

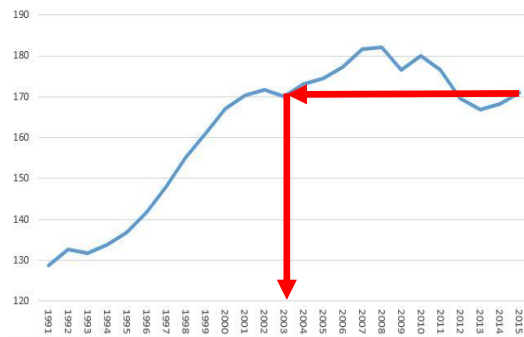
## Still alive in the long run - growth is needed at the European periphery

Miguel St. Aubyn

15.mar.2016



Portugal, real GDP, 2010 prices, 10<sup>9</sup> euros

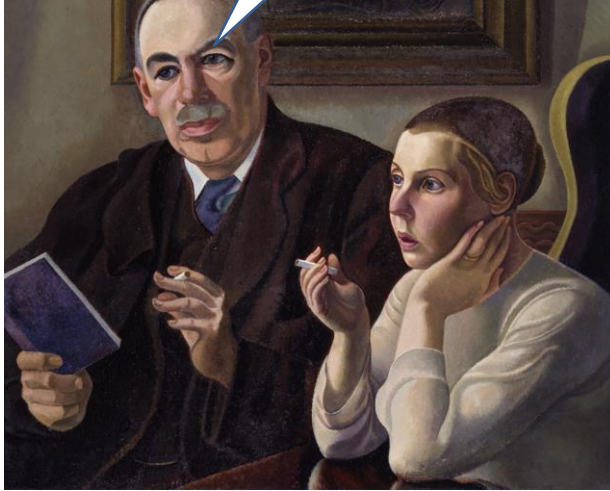


Source: AMECO database, online, oct. 2015.

But this *long run* is a misleading guide to current affairs. *In the long run* we are all dead. Economists set themselves too easy, too useless a task if in tempestuous seasons they can only tell us that when the storm is long past the ocean is flat again.



**John Maynard Keynes  
(1883-1946)**



"John Maynard Keynes & Lydia Lopokova",  
Oil on canvas, William  
Roberts (1895 – 1980),  
National Portrait Gallery,  
London

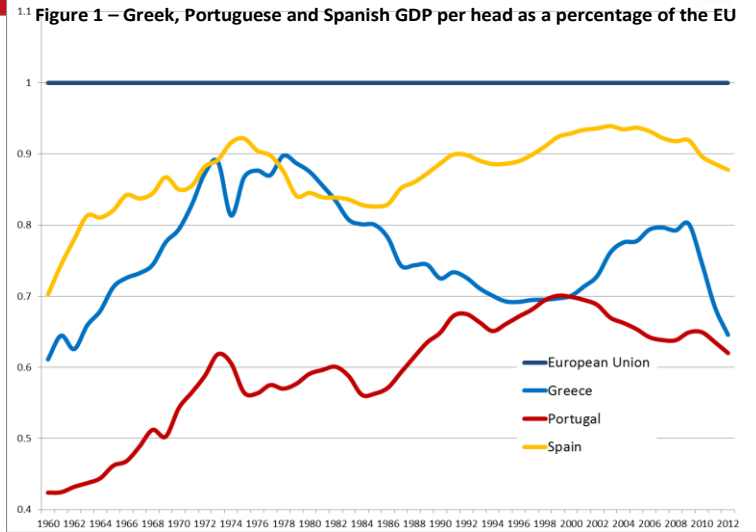


**Table 1 - GDP per capita average growth rates**

	1960-73	1974-85	1986-1999	2000-2012
European Union	4.3%	1.7%	2.1%	0.9%
Greece	7.3%	1.6%	1.2%	0.2%
Portugal	7.3%	1.0%	3.7%	-0.1%
Spain	6.2%	0.8%	3.0%	0.5%

