Greece
in the middle of a storm

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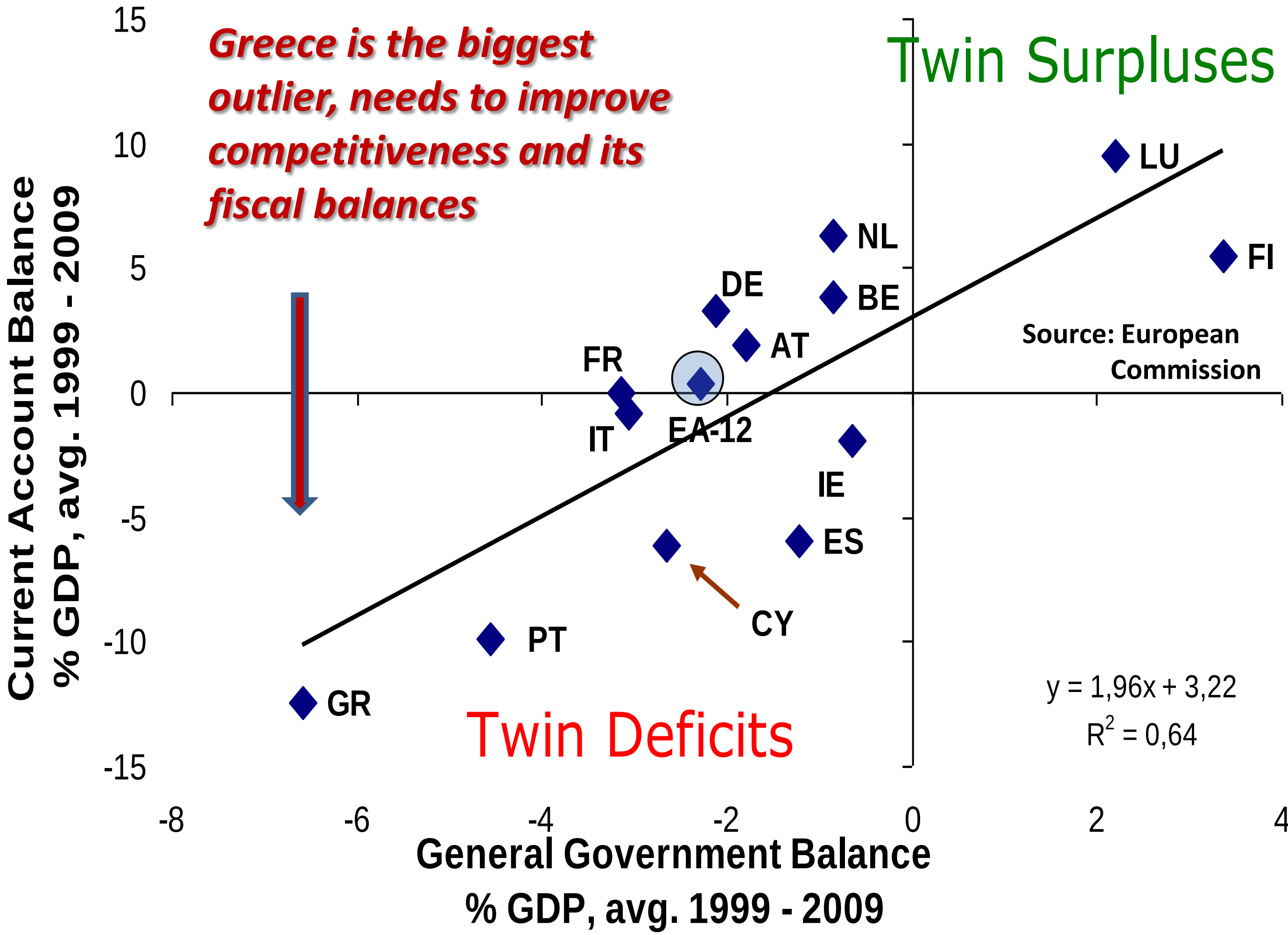
I. A BIRD'S EYE VIEW ON GREECE

2012	Greece	EA17	World
Population (mil.)	11.3	333.5	7,056.7
Geographical Area (thousand km²)	132.0	2,624.0	148,940
GDP per capita (€)	17,146	28,460	9,729.1
Human Development Index (2011 UN ranking among 194 countries)	29		
Life expectancy (years)	80.0	79.8 (EU-27)	71.2
Motor vehicles per 1000 inhabitants (2010)	624	593	175
Suicides / 100 thousand inhabitants (2010)	2.9	9.1	
Primary Sector (% GDP)	3.4	1.8	4.3
Secondary Sector (% GDP)	16.4	25.2	29.3
Tertiary Sector (% GDP)	80.2	73.1	66.4
Tourism (Total contribution, % GDP)	16.4	8.3 (EU-27)	9.2
Construction (% GDP)	2.1	5.9	
Public Sector (Prim. Gen. Gov. Exp. % GDP)	45.4	46.7	
Exports (% GDP)	27.2	45.8	
Imports (% GDP)	32.1	43.1	
Private Consumption (% GDP)	74.6	57.5	
Gen. Gov. Debt (% GDP)	161.6	93.1	

