

Features of the Greek Adjustment under the MoU

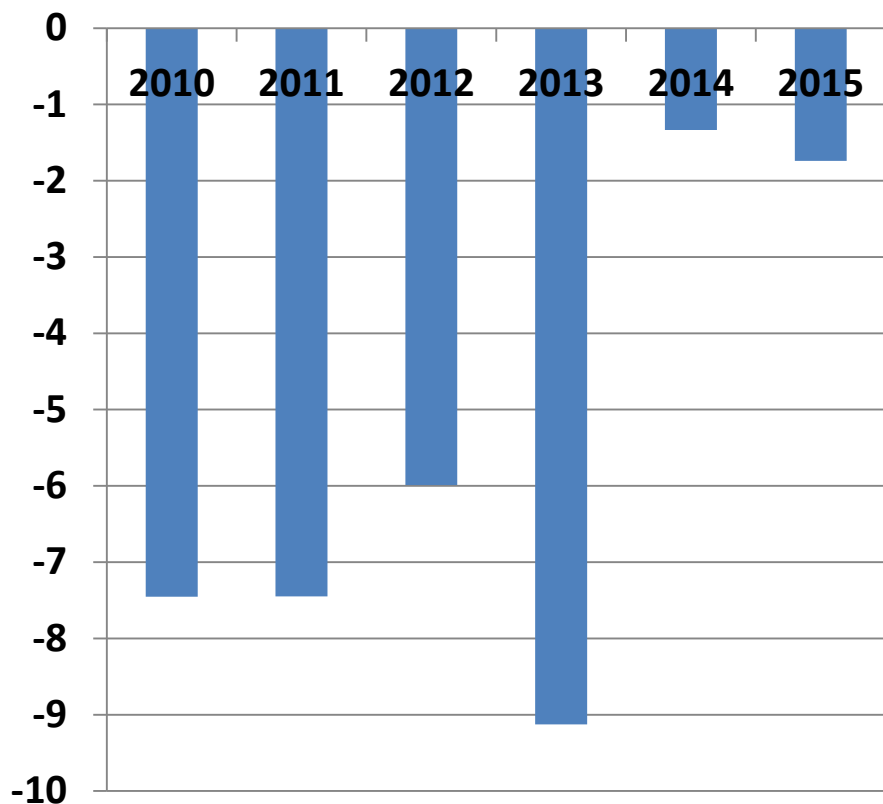
Η ΕΛΛΑΔΑ ΣΤΗΝ ΟΝΕ

Thomas Moutos (AUEB & CESifo)

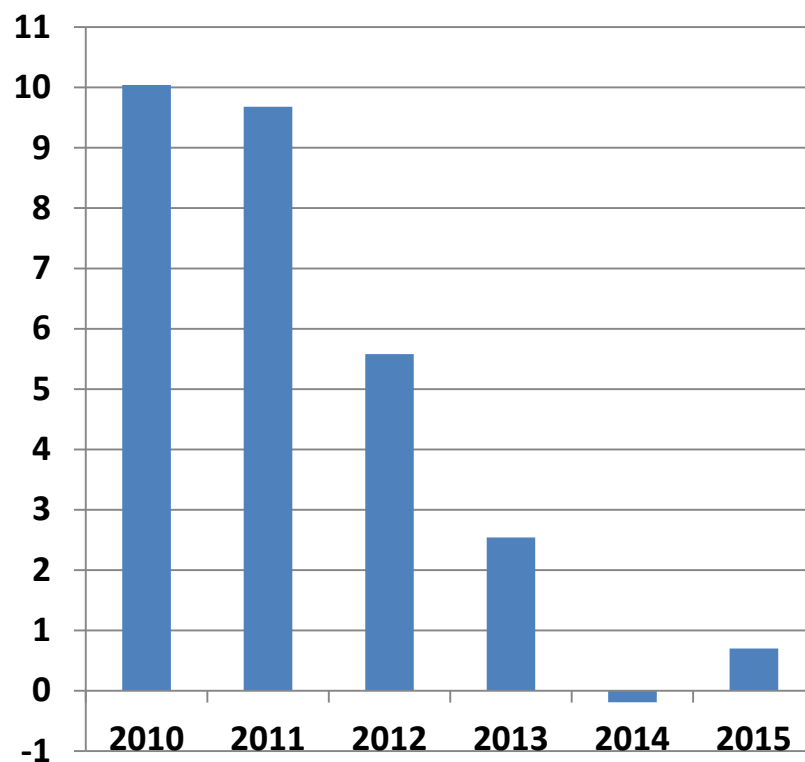
2017

This diagram may explain why there was a little of GDP growth (0.6%) in 2014. The “measures” for 2014 were very small (only 1.33 bn. cuts in expenditure and, for the first time since the MoUs, **decreases** in taxes by 0.19 bn.). The “measures” for 2015, which were agreed before the end of 2014, were in total 2.14 bn (1.74 bn. cuts in expenditure and 0.7 bn **increases** in taxes).

Discretionary Changes in Current Government Expenditure (bl. euros)

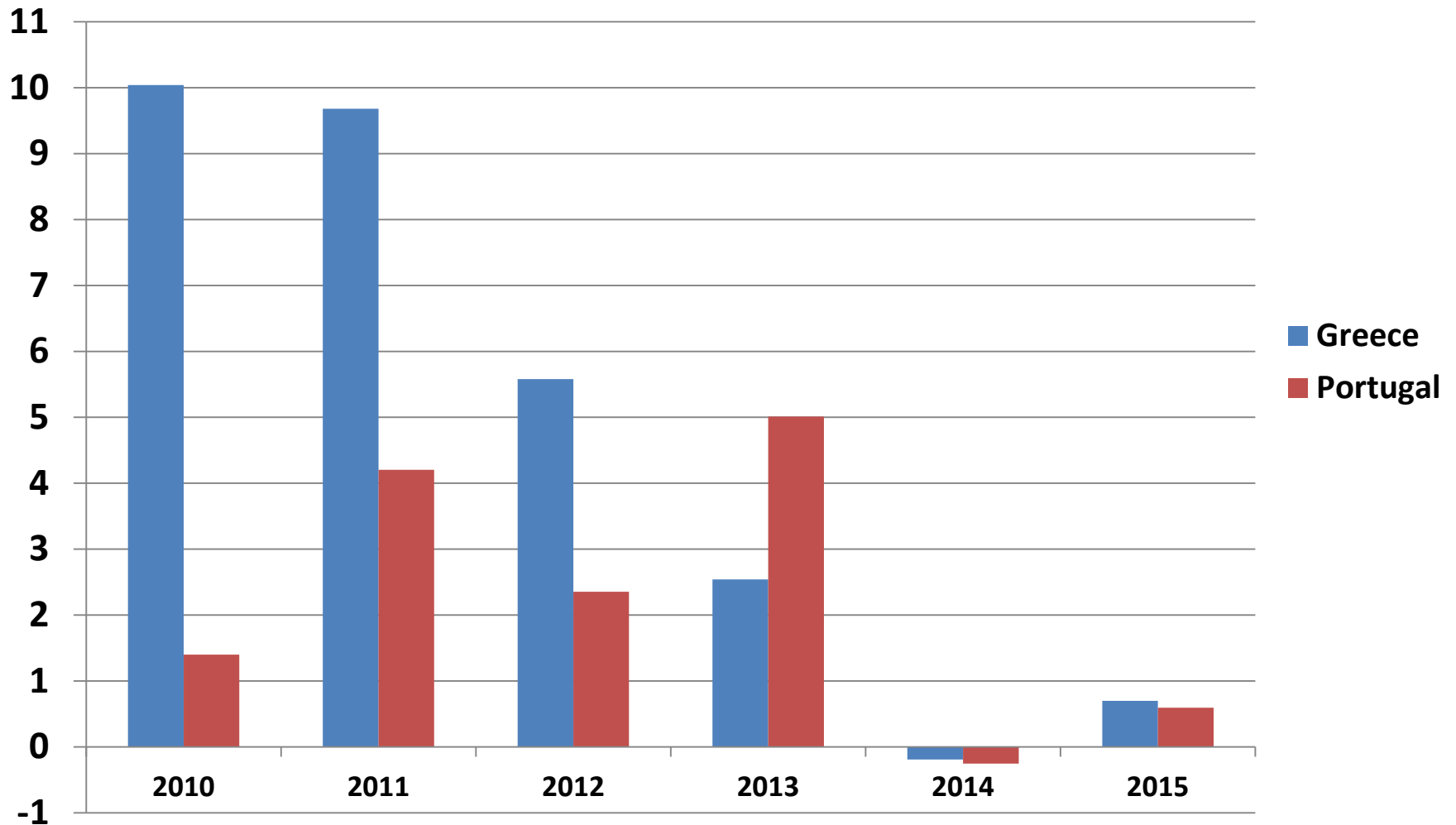


Discretionary Changes in Current Government Revenue (bl. euros)



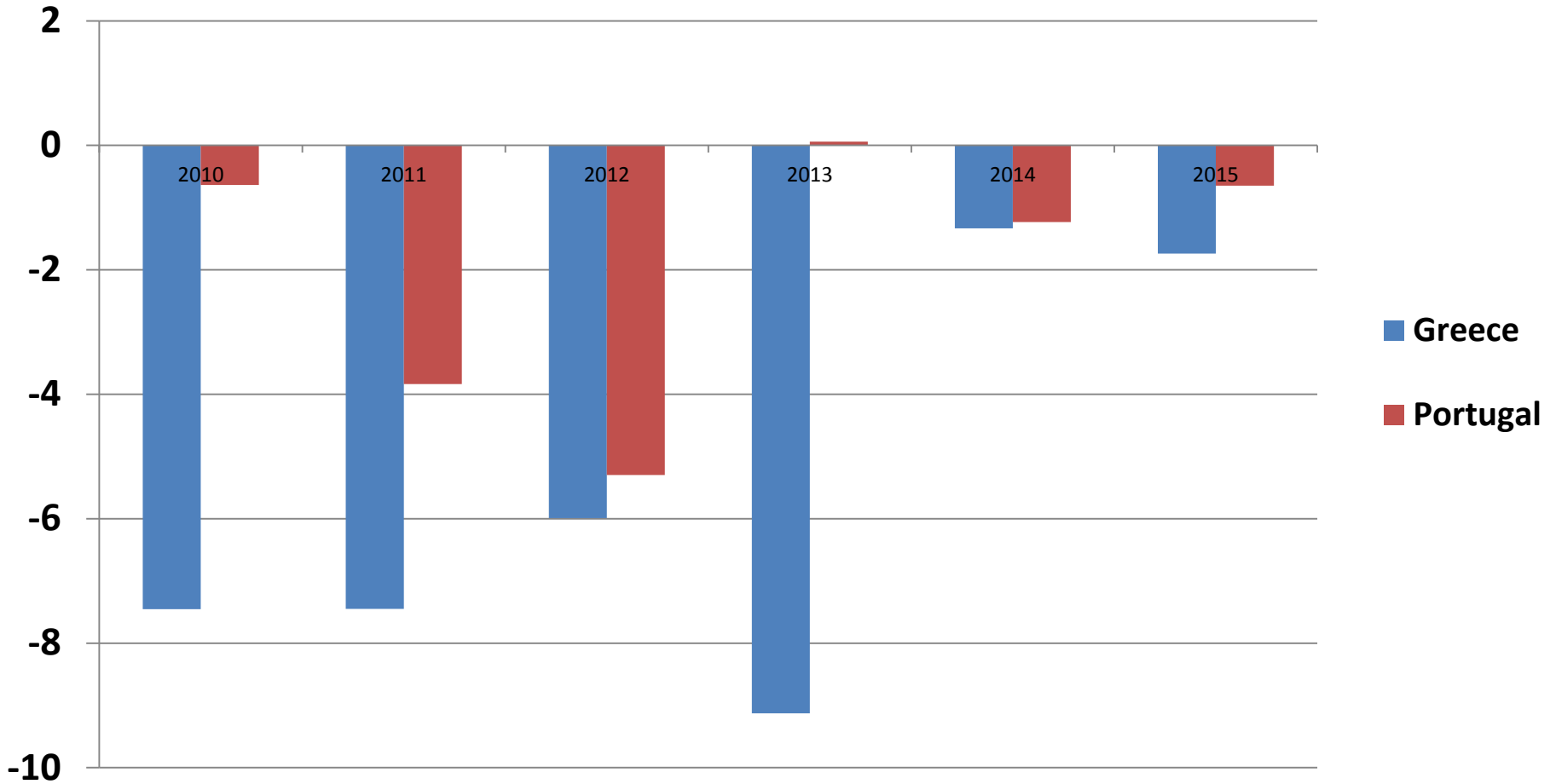
Discretionary Changes in Current Government Revenue (bl. euros)

Cumulative Changes 2010-2014: Greece: **27.65** ; Portugal: **12.7** .