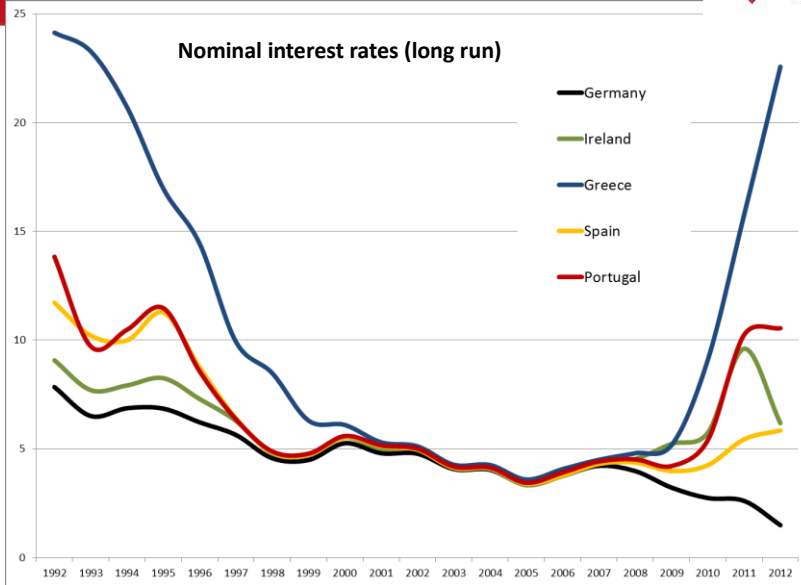
Source: GDP per capita in constant 2005 US\$, World Bank. <http://data.worldbank.org>  
Ireland (1960-1999): AMECO database, [http://ec.europa.eu/economy\\_finance/db\\_indicators/ameco/](http://ec.europa.eu/economy_finance/db_indicators/ameco/)

Figure 1 – Greek, Portuguese and Spanish GDP per head as a percentage of the EU



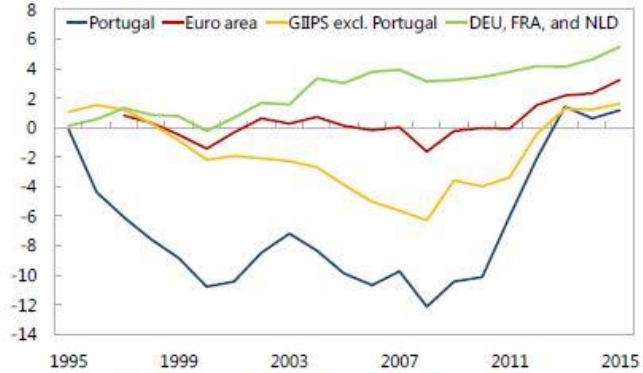
Source: GDP per capita in constant 2005 US\$, World Bank, <http://data.worldbank.org/>

Nominal interest rates (long run)



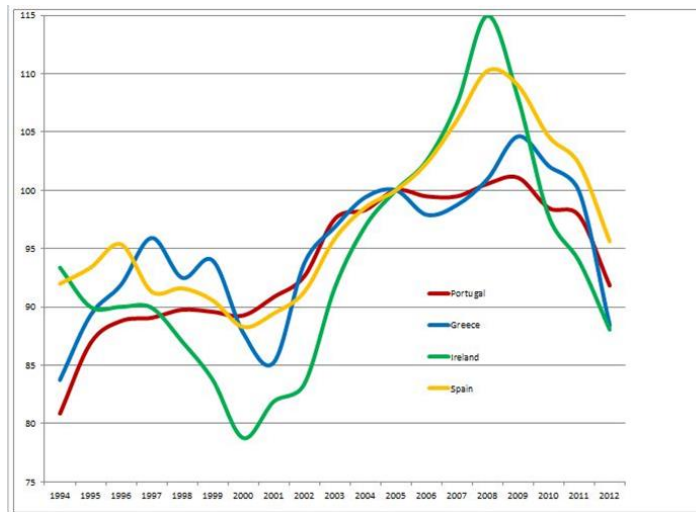
### Current Account Balance

(Percent of GDP)

