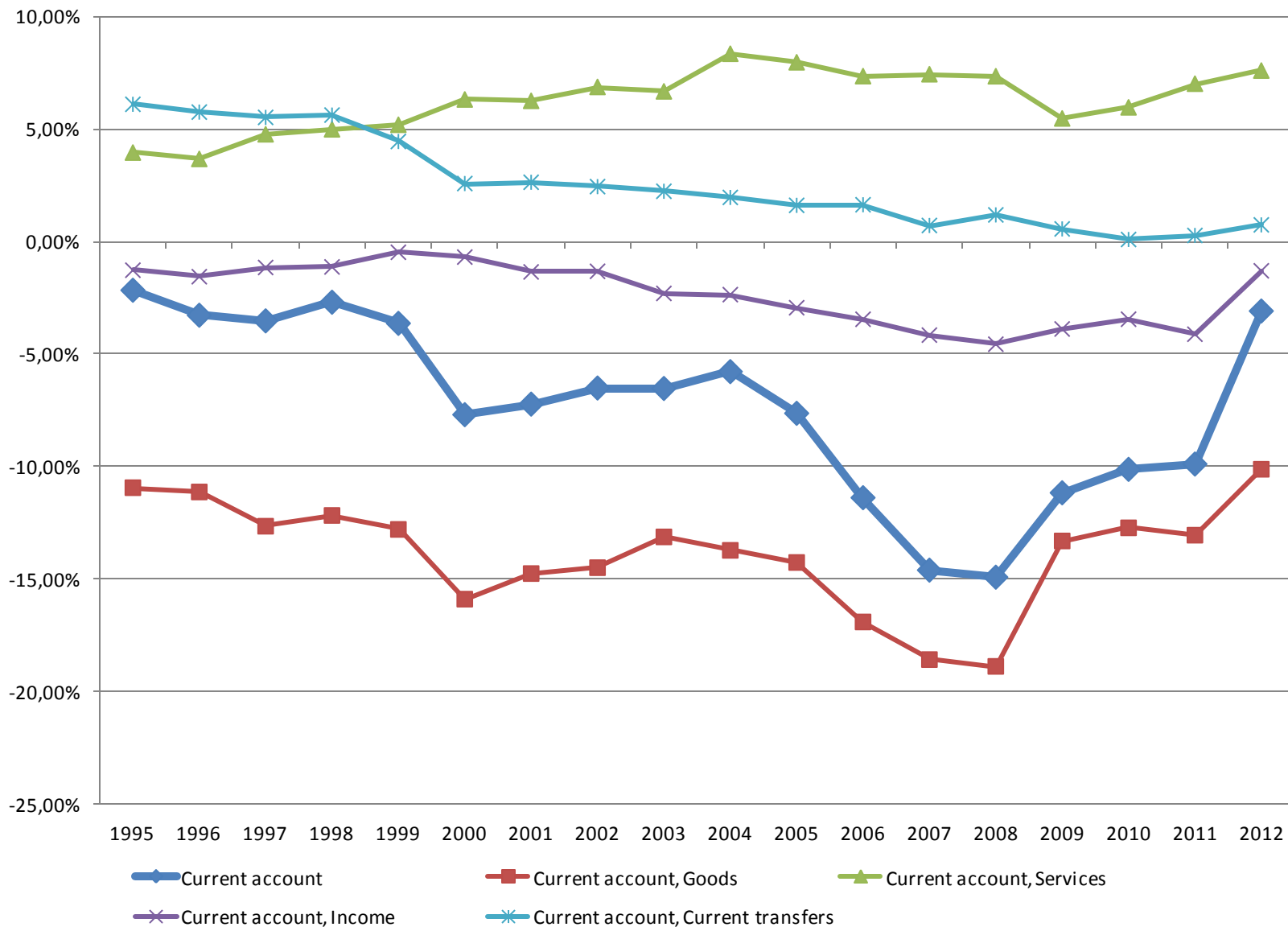


Discussion with Daniel Gros and Gikas Hardouvelis

Aristos Doxiadis

GREECE: current account components, % GDP



GEO/INDIC_NA	Exports of goods and services	Imports of goods and services	Trade G&S
Belgium	84.9	84.1	169.0
Ireland	84.0	74.8	158.8
Netherlands	76.3	68.0	144.3
Bulgaria	58.2	78.7	136.9
Czech Republic	64.4	62.1	126.5
Austria	59.3	53.5	112.8
Denmark	54.7	51.6	106.3
Sweden	53.5	46.8	100.3
Finland	46.8	43.1	89.9
Poland	39.9	43.9	83.8
Portugal	32.4	42.5	74.9
Romania	30.4	43.5	73.9
Greece	24.1	38.6	62.7
Spain	26.5	32.3	58.8
Italy	28.5	29.3	57.8
France	26.9	29.1	56.0

Percent of GDP, 2008 (Eurostat)

GEO/INDIC_NA	Exports of goods	Imports of goods	Trade goods
Belgium	66.9	68.4	135.3
Netherlands	61.0	53.7	114.7
Bulgaria	42.9	67.2	110.1
Czech Republic	54.8	54.2	109.0
Austria	42.9	43.2	86.1
Ireland	45.3	32.0	77.3
Sweden	38.0	34.3	72.3
Poland	33.2	38.1	71.3
Finland	35.5	31.8	67.3
Denmark	33.3	33.0	66.3
Romania	24.1	37.7	61.8
Portugal	23.8	36.8	60.6
Italy	23.4	23.6	47.0
France	21.3	24.0	45.3
Spain	17.6	25.5	43.1
Greece	10.7	31.6	42.3

Percent of GDP, 2008 (Eurostat)

Self-employment* as % of civilian employment, 2007

Top five
OECD
countries

Turkey	39.0
GREECE	35.1
Mexico	33.9
Korea	31.3
Italy	25.7
OECD - Total	15.8
France	9.0
Denmark	8.8
Norway	7.8
United States	7.0
Luxembourg	5.9

Bottom
five OECD
countries

*Including employers and unpaid family members

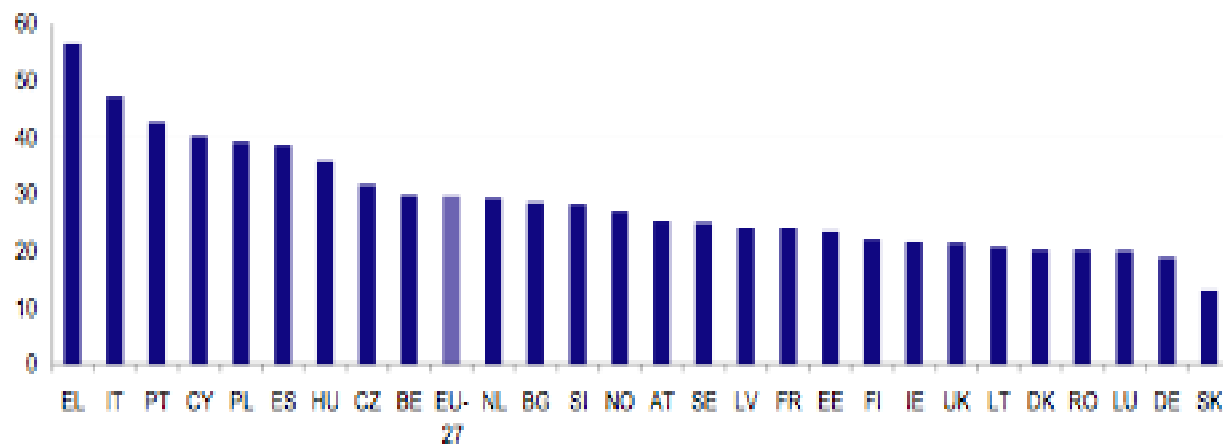
Self-employment distorts macro figures

Share of wages in GDP (2007)

	Germany	Greece
Compensation of Employees	48.5%	35.2%
Gr. Operating Surplus & Mixed Income	40.0%	53.3%
Taxes on production & imports	11.5%	11.5%

Greece had the highest % of employed in units of under 10 people among the 27 EU countries

Figure 4: Micro enterprises – share of non-financial business economy employment, 2005 (%) ⁽¹⁾



Source: Eurostat, Statistics in Focus, 31/2008

NON-TRADABLE

BIG
>250

Government
Utilities
Banks
Telecoms
Media
Retail
22.5%

TRADABLE

Manufacturing
Airlines
Shipping
Tourism
2.6%
(6.5%)