Discretionary Changes in Current Government Expenditure (bl. euros)

Cumulative Changes 2010-2014: Greece: **-31.4** ; Portugal: **-10.9**



Both the “Medicine” and its Effects were far stronger in Greece

- Total Size of Fiscal Measures 2010-2014 (% of GDP)
Greece: 29.1% , Portugal: 13.8%
(since it was part of yesterday’s “news”, Cyprus: 12.6% for 2011-2014)
- Percentage Drop in GDP 2010-2014
Greece: 17.9% Portugal: 6.0%
- Proportion of Measures Involving Tax Increases
Greece: 47.2% Portugal: 53.8%

Cyprus: 51.8% for 2011-2014; so, the reported “news” is wrong that “Cyprus managed to exit from the MoU by cutting government spending and not increasing taxes”

Figure 10: VAT Collection Efficiency Ratio

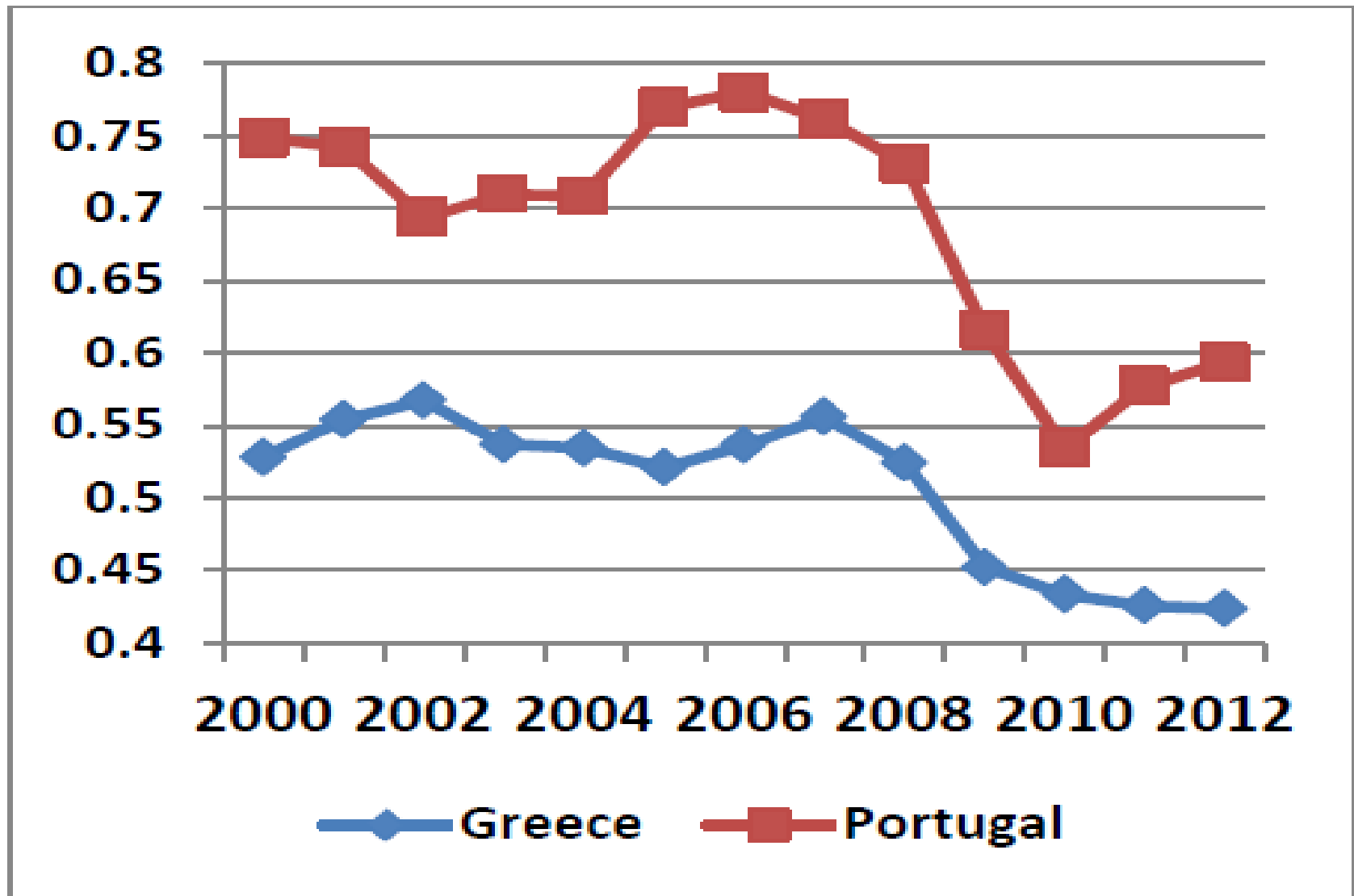


Figure 11: Ratio of Tradable to Non-Tradable Gross Value Added

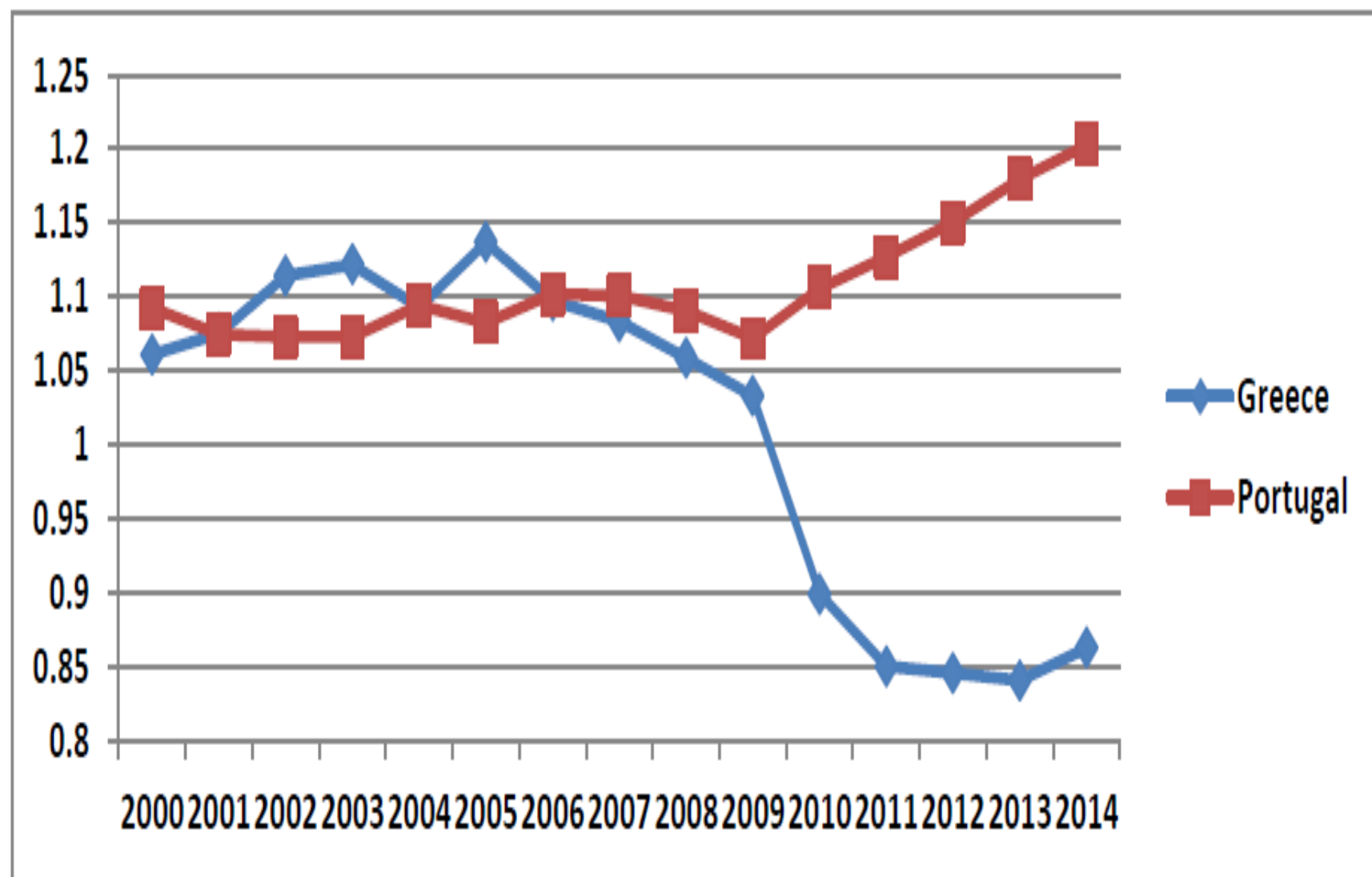
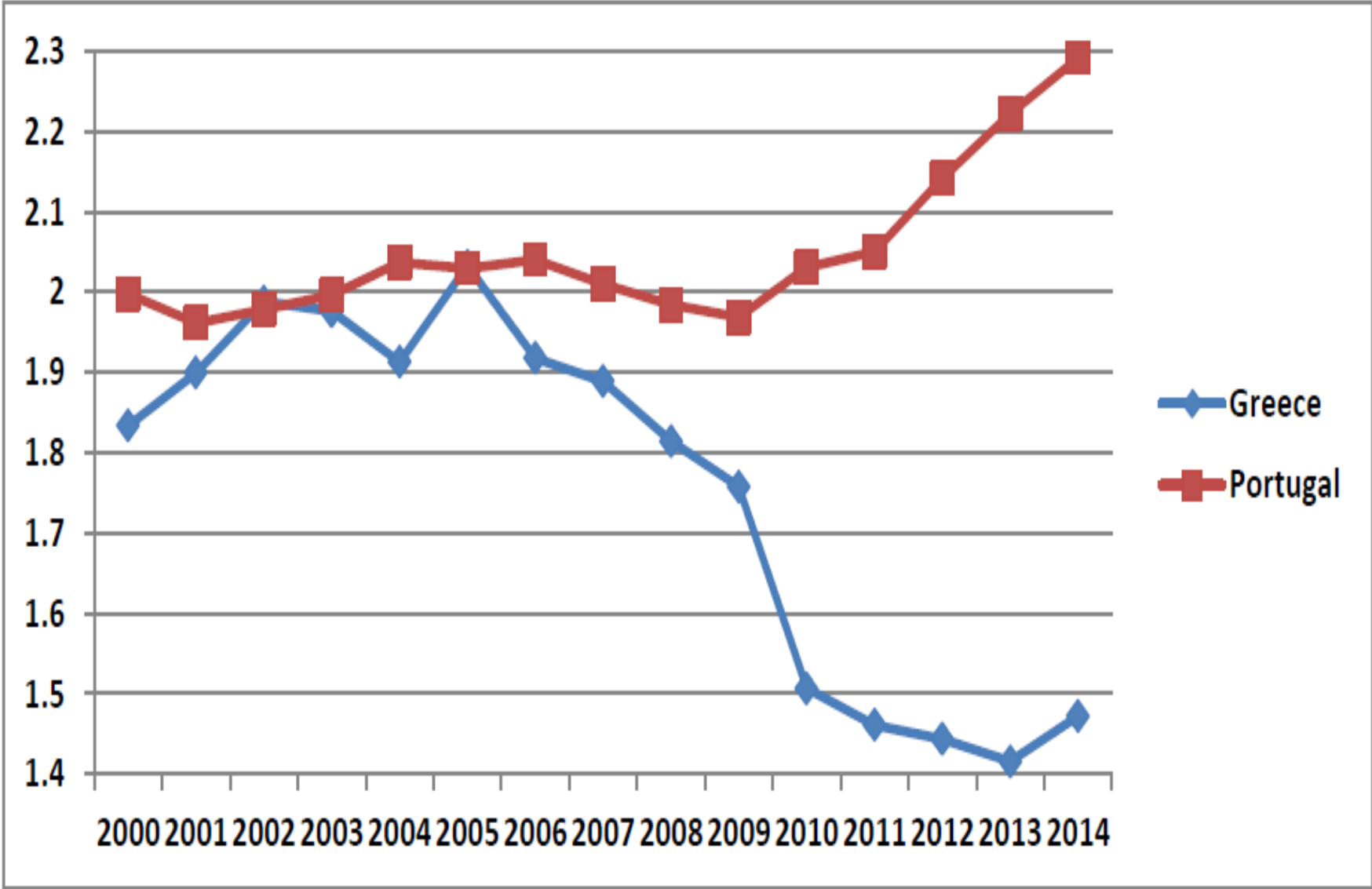
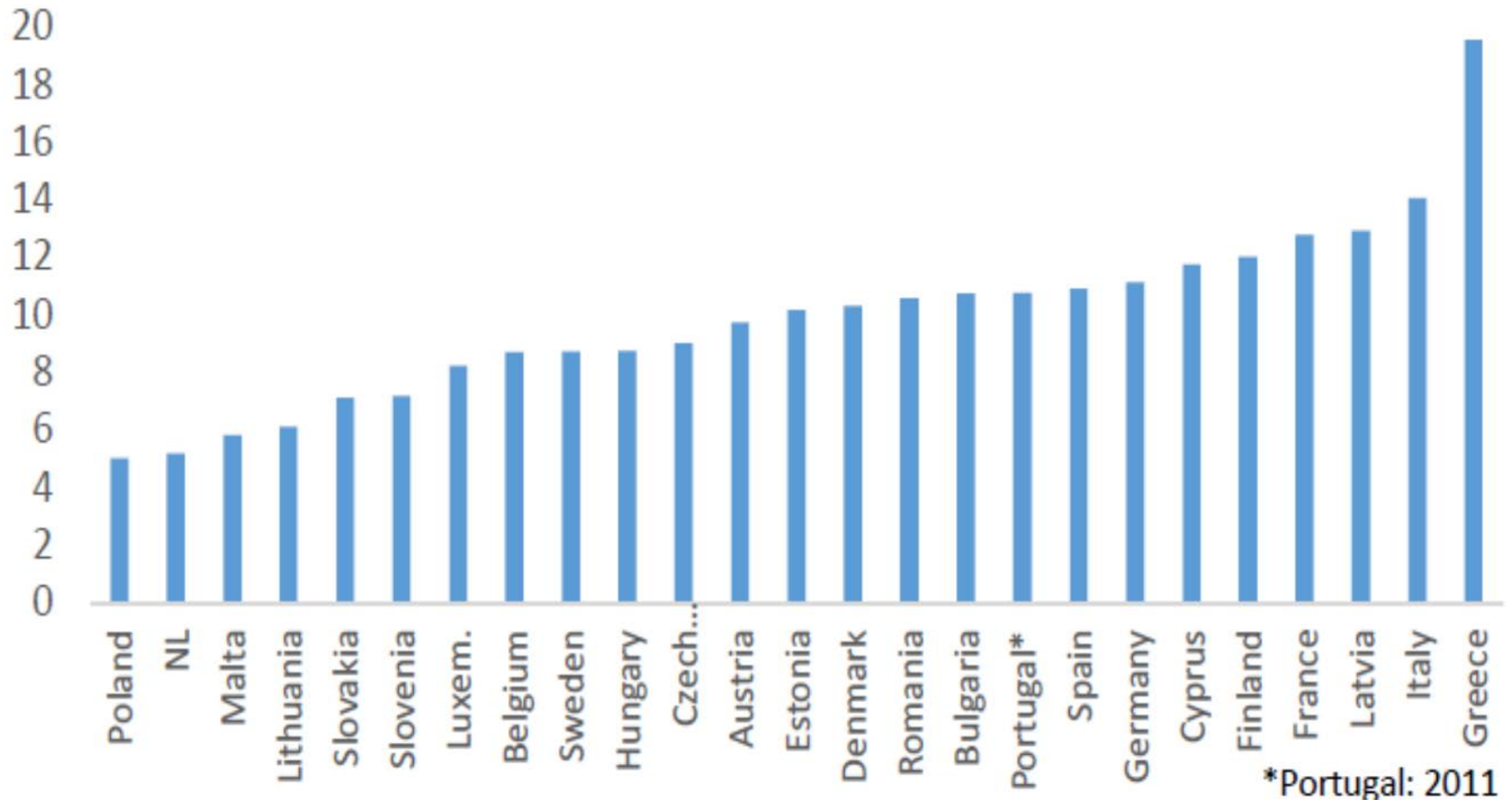


