
Latent Sources of Growth Dynamics in Hellas

The Content of Growth

KAS – IOBE, Athens, 24 January 2013

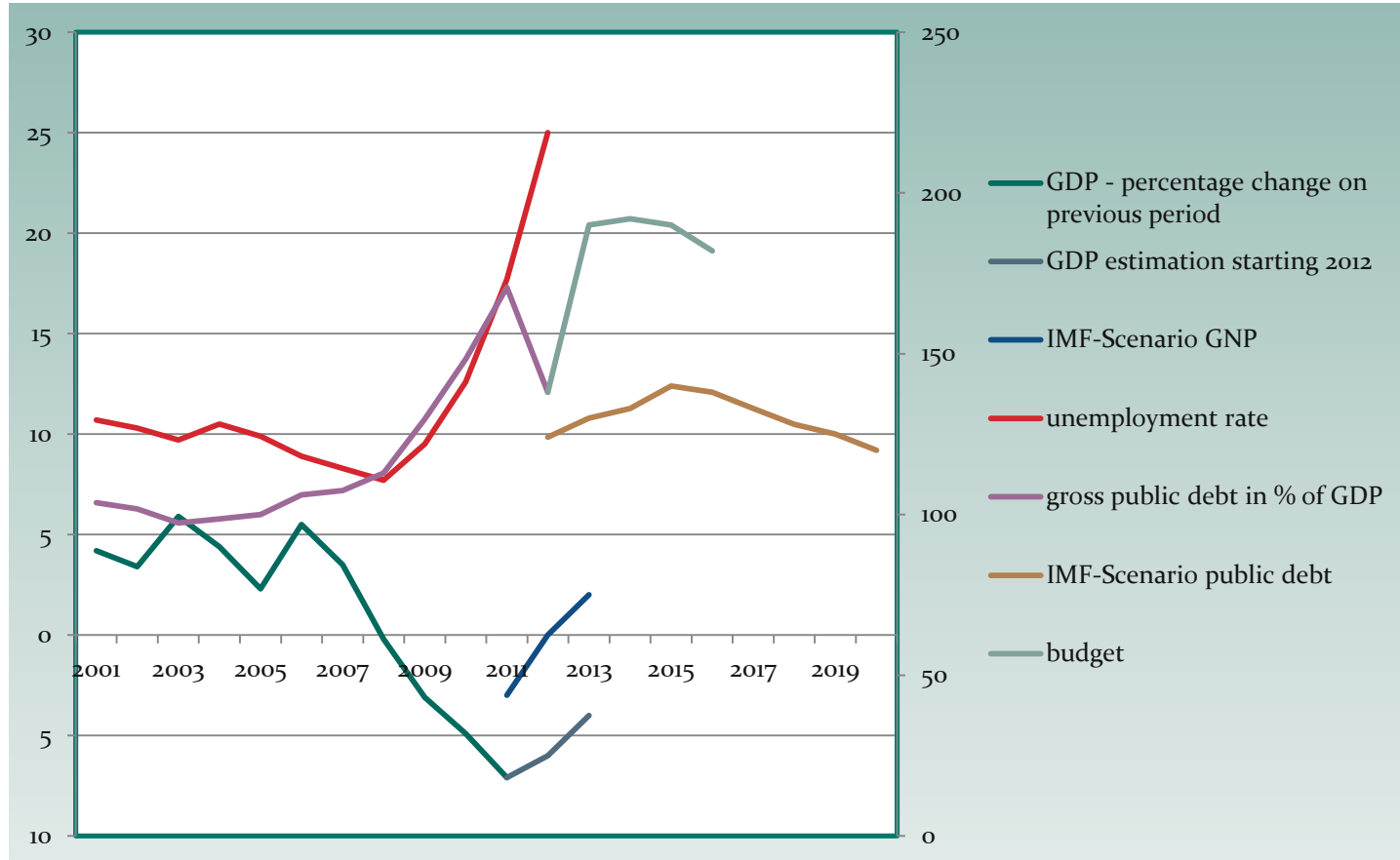
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Overview