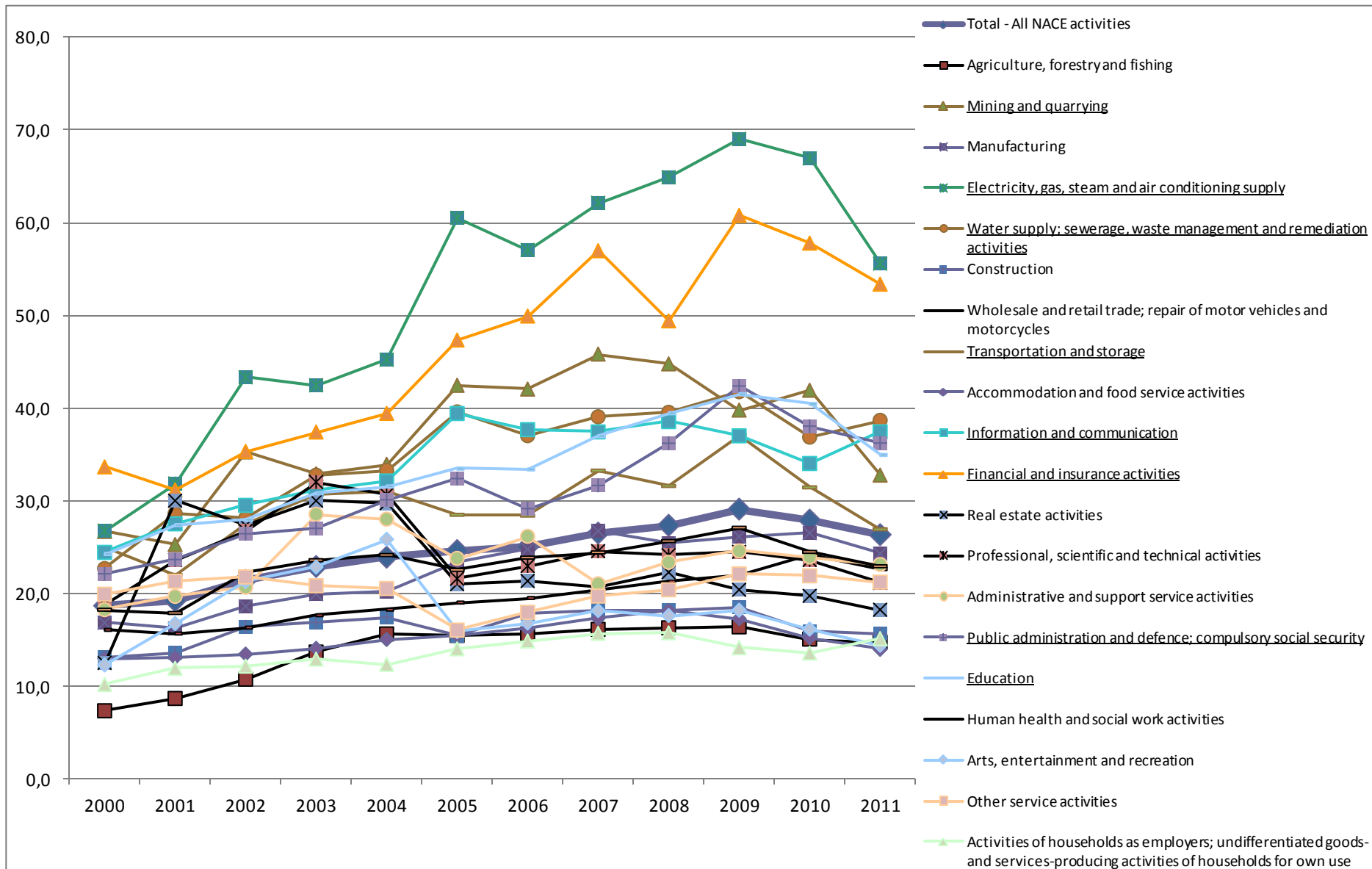
SME
<250

Media
Retail
Shops
Lawyers
Hairdressers
52.2%

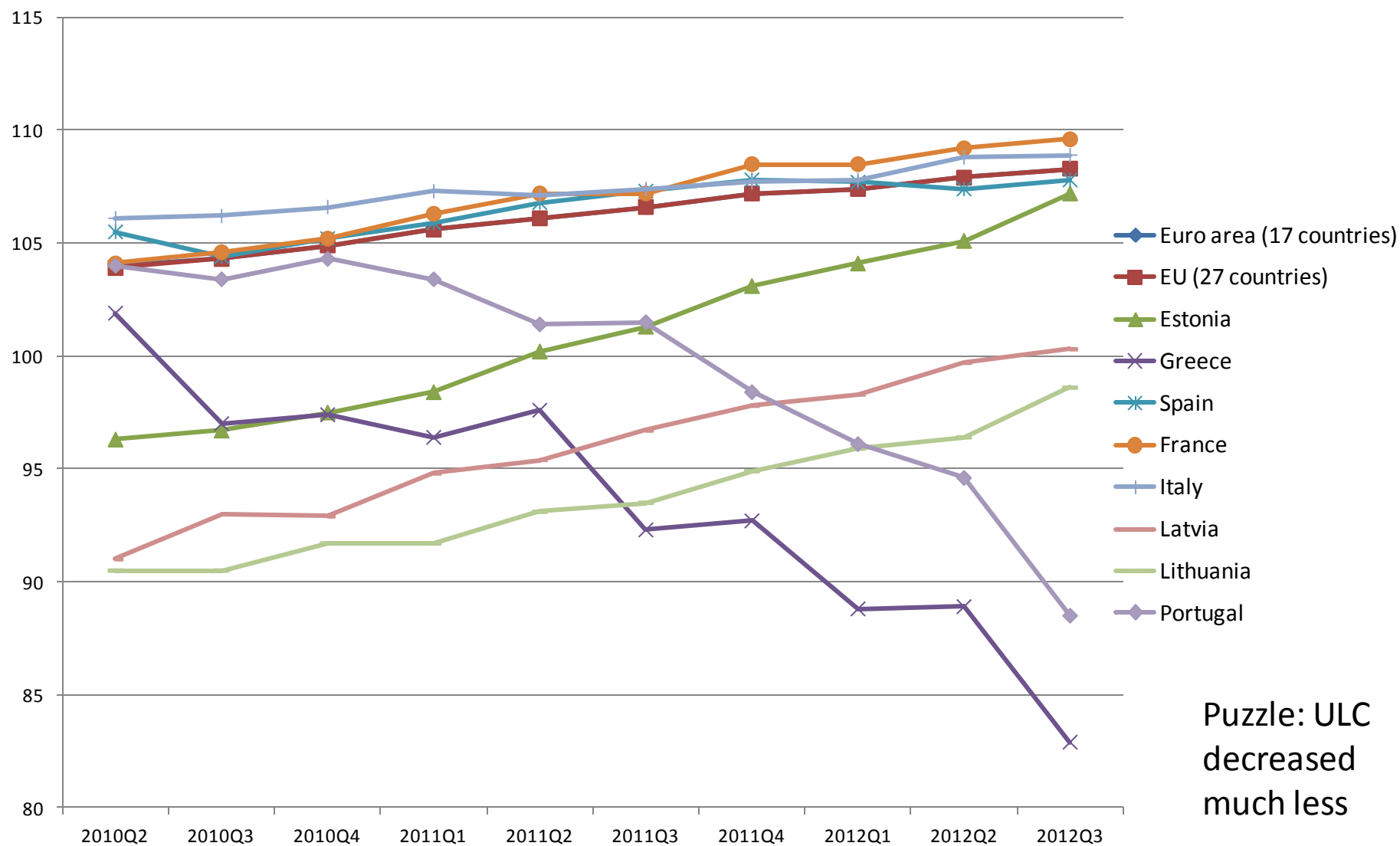
Tourism
Small manufacture
Agriculture
Workshops
Digital Applications
22.7%

Share in total employment, 2007

Annual compensation per full time equivalent employee



Labor cost index, hourly basis (2008=100) (Eurostat)



Puzzle: ULC
decreased
much less

What constrains growth?

	New business	Step growth	Expansion
Intersectoral Incentives	Yes	No	No
Institutional barriers	Yes	Yes	Not much
Discovery costs	Yes	Yes	No
Factor costs and taxes	n.a.	Yes	Yes

The Content of Growth

by

Daniel Gros

(Centre for European Policy Studies)

Athens, 10 July 2013

What growth?

Nature of growth must change:

1. During boom: consumption (financed by government) leads to import boom, show rooms, restaurants, etc.
2. After boom: need exports to grow. Goods exports start from low base, so services, tourism must be key.
3. Unfortunately little sign of this happening.

General growth prospects?

Key inputs:

1. Investment until recent high
 2. Human capital (quantity OK, quality bad, demographics worsening)
 3. Quality of Governance (bad and worsening)
- => Greece needs better institutions (including better schools) not more financial support.

What growth?

From boom to bust:

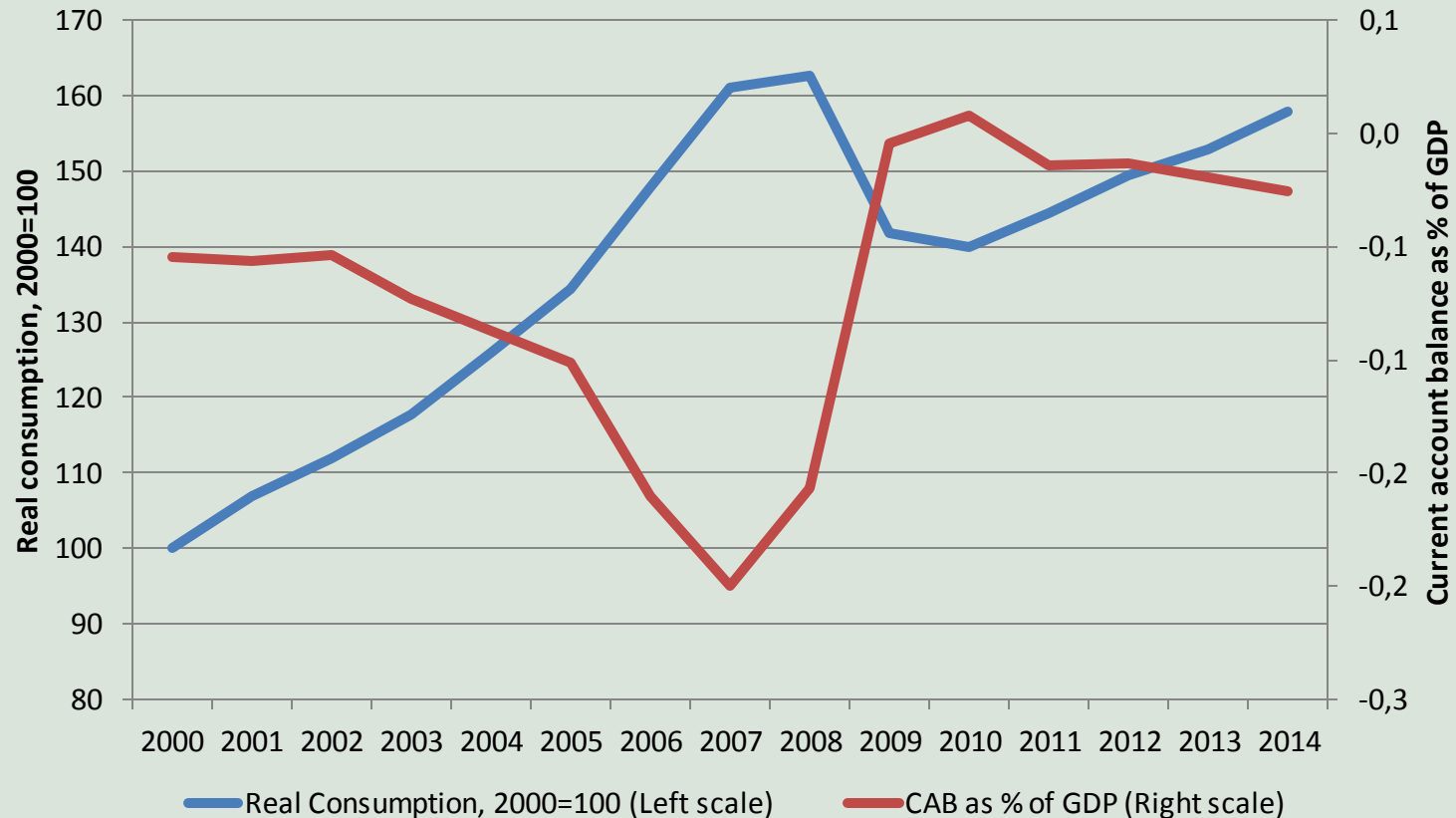
Boom: Consumption up, (external) current account deficit up.

Bust: everything in reverse.

What is better 'short and sharp' or 'slow and never ending'?

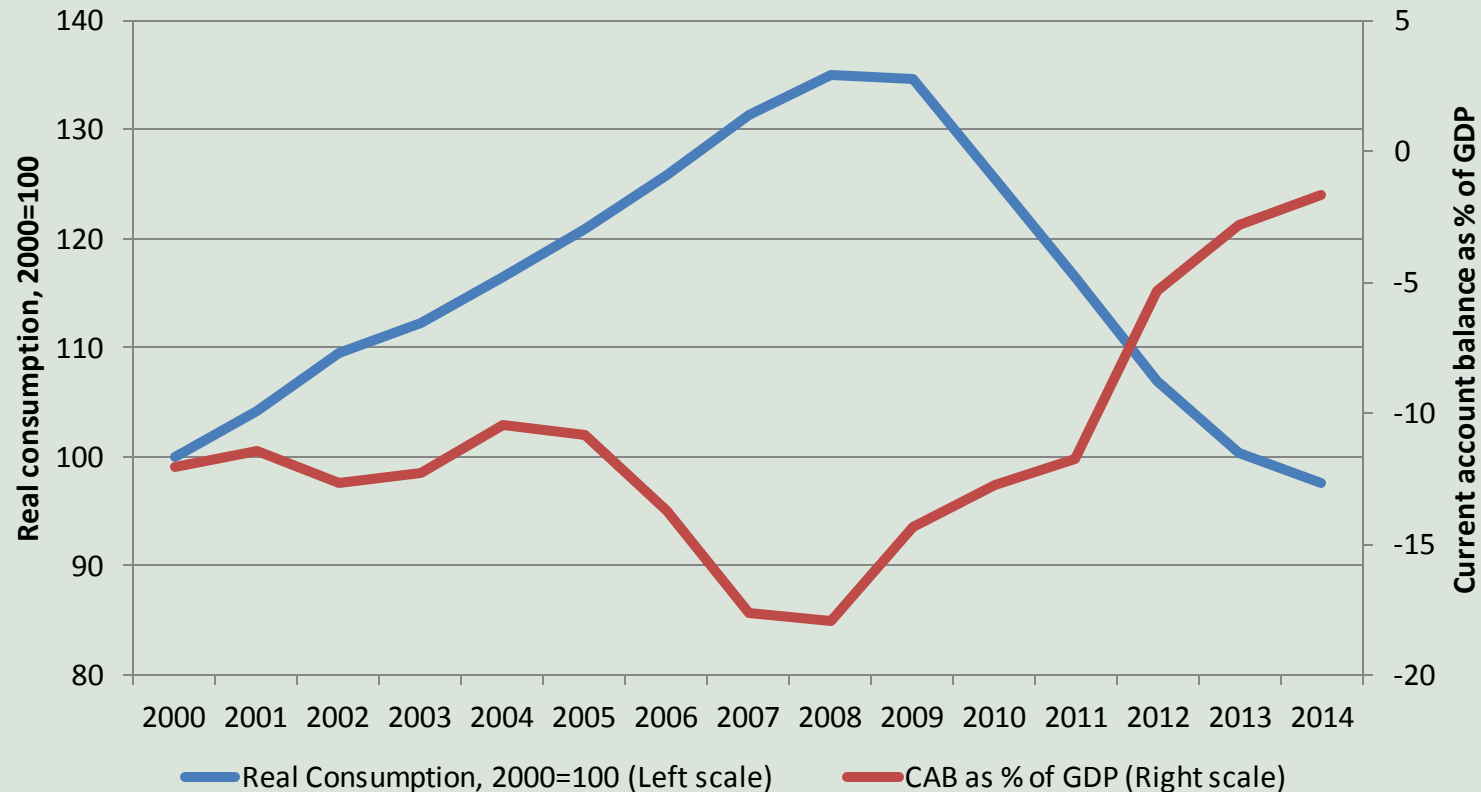
External adjustment through consumption depression (1)

