

# The content of growth in a shrinking economy

**Gikas A. Hardouvelis**

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



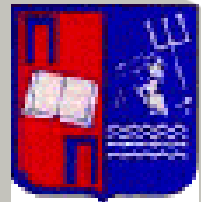
Konrad Adenauer Stiftung & IOBE  
Athens, July 10, 2013



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

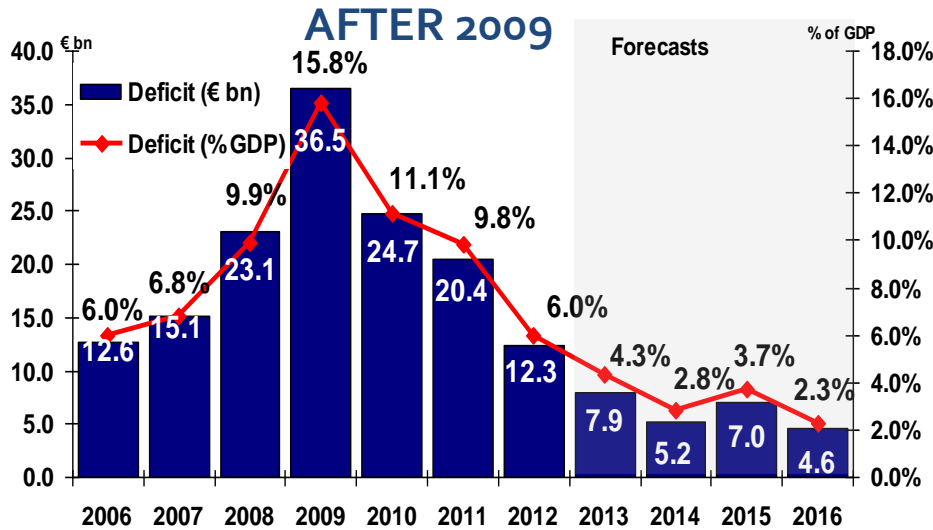
	Greece		EA17	
	2009	2012	2009	2012
Private consumption	72.4%	73.7%	57.5%	57.5%
Public consumption	20.5%	17.8%	22.3%	21.5%
Private investment	16.7%	11.3%	16.6%	16.3%
Public investment	3.1%	1.8%	2.8%	2.1%
Exports	19.3%	27.0%	36.8%	45.7%
Imports	30.7%	32.0%	35.5%	43.0%
GDP (€bn)	231.1	193.7	8922.3	9485.2

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

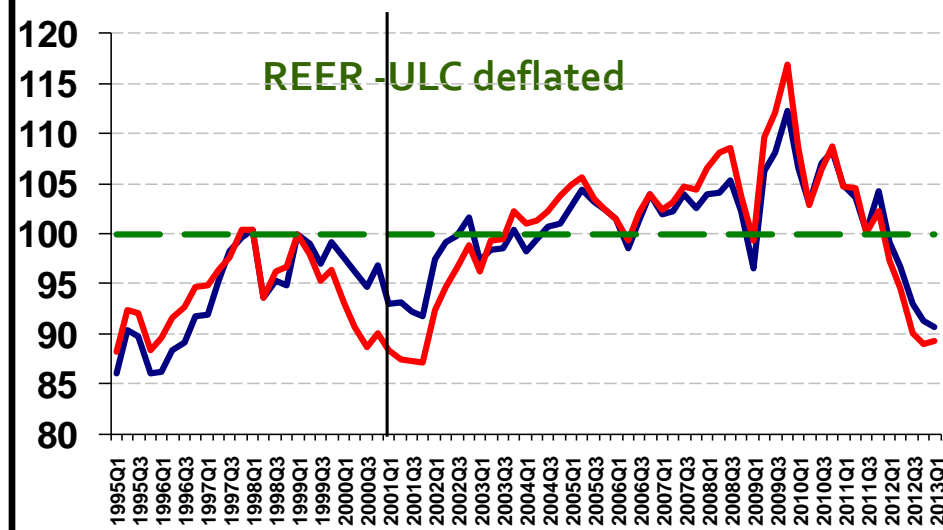
## DRASTIC FISCAL CONSOLIDATION



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



- ❖ 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	<b>22.8</b>	<b>20.6</b>
2012	<b>13.1</b>	<b>18.4</b>

## 2. Corruption Perceptions Index

2012 (0-100)