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- 3 Strengthening Regional Innovation Systems
- 4 Conclusions

Status Quo



Sources: Eurostat, IWF, Greek Ministry of Finance.

in percentage

	agriculture, forestry and fishing	Manufacturing	Catering and hotel industry	computer programming activities, information technology and computer services activities	architectural and engineering activities; technical testing and analysis	Research and Development
	2010			2009		
EU	1,7	14,9	3,1	1,8	1,4	0,5
Greece	3,1	10,0	6,8	0,4	0,9	0,3
Germany	0,8	20,9	1,6	1,7	1,4	0,4
Finland	3,0	18,0	1,7	2,2	1,7	0,6

Source: Eurostat.

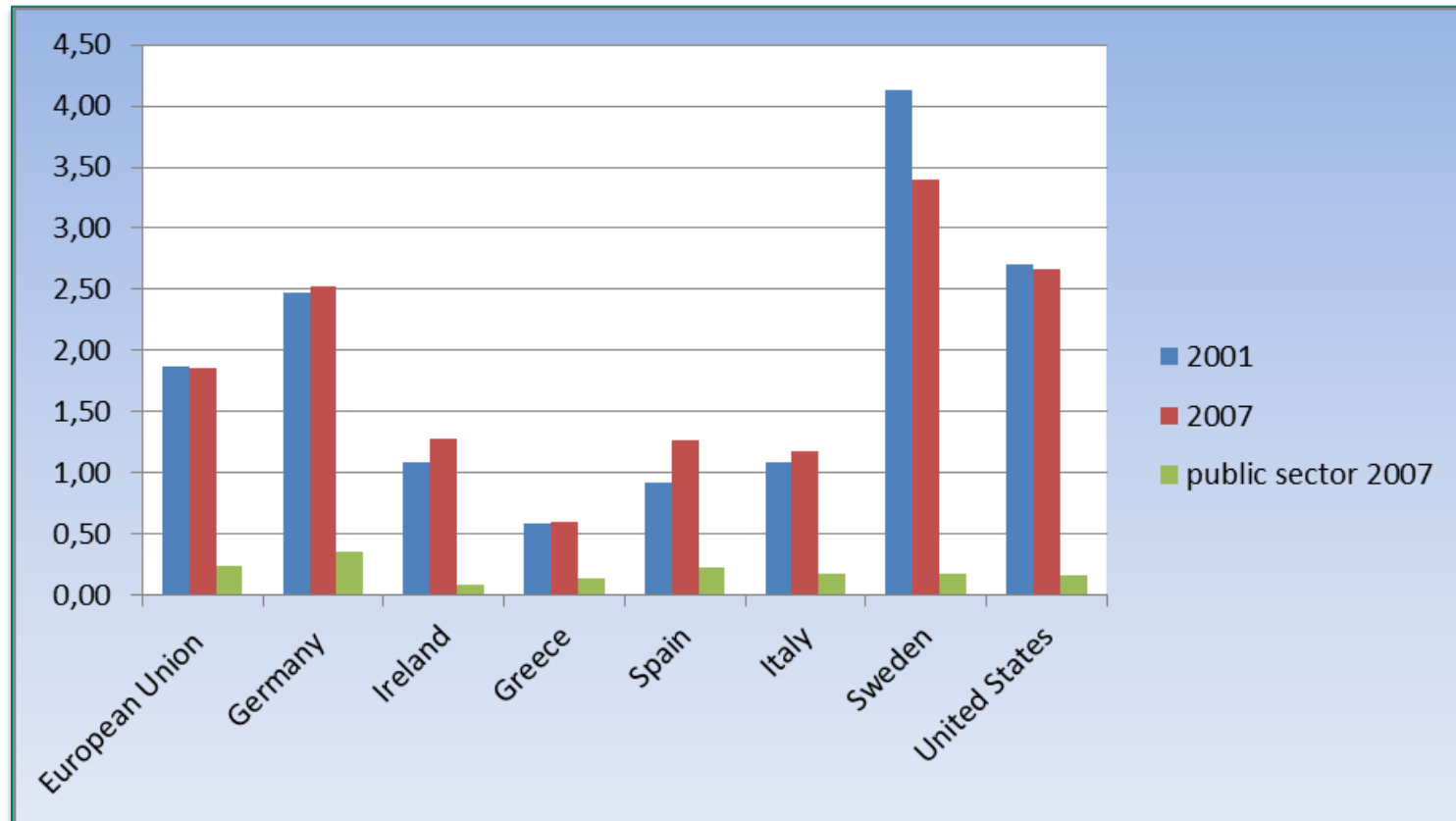
Share of Employees in the manufacturing sector