BELL adjustment

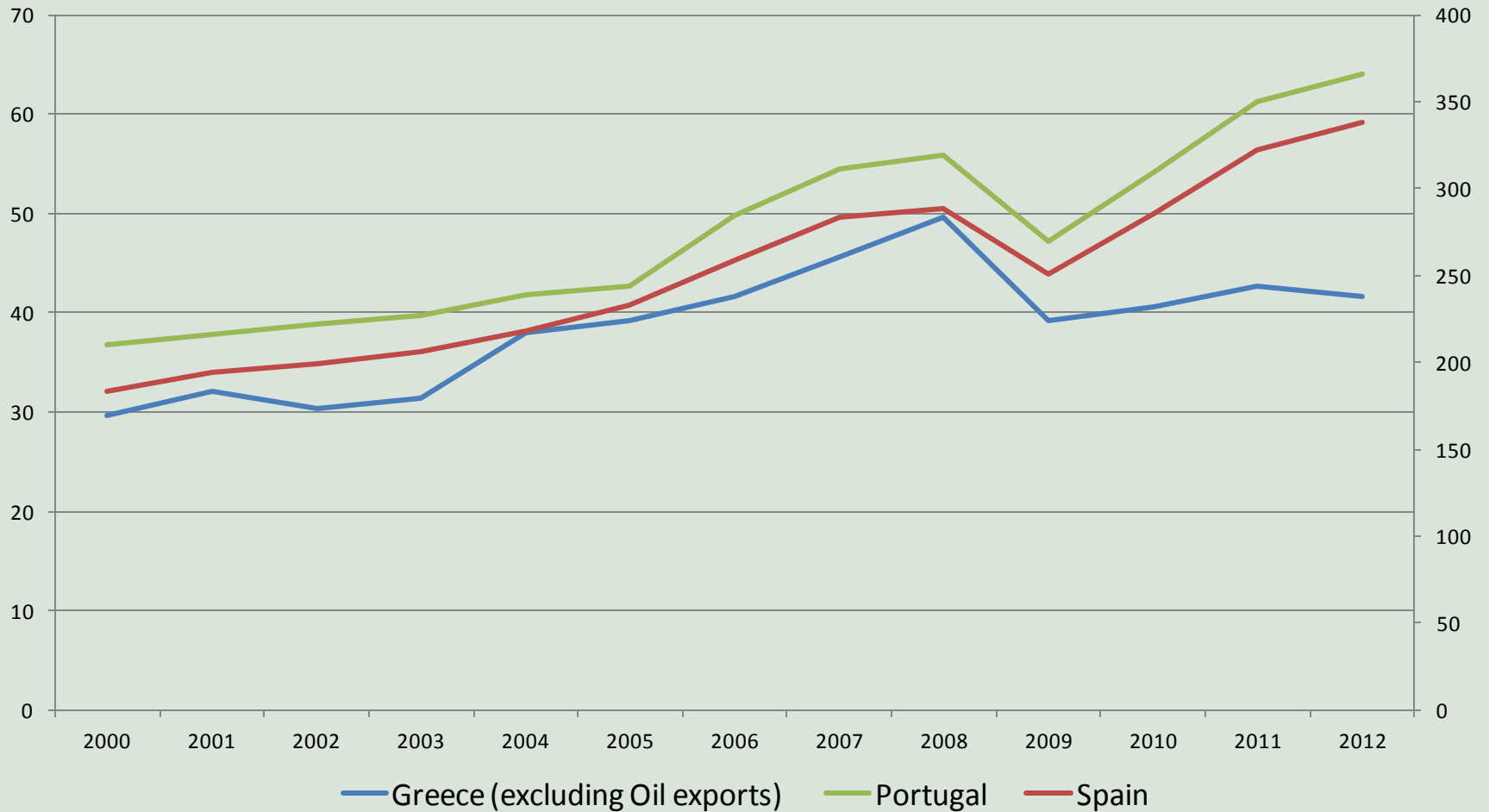


External adjustment through consumption depression (2)

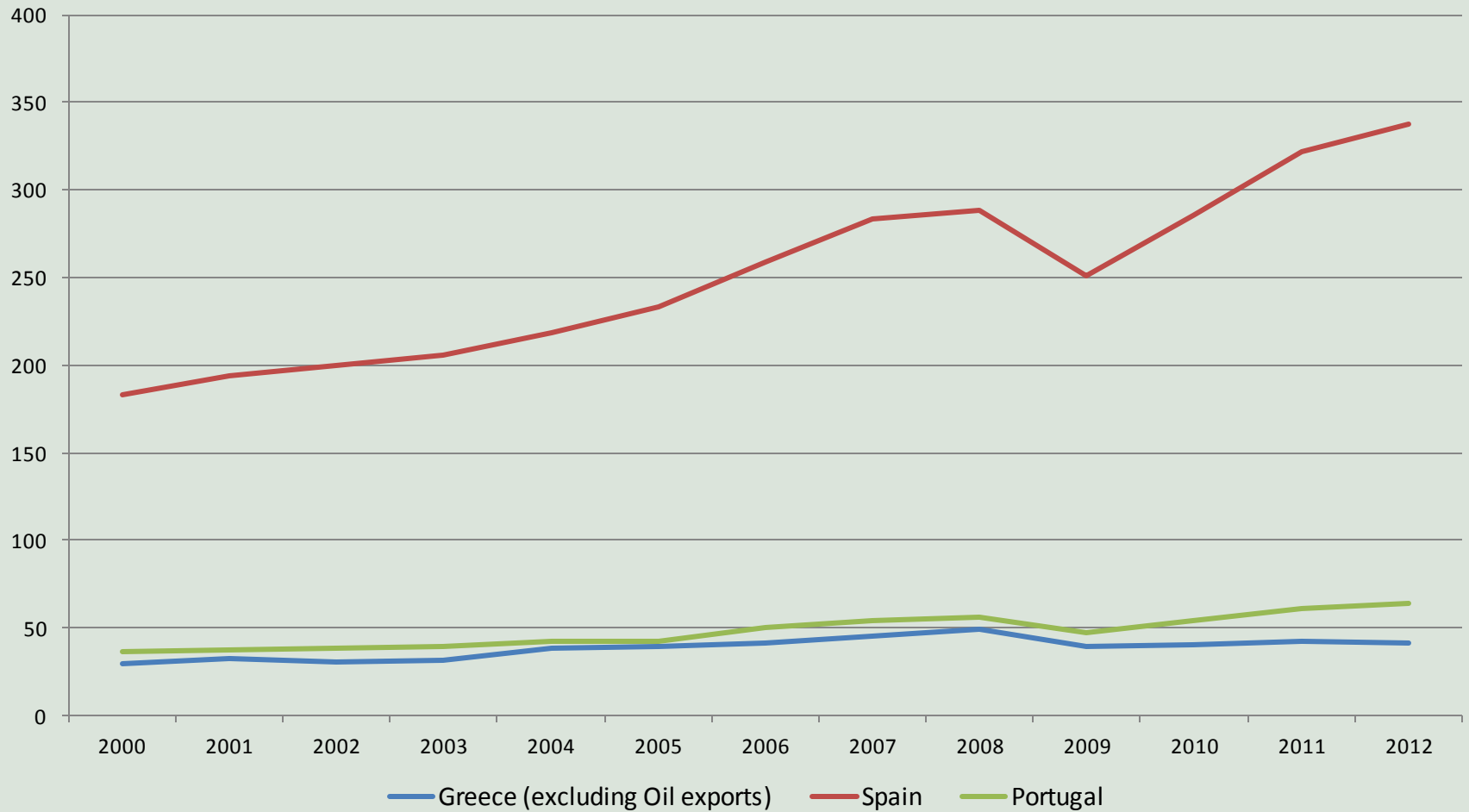
Greek adjustment



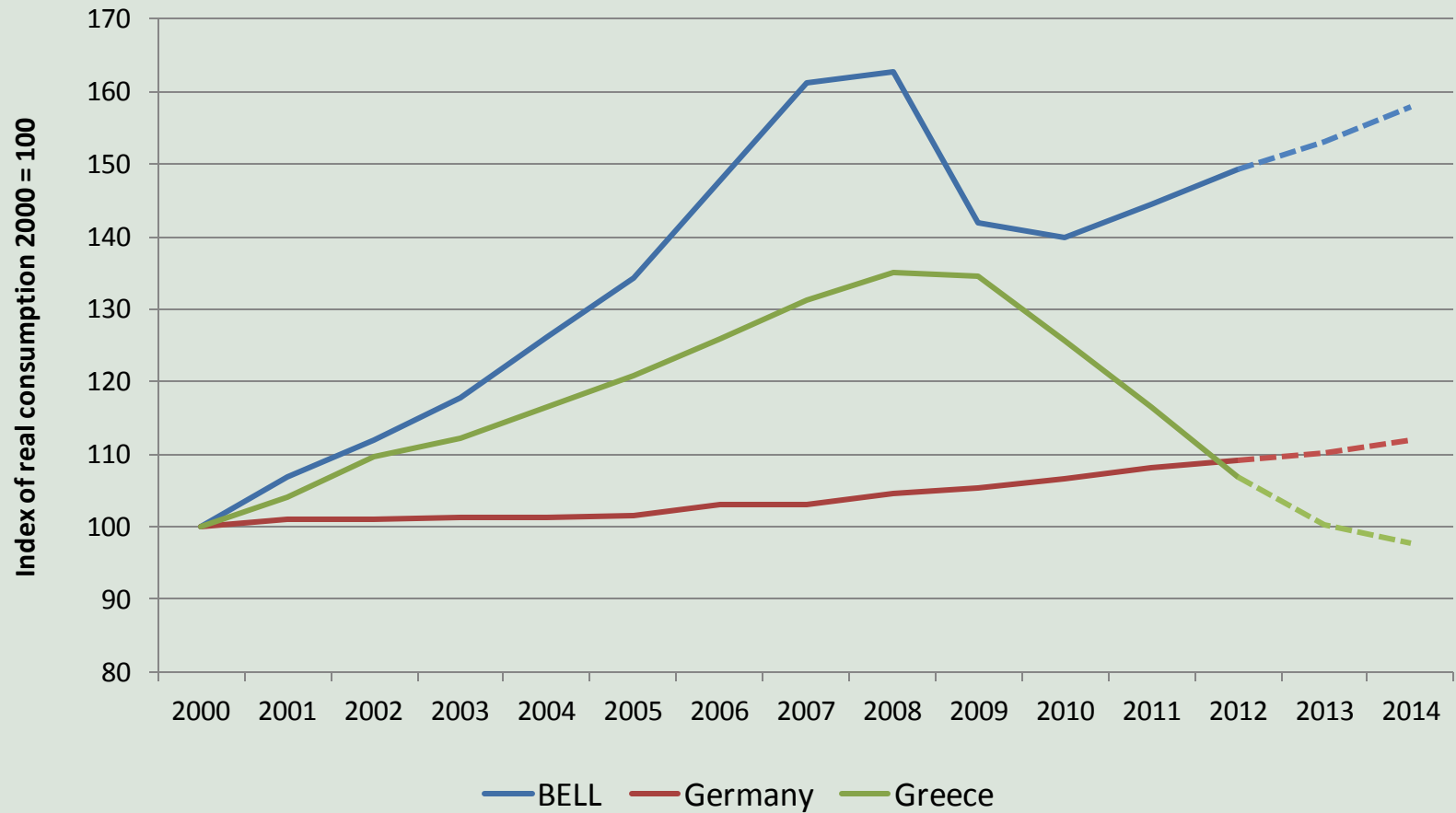
Exports of Goods and Services, in bn Euro



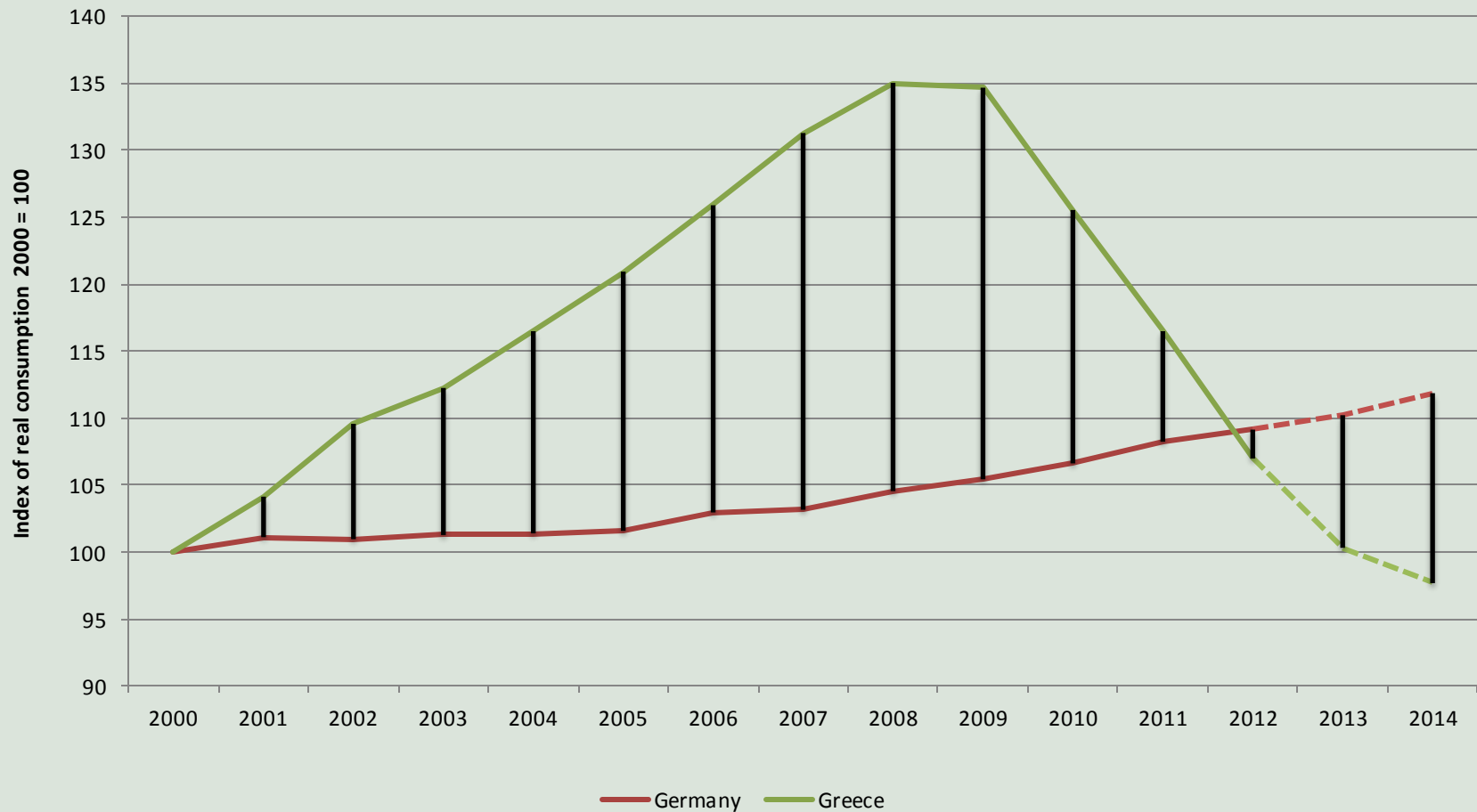
Exports of Goods and Services, in bn Euro



