

The Greek Crisis, Structural Reforms and EZ Convergence

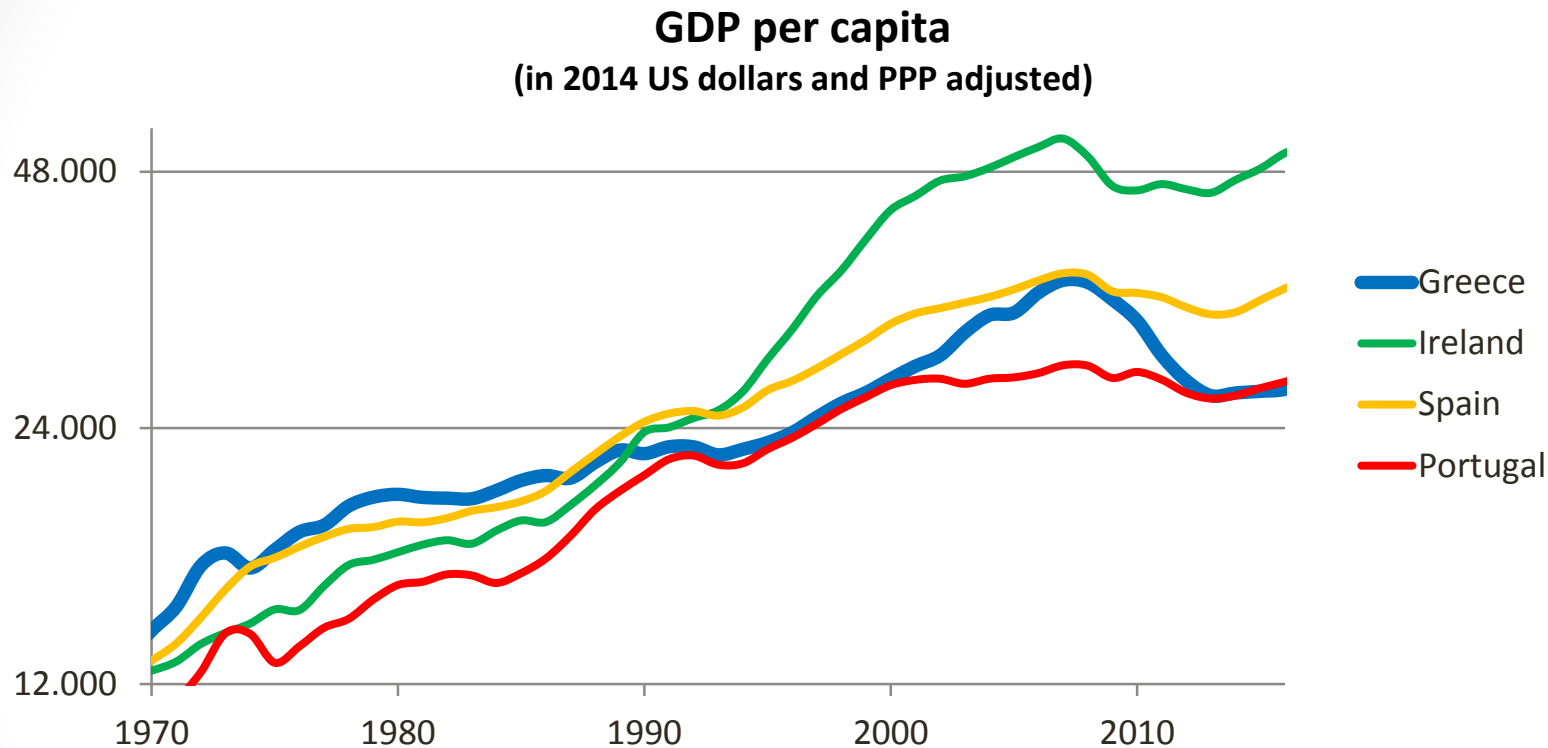
Costas Meghir (Yale), Chris Pissarides (LSE), Dimitri Vayanos (LSE), and Nikos Vettas (AUEB & IOBE)

London, 30 October 2017

The Greek Economy

– A Historical Overview

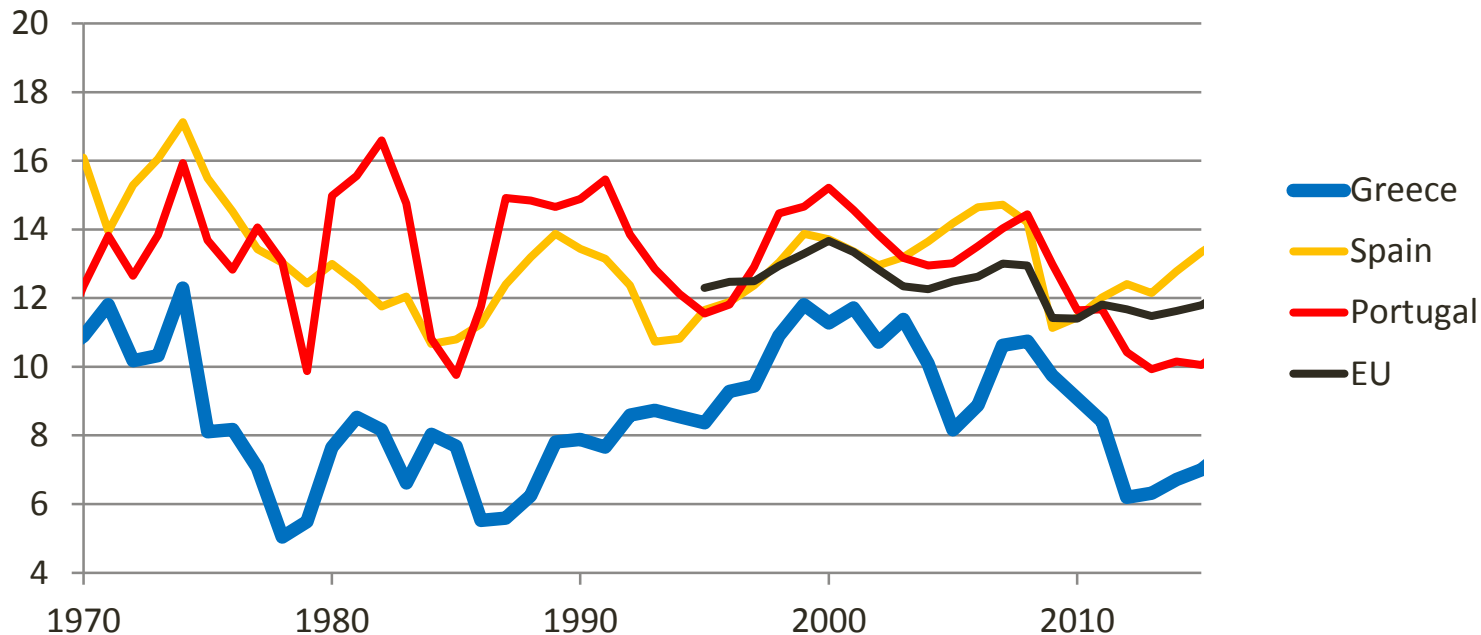
GDP



- Greece is becoming one of the poorest countries in the EU.
 - From 14th between 28 countries in 1980, it slid to 24th in 2016.
- Gradual fall---both before Euro entry and after.

Investment

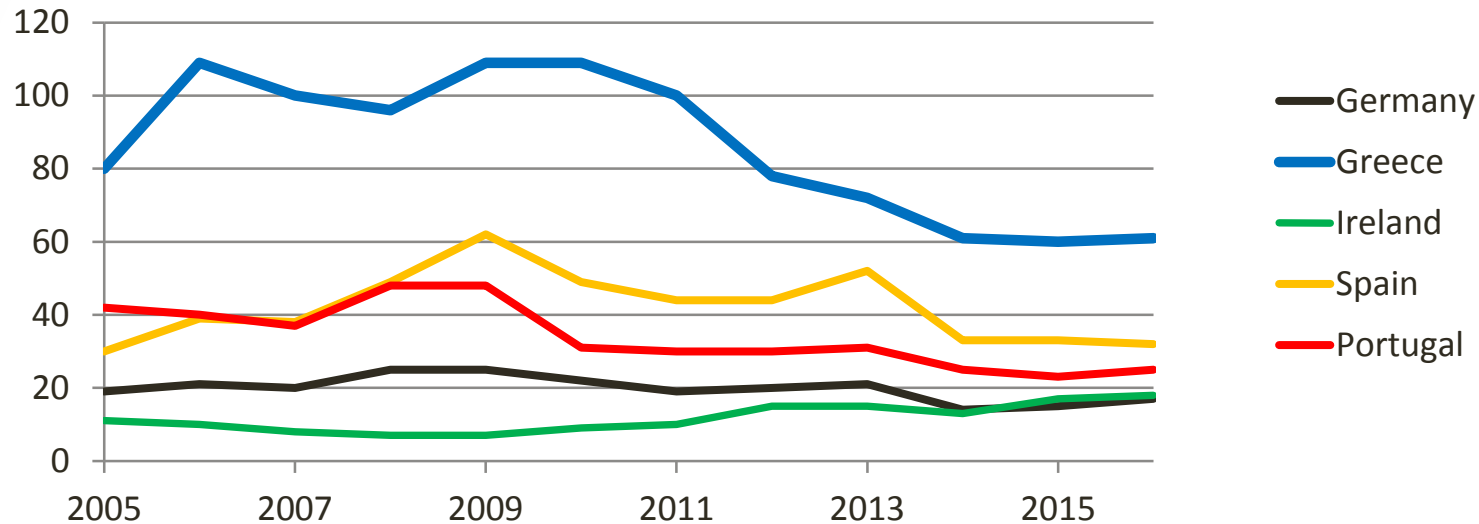
Corporate Investment as % of GDP



- Corporate investment in Greece has been low.
- It rose in the run-up to Euro entry, but dropped again during the crisis.

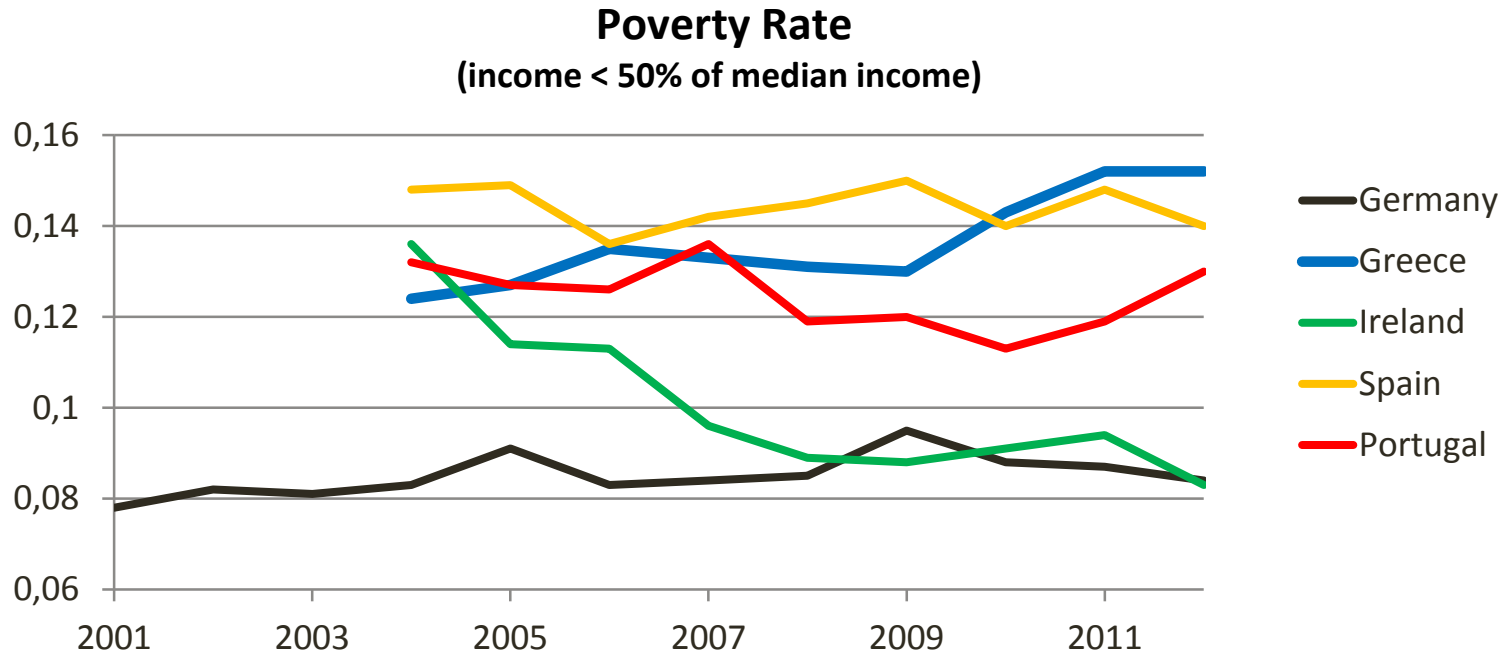
Business Environment

Rank in World Bank Doing Business Report



- Business environment has been mediocre.
 - Significant improvement during the crisis---until 2014.
- Consistent with low foreign direct investment (FDI).
 - 2001-2007: FDI in Greece 1% of GDP – 28th in EU (4.5%).
 - 2008-2012: FDI in Greece 0.7% of GDP – 26th in EU (2.7%).

