</b>	<b>41.7%</b>
<b>70%</b>	<b>12.9%</b>	<b>46.1%</b>
<b>60%</b>	<b>15.0%</b>	<b>51.6%</b>
<b>50%</b>	<b>18.1%</b>	<b>58.4%</b>
<b>40%</b>	<b>22.6%</b>	<b>67.2%</b>
<b>30%</b>	<b>30.1%</b>	<b>78.3%</b>
<b>20%</b>	<b>45.1%</b>	<b>91.6%</b>
<b>10%</b>	<b>90.3%</b>	<b>99.9%</b>

Source: Bloomberg, Eurobank EFG Research

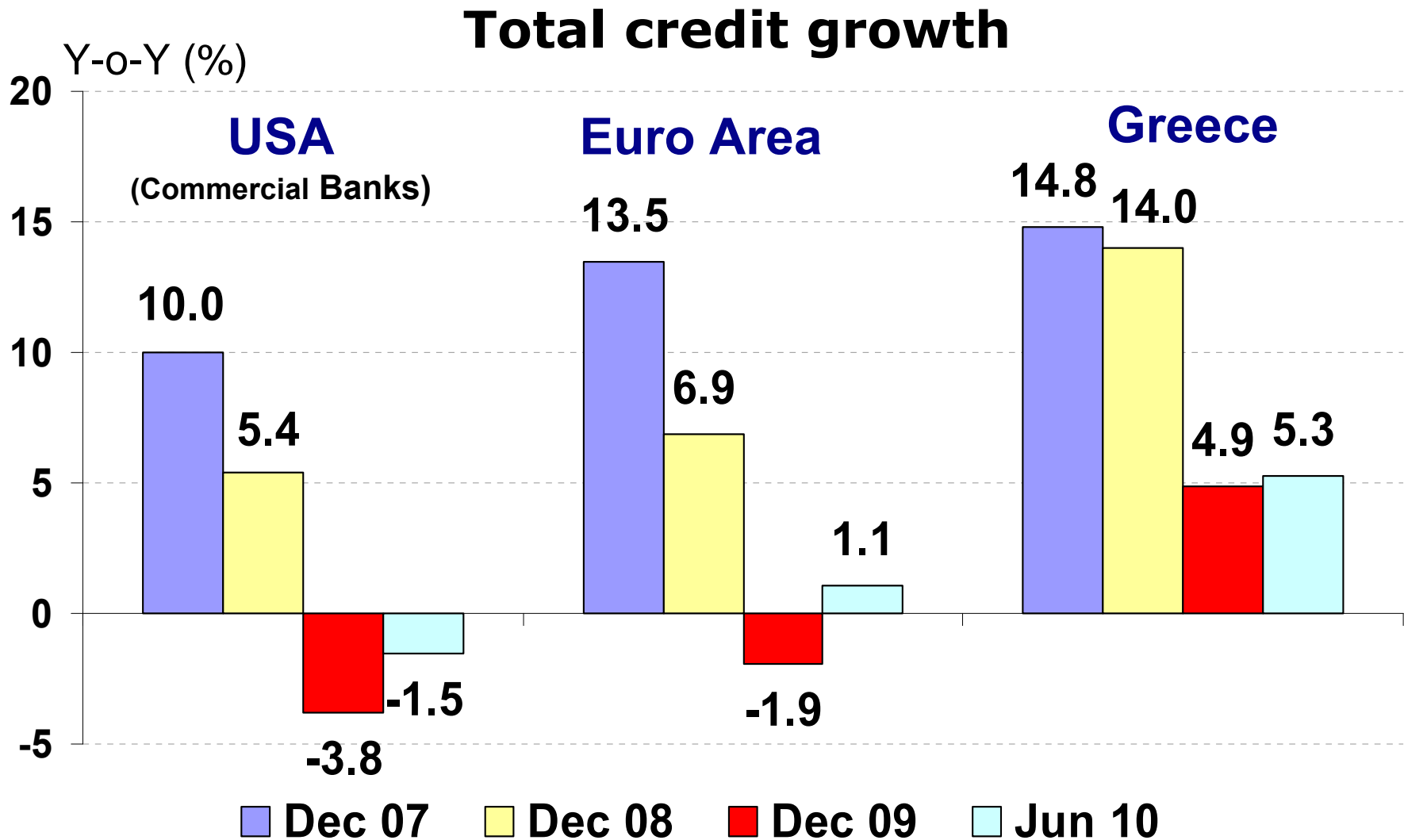


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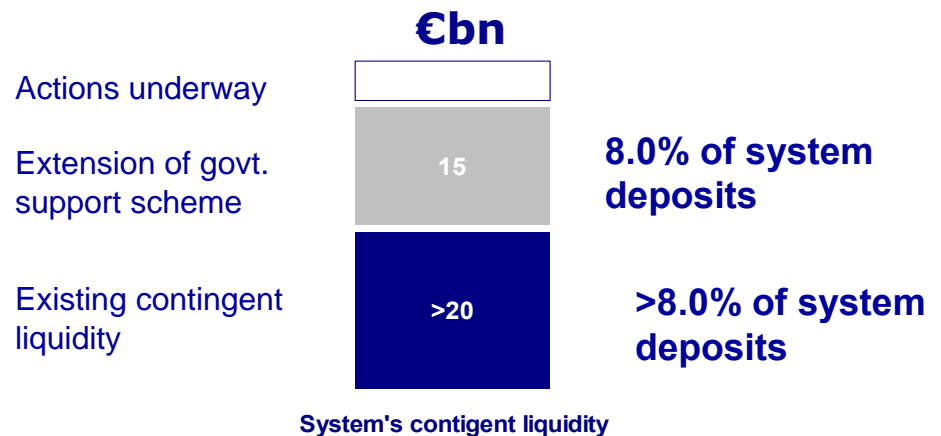
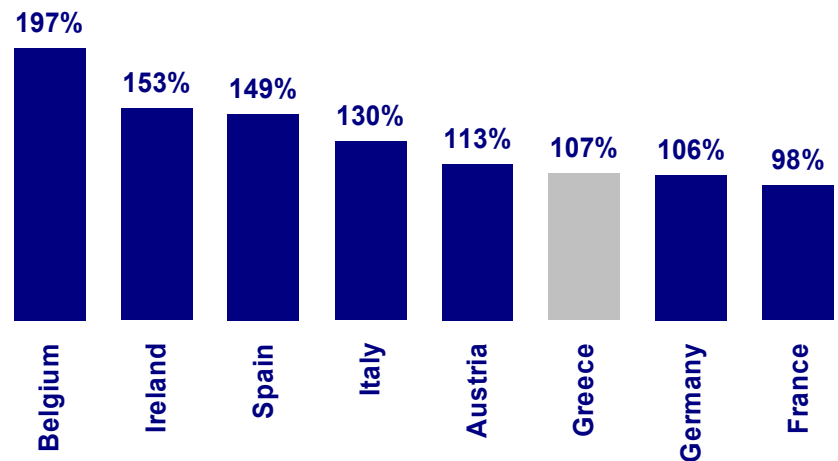
## B. Credit growth still positive in Greece



## B. Strong liquidity buffers

- ✓ Banking system largely self funded (L/D 107% in FY 09; 111% as at 1Q10)
- ✓ ECB accepts GGBs as collateral irrespective of rating
- ✓ Contingent liquidity of approx. 20% of total deposits as at 1Q10 - including €15bn of government guarantees.
- ✓ Additional €25bn government guarantees to become available in September.
- ✓ Covered bonds and other actions generate further liquidity
- ✓ Limited refinancing requirements for 2010 and timid lending growth expectations

