

HIGHER EDUCATION AND HUMAN CAPITAL

SOUTHERN EUROPE AT A GLANCE | 2016

Madalena Fonseca

Cartografia:

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HIGHER EDUCATION AND HUMAN CAPITAL: PORTUGAL AT A GLANCE IN THE SOUTHERN EUROPE CONTEXT

Introduction

The present publication is based on the quest for a concept and assessment tool of regional upgrading in the framework of regional disparities. It can be largely considered as an ATLAS. Inspired by the OECD annual report *Education at a Glance* it corresponds to the development of indicators on educational stock, economic growth, development, cohesion and regional convergence for four countries in Southern Europe: Portugal, Spain, Italy and Greece (Figure 1).

The main objective of the study behind the Atlas is the development of a comparative analysis of regional socioeconomic disparities in the four countries of Southern Europe with a particular focus on the relationship between human capital and regional development, taking higher education as the main driver of human capital and regional upgrading.

Two main questions are behind the making of this ATLAS:

1: Why are the regional disparities in Southern Europe so persistent?

2: Is there a link between higher education, human capital, economic growth and regional development?

In the knowledge economy, human capital is the pillar for innovation and economic growth. Human capital endowment embodies educational stock and therefore higher education and qualification at higher levels of the school system are the most relevant components of human capital.

The link between human capital, innovation, economic growth and regional development is usually analysed through proxies and most frequently through indicators of the educational stock of a region (Woessmann, 2003) (Crescenzi & Rodríguez-Pose, 2013) (Crescenzi, Pietrobelli, & Rabelotti, 2013) (De La Fuente, 2003) (Rodríguez-Pose & Tselios, 2009) (Rodríguez-Pose & Fratesi, 2007) (Rodríguez-Pose A. , 2013) (Rodríguez-Pose A. , 1999). Higher education indicators show a high relevance in most of the approaches based on the analysis of educational stock related to economic growth (Rodríguez-Pose & Vilalta-Bufí, 2005) (Goldstein & Renault, 2004) (Marginson, 2007). There is however limitations and the real effect of higher education institutions on the economic growth and regional development of the regions where they are located remains a statement take for granted more than an argument empirical and theoretically demonstrated. There is some empirical evidence but almost nothing about the underlying causes of this relationship (Shapiro, 2006). The mismatch between educational stock and labour market demand, over-education and brain-drain are some of the evidences of the shortfalls of the methodologies carried on most of the recent studies. Human capital is relevant but not the location where it is generated. Human capital stock of neighbouring regions can be used by a region, and regions with high human capital potential can underperform despite their assets. It is possible to identify some clusters or “clubs” (communities) of convergence and the relevance of factors like migrations, the economic base and production structure or specialisation of a region as well as the polarization pattern of the main urban areas (Storper & Scott, 2009) (Simmie & Martin, 2010).

Furthermore, regional development policies in Southern Europe have concentrated in a physical capital approach and less on human capital enhancement (Hoepker, 2013) (Markusen, 2008) (Rodríguez-Pose & Fratesi, 2007) (Amaral & Fonseca, 2012).

At a broader level, the ATLAS relates higher education activities with local human capital stock or endowment, the employment structure of the regions and the socioeconomic level of development, considering EU average.

Nearly 30 years of European Regional/ Cohesion Policy should provide some evidence a regional upgrading and convergence from the lagging regions. The ATLAS can be used as a reference guide or a database of indicators to support evaluation tools and methodologies of assessment of different programs and actions in the framework of the European regional/ cohesion policies.

Data refers to NUTS 0, NUTS I and/or NUTS II levels, according to the available information. Eurostat is the main source of the variables - secondary data - that is used in the ATLAS.

The analysis will take the European averages for the different indicators as a reference for comparative analysis. An ESRI Geodatabase was setup to store and map all the data collected. Whenever possible data was gathered for the most recent available year and also, for a time-series analysis data from 2001 was also included.

This is a living ATLAS and will be updated at any time, for some or all the indicators, whenever the data will be updated at the original sources. The ATLAS wants to gather as much information as possible, within the framework of its objectives. Some indicators do not have any comments; they are there available for any comparison or check of other analysis.

All the information was structured in three main thematic categories: Education, Demography and Economy.

This is the first draft of the Atlas, and for this reason it is only published in ebook. Some information appears only on raw data, without analysis. The tables, charts and maps refer to different dates, depending on EUROSTAT update. The Agency plans to update the current information and extend it with the insertion of more analysis and new variables and indicators. For example, the monitoring indicators of the Europe 2020 Strategy will be expanded and deepened.

Accordingly, some caution should be taken while using the information in this Atlas.

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Eurostat:

<http://ec.europa.eu/eurostat/web/sdi/indica>

FIGURE 1 – THE FOUR COUNTRIES IN SOUTHERN EUR

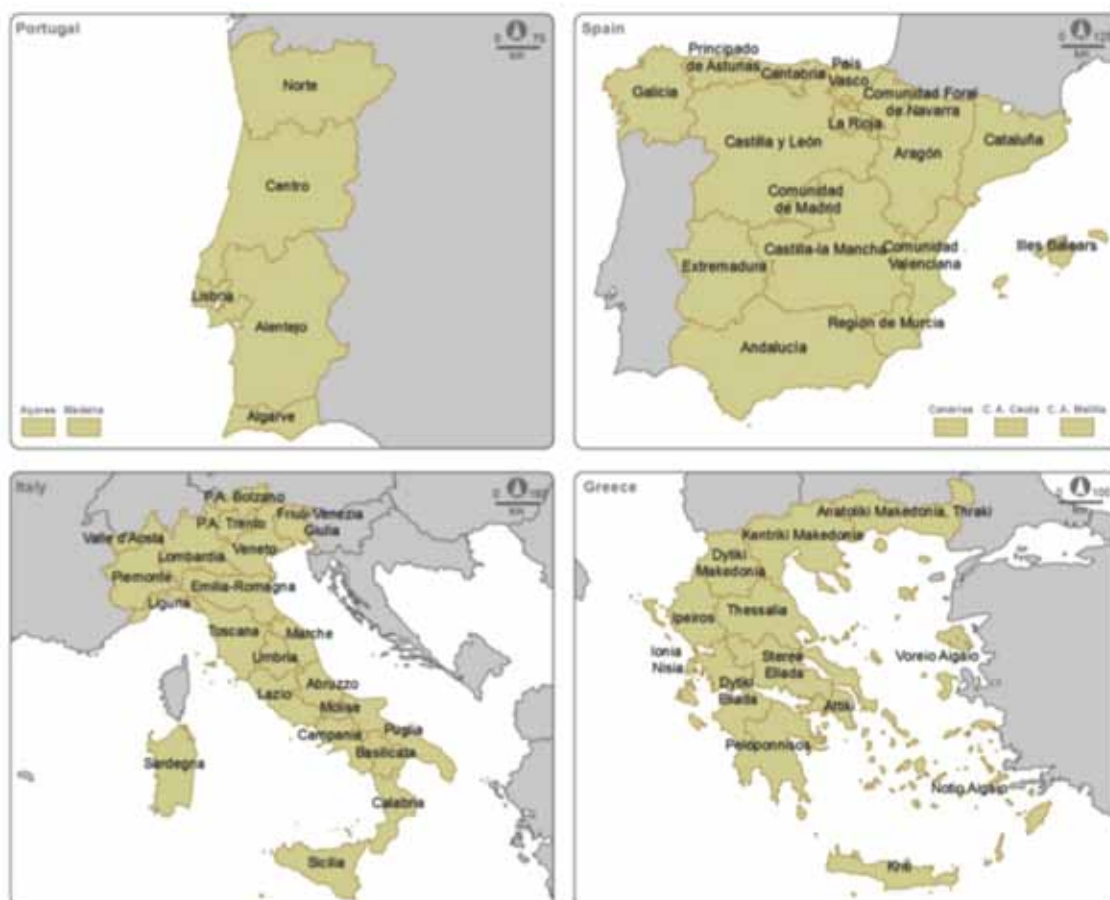


TABLE 1 – GENERAL INDICATORS

	POPULATION 2014	GDP-PPS ¹ 2013	UNEMPLOYMENT RATE ² 2014	TERTIARY STUDENTS 2012 ³
Portugal	10.427.301	78	14,1	67,4
Spain	46.512.199	94	24,1	79,7
Italy	60.782.668	99	12,5	61,2
Greece	10.903.704	73	26,4	112
EU28	506.913.394	100	10	64,2

¹ GDP - Purchasing Power Standard per inhabitant in percentage of the EU average;

² Unemployment rate as percentage of total 20 – 64 population;

³ Percentage 20 – 24 population;

Source: Eurostat;

MAPS AND FIGURES





- The four countries in Southern Europe included in this Atlas, Portugal, Spain, Italy and Greece amount to a total population of 128,6 million inhabitants, in 2014, which represent about 25% of the 506 million of the European Union with 28 member states (EU 28).
- Portugal and Greece have a similar dimension, around 10 million inhabitants. Spain has 46,5 million inhabitants and Italy 60,7 million (Figure 2).
- Evolution trends are distinct among the 4 countries: Portugal and Greece registered a steady population growth from 2001 to 2009 /2010, and then started a steep decline until 2014. Greece has even fallen to lower values in 2014 than in 2001.
- Spain had a steady population increase since 2001 until 2012, reaching 46,8 million, in 2012. Since then, Spain registered a slow decrease and accounts now for 46,5 million inhabitants.
- Italy is the most populated and with the biggest demographic dynamic of the four countries. It is the only country that registered a steady and continuous growth throughout the whole time-series, and also the only one where the rhythm of growth has increased in the recent years. Mostly due to immigration dynamics, Italy was able to go from 56,9 million inhabitants in 2001 to 60,7 million in 2014.

FIGURE 2 – TOTAL POPULATION, (NUTS2) 2014

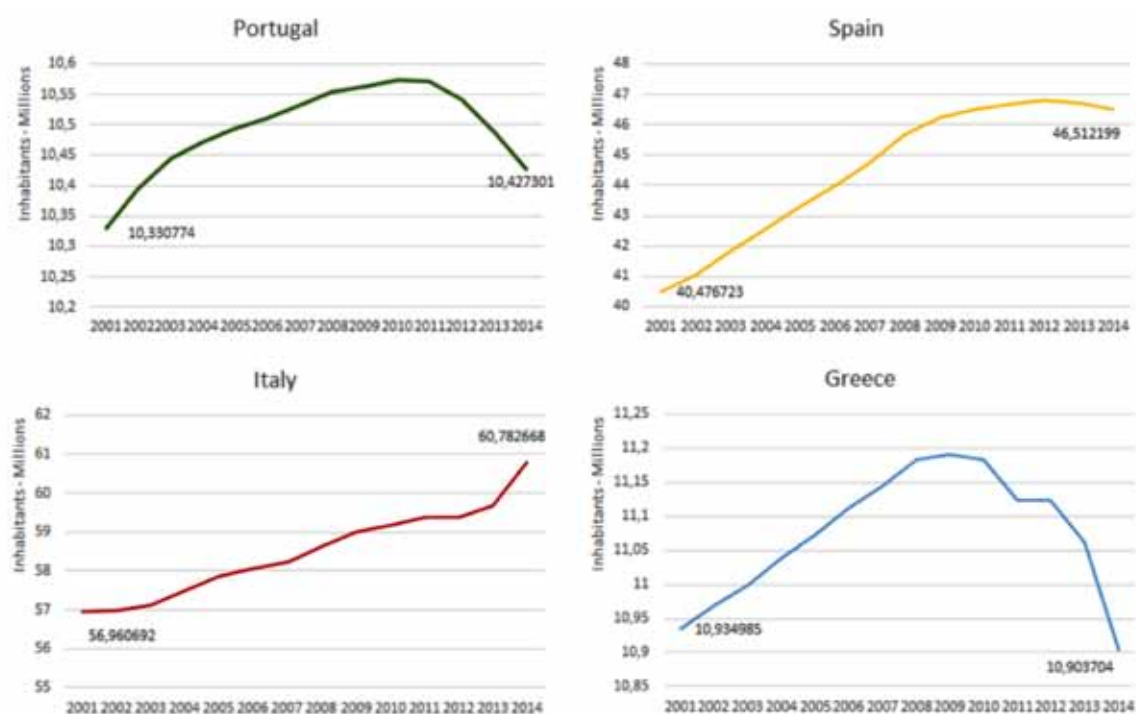
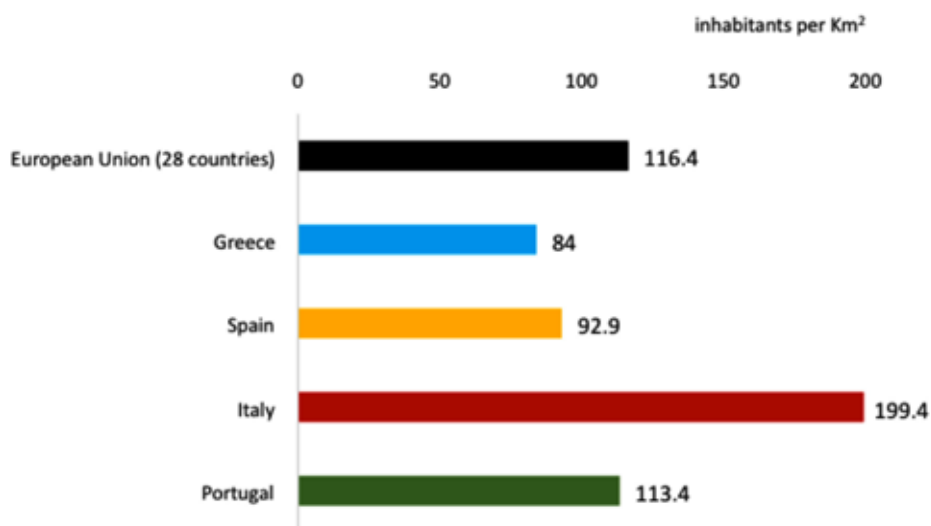


FIGURE 3 – POPULATION DENSITY – COUNTRY TOTALS - (POPULATION / KM2), 2013



1. POPULATION



FIGURE 3 – POPULATION DENSITY – COUNTRY TOTALS - (POPULATION /KM2), 2013

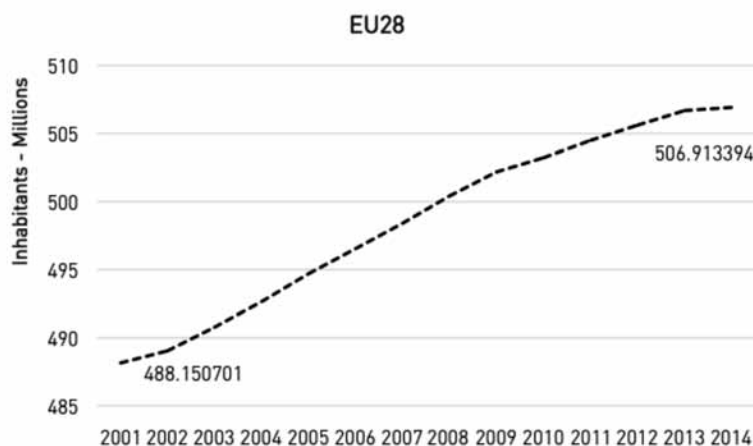


TABLE 2 – TOTAL POPULATION, (NUTS2) 2014

PORTUGAL	2014	SPAIN	2014	ITALY	2014	GREECE	2014
Norte	3 644 195	Galicia	2 747 226	Piemonte	4 436 798	Anatoliki Makedonia, Thraki	606 225
Algarve	442 358	Principado de Asturias	1 058 975	Valle d'Aosta	128 591	Kentriki Makedonia	1 899 389
Centro	2 281 164	Cantabria	587 682	Liguria	1 591 939	Dytiki Makedonia	278 214
Lisboa	2 807 525	País Vasco	2 167 166	Lombardia	9 973 397	Thessalia	736 379
Alentejo	743 306	C. Foral de Navarra	636 450	P. A. Bolzano	515 714	Ipeiros	340 240
R. A. Açores	247 440	La Rioja	315 223	P. A. Trento	536 237	Ionian Nisia	207 134
R. A. Madeira	261 313	Aragón	1 331 301	Veneto	4 926 818	Dytiki Ellada	676 670
		C. Madrid	6 378 297	Friuli-Venezia Giulia	1 229 363	Stereia Ellada	558 222
		Castilla y León	2 495 689	Emilia-Romagna	4 446 354	Peloponnisos	583 818
		Castilla-la Mancha	2 075 197	Toscana	3 750 511	Attiki	3 856 059
		Extremadura	1 096 421	Umbria	896 742	Voreio Aigaio	198 109
		Cataluña	7 416 237	Marche	1 553 138	Notio Aigaio	333 848
		C. Valenciana	4 956 427	Lazio	5 870 451	Kriti	629 397
		Illes Balears	1 115 841	Abruzzo	1 333 939		
		Andalucía	8 388 875	Molise	314 725		
		Región de Murcia	1 461 803	Campania	5 869 965		
		C. A. Ceuta	84 674	Puglia	4 090 266		
		C. A. Melilla	83 870	Basilicata	578 391		
		Canarias	2 114 845	Calabria	1 980 533		
				Sicilia	5 094 937		
				Sardegna	1 663 859		
PORTUGAL	10 427 301	SPAIN	46 512 199	ITALY	60 782 668	GREECE	10 903 704

Source: Eurostat

FIGURE 5 – POPULATION DENSITY (POPULATION /KM2), 2013

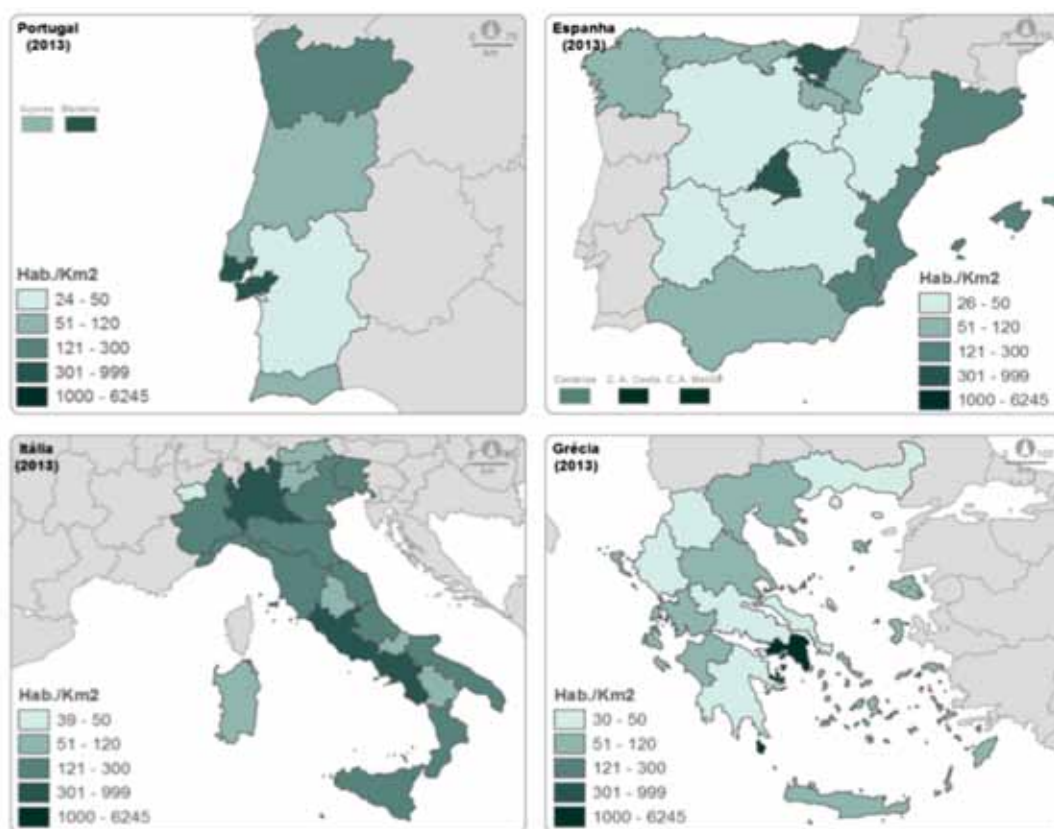


TABLE 3 – POPULATION DENSITY (POPULATION/KM2), 2013

PORTUGAL	2013	SPAIN	2013	ITALY	2013	GREECE	2013
Norte	171,7	Galicia	93,9	Piemonte	173,5	Anatoliki Makedonia, Thraki	43,8
Algarve	88,7	Principado de Asturias	100,5	Valle d'Aosta	39,3	Kentriki Makedonia	100,8
Centro	81,2	Cantabria	111,9	Liguria	291,5	Dytiki Makedonia	30,4
Lisboa	937	País Vasco	301,7	Lombardia	414,2	Thessalia	52,8
Alentejo	23,6	C. Foral de Navarra	61,6	P. A. Bolzano	69,3	Ipeiros	37,8
R. A. Açores	106,6	La Rioja	63	P. A. Trento	85,9	Ionia Nisia	91
R. A. Madeira	327,3	Aragón	28,1	Veneto	266,4	Dytiki Ellada	61,2
		C. Madrid	803,5	Friuli-Venezia Giulia	155,9	Stereia Ellada	36,4
		Castilla y León	26,8	Emilia-Romagna	196,5	Peloponnisos	38,1
		Castilla-la Mancha	26,4	Toscana	161,9	Attiki	1021,6
		Extremadura	27	Umbria	105,3	Voreio Aigaio	53,2
		Cataluña	232,9	Marche	164,8	Notio Aigaio	64,5
		C. Valenciana	215,7	Lazio	331,6	Kriti	75,5
		Illes Balears	223	Abruzzo	122,2		
		Andalucía	97	Molise	70,4		
		Región de Murcia	129,5	Campania	425,7		
		C. A. Ceuta	4392,9	Puglia	208,3		
		C. A. Melilla	6245	Basilicata	57,3		
		Canarias	283,3	Calabria	129,4		
				Sicilia	195,4		
				Sardegna	68,6		
PORTUGAL	113,4	SPAIN	92,9	ITALY	199,4	GREECE	84

Source: Eurostat

1. POPULATION



- The European Union's population ageing results first and foremost of the declining of natality rates which results in the decline of young population at the bottom of the age pyramid.
- There is a clear declining trend of population from 0 – 19 years, both on the EU as a whole and the Southern European countries (Figure 6).
- The European Union (28) shows a steady decline from 1990 to 2011 (from 26,75% to 21,22%) of population from 0 – 19 years.
- The decline is even more pronounced within the Southern European countries, where all are at date, now below the EU average.
- Italy registers the lowest percentage of 0 – 19 population throughout the time series and in 2011 with 18,8%.
- At NUTS2 level, the Asturias region in Spain and Liguria in Italy show the lowest percentage of young population (14,35% and 15,46%, respectively).
- Regions NUTS2 with the highest totals of population 0 – 19 years correspond to the main metropolitan areas and country capitals, such as Lisboa (21,12 %) and Madrid (20,55 %), some industrialized regions such as Norte (PT), Trento and Bolzano (IT) and regions located in the South, more exposed to a higher migration influx.