Social Protection

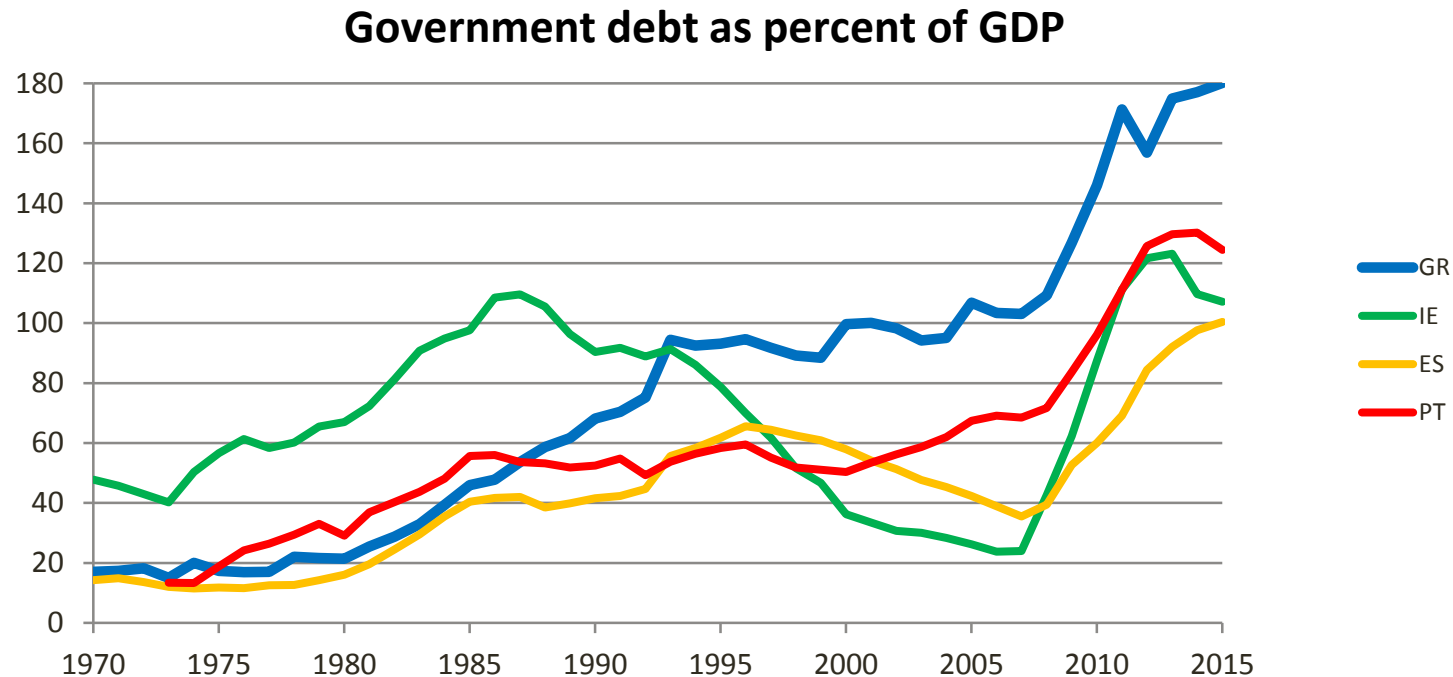


- Institutional weaknesses concern not only business environment but also social protection.
 - Poverty rate went up during the crisis---but before it as well.

GDP and Institutional Quality

- The stagnation of the Greek economy since the 1980s is a long-term phenomenon, due largely to low institutional quality.
 - Rising government debt helped cover the problems.
- The fast growth in the run-up to and after Euro entry, and the sharp contraction during the crisis, is a shorter-term phenomenon that is also due to macroeconomic reasons.
 - It does not change the broader picture. (GDP per capita in real terms is the same in 2016 as it was in 1999.)

Government Debt

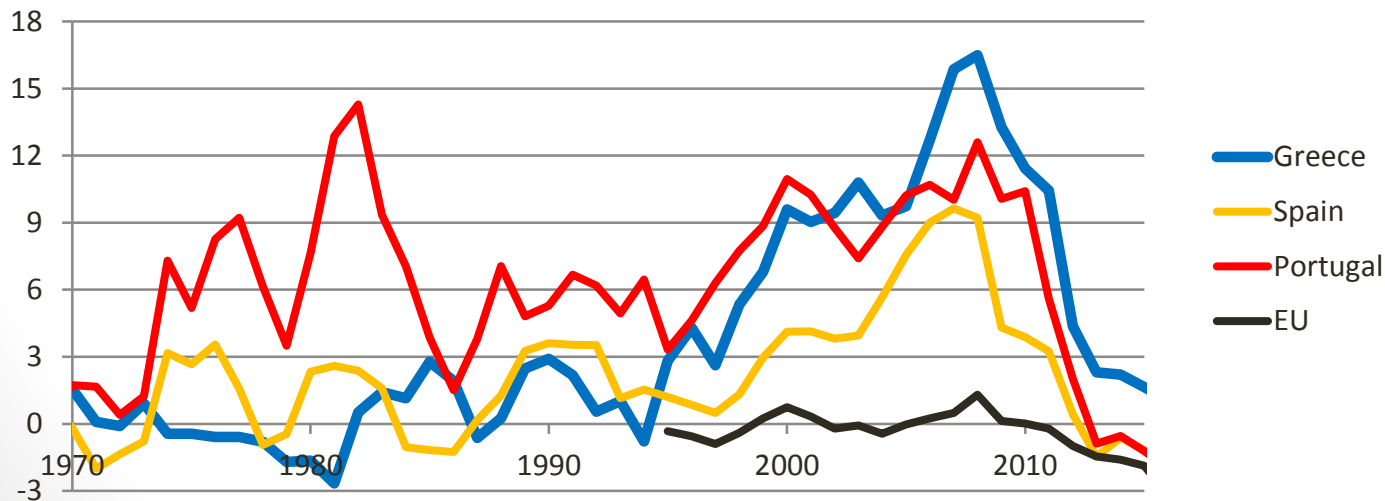


- Debt to GDP grew sharply in the 1980s.
- Debt remained a large percent of GDP until the crisis, despite the rapid growth in GDP.

Euro Entry

- Euro entry (and the anticipation of it happening) lowered dramatically the rates at which Greece could borrow.
- This led to:
 - Rise in investment and even greater rise in consumption.
 - Rise in GDP.
 - Current account deficit.

Current Account Deficit as % of GDP



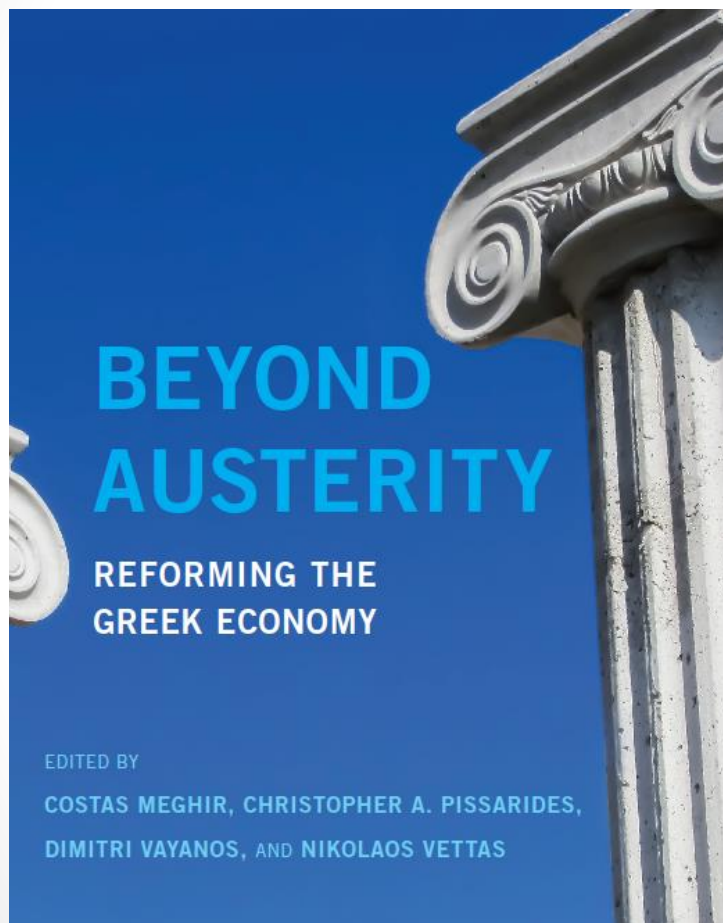
The Crisis

- Greece's external borrowing was not sustainable and had to stop.
 - Net foreign assets (public and private sector) were -100% of GDP in 2007.
- The mechanisms that caused GDP and current account deficit to rise started running in reverse.
 - Large drop in GDP (and hence large rise in debt to GDP).
 - (Almost) balanced current account from 2014 on.

Rest of the Talk

- Dig deeper into Greece's economic institutions.
 - Pre-crisis – Large economic inefficiencies, generating rents for some at the expense of others.
 - During crisis – Fiscal sustainability was achieved and some inefficiencies were removed. Yet many remain.
 - Priorities for future reforms. Economic outlook.
- Highlight broader implications for structural reform in the EZ.
 - Necessary for EZ's long-term viability.
 - Some of Greece's weaknesses are shared by other countries.

Our Book



- «Beyond Austerity: Reforming the Greek Economy», MIT Press.
 - <https://mitpress.mit.edu/books/beyond-austerity>
- Greek edition: «Πέρα από τη Λιτότητα: Για μια Νέα Δυναμική στην Ελληνική Οικονομία», Πανεπιστημιακές Εκδόσεις Κρήτης.
- Economic institutions and resulting incentives, across wide range of areas.
 - Pre-crisis situation.
 - Changes during crisis.
 - Policy proposals going forward.
- Collective effort of Greek economists in Greece and diaspora.
- Grateful to **LSE's Hellenic Observatory** for funding the research (data collection and processing, etc) reported in the book.

Beyond Austerity: Reforming the Greek Economy



1. The Greek Economy



C. Meghir



C. Pissarides



D. Vayanos



N. Vettas

2. Greece and the Euro



G. M. Angeletos



H. Dellas

3. Trade Balance



C. Arkolakis



A. Doxiadis



M. Galenianos

4. Product Markets



Y. Katsoulacos



C. Genakos



G. Houpis

5. Privatizations



V. Skreta

6. Labor Market



A. Lyberaki



K. Meghir



D. Nicolitsas

7. Financial System



M. Haliassos



G. Hardouvelis



M. Tsoutsoura



D. Vayanos

8. Education



N. Vettas

9. Healthcare



P. Kanavos



K. Souliotis

10. Taxation



M. Flevotomou



M. Haliassos



C. Kotsogiannis



C. Meghir

11. Pensions

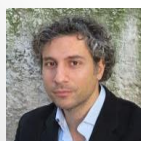


S. Panageas



P. Tinios

12. Justice System



E. Papaioannou



S. Karatza

13. Corruption



C. Azariadis



Y. Ioannides

14. Public Administration I



M. Jacobides

15. Public Administration II



P. Karkatsoulis



E. Stefopoulou

The Labor Market

Overview

- The Greek labor market was overregulated before the crisis.
- Significant deregulation during the crisis.
- Current problems:
 - Excessively high and progressive tax wedge.
 - Risk that old regulations may be brought back after adjustment programs end.