depending on firm sizes 2007
in percentage

	enterprises with... employees				
	1 to 9	10 to 19	20 to 49	50 to 249	250 and more
Greece	46	4	9	20	21
Germany	7	8	7	25	53
Finland	9	6	10	24	51

Source: Eurostat.

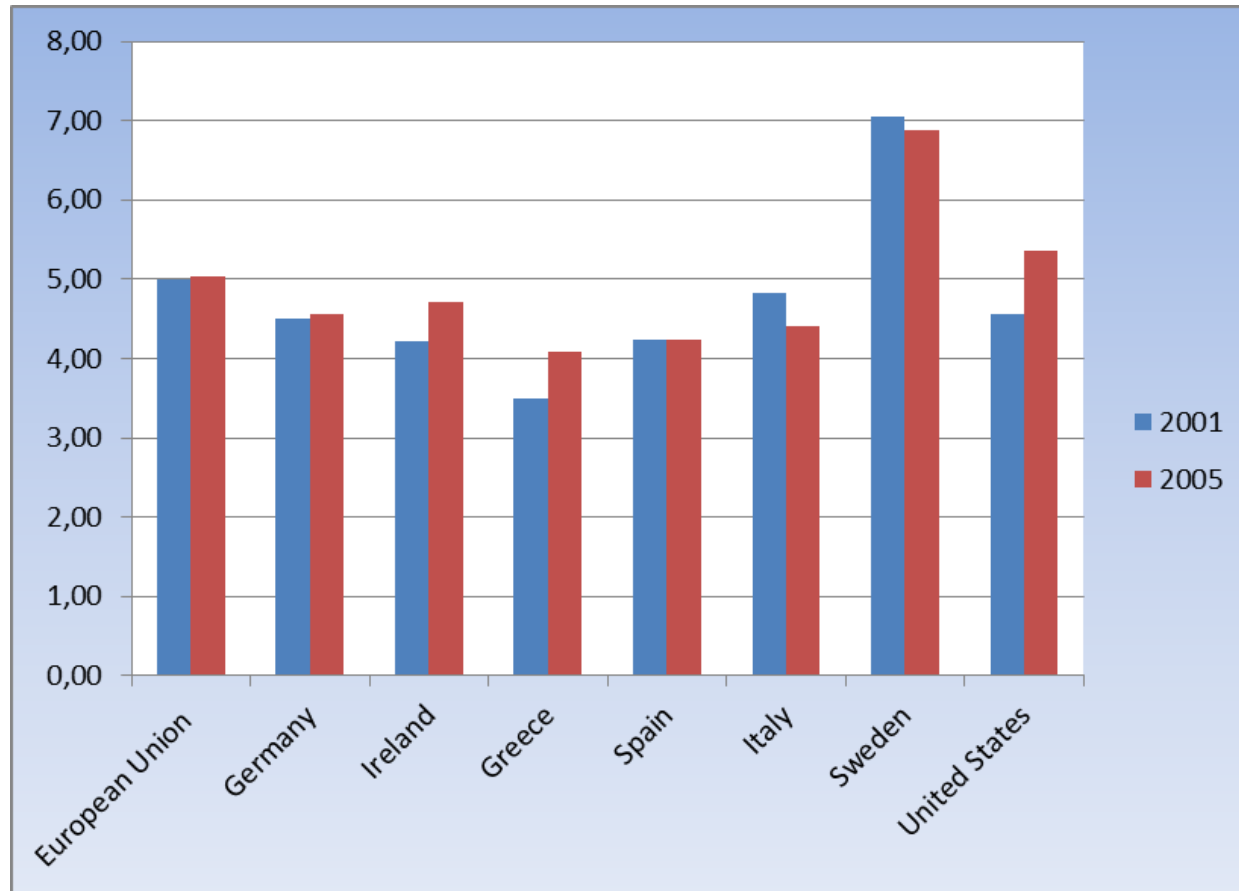
percentage of GDP



Source: Eurostat.

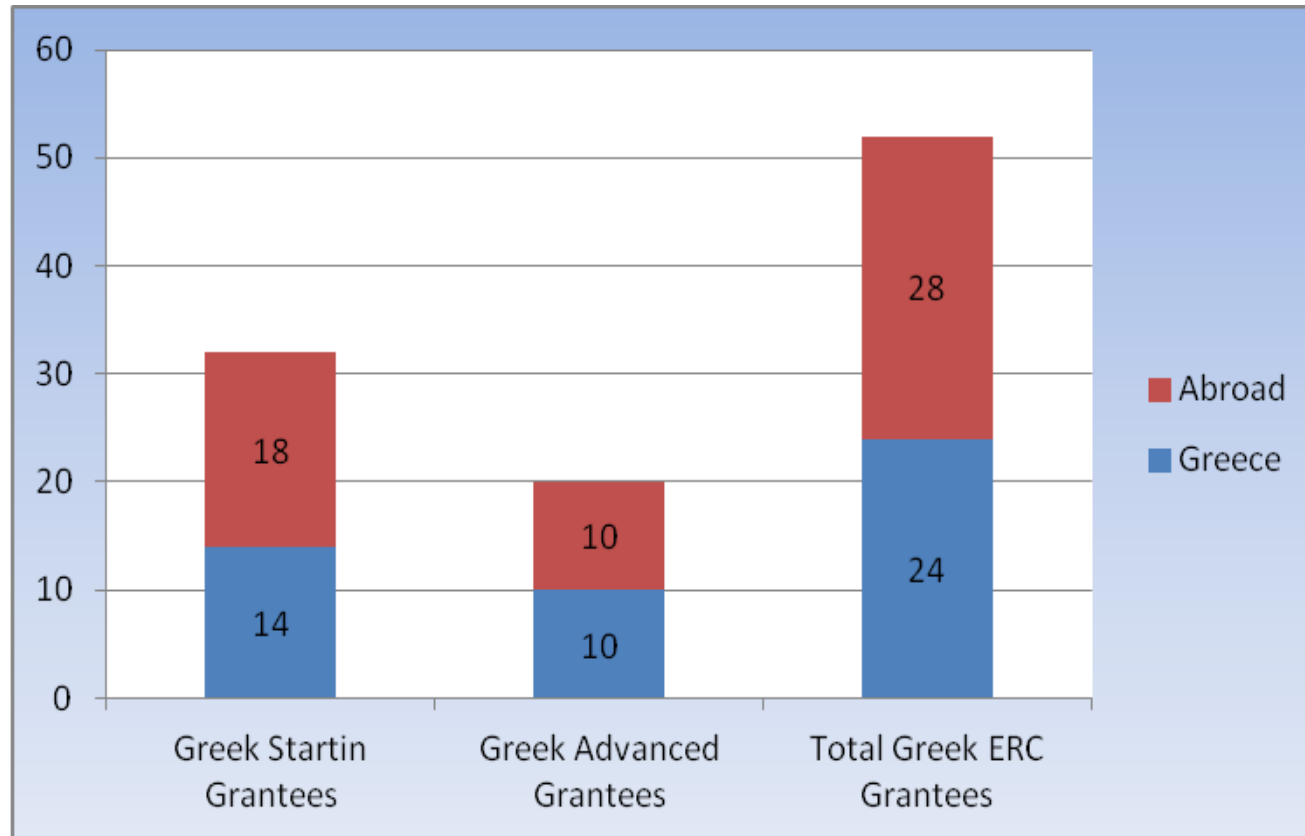
Expenditures for Education

percentage of GDP'; public total expenditures



Source: Eurostat.