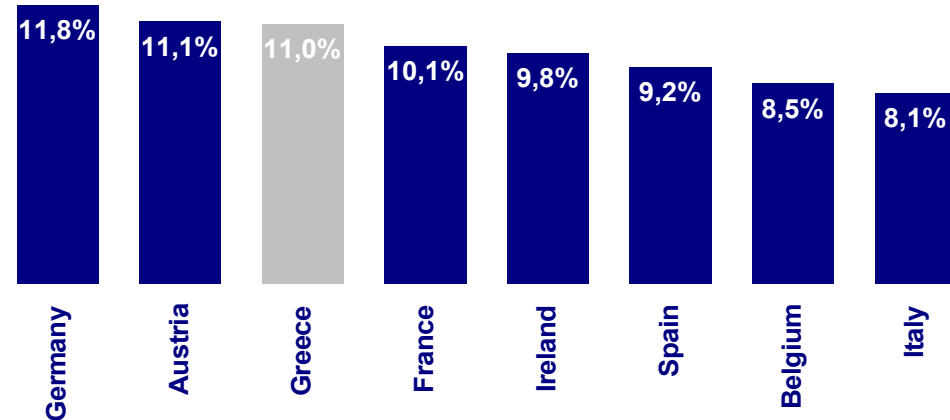
FY 09 L/D ratios



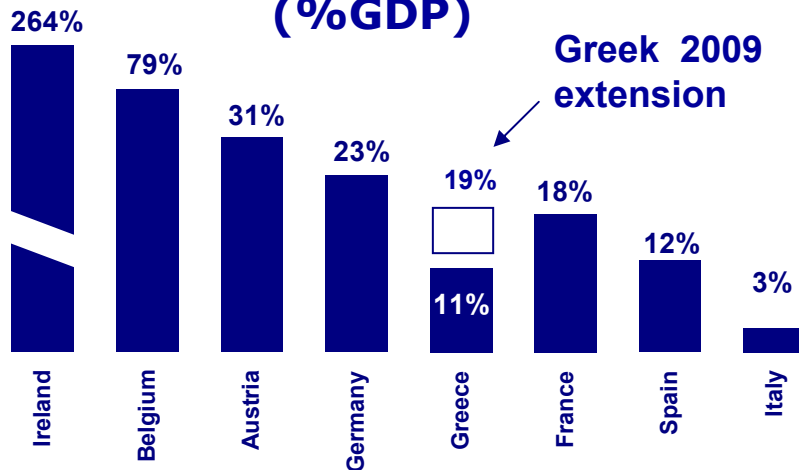
## B. Greek banks: strongly capitalized

- ✓ Greek capital ratios among the highest in Europe despite limited govt. support.
- ✓ Greek banks boosted capital position both organically and through markets (rights & hybrids issues, buyback of preferred shares).
- ✓ Financial Stability Fund provides for additional €10bn equity support – as yet unutilised