I.1 GREECE WAS AN EARLY OFFENDER IN TWO OF THE THREE LEGS OF THE EMU CRISIS

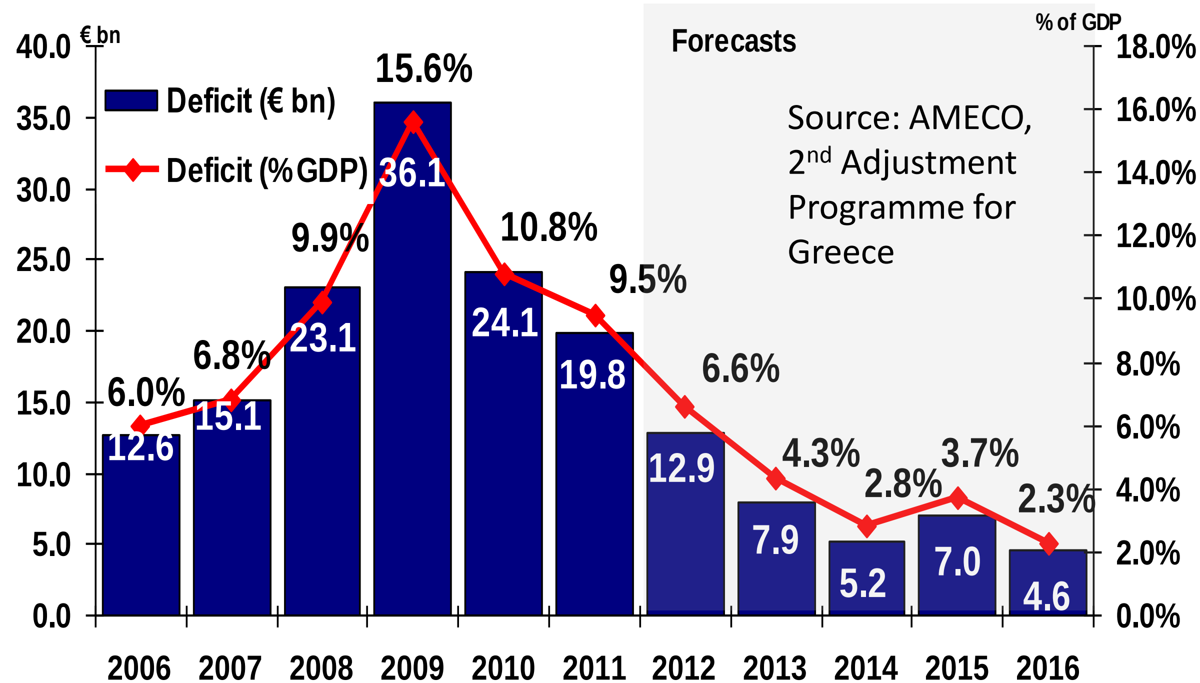
- During EMU years Greece suffered from
  - **lack of fiscal discipline &**
  - **lack of competitiveness**
- The third leg, the **banking crisis** in Greece was caused by the **state's PSI and *the continuing recession that drives up* NPLs**
- Since 2010, there is a lot of **progress** in rectifying both disequilibria

Average annual external and fiscal balance in EA-12 before the Greek/EMU crisis hit in early 2010



I.1 DRASTIC FISCAL CONSOLIDATION AFTER 2009

- ❖ From 2009 to 2012 expenditure was cut drastically
- ❖ Revenues managed to remain high despite the ~20% cumulative recession
- ❖ Primary balance improved by 9.0 pp of GDP
- ❖ Yet taxes have fallen on the usual suspects, the law-abiding citizens



Greece: General Government, Fiscal Progress

	Revenue (€bn)	Primary Expenditure (€bn)	Wages, Pensions, Benefits (€bn, % of Primary Exp.)	Primary Deficit (% GDP)	Total Deficit (% GDP)
2009	88.6	112.8	80.0 (*70.9%*)	-10.5	-15.6
2010	90.2	101.1	75.0 (*74.2%*)	-4.9	-10.8
2011	88.1	93.0	73.1 (*78.6%*)	-2.3	-9.5
2012	85.0	87.9	69.0 (*78.5%*)	-1.5	-6.6

Primary surplus targets (%GDP)

2013 0.0
2014 1.5
2015 3.0
2016 4.5

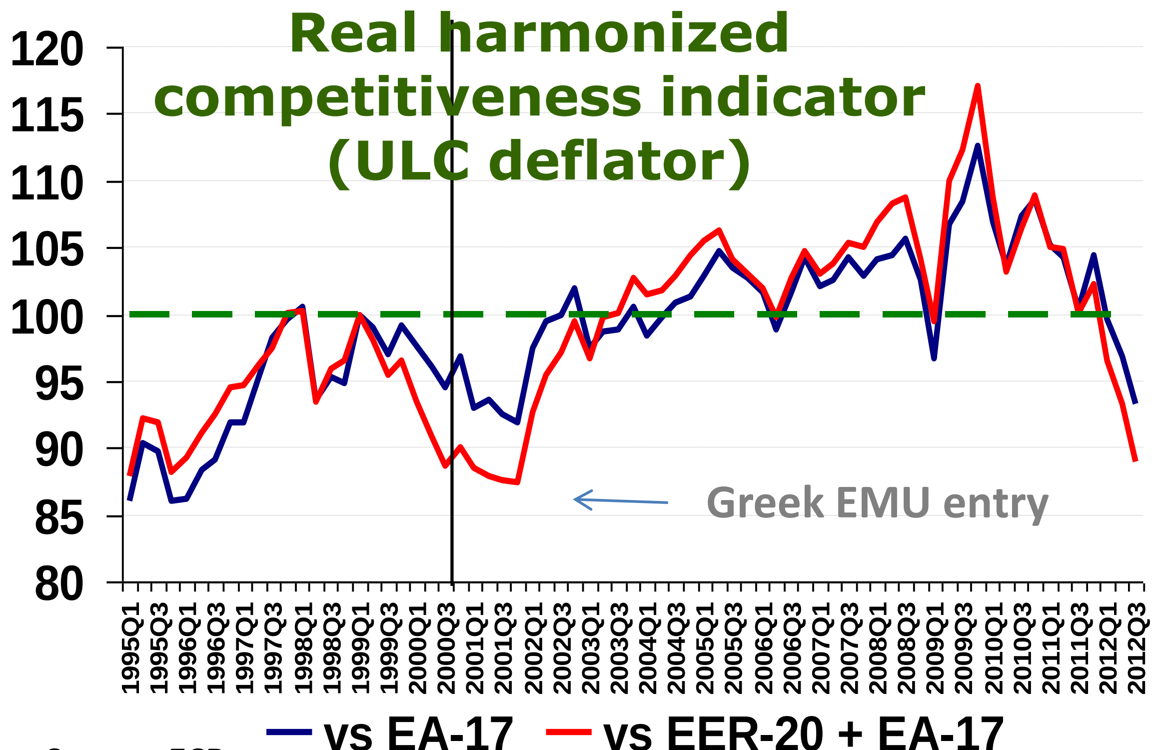
I.1 PROGRESS IN COST COMPETITIVENESS

NOMINAL UNIT LABOR COSTS

% Δ	GR	CY	DE	FR	IT	ES	IE	PT	US	EA17	EU27
2000 - 2009	31.6	28.5	5.6	22.4	31.4	33.8	34.6	26.8	-21.7	21.1	15.0
2009 - 2012	-10.0	4.4	3.1	4.2	2.4	-6.4	-10.4	-5.5	11.5	1.5	4.4