Real consumption relative to 2000

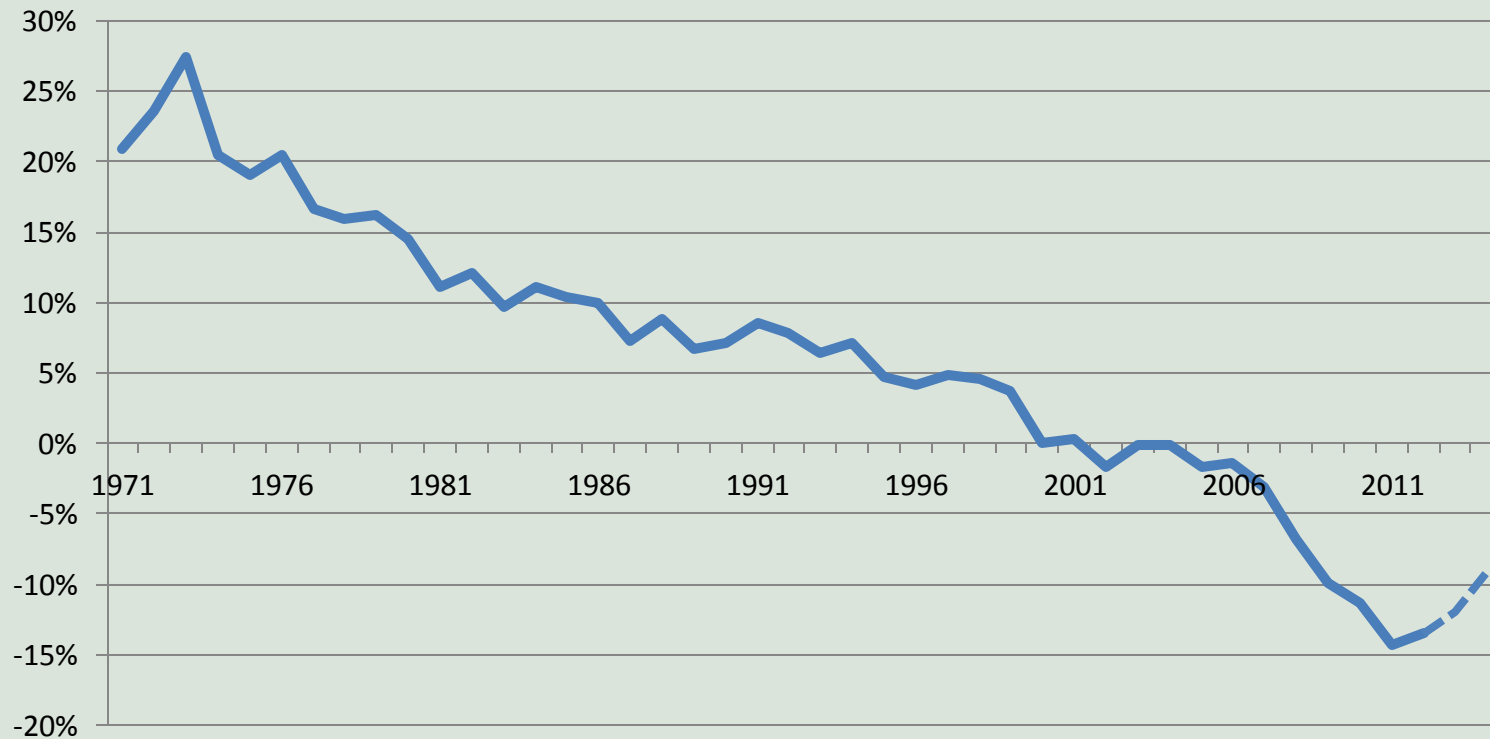


Real consumption gap between Germany and Greece



Greece: long-term evolution of Net National Saving

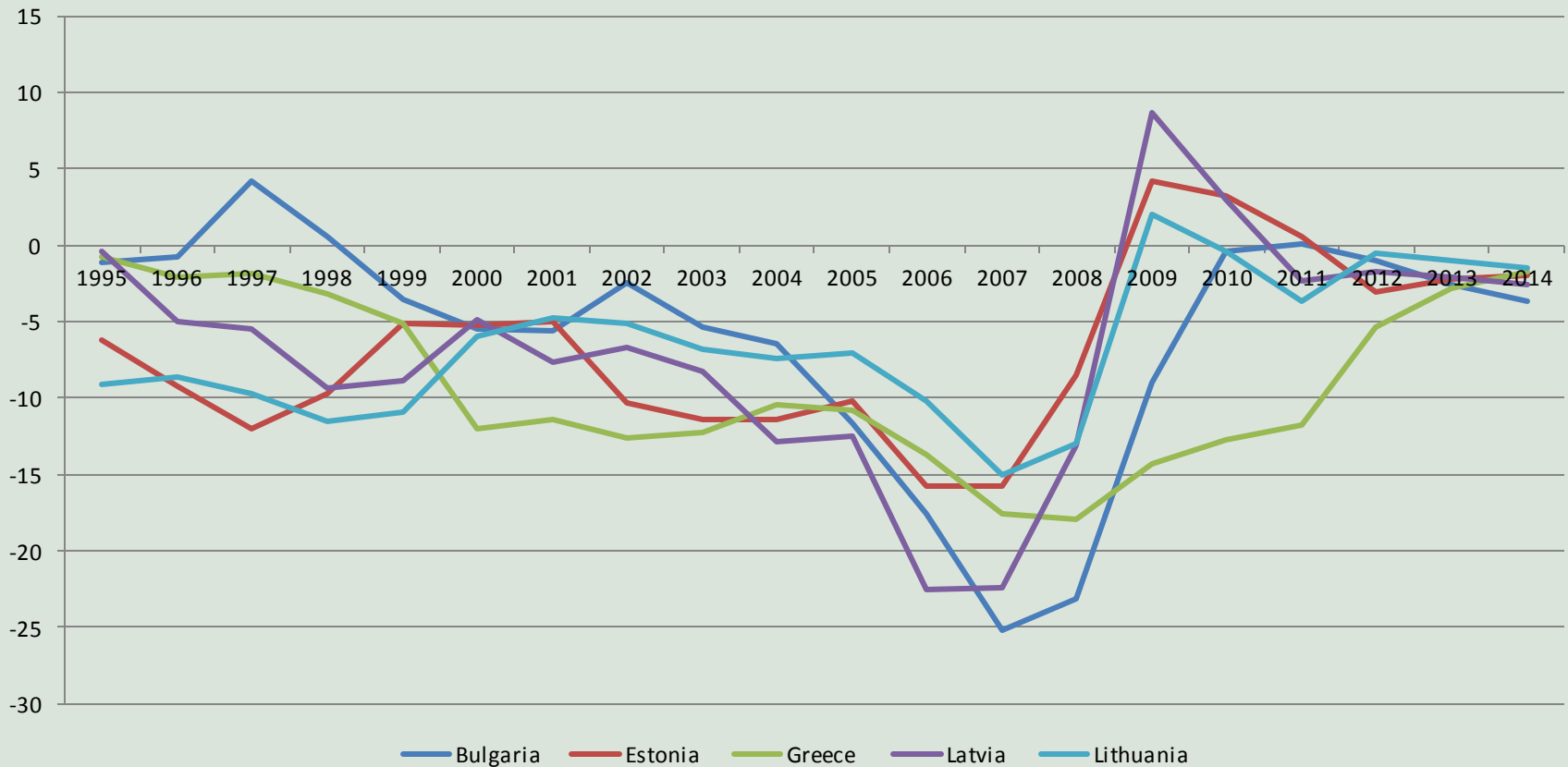
NNS as % of GDP



Source: European Commission Services and own computations

Greece: Slower external adjustment

Current account balance as % of GDP



Gross External Debt ratios 2012

	Greece	Portugal	Spain	Argentina (1999)
Total Gross External Debt as % GDP	241	289	213	52
Total Gross External debt as % of Exports	891	747	662	529
Government & MA gross external debt % of tax revenue	417	301	176	na*

Source: National central banks, European Commission services (AMECO), IFS (for Argentina), JHED (for Hungary external debt) and authors' calculations

Net External Debt ratios 2012

	Greece	Portugal	Spain	BELL	Argentina (1999)
Net External debt (=cumulated CA 1995- 2010) as % of GDP	178	131	62	79	64
Net External debt (=cumulated CA 1995- 2010) % of Exports	660	340	192	106	79

Growth prospects: classic factors of production

I) Physical capital:

Investment rate OK (until recently higher than EU), but accumulation of foreign debt means that foreigners have a claim on large part of the additional output.

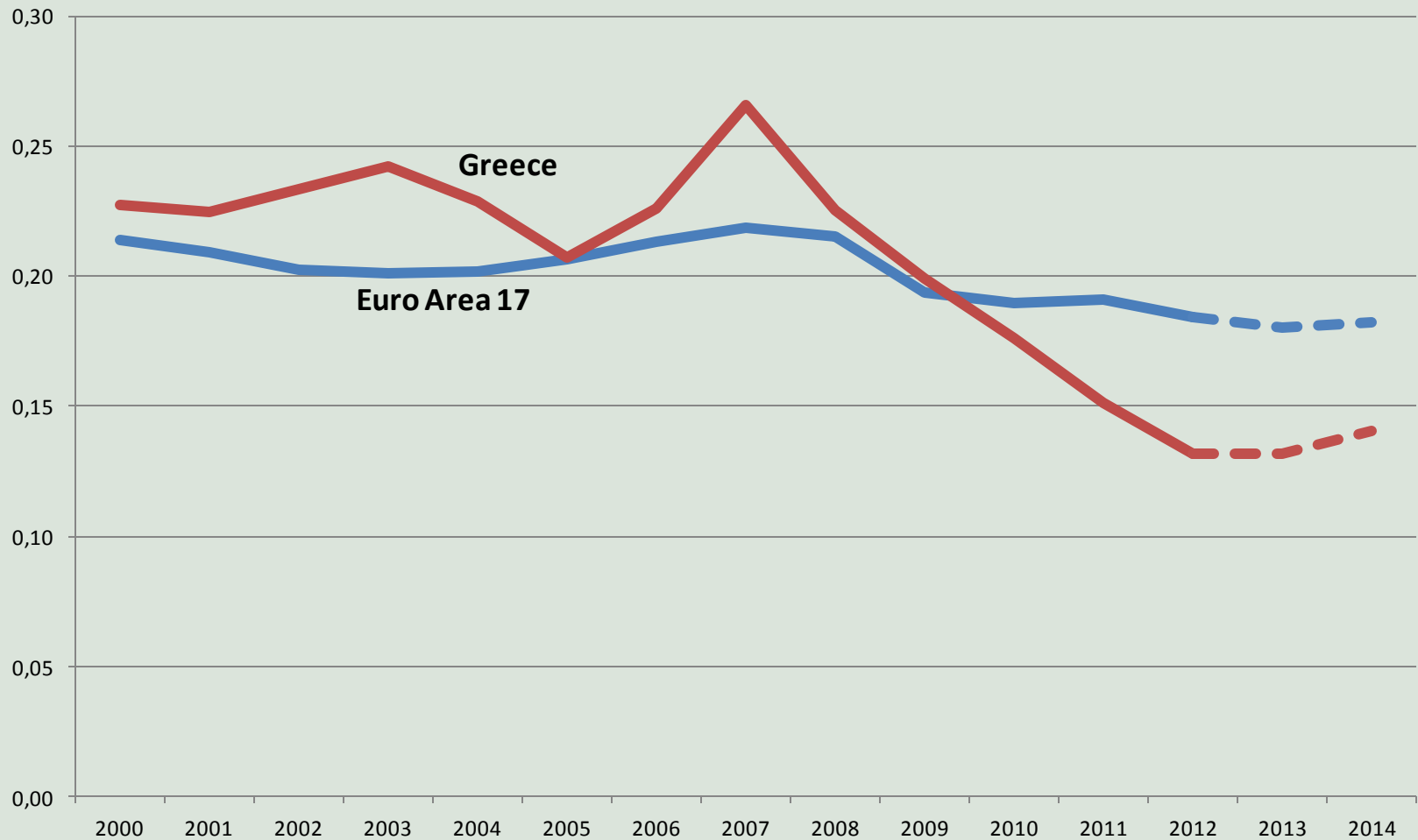
II) Human capital (quality):

School attendance OK, but low quality, hence lagging behind EU leaders.