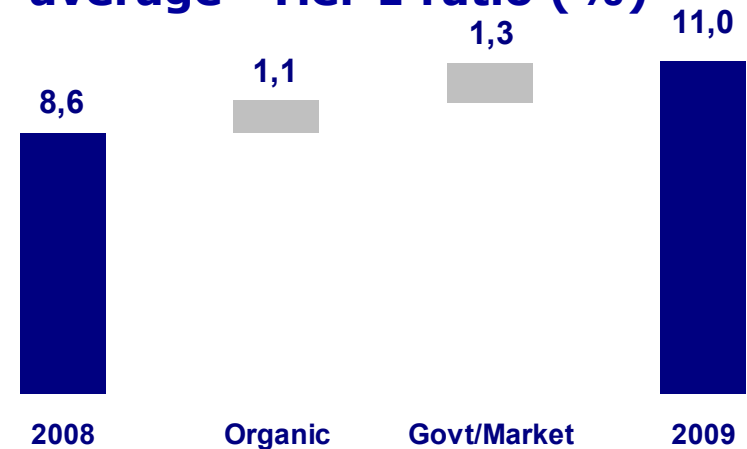
### FY09 Tier 1 ratios



### Government support scheme (%GDP)



### Evolution of Greek sector's average\* Tier 1 ratio (%)



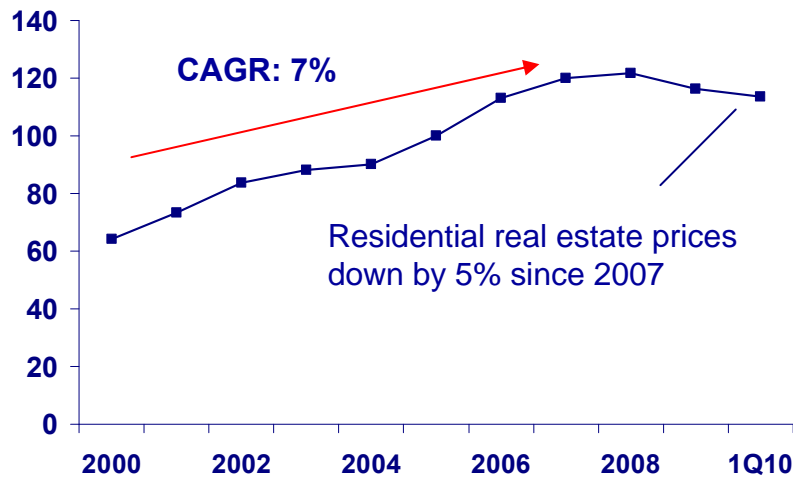
\* 4 largest players

## B. No excesses by Greek banks

- ✓ Greek lending penetration at reasonable levels – not over-leveraged.
- ✓ No sub-prime/ toxic assets.
- ✓ No real estate bubble.
- ✓ Govt. support program pre-emptive and aimed to supply liquidity to the economy

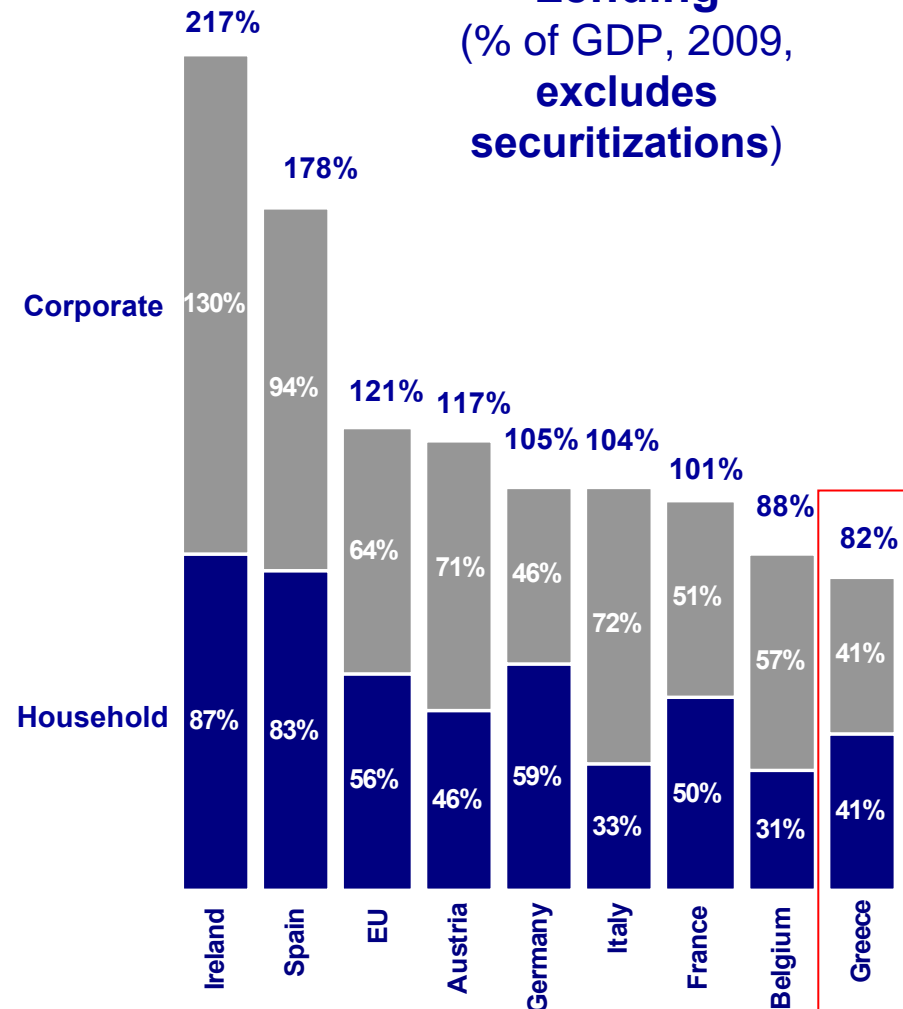
### No real estate bubble in Greece

(Nominal asset prices, 100=2005)