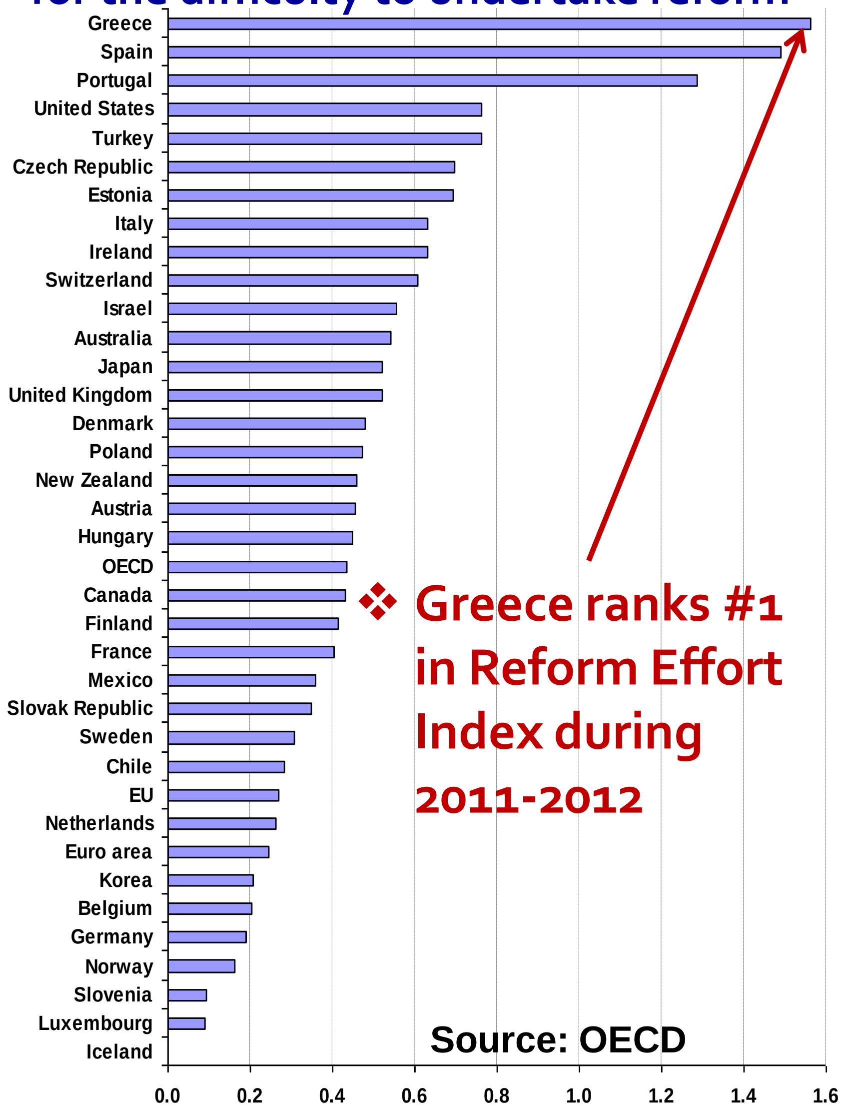
Source: European Commission

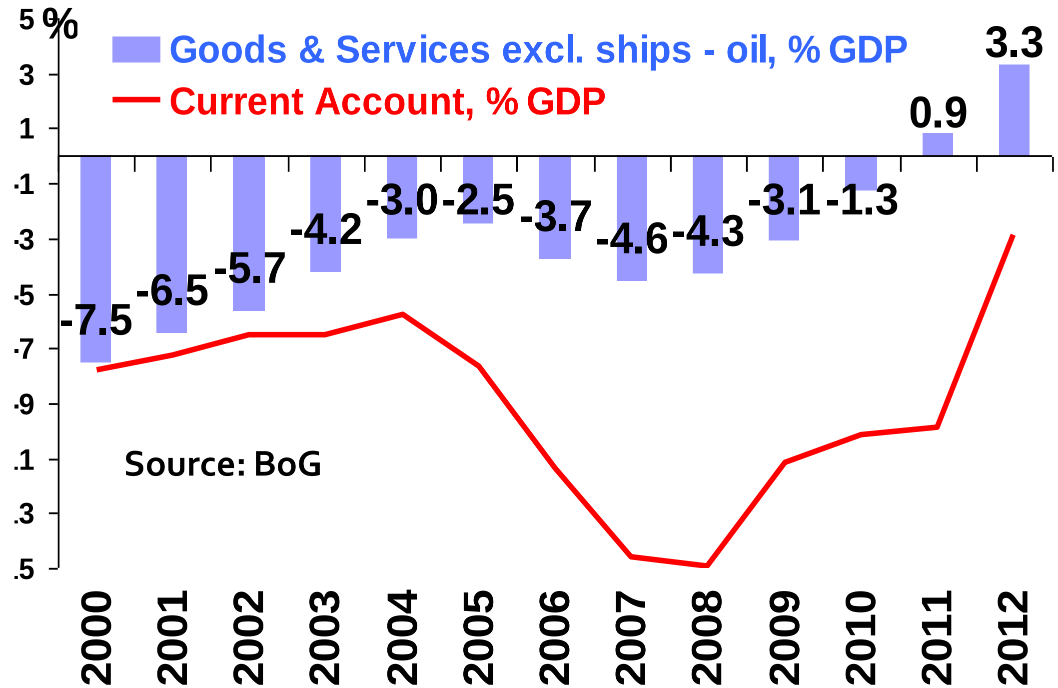
- Unit labor costs in Greece are adjusting faster than in Spain, Portugal or Cyprus
- Improvement in ULCs similar to Ireland's
- Gains of over 25 points in competitiveness from the peak in 2009
- Greece has regained the lost cost competitiveness



Source: ECB

OECD Responsiveness rate adjusted for the difficulty to undertake reform





2012	€ mn	% GDP
Curr. Account	-5,583.6	-2.9
Goods	-19,582.8	-10.1
Services	14,719.2	7.6
Income	-2,164.7	-1.1
Transfers	1,444.5	0.7

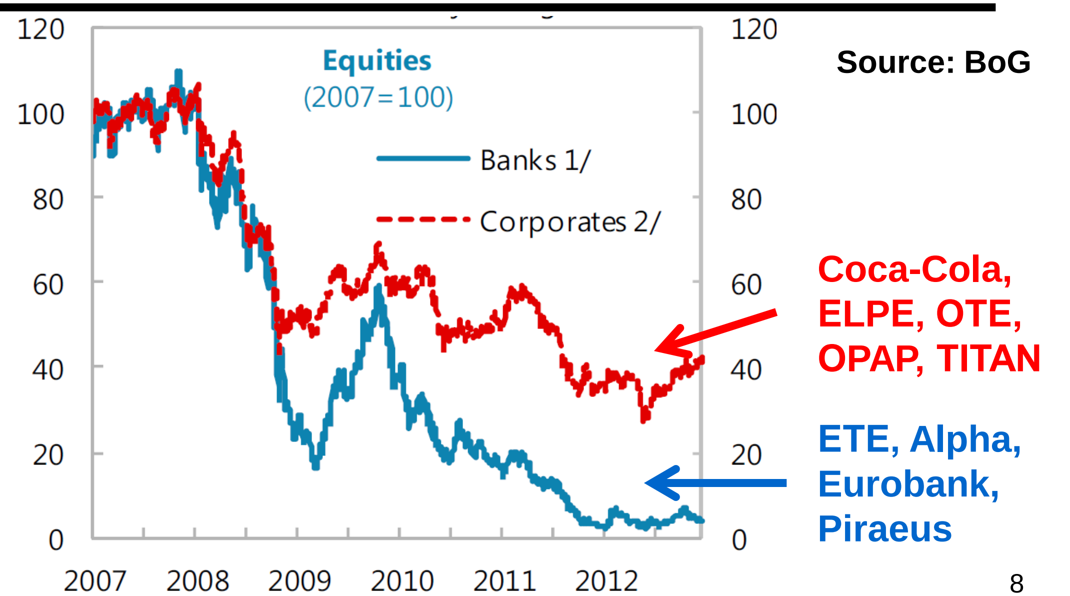
I.2 GREEK BANKS: MANAGED THE INTERNATIONAL CRISIS BUT BECAME VICTIMS OF THE GREEK CRISIS