FIGURE 6 - POPULATION FROM 0 TO 19 YEARS BY COUNTRY - AS % OF TOTAL POPULATION AT COUNTRY LEVEL, 2001 - 2014

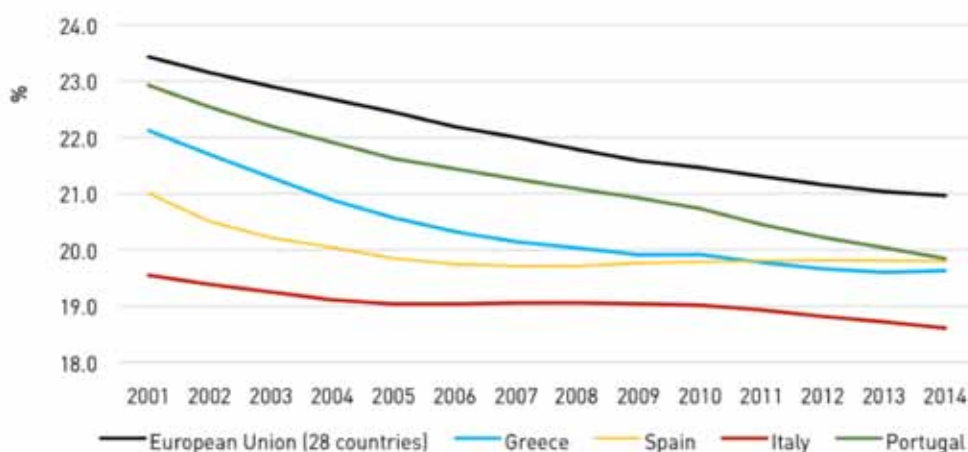


FIGURE 7 - POPULATION FROM 0 TO 19 YEARS – AS % OF TOTAL POPULATION AT NUT LEVEL

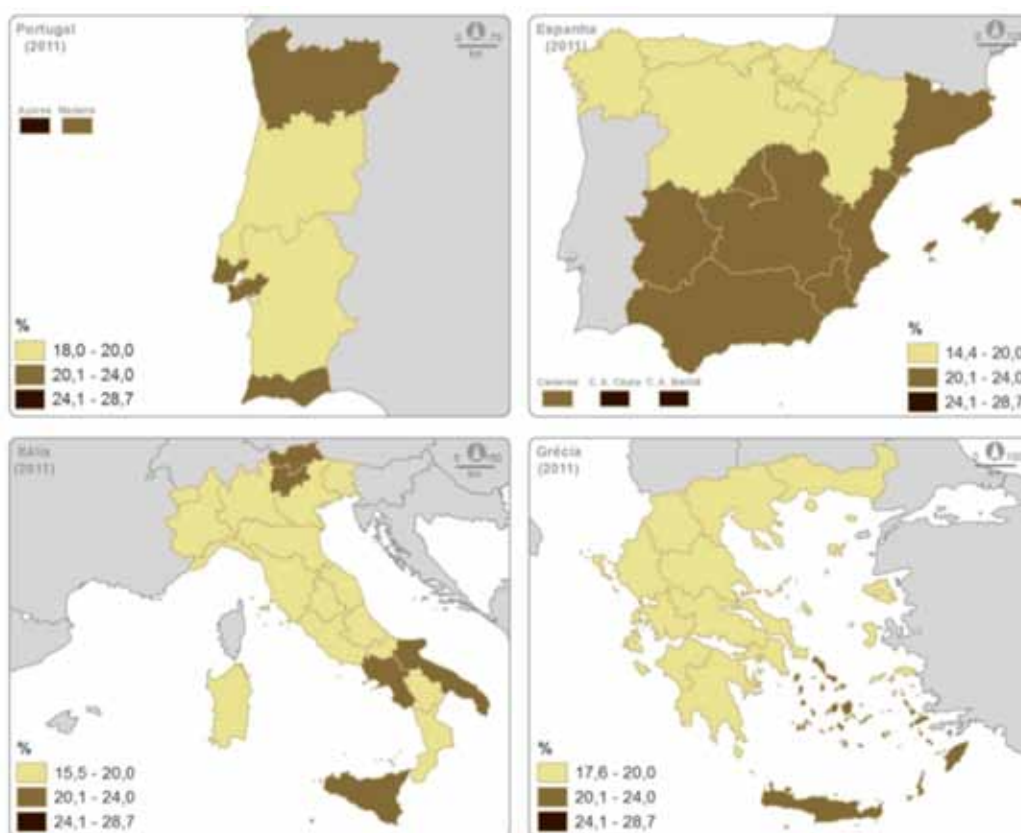


TABLE 4 – POPULATION FROM 0 TO 19 YEARS – AS % OF TOTAL POPULATION AT NUT LEVEL (EU27 = 21,22)

PORTUGAL	2011	SPAIN	2011	ITALY	2011	GREECE	2011
Norte	20,78	Galícia	15,82	Piemonte	17,05	Anatoliki Makedonia, Thraki	20,00
Algarve	20,59	Principado de Asturias	14,35	Valle d'Aosta	18,13	Kentriki Makedonia	19,89
Centro	18,71	Cantabria	17,20	Liguria	15,46	Dytiki Makedonia	19,44
Lisboa	21,12	País Vasco	17,29	Lombardia	18,60	Thessalia	19,68
Alentejo	17,95	C. Foral de Navarra	19,82	P. A. Bolzano	22,02	Ipeiros	17,63
R. A. Açores	25,09	La Rioja	18,93	P. A. Trento	20,33	Ionía Nisia	18,92
R. A. Madeira	23,43	Aragón	18,12	Veneto	18,74	Dytiki Ellada	19,24
		C. Madrid	20,55	Friuli-Venezia Giulia	16,61	Stereá Ellada	18,31
		Castilla y León	16,19	Emilia-Romagna	17,33	Peloponnisos	18,23
		Castilla-la Mancha	20,38	Toscana	16,78	Attiki	18,83
		Extremadura	20,03	Umbria	17,17	Voreio Aigaio	18,66
		Cataluña	20,28	Marche	17,82	Notio Aigaio	22,18
		C. Valenciana	20,12	Lazio	18,68	Kriti	22,40
		Illes Balears	20,94	Abruzzo	17,84		
		Andalucía	22,05	Molise	17,57		
		Región de Murcia	23,01	Campania	22,63		
		C. A. Ceuta	26,05	Puglia	20,48		
		C. A. Melilla	28,68	Basilicata	18,84		
		Canarias	20,48	Calabria	19,95		
				Sicilia	21,12		
				Sardegna	16,98		
PORTUGAL	20,49	SPAIN	19,88	ITALY	18,88	GREECE	19,37

Source: Eurostat



FIGURE 8- POPULATION FROM 20 TO 39 YEARS BY COUNTRY – AS % OF TOTAL POPULATION AT COUNTRY LEVEL, 2001 – 2014

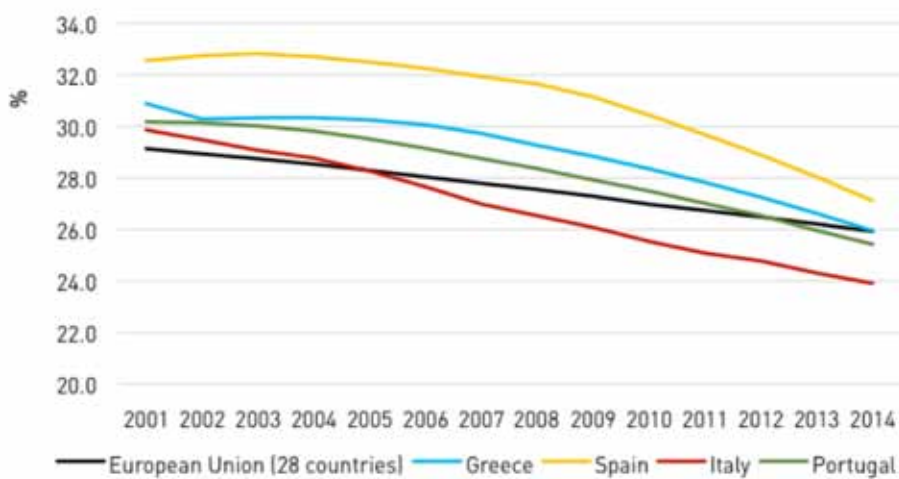


FIGURE 9 - POPULATION FROM 20 TO 39 YEARS – AS % OF TOTAL POPULATION AT NUT LEVEL

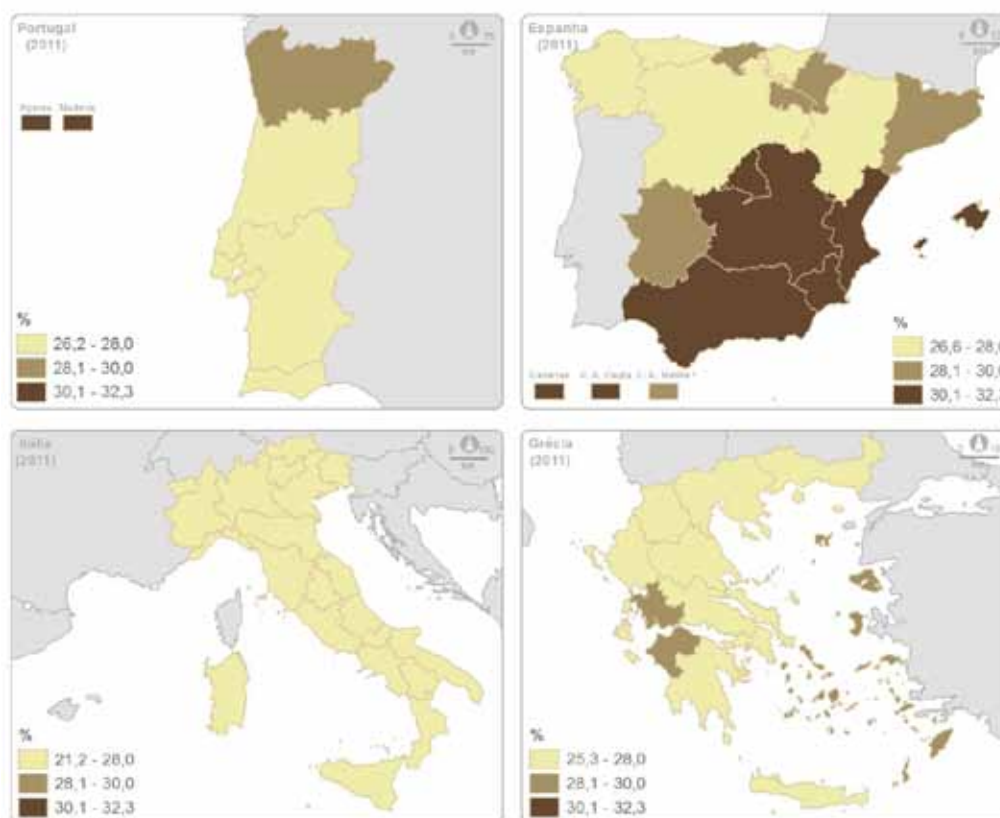


TABLE 5 - POPULATION FROM 20 TO 39 YEARS – AS % OF TOTAL POPULATION AT NUT LEVEL (EU27 = 26,93)

PORTUGAL	2011	SPAIN	2011	ITALY	2011	GREECE	2011
Norte	28,92	Galicía	28,00	Piemonte	23,71	Anatoliki Makedonia, Thraki	27,70
Algarve	26,76	Principado de Asturias	26,81	Valle d'Aosta	24,08	Kentriki Makedonia	27,18
Centro	27,34	Cantabria	28,68	Liguria	21,19	Dytiki Makedonia	26,55
Lisboa	27,31	País Vasco	26,57	Lombardia	25,19	Thessalia	25,95
Alentejo	26,16	C. Foral de Navarra	28,15	P. A. Bolzano	25,83	Ipeiros	26,88
R. A. Açores	32,04	La Rioja	28,53	P. A. Trento	24,68	Ionía Nisia	25,32
R. A. Madeira	32,07	Aragón	27,88	Veneto	25,05	Dytiki Ellada	28,40
		C. Madrid	30,55	Friuli-Venezia Giulia	23,10	Stereá Ellada	26,31
		Castilla y León	26,70	Emilia-Romagna	24,55	Peloponnisos	25,30
		Castilla-la Mancha	30,12	Toscana	23,95	Attiki	27,63
		Extremadura	28,43	Umbria	24,78	Voreio Aigaio	28,29
		Cataluña	29,26	Marche	24,82	Notio Aigaio	28,27
		C. Valenciana	30,22	Lazio	25,74	Kriti	27,95
		Illes Balears	31,85	Abruzzo	25,72		
		Andalucía	30,81	Molise	25,50		
		Región de Murcia	32,26	Campania	27,85		
		C. A. Ceuta	30,54	Puglia	26,95		
		C. A. Melilla	29,86	Basilicata	26,23		
		Canarias	32,01	Calabria	27,40		
				Sicilia	26,96		
				Sardegna	26,70		
PORTUGAL	28,17	SPAIN	29,66	ITALY	25,49	GREECE	27,26

Source: Eurostat



FIGURE 10 - POPULATION FROM 40 TO 59 YEARS BY COUNTRY - AS % OF TOTAL POPULATION AT COUNTRY LEVEL, 2001 - 2014

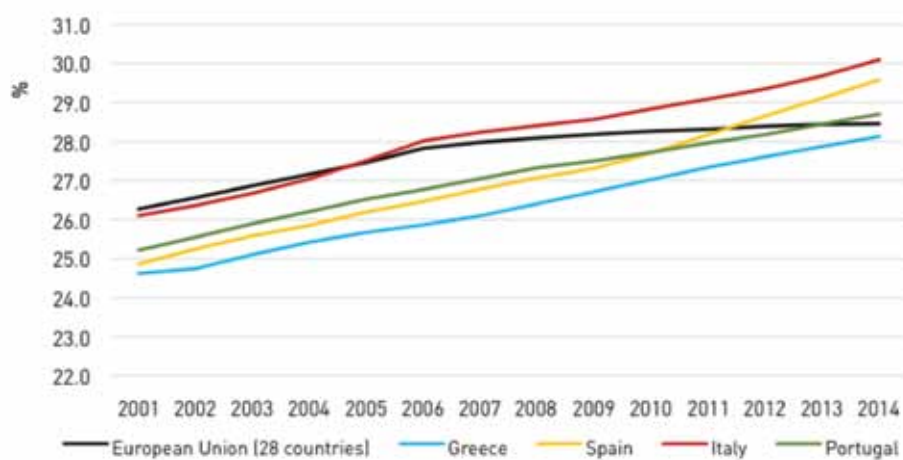


FIGURE 11 - POPULATION FROM 40 TO 59 YEARS – AS % OF TOTAL POPULATION AT NUT LEVEL

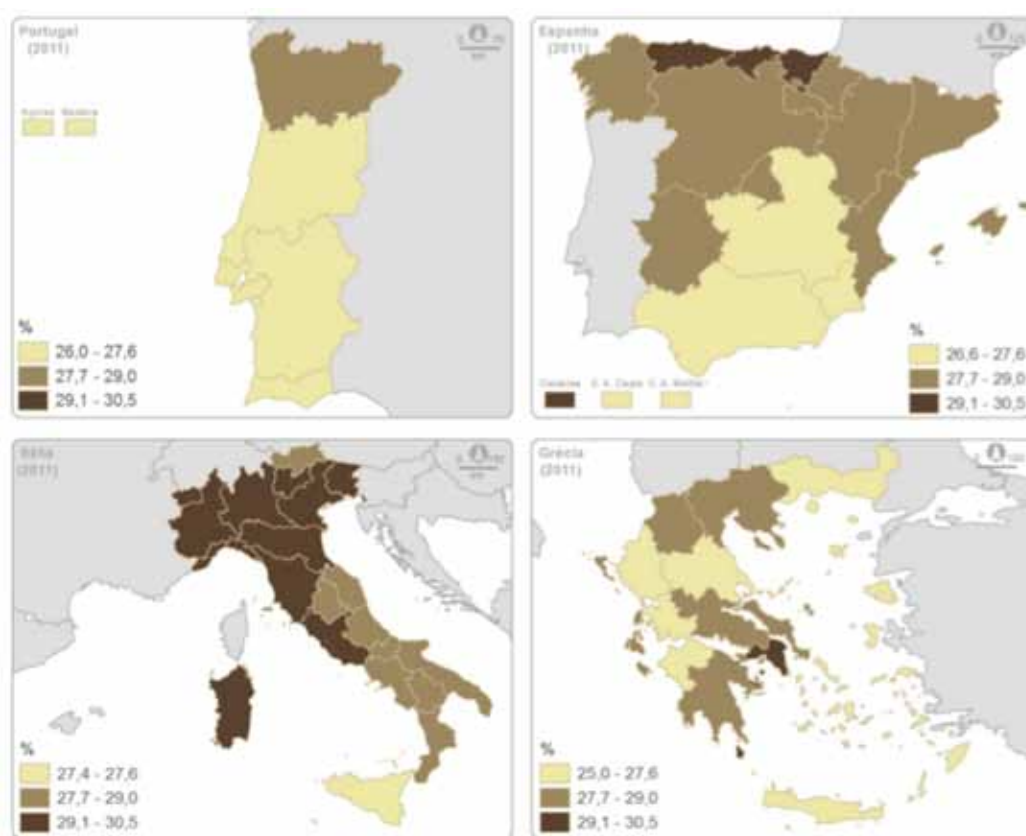


TABLE 6 - POPULATION FROM 40 TO 59 YEARS – AS % OF TOTAL POPULATION AT NUT LEVEL (EU27 = 28,29)

PORTUGAL	2011	SPAIN	2011	ITALY	2011	GREECE	2011
Norte	28,72	Galicia	28,06	Piemonte	29,60	Anatoliki Makedonia, Thraki	26,22
Algarve	27,60	Principado de Asturias	30,14	Valle d'Aosta	30,40	Kentriki Makedonia	27,88
Centro	27,34	Cantabria	29,50	Liguria	29,56	Dytiki Makedonia	27,98
Lisboa	27,18	País Vasco	30,06	Lombardia	29,76	Thessalia	26,81
Alentejo	26,94	C. Foral de Navarra	28,54	P. A. Bolzano	28,92	Ipeiros	26,41
R. A. Açores	26,01	La Rioja	28,30	P. A. Trento	29,60	Ionia Nisia	28,44
R. A. Madeira	27,06	Aragón	28,23	Veneto	30,04	Dytiki Ellada	27,17
		C. Madrid	28,26	Friuli-Venezia Giulia	29,81	Stereia Ellada	27,65
		Castilla y León	28,72	Emilia-Romagna	29,43	Peloponnisos	27,76
		Castilla-la Mancha	27,17	Toscana	29,20	Attiki	29,83
		Extremadura	27,75	Umbria	28,48	Voreio Aigaio	25,03
		Cataluña	27,86	Marche	28,69	Notio Aigaio	27,47
		C. Valenciana	27,94	Lazio	29,48	Kriti	26,67
		Illes Balears	28,18	Abruzzo	28,86		
		Andalucía	27,41	Molise	28,62		
		Región de Murcia	26,67	Campania	27,69		
		C. A. Ceuta	27,03	Puglia	27,83		
		C. A. Melilla	26,56	Basilicata	28,69		
		Canarias	29,40	Calabria	27,87		
				Sicilia	27,41		
				Sardegna	30,48		
PORTUGAL	27,90	SPAIN	28,10	ITALY	29,02	GREECE	28,21