Source: Real Estate Prices, BoG

### Private Sector Lending (% of GDP, 2009, excludes securitizations)

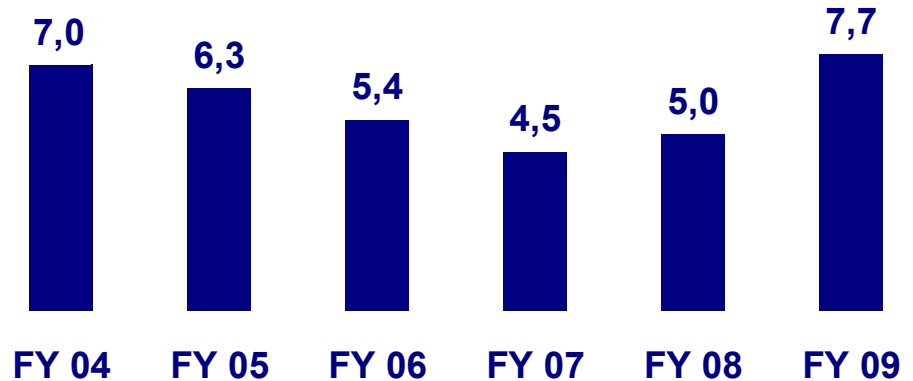


Source: ECB, excludes securitizations

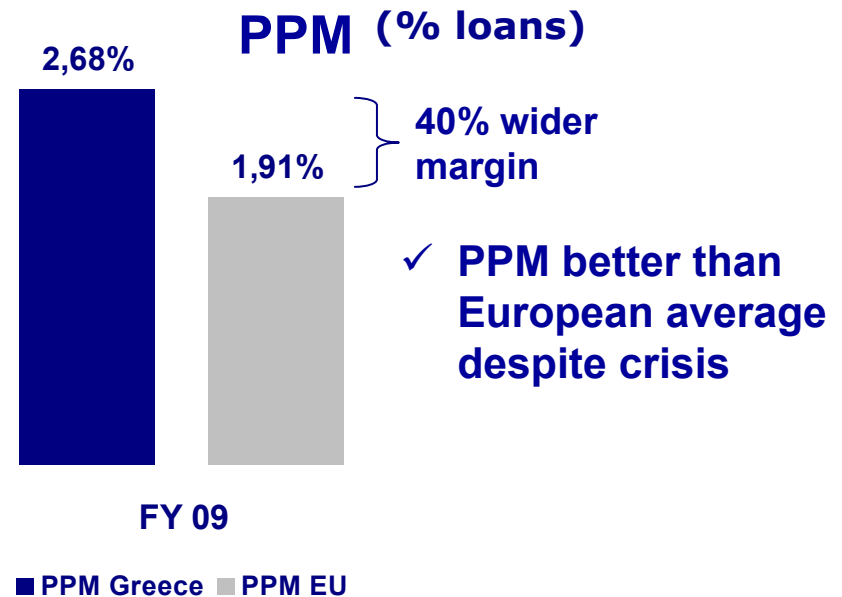
## B. Asset quality: Manageable despite two years of crisis

- ✓ 2 years of crisis have pushed NPLs to 7.7% in 2009 (8.2% in 1Q10).
- ✓ Solid pre-provision income is the first line of defense for asset quality
  - Higher than peers pre-provision margin at 268bps
  - Fully covers cost of risk for 2009 of 156bps
- ✓ Pre-provision profit can accommodate NPLs rising to 20% in the next three years before capital is hit