Figure 12: "Private Sector" Ratio of Tradable to Non-Tradable Gross Value Added



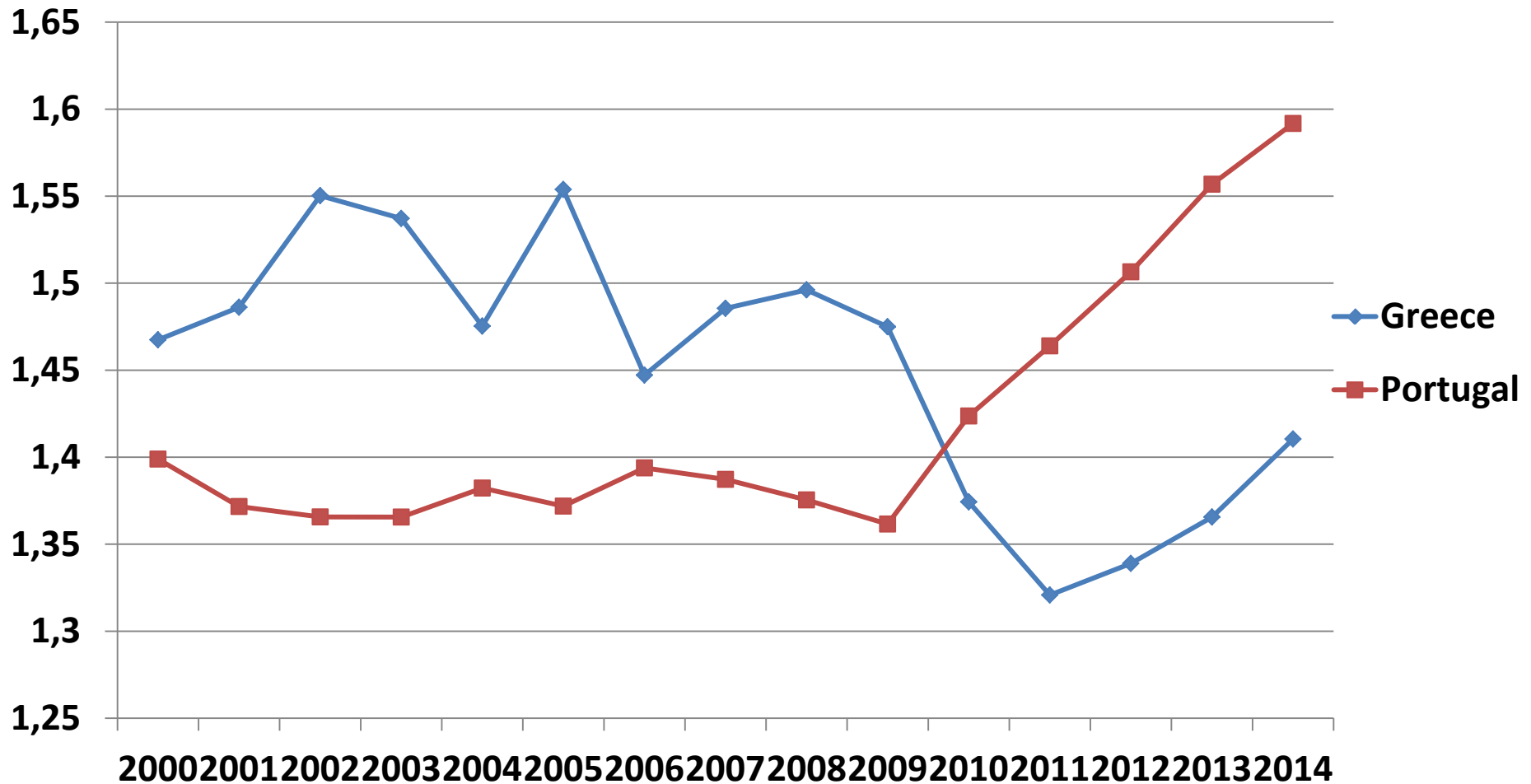
The Strange Case of Real Estate GVA

This is the only sector that has grown during the crisis – most likely it is a statistical artefact due to a change in regulations that forced reporting of rental incomes. The data below are for 2013, and show the share of this sector in total GVA.



If we exclude the Real Estate sector, then there is some rebound in the relative size of the traded sector in Greece...

Ratio of Tradables to Non-Tradables Gross Value Added



Potential Explanations for the Maladjustment of the Greek Economy

- Credit constraints e.g. potential exporters may not have been able to access foreign markets due to the lack of credit; start-up firms may have larger capital needs than small vendors serving food and/or refreshments.
- The large rise in the user cost of capital and taxation (for energy as well).
- “Necessity” entrepreneurship – people become shop-owners after losing their job – may have also been fostered during the crisis. The increased leisure of the jobless has also increased demand for these services.
- The collapse of GVA in “construction” by 61% between 2009 and 2014 has reduced the demand for products of manufacturing firms producing intermediate inputs (e.g. cement, steel) used in construction. (The corresponding decline in Portugal was 37%.) This explanation matches well with the far larger decline in total sales of intermediate goods to the domestic market (by 55%) relative to other goods (and relative to export revenue). Note also that “construction” is, by far, the pre-eminent user of intermediate inputs sourced from domestic manufacturers; in 2009, the intermediate consumption of the “construction” sector alone was 19% of all sectors’ sourcing from the domestic manufacturing sector.
- The share of GVA in “construction” was just 5% of the aggregate economy’s GVA in 2009.

Wage-adjusted labour productivity is the ratio of GVA to personnel costs, adjusted for the share of paid employees in total employment. If this ratio is less than 100%, it is an indication of tax evasion.

Figure 20: Wage-Adjusted Labour Productivity Ratio (% , 2010)

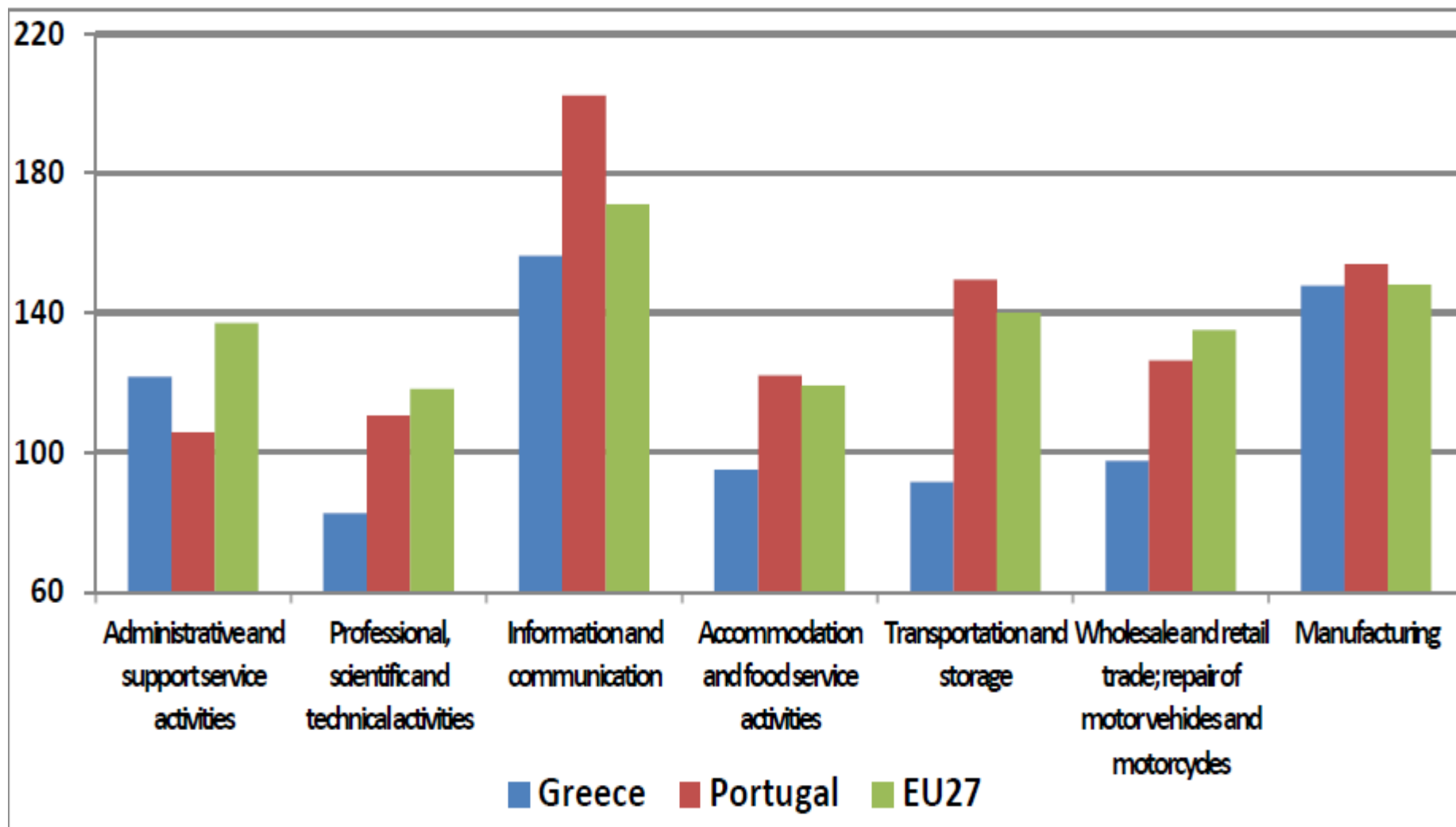
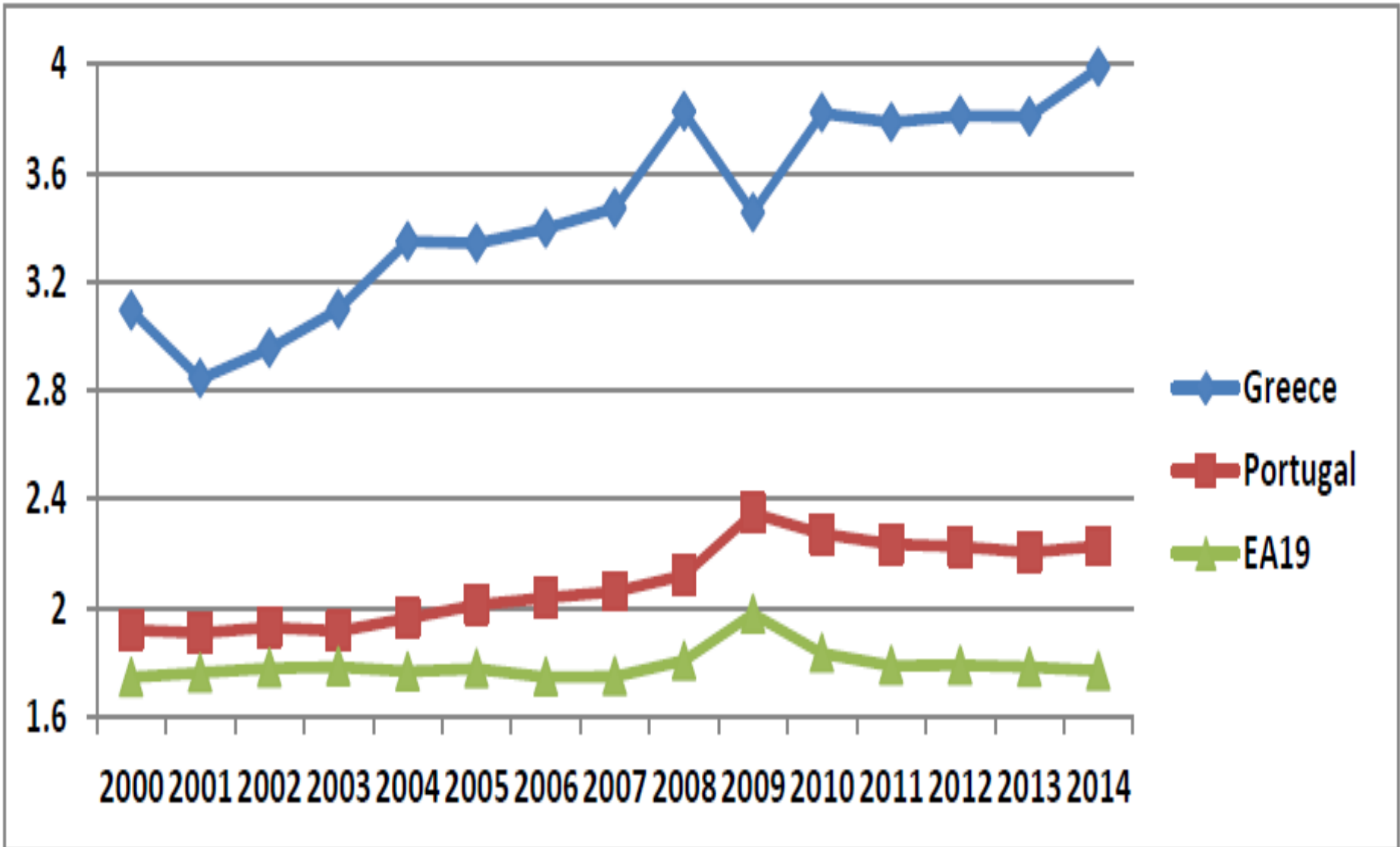