Source: Eurostat



FIGURE 12 - POPULATION FROM 60 TO 79 YEARS BY COUNTRY- AS % OF TOTAL POPULATION AT COUNTRY LEVEL, 2001 - 2014

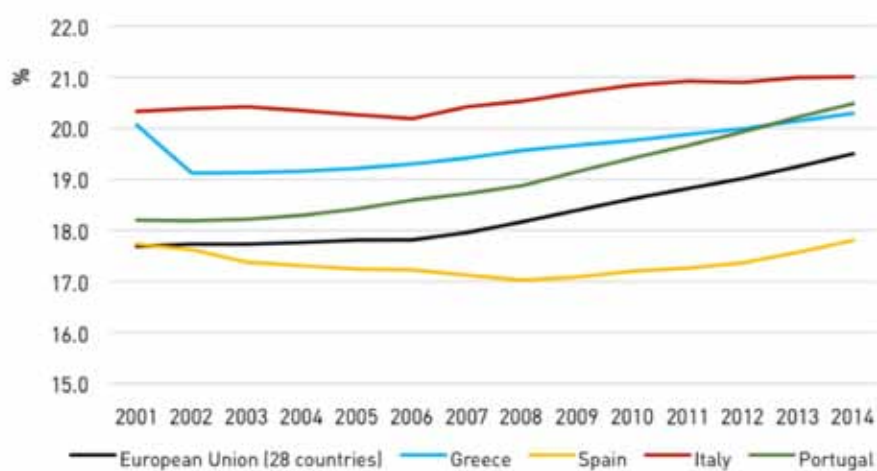


FIGURE 13 - POPULATION FROM 60 TO 79 YEARS – AS % OF TOTAL POPULATION AT NUT LEVEL

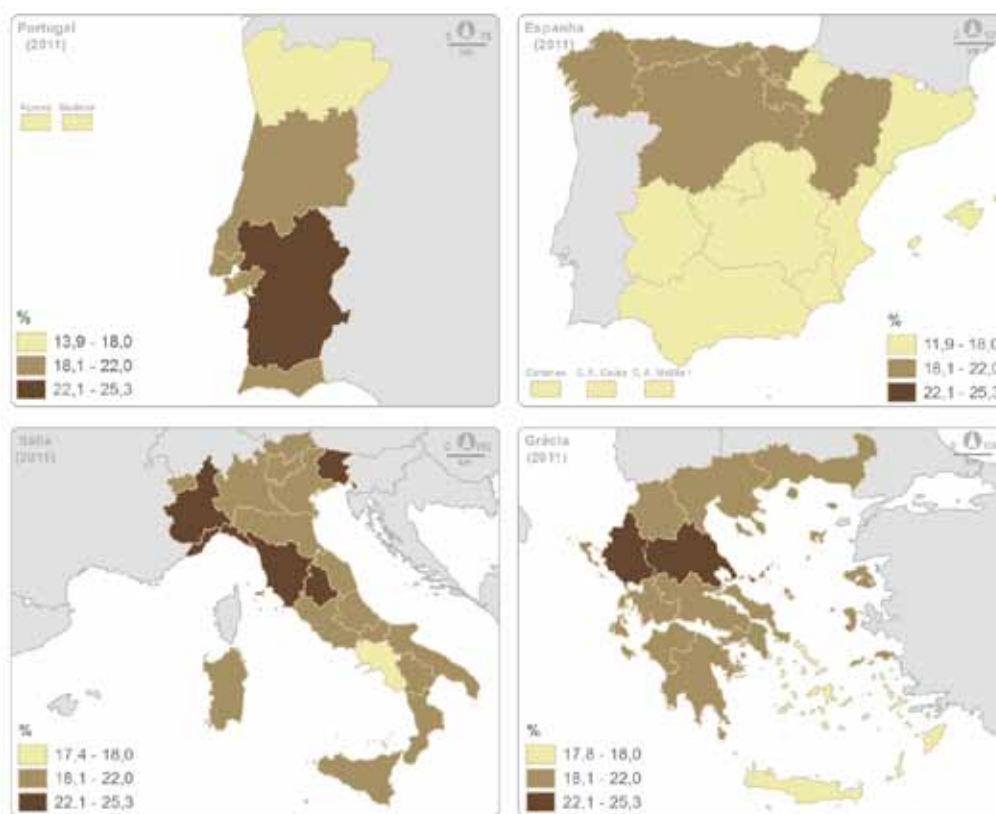


TABLE 7 - POPULATION FROM 60 TO 79 YEARS – AS % OF TOTAL POPULATION AT NUT LEVEL (EU27 = 18,74)

PORTUGAL	2011	SPAIN	2011	ITALY	2011	GREECE	2011
Norte	17,56	Galicia	21,16	Piemonte	22,96	Anatoliki Makedonia, Thraki	21,00
Algarve	19,92	Principado de Asturias	21,38	Valle d'Aosta	21,28	Kentriki Makedonia	20,43
Centro	20,83	Cantabria	18,42	Liguria	25,30	Dytiki Makedonia	20,34
Lisboa	20,21	País Vasco	20,21	Lombardia	20,91	Thessalia	22,19
Alentejo	22,30	C. Foral de Navarra	17,66	P. A. Bolzano	18,20	Ipeiros	22,30
R. A. Açores	13,91	La Rioja	18,08	P. A. Trento	19,39	Ionia Nisia	21,02
R. A. Madeira	14,48	Aragón	19,01	Veneto	20,36	Dytiki Ellada	19,77
		C. Madrid	16,38	Friuli-Venezia Giulia	23,38	Stereia Ellada	21,76
		Castilla y León	20,38	Emilia-Romagna	21,59	Peloponnisos	21,70
		Castilla-la Mancha	16,47	Toscana	22,74	Attiki	19,35
		Extremadura	17,89	Umbria	22,10	Voreio Aigaio	21,06
		Cataluña	17,51	Marche	21,41	Notio Aigaio	17,77
		C. Valenciana	17,29	Lazio	20,47	Kriti	17,95
		Illes Balears	15,15	Abruzzo	20,81		
		Andalucía	15,75	Molise	21,04		
		Región de Murcia	14,25	Campania	17,41		
		C. A. Ceuta	13,46	Puglia	19,53		
		C. A. Melilla	11,94	Basilicata	19,97		
		Canarias	14,99	Calabria	19,20		
				Sicilia	19,08		
				Sardegna	20,54		
PORTUGAL	19,39	SPAIN	17,33	ITALY	20,64	GREECE	20,14

Source: Eurostat



FIGURE 14 - POPULATION 80 YEARS OVER BY COUNTRY - AS % OF TOTAL POPULATION AT COUNTRY LEVEL, 2001 - 2014

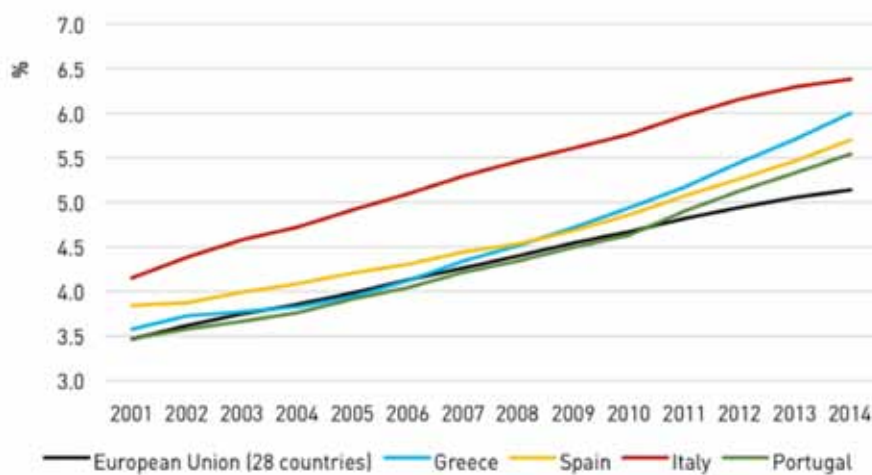


FIGURE 15 - POPULATION 80 YEARS OVER – AS % OF TOTAL POPULATION AT COUNTRY LEVEL

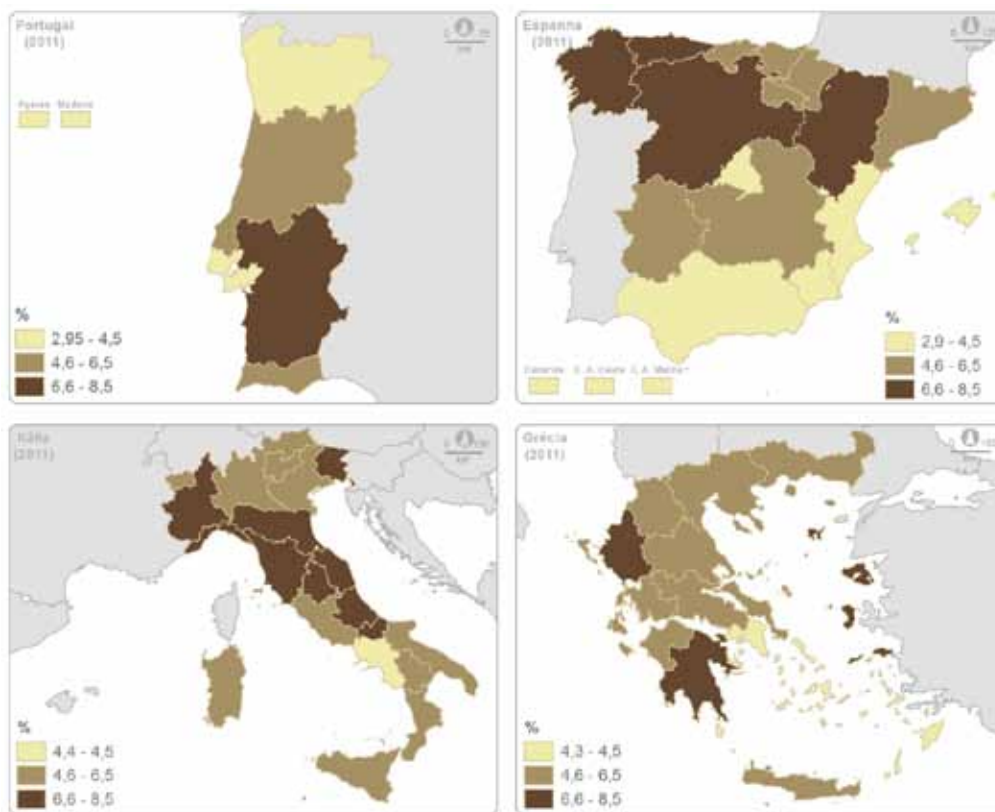


TABLE 8 - POPULATION 80 YEARS OVER – AS % OF TOTAL POPULATION AT NUT LEVEL (EU27 = 4,82)

PORTUGAL	2011	SPAIN	2011	ITALY	2011	GREECE	2011
Norte	4,02	Galia	6,95	Piemonte	6,68	Anatoliki Makedonia, Thraki	5,09
Algarve	5,13	Principado de Asturias	7,32	Valle d'Aosta	6,11	Kentriki Makedonia	4,62
Centro	5,78	Cantabria	6,21	Liguria	8,50	Dytiki Makedonia	5,68
Lisboa	4,18	País Vasco	5,87	Lombardia	5,54	Thessalia	5,38
Alentejo	6,65	C. Foral de Navarra	5,82	P. A. Bolzano	5,03	Ipeiros	6,78
R. A. Açores	2,95	La Rioja	6,15	P. A. Trento	6,01	Ionia Nisia	6,30
R. A. Madeira	2,96	Aragón	6,76	Veneto	5,81	Dytiki Ellada	5,42
		C. Madrid	4,28	Friuli-Venezia Giulia	7,10	Stereia Ellada	5,97
		Castilla y León	8,01	Emilia-Romagna	7,09	Peloponnisos	7,01
		Castilla-la Mancha	5,87	Toscana	7,34	Attiki	4,36
		Extremadura	5,89	Umbria	7,46	Voreio Aigaio	6,95
		Cataluña	5,07	Marche	7,26	Notio Aigaio	4,31
		C. Valenciana	4,42	Lazio	5,63	Kriti	5,03
		Illes Balears	3,88	Abruzzo	6,77		
		Andalucía	3,98	Molise	7,26		
		Región de Murcia	3,81	Campania	4,41		
		C. A. Ceuta	2,93	Puglia	5,21		
		C. A. Melilla	2,96	Basilicata	6,26		
		Canarias	3,13	Calabria	5,58		
				Sicilia	5,42		
				Sardegna	5,30		
PORTUGAL	4,67	SPAIN	5,03	ITALY	5,96	GREECE	5,03

Source: Eurostat

1. POPULATION



- The European Union's population ageing results first and foremost of the declining of fertility rates.
- Throughout the whole European Union, fertility rates have long been below the desired level of 2,1 births per woman, required to ensure generation replacement.
- Southern Europe has been particularly affected by the decline in the fertility rates; in 2013, all countries are below EU level (1,55) and show a declining trend.
- At a regional level, Spain's Ceuta and Melilla are the ones with the highest rates and of these, only Melilla surpasses the 2,1 level with 2,49.
- Apart from these 2 special regions, the next highest values are in the North of Italy, in the Bolzano (1,65) and Trento (1,60) regions.
- In Portugal, the capital region Lisbon is clearly above the rest of the country with 1,43.
- Greece has a more even distribution of fertility rates throughout the country, being Ionia Nisia the region with the highest rate at 1,43.
- The regions with the lowest rates are located in Portugal and Spain, Madeira with 0,98 and Asturias with 0,96.

FIGURE 16 – FERTILITY RATES AT COUNTRY LEVEL, 2001 - 2013

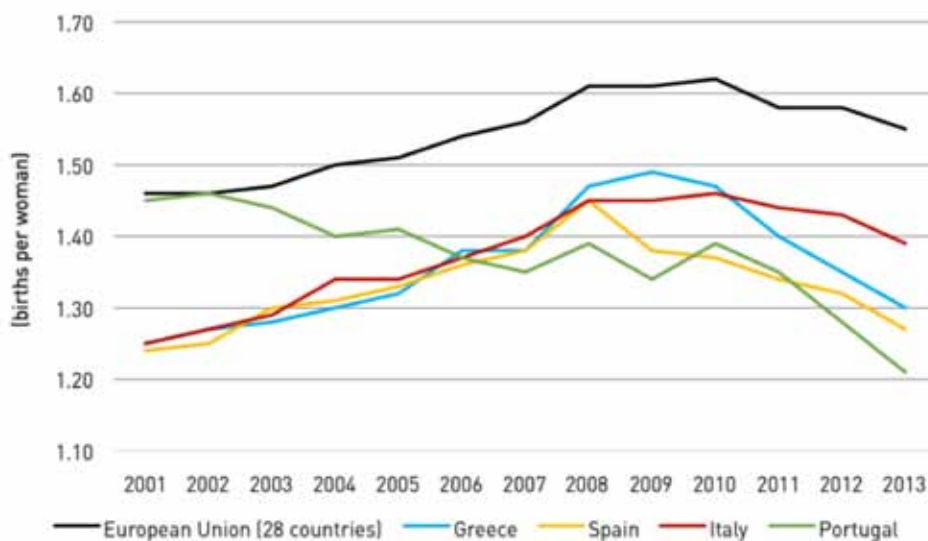


FIGURE 17 – FERTILITY RATES (BIRTHS PER WOMAN) 2013

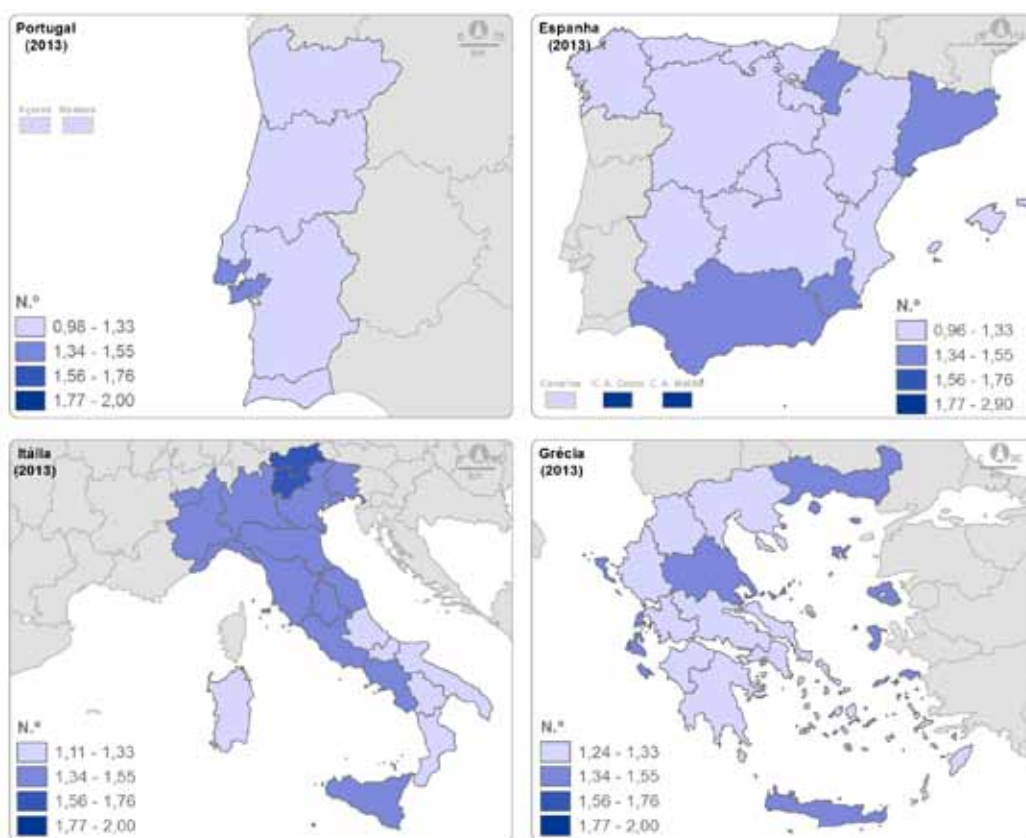


TABLE 9 – FERTILITY RATES (BIRTHS PER WOMAN) 2013

PORTUGAL	2013	SPAIN	2013	ITALY	2013	GREECE	2013
Norte	1,10	Galicia	1,04	Piemonte	1,41	Anatoliki Makedonia, Thraki	1,38
Algarve	1,31	Principado de Asturias	0,96	Valle d'Aosta	1,44	Kentriki Makedonia	1,30
Centro	1,11	Cantabria	1,18	Liguria	1,34	Dytiki Makedonia	1,29
Lisboa	1,43	País Vasco	1,30	Lombardia	1,48	Thessalia	1,34
Alentejo	1,22	C. Foral de Navarra	1,36	P. A. Bolzano	1,65	Ipeiros	1,29
R. A. Açores	1,27	La Rioja	1,33	P. A. Trento	1,60	Ionía Nisia	1,43
R. A. Madeira	0,98	Aragón	1,30	Veneto	1,42	Dytiki Ellada	1,33
		C. Madrid	1,29	Friuli-Venezia Giulia	1,37	Stereá Ellada	1,25
		Castilla y León	1,13	Emilia-Romagna	1,45	Peloponnisos	1,32
		Castilla-la Mancha	1,30	Toscana	1,35	Attiki	1,24
		Extremadura	1,22	Umbria	1,37	Voreio Aigaio	1,34
		Cataluña	1,34	Marche	1,34	Notio Aigaio	1,28
		C. Valenciana	1,26	Lazio	1,42	Kriti	1,42
		Illes Balears	1,22	Abruzzo	1,30		
		Andalucía	1,34	Molise	1,17		
		Región de Murcia	1,51	Campania	1,35		
		C. A. Ceuta	1,79	Puglia	1,28		
		C. A. Melilla	2,49	Basilicata	1,12		
		Canarias	0,99	Calabria	1,28		
				Sicilia	1,36		
				Sardegna	1,11		
PORTUGAL	1,21	SPAIN	1,27	ITALY	1,39	GREECE	1,30

Source: Eurostat



- The old-age dependency ratio is the relation between population with 65 or above and the population in active age, from 15 to 64. This ratio helps to depict the population ageing process.
- With the exception of Spain, the other 3 countries have higher old-age dependency than the EU 28 average (Figure 18).
- Italy has the highest old-age dependency level with 32,7 %. Italy was also the country with the lowest number of population between 0 – 18 (Figure 6), which makes it the country with the most serious ageing problem.
- Within the NUTS 2 context, Italy confirms its ageing scenario with the 2 highest ratios of the four countries, Liguria and Friuli-Venezia Giulia, 45,6% and 38,6% respectively.
- Outside Italy the highest values are found in Alentejo (PT) – 38,2 % and Ipeiros (EL) – 39,4 %.
- The lowest old-age dependency ratios are found in the Spain's autonomous African regions of Ceuta (15,9 %) and Melilla (14,5 %), and in Azores in Portugal (18,7 %) (Figure 19).