Some Labor-Market Indicators

	Greece 2007	OECD 2007	Greece 2016	OECD 2016
Self Employed (%)	35,5	16,1	35,2	16,1
Long-term Unemployed (% of total)	50,0	28,6	71,2	35,2

Annual Reallocation Rate (Hirings+Separations)/Employment

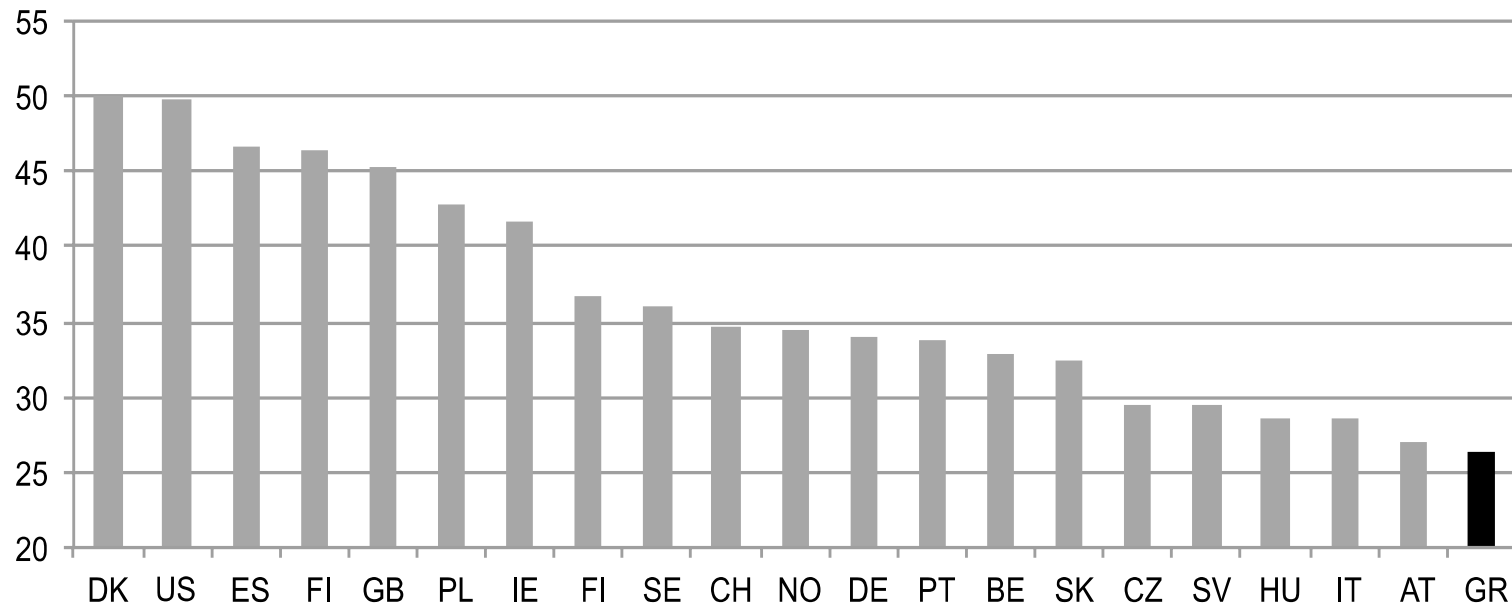
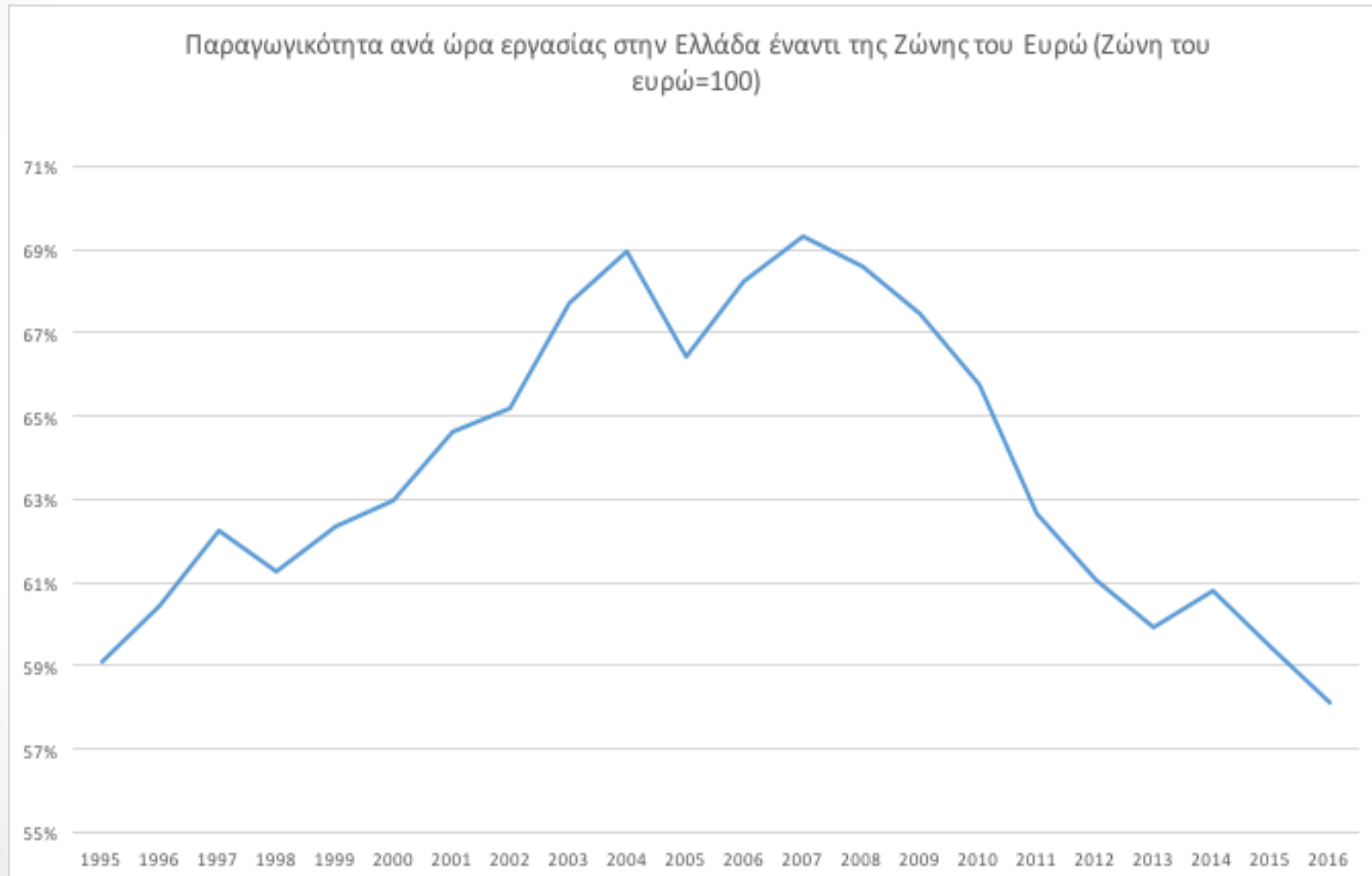


Figure 6.3

Worker reallocation rates in 2005

Source: OECD, *Employment Outlook* (2009, ch. 2)

Productivity per Hour relative to EZ Average



Employment Protection Legislation

- Large severance pay – 11 months of salary.
 - Now reduced to 5 months.
- Difficulty to carry out collective dismissals (2% of employees - ministerial approval)
 - Ministerial approval no longer required - replaced by consultation.
- Legal prerogative favoring workers

Working Hours

- Overtime: 2 x wage for more than 30 hours per semester (ministerial approval).
 - Ministerial approval no longer required
- Part-time work: Employer cost not pro-rata and 7.5% hourly wage premium.

Pay Restrictions

- Four layers of collective bargaining:
 - National
 - Sectoral
 - Occupational
 - Firm
- Each layer could only improve pay and conditions.
- Agreements extended to firms not party to the agreement.
- Effectively moved to firm-level agreements.
- Automatic extension to the sector has been removed.

Public-Sector Impact on Pay

- Public Sector pay 20%-35% higher than private sector, with no performance evaluation.
- Put pressure on formal sector employment and wage growth, and hindered exports.

Regulation and Informality

- Regulations subsidize the informal sector.
- Large parts of the informal sector are focused on domestic low-quality services (and tourism).
- Effectively the system encourages formation of non-exporting low-growth type employment.

The Tax Wedge

Employer cost	Takehome pay	Tax Wedge (%)	Marginal Tax Wedge (%)
10000	6720	32.8	32.8
20000	12366	38.2	49.1
30000	17444	41.9	55.6
40000	21879	45.3	55.6
50000	25972	48.1	62.0
60000	29740	50.4	68.1
70000	32932	53.0	68.1

- Excessively high and progressive.
 - For employer cost of 30000, tax wedge is 26.8% in Bulgaria and 19.7% in Cyprus.
- Discourages employment of high-skill labor.

Taxation

The Tax and Welfare System

- Simplifying and redesigning the tax system.
- Introducing welfare programs.
- Minimum Income Guarantee and tax credits.
- Supporting individuals in a deregulated economy.

Complexity

- Complicated tax system treating income from salary, business, capital and capital gains in different ways.
- A key issue is the tax base and how this is distorted by evasion.
- VAT has four rates (0%, 6%, 13% and 24%). Average rate 15.2%

Compliance

- Low compliance rates: Income tax collected before the crisis was 7% of GDP, compared to about 14% in EU 27.
- Income under-reporting was 12%.
- Shortfall in personal income tax receipts of was 30%.
- Noncompliance of VAT was 30 % of VAT in 2006, compared to 9% in EU15.

Reforming Personal Taxation

- Broaden tax base through compliance and actual reform – ensuring a better and less distortionary tax system.
- Introduce welfare programs to support a more deregulated labour market.

An Alternative Tax and Welfare System

- Shift to Consumption Taxation.
- Integrated Tax and Welfare System.
 - Progressivity needs to be evaluated overall – including the effect of all taxes and benefits.
 - Tax base matters for progressivity.
- Comparison based on microeconomic data.

VAT-Based Tax System

- Most revenue collected from VAT
- All expenditures taxed (including rents and imputed rents) at a uniform rate.
- Uniform rate (27%)
- Income tax with single marginal rate for the top quartile of total income distribution
- Welfare benefits:
 - Means tested minimum income
 - Earned Income Tax Credit
 - Welfare depends on household composition.

Advantages of VAT-Based System

- Automatically broadens the tax base.
- Tax evaders and avoiders still pay substantial tax.
- Encourages Savings.
- Compliance:
 - VAT is self-enforcing (to an extent) when long supply chains are involved.
 - With no income tax for most the incentive to evade VAT is lower
 - Compliance issues decline as the economy grows through the formal sector and credit cards become more prevalent.
- Progressivity is assured by:
 - Increasing the tax base.
 - Welfare benefits at the bottom.
 - Higher income tax rate at the top.

All-Inclusive Marginal Tax Rates

	Low	Benefit withdrawal	Top quartile
VAT Based System	-7%	45%	41%

Similar inequality to current system.

Pensions

Pension System – Pre-Crisis

- Non-viable.
 - Pension expenditure in 2007 second-highest in EU (12% of GDP).
 - Expenditure projected to double by 2060.
- Unfair.
 - Rules mapping contributions to pensions differed vastly across professional groups.
 - High old-age poverty.
- Resistant to reform.
 - Reform efforts pre-crisis ended in 2001, with failure of pension reform.