RESULTS: Banking Groups

€ ml.	2008	2009	2010	2011[1]	Q3 2012[2]
Net Income	6.717	7.082	5.524	4.978	2.074
Provisions	**3.383**	**5.786**	**5.915**	**10.951**	**6.360**
PSI	**0**	**0**	**0**	**29.860**	**1.622**
Pre-tax profits	3.340	1.306	-393	-35.865	-6.180
Taxes	787	659	449	-4.187	-1.107
Profits	2.554	648	-843	-31.678	-5.073

[1] excluding Agricultural Bank and Post Bank
[2] only Alpha, Attica, General, NBG, Eurobank, Piraeus

- Drop in Net Income begins in 2010
- Provisions increase in 2009 and 2011
- PSI reduces income by €30bn in 2011
- Stock holders lost almost all of their investments



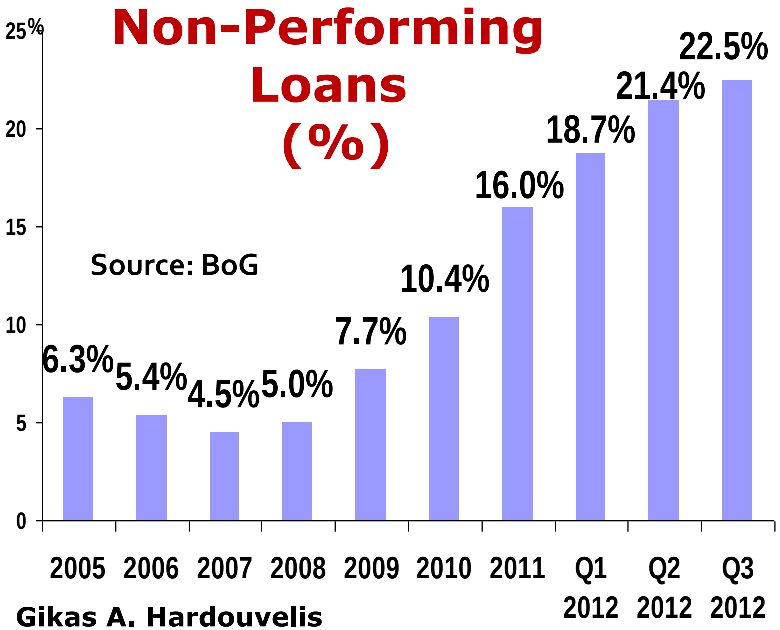
Source: BoG

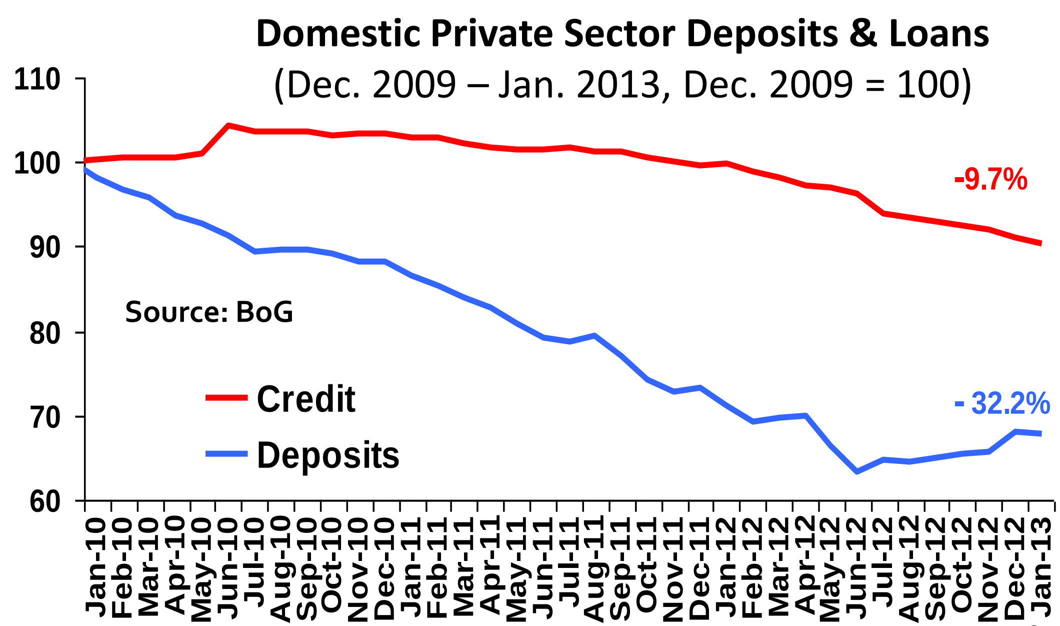
I.2 GREEK BANKS CONTINUE TO INTERMEDIATE

- After Greek crisis, a widening gap in evolution of loans and deposits
- Deposit reversal after June 2012 elections when Euro-exit fears subsided
- Loan restructurings dominate Greek bank behavior today

Domestic Private Sector

(€ bn)	Credit	Deposits		Credit	Deposits
2007	215.1	197.9	Jan. 2012	248.7	169.0
2008	249.3	227.6	Mar. 2012	244.7	165.4
2009	249.3	237.5	Jun. 2012	239.8	150.6
2010	257.5	209.6	Sep. 2012	231.4	154.3
2011	248.1	174.2	Dec. 2012	227.3	161.5
Source: BoG			Jan. 2013	225.1	161.0