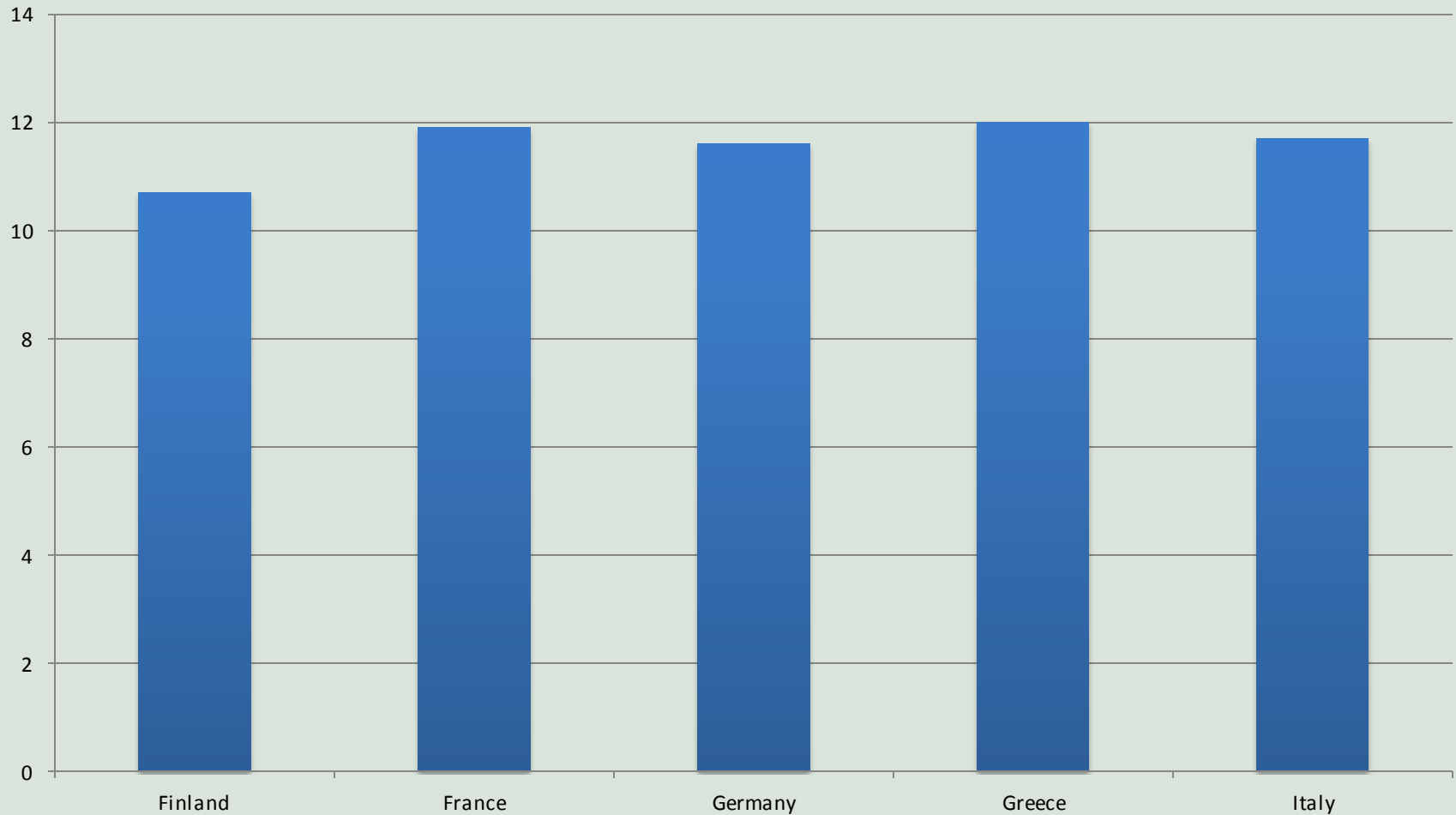
III) Demographics:

Historic increase in labour force is going into reverse (1.8 pct. decline in next decade), worse to come later.