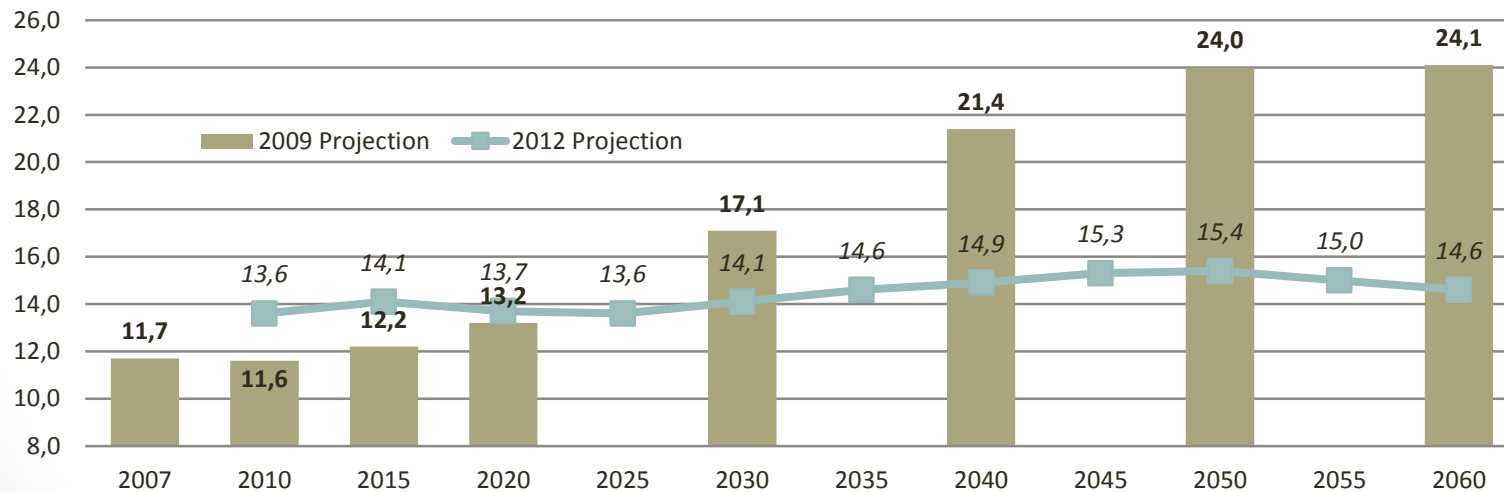
Changes During Crisis

- Goals:
 - Reduce pensions and raise contributions, to achieve viability.
 - Make rules uniform across professional groups, to achieve fairness.
- End-result (after 8 years of changes):
 - Single pension calculation for all, consisting of:
 - Minimum pension (384 Euros).
 - Pension proportional to number of working years.
 - Single retirement age at 67, for those who retired until 2016.
 - Contributions range from 27-38% (of employer's salary expenditure).

Problem 1: Early Retirements

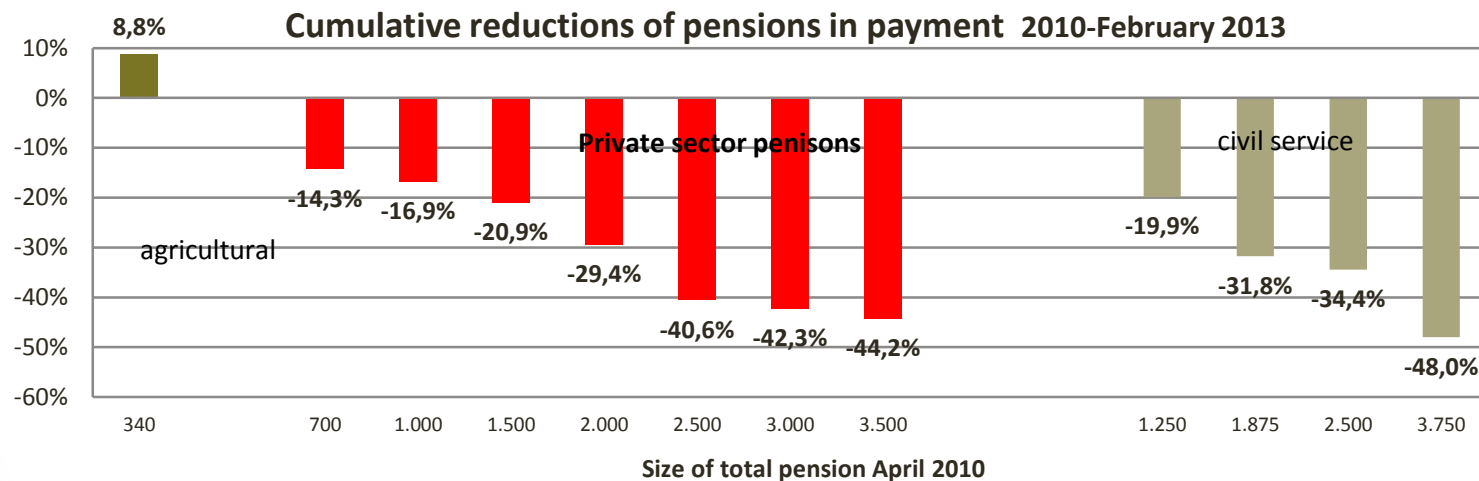
- Large wave of early retirements until 2016.
 - Partly to meet employment reduction targets in public sector.
 - *Raised* pension expenditure in medium term.

Comparing the 2009 and 2012 EPC projections (pensions as % of GDP)



Problem 2: Loss of Reciprocity

- To meet fiscal targets, existing pensions were cut drastically and in a way not reflecting contribution history.
 - Each cut was advertised as “the last one”.



- Link between contributions and pensions, which was already weak, disappeared.
 - Contributions (27-38%) perceived as a *labour tax*.
 - Together with high income taxes, large burden on productive activity.

Solution: Multi-Pillar System

- Bring back trust and reciprocity.
- Multi-pillar system.
 - State pensions, about half of today's level. Same for contributions.
 - Individual retirement accounts, with fiscal incentives.
 - Until recently, disincentives.
 - Contributions not perceived as a labour tax.
- Transition problem---working-age population must pay current pensions and save for their future pensions--can be solved.
 - Cost can be spread across all future generations.
- Side-benefits:
 - Increased private savings (currently low).
 - Lower cost of capital for Greek firms.

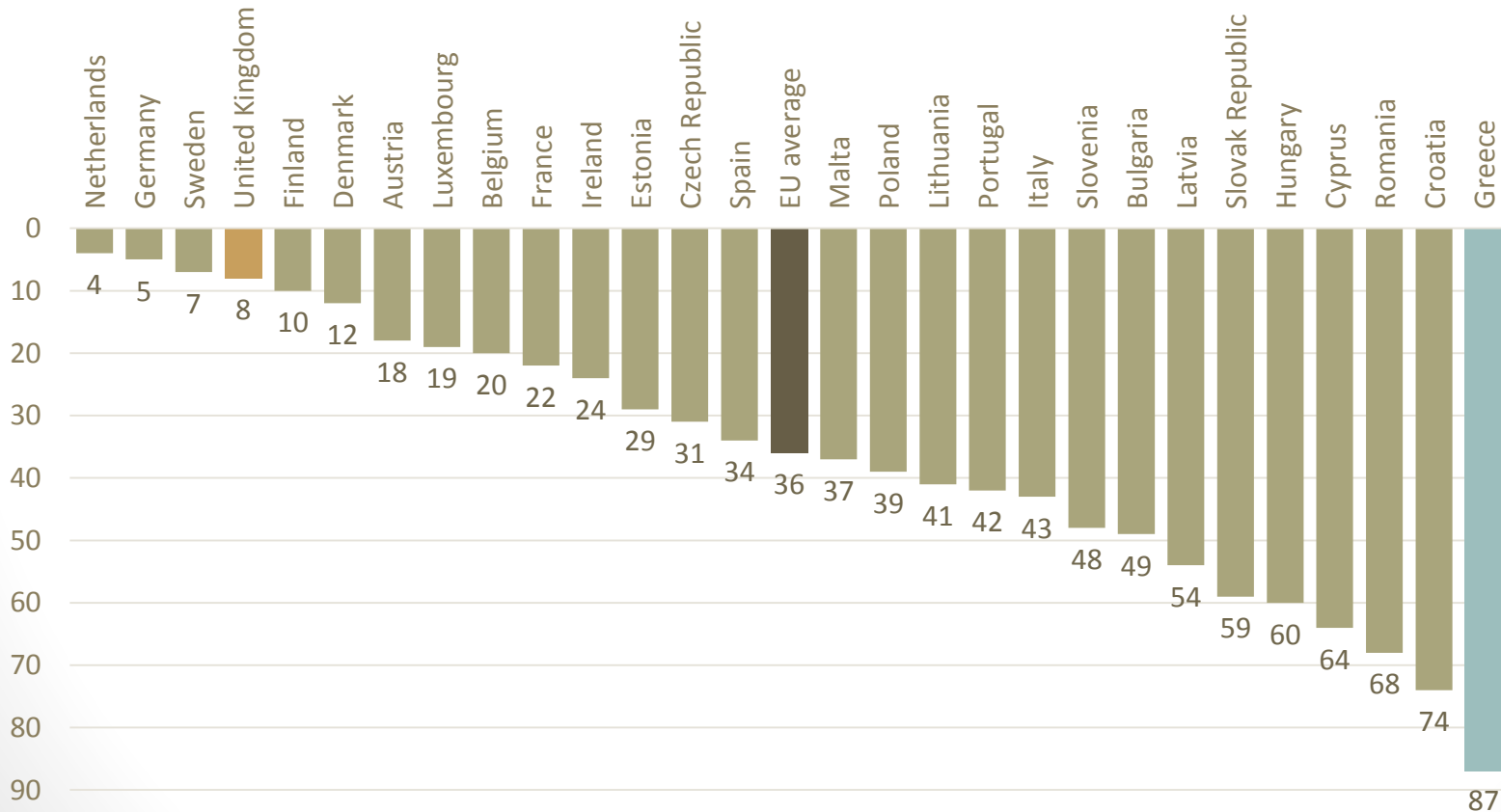
Product Markets, Public Administration, Education, and the Justice System

Pre-Crisis: Long-Run Characteristics

- Product markets: low export orientation and innovation
 - Entry and growth barriers - size of firms.
 - Investment primarily towards non-tradables.
- Public administration: formalism
 - Regulatory burden and bureaucracy.
 - Unclear boundaries between the government and the public sector.
- Education: weak governance
 - Excessive control and dependence on the state.
 - Missing links with labor market and broader economy.
- Justice: low effectiveness
 - Excessive delays.
 - Lack of transparent and simple legislation.

Competitiveness

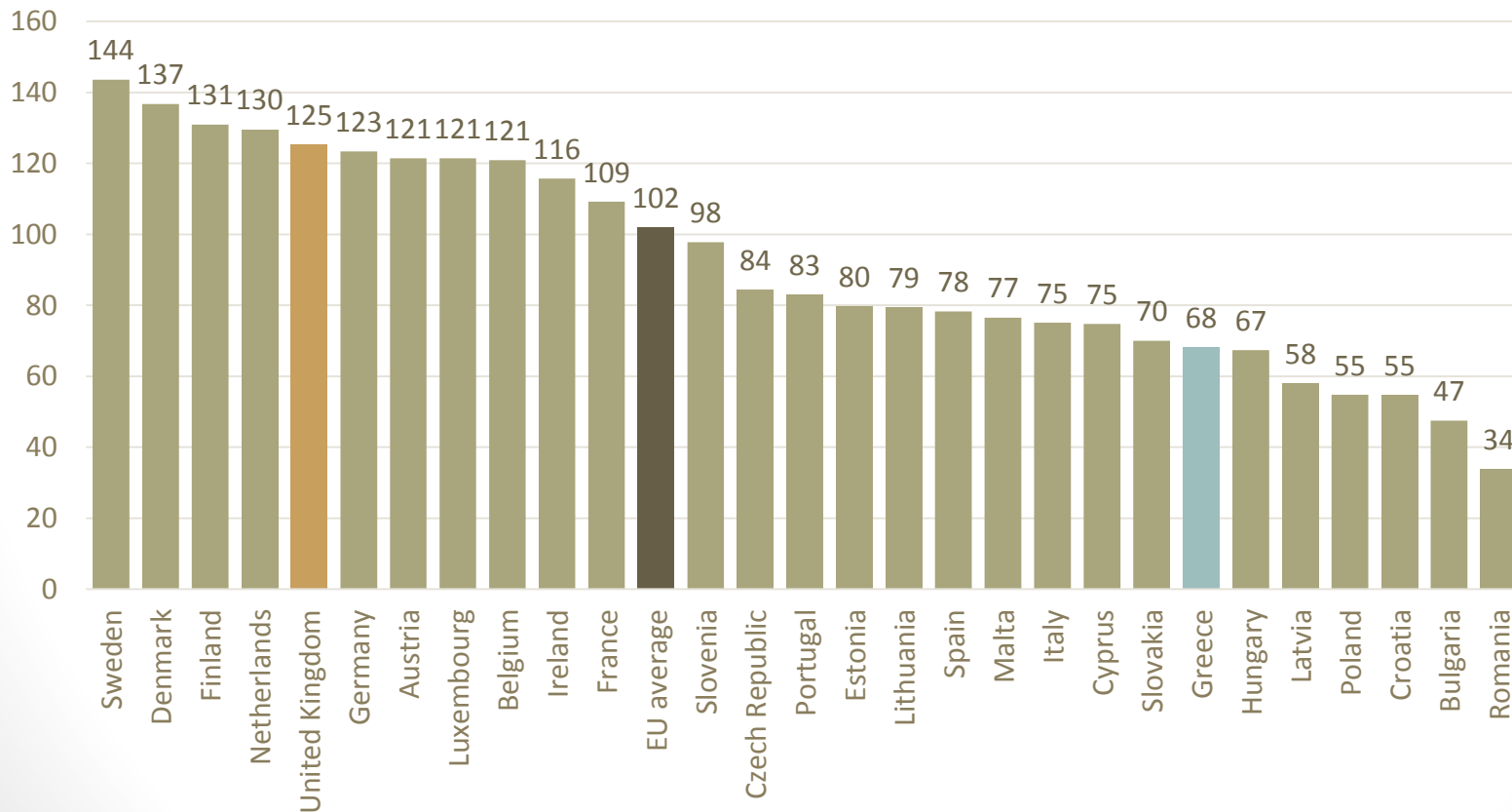
World ranking of EU28 countries according to the Global Competitiveness Index 2017-2018