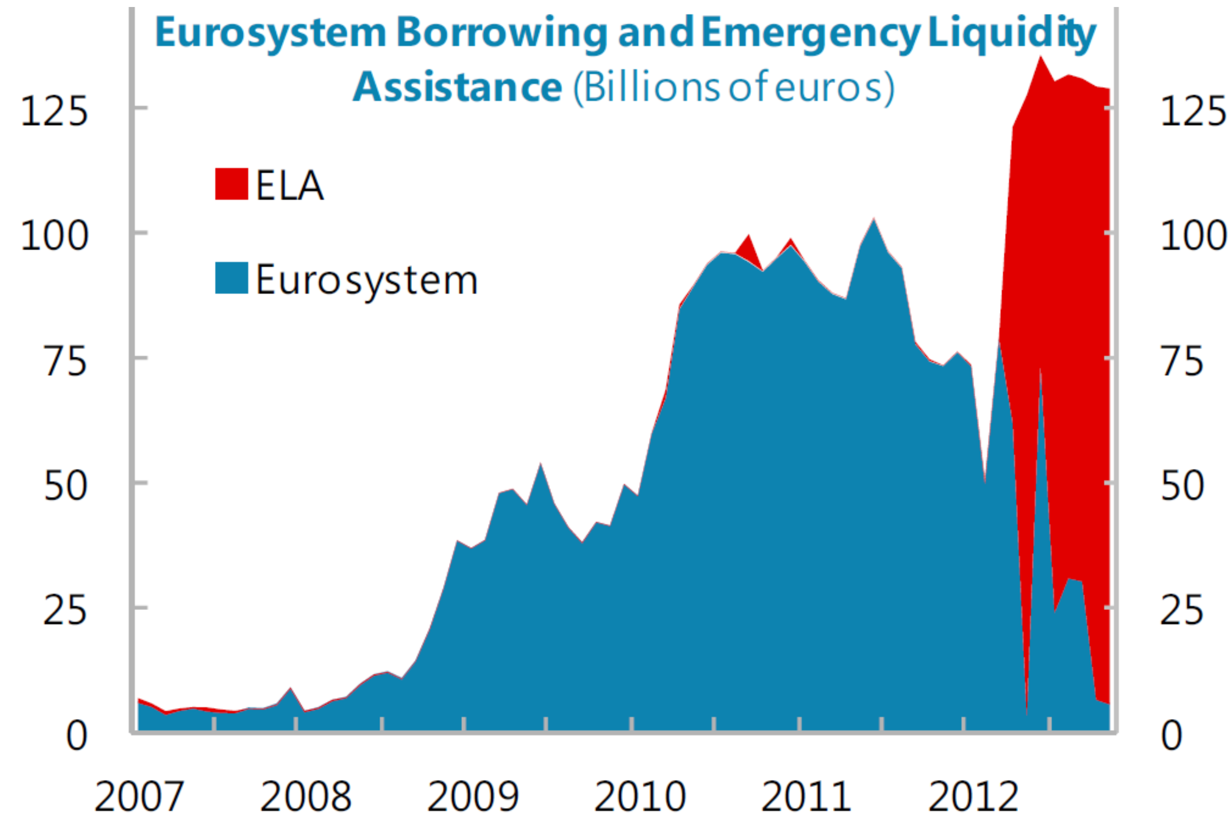




I.2 HUGE DEPENDENCE ON THE EUROSYSTEM

- During the International crisis, wholesale borrowing stopped, leading to €50bn increase in borrowing from ECB
- After Greek crisis, deposit withdrawals result in big need for extra liquidity
- ELA borrowing is costly, 2 pp. higher, implying a more restrictive monetary policy on Greece!!

The International crisis and the subsequent deposit withdrawal led banks to the Eurosystem

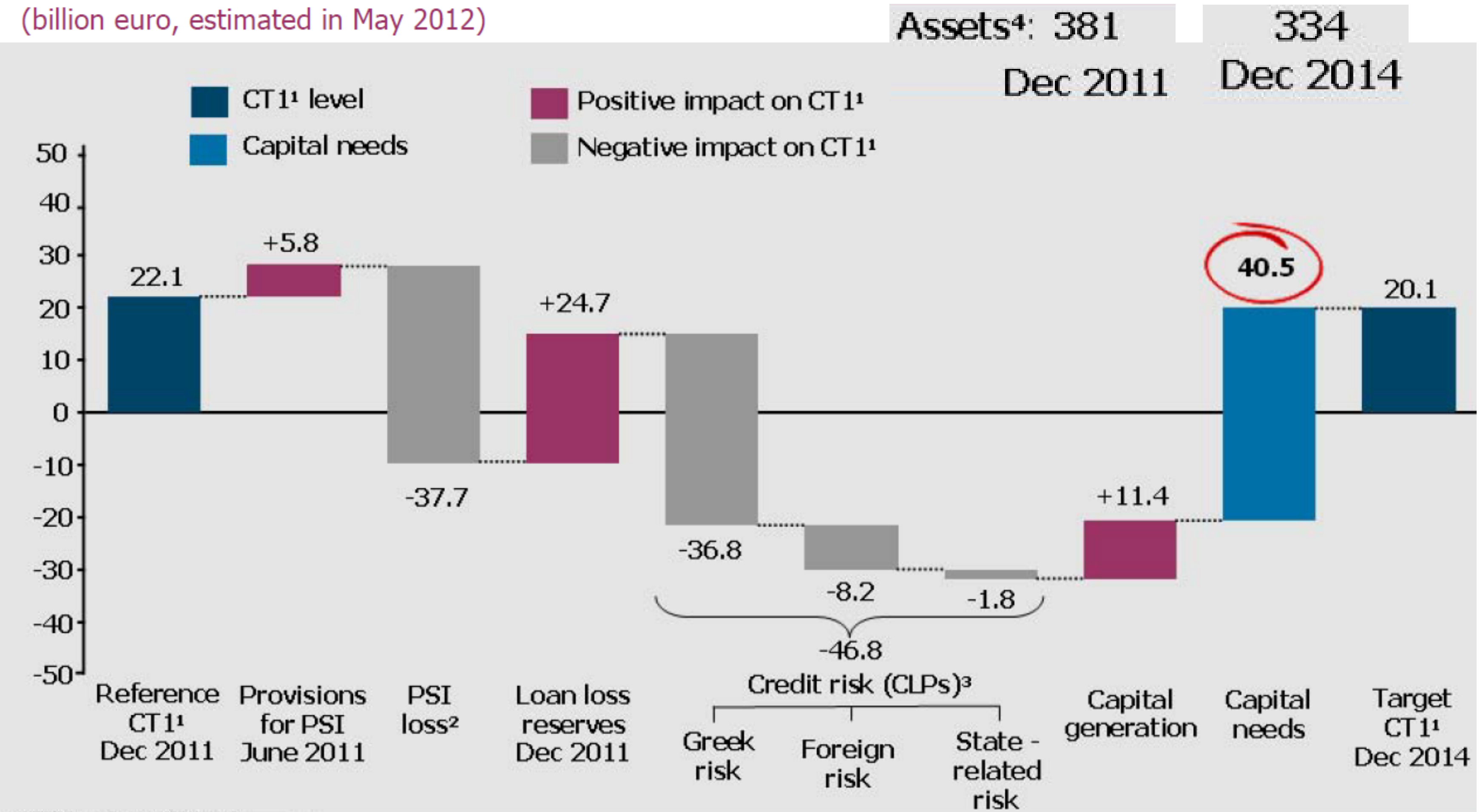


Source: IMF Country Report No. 13/20, January 2013

I.2 BANK RECAPITALIZATION

Chart I.1 Process for calculating capital needs (December 2011 – December 2014; consolidated basis)