Gross fixed capital formation, share of GDP

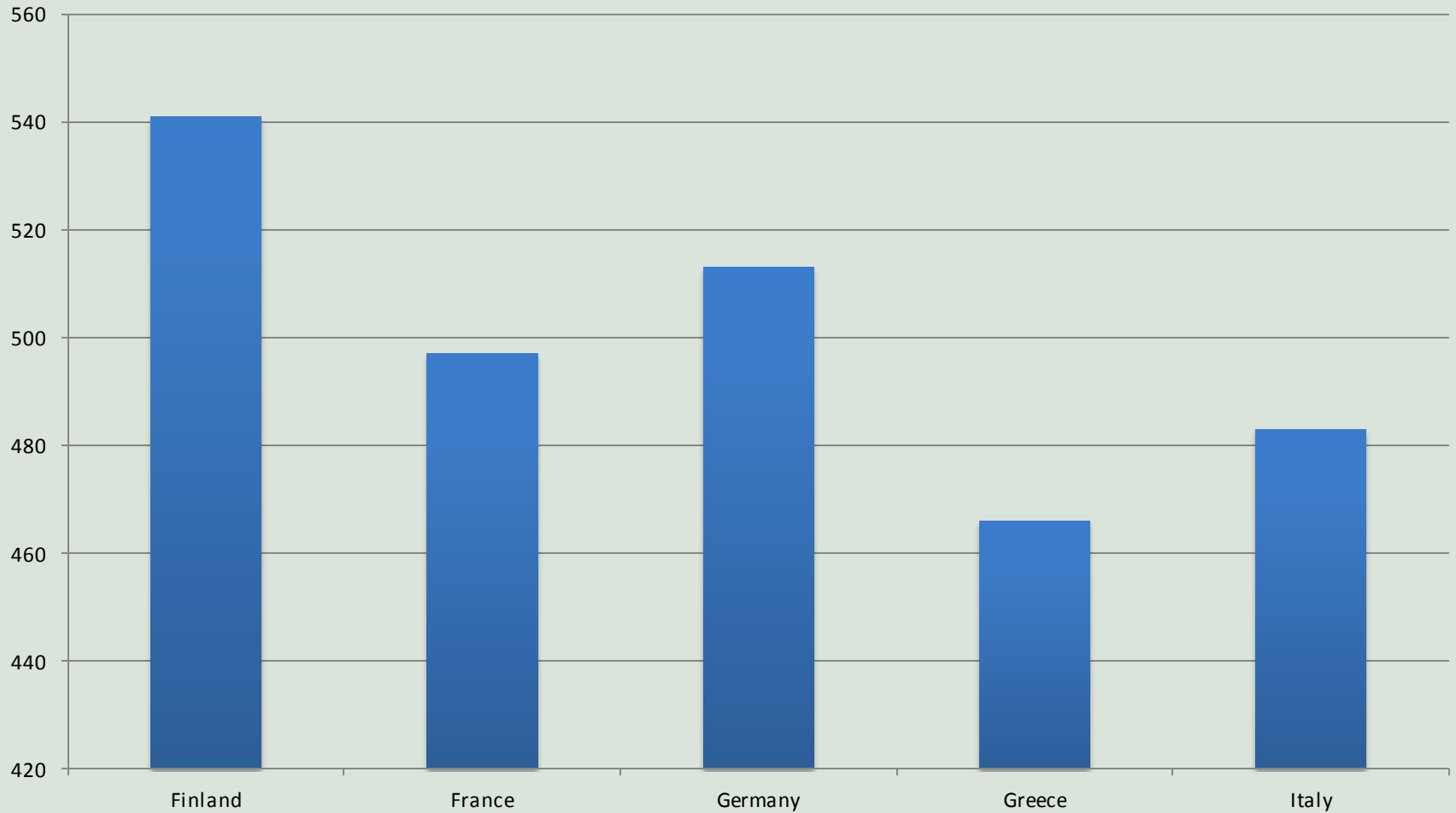


Average years of schooling, cohort 25-29 in 2010

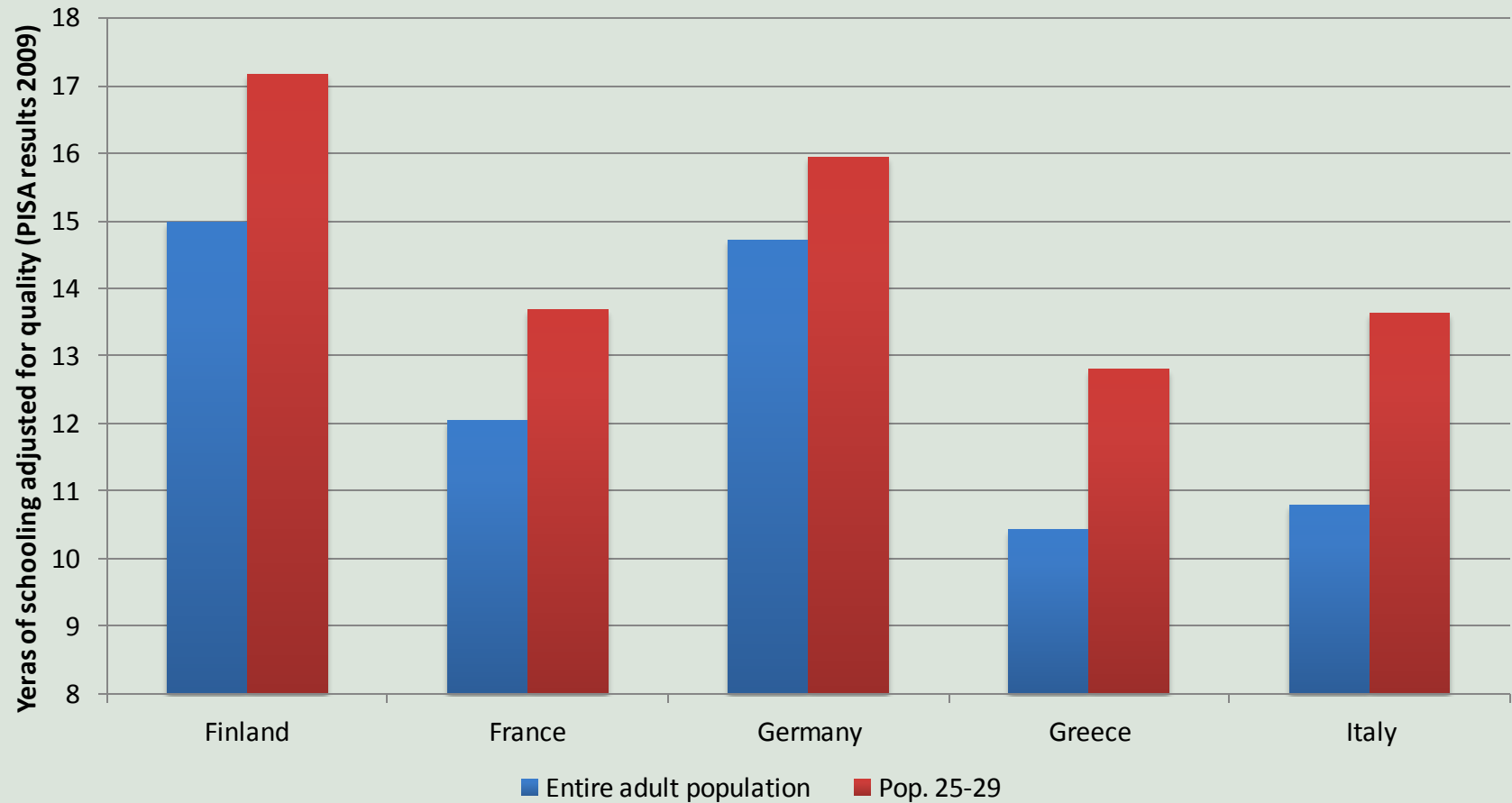


Source: Barro-Lee, 2013

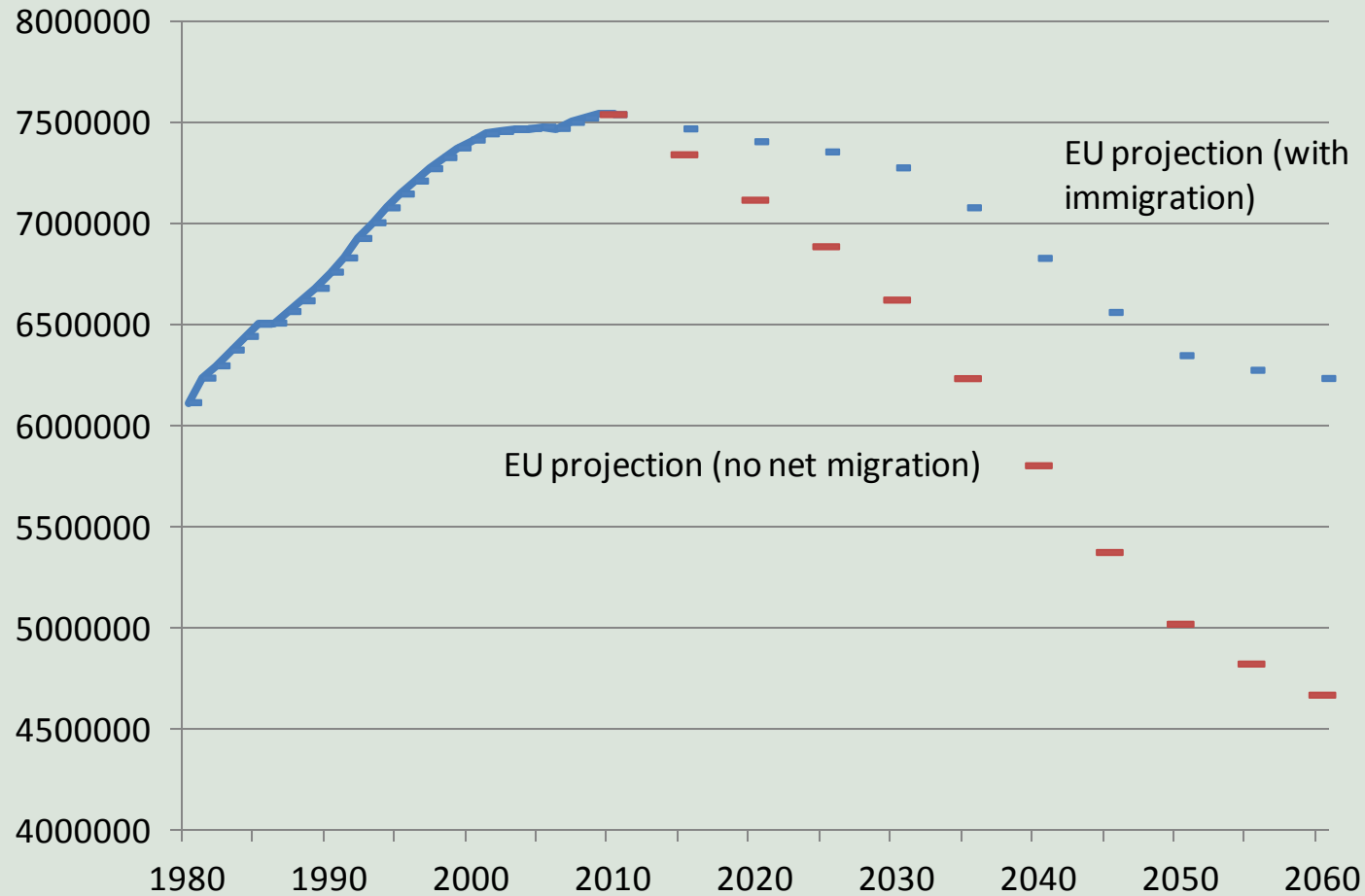
PISA Results 2009/10



Human capital formation (quality adjusted years of schooling)



Potential labour force, population 15-64 years



Quality of Governance?

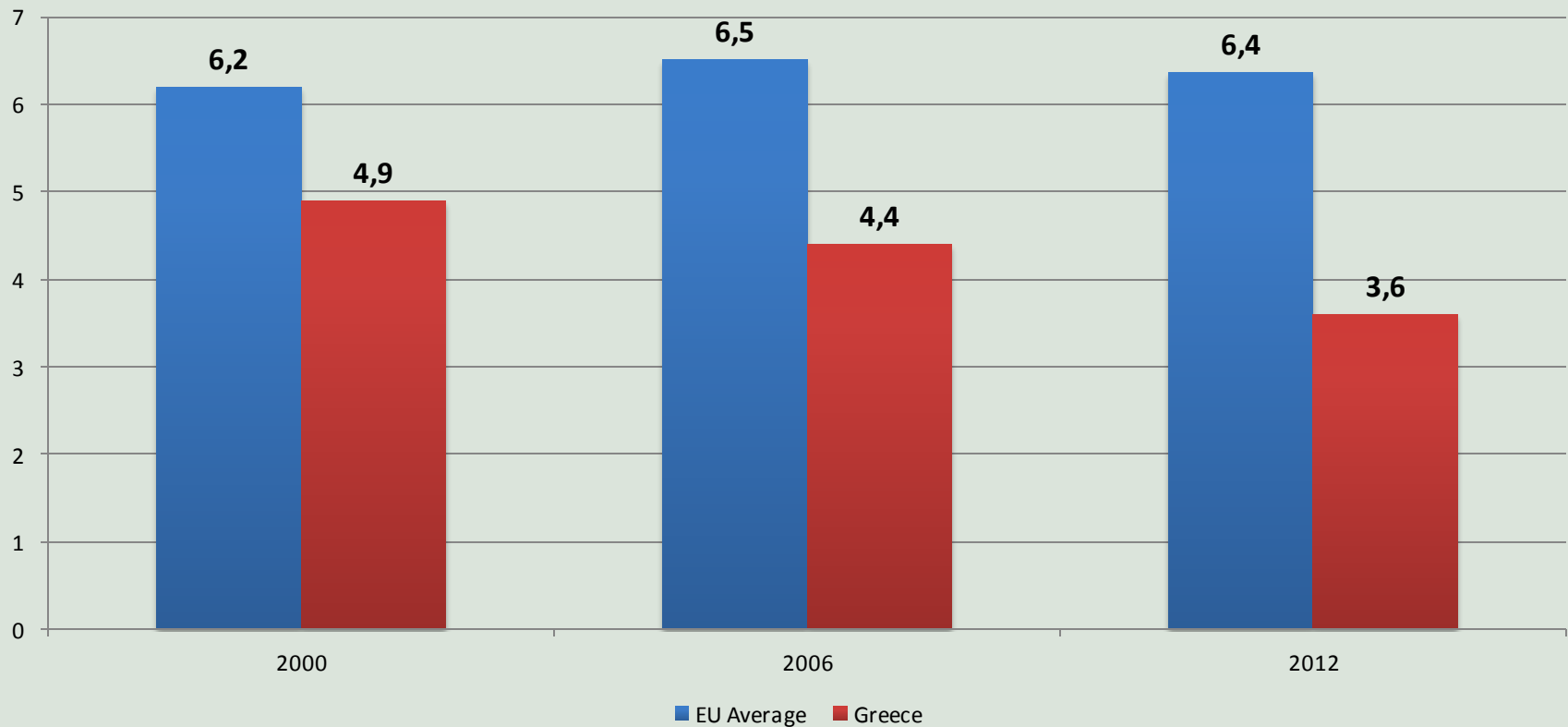
Key for implementing reforms (laws voted by Parliament need to be implemented).

Key for growth (large literature on negative impact of corruption on growth).

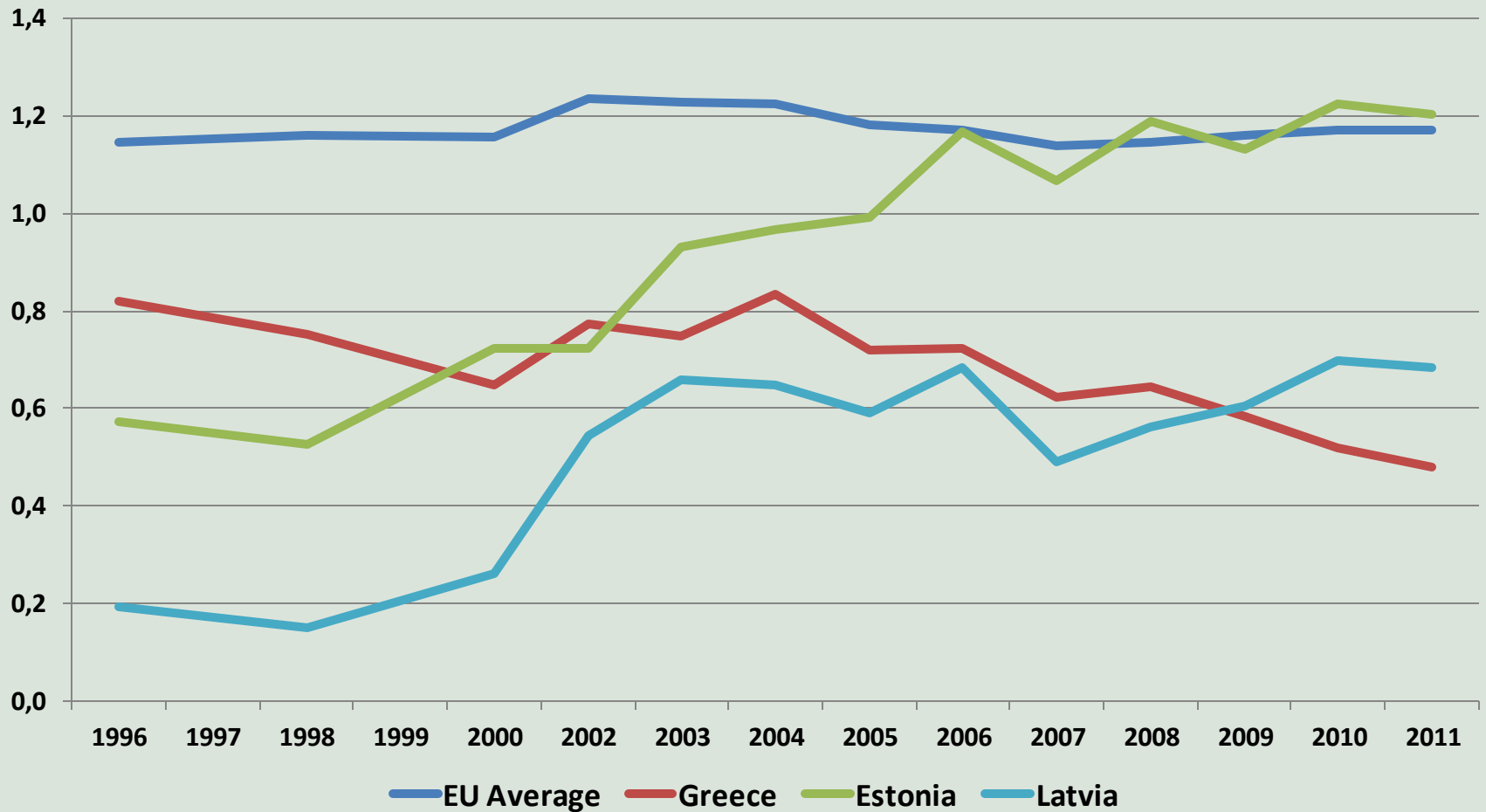
Corruption in Greece not only very bad, but also worsening over time, both absolute and relative to EU-27 (now worst in EU-27, against ninth from bottom in 2000).

Corruption in Greece: going from bad to worse The decline of Greek public administration

(Measured by Transparency International Corruption Perception Index. Higher value means less corruption)



Government Effectiveness (WGI Worldbank)