FIGURE 18 – OLD AGE DEPENDENCY RATIO (POPULATION 65+ / POPULATION 15-64) 2013 – BY COUNTRY

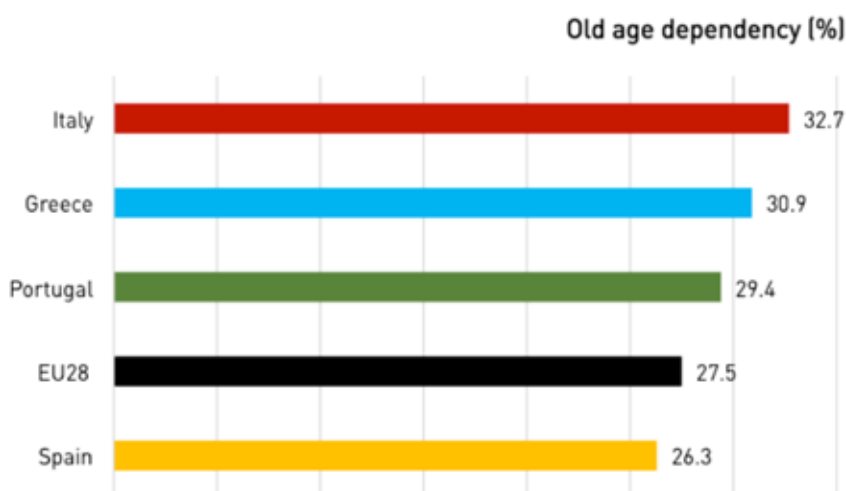


FIGURE 19 – OLD AGE DEPENDENCY RATIO (POPULATION 65+ / POPULATION 15-64) 2013

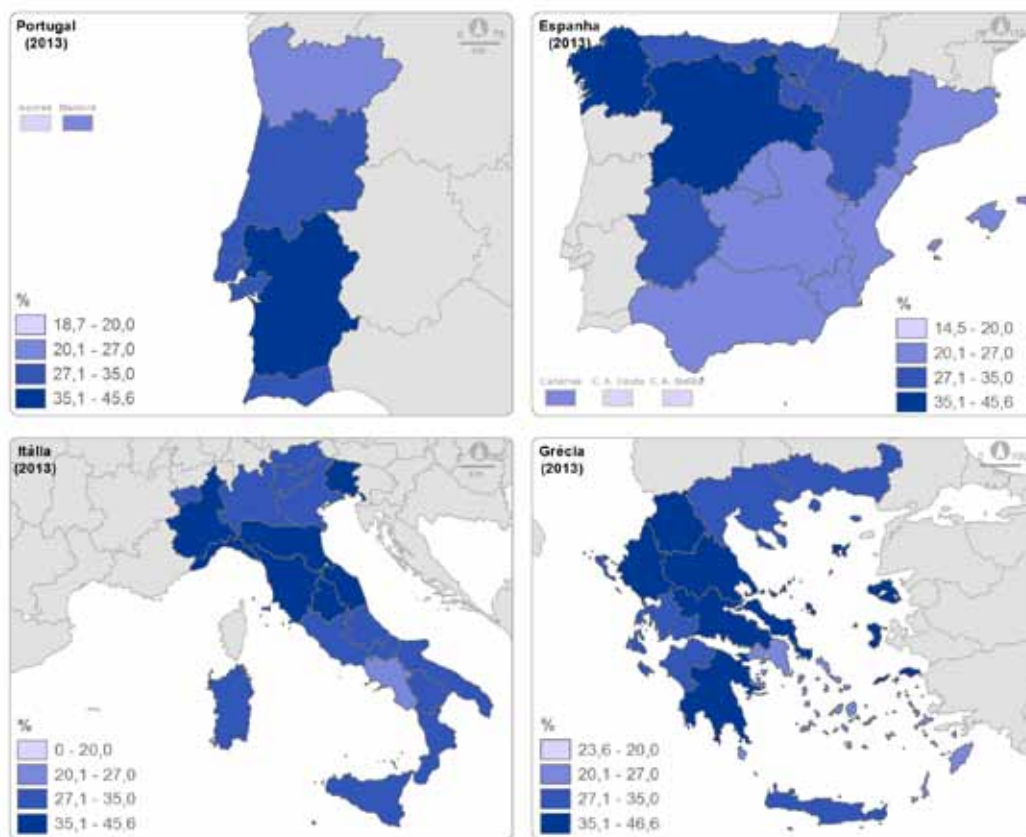


TABLE 10 – OLD AGE DEPENDENCY RATIO (POPULATION 65+ / POPULATION 15-64) 2013

PORTUGAL	2013	SPAIN	2013	ITALY	2013	GREECE	2013
Norte	25,5	Galicia	35,6	Piemonte	37,6	Anatoliki Makedonia, Thraki	34,0
Algarve	30,7	Principado de Asturias	34,8	Valle d'Aosta	33,6	Kentriki Makedonia	32,0
Centro	34,6	Cantabria	28,9	Liguria	45,6	Dytiki Makedonia	35,3
Lisboa	30,0	País Vasco	31,0	Lombardia	32,7	Thessalia	36,3
Alentejo	38,2	C. Foral de Navarra	27,7	P. A. Bolzano	28,4	Ipeiros	39,4
R. A. Açores	18,7	La Rioja	28,9	P. A. Trento	31,0	Ionia Nisia	33,8
R. A. Madeira	21,1	Aragón	31,0	Veneto	32,2	Dytiki Ellada	32,2
		C. Madrid	23,3	Friuli-Venezia Giulia	38,6	Sterea Ellada	35,6
		Castilla y León	36,0	Emilia-Romagna	36,3	Peloponnisos	36,6
		Castilla-la Mancha	26,6	Toscana	38,4	Attiki	26,9
		Extremadura	29,1	Umbria	37,7	Voreio Aigaio	35,8
		Cataluña	26,2	Marche	36,3	Notio Aigaio	23,6
		C. Valenciana	26,3	Lazio	31,6	Kriti	27,9
		Illes Balears	20,8	Abruzzo	33,9		
		Andalucía	22,9	Molise	34,6		
		Región de Murcia	21,4	Campania	25,3		
		C. A. Ceuta	15,9	Puglia	29,4		
		C. A. Melilla	14,5	Basilicata	31,5		
		Canarias	20,1	Calabria	29,4		
				Sicilia	29,3		
				Sardegna	30,7		
PORTUGAL	29,4	SPAIN	26,3	ITALY	32,7	GREECE	30,9

Source: Eurostat



- Another way to understand the ageing phenomena in Europe is to analyse life expectancy. If on one hand the younger populations are declining, on the other hand people tend to live longer helping to build up the old age population. Life expectancy is also a good proxy for the general development of a country, as it reflects the levels of quality of life and healthcare available to the population.
- The four Southern Europe countries show a very similar evolving trend in what concerns life expectancy and are all above EU 28 average of 80,6 years, Spain being the highest with 83,2 years and Portugal the lowest with 80,9 years (Figure 20).
- All countries show a steady increase since 2001; Spain and Portugal registered the most growth between 2001 and 2013.
- At the NUTS 2 level there is an overall homogeneity with Spain having the only regions passing the 84 years mark: Madrid, Navarra, La Rioja and Castilla y Leon.
- Portugal's autonomous regions of Azores and Madeira with 76,7 and 78,4 respectively present the lower values of life expectancy.

FIGURE 20 – LIFE EXPECTANCY BY COUNTRY (AGE – LESS THAN ONE YEAR) 2001 - 2013

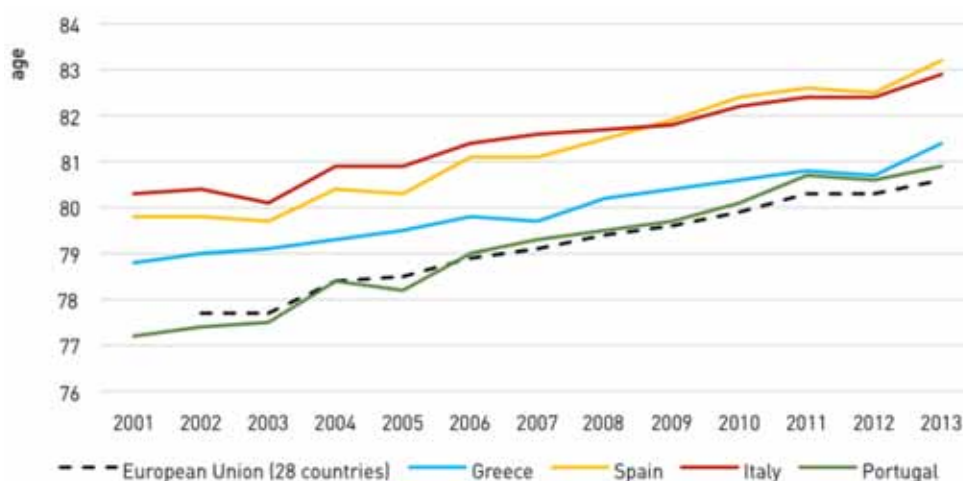


FIGURE 21 – LIFE EXPECTANCY (AGE – LESS THAN ONE YEAR) 2013

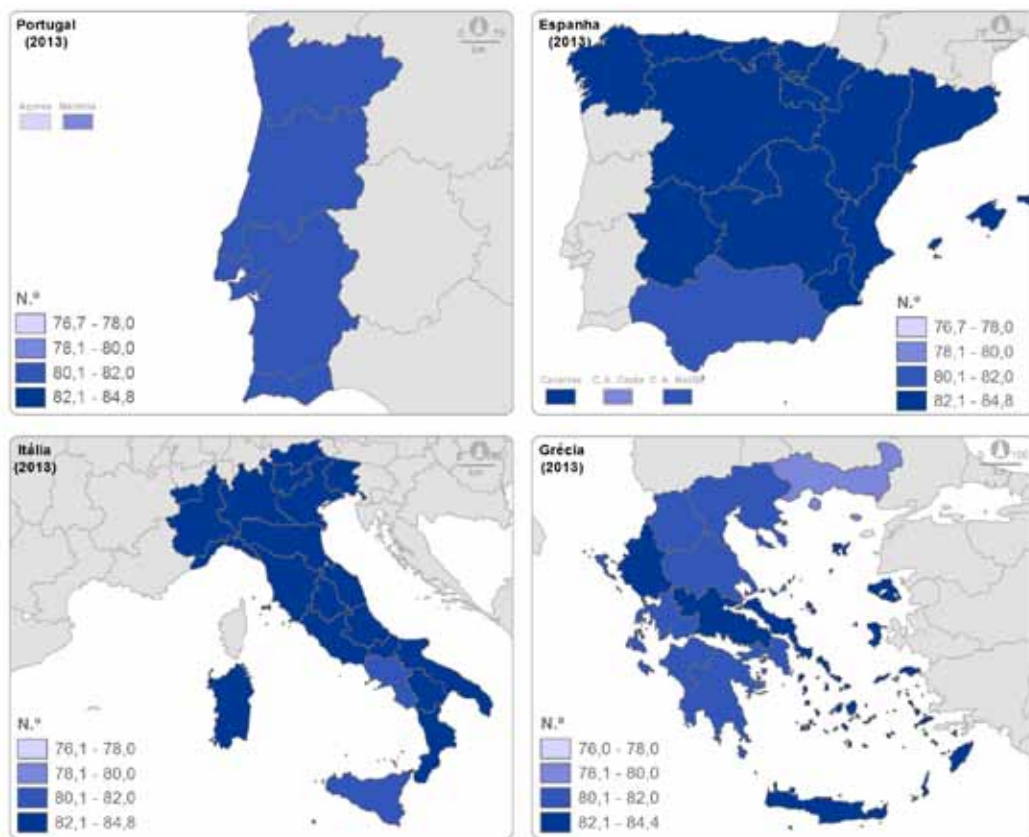


TABLE 11 – LIFE EXPECTANCY (AGE – LESS THAN ONE YEAR) 2013

PORTUGAL	2013	SPAIN	2013	ITALY	2013	GREECE	2013
Norte	81,3	Galia	82,9	Piemonte	82,7	Anatoliki Makedonia, Thraki	80
Algarve	80,6	Principado de Asturias	82,5	Valle d'Aosta	83	Kentriki Makedonia	81,3
Centro	81	Cantabria	83,4	Liguria	82,5	Dytiki Makedonia	81,3
Lisboa	81,3	País Vasco	83,7	Lombardia	83,5	Thessalia	81,8
Alentejo	80,2	C. Foral de Navarra	84	P. A. Bolzano	83,9	Ipeiros	82,6
R. A. Açores	76,7	La Rioja	84	P. A. Trento	83,9	Ionia Nisia	81,6
R. A. Madeira	78,4	Aragón	83,4	Veneto	83,4	Dytiki Ellada	80,9
		C. Madrid	84,8	Friuli-Venezia Giulia	82,6	Stereia Ellada	82,2
		Castilla y León	84	Emilia-Romagna	83,4	Peloponnisos	82
		Castilla-la Mancha	83,5	Toscana	83,4	Attiki	81,1
		Extremadura	82,2	Umbria	83,3	Voreio Aigaio	82,1
		Cataluña	83,4	Marche	83,6	Notio Aigaio	82,3
		C. Valenciana	82,8	Lazio	82,8	Kriti	82,3
		Illes Balears	82,9	Abruzzo	82,9		
		Andalucía	81,8	Molise	82,8		
		Región de Murcia	82,7	Campania	81,1		
		C. A. Ceuta	79,7	Puglia	83,1		
		C. A. Melilla	81	Basilicata	82,8		
		Canarias	82,7	Calabria	82,5		
				Sicilia	81,9		
				Sardegna	82,8		
PORTUGAL	80,9	SPAIN	83,2	ITALY	82,9	GREECE	81,4

Source: Eurostat



- Natural change reflects the difference between the crude birth rate and the crude death rate of a population.
- The four Southern Europe countries present different profiles in what concerns population natural change (Figure 22).
- Spain is the only country that kept a positive natural growth throughout the whole time series, even though there is a steady decline since 2008 onwards. In 2013, the value of this indicator, for Spain was already 0,8%.
- Greece and Portugal had a positive population natural growth until 2008 and 2009 but, since then, the indicator has been registering an increasingly negative growth, reaching in 2013 -1,6% and -2,3% respectively.
- Italy was the only country with constant negative rates, except for 2004, where a slight positive balance was registered.
- At NUTS 2 level the most negative natural growth rates corresponds to Liguria, Italy with -6,8% and Alentejo, Portugal with -6,5%. In Portugal, Lisbon is the only region that doesn't have a negative growth rate.
- Regions with the highest natural growth are all in Spain: Melilla (12,5%), Ceuta (6,6%), Murcia (4,1%) and Madrid (3,6%).

FIGURE 22 – CRUDE RATE OF NATURAL GROWTH (%) BY COUNTRY 2001 – 2013

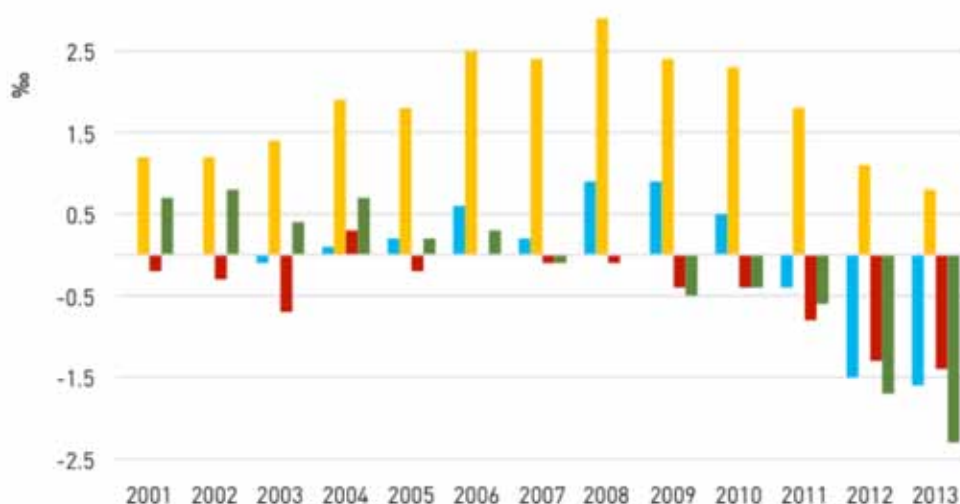


FIGURE 23 - CRUDE RATE OF NATURAL GROWTH (%) 2013

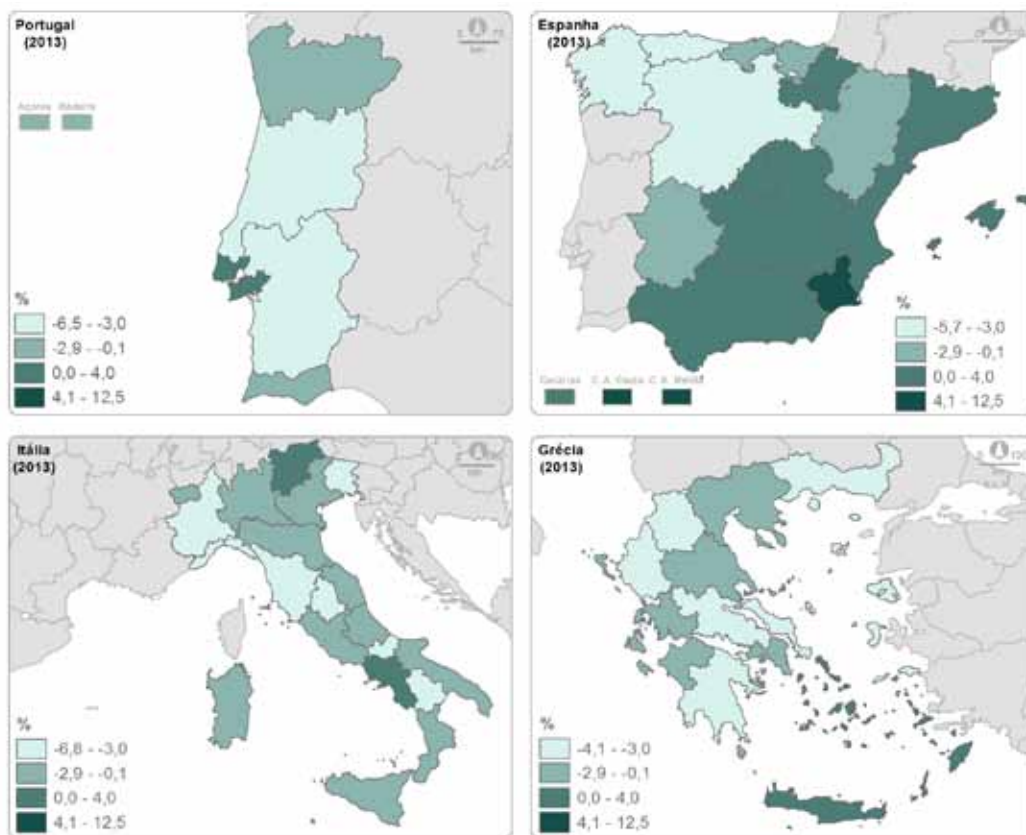


TABLE 12 – CRUDE RATE OF NATURAL GROWTH (%) 2013

PORTUGAL	2013	SPAIN	2013	ITALY	2013	GREECE	2013
Norte	-1,7	Galicia	-3,9	Piemonte	-3,3	Anatoliki Makedonia, Thraki	-3,1
Algarve	-2,4	Principado de Asturias	-5,7	Valle d'Aosta	-1,8	Kentriki Makedonia	-1,5
Centro	-5,1	Cantabria	-1,3	Liguria	-6,8	Dytiki Makedonia	-3,7
Lisboa	0,3	País Vasco	-0,3	Lombardia	-0,3	Thessalia	-2,8
Alentejo	-6,5	C. Foral de Navarra	1,2	P. A. Bolzano	2,4	Ipeiros	-3,5
R. A. Açores	-0,4	La Rioja	0,1	P. A. Trento	0,5	Ionia Nisia	-2,4
R. A. Madeira	-2,3	Aragón	-1,3	Veneto	-0,9	Dytiki Ellada	-2,5
		C. Madrid	3,6	Friuli-Venezia Giulia	-3,9	Stereia Ellada	-3,2
		Castilla y León	-3,9	Emilia-Romagna	-2,2	Peloponnisos	-4,1
		Castilla-la Mancha	0,4	Toscana	-3,4	Attiki	-0,7
		Extremadura	-2,0	Umbria	-3,1	Voreio Aigaio	-3,3
		Cataluña	1,4	Marche	-2,7	Notio Aigaio	1,6
		C. Valenciana	0,7	Lazio	-0,4	Kriti	1,2
		Illes Balears	2,6	Abruzzo	-2,7		
		Andalucía	1,9	Molise	-4,1		
		Región de Murcia	4,1	Campania	0,1		
		C. A. Ceuta	6,6	Puglia	-0,6		
		C. A. Melilla	12,5	Basilicata	-3,2		
		Canarias	1,1	Calabria	-1,1		
				Sicilia	-1,0		
				Sardegna	-2,0		
PORTUGAL	-2,3	SPAIN	0,8	ITALY	-1,4	GREECE	-1,6

Source: Eurostat

1. POPULATION



- Net migration expresses the difference between immigrants and emigrants in a given area. The value is expressed per thousand inhabitants.
- Since 2001 Italy is the only country to have a positive and increasing migration balance reaching the value of 19,7‰, in 2013.
- The other 3 countries went from positive to negative results (more people are leaving the country than the ones that are coming in). Greece is the country with the highest loss of migrants with -6,4 ‰ in 2013.
- At NUTS 2 level, the Lazio region is by far the one with the largest influx of migrants, having a total of 55,2‰, followed by Liguria with 23,8‰ and Sicilia with 19,8‰.
- Regions with the largest loss of net migrants all belong to Greece, such as Voreio Aigaio (-50,1‰), Notio Aigaio (-41,9‰) and Anatoliki Makedonia, Thraki (-27,7‰).
- Data for 2014 and 2015 are not available at EUROSTAT. Most probably the data for the last years can show a different situation.