(billion euro, estimated in May 2012)



¹ CT1 : Core Tier 1.
² Loss incurred by the Private Sector Involvement on Greek Government Bonds and selected state-related loans.
³ CLPs: Credit loss projections.
⁴ Total assets as per banks' Business Plans.

Source: Bank of Greece.

II.

I. Overview

1) Greek disequilibria
2) The banking sector

II. The growth puzzle

1) Long-term: Please reform …
2) Short-term: Will the recession stop?

II.1 DETERMINANTS OF LONG-TERM ECONOMIC GROWTH

- In the baseline scenario, Greece will begin its new growth path from a much lower point, at 64.9% of old EE-15 at the end of 2014
- What would the new average growth rate be from 2015-on? According to the traditional model, in Greece, during 1990-2008, average growth was 3%, caused by three determinants: Capital (1.10 pp.), Labor hours (0.90 pp.), Total Factor Productivity (1.00 pp.) A repetition will be hard in the future

Greek Relative Living Standards
EE-15=100 in PPS

1991	75.5
1995	71.7
1999	71.0
2003	80.7
2007	80.9
2014	64.9

- The empirical literature makes cross-country comparisons over decade-long time intervals. Variables found important:
  - I. (+) Investment as a % of GDP (affecting size of physical capital)
  - II. (+) Rate of human capital increase, ~ by % population in sec. education
  - III. (-) Initial income, capturing convergence
  - IV. (-) Government consumption, not to be productive (e.g. military exp.)
  - V. (-) Inflation, which destroys the price mechanism
  - VI. (-) Real effective exchange rate, showing the competitiveness effect
  - VII. (+) Openness
  - VIII. (+) Quality of institutions
  - IX. (-) FX risk premium in countries that have flexible exchange rates
- Greek economic policy is on the right track with visible results regarding:
  - a) Government consumption ⇩
  - b) Inflation ⇩
  - c) Real effective exchange rate and internal devaluation ⇩
  - d) Openness ⇧
- Greece needs to improve Investment/GDP, Human capital, quality of institutions

II.1 SUCCESSFUL REFORMS

LABOR MARKET REFORMS

- ❖ **Reduction of wage floors (-22% in the min wage, -32% in employees under the age of 25)**
- ❖ **Structural measures to level the playing field in collective bargaining**
  - Shortening the length of collective contracts and reduction of their 'after effects' time.
  - Removal of contracts with definite duration defined as expiring upon age limit or retirement
  - Freeze of 'maturity' (referring to automatic increases in wages dependent on time) until unemployment falls < 10%
  - Elimination of unilateral recourse to arbitration

PENSION & HEALTH CARE REFORMS

- ❖ **Future ⇧ in public pension expenditure ≤ 2.5 % of GDP, or up to EU-average of 14% - (5/2010)**
- ❖ **Retirement age in line with life expectancy; benefits linked to lifetime contribution; disincentives for early retirement**
- ❖ **Health expenditure not to exceed 6% of GDP**
- ❖ Social security funds merged into one (EOPYY), equalizing benefits and contributions
- ❖ Overhaul of the list of difficult and hazardous occupations, Disability criteria and rules revised (since Sep. 2011)
- ❖ Pharmaceutical expense reduction (2nd MoU)