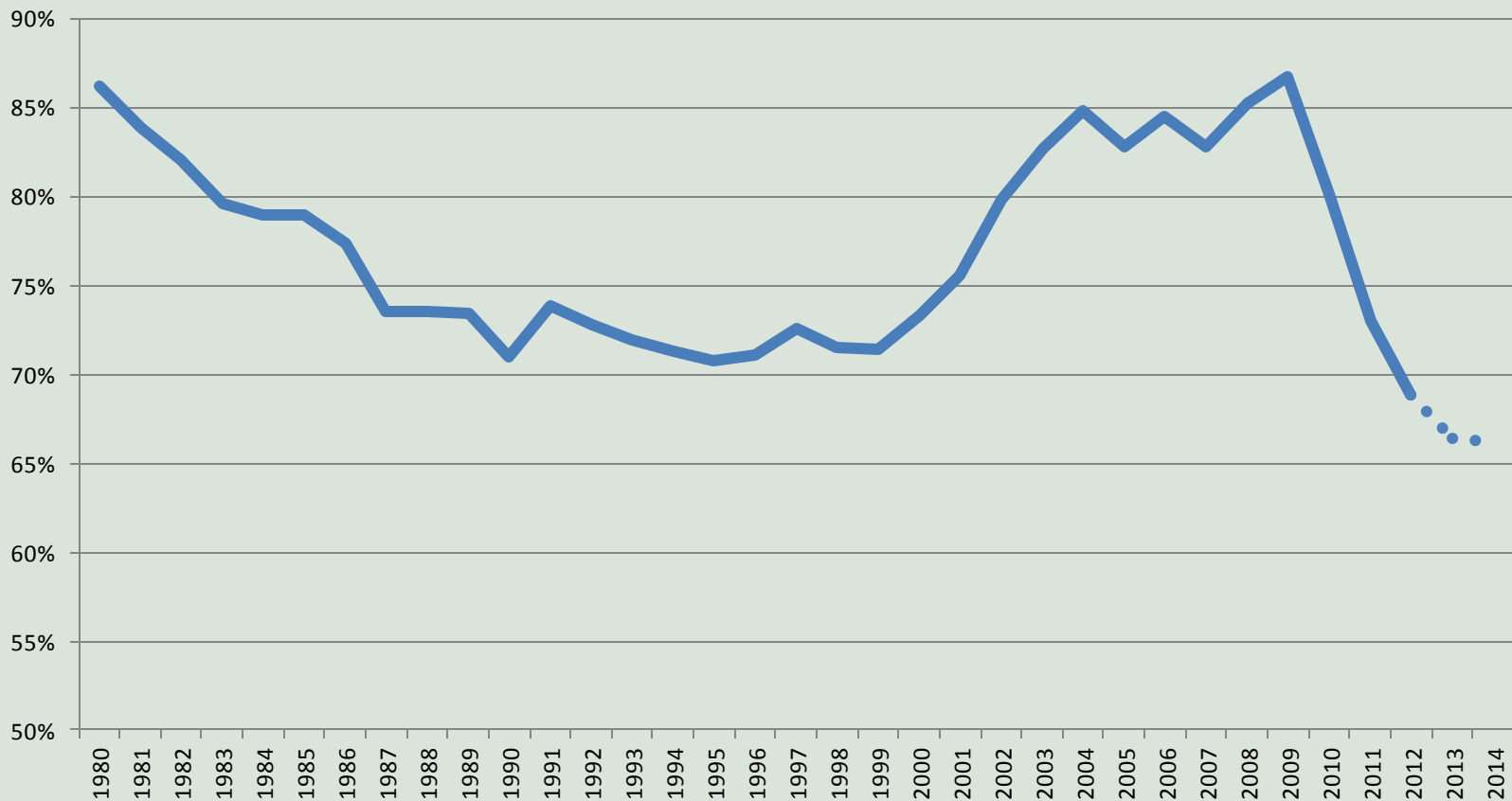


Concluding remarks

- There is no silver bullet to get growth started again.
- Resources must shift from consumption to exports, which requires time and lower wage costs.
- Long term growth prospects hampered most of all by poor institutions (schools and public administration in general), not by capital shortage.

Appendix: The ebbs and floods of Greek economic development

Greece's GDP per capita (PPP-based) as percentage of EURO core (DE, I, ES, F)



Appendix: Sector specific growth, 2000-2009.

	Gross value added, billion Euros, 2009	Real growth, index (year 2000 = 100)	
		2000	2009
Non-tradables	174	100	140
- Services			
- Construction			
Tradables	31	100	105
- Agriculture			
- Manufacturing			
- Raw materials			

The content of growth in a shrinking economy

Gikas A. Hardouvelis

*Professor of Finance & Economics, Un. of Piraeus
Chief Economist, Eurobank Group*



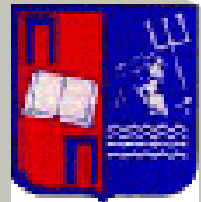
Konrad Adenauer Stiftung & IOBE
Athens, July 10, 2013



Konrad
Adenauer
Stiftung



UNIVERSITY OF PIRAEUS
DEPARTMENT OF BANKING
& FINANCIAL MANAGEMENT



DESPERATELY SEEKING ... A NEW GROWTH PARADIGM

- ✓ Greeks over-consume and under-produce. They need a new growth paradigm with an emphasis on exports and investment.
- ✓ The switch away from consumption cannot happen overnight, as it would contribute to the on-going collapse of aggregate demand

	Greece		EA17	
	2009	2012	2009	2012
Private consumption	72.4%	73.7%	57.5%	57.5%
Public consumption	20.5%	17.8%	22.3%	21.5%
Private investment	16.7%	11.3%	16.6%	16.3%
Public investment	3.1%	1.8%	2.8%	2.1%
Exports	19.3%	27.0%	36.8%	45.7%
Imports	30.7%	32.0%	35.5%	43.0%
GDP (€bn)	231.1	193.7	8922.3	9485.2

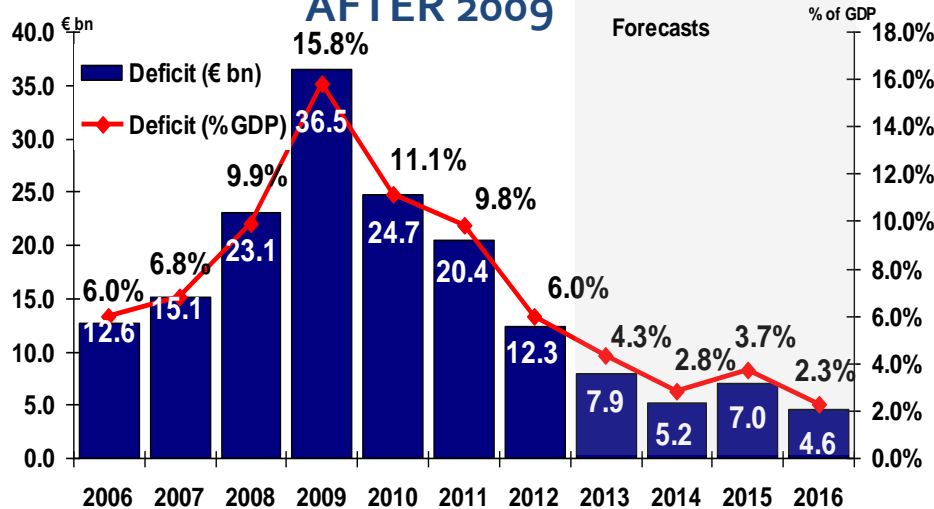
Oil Exports in 2009 (2012) were €3.4bn (€ 10.4bn) or 1.5%GDP (5.4%)

Oil Imports in 2009 (2012) were €8.5bn (€ 17.9bn) or 3.7%GDP (7.2%)

MAJOR ACHIEVEMENTS WITH CONCRETE RESULTS

DRASTIC FISCAL CONSOLIDATION

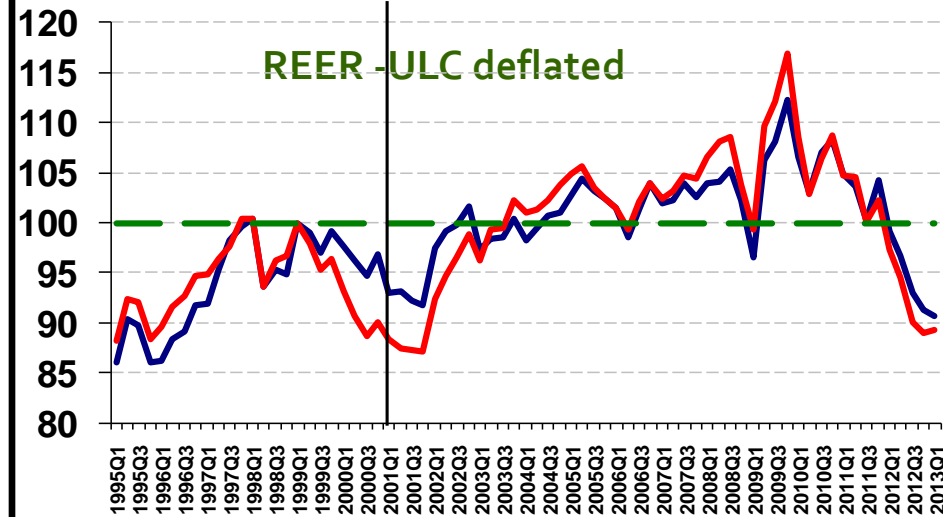
AFTER 2009



Source: MinFin, Eurobank Research

- ❖ Wage & pension cuts & other public expenses
- ❖ Pensions, Health Care, Public Sector & Structural Fiscal Reforms also contributed despite the serious delays in implementation

COMPETITIVENESS IMPROVED



Source: ECB — vs EA-17 — vs EER-20 + EA-17

- ❖ Gains of over 25 points in cost competitiveness from the peak in 2009 because Labor Market reforms took priority over product & service market reforms
- ❖ Institutional reforms lag behind

NOMINAL UNIT LABOR COSTS

% Δ	GR	CY	DE	FR	IT	ES	IE	PT	US	EA17	EU27
2000 - 2009	33.2	31.2	5.6	22.4	31.4	33.8	34.2	26.8	18.2	21.0	23.2
2009 - 2012	-8.1	4.2	3.1	4.0	3.4	-6.6	-9.4	-5.8	2.7	1.6	2.3

DETERMINANTS OF LONG-TERM ECONOMIC GROWTH

- ❖ 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.)**
- ❖ In the 1990s economists emphasize investment in technology
- ❖ Then in the 2000s, institutional characteristics like corruption, rule of law, efficient organization of the State sector, etc. were thought to be the deeper causes of growth
- ❖ 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, thought 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

PROGRESS IN OTHER SOURCES OF GROWTH

2. Openness is **improving**: (Exports + Imports)/GDP from the 57.7% average over 2001-2009 is 59.0% in 2012
3. Inflation is **improving**: From 3.3% in 2001-2009 to 1.0% in 2012
4. The size of government consumption is **declining**, from 18.4% in 2001-2009 to 17.8% in 2012 .
5. The initial condition will be **lower** at the end of 2014, which makes convergence easier

Relative Living Standards

EE-15=100 in PPS

1991	75.5
1995	71.7
1999	71.0
2003	80.7
2007	80.9
2014	65.4

LAGGING BEHIND IN OTHER SOURCES OF GROWTH

Greece EA-12

1. Investment

(% GDP)

2001-2009	22.8	20.6
2012	13.1	18.4

2. Corruption Perceptions Index

2012 (0-100)

36.0	70.6
-------------	-------------

3. Rule of Law 2011

(score -2,5 to 2,5)

0.57	1.41
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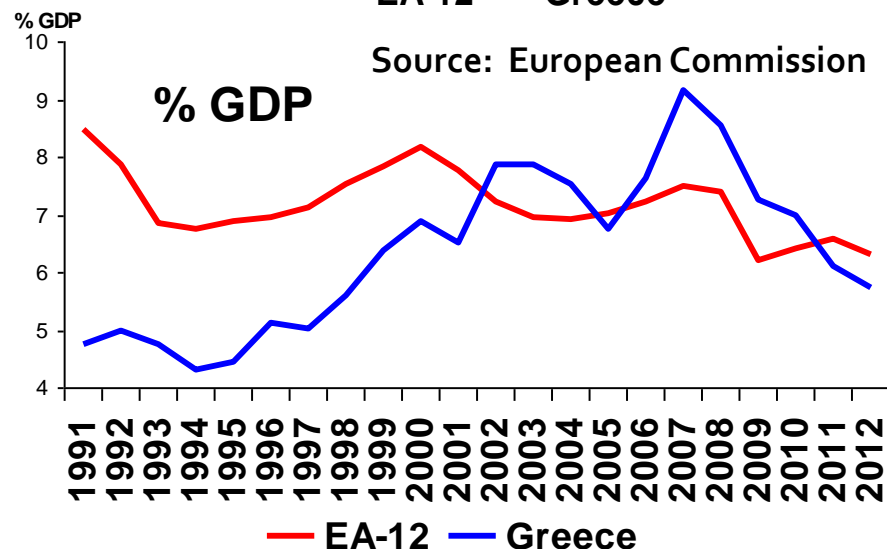
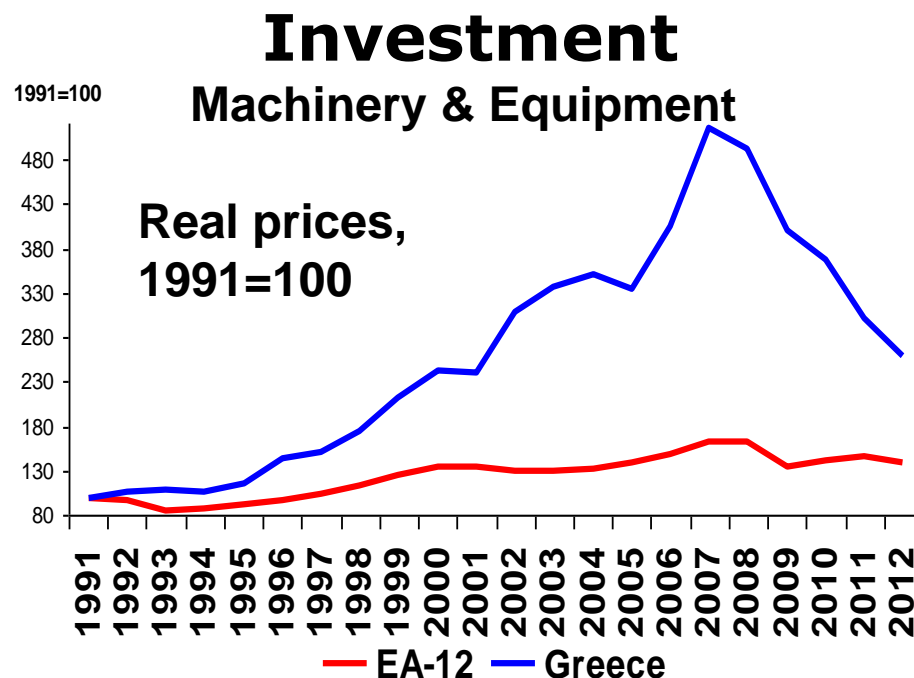
4. Government Effectiveness 2011