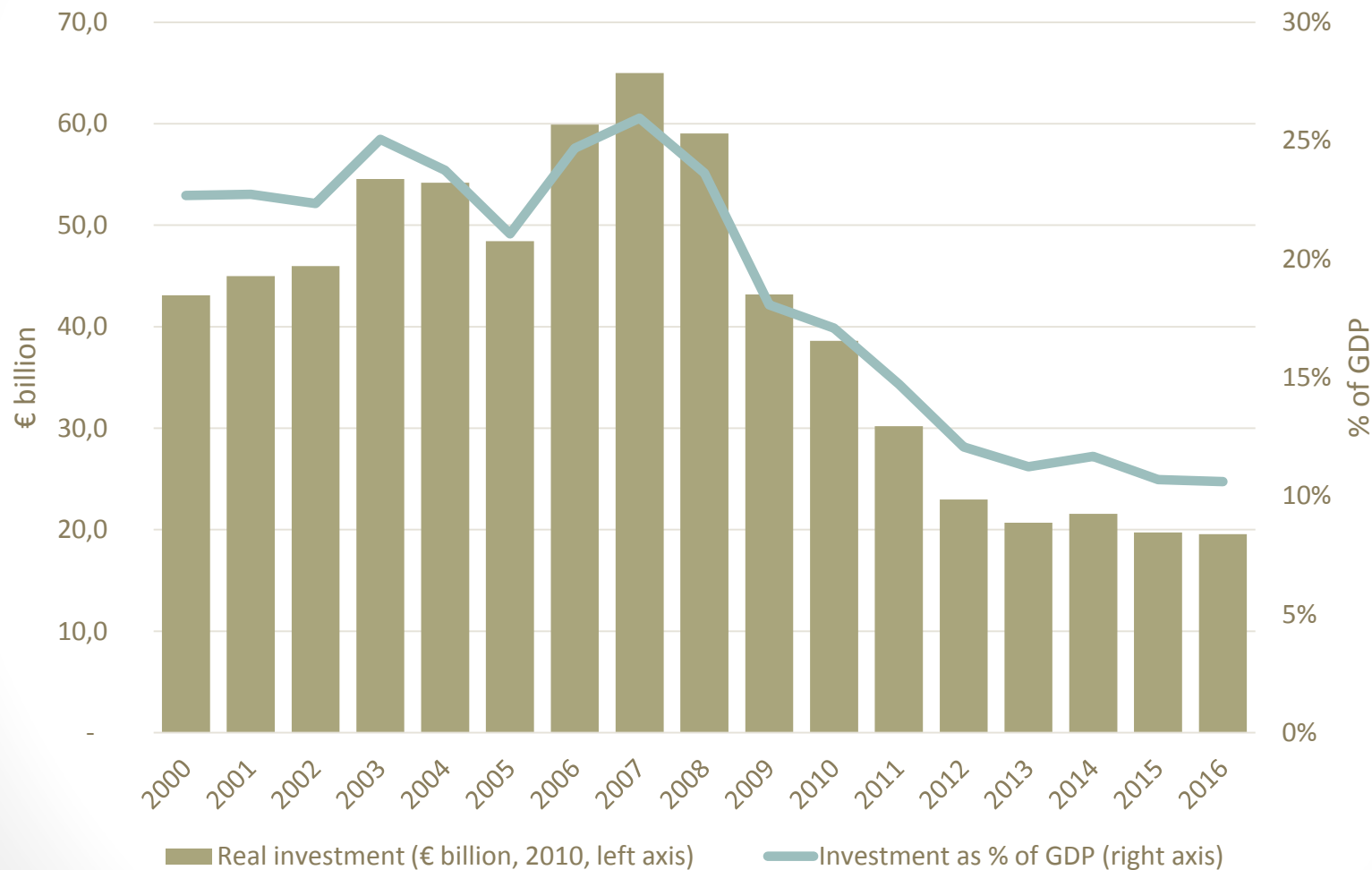
Source: World Economic Forum

Innovation

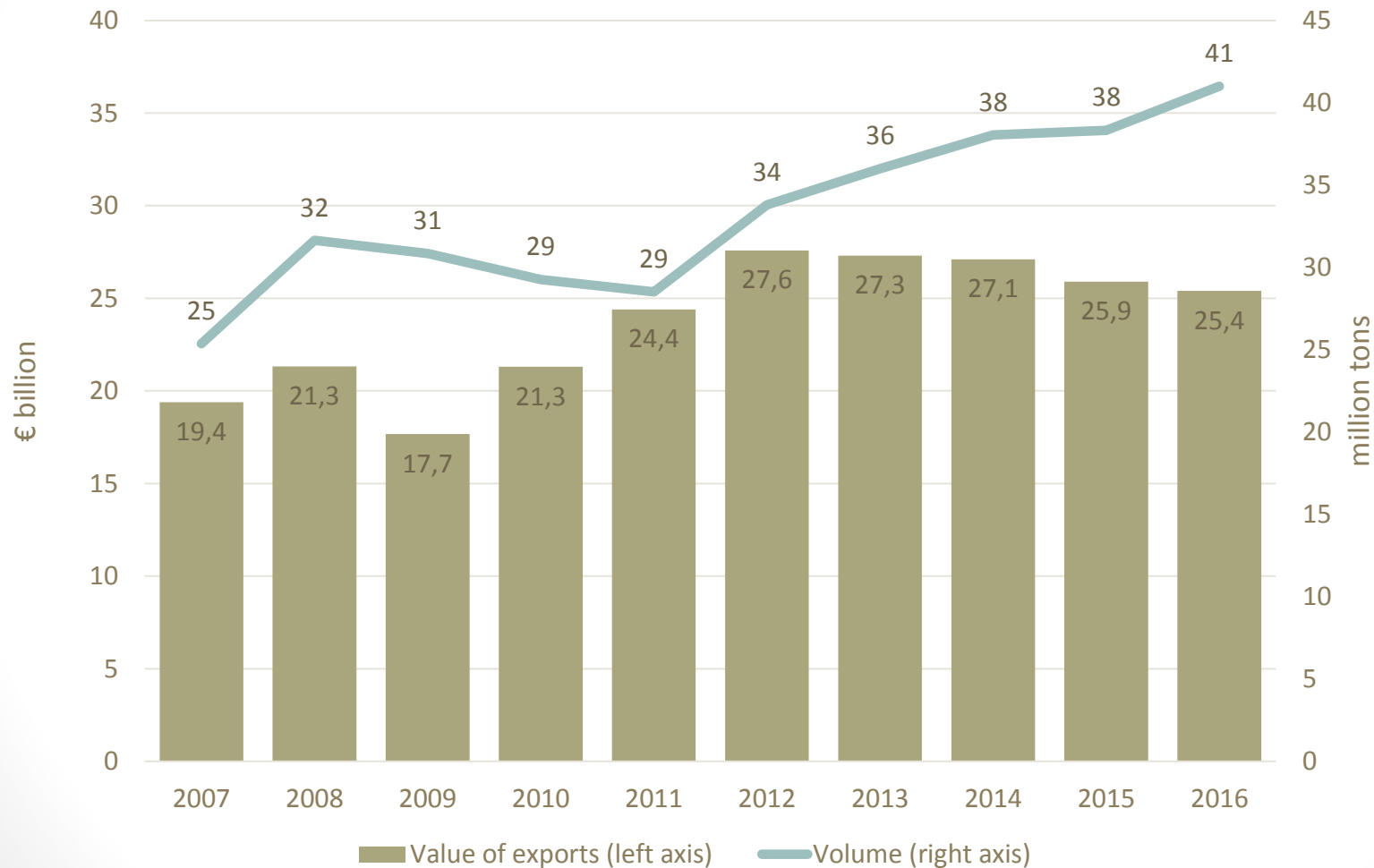
2016 European Innovation Scoreboard across EU28 countries
(Index 100 = EU average in 2010)