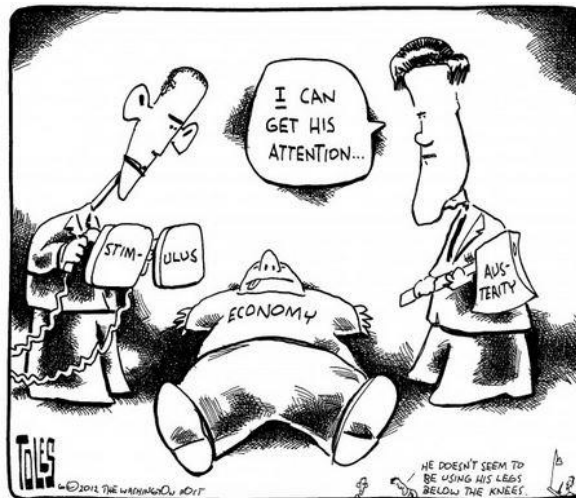
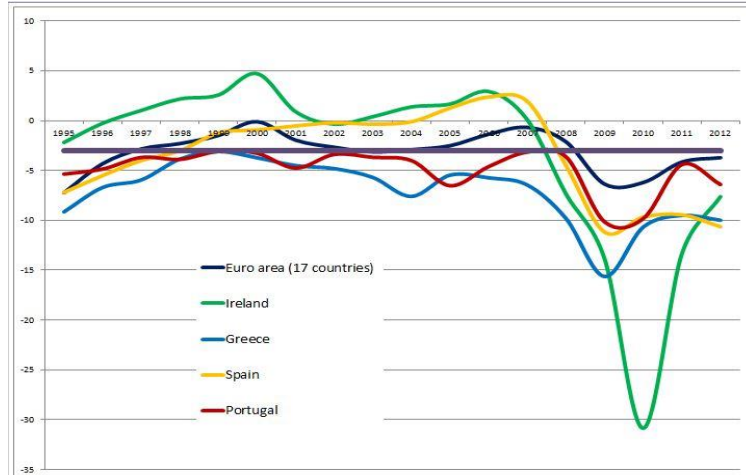


Source: World Economic Outlook database; and IMF staff estimates.

### Real exchange rate (unit labour cost based)



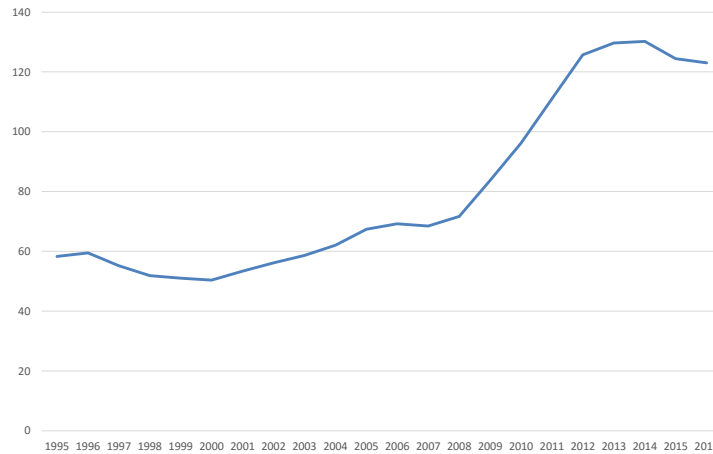
Budget surplus





### Public debt (% of GDP)

Dívida Pública (% do PIB)



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MANAGEMENT  
UNIVERSIDADE DE LISBOA

***#1. Adjustment programs did not take into account architectural failures within the eurozone - (i) the exchange rate problem and the north/south fracture***

***#2. Adjustment programs did not take into account architectural failures within the eurozone - (i) the European Central Bank***

***#3. Adjustment programs were conceived with underestimated multipliers***

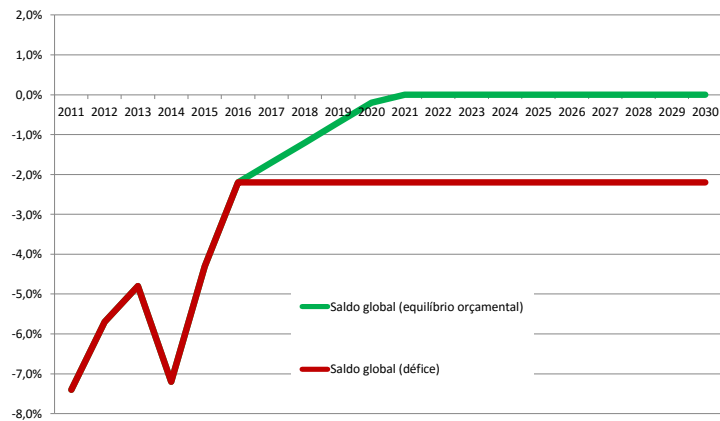
***#4. Adjustment programs did not take into account national institutions and idiosyncrasies***



Debt dynamics:

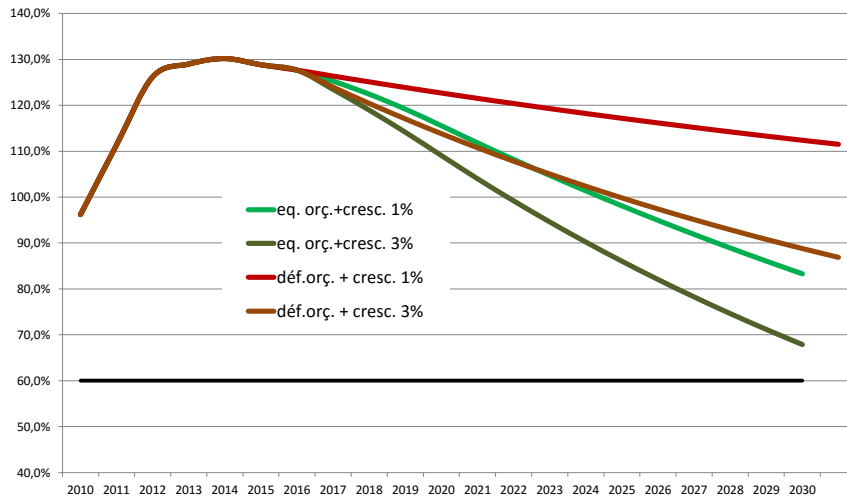
$$D_t = D_{t-1} - S_t + A_t$$

### Budget surplus/deficit under different scenarios





### Public debt under different scenarios



*#1. Reducing austerity has a price...*

*#2. ... but the most important is long run growth*



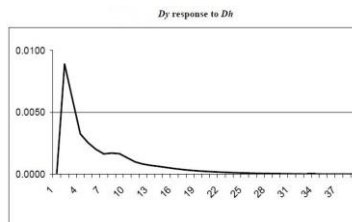
Aggregate production function for Portugal (Pina and St. Auyn, 2005):

$$Y_t = A. \exp(0,0563H_t) KP_t^{0,557} KG_t^{0,148} L_t^{0,295}$$

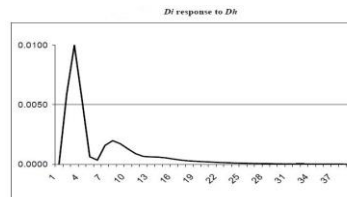
where  $Y_t$  is GDP,  $KP_t$  is private capital,  $KG_t$  is public capital,  $L_t$  is employment.

H is "human capital". *Proxy*: average years of schooling of working age population.

- A one year sustained increase in H lead to a GDP increase of approximately 5.6 percent.
- Macroeconomic rate of return – about 16 percent.



GDP responds to education



Private investment responds to education

Source: Pereira and St. Aubyn (2009)

Innovation in EU  
Patent registering

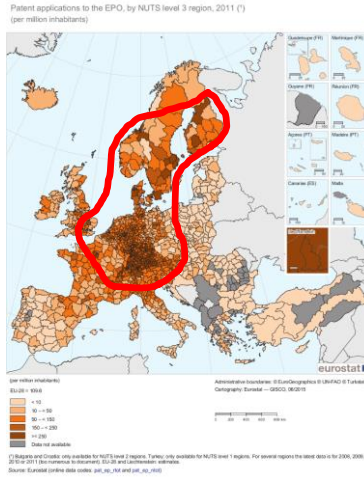
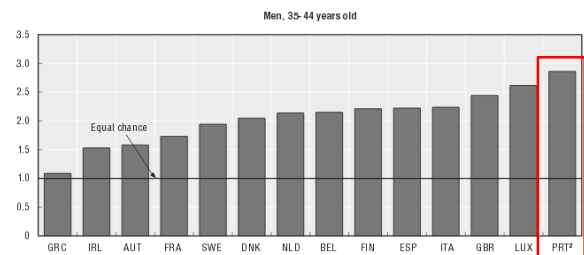


Figure 3. Ratio of the chance of being in the top wage quartile for sons of higher-educated vs. lower-educated fathers:<sup>1</sup> Selected European OECD countries



Note: Germany is not included in this figure as there is a problem with the representativeness of the German sample along the education dimension.

1. This figure shows the ratio of two conditional probabilities. It measures the ratio between the probability to end up in the top wage quartile given that the son's father had achieved tertiary education and the probability to end up in the top wage quartile given that the son's father had achieved less than upper-secondary education. Probabilities are defined as simple frequency measures. Fathers' educational achievement is a proxy for parental background or wages.

2. 25-34 years old for Portugal.

Source: OECD calculations based on the 2005 EU-SILC Database.