FIGURE 24 – CRUDE RATE – NET MIGRATION (‰) BY COUNTRY 2001 – 2013

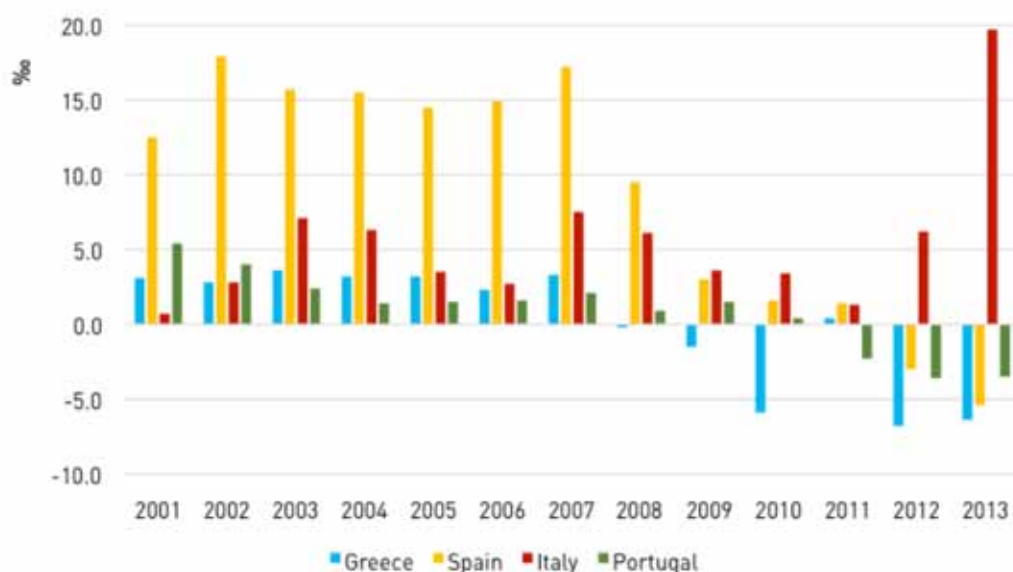


FIGURE 25 – CRUDE RATE – NET MIGRATION (%) 2013

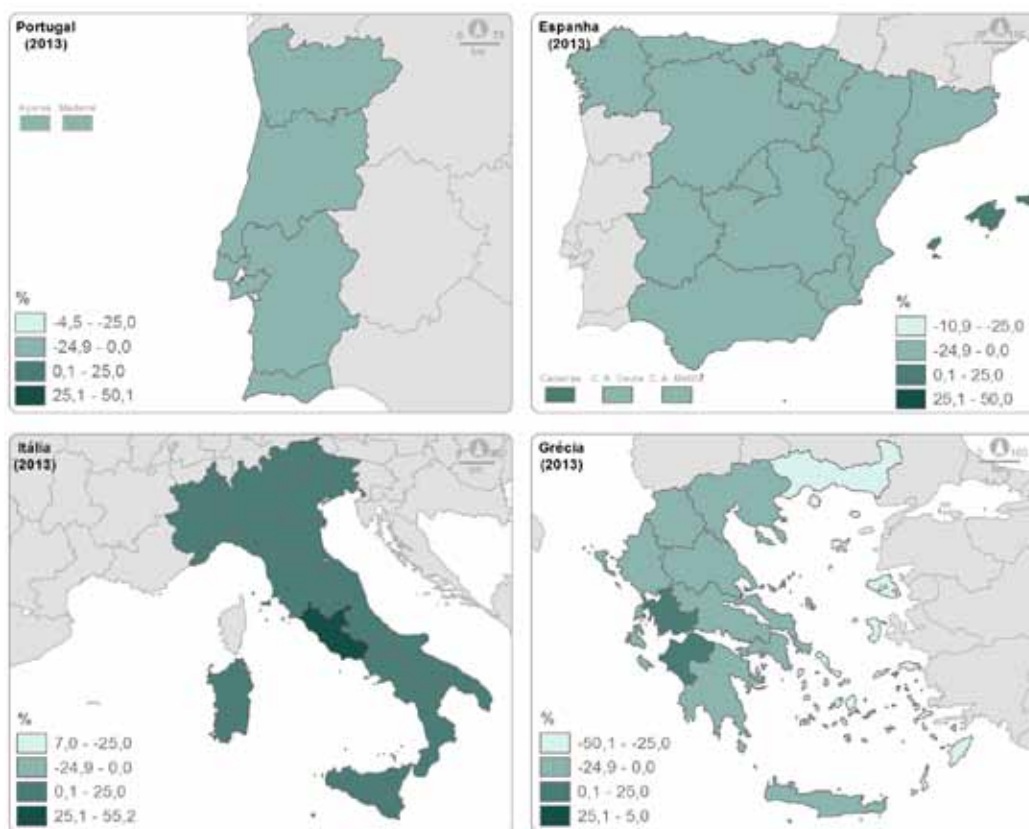


TABLE 13 – CRUDE RATE – NET MIGRATION

PORTUGAL	2013	SPAIN	2013	ITALY	2013	GREECE	2013
Norte	-4,3	Galicia	-1,5	Piemonte	17,5	Anatoliki Makedonia, Thraki	-27,7
Algarve	-2,2	Principado de Asturias	-2,6	Valle d'Aosta	7,6	Kentriki Makedonia	-2,3
Centro	-2,7	Cantabria	-2,7	Liguria	23,8	Dytiki Makedonia	-21,1
Lisboa	-4,2	País Vasco	-4,3	Lombardia	18,4	Thessalia	-5,8
Alentejo	-0,7	C. Foral de Navarra	-5,1	P. A. Bolzano	9,5	Ipeiros	-16,3
R. A. Açores	0,0	La Rioja	-10,9	P. A. Trento	10,6	Ionia Nisia	-17,7
R. A. Madeira	-4,5	Aragón	-4,0	Veneto	10,1	Dytiki Ellada	1,5
		C. Madrid	-9,3	Friuli-Venezia Giulia	10,0	Stereia Ellada	-11,9
		Castilla y León	-5,3	Emilia-Romagna	17,8	Peloponnisos	-13,0
		Castilla-la Mancha	-9,6	Toscana	18,9	Attiki	-15,8
		Extremadura	-2,2	Umbria	14,9	Voreio Aigaio	-50,1
		Cataluña	-10,1	Marche	7,9	Notio Aigaio	-41,9
		C. Valenciana	-6,9	Lazio	55,2	Kriti	-1,6
		Illes Balears	2,6	Abruzzo	18,9		
		Andalucía	-2,4	Molise	8,5		
		Región de Murcia	-4,2	Campania	17,1		
		C. A. Ceuta	-5,0	Puglia	10,2		
		C. A. Melilla	-9,5	Basilicata	7,0		
		Canarias	3,5	Calabria	12,4		
				Sicilia	19,8		
				Sardegna	16,2		
PORTUGAL	-3,5	SPAIN	-5,4	ITALY	19,7	GREECE	-6,4

Source: Eurostat



- EUROSTAT produces an indicator called the crude rate of total population change, which combines the crude rate of natural growth with the crude rate of net migration.
- Italy is the only country with a continuous increase and positive values, reaching 18,2 ‰, in 2013.
- Spain presents the highest amplitude in the variation through this time series; Spain reached 19,7 ‰ in 2007, falling to 4,6 ‰ in 2013.
- Portugal and Greece show a steady trend of population decrease since 2010.
- Looking at the NUTS 2, Italian regions are the ones with the highest values, with its capital region, Lazio clearly above all the rest with a positive crude rate of 54,8 ‰, followed by Sicilia (18,8 ‰) e Lombardia (18,1 ‰).
- The most negative variations are found in Greece in the regions of Voreio Aigaio (-53,4 ‰) and Notio Aigaio with -40,3 ‰.

FIGURE 26 – CRUDE RATE OF TOTAL POPULATION CHANGE (‰) BY COUNTRY 2001 – 2013

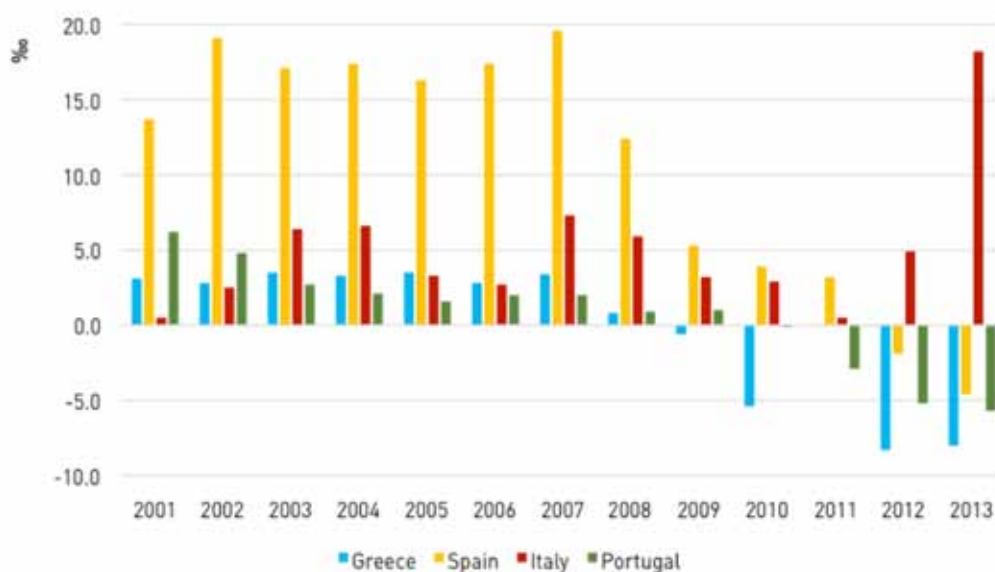


FIGURE 27 – CRUDE RATE OF TOTAL POPULATION CHANGE (‰) 2013

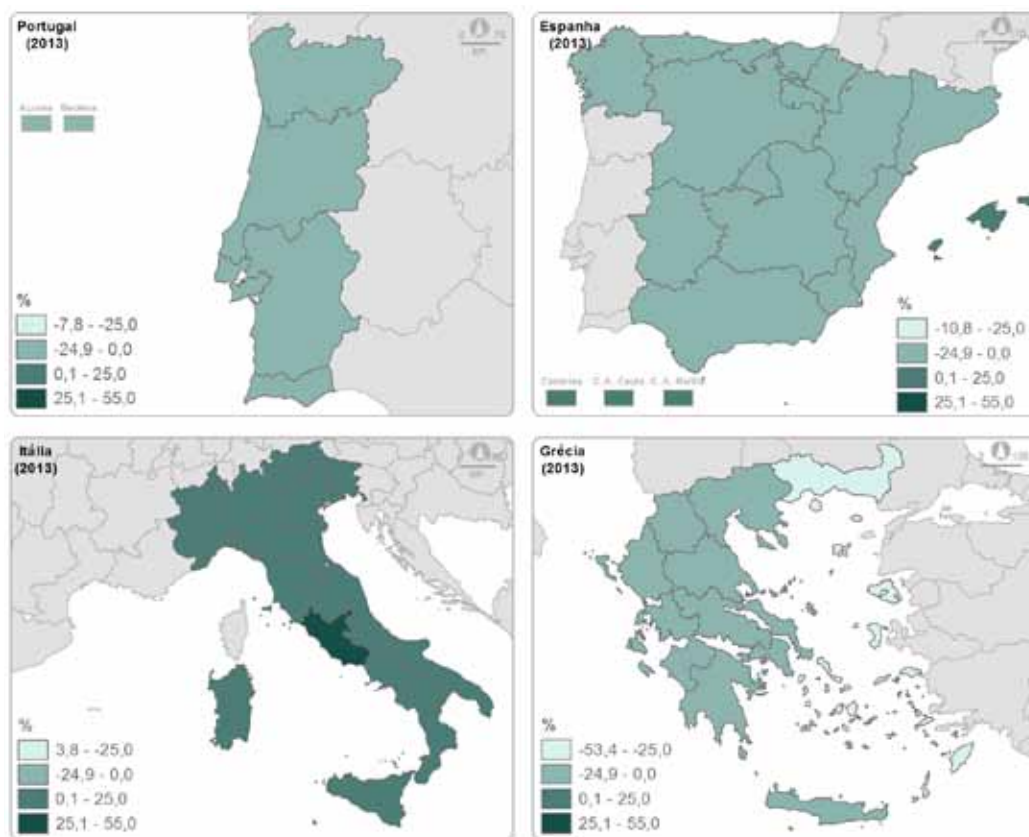


TABLE 14 – CRUDE RATE OF TOTAL POPULATION CHANGE (‰) 2013

PORTUGAL	2013	SPAIN	2013	ITALY	2013	GREECE	2013
Norte	-6,0	Galicia	-5,4	Piemonte	14,2	Anatoliki Makedonia, Thraki	-30,8
Algarve	-4,6	Principado de Asturias	-8,3	Valle d'Aosta	5,8	Kentriki Makedonia	-3,8
Centro	-7,8	Cantabria	-4,0	Liguria	17,0	Dytiki Makedonia	-24,8
Lisboa	-3,9	País Vasco	-4,5	Lombardia	18,1	Thessalia	-8,7
Alentejo	-7,2	C. Foral de Navarra	-3,9	P. A. Bolzano	11,9	Ipeiros	-19,8
R. A. Açores	-0,4	La Rioja	-10,8	P. A. Trento	11,1	Ionian Nisia	-20,1
R. A. Madeira	-6,8	Aragón	-5,3	Veneto	9,2	Dytiki Ellada	-1,0
		C. Madrid	-5,7	Friuli-Venezia Giulia	6,1	Stereia Ellada	-15,1
		Castilla y León	-9,1	Emilia-Romagna	15,6	Peloponnisos	-17,1
		Castilla-la Mancha	-9,2	Toscana	15,5	Attiki	-16,5
		Extremadura	-4,1	Umbria	11,8	Voreio Aigaio	-53,4
		Cataluña	-8,7	Marche	5,2	Notio Aigaio	-40,3
		C. Valenciana	-6,2	Lazio	54,8	Kriti	-0,4
		Illes Balears	5,1	Abruzzo	16,2		
		Andalucía	-0,5	Molise	4,4		
		Región de Murcia	-0,1	Campania	17,2		
		C. A. Ceuta	1,6	Puglia	9,7		
		C. A. Melilla	3,0	Basilicata	3,8		
		Canarias	4,6	Calabria	11,3		
				Sicilia	18,8		
				Sardegna	14,2		
PORTUGAL	-5,7	SPAIN	-4,6	ITALY	18,2	GREECE	-8,0

Source: Eurostat



- Higher education is taken as the main driver of human capital and regional upgrading. Education development however, is much beyond this sector of the educational system. A set of indicators is used by the European Commission, OECD and other institutions to assess the level of development of the education systems.
- Educational attainment in Southern Europe remains below average level of OECD countries and EU 21 in spite of the recent improvements.
- Greece presents the lowest score in what concerns population between 25-64 years, below upper secondary education, with 32 %, the most closer with OECD average of 24 % or EU21 of 22 %.
- Greece and Italy are the closest with OECD and EU 21 average for upper secondary and post-secondary non-tertiary education attainment.
- As for tertiary education, Spain is the only country from the group, with values similar to OECD and EU 21 average. In fact, Spain registers a score of 35 % of attainment for the population between 25-64, while OECD average is 34 % and EU 21 average is 32%. In the younger generation (25-34) Spain also has a high score (41 %); OECD and EU 21 have an average of 41 % and 39 % for the same indicator.
- OECD report, *Education at a Glance 2015* refers that Portugal has caught up in recent years and has achieved the highest increase in educational attainment between generations among the OECD countries.
- Nevertheless, Portugal shows de more negative values in what concerns educational attainment in the group of the four Southern Europe countries.

TABLE 15 – POPULATION THAT HAS ATTAINED BELOW UPPER SECONDARY EDUCATION, 2014 – PERCENTAGE BY AGE GROUP

	BELOW UPPER SECONDARY											
	25-64 year-olds				25-34 year-olds				55-64 year-olds			
	2000	2005	2010	2014	2000	2005	2010	2014	2000	2005	2010	2014
Greece	51	43	35	32	31	26	21	18	75	68	56	50
Italy	58	50	45	41	44	34	29	26	79	70	62	54
Portugal	81	74	68	57	68	57	48	35	92	87	84	77
Spain	62	51	47	43	45	35	34	34	85	74	68	61
OECD average	35	30	26	24	25	21	18	17	52	43	38	34
EU21 average	35	29	25	22	24	19	17	15	52	43	36	32

Source: Education at a glance, 2015

TABLE 16 – POPULATION THAT HAS ATTAINED UPPER SECONDARY EDUCATION, 2014 – PERCENTAGE BY AGE GROUP

	UPPER SECONDARY OR POST-SECONDARY NON-TERTIARY											
	25-64 year-olds				25-34 year-olds				55-64 year-olds			
	2000	2005	2010	2014	2000	2005	2010	2014	2000	2005	2010	2014
Greece	32	36	41	40	45	49	48	43	17	20	27	29
Italy	33	38	40	42	46	50	50	50	15	22	28	34
Portugal	11	14	16	22	19	24	27	33	3	5	7	10
Spain	16	21	22	22	21	24	25	24	6	11	14	17
OECD average	44	44	44	43	50	47	45	42	33	37	40	41
EU21 average	45	47	47	47	52	51	48	45	34	39	43	45

Source: Education at a glance, 2015

TABLE 17 – POPULATION THAT HAS ATTAINED TERTIARY EDUCATION, 2014 – PERCENTAGE BY AGE GROUP

	TERTIARY											
	25-64 year-olds				25-34 year-olds				55-64 year-olds			
	2000	2005	2010	2014	2000	2005	2010	2014	2000	2005	2010	2014
Greece	18	21	25	28	24	26	31	39	8	12	17	21
Italy	9	12	15	17	10	16	21	24	6	8	11	12
Portugal	9	13	15	22	13	19	25	31	5	7	9	13
Spain	23	29	31	35	34	41	40	41	10	14	18	21
OECD average	22	26	30	34	26	32	37	41	15	20	22	25
EU21 average	20	24	28	32	24	30	35	39	14	18	21	23

Source: Education at a glance, 2015ne



FIGURE 28- NUMBER OF STUDENTS – ALL ISCED 1997 LEVELS

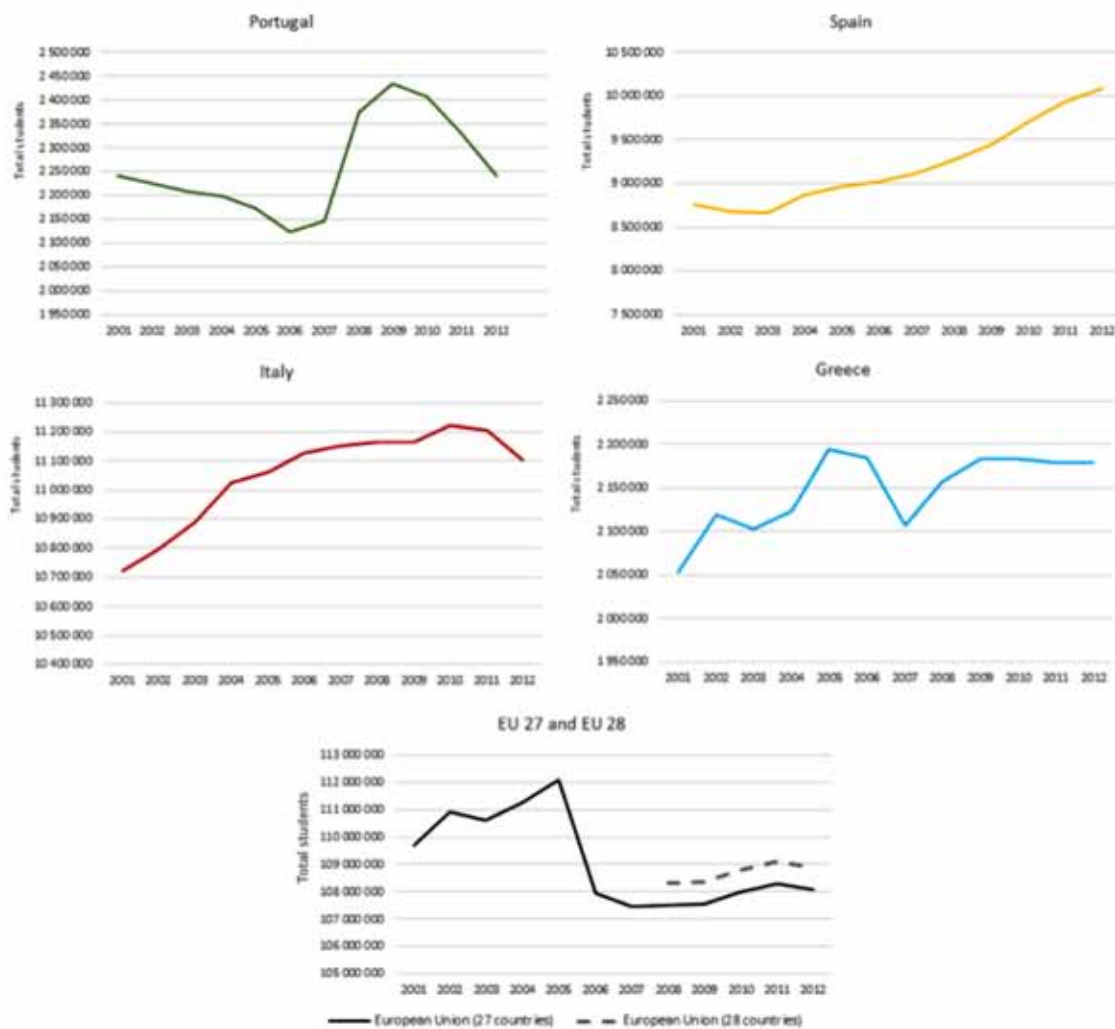


FIGURE 29 – NUMBER OF STUDENTS – ALL ISCED 1997 LEVELS

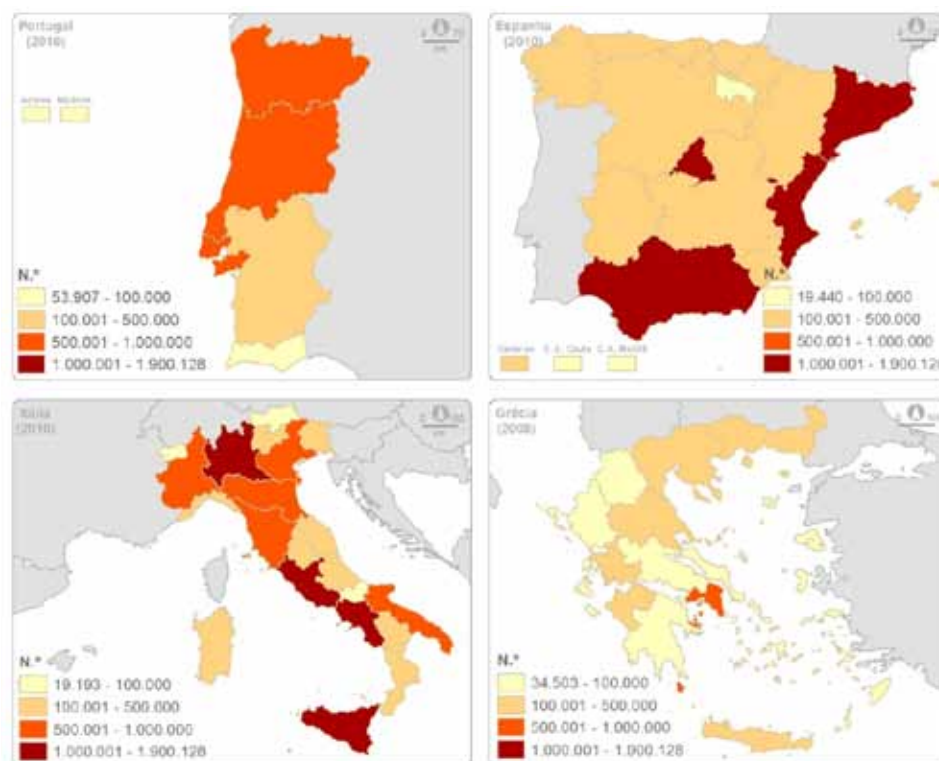


TABLE 18 - NUMBER OF STUDENTS – ALL ISCED 1997 LEVELS

PORTUGAL	2010	SPAIN	2010	ITALY	2010	GREECE	2008
Norte	864.627	Galicia	472.631	Piemonte	721.933	Anatoliki Makedonia, Thraki	113.581
Algarve	94.367	Principado de Asturias	164.300	Valle d'Aosta	19.193	Kentriki Makedonia	401.554
Centro	509.893	Cantabria	101.095	Liguria	237.316	Dytiki Makedonia	65.809
Lisboa	673.925	País Vasco	437.988	Lombardia	1.679.480	Thessalia	130.529
Alentejo	152.296	C. Foral de Navarra	121.256	P. A. Bolzano	87.669	Ipeiros	71.413
R. A. Açores	53.907	La Rioja	57.743	P. A. Trento	101.506	Ionia Nisia	36.053
R. A. Madeira	57.083	Aragón	250.195	Veneto	850.737	Dytiki Ellada	149.225
		C. Madrid	1.388.026	Friuli-Venezia Giulia	201.739	Stereia Ellada	90.773
		Castilla y León	465.065	Emilia-Romagna	754.577	Peloponnisos	84.256
		Castilla-la Mancha	427.597	Toscana	650.403	Attiki	729.668
		Extremadura	226.389	Umbria	156.743	Voreio Aigaio	34.503
		Cataluña	1.495.744	Marche	279.967	Notio Aigaio	51.540
		C. Valenciana	1.010.394	Lazio	1.096.910	Kriti	131.591
		Illes Balears	191.398	Abruzzo	259.939		
		Andalucía	1.900.128	Molise	56.784		
		Región de Murcia	330.899	Campania	1.294.004		
		C. A. Ceuta	19.466	Puglia	815.345		
		C. A. Melilla	19.440	Basilicata	103.924		
		Canarias	420.851	Calabria	389.297		
				Sicilia	1.037.917		
				Sardegna	283.833		
PORTUGAL	2.406.098	SPAIN	9.701.187	ITALY	11.221.529	GREECE	2.157.590