<b>36.0</b>	<b>70.6</b>
-------------	-------------

## 3. Rule of Law 2011

(score -2,5 to 2,5)

<b>0.57</b>	<b>1.41</b>
-------------	-------------

## 4. Government Effectiveness 2011

(score -2,5 to 2,5)

<b>0.48</b>	<b>1.36</b>
-------------	-------------

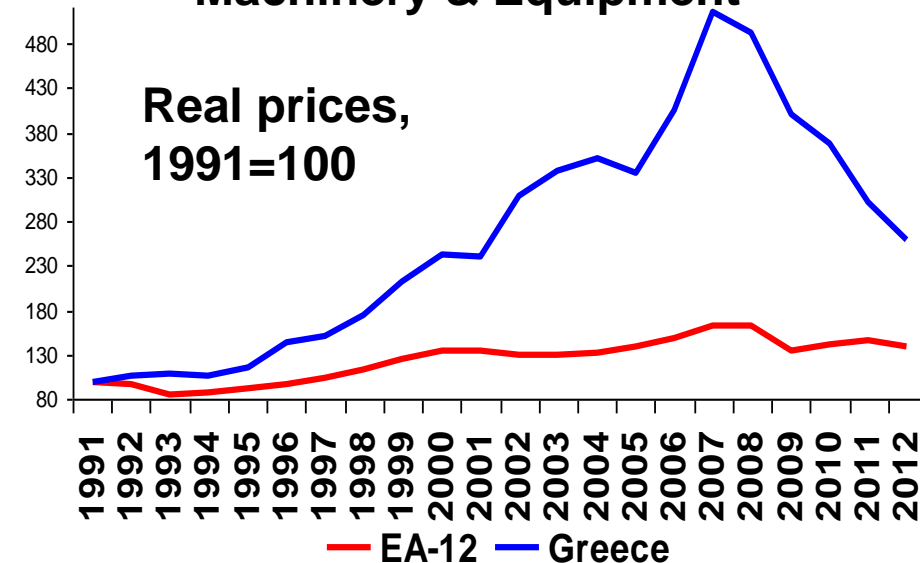
Source: EUROSTAT, Transparency International, World Bank

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

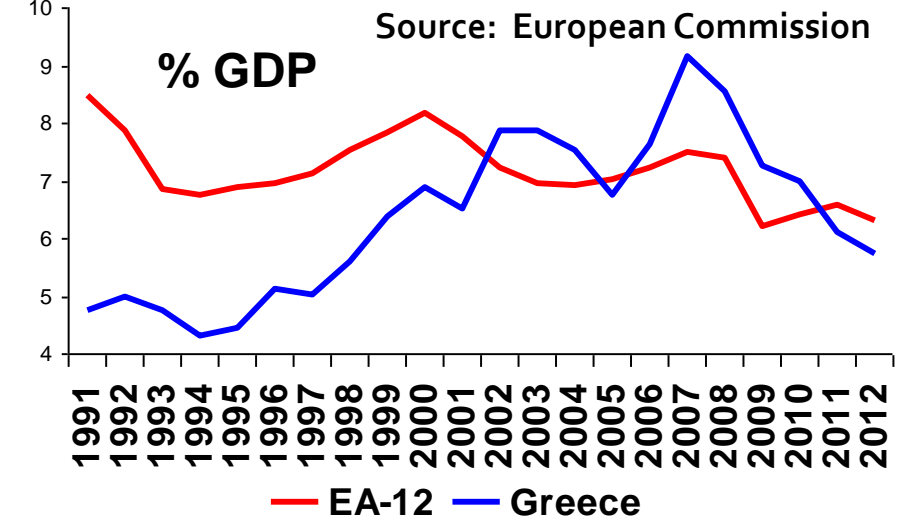
## Investment

### Machinery & Equipment

1991=100



% GDP



# 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 ⇒ automatic extra restrictive measures (according to MoU) ⇒ 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 ⇒ 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 ⇒ 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](http://www.hardouvelis.gr)