Figure 21: GVA in tax-evasion-conducive activities relative to manufacturing



Portugal's adjustment was more export-based, despite the smaller decline in ULC's in Portugal (4.2%) than in Greece (12.8%) from 2010 to 2014. (Relative ULC indices display the same pattern.) Among other things, trade structure matters a lot...

Exports (% of GDP) in 2008

	Greece	Portugal
Goods	8.4	22.6
Services	13.2	8.5
Total	21.6	31.1

Percentage Changes in Trade Flows (2010-2014)

	Greece	Portugal
Real Exports		
Goods	19.4	23.1
Services	4.2	22.2
Real Imports		
Goods	-8.9	-2.5
Services	-27.4	8.2

Real Effective Exchange Rate Indices

Cost-Based

RER-ULC: Manufacturing industry

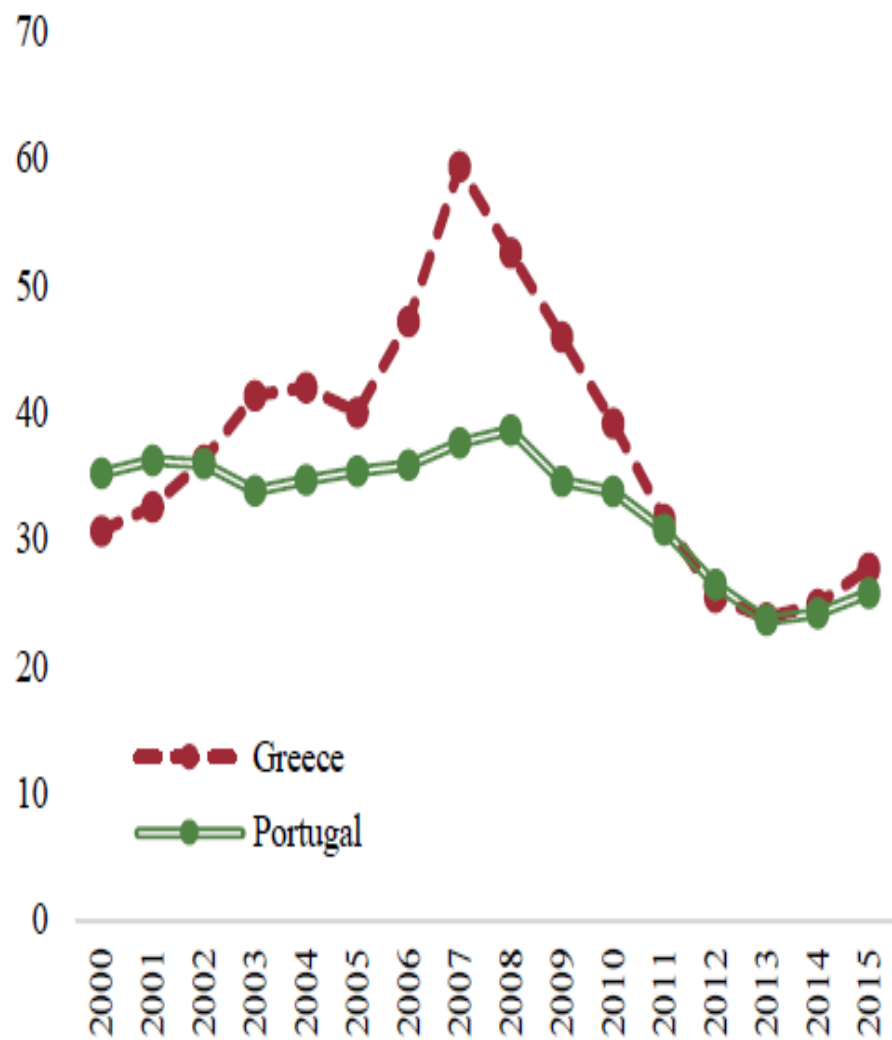
	2000	2005	2010	2013
Greece	96	107	146	121
Portugal	101	105	104	91
Spain	91	102	108	96
Italy	117	136	151	158
Ireland	77	81	76	71

Price-Based

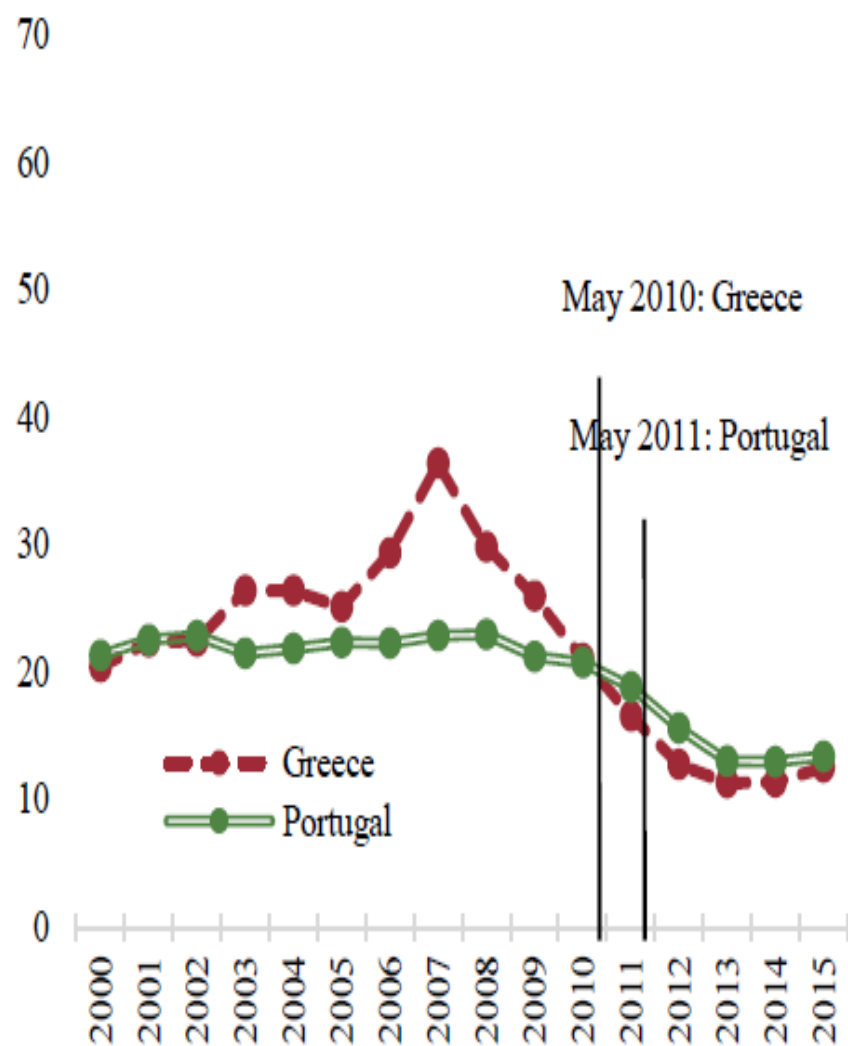
RER-P: Manufacturing industry

	2000	2005	2010	2013
Greece	99	108	125	137
Portugal	100	105	113	102
Spain	92	107	117	117
Italy	115	124	132	129
Ireland	116	122	133	120

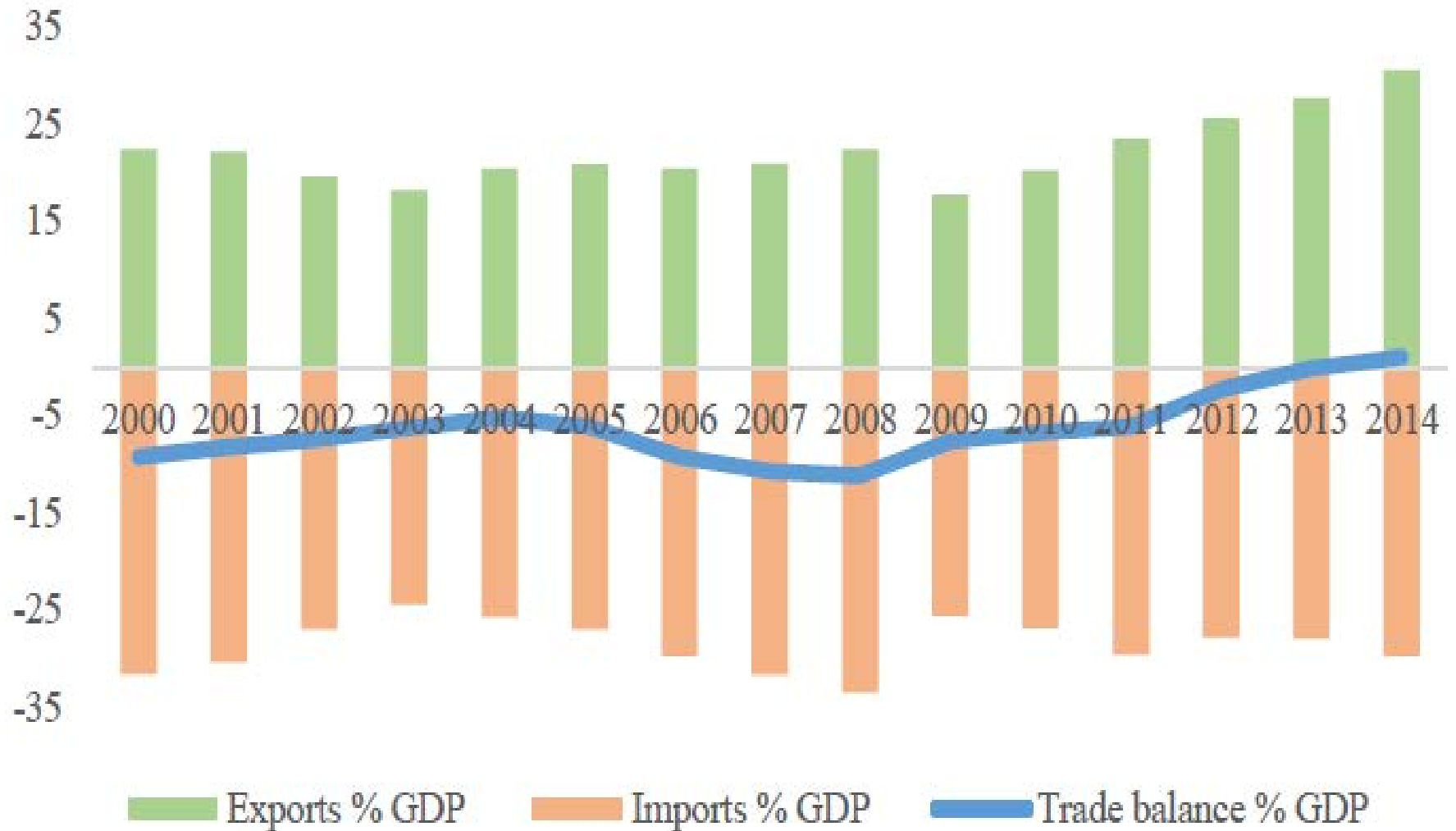
Panel a: Gross fixed capital formation, total economy (€ bn)