ERC –research funds for für Greeks in Greece and abroad (Europe)



Source: EKT

- the fifth consecutive year of recession, until the end of 2013 the expected GDP will lose about 25%
- basic problems are structural origins:
 - low industrial base, mostly focusing on the domestic market
 - lowest export share of all EU countries, migration of firms
 - the most important export: tourism and food
 - mainly small enterprises, many closed markets
 - BUT: excellent researcher, mostly abroad;
 - First steps towards innovation oriented clusters

- in comparison with other EU countries, Scandinavia, Germany, Netherlands, Greece lacks a well functioning innovation system
- due to the missing industrial structure innovative firms, especially start-ups, have hard times in Greece
- Fragmented Innovation activities
- lack of acceptance of well-functioning innovation systems in in the Greek political system

Why focus on Innovation Systems?

"...just over a hundred years ago, *Scientific American* reported that economic progress in Manhattan was near an end because the island could support only a limited number of horses."

"In the long run, economic growth comes not from cramming more horses onto your island, or more factories into your rust belt, or even more information onto your servers, but from technological breakthroughs—not from more of the same but from the new and previously unthinkable."

Steven E. Landsburg

- The science and research system of a country is composed of:
 - research facilities (universities and public institutions or non-university research facilities e.g. Max-Planck; Leibniz- und Fraunhofer-Institute),
 - research oriented companies spending their profits into research.
- definition of innovation systems (Freeman 1987): „the **network** of institutions in the public and private sectors whose activities and **interactions** initiate, import, modify and diffuse new technologies“
- focus on systemic interactions within the innovation process

An innovation system composed more than innovative firms and entrepreneurs.

Important requirements for a well functioning national innovation system are:

- Higher education
- research and development
- financing
- networks
- markets (implementation, demand, competition, regulation)
- soft factors (assessment of managers, values and attitudes of citizens)

Strengthening Regional Innovation Systems

Reverse the brain drain:

- Human capital is the most important resource to generate new knowledge
- Excellent Greek researchers work everywhere in the world
- Reduce barriers and regulatory burdens for return and develop attractive labor conditions
- Aim for independent research with the main aim of top quality research output

- Use of new programmes of EU:
 - ERA Chairs
 - Teaming Excellence
- Development of innovation friendly structures:
 - Research oriented universities and research institutes with a strong focus on applied research, relevant for the industry; role model: „Fraunhofer Institute“,
 - Hightech start-ups turnning new knowledge into marketable products
 - Institutions for the knowledge transfer between institutes and start-ups
 - Develop clusters; role model „Berlin Adlershof“

Further prerequisites: reforms have to be continued

- Ensure (intellectual) Property Rights
- Attract Venture Capital
- Develop a dual Education System
- Opening of „closed shops“
- Improve entry regulations for (innovative) firms
- Adjust company taxation and introduce simple tax system
- Make labor markets more flexible

Conclusion

- Not only national debt crisis, the Greek economy is too weak for recovery within EU-zone
- Austerity packages and current reforms are not sufficient
- Investment into sustainable growth strategy
- Further reforms necessary under Greek ownership
- Establishment of regional innovation systems: ‚Silicon Valley‘
- EU funds are ready to be used
- Furthermore: trust into Greek institutions has to be rebuilt to regain attraction for Greek and foreign capital

Vielen Dank für Ihre Aufmerksamkeit.



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