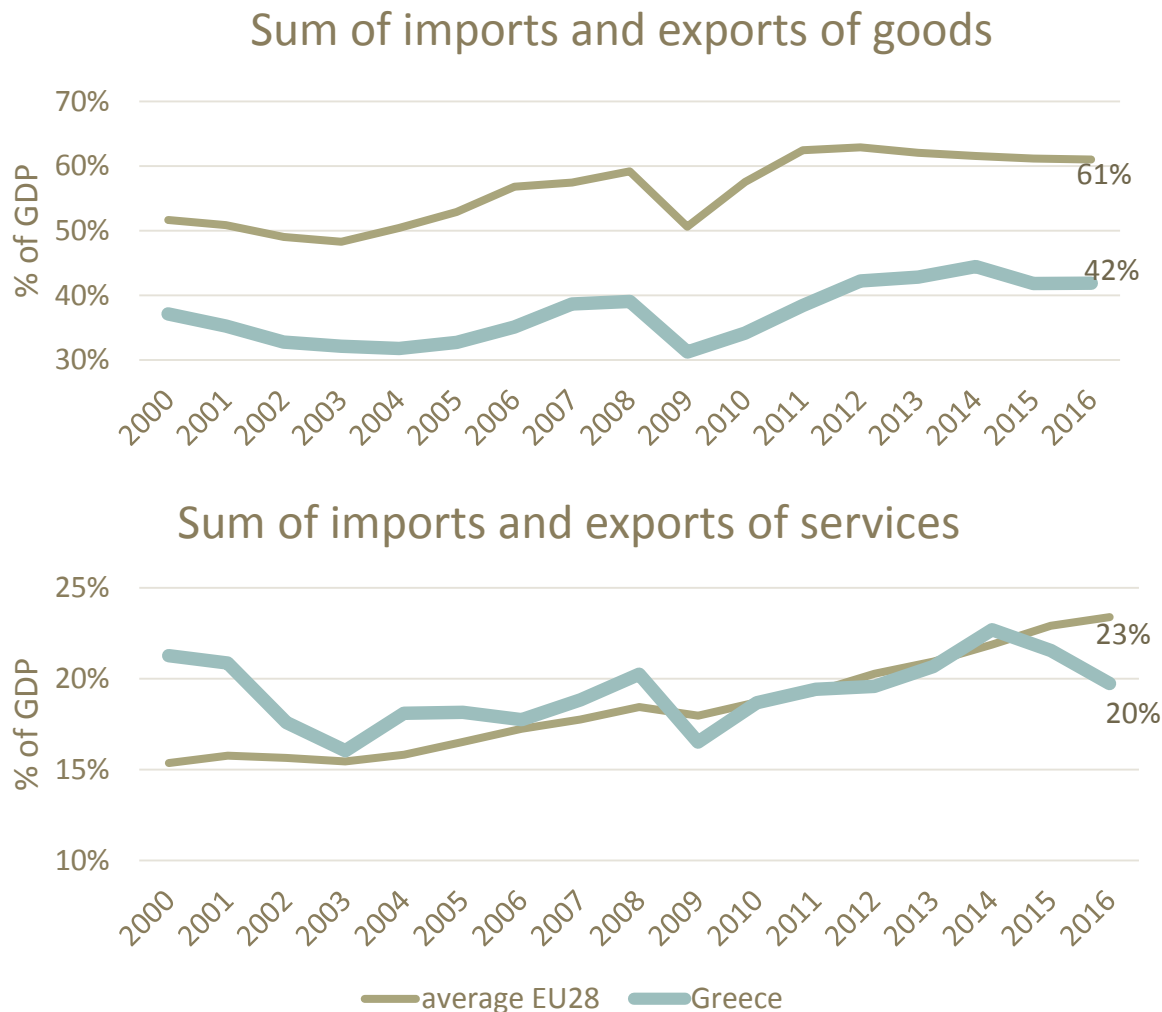
Investment: Collapsing



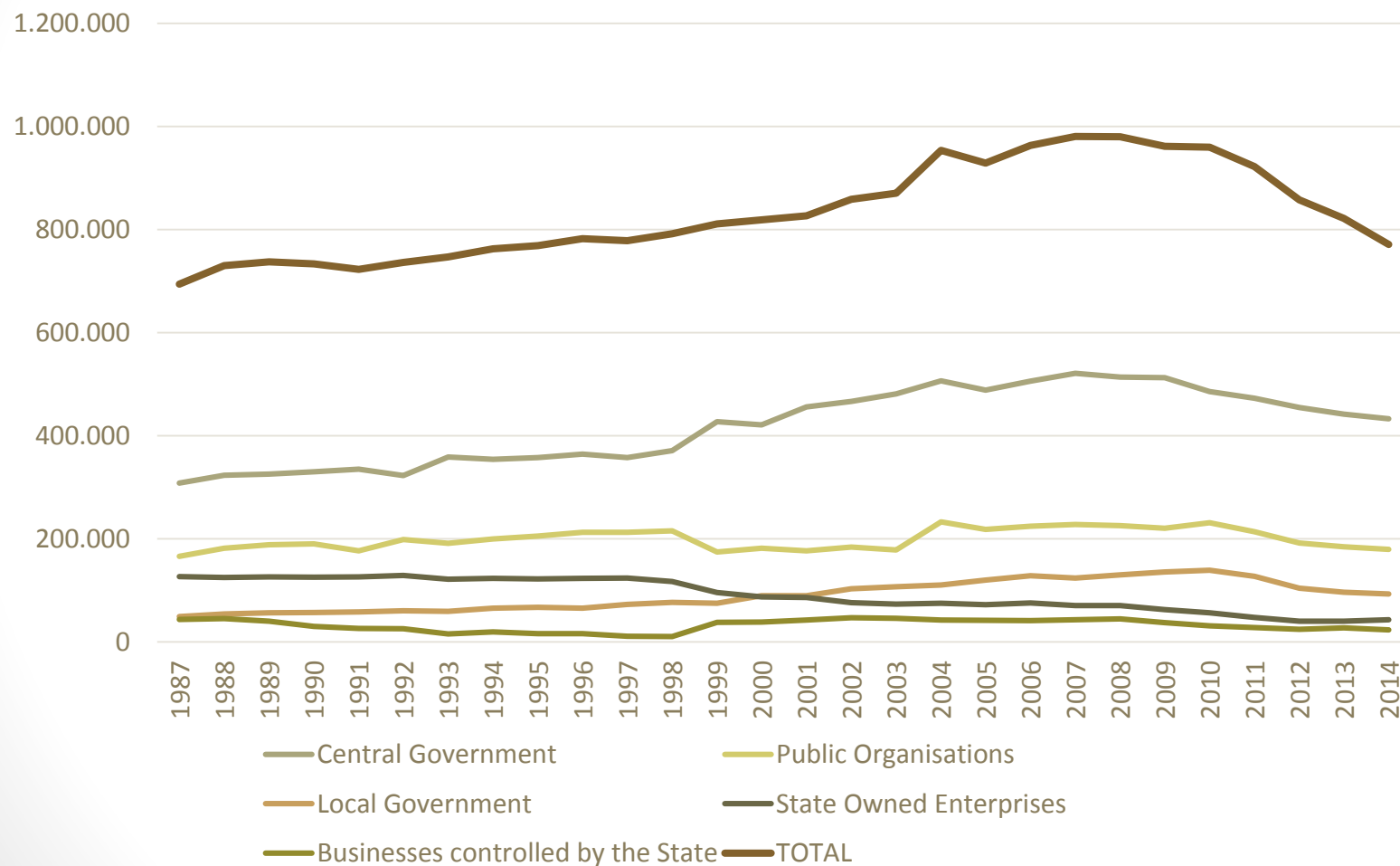
Exports of Goods: Volume, not Value



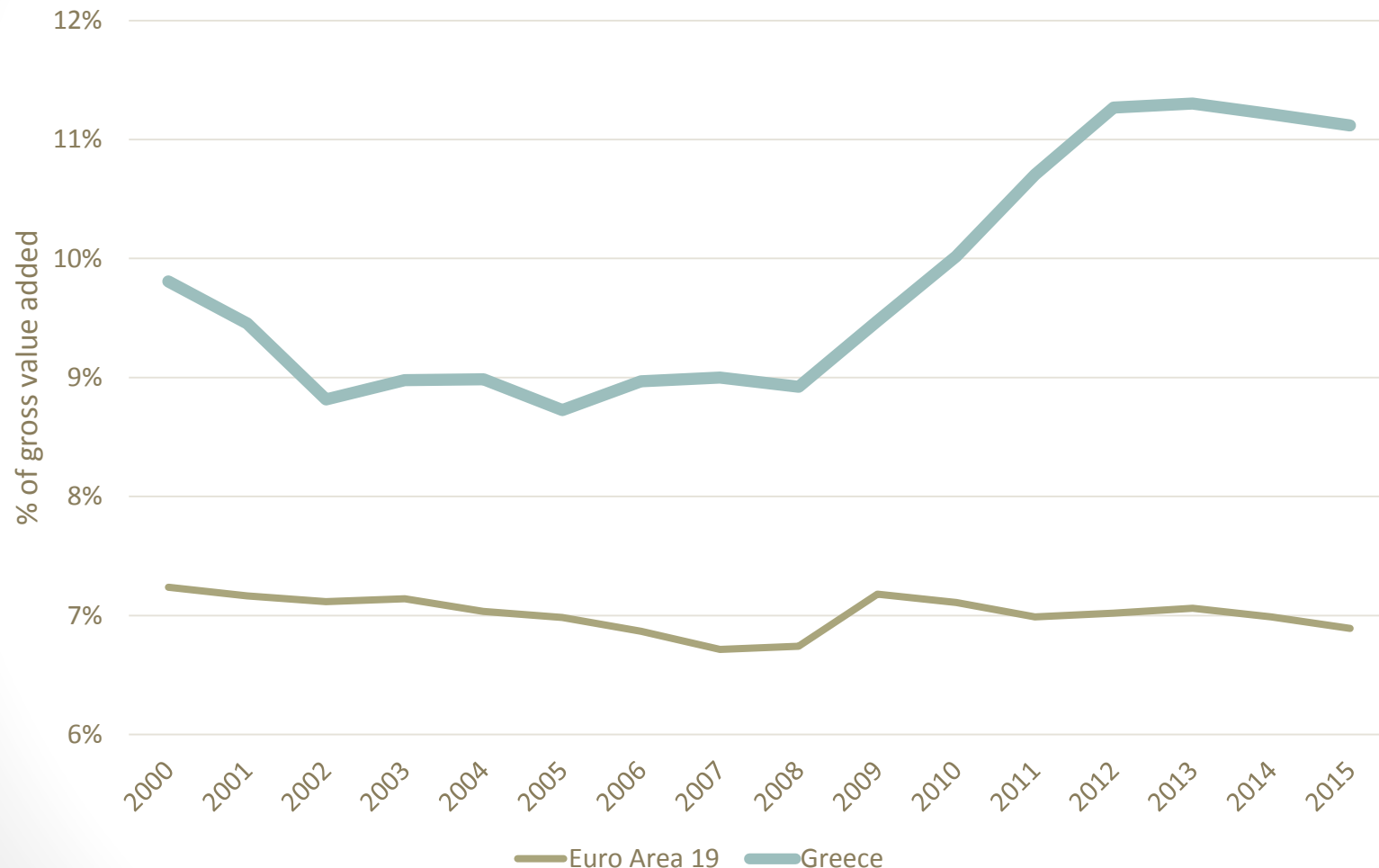
Openness: Goods vs Services



Employees in the Public Sector