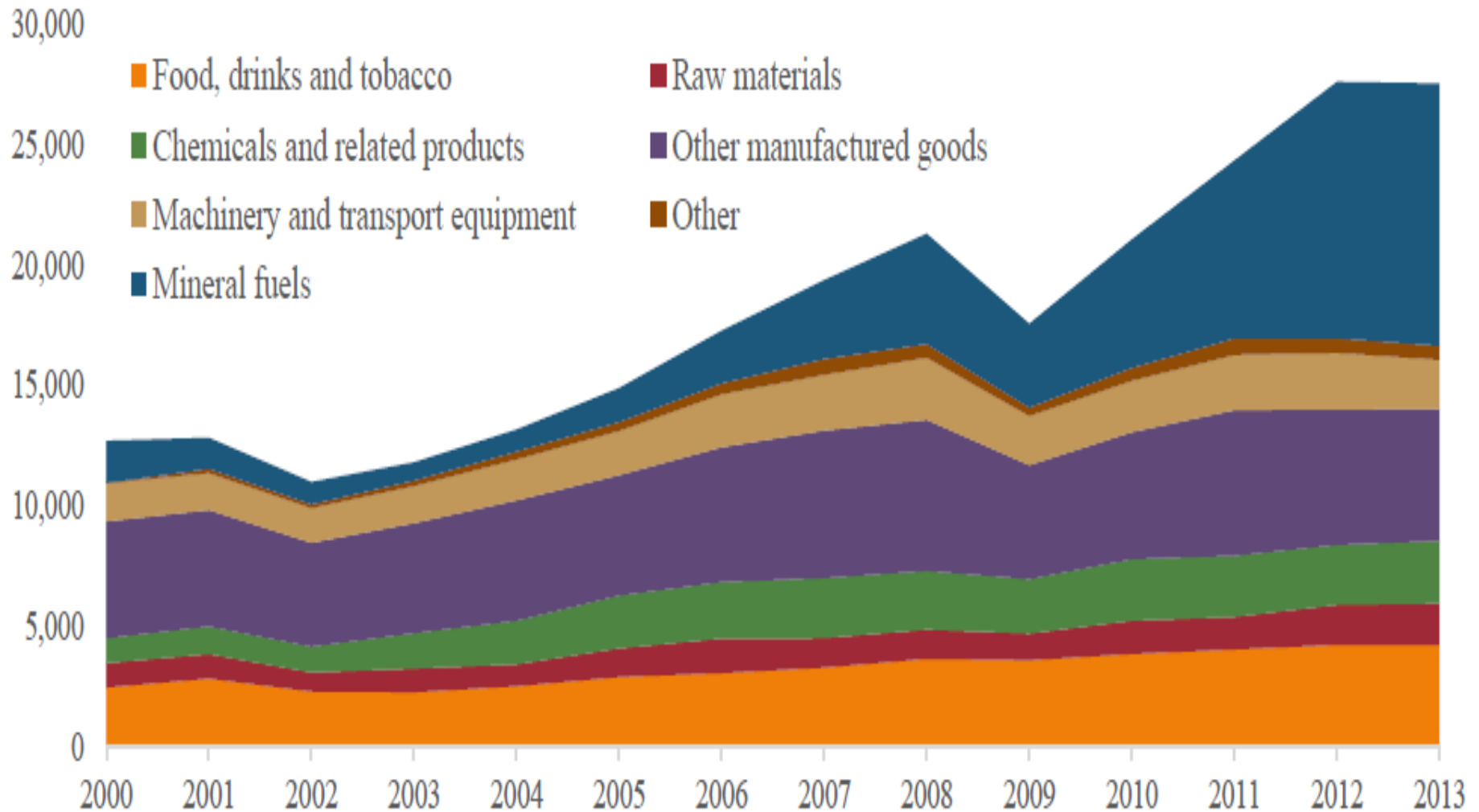
Panel b: Gross fixed capital formation, construction (€ bn)



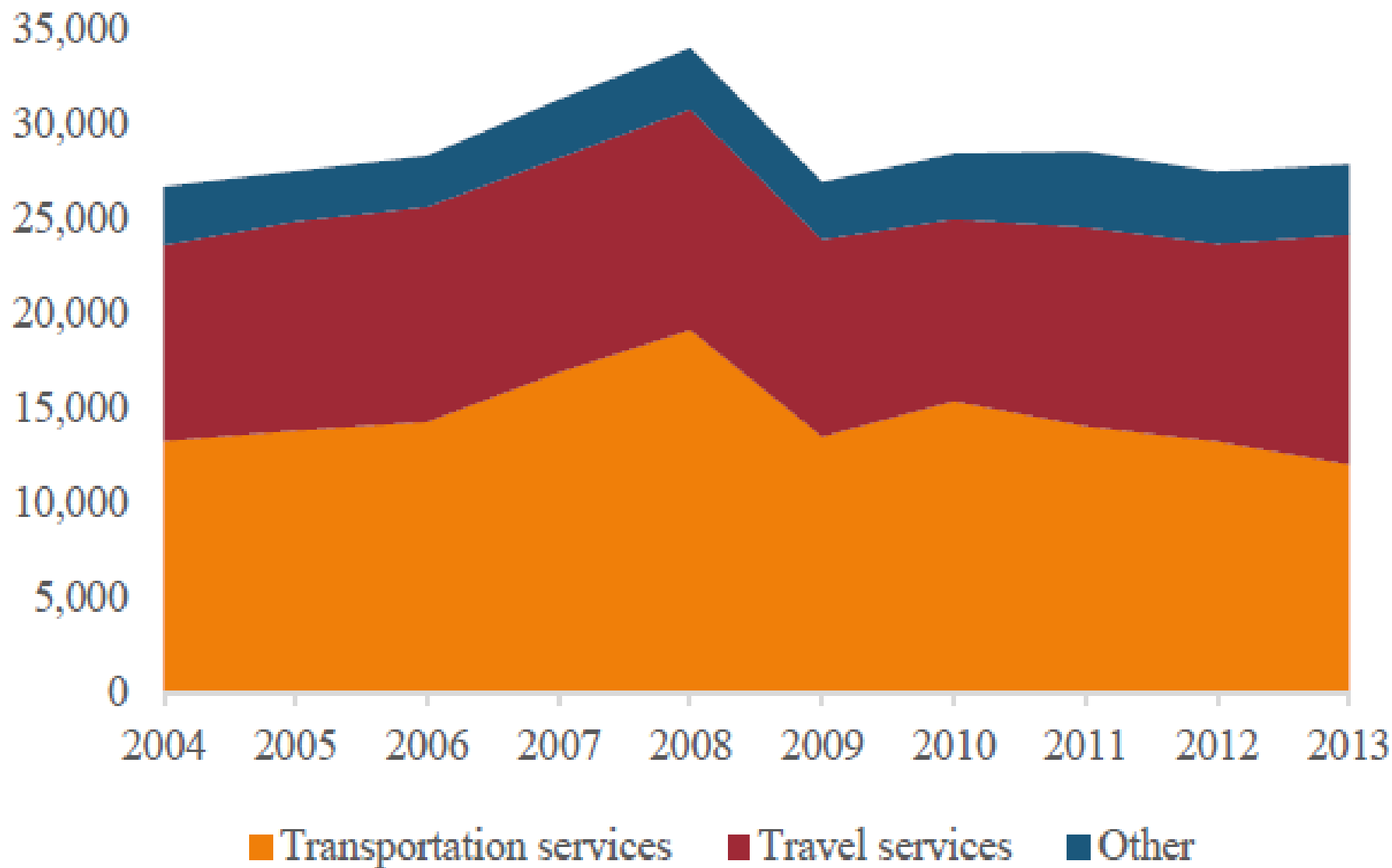
Overall Trade of Goods and Services (% of GDP)



Composition of Goods Exports (ml. euros)

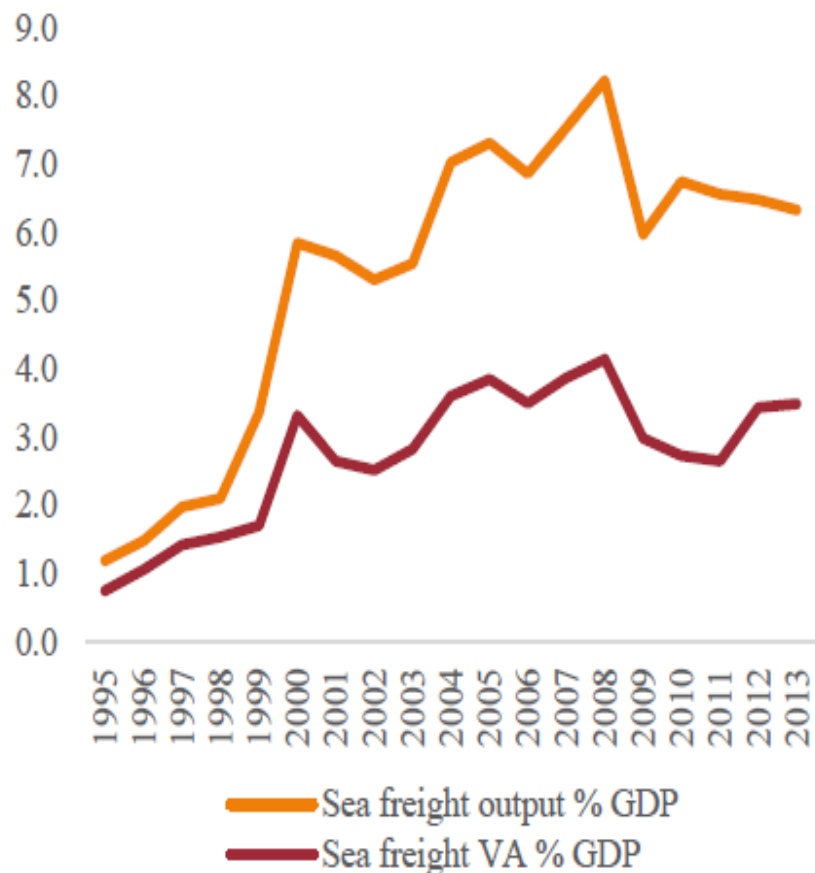


Composition of Services Exports (ml. euros)