Source: Eurostat

2. EDUCATION



- Students (all ISCED levels) aged 17 as a percentage of the corresponding population age are a common proxy of education development in a country or region; desirably this indicator should reach 100% (Figure 30).
- The EU27 values have been rising since 2001 and are now (2012) above 90 %.
- Apart from Italy, the other 3 countries of the four countries of the present Atlas are also above that mark.
- Greece in 2012 registered the highest value with 97,3 %.
- Portugal and Spain show an increasing tendency over the last years on this time-series reaching 93,5% and 90% respectively.
- Italy presents a more irregular evolution with a score of 86,1% in 2012.
- At the NUTS 2 level, this indicator presents a complex pattern.
- Italy and Spain present great contrasts; globally, Spain presents a better development although the lowest percentage is found in Illes Balears with 77,0 % (Piemonte in Italy has 78,8%).
- The regions with the highest percentages are all in Greece – Ipeiros with 106,3%, Kentriki Make-donia with 100,5% and Kriti with 99,8%.

FIGURE 30 – STUDENTS (ALL ISCED LEVELS) AGED 17 AT NATIONAL LEVEL – AS % OF CORRESPONDING POPULATION AGE

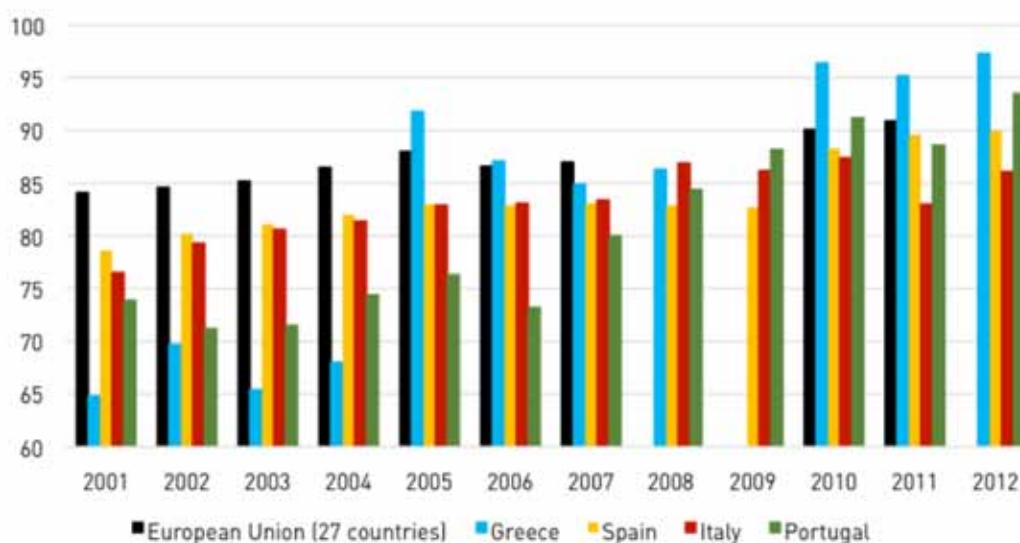


FIGURE 31 – STUDENTS (ALL ISCED LEVELS) AGED 17 AT REGIONAL LEVEL – AS % OF CORRESPONDING AGE POPULATION

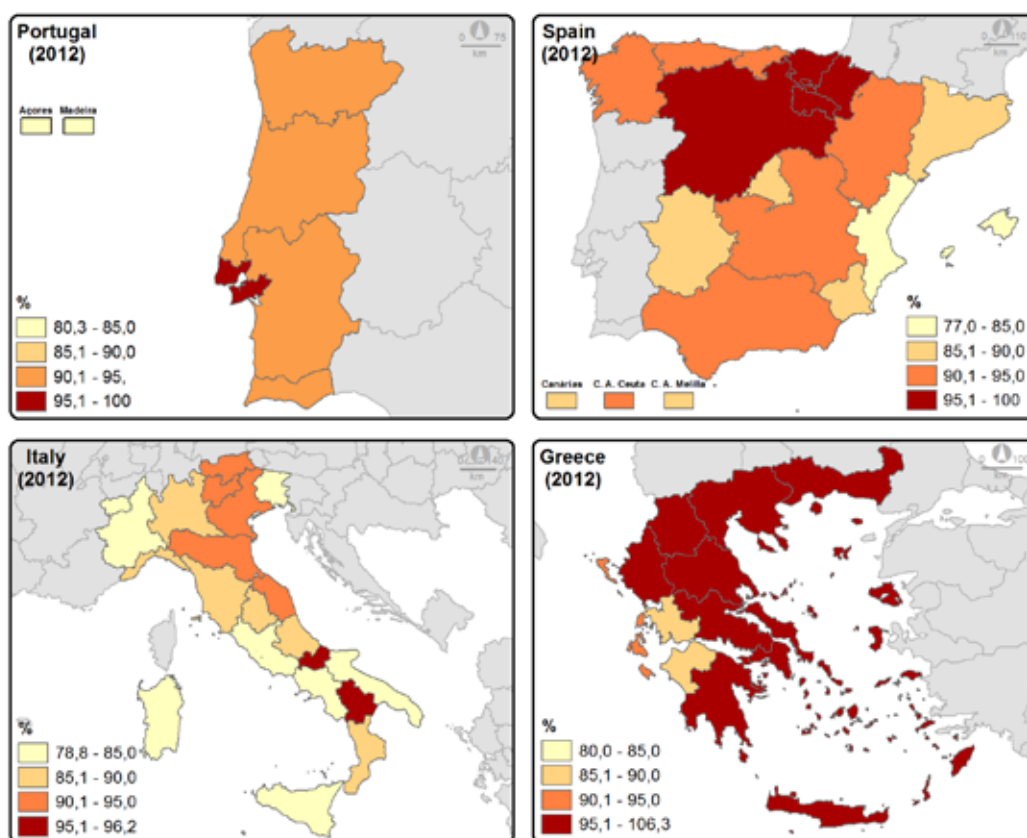


TABLE 19 - STUDENTS (ALL ISCED LEVELS) AGED 17 AT REGIONAL LEVEL – AS % OF CORRESPONDING AGE POPULATION – V4

PORTUGAL	2012	SPAIN	2012	ITALY	2012	GREECE	2012
Norte	92,0	Galicía	91,3	Piemonte	78,8	Anatoliki Makedonia, Thraki	95,5
Algarve	95,0	Principado de Asturias	92,8	Valle d'Aosta	79,0	Kentriki Makedonia	100,5
Centro	94,0	Cantabria	94,5	Liguria	85,7	Dytiki Makedonia	97,7
Lisboa	97,9	País Vasco	98,5	Lombardia	88,6	Thessalia	98,1
Alentejo	91,8	C. Foral de Navarra	98,6	P. A. Bolzano	94,2	Ipeiros	106,3
R. A. Açores	80,3	La Rioja	96,7	P. A. Trento	90,6	Ionía Nisia	90,2
R. A. Madeira	89,4	Aragón	91,2	Veneto	94,6	Dytiki Ellada	89,4
		C. Madrid	89,1	Friuli-Venezia Giulia	83,5	Stereá Ellada	98,2
		Castilla y León	95,8	Emilia-Romagna	91,8	Peloponnisos	98,7
		Castilla-la Mancha	92,2	Toscana	86,7	Attiki	96,2
		Extremadura	88,8	Umbria	89,5	Voreio Aigaio	99,7
		Cataluña	87,8	Marche	93,0	Notio Aigaio	96,7
		C. Valenciana	84,9	Lazio	83,4	Kriti	99,8
		Illes Balears	77,0	Abruzzo	89,0		
		Andalucía	93,5	Molise	95,4		
		Región de Murcia	86,1	Campania	82,6		
		C. A. Ceuta	90,6	Puglia	84,1		
		C. A. Melilla	87,0	Basilicata	96,2		
		Canarias	85,1	Calabria	87,1		
				Sicilia	80,3		
				Sardegna	84,4		
PORTUGAL	93,5	SPAIN	90,0	ITALY	86,1	GREECE	97,3

Source: Eurostat



- Students (ISCED 5-6) at regional level – as % of total country level are a good indicator of the spatial pattern of tertiary education; indirectly this indicator is linked with the location of the main concentrations of higher education institutions and human capital potential (Table 20).
- In Greece and Portugal, the regions where the national capitals are located present the highest values for their countries, revealing a clear pattern of concentration of higher education institutions (Figure 32).
- The highest values, and therefore the countries that have a more uneven distribution of HEIs are found in Portugal (Lisbon has 38,0%) and Greece (Attiki has 36,8%).
- Portugal also has a strong concentration of tertiary students in the Norte region (31,7%), making it the third highest value of all the regions in the study area.
- Spain and Italy have a more even distribution of tertiary students, where Madrid has 18,8% and Lazio 15,3%. These two countries, however, are also the ones with the regions showing the lowest values of student concentration – Ceuta and Mellila (Spain) and Valle d'Aosta and Bolzano (Italy) all have 0,1%.

FIGURE 32 – STUDENTS (ISCED 5-6) AT REGIONAL LEVEL – AS % OF TOTAL COUNTRY LEVEL STUDENTS

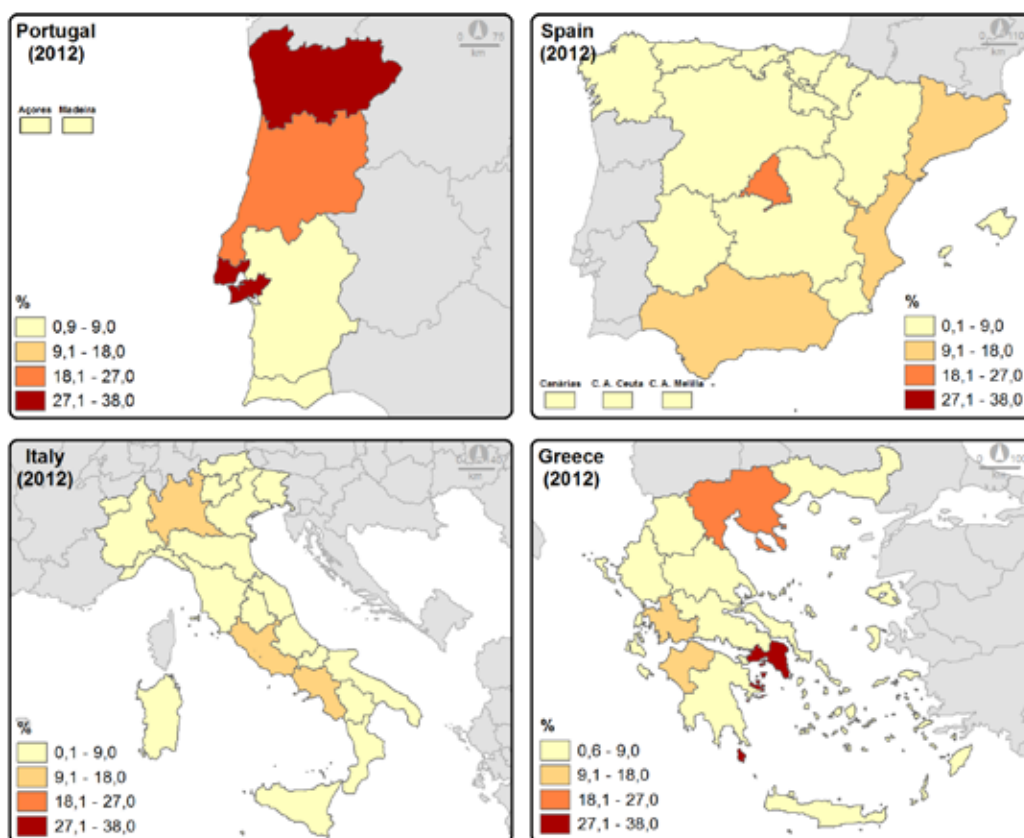


TABLE 20 - STUDENTS (ISCED 5-6) AT REGIONAL LEVEL – AS % OF TOTAL COUNTRY LEVEL STUDENTS

PORTUGAL (=100)	2012	SPAIN (=100)	2012	ITALY (=100)	2012	GREECE (=100)	2012
Norte	31,7	Galicia	5,2	Piemonte	5,7	Anatoliki Makedonia, Thraki	4,8
Algarve	2,6	Principado de Asturias	1,9	Valle d'Aosta	0,1	Kentriki Makedonia	19,5
Centro	21,6	Cantabria	1,0	Liguria	2,0	Dytiki Makedonia	3,9
Lisboa	38,0	País Vasco	4,2	Lombardia	14,8	Thessalia	4,6
Alentejo	4,3	C. Foral de Navarra	1,2	P. A. Bolzano	0,1	Ipeiros	4,6
R. A. Açores	0,9	La Rioja	0,9	P. A. Trento	0,9	Ionian Nisia	1,2
R. A. Madeira	0,9	Aragón	2,6	Veneto	6,0	Dytiki Ellada	12,0
		C. Madrid	18,8	Friuli-Venezia Giulia	1,9	Stereia Ellada	3,0
		Castilla y León	5,8	Emilia-Romagna	8,0	Peloponnisos	1,5
		Castilla-la Mancha	2,8	Toscana	6,8	Attiki	36,6
		Extremadura	1,8	Umbria	1,6	Voreio Aigaio	1,5
		Cataluña	16,7	Marche	2,8	Notio Aigaio	0,6
		C. Valenciana	11,3	Lazio	15,3	Kriti	6,2
		Illes Balears	1,2	Abruzzo	3,6		
		Andalucía	17,3	Molise	0,5		
		Región de Murcia	3,2	Campania	10,9		
		C. A. Ceuta	0,1	Puglia	5,6		
		C. A. Melilla	0,1	Basilicata	0,5		
		Canarias	3,5	Calabria	2,9		
				Sicilia	7,9		
				Sardegna	2,4		

Source: Eurostat

2. EDUCATION



- There are some limitations when calculating enrolment rates for education at all levels; lack of accurate data is a common problem in all countries and organisations dealing with education issues and statistics.
- Gross enrolment rate (GER), according to the United Nations, corresponds to the number of students enrolled in a level of education, regardless of age, divided by the population of the age group that officially corresponds to the same level.
- Net enrolment rate (NER), according to the United Nations, corresponds to the number of students enrolled in a level of education who belong to the age group that officially corresponds to that level, divided by the total population of the same age group.
- Tertiary students as % of the population ages 20-24, considered in this ATLAS, corresponds to a GER and can tell us how much of the demographic potential of a region is being used to build up human capital. When the indicator exceeds 100% it means that a region has a strong capability to attract students from other regions (Table 21).
- EU shows a growth trend in what concerns tertiary students as % of the population ages 20-24 between 2001 and 2012; Greece, Spain and Portugal are all above the EU average (64,2%), but only Greece and Spain display a clear growth trend (Figure 33).
- Greece clearly stands out, being the only country that passes the 100% mark (112% in 2012).
- Italy, on the other hand, is declining since 2007, falling to 61,2% in 2012 and being the only country below EU average.
- At NUTS 2 level, capital regions show high values in all 4 countries, with Lisbon being the highest in Portugal with 99,1% and Lazio, in Italy, with 100,4% (Figure 34).
- Greece has the regions with the highest values for all the regions in the four countries of Southern Europe - Dytiki Ellada with 182,9% and Ipeiros with 162,8%.
- The lowest values of this indicator are presented in regions from Italy, Valle d'Aosta (20,5%) and Bolzano (9,3%) showing the minimum values. These are somehow surprising values for those regions with a strong economic base in industry.

FIGURE 33 - STUDENTS IN TERTIARY EDUCATION (ISCED 5-6) BY COUNTRY – AS % OF THE POPULATION AGED 20-24 YEARS AT REGIONAL LEVEL, 2001 – 2012

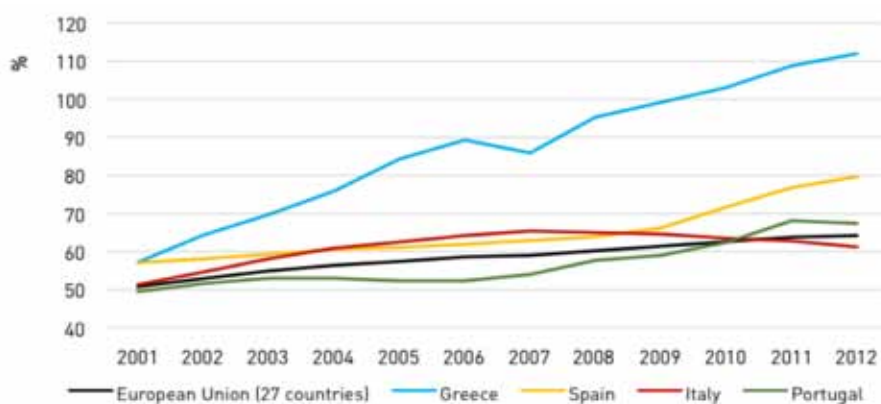


FIGURE 34 – STUDENTS IN TERTIARY EDUCATION (ISCED 5-6) – AS % OF THE POPULATION AGED 20-24 YEARS AT REGIONAL LEVEL

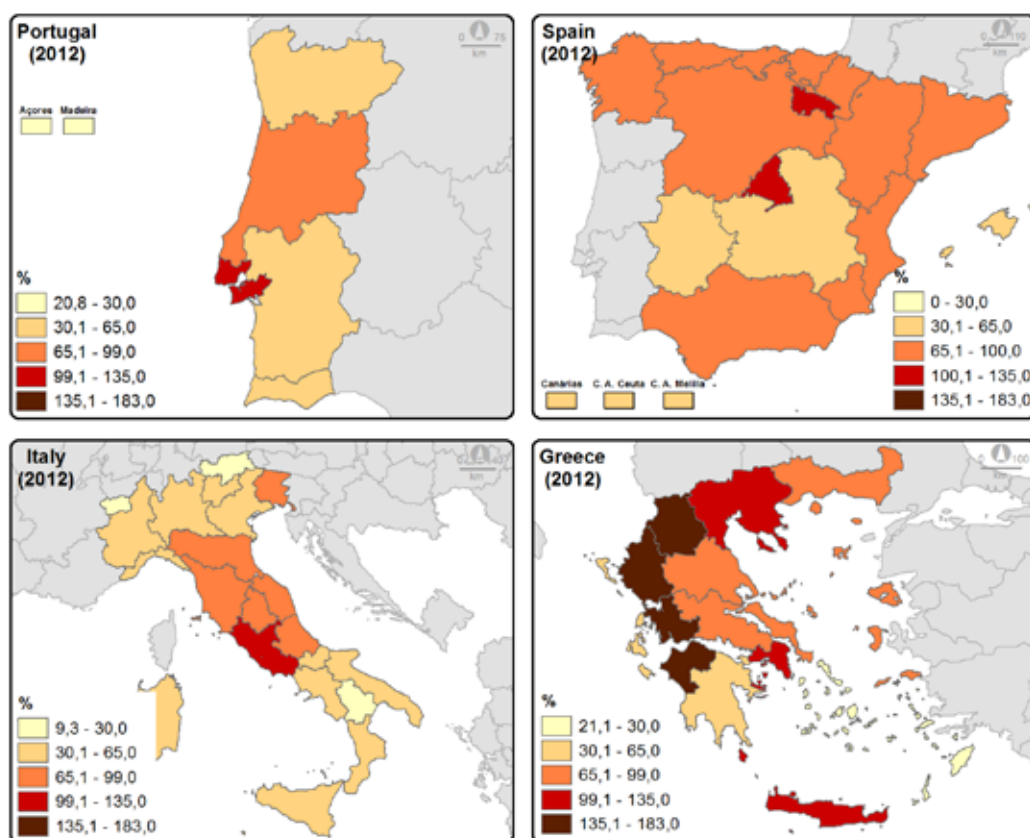


TABLE 21 – STUDENTS IN TERTIARY EDUCATION (ISCED 5-6) – AS % OF THE POPULATION AGED 20-24 YEARS AT REGIONAL LEVEL

PORTUGAL	2012	SPAIN	2012	ITALY	2012	GREECE	2012
Norte	58,0	Galicia	78,1	Piemonte	54,8	Anatoliki Makedonia, Thraki	97,1
Algarve	43,3	Principado de Asturias	83,3	Valle d'Aosta	20,5	Kentriki Makedonia	126,7
Centro	69,7	Cantabria	69,5	Liguria	56,0	Dytiki Makedonia	154,4
Lisboa	99,1	País Vasco	90,4	Lombardia	61,7	Thessalia	74,1
Alentejo	44,4	C. Foral de Navarra	79,6	P. A. Bolzano	9,3	Ipeiros	162,8
R. A. Açores	20,8	La Rioja	114,4	P. A. Trento	64,5	Ionia Nisia	60,9
R. A. Madeira	21,0	Aragón	78,7	Veneto	48,8	Dytiki Ellada	182,9
		C. Madrid	110,8	Friuli-Venezia Giulia	67,2	Stereia Ellada	66,6
		Castilla y León	95,2	Emilia-Romagna	80,5	Peloponnisos	31,8
		Castilla-la Mancha	46,5	Toscana	78,0	Attiki	121,8
		Extremadura	54,4	Umbria	71,1	Voreio Aigaio	95,1
		Cataluña	89,5	Marche	70,3	Notio Aigaio	21,1
		C. Valenciana	84,1	Lazio	100,4	Kriti	118,0
		Illes Balears	38,7	Abruzzo	97,3		
		Andalucía	68,1	Molise	48,8		
		Región de Murcia	72,7	Campania	54,7		
		C. A. Ceuta	48,5	Puglia	43,4		
		C. A. Melilla	45,7	Basilicata	24,6		
		Canarias	55,3	Calabria	42,5		
				Sicilia	47,3		
				Sardegna	51,7		
PORTUGAL	67,4	SPAIN	79,7	ITALY	61,2	GREECE	112,0