[www.eurobank.gr/research](http://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
<b>Population (mil.)</b>		<b>11.4</b>	<b>332.1</b>	<b>7,052.1</b>
<b>Geographical Area (thousand km<sup>2</sup>)</b>		<b>132.0</b>	<b>2,624.0</b>	<b>148,940</b>
<b>GDP per capita (€)</b>		<b>17,161</b>	<b>28,463</b>	<b>7,219</b>
<b>Human Development Index</b> (2012 UN ranking among 186 countries)		<b>29</b>		
<b>Life expectancy (years)</b>		<b>80.0</b>	<b>81.0</b>	<b>70.1</b>
<b>Motor vehicles per 1000 inhabitants (2010)</b>		<b>624</b>	<b>593</b>	<b>175</b>
<b>Suicides / 100 thousand inhabitants (2009)</b>		<b>3.2</b>	<b>12.9</b> (OECD)	
<b>Primary Sector (% GDP)</b>		<b>3.4</b>	<b>1.8</b>	<b>4.3</b>
<b>Secondary Sector (% GDP)</b>		<b>16.4</b>	<b>25.1</b>	<b>29.3</b>
<b>Tertiary Sector (% GDP)</b>		<b>80.2</b>	<b>73.1</b>	<b>66.4</b>
<b>Tourism (Total contribution, % GDP)</b>		<b>16.4</b>	<b>8.3</b> (EU-27)	<b>9.2</b>
<b>Construction (% GDP)</b>		<b>2.1</b>	<b>5.9</b>	
<b>Public Sector (Prim. Gen. Gov. Exp. % GDP)</b>		<b>49.7</b>	<b>46.8</b>	
<b>Exports (% GDP)</b>		<b>27.0</b>	<b>45.7</b>	
<b>Imports (% GDP)</b>		<b>32.0</b>	<b>43.0</b>	
<b>Private Consumption (% GDP)</b>		<b>73.7</b>	<b>57.5</b>	
<b>Gen. Gov. Debt (% GDP)</b>		<b>156.9</b>	<b>92.7</b>	

## 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<sup>o</sup> 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

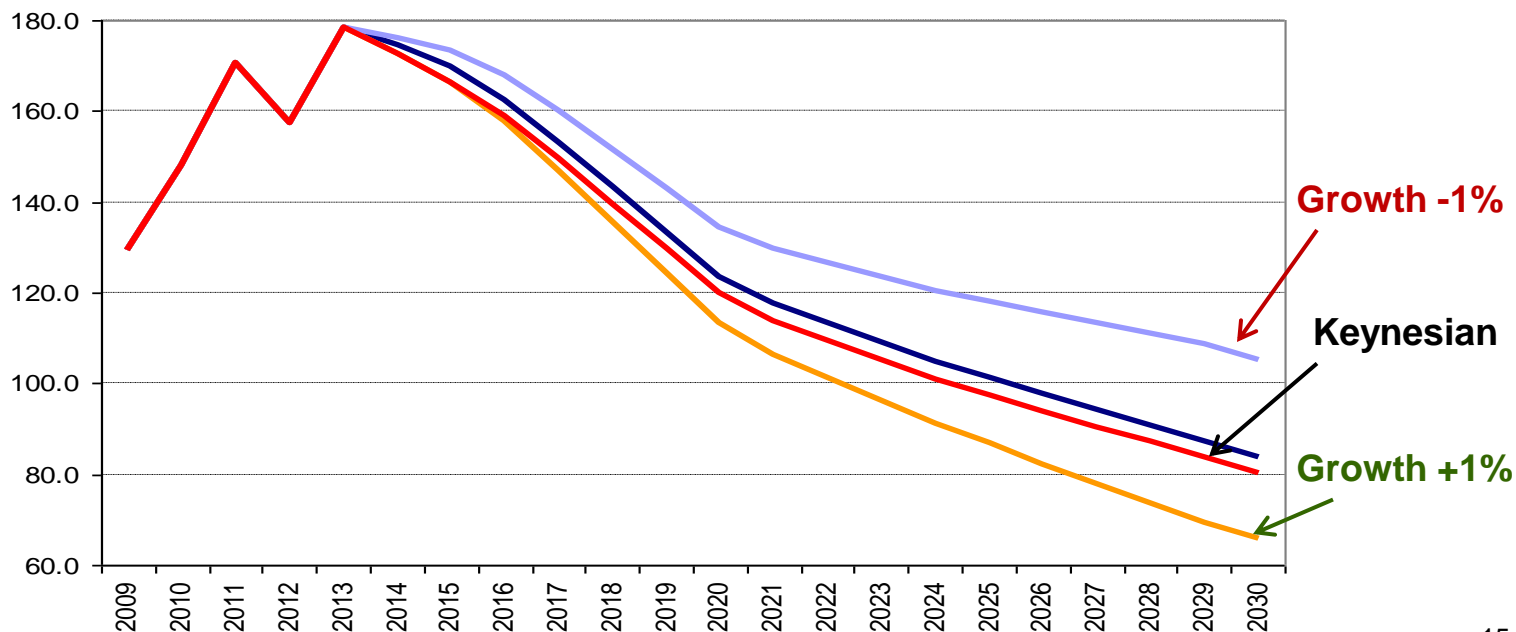
	2012	2021	2030
<b>Debt - Baseline (€ bn)</b>	<b>305.1</b>	<b>286.3</b>	<b>291.6</b>
<b>Nominal GDP - Baseline (€ bn)</b>	<b>193.7</b>	<b>244.8</b>	<b>350.8</b>
<b>Debt - Baseline (%GDP)</b>	<b>157.5</b>	<b>116.9</b>	<b>83.1</b>
<b>Growth +1%</b>	<b>157.5</b>	<b>105.9</b>	<b>65.4</b>
<b>Growth -1%</b>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