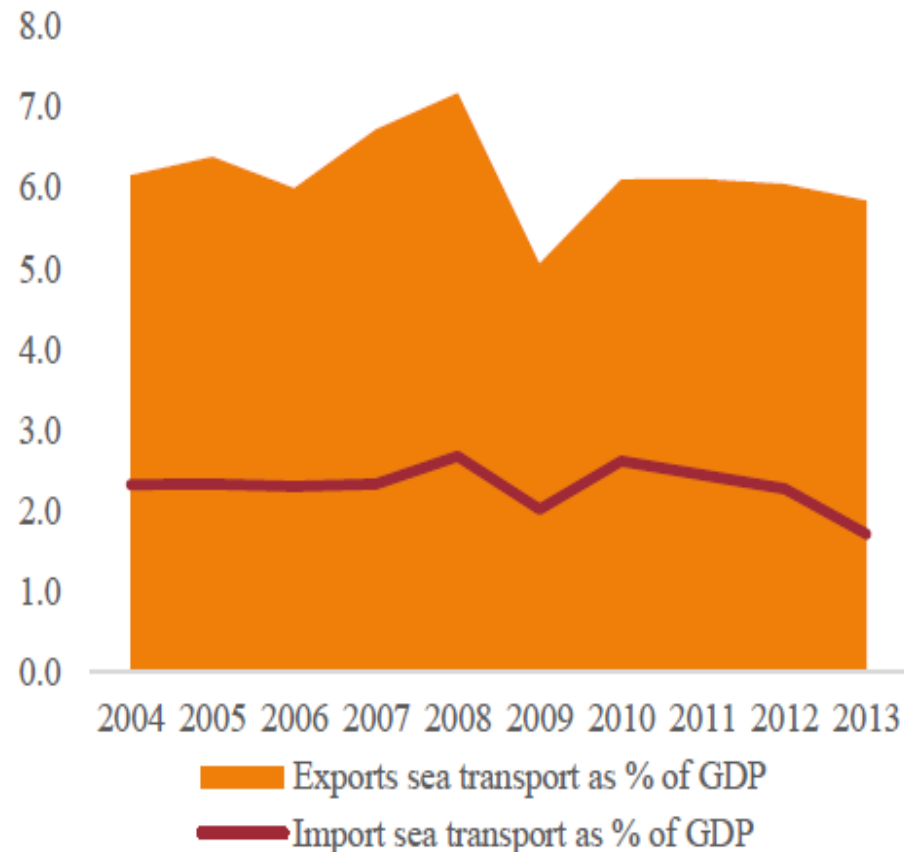


Sea Transport: Exports, Imports, and Value Added

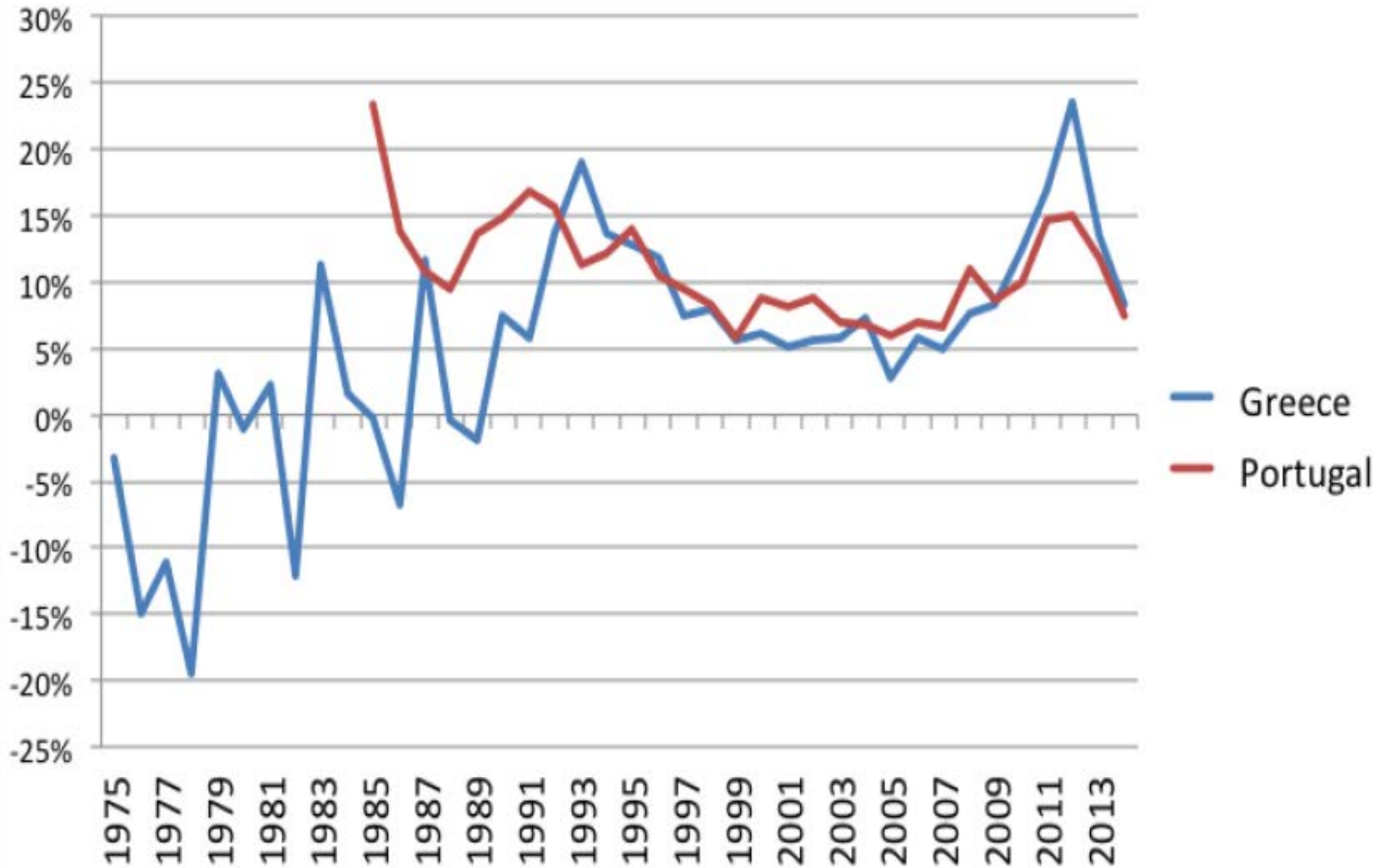
Panel a: Value-added vs. gross output



Panel b: Import and export of sea transport services



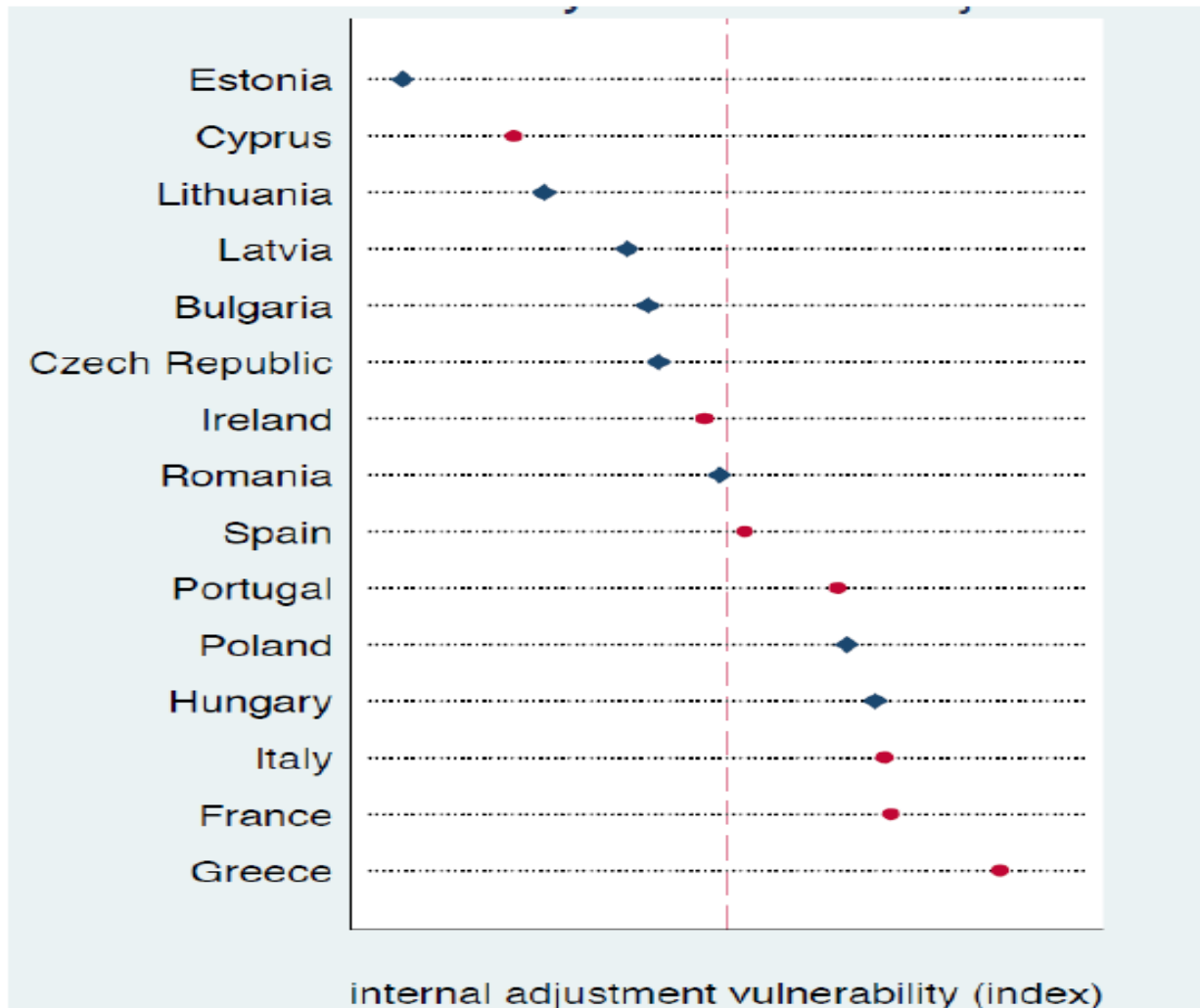
User Cost of Capital



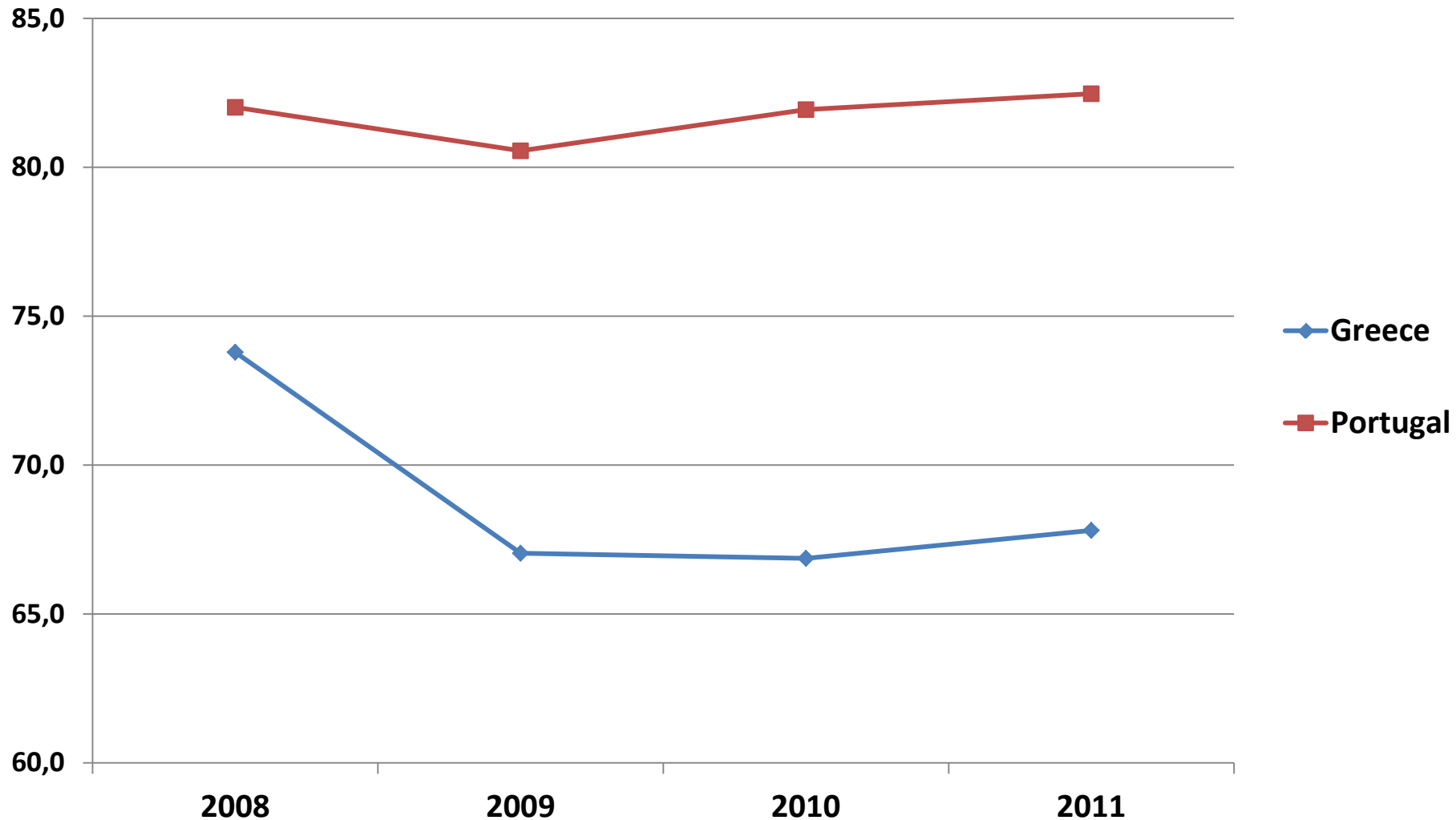
User Cost of Capital

		1996-2005	2006-2010	2011-2014
Greece				
	(1) User Cost of Capital	7.8%	7.8%	15.6%
	(2) Relative price of capital	0.95	0.87	0.86
	(3) Nominal Interest rate	9.0%	5.5%	13.8%
	(4) Depreciation	2.7%	3.8%	3.9%
	(5) Nominal Capital gains	3.6%	0.3%	-0.4%
Portugal				
	(1) User Cost of Capital	8.6%	8.6%	12.2%
	(2) Relative price of capital	0.96	0.93	0.92
	(3) Nominal Interest rate	6.0%	4.5%	7.7%
	(4) Depreciation	5.8%	5.7%	5.7%
	(5) Nominal Capital gains	3.1%	0.9%	0.1%