(score -2,5 to 2,5)

0.48	1.36
-------------	-------------

Source: EUROSTAT, Transparency International, World Bank

5. Labor force participation and quality of education are also factors that lag behind



REMAINING REFORMS AIMING TO ADDRESS THE FISCAL DISEQUILIBRIUM

ON-GOING REFORMS to be completed soon

- ❖ Complete Restructuring of tax system (closure of offices, increase number of inspectors to 1.000 from 235, audits of large tax payers not operational yet)
- ❖ IT system that interconnects tax offices
- ❖ Anti-corruption plan (penalties for tax evasion, protection of whistle blowers, empowering the internal audit of tax offices)
- ❖ Simplification of income tax code
- ❖ Speed-up of the public procurement framework (remains in a pilot stage at public hospitals, where it is not finished yet)
- ❖ Double entry accrual accounting in all hospitals
- ❖ Additional pharmaceutical spending reduction (generics to reach 40% use from current ~ 18%)
- ❖ Legal clearance of real estate for future privatizations

CHALLENGING REFORMS

- ❖ Reorganize public sector entities and transfer or lay-off redundant employees
- ❖ Privatizations at a delicate balance (revenues of only €0.7bn thus far in 2013, relative to an updated target of € 1.6bn), encountering problems on the demand side

REMAINING REFORMS AIMING TO ADDRESS THE INSTITUTIONAL & BUSINESS ENVIRONMENT

ON-GOING REFORMS to be completed soon

- ✓ Financial sector reforms: Recapitalize banks
- ❖ Energy sector liberalization: Restructure PPC (DEH), liberalize the electricity market
- ❖ Labour reforms in order to fight unemployment (differentiating benefits, etc.)

CHALLENGING REFORMS

- ❖ Speed-up the judicial reform
 - Update existing plan for reduction of backlog of tax cases; past targets missed
 - Deliver the Report and then plan to address the backlog of nontax cases
 - Open access to mediation services to non-lawyers
- ❖ Land registry and spatial planning
 - Simplify legislation for town planning processes
 - Update legislation on forests, lands and parks

SIGNIFICANT RISKS REMAIN AND TRANSCEND THE REFORM AGENDA

RECESSION COULD CONTINUE INTO 2014 - THE HIGHEST RISK OF ALL

- ❖ Fiscal gap for H2 2014 not addressed properly or addressed too late
- ❖ Slippages in privatizations & budget execution \Rightarrow automatic extra restrictive measures (according to MoU) \Rightarrow enlarging the fiscal drag
- ❖ If private sector liquidity squeeze persists,
 - it could lead to a nonlinear increase in the number of –otherwise healthy- firms closing down
 - household consumption would be severely affected
 - with severe repercussions on unemployment and GDP (social unrest, possibility of economic collapse)

REFORM IMPLEMENTATION COULD LOSE STEAM

- ❖ Limited ownership of Reform Program \Rightarrow Reforms may stall after primary balances achieved or after troika leaves
- ❖ Cohesion of government at risk due to the difficulty of reorganizing and shrinking the public sector through lay-offs of redundant staff, etc.

DEBT SUSTAINABILITY BECOMES INCREASINGLY DIFFICULT TO ACHIEVE

- ❖ If recession does not stop soon, Debt $< 110\%$ GDP in 2022 becomes a remote possibility \Rightarrow OSI or similar mechanism would be required

SUMMARY: *The Content of Growth in a Shrinking Economy*

1. HOW will long-term growth come back?

- ❖ By addressing the factors which drive long-term growth: (i) **Investment/GDP**, (ii) **quantity plus quality of human capital** (iii) reduction in the size of government, (iv) inflation (v) cost competitiveness, (vi) openness, (vii) **quality of institutions** like Government functioning & effectiveness, rule of law and corruption
- ❖ The MoUs addresses all 7 factors, and we can already claim success in improving a number of factors
- ❖ Reforms have now touched the **DEEP STATE** and test government's willingness to proceed: OWNERSHIP OF REFORMS NEEDED

2. WHEN will the economy stop shrinking? **This is the highest risk**

- ❖ When aggregate demand stabilizes, implying a delicate balance between fiscal austerity and pro-growth policies.
- ❖ We failed in this balance partly due to the loss of credibility of Greek politicians and the economy is in a **depression**
- ❖ Economy has a chance to stabilize in 2014, yet risks remain.

3. The reform recipe ought to go ahead even if recession continues



**Thank you
for your attention**

www.hardouvelis.gr

www.eurobank.gr/research

I wish to thank my colleagues at Eurobank for their comments

APPENDIX: A BIRD'S EYE VIEW ON GREECE

	2012	Greece	EA17	World
Population (mil.)		11.4	332.1	7,052.1
Geographical Area (thousand km²)		132.0	2,624.0	148,940
GDP per capita (€)		17,161	28,463	7,219
Human Development Index (2012 UN ranking among 186 countries)		29		
Life expectancy (years)		80.0	81.0	70.1
Motor vehicles per 1000 inhabitants (2010)		624	593	175
Suicides / 100 thousand inhabitants (2009)		3.2	12.9 (OECD)	
Primary Sector (% GDP)		3.4	1.8	4.3
Secondary Sector (% GDP)		16.4	25.1	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)		49.7	46.8	
Exports (% GDP)		27.0	45.7	
Imports (% GDP)		32.0	43.0	
Private Consumption (% GDP)		73.7	57.5	
Gen. Gov. Debt (% GDP)		156.9	92.7	

APPENDIX: OPTIMISTIC PROJECTIONS

	2012 €bn Nominal	2012 %yoy growth Real	Shares in 2012 GDP	2013 yoy growth Real	2014 %yoy growth Real
Private Consumption	142.756	-9.1%	73.7%	-7.7%	0.5%
Government Consumption	34.398	-4.2%	17.8%	-7.2%	-3.1%
Tot. Consumption	177.154	-8.1%	91.4%	-7.6%	-0.2%
GFCF	26.339	-17.6%	13.6%	-10.9%	1.5%
Domestic Demand	203.493	-9.4%	105.0%	-8.0%	0.0%
Imports	62.053	-13.8%	32.0%	-9.2%	0.6%
Exports	52.309	-2.4%	27.0%	4.9%	2.1%
GDP (nominal)	193.748				
Real GDP		-6.4%		-4.2%	0.4%
GDP deflator		-0.9%		-1.2%	-0.5%
Unemployment (avg)		24.7%		26.5%	27.0%

Source: Eurobank Research

APPENDIX: OFFICIAL SECTOR FINANCING

Official sector Financing (IMF, EFSF) & Bond redemptions (2012-2014, €bn)

	2012				2013				2014				Total
IMF	1.6	0.0	0.0	0.0	3.3	1.8	1.8	1.8	3.5	1.8	1.8	1.8	19.1
EFSF	40.4	33.6	0.0	34.3	12.0	10.3	3.0	2.6	5.7	2.9	0.0	0.0	144.7
Total	42.0	33.6	0.0	34.3	15.3	12.1	4.8	4.4	9.2	4.7	1.8	1.8	163.9
ANFA& SMP	0.0	0.0	0.0	0.3	0.0	2.7	0.0	0.0	0.0	2.5	0.0	0.0	5.5
Maturing Debt	4.9	4.0	0.0	0.3	4.4	6.8	3.8	1.3	3.5	11.7	7.5	2.6	50.8

Source: 2^o Economic Adjustment Programme for Greece (May 2013)

- ❖ Up to July 10, 2013, total financing amounts to €130.6 bn.
- ❖ Remaining financing from EFSF/IMF until the end of 2013 amounts to €11.0bn plus €2.7bn from SMP&ANFA holdings' profits.
- ❖ Total funding from EFSF/IMF for 2014 stands at €17.5 bn plus €2.5bn from SMP&ANFA holdings ' profits.

APPENDIX: DSA SENSITIVE TO GROWTH

DSA – Sensitivity to growth

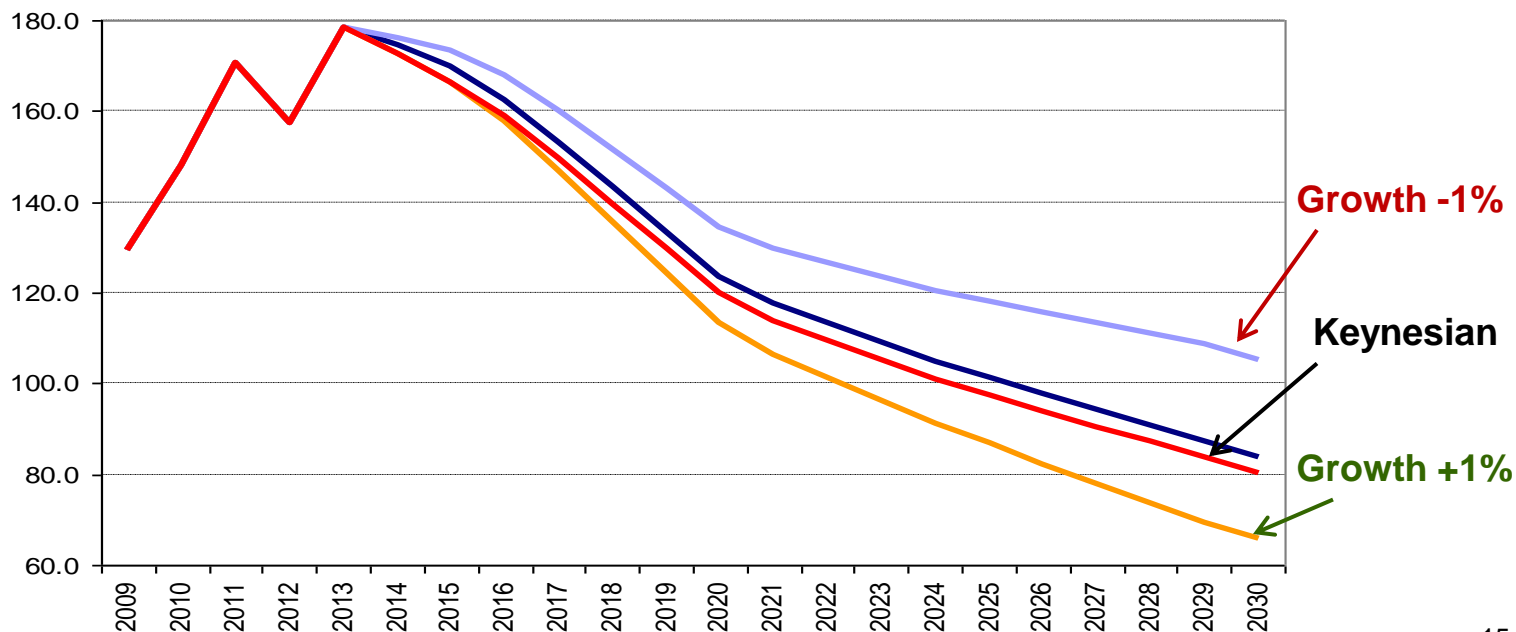
	2012	2021	2030
Debt - Baseline (€ bn)	305.1	286.3	291.6
Nominal GDP - Baseline (€ bn)	193.7	244.8	350.8
Debt - Baseline (%GDP)	157.5	116.9	83.1
Growth +1%	157.5	105.9	65.4
Growth -1%	157.5	129.1	104.4
Growth +1% & PS 3.0% GDP*	157.5	113.2	79.8

BASELINE ASSUMPTIONS

- Positive Growth from 2014 onwards with average growth at 2.3% of GDP for 2014-2030
- Primary Balance at 0.0% in 2013, 1.5% at 2014, 3.0% at 2015 and on average 4.1% of GDP for 2016-2030

***PS After 2015, i.e. Keynesian scenario, effects resemble base-line scenario**

Source: Eurobank Research, ELSTAT



APPENDIX: DSA - PRIMARY SURPLUS MATTERS

DSA – Sensitivity to primary surplus

	2012	2021	2030
Debt Baseline (€ bn)	305.1	286.3	291.6
Nominal GDP - Baseline (€ bn)	193.7	244.8	350.8
Debt Baseline (%GDP)	157.5	116.9	83.1
PS at 3% after 2015 (%GDP)	157.5	124.4	98.5
PS at 1.5% after 2014 (%GDP)	157.5	134.6	120.5
PS at 0% after 2013 (%GDP)	157.5	146.2	143.9

BASELINE ASSUMPTIONS

- Positive Growth from 2013 onwards with average growth at 2.3% of GDP for 2014-2030
- Primary Balance at 0.0% in 2013, 1.5% at 2014 3.0% at 2015 and on average 4.1% of GDP for 2016-2030

- ✓ Attaining a large primary surplus is critical to sustainability
- ✓ Its lack of, gobbles up even the boost of economic growth