Source: Eurostat



- The ratio of the proportion of students in tertiary education (ISCED 5-6) over the proportion of the population by NUTS 1 and NUTS 2 provides a measure of the specialization of a region in tertiary education (Table 22).
- The higher the value, the more specialised is that region in tertiary education; values above 1 show that a region has a higher level of specialisation or concentration in tertiary education than the proportion of the whole country.
- For Portugal, Spain and Italy the regions NUT 2 where the national capitals are located score the highest values – Lisboa 1,4, Madrid 1,4 and Lazio 1,6.
- For Greece it's Dytiki Ellada that has the highest ratio with 1,8 – the highest for all the regions in the study area.
- Greece is also the country with more regions above 1 – Ipeiros and Dytiki Makedonia with 1,5 and Kentriki Makedonia and Kriti with a 1,1 ratio.
- The lowest ratios are found in Bolzano (Italy) and Notio Aigaio (Greece), both with 0,2.

FIGURE 35 – RATIO OF THE PROPORTION OF STUDENTS (ISCED 5-6) OVER THE PROPORTION OF THE POPULATION BY NUTS 1 AND NUTS 2

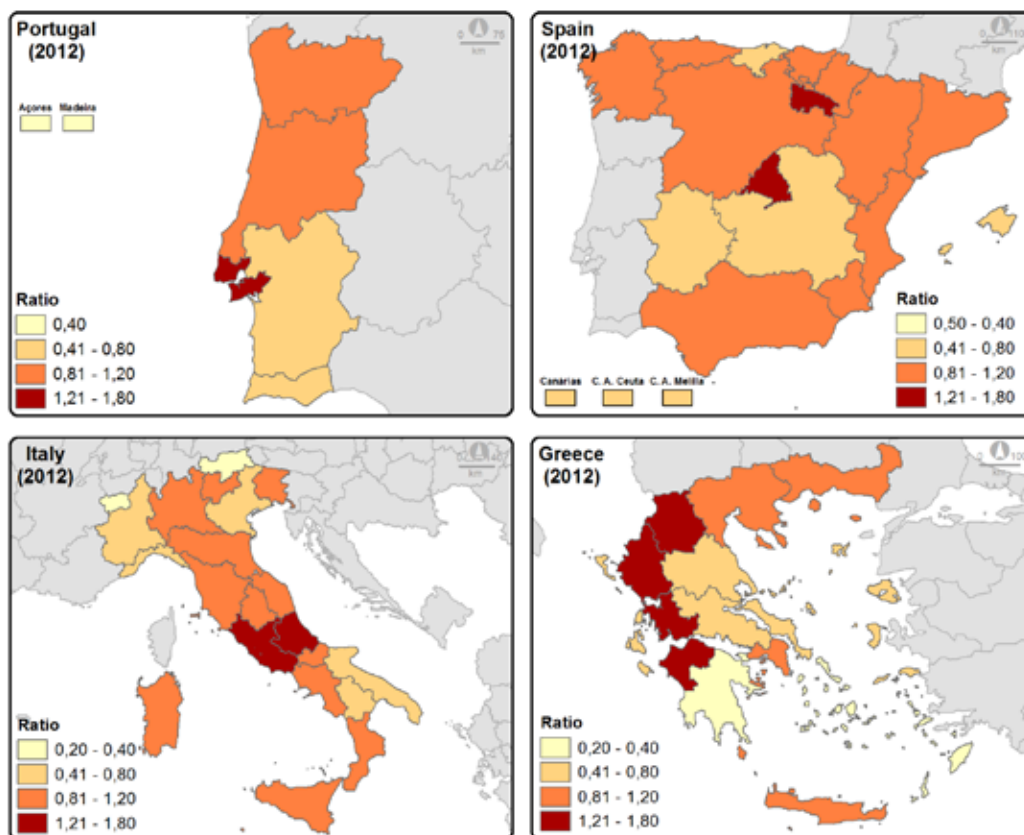


TABLE 22 - RATIO OF THE PROPORTION OF STUDENTS (ISCED 5-6) OVER THE PROPORTION OF THE POPULATION BY NUTS 1 AND NUTS 2

PORTUGAL (=1,0)	2012	SPAIN (=1,0)	2012	ITALY (=1,0)	2012	GREECE (=1,0)	2012
Norte	0,9	Galicia	0,9	Piemonte	0,8	Anatoliki Makedonia, Thraki	0,9
Algarve	0,6	Principado de Asturias	0,9	Valle d'Aosta	0,3	Kentriki Makedonia	1,1
Centro	1,0	Cantabria	0,8	Liguria	0,7	Dytiki Makedonia	1,5
Lisboa	1,4	País Vasco	0,9	Lombardia	0,9	Thessalia	0,7
Alentejo	0,6	C. Foral de Navarra	0,9	P. A. Bolzano	0,2	Ipeiros	1,5
R. A. Açores	0,4	La Rioja	1,3	P. A. Trento	1,0	Ionia Nisia	0,6
R. A. Madeira	0,3	Aragón	0,9	Veneto	0,7	Dytiki Ellada	1,8
		C. Madrid	1,4	Friuli-Venezia Giulia	0,9	Stereia Ellada	0,6
		Castilla y León	1,1	Emilia-Romagna	1,1	Peloponnisos	0,3
		Castilla-la Mancha	0,6	Toscana	1,1	Attiki	1,0
		Extremadura	0,8	Umbria	1,1	Voreio Aigaio	0,8
		Cataluña	1,1	Marche	1,1	Notio Aigaio	0,2
		C. Valenciana	1,0	Lazio	1,6	Kriti	1,1
		Illes Balears	0,5	Abruzzo	1,6		
		Andalucía	1,0	Molise	0,9		
		Región de Murcia	1,0	Campania	1,1		
		C. A. Ceuta	0,8	Puglia	0,8		
		C. A. Melilla	0,8	Basilicata	0,5		
		Canarias	0,8	Calabria	0,9		
				Sicilia	1,0		
				Sardegna	0,9		

Source: Eurostat



- The number of students in the second stage of tertiary education leading to an advanced research qualification (ISCED level 6), as % of total country level 6 students focus on a special feature of education linked with advanced research (Table 23).
- Again, the highest values in each country correspond to the NUT 2 where the national capitals are located: Lisboa (Portugal) 39,5%; Madrid (Spain) 29,7%; Lazio (Italy) 17,9% and Attiki (Greece) 41,9% (Figure 36).
- Apart from these regions, Norte (Portugal) with 31,9%, Centro (Portugal) with 21,3% and Kentriki Makedonia with 21,1% have the highest percentages of ISCED level 6 students.
- In contrast, some of the lowest values are found in periphery regions like Madeira and Açores (Portugal) with 0,4% and 0,5% respectively, Ceuta (Spain) with 0,1%.
- Surprisingly, Bolzano (Italy) registers only 0,2%.

FIGURE 36 - NR STUDENTS - SECOND STAGE OF TERTIARY EDUCATION LEADING TO AN ADVANCED RESEARCH QUALIFICATION (LEVEL 6), AS % OF TOTAL COUNTRY LEVEL 6 STUDENTS

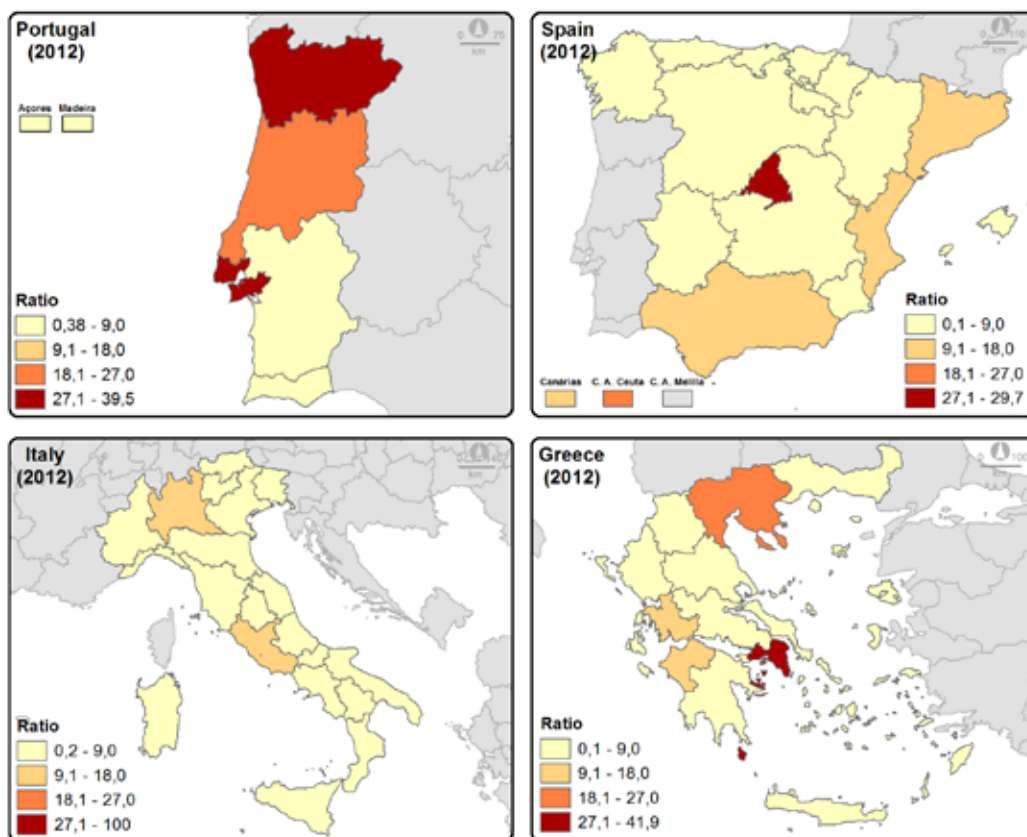


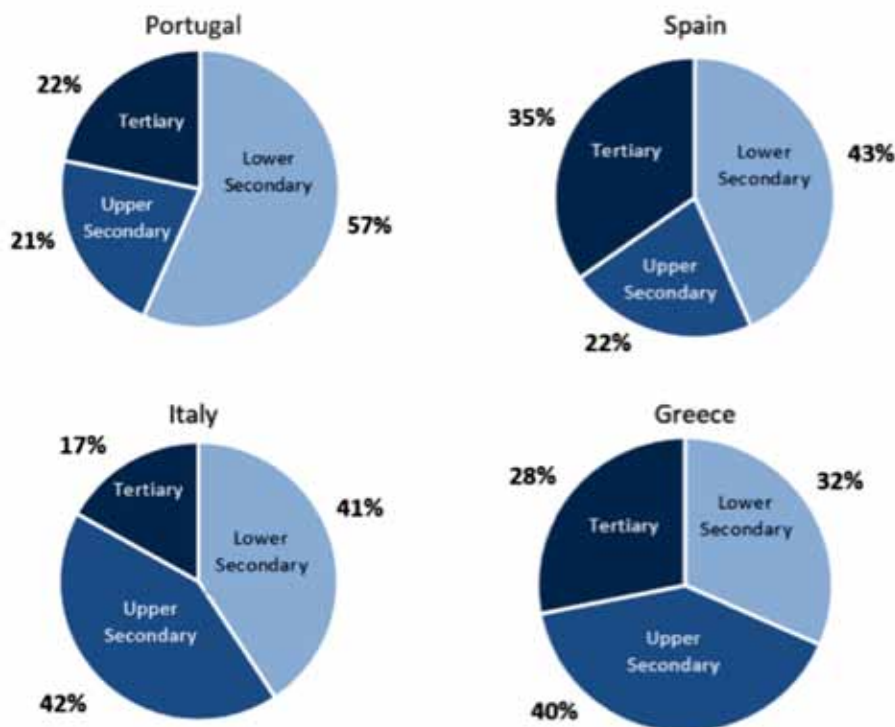
TABLE 23 - NR STUDENTS - SECOND STAGE OF TERTIARY EDUCATION LEADING TO AN ADVANCED RESEARCH QUALIFICATION (LEVEL 6), AS % OF TOTAL COUNTRY LEVEL 6 STUDENTS

PORTUGAL = 100	2012	SPAIN =100	2012	ITALY =100	2012	GREECE =100	2012
Norte	31,9	Galicia	2,4	Piemonte	5,7	Anatoliki Makedonia, Thraki	7,2
Algarve	2,0	Principado de Asturias	0,9	Valle d'Aosta	--	Kentriki Makedonia	21,1
Centro	21,3	Cantabria	1,9	Liguria	3,2	Dytiki Makedonia	0,8
Lisboa	39,5	País Vasco	2,2	Lombardia	15,7	Thessalia	4,8
Alentejo	4,5	C. Foral de Navarra	1,7	P. A. Bolzano	0,2	Ipeiros	4,4
R. A. Açores	0,5	La Rioja	0,8	P. A. Trento	1,7	Ionia Nisia	1,6
R. A. Madeira	0,4	Aragón	1,6	Veneto	7,4	Dytiki Ellada	9,0
		C. Madrid	29,7	Friuli-Venezia Giulia	2,3	Stereia Ellada	0,1
		Castilla y León	4,9	Emilia-Romagna	8,3	Peloponnisos	1,0
		Castilla-la Mancha	2,1	Toscana	7,9	Attiki	41,9
		Extremadura	3,3	Umbria	1,0	Voreio Aigaio	2,0
		Cataluña	10,7	Marche	2,1	Notio Aigaio	0,4
		C. Valenciana	14,4	Lazio	17,9	Kriti	5,6
		Illes Balears	0,7	Abruzzo	2,9		
		Andalucía	17,4	Molise	0,3		
		Región de Murcia	3,3	Campania	8,3		
		C. A. Ceuta	0,1	Puglia	4,4		
		C. A. Melilla	--	Basilicata	0,5		
		Canarias	1,9	Calabria	2,2		
				Sicilia	5,3		
				Sardegna	2,7		

Source: Eurostat

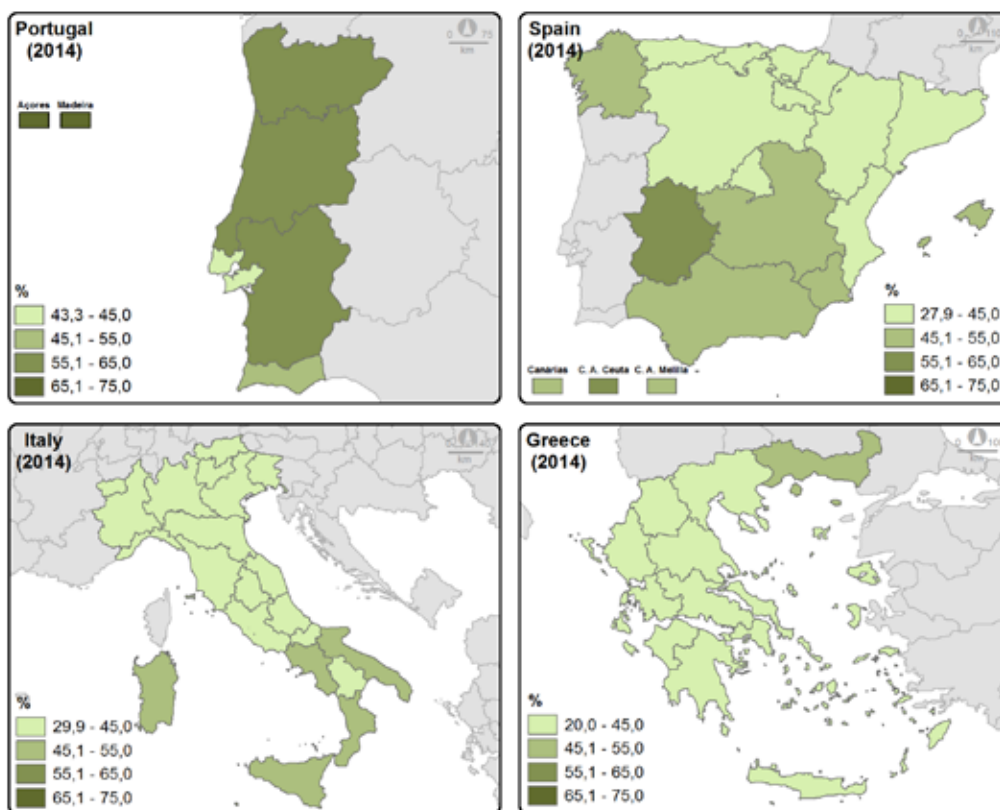


FIGURE 37 - EDUCATION ATTAINMENT DISTRIBUTION (PERSONS AGED 25-64), BY COUNTRY (%), - 2014



- Persons aged 25-64 with lower secondary education attainment (%) in the four countries in Southern Europe remain above EU28 average of 24% which has a negative meaning.
- Portugal has clearly the highest score for lower secondary education attainment with 56,7%, in 2014.
- Greece has the lowest value with 31,6 %.
- At NUTS 2 level, Portugal has the regions with the highest values of all four countries, especially Açores (73,3%) and Madeira (65,2%). Outside Portugal, regions with high percentages are found in Spain – Extremadura (57,3%) and Ceuta (55,7%) (Figure 38).
- The smallest percentages of lower secondary attainment belong to the capital regions of Greece – Attiki (20,0%), Spain – Madrid (27,9%) and Italy – Lazio (29,9%).