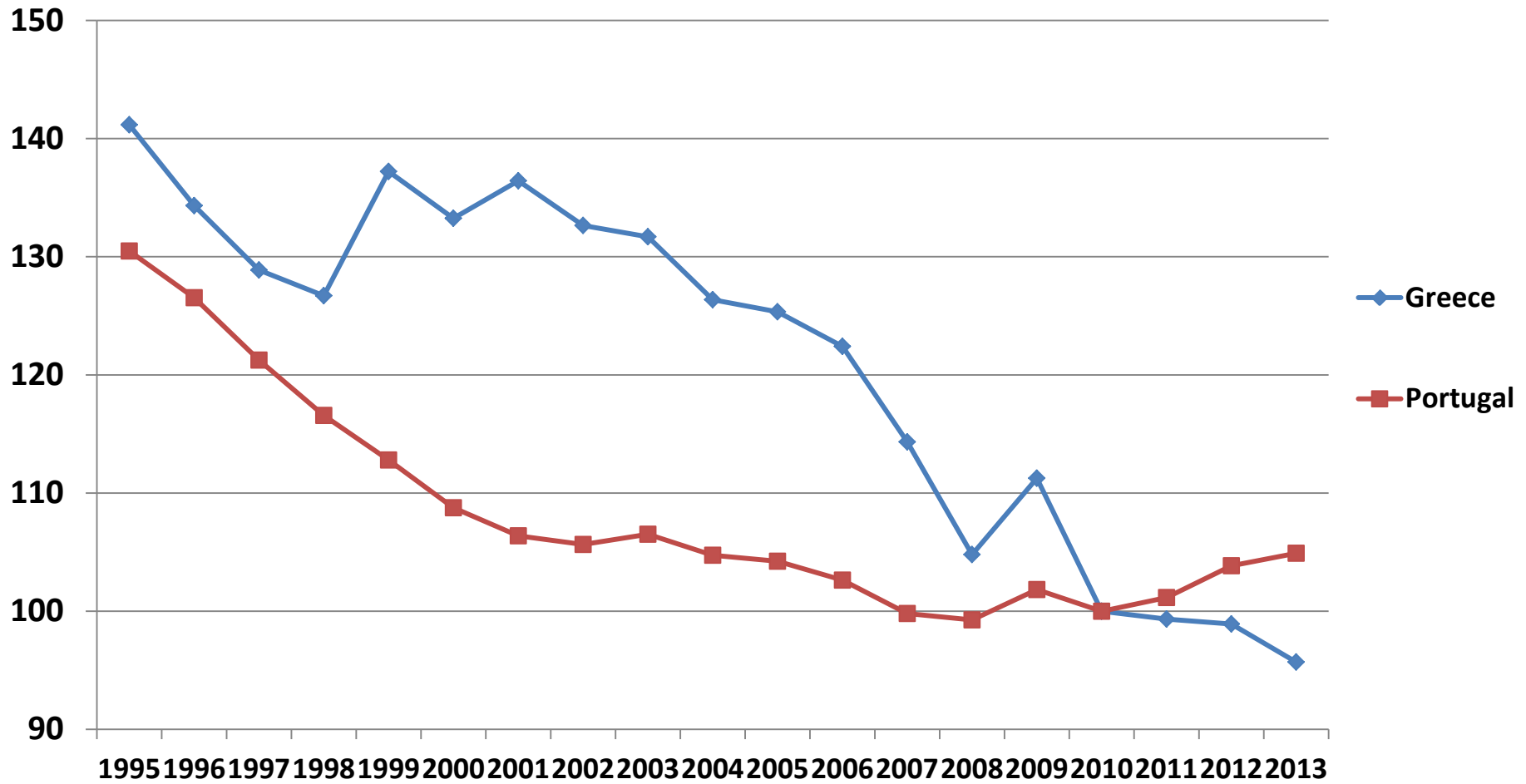
The Vulnerability Index is constructed from sub-indices involving fiscal variables, wage regulations, regulatory burdens, political structure, etc., and it measures the ability of a country to withstand internal devaluation. The index was constructed on the basis of data for 2007.



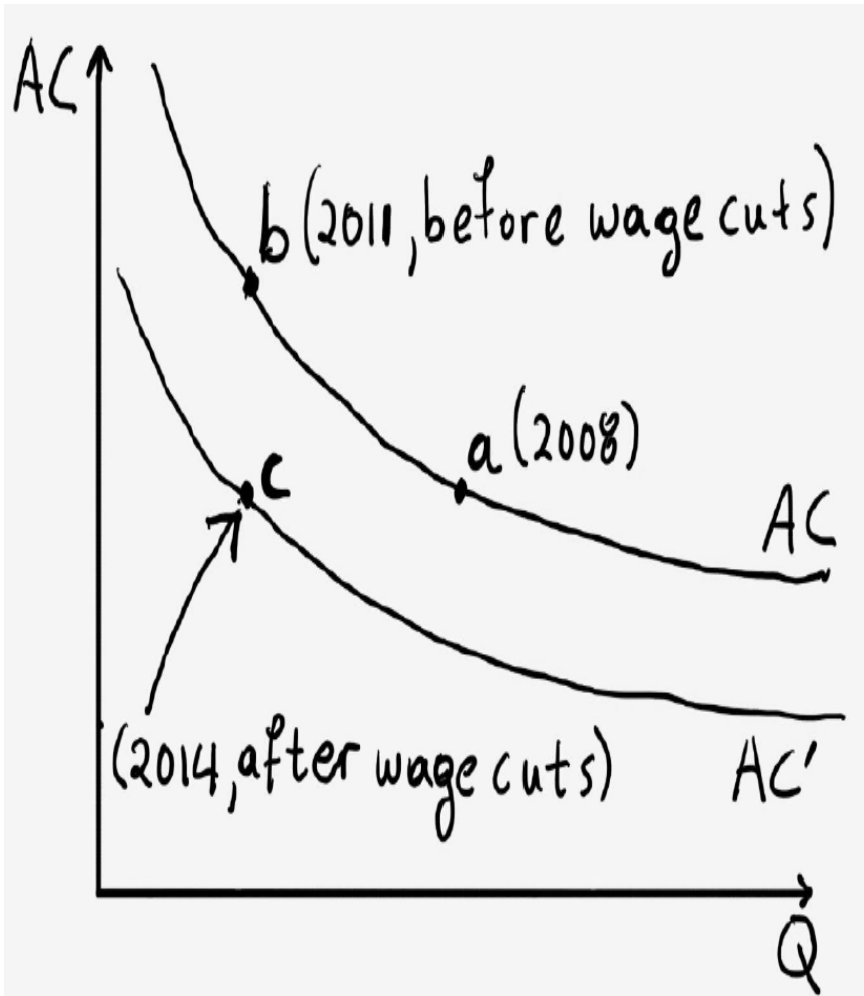
Share in Total Value Added at Factor Cost for Enterprises With at Least 20 Employees in Manufacturing, % (small firms usually do not export)



Goods Production (except Building and Construction) Share in Total Gross Value Added, 2010=100



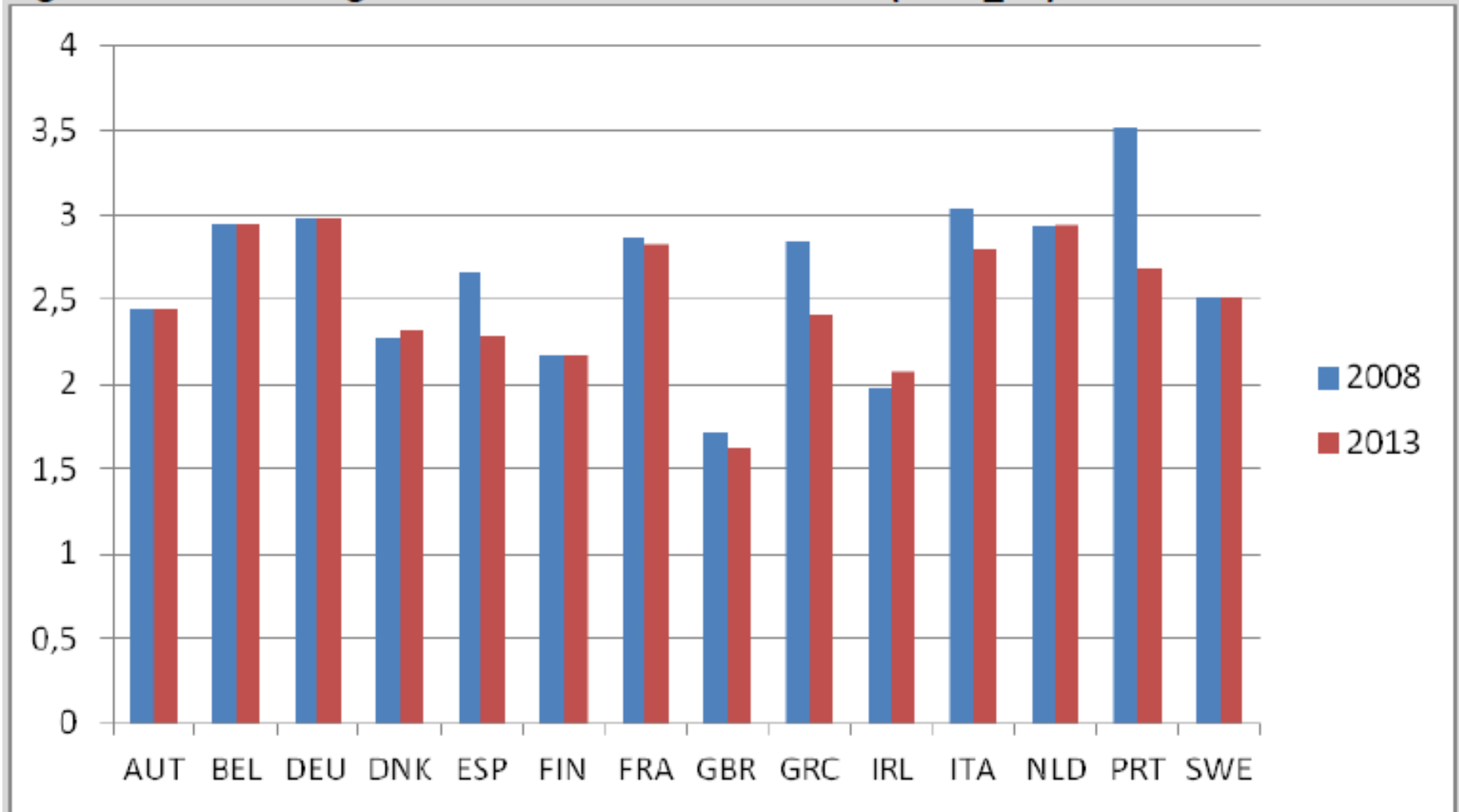
Demand Decreases, Wage Declines, and the Non-Response of Average Costs (and Prices)



- Starting from point **a** in 2008, the reduction in AD for goods due to budget consolidation, shifts the economy to a point like **b**, which after the wage cuts (implemented mostly after 2011) reduces AC to a point like **c** – not too different from point **a**.
- In addition there were large rises in the cost of capital and energy (Greek manufacturing is very energy intensive).

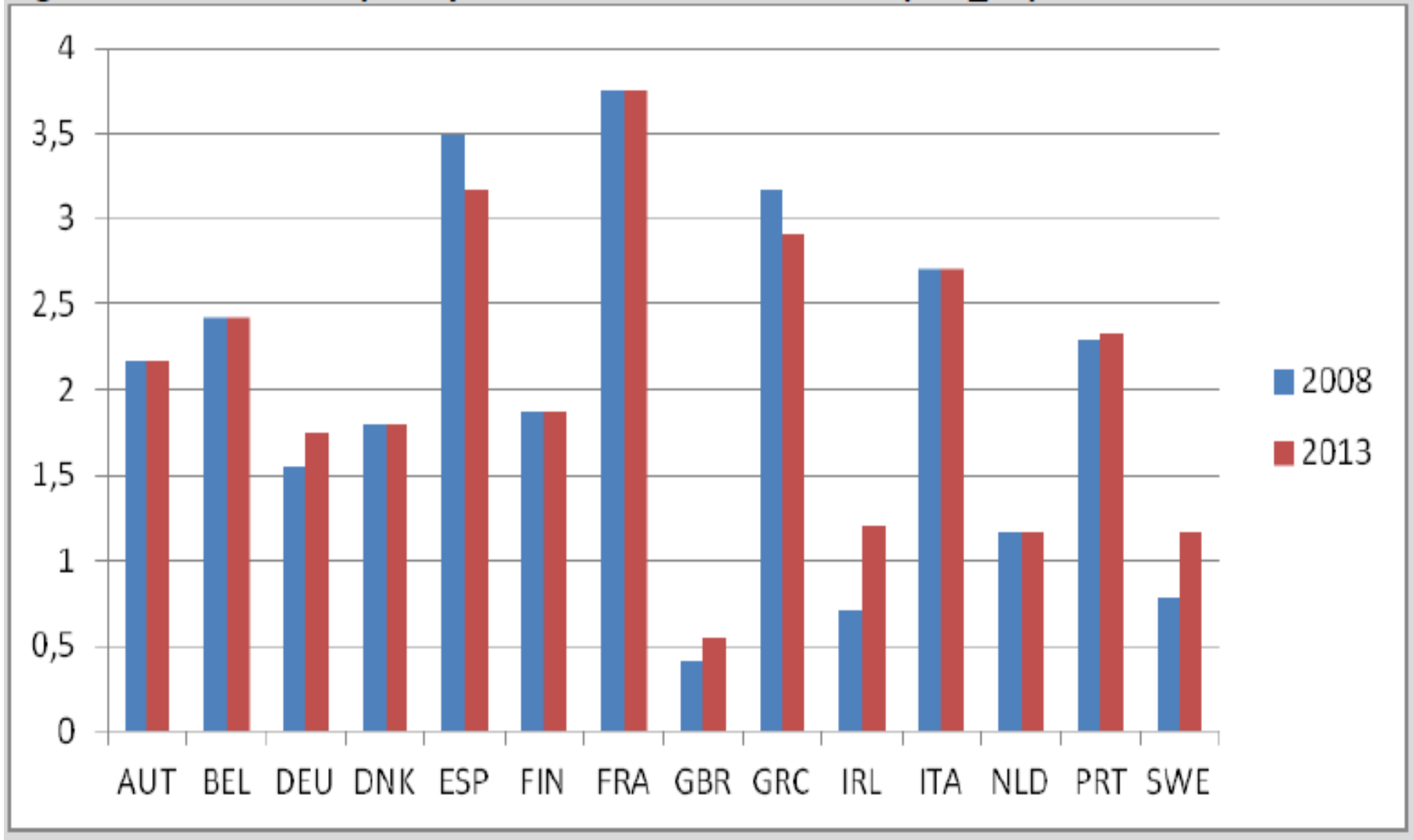
As far as labour regulations are concerned, Greece appears not to be an outlier for regular contracts ...