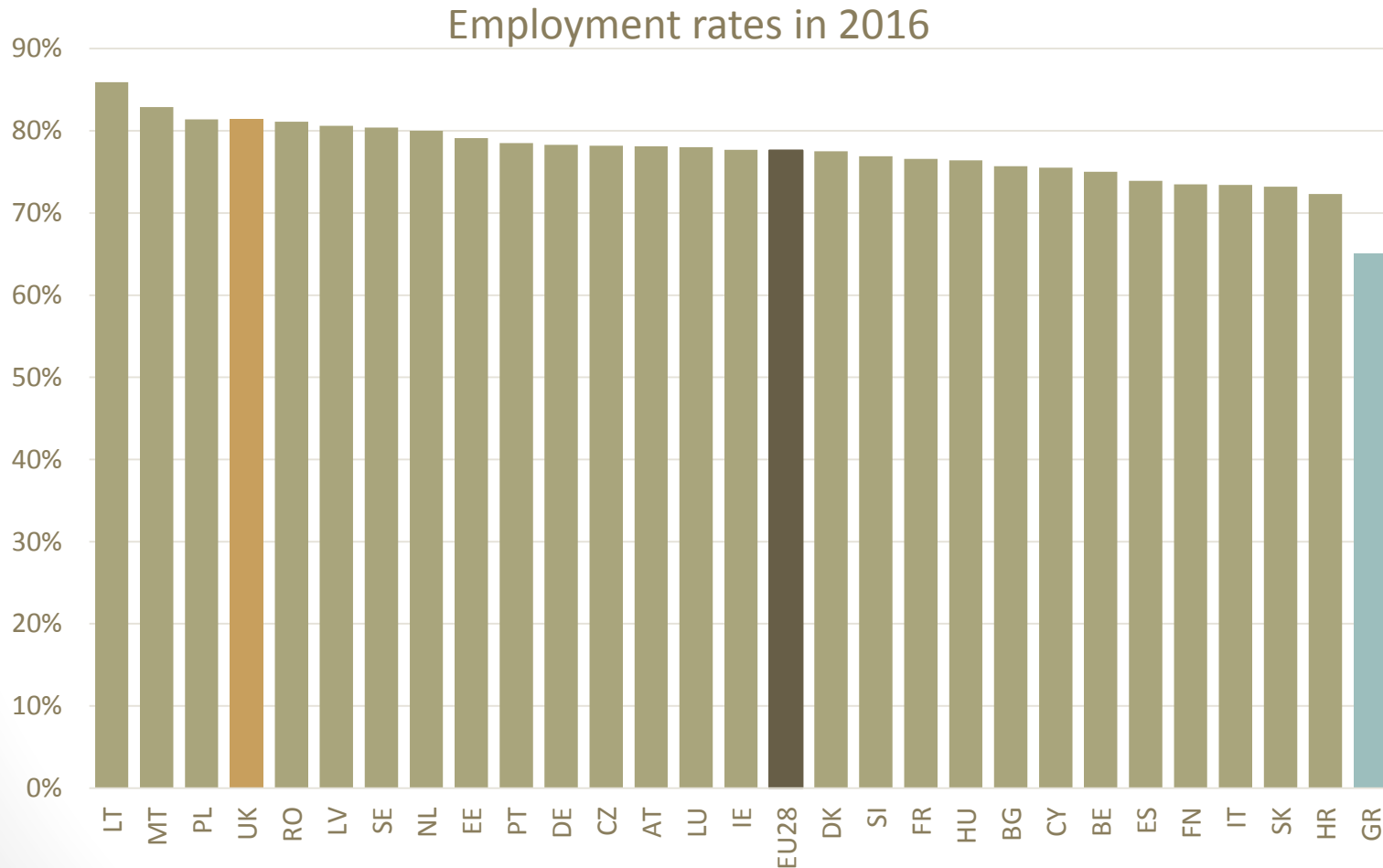
Contribution of Public Sector



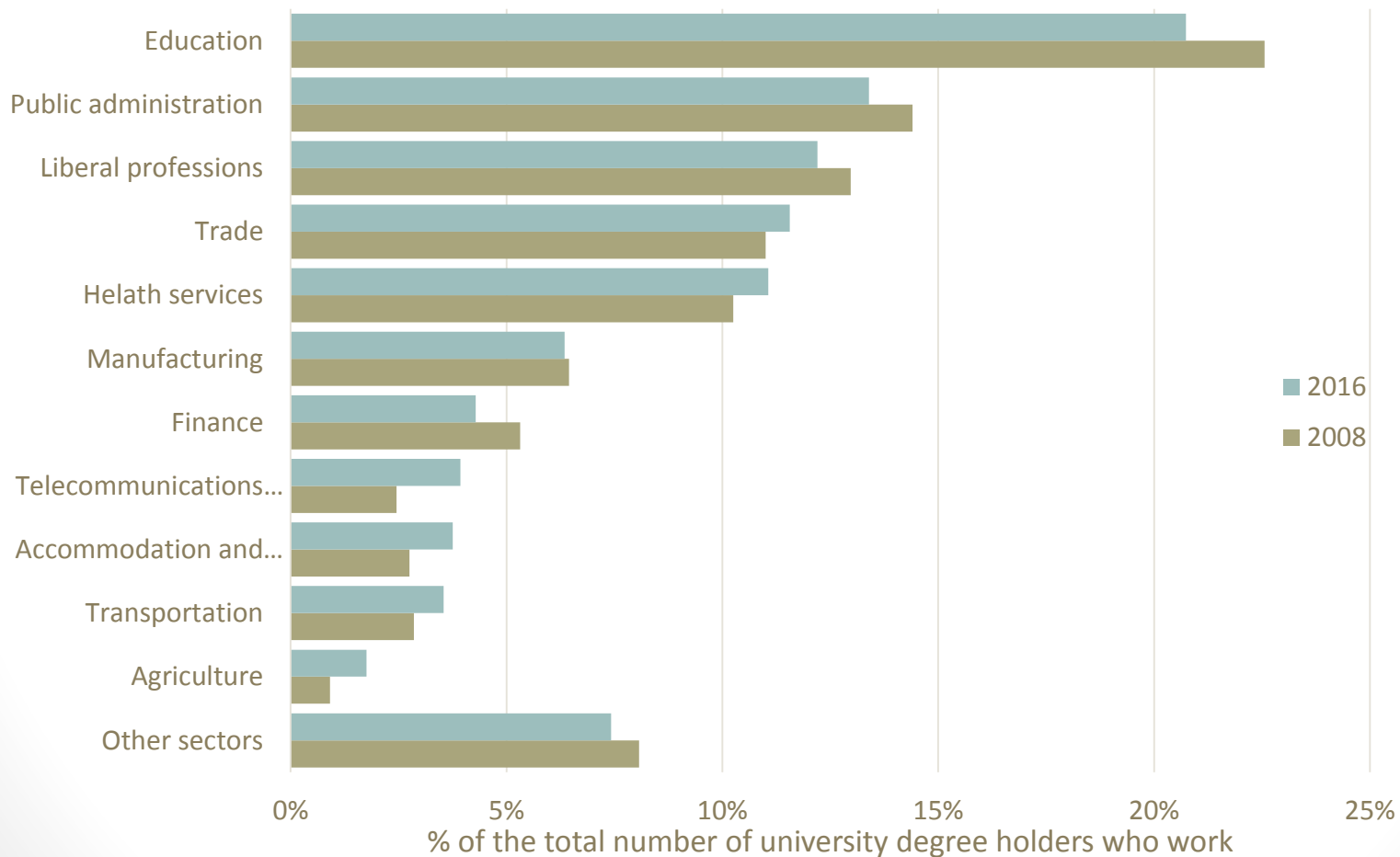
University Graduates, 2012



Employment for University Graduates



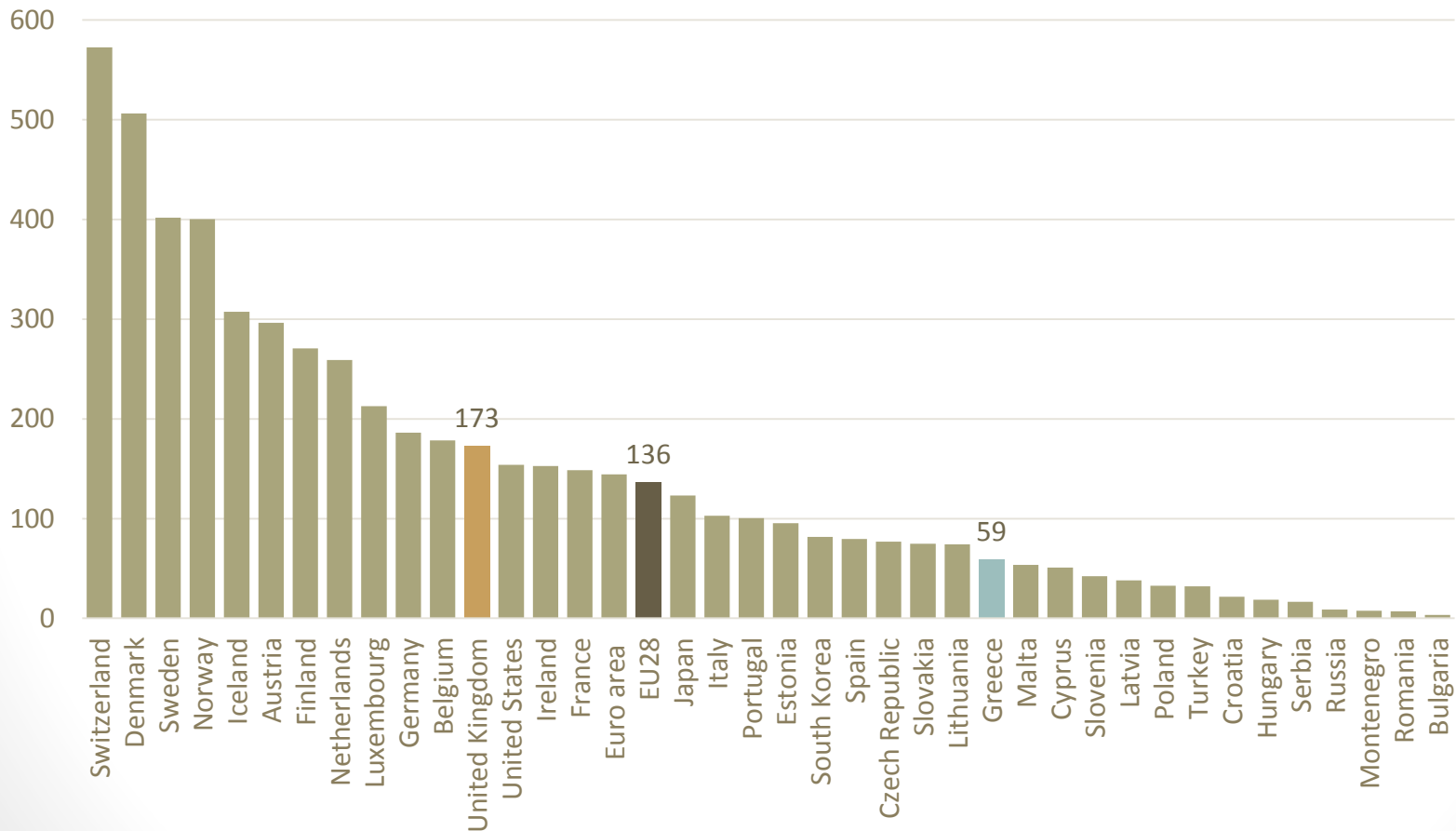
Where do University Degree Holders Work?