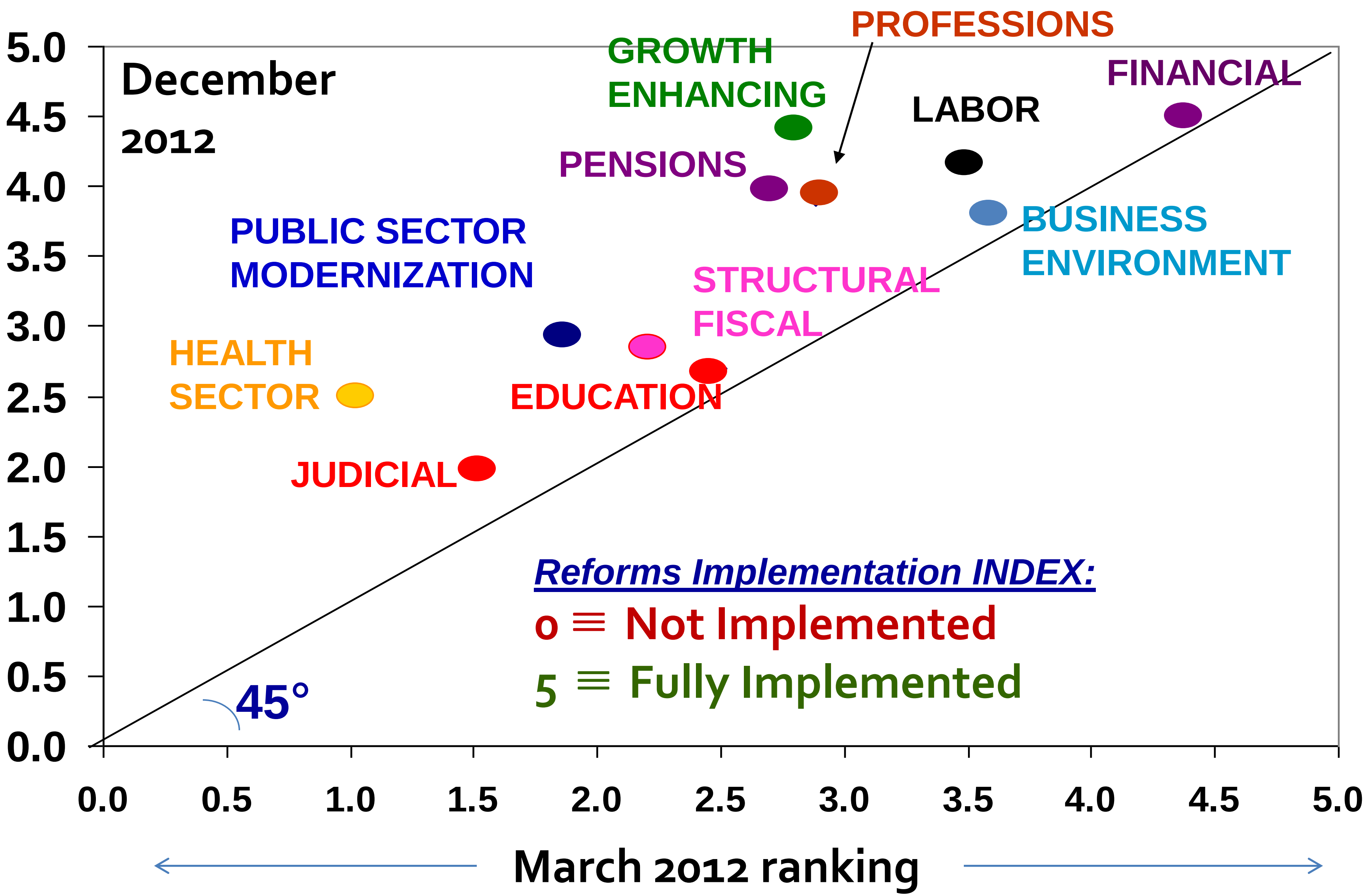
PUBLIC SECTOR REFORMS

- ❖ **Single Payment Authority established**
- ❖ **Wage grid adopted aimed at creating simplified uniformed remuneration system**
- ❖ Census of civil servants (717,792 employees on public payroll)
- ❖ Strengthening of expenditure controls (commitment registries for all GG entities, introduction of supplementary budgets in case of expenditure overruns, Medium Term Fiscal Strategy framework (including updates of MTFS)

GROWTH ENHANCING, BUSINESS ENVIRONMENT & COMPETITIVENESS REFORMS

- ❖ **"De jure" removal of restrictions in "closed-professions'";** e.g**.** Liberalization of Transports, taxis & cruise-ships (cabotage).
- ❖ Simplification of fast-track investment licensing, Reduction of red tape to exporters
- ❖ Measures to increase absorption of Structural and Cohesion funds.

II.1 QUANTIFYING THE PROGRESS IN REFORMS FROM MARCH 2012 TO DECEMBER 2012



II.1 PRIORITY REFORM-WORK REMAINING AHEAD

Public Sector Modernization

- ❖ Transfer redundant staff to "labour reserve" and then begin lay-offs; Politicians and public employees uniformly resist it; Requires realistic organograms and a lot of hard work
- ❖ Speed-up of the public procurement framework (pilot process already in hospitals)

Structural Fiscal Reforms

- ❖ Strengthen independence of the General Secretary responsible for revenues
- ❖ Complete Restructuring of the tax system (closure of offices, increase number of inspectors to 1.000 from 235, audits of large tax payers not operational yet)
- ❖ Anti–corruption plan (penalties for tax evasion, protection of whistle blowers, empower the internal audit of tax offices)
- ❖ IT system that interconnects tax offices: on-going
- ❖ Legal Clearance of real estate for future privatizations

Judicial reform

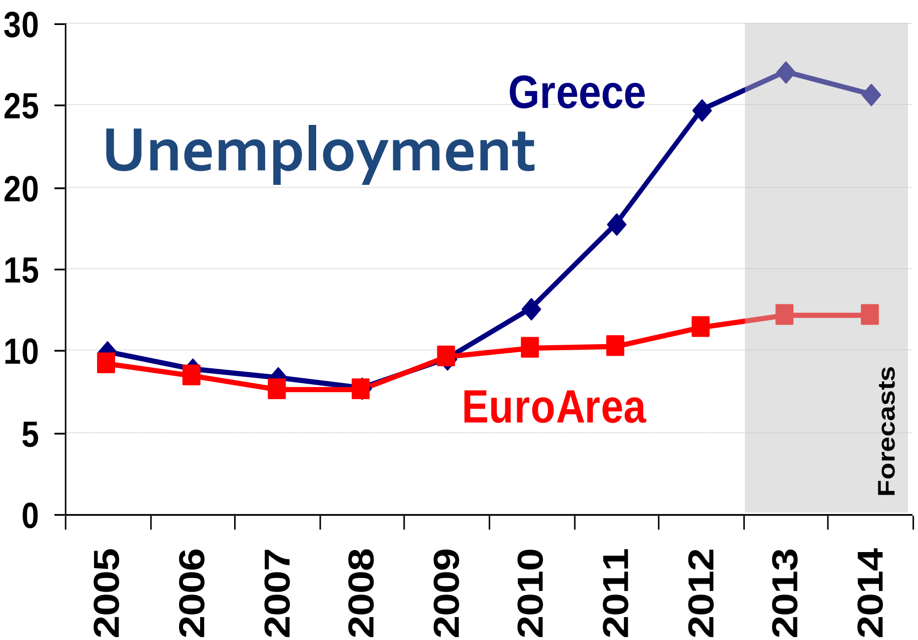
- ❖ Update existing plan for reduction of backlog of tax cases; past targets already missed
- ❖ Non tax cases: Not even the study of the problem is ready, yet plan is supposed to be operational by June 2013
- ❖ Opening access to mediation services for non-lawyers
- ❖ New Code of Civil Procedure to be ready by end 2013

Health sector reform

- ❖ Pharmaceutical spending reduction (generics to reach 40% use from current ~ 18%)
- ❖ Double entry accrual accounting in hospitals to reach 100% from current 70%
- ❖ Centralized procurement not covering all parties yet