Figure 2.5: EPL for regular contracts in 2008 and 2013 (EPRC_V3)

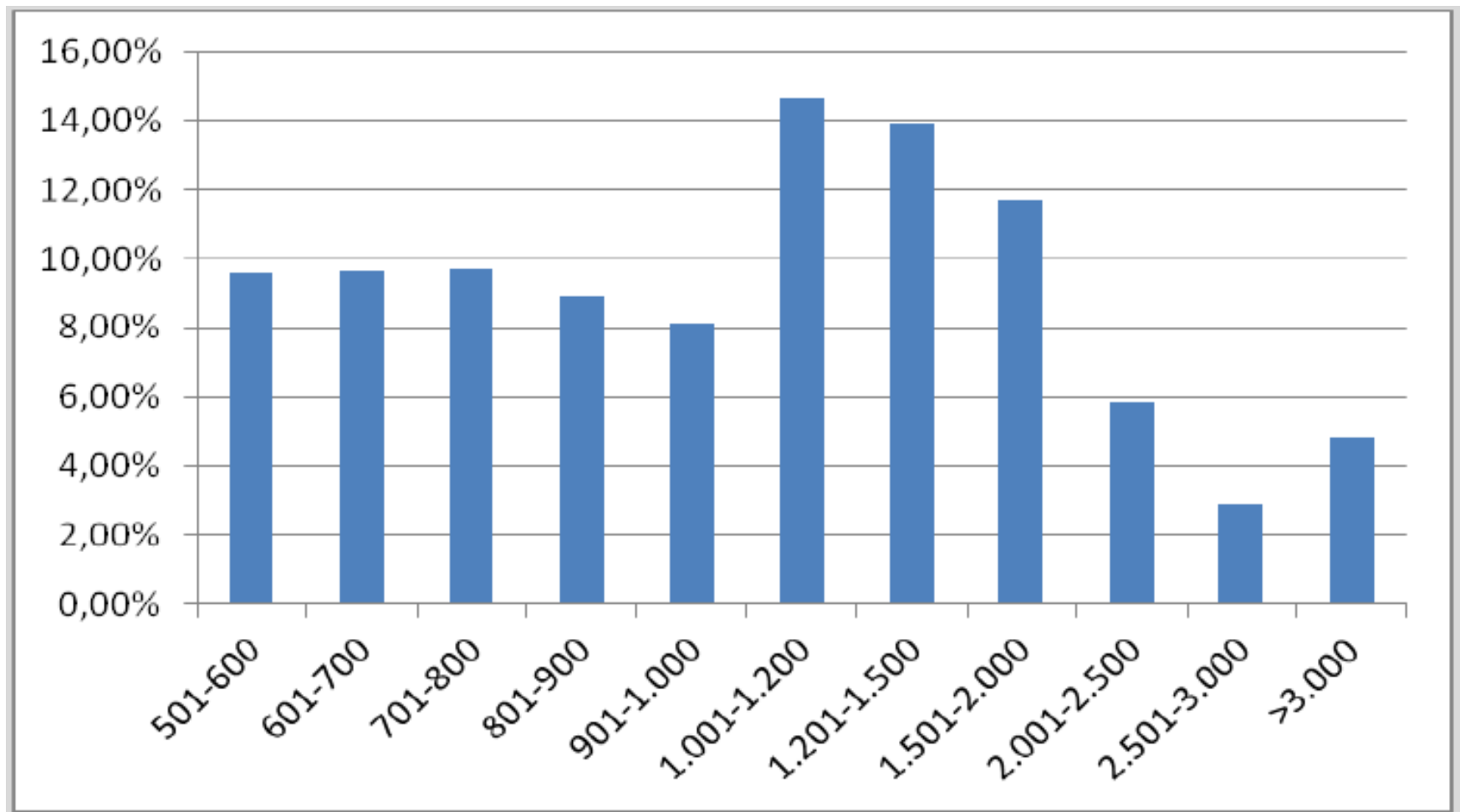


...but it almost is for temporary contracts...

Figure 2.6: EPL for temporary contracts in 2008 and 2013 (EPT_V3)



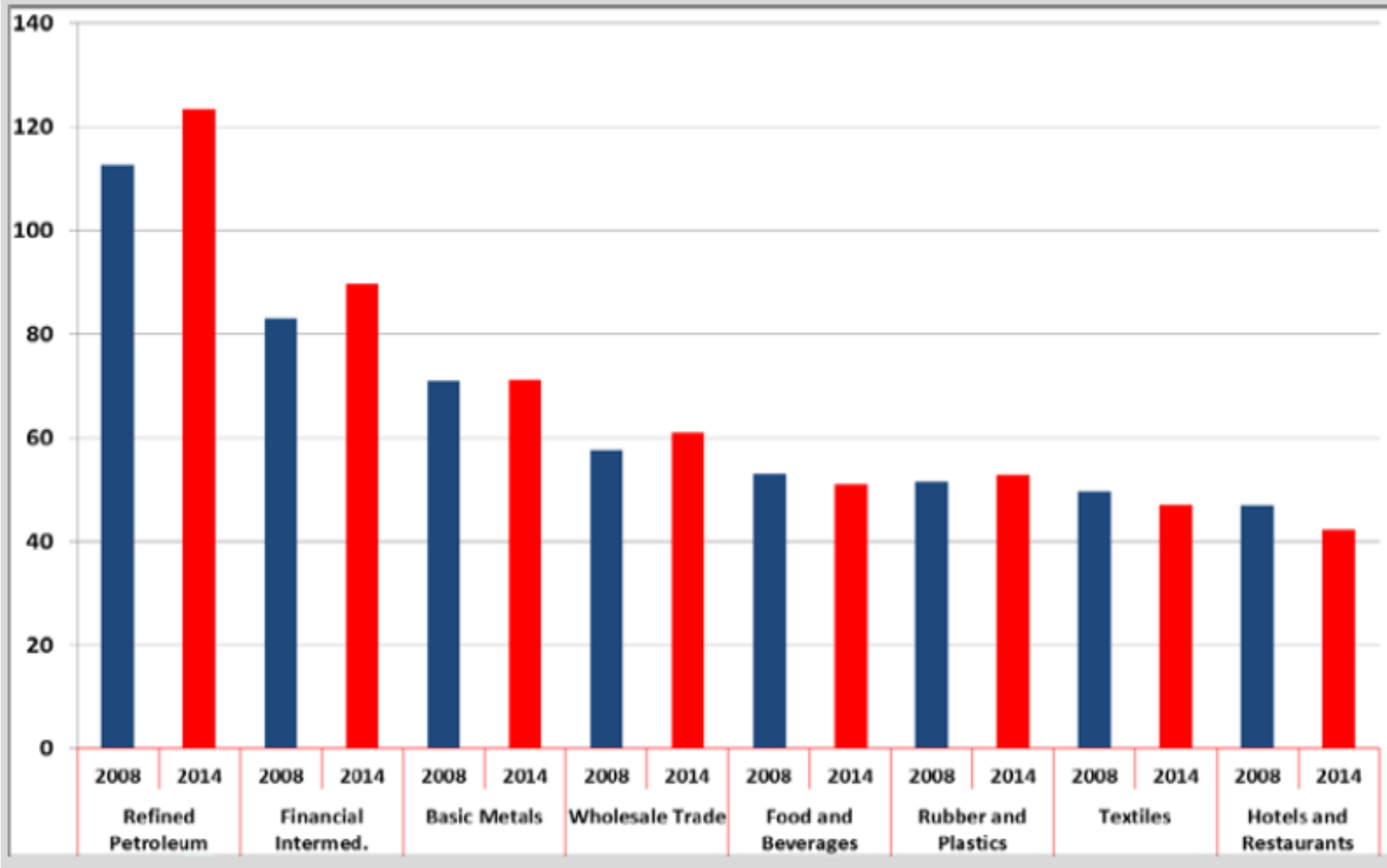
Distribution of Gross Monthly Wage Earnings in November 2013 (euros)



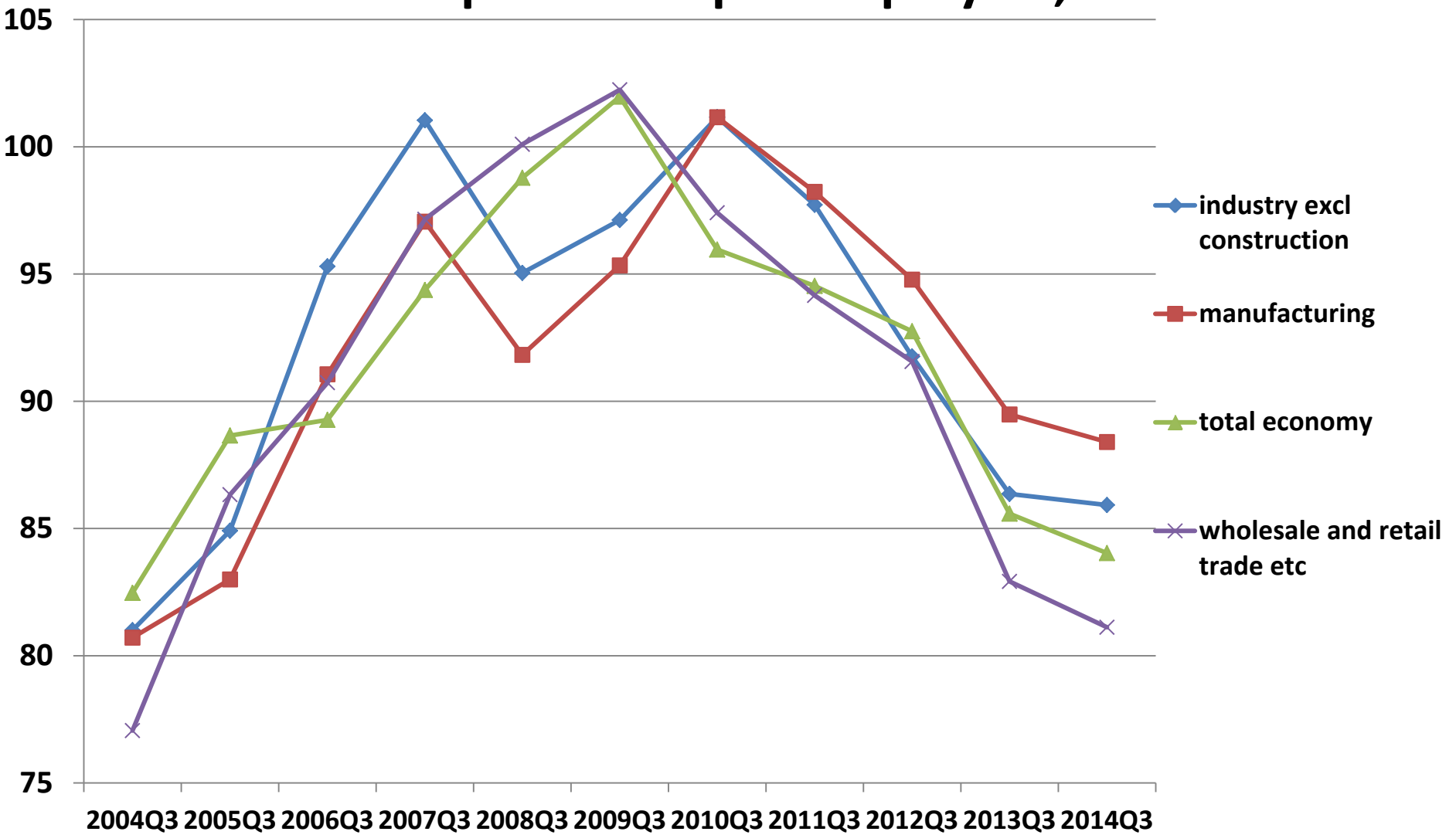
Source: ERGANI (November, 2013)

Internal Devaluation has not Affected Everybody

Figure 4.4: Average daily wages in selected industries, 2008 and 2014 (euros)*



Greece: Compensation per Employee , 2010=100



Pensioners have fared not as bad as other groups...

Table 4.3: Poverty and inequality indicators, 2008–12

At risk of poverty rates by gender and age (%) ³⁰						
Age	Gender	2008	2009	2010	2011	2012
Total	Total	20.1	19.7	20.1	21.4	23.1
	Males	19.6	19.1	19.3	20.9	22.5
	Females	20.7	20.2	20.9	21.9	23.6
0–17	Total	23.0	23.7	23	23.7	26.9
18–64	Total	18.7	18.1	19.0	20.0	23.8
65+	Total	22.3	21.4	21.3	23.6	17.2

...and the decline in the wage share continues....

Figure 1.2: Unemployment rate and adjusted wage share (per cent)