Source: Causa and Johansson (2010)

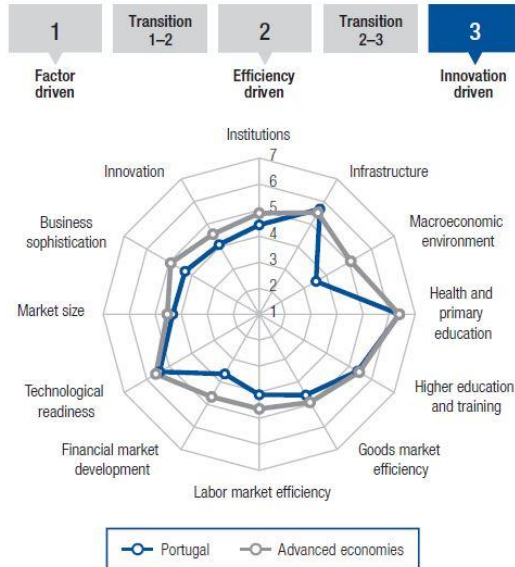
### Global Competitiveness Index



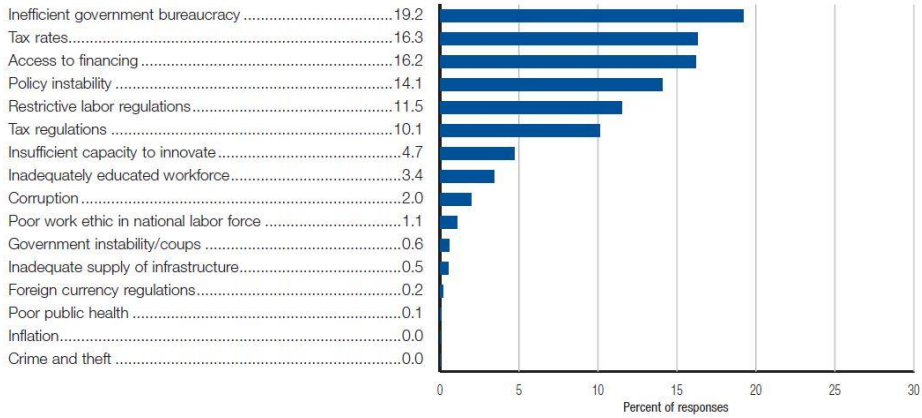
	Rank (out of 144)	Score (1-7)
GCI 2014-2015 .....	36	4.5
GCI 2013-2014 (out of 148).....	51	4.4
GCI 2012-2013 (out of 144).....	49	4.4
GCI 2011-2012 (out of 142).....	45	4.4
<b>Basic requirements (20.0%).....</b>	<b>41</b>	<b>5.0</b>
Institutions .....	41	4.4
Infrastructure .....	17	5.7
Macroeconomic environment .....	128	3.5
Health and primary education.....	24	6.4
<b>Efficiency enhancers (50.0%).....</b>	<b>37</b>	<b>4.6</b>
Higher education and training.....	24	5.4
Goods market efficiency .....	44	4.6
Labor market efficiency .....	83	4.1
Financial market development .....	104	3.6
Technological readiness.....	26	5.4
Market size.....	51	4.3
<b>Innovation and sophistication factors (30.0%).....</b>	<b>31</b>	<b>4.2</b>
Business sophistication .....	51	4.3
Innovation.....	28	4.1

*The Global Competitiveness Report  
2014-2015, World Economic Forum*

### Stage of development



### The most problematic factors for doing business



**Note:** From the list of factors above, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

**Table 1: Corruption perception by country**

Bribery/corrupt practices happen widely in business in this country

Rank	Country	% Agree
1	Croatia	92
2	Kenya	90
3	Slovenia	87
4	Serbia	84
5	Portugal	82
6	India	80
7	Ukraine	80
8	Slovakia	78
9	South Africa	78
10	Hungary	73
11	Nigeria	72
12	Greece	69
13	Spain	69
14	Italy	67
15	Egypt	64
16	Turkey	63
17	Czech Republic	61
18	Russia	60
19	Latvia	55
<b>All respondents</b>		<b>51</b>
20	Ireland	50
21	Lithuania	45
22	Saudi Arabia	44
23	Poland	43
24	Austria	42
25	Romania	39
26	Oman	36
27	Belgium	34
28	France	29
29	UK	27
30	Germany	26
31	UAE	24
32	Estonia	21
33	Norway	21
34	Netherlands	13
35	Switzerland	12
36	Finland	11
37	Sweden	10
38	Denmark	4



**51% of respondents agree that bribery/corrupt practices happen widely in their country**

*Fraud and corruption — the easy option for growth? Europe, Middle East, India and Africa Fraud Survey 2015, Ernst and Young*