## 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



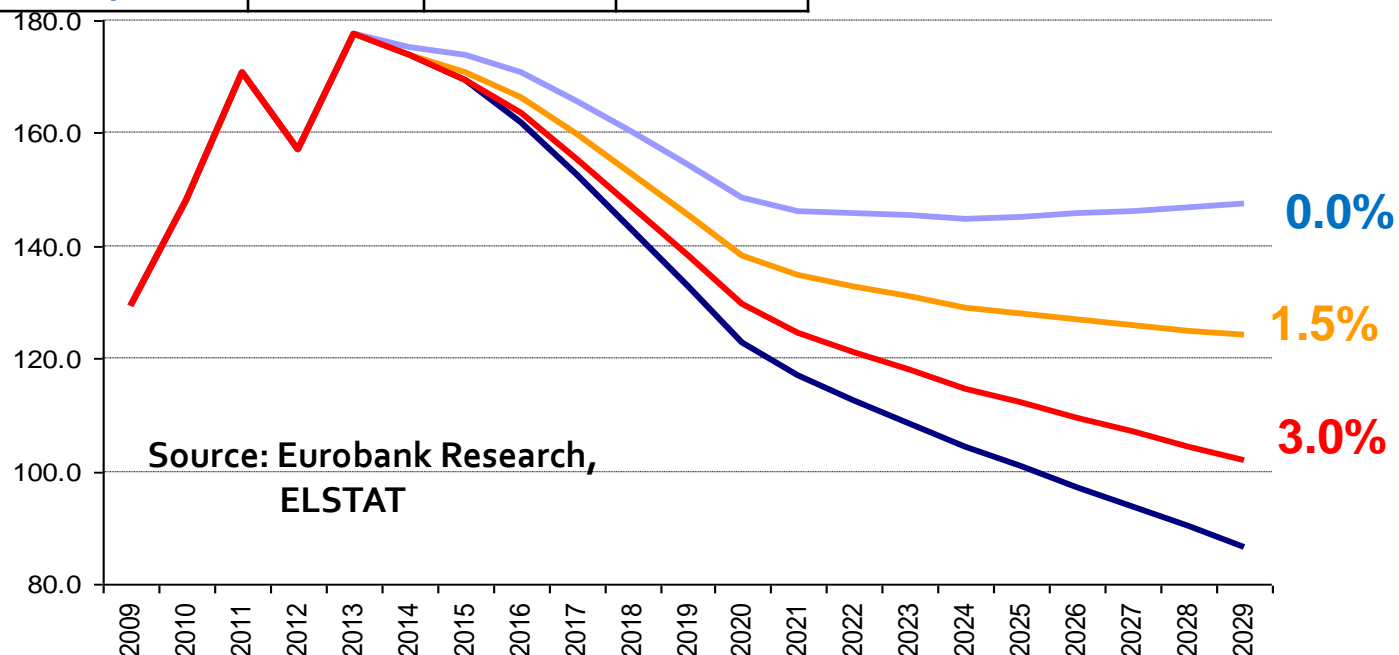
# APPENDIX: DSA - PRIMARY SURPLUS MATTERS

## DSA – Sensitivity to primary surplus

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

## 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



Source: Eurobank Research, ELSTAT

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