II.2 CUMULATIVE RECESSION REACHES RECORD LEVELS

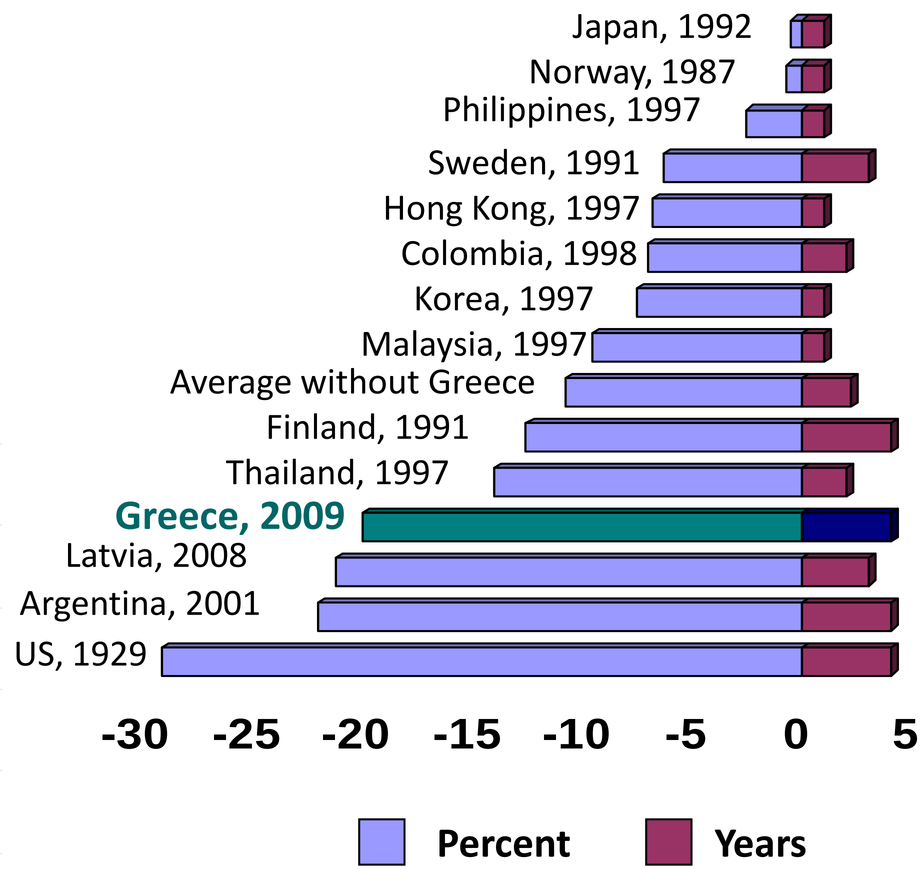
- Recession is one of the worst in global history over the last 80 years
- By end-2013, only US depression worse
- Risk of social upheaval rises as incomes collapse and unemployment worsens
- The most important policy task is to stop the recession



Source: European Commission

Historical Banking Crises:

% Cumulative loss in Output & Duration



Source: IMF (2010), Reinhart & Rogoff (2009), European Commission

II.2 CAN THE RECESSION STOP? GDP OUTLOOK IN 2013

	2012 €bn, Nominal	Share in 2012 GDP	2012 %yoy Real	2013f %yoy Real
Private Consumption	142.8	73.2%	-9.1%	-8.5%
Government Consumption	34.4	17.6%	-4.2%	-7.0%
Total Consumption	177.2	90.7%	-8.2%	-8.4%
GFCF	26.3	13.5%	-17.6%	-4.0%
Domestic Demand	203.5	104.2%	-7.6%	-8.0%
Exports	52.3	26.8%	-2.4 %	5.7%
Imports	62.1	31.8%	-13.8%	-9.4%
Real GDP	195.2		**-6.4%**	**-3.8%**
GDP deflator			-0.5%	-1.0%
Unemployment			24.4%	26.6%

II.2 UPSIDE POTENTIAL for 2013

- The **fiscal drag** from fiscal consolidation measures (**€2.185bn** from the carry-over of previous measures and **€9.374bn** from measures agreed in October 2012) …
- can be **counterbalanced** by the following **Liquidity Boosts**:
  - ✓ Improved absorption of **EU Structural Funds**: government budget accounts for **€5.7bn** or **3.1% of GDP** of net inflows from the EU (comparable to previous non-recessionary years)
  - ✓ Planned **reduction of government arrears** of **€9.5bn** or **5.0% of GDP**, €0.7bn disbursed in Dec 2012 , and remaining throughout 2013
  - ✓ **€1bn** of **EIB funding** agreed for 2013 for SMEs (this will probably be larger due to leveraging/co-financing of projects by banks)
  - ✓ **Recapitalization of Greek banks (€23.5bn**) – already occurred in the form of bridge financing - and its impact on banks' available funding & cost of funding
  - ✓ A **possible return of deposits** (this factor is mitigated by the need to reduce exposure to the Eurosystem for liquidity- no assumed impact)
  - ✓ Better outlook of investment and consumption if **uncertainty regarding Euro participation resolves**(no assumed impact)

- **Summing up the previous elements ⇨ net liquidity injection is positive**

II.2 DOWNSIDE RISKS IN 2013

1. Slippages in privatizations & budget execution, are followed by **automatic extra restrictive measures**, thereby enlarging the fiscal drag
   a) Budget execution slippages already evident in January & February 2013, originating mainly from a drastic fall in VAT as economy shrinks
   b) Privatizations receipts of €2.6bn may turn out more difficult than expected
2. The **economic and political environment in Europe may deteriorate** and a euro accident (e.g. Italy) may happen prior to the September 2013 German elections, having a negative impact on Greek exports
3. If private sector **liquidity squeeze persists**, it could lead to a **non-linear** increase in the number of –otherwise healthy- firms closing down with severe repercussions on unemployment and GDP ⇨ social unrest ⇨ possibility of economic collapse
4. **Liquidity constraints** for households which consume > 100% of their disposable incomes and a **negative wealth effect** (falling house prices and stock prices, bond haircuts) could increase pass through to consumption
   - Baseline forecasts assume an 0.9 elasticity of consumption w.r.t. disposable incomes; e.g. if elasticity is increased to 1.3, private consumption would be reduced by -12.2% and the subsequent GDP fall would enlarge to **-6.4%**
   - If, in addition, investment falls by -20%, instead of -4%, due to firms' closing down, GDP fall would enlarge to **-8.5%.**

FINAL REMARKS: *Green-shoots in a shrinking Economy?*

1. WHEN will the economy stop shrinking?
   - When aggregate demand stabilizes, implying a delicate balance between fiscal austerity and pro-growth policies.
   - Greece failed in this balance thus far partly due to the loss of politicians' credibi-lity ⇨ delay in European liquidity injection ⇨ economy is now in a depression
   - There is a bifurcation point over the next 4-6 months as households and companies are being squeezed by higher taxes, declining wages and pensions, rising unemployment and a shortage of liquidity. We may
     1) Survive the crunch and subsequently recover
     2) Survive the crunch and subsequently muddle through with persistent stagnation
     3) Enter a rapid vicious economic and political ⇩ cycle ⇨ living standards collapse
2. Reform recipe ought to go ahead even if worst scenario were to prevail

3. HOW will long-term growth come back?
   - By addressing the factors which drive long-term growth: (i) Investment/GDP ⇧, (ii) quantity & quality of human capital ⇧ (iii) size of government ⇩, (iv) inflation ⇩ (v) cost & price competitiveness ⇧, (vi) openness ⇧, (vii) quality of institutions like Government effectiveness ⇧, rule of law ⇧ & corruption⇩
   - The MoU addresses all causal growth factors, and we can already claim success in beginning to improve a number of them

Thank you for your attention

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I wish to thank my colleagues at Eurobank for their comments