### NPLs on the rise but at reasonable levels



Source: BoG

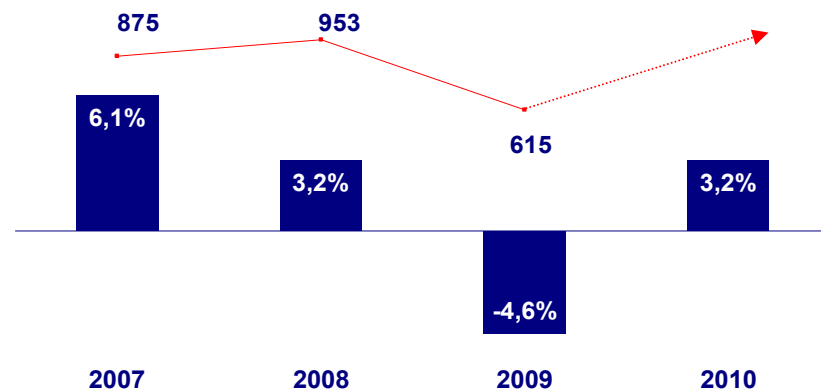


Source: Eurobank EFG estimates

## B. Substantial CEE/SEE exposure offsets Greek strain

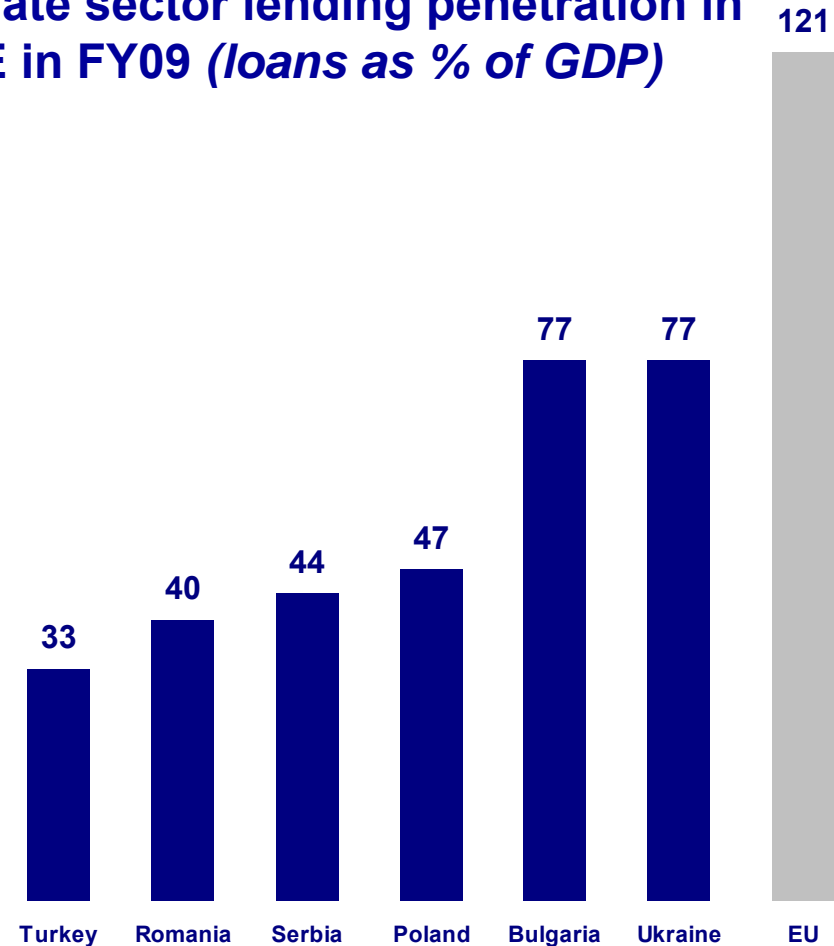
- ✓ The region represents 1/4 of total lending for the Greek banks\* and corresponds to c.40% of total revenues
- ✓ Most countries in SEE & Turkey to register growth in 2010
- ✓ Local markets remain underleveraged with ample room for credit expansion
- ✓ Normalization of funding & risk costs to boost profitability

### Sector's SEE earnings follow GDP growth trend



\* 4 largest players

### Private sector lending penetration in SEE in FY09 (loans as % of GDP)



Source: Eurobank Research, ECB - excludes securitizations