Source: ELSTAT, Data processing: IOBE

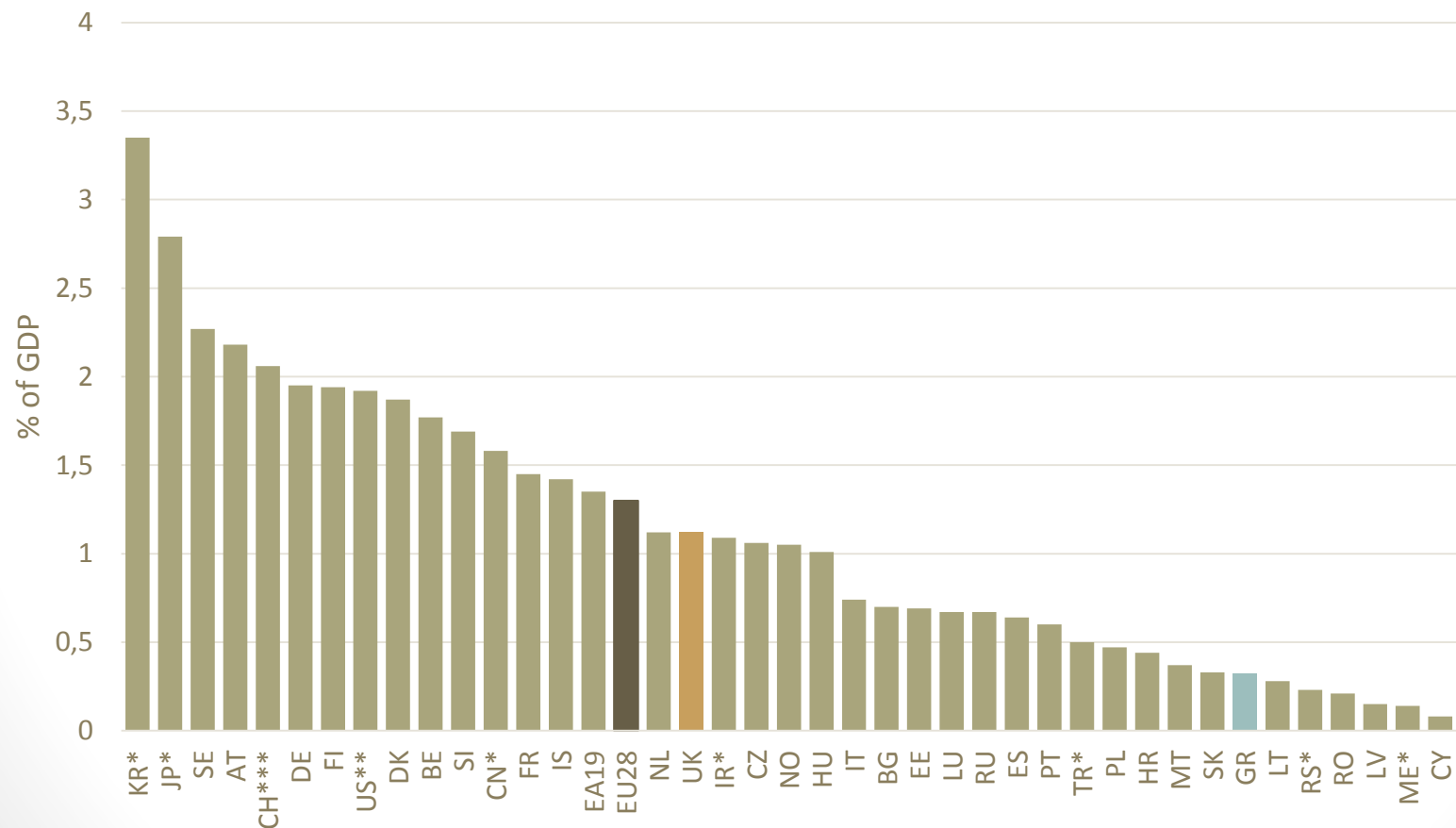
Universities R&D per Capita

2015 R&D expenditure per capita by Universities (in Euros)



R&D Expenditure

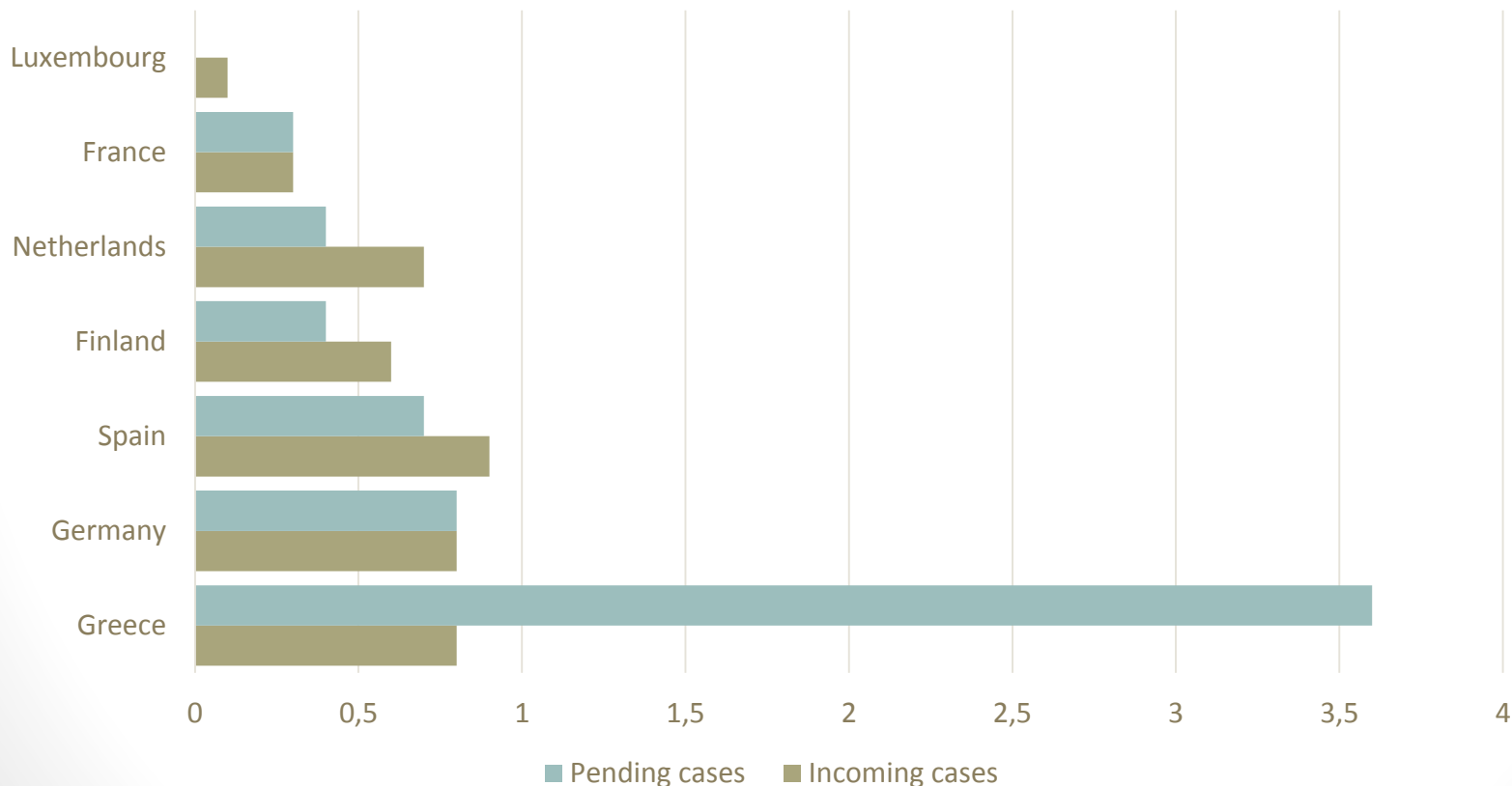
Private sector R&D expenditure in 2015



Source: Eurostat, IOBE estimates *2014 **2013 ***2012

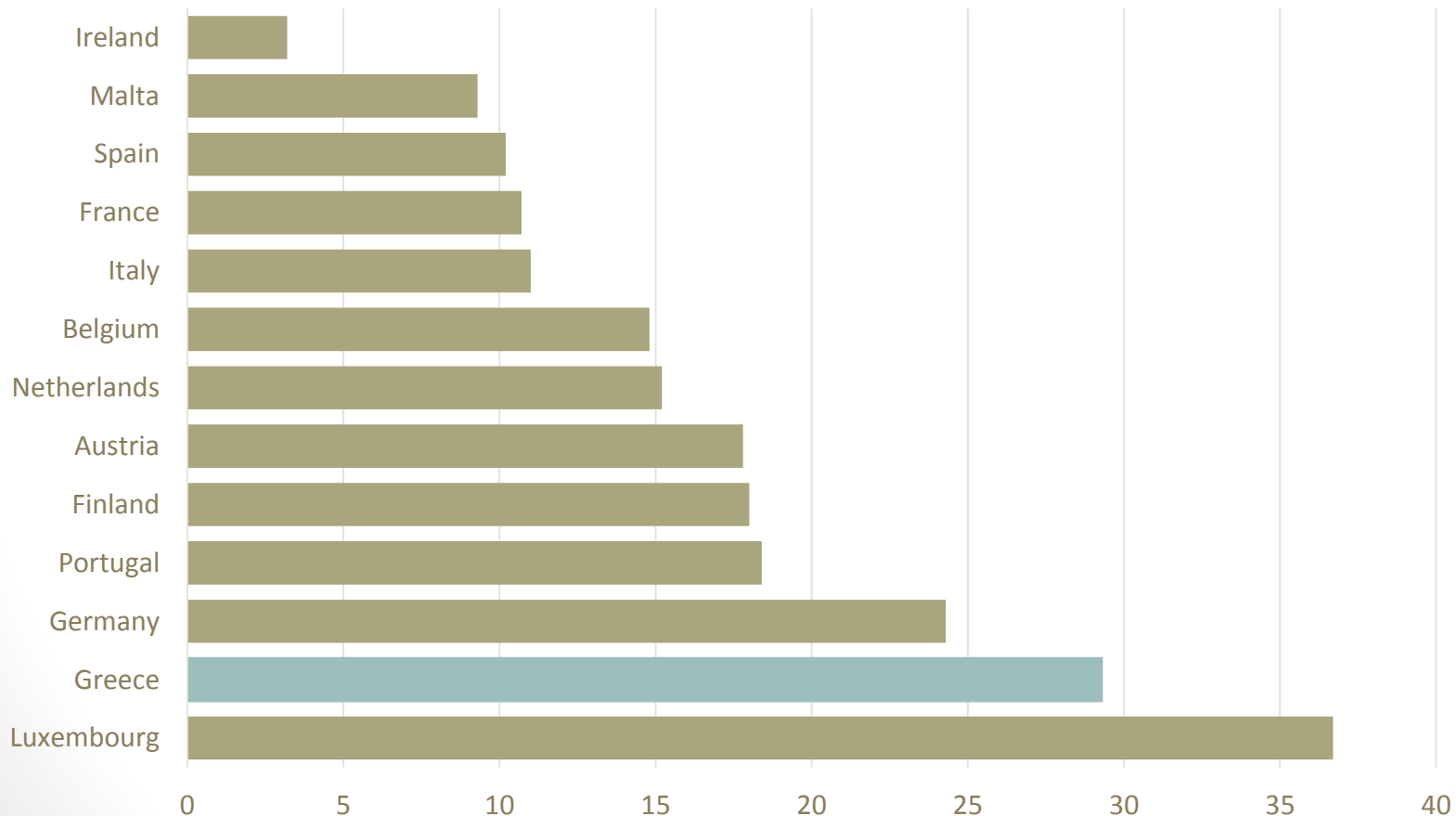
Slow Justice

Incoming and pending cases per 100 inhabitants in administrative courts (2010)



Not Due to Few Judges

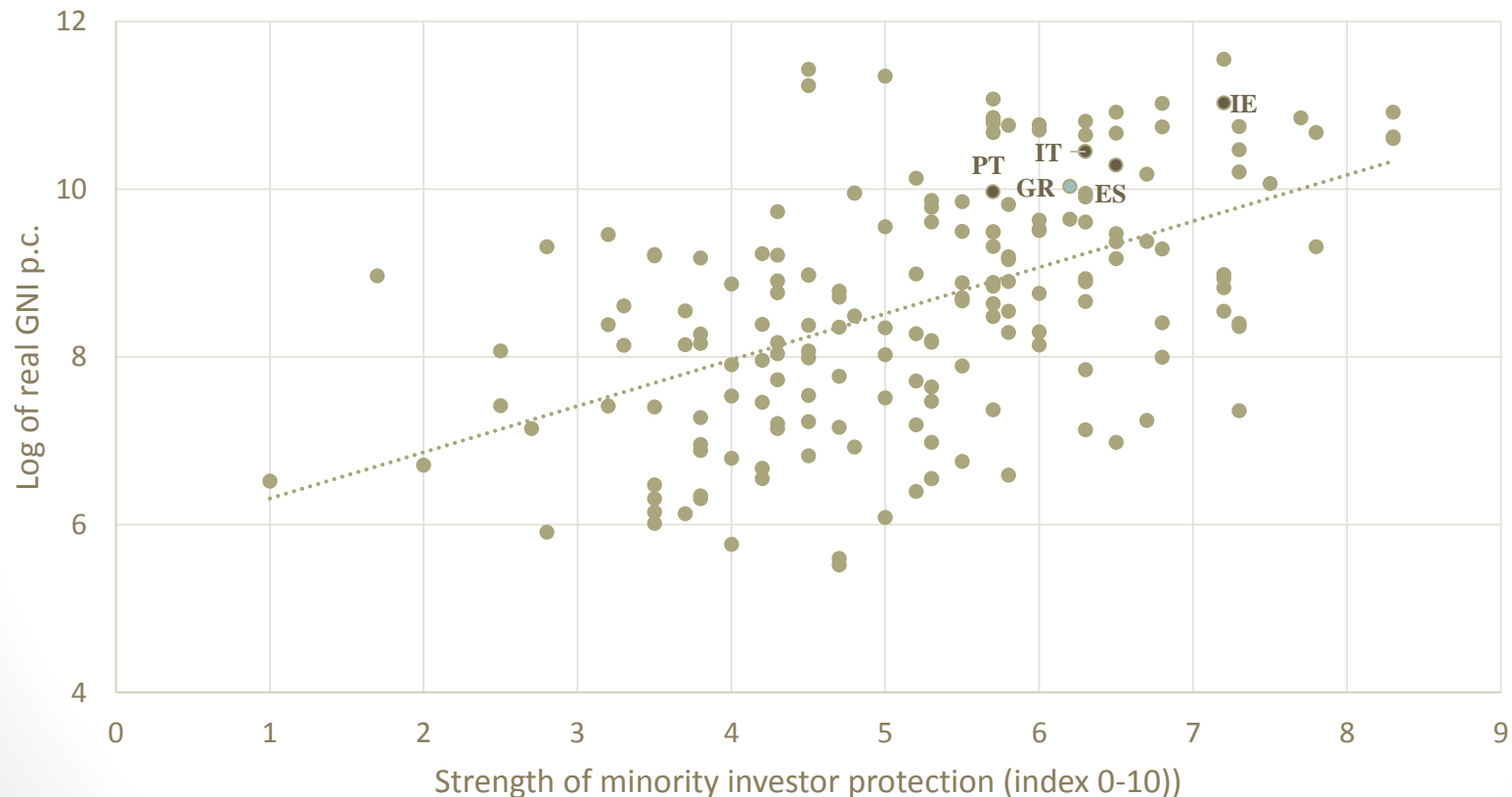
Number of judges per 100,000 inhabitants (2010)



Source: Beyond Austerity, MIT Press, 2017

Justice System Affects Growth

Investor protection and Economic Development
Unconditional relationship in 2015



Adjustment Programs and Prospects

- Product markets
 - Some deregulation and reduction of formal entry barriers.
 - (Slow) shift towards tradables.
 - Investment has collapsed mainly due to macro uncertainty and liquidity; NPLs.
- Public administration
 - Reduction in employment and wages: retirement, temporary jobs, hiring freeze .
 - Pending: structural changes, incentives.
- Education
 - Moving backwards: increased central control and dependence on the state.
 - Brain drain; demographics; missing opportunities.
- Justice
 - Very slow progress, out of court settlements.
 - Simplification of legal framework; digital infrastructure.

Perspectives

- Economy has been stabilized (twin deficits fixed).
- High growth rates cannot be expected given the current structure and path of the economy.
- Emphasis on reforms: open markets and stronger institutions.
 - Tax reform and pension reform.
 - Promote competition in product markets: regulatory reform, privatizations and NPLs.
 - Public administration: incentives, and simplification of rules.
 - Education and justice system.
- Participation in EZ is precondition for viable growth; reduction in risks.
- The big picture: opportunities and challenges for Greece in the new protectionist (?) and technology environment.