FIGURE 38 - PERSONS AGED 25-64 WITH LOWER SECONDARY EDUCATION ATTAINMENT (%)



EU28 = 24%

TABLE 24- PERSONS AGED 25-64 WITH LOWER SECONDARY EDUCATION ATTAINMENT (%)

PORTUGAL	2014	SPAIN	2014	ITALY	2014	GREECE	2014
Norte	62,8	Galicía	47,0	Piemonte	39,4	Anatoliki Makedonia, Thraki	49,7
Algarve	54,1	Principado de Asturias	39,0	Valle d'Aosta	44,0	Kentriki Makedonia	33,7
Centro	59,6	Cantabria	36,1	Liguria	36,1	Dytiki Makedonia	42,6
Lisboa	43,3	País Vasco	31,6	Lombardia	37,9	Thessalia	34,1
Alentejo	60,5	C. Foral de Navarra	34,7	P. A. Bolzano	32,1	Ipeiros	39,2
R. A. Açores	73,3	La Rioja	38,9	P. A. Trento	31,0	Ionía Nisia	39,6
R. A. Madeira	65,2	Aragón	39,0	Veneto	38,7	Dytiki Ellada	40,7
		C. Madrid	27,9	Friuli-Venezia Giulia	35,4	Sτέρα Ellada	41,2
		Castilla y León	42,3	Emilia-Romagna	35,4	Peloponnisos	39,8
		Castilla-la Mancha	51,2	Toscana	40,0	Attiki	20,0
		Extremadura	57,3	Umbria	32,9	Voreio Aigaio	37,1
		Cataluña	42,6	Marche	37,1	Notio Aigaio	40,5
		C. Valenciana	44,7	Lazio	29,9	Kriti	38,6
		Illes Balears	47,1	Abruzzo	36,8		
		Andalucía	52,4	Molise	41,6		
		Región de Murcia	51,1	Campania	48,8		
		C. A. Ceuta	55,7	Puglia	51,2		
		C. A. Melilla	47,1	Basilicata	42,0		
		Canarias	50,6	Calabria	46,4		
				Sicilia	50,8		
				Sardegna	52,8		
PORTUGAL	56,7	SPAIN	43,4	ITALY	40,7	GREECE	31,6

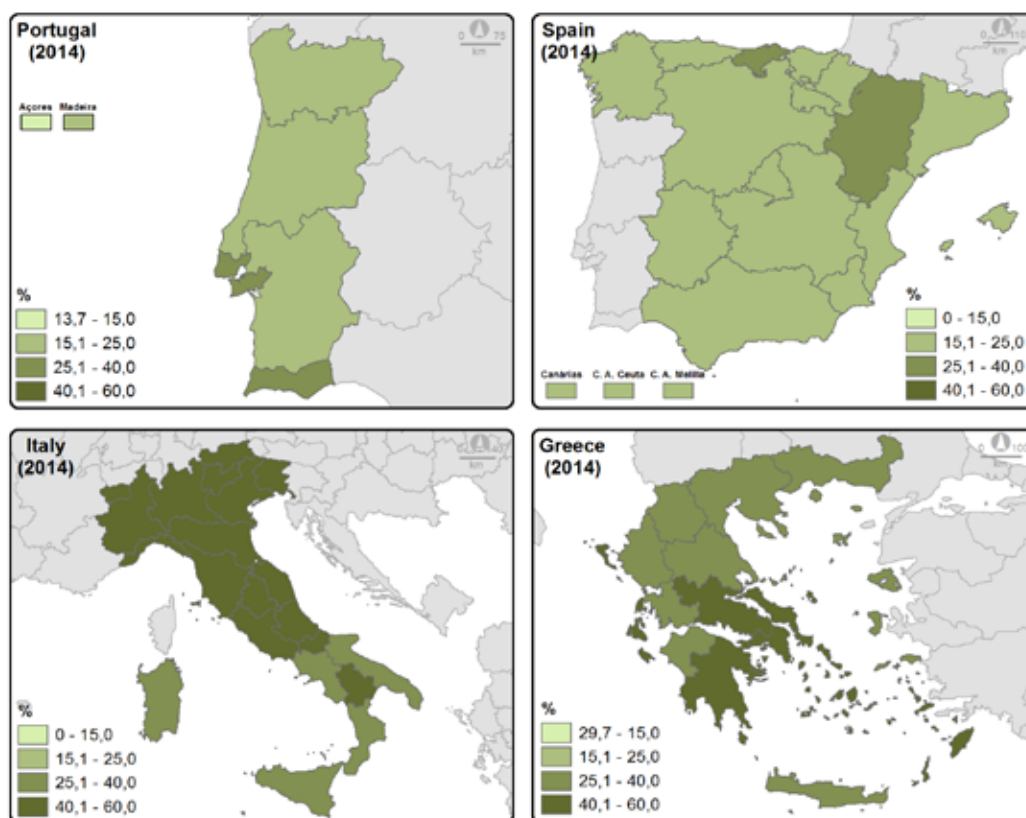
Source: Eurostat

2. EDUCATION



- In what concerns upper secondary education level, Italy (42,4 %) is the only country in Southern Europe with a value near the EU 28 average of 46,7%,
- The four countries however, have values below the EU 28 average.
- Italy registers the large number of regions NUTS 2 with the highest values and most of them located in the North part of the country, in industrial regions: Bolzano with 51,6%, Trento with 50,7% and Friuli-Venezia Giulia with 47,4%.
- Outside Italy, Attiki (Greece) has the highest percentage with 43,6%.
- Portugal has the regions with the lowest scores in this category: the peripheral regions of Açores (13,7%) and Madeira (18,2%).

FIGURE 39 – PERSONS AGED 25-64 WITH UPPER SECONDARY EDUCATION ATTAINMENT (%)



EU28 = 46,7%

TABLE 25 - PERSONS AGED 25-64 WITH UPPER SECONDARY EDUCATION ATTAINMENT (%)

PORTUGAL	2014	SPAIN	2014	ITALY	2014	GREECE	2014
Norte	19,0	Galicia	19,6	Piemonte	44,4	Anatoliki Makedonia, Thraki	29,7
Algarve	26,5	Principado de Asturias	22,3	Valle d'Aosta	40,8	Kentriki Makedonia	39,1
Centro	20,7	Cantabria	26,5	Liguria	44,6	Dytiki Makedonia	35,1
Lisboa	25,7	País Vasco	21,4	Lombardia	44,2	Thessalia	39,6
Alentejo	22,7	C. Foral de Navarra	22,5	P. A. Bolzano	51,6	Ipeiros	36,1
R. A. Açores	13,7	La Rioja	24,2	P. A. Trento	50,7	Ionía Nisia	42,7
R. A. Madeira	18,2	Aragón	25,4	Veneto	45,8	Dytiki Ellada	36,7
		C. Madrid	24,9	Friuli-Venezia Giulia	47,4	Stereá Ellada	40,9
		Castilla y León	23,2	Emilia-Romagna	45,8	Peloponnisos	41,0
		Castilla-la Mancha	21,6	Toscana	42,6	Attiki	43,6
		Extremadura	15,9	Umbria	47,1	Voreio Aigaio	37,6
		Cataluña	20,4	Marche	44,3	Notio Aigaio	41,7
		C. Valenciana	23,3	Lazio	46,8	Kriti	39,4
		Illes Balears	25,0	Abruzzo	46,7		
		Andalucía	20,0	Molise	41,5		
		Región de Murcia	21,7	Campania	36,9		
		C. A. Ceuta	21,8	Puglia	34,8		
		C. A. Melilla	24,1	Basilicata	42,9		
		Canarias	22,4	Calabria	38,4		
				Sicilia	35,9		
				Sardegna	34,1		
PORTUGAL	21,6	SPAIN	21,9	ITALY	42,4	GREECE	40,3

Source: Eurostat

2. EDUCATION



- Regarding tertiary education attainment, the percentage of persons aged 25-64 with tertiary education attainment between 2001 and 2014 has been increasing steadily in all the four Southern Europe countries in a parallel trend with EU 28 average (Figure 40).
- Spain keeps its values above the EU28 level throughout the whole time-series and registers the highest value, with 34,7 %, in 2014, being the only country in Southern Europe above the EU28 average of 29,3%.
- Italy has the lowest percentage with 16,9% followed by Portugal with 21,7%.
- Portugal registered the largest increase in this time-series from 9,2%, in 2001 to the current value of 21,7%.
- Italy, on the contrary, is the country with the smallest increase, from 9,8%, in 2001, to 16,9%, in 2014.
- At NUTS 2 level, the regions with the national capitals, in Spain, Greece and Portugal register the higher values: Madrid (Spain) has the highest percentage with 47,2% (Figure 41).
- Outside the capital regions, Spain is still the country whose regions have the highest values - País Vasco with 47,0 % and Navarra with 42,7%.
- Spain presents a sharp North-South divide.
- Italy has not only a low value at the country average level but also a very balanced regional pattern without large disparities.
- Açores in Portugal, with 13,0% presents the lowest value, next to the regions of Sardenha with 13,1% and Sicilia with 13,3%, in Italy.

FIGURE 40 – PERSONS AGED 25-64 WITH TERTIARY EDUCATION ATTAINMENT (%) BY COUNTRY, 2001 – 2014

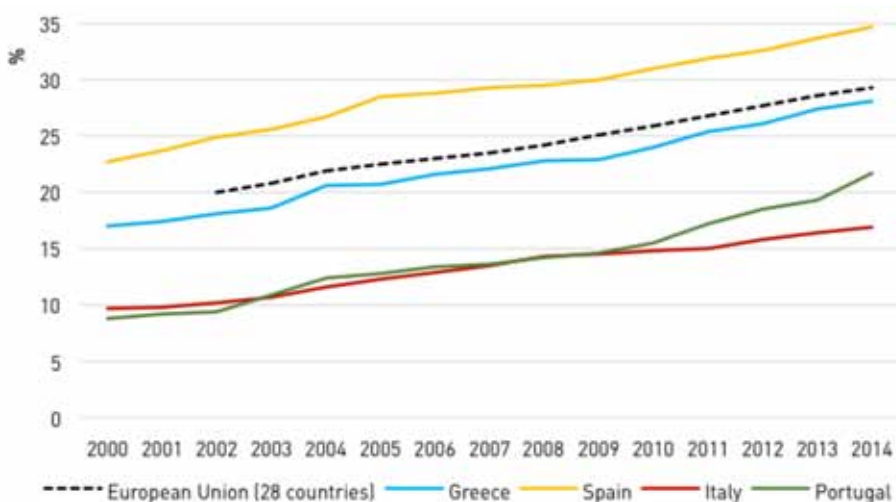
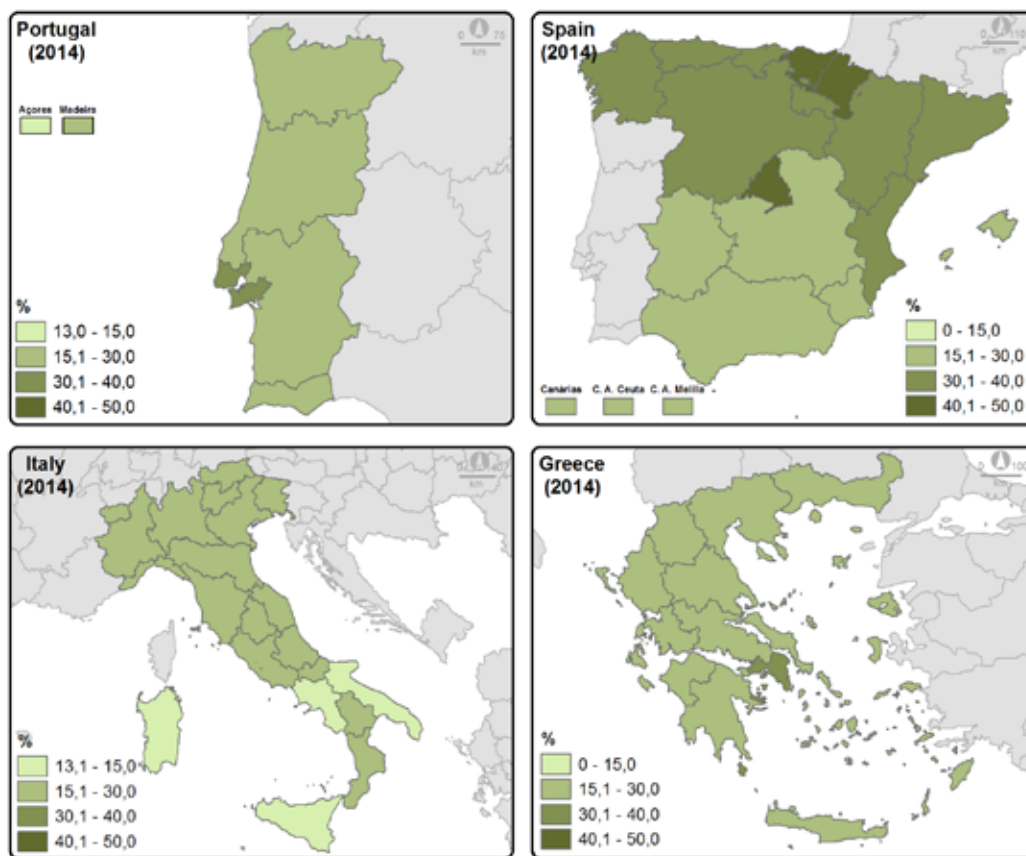


FIGURE 41 - PERSONS AGED 25-64 WITH TERTIARY EDUCATION ATTAINMENT (%)



EU28 = 29,3%

TABLE 26 - PERSONS AGED 25-64 WITH TERTIARY EDUCATION ATTAINMENT (%)

PORTUGAL	2014	SPAIN	2014	ITALY	2014	GREECE	2014
Norte	18,2	Galicia	33,4	Piemonte	16,2	Anatoliki Makedonia, Thraki	20,5
Algarve	19,4	Principado de Asturias	38,7	Valle d'Aosta	15,2	Kentriki Makedonia	27,3
Centro	19,7	Cantabria	37,4	Liguria	19,3	Dytiki Makedonia	22,3
Lisboa	31,0	País Vasco	47,0	Lombardia	17,9	Thessalia	26,3
Alentejo	16,8	C. Foral de Navarra	42,7	P. A. Bolzano	16,2	Ipeiros	24,6
R. A. Açores	13,0	La Rioja	36,9	P. A. Trento	18,3	Ionía Nisia	17,7
R. A. Madeira	16,6	Aragón	35,7	Veneto	15,4	Dytiki Ellada	22,6
		C. Madrid	47,2	Friuli-Venezia Giulia	17,2	Stereá Ellada	17,9
		Castilla y León	34,5	Emilia-Romagna	18,7	Peloponnisos	19,3
		Castilla-la Mancha	27,2	Toscana	17,4	Attiki	36,3
		Extremadura	26,8	Umbria	20,1	Voreio Aigaio	25,3
		Cataluña	37,0	Marche	18,6	Notio Aigaio	17,8
		C. Valenciana	32,0	Lazio	23,3	Kriti	22,0
		Illes Balears	27,9	Abruzzo	16,5		
		Andalucía	27,6	Molise	17,0		
		Región de Murcia	27,1	Campania	14,3		
		C. A. Ceuta	22,5	Puglia	14,0		
		C. A. Melilla	28,8	Basilicata	15,1		
		Canarias	27,0	Calabria	15,2		
				Sicilia	13,3		
				Sardegna	13,1		
PORTUGAL	21,7	SPAIN	34,7	ITALY	16,9	GREECE	28,1

Source: Eurostat

2. EDUCATION



- One of the most relevant indicators of an education system and therefore a headline target of the Europe 2020 strategy relates to early school leavers.
- The European Union defines early school leavers as people aged 18-24 who have only lower secondary education or less and are no longer in education or training. Early school leavers are therefore those who have only achieved pre-primary, primary, lower secondary or a short upper secondary education of less than 2 years. Early school leaving can take several forms. It includes young people who have dropped out of school before the end of compulsory education, those who have completed compulsory schooling, but have not gained an upper secondary qualification, and those who have followed pre-vocational or vocational courses which did not lead to a qualification equivalent to upper secondary level.
- There is a clear declining trend on early school leavers in all four countries in Southern Europe, since 2001, although at different rates (Figure 42).
- At present (2014) Spain registers the highest value 21,9%;
- Greece, with 9,0% shows the best score and is the only country below the EU28 average of 11,1%.
- From the 4 countries, Portugal is clearly the one with the wider variation, being able to reduce its early leavers percentage from 44,2% in 2001 to 17,4% in 2014.
- At the NUTS 2 level, Thessalia and Attiki are the regions with the best situation with 5,9% and 6,3% respectively. In Italy, Veneto (8,4%) and Trento (8,5%) are the best performing regions.
- On the opposite situation, Açores (32,8%) in Portugal and Balears (32,1%) in Spain present the highest values and the more critical situation.

FIGURE 42 – EARLY LEAVERS FROM EDUCATION AND TRAINING, BY COUNTRY (% POPULATION 18-24), 2001-2014

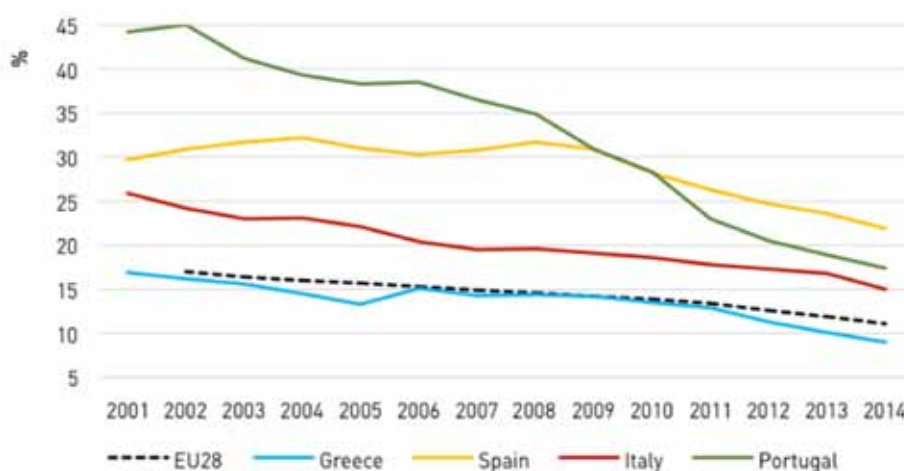
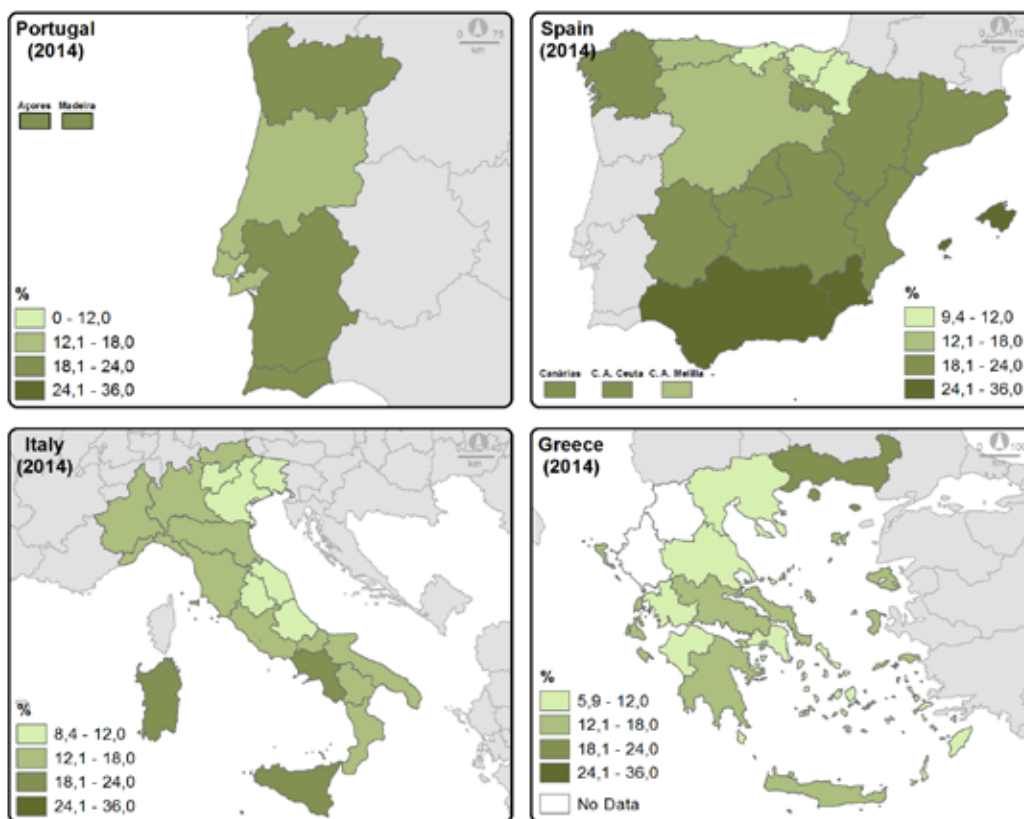


FIGURE 43 – EARLY LEAVERS FROM EDUCATION AND TRAINING (%)



EU28 = 11,1%

TABLE 27 – EARLY LEAVERS FROM EDUCATION AND TRAINING (%)

PORTUGAL	2014	SPAIN	2014	ITALY	2014	GREECE	2014
Norte	19.0	Galicia	18.5	Piemonte	12.7	Anatoliki Makedonia, Thraki	19.7
Algarve	21.9	Principado de Asturias	13.6	Valle d'Aosta	--	Kentriki Makedonia	8.4
Centro	14.0	Cantabria	9.7	Liguria	13.6	Dytiki Makedonia	--
Lisboa	14.4	País Vasco	9.4	Lombardia	12.9	Thessalia	5.9
Alentejo	18.4	C. Foral de Navarra	11.8	P. A. Bolzano	13.1	Ipeiros	--
R. A. Açores	32.8	La Rioja	21.1	P. A. Trento	8.5	Ionia Nisia	16.3
R. A. Madeira	22.7	Aragón	18.4	Veneto	8.4	Dytiki Ellada	9.5
		C. Madrid	18.3	Friuli-Venezia Giulia	11.1	Stereia Ellada	14.7
		Castilla y León	16.8	Emilia-Romagna	13.2	Peloponnisos	14.8
		Castilla-la Mancha	22.2	Toscana	13.8	Attiki	6.3
		Extremadura	22.9	Umbria	9.1	Voreio Aigaio	14.2
		Cataluña	22.2	Marche	10.9	Notio Aigaio	9.5
		C. Valenciana	23.4	Lazio	12.5	Kriti	14.0
		Illes Balears	32.1	Abruzzo	9.6		
		Andalucía	27.7	Molise	12.1		
		Región de Murcia	24.1	Campania	19.7		
		C. A. Ceuta	29.5	Puglia	16.9		
		C. A. Melilla	19.6	Basilicata	12.3		
		Canarias	23.8	Calabria	16.8		
				Sicilia	24.0		
				Sardegna	23.5		
PORTUGAL	17,4	SPAIN	21,9	ITALY	15,0	GREECE	9,0

Source: Eurostat

2. EDUCATION



- Population aged 30 – 34 with tertiary education attainment is another headline target of the Europe 2020 strategy, and therefore, a key indicator for education policies across the EU.
- The EU overall target is to reach 40% for the year 2020. In 2014, the European average was 37,9%.
- Of the four Southern European countries only Spain has passed the 40% mark, with 42,3% (Figure 44).
- For Greece, the score in 2014 was 37,2%; for Portugal 31,3% and for Italy 23,9%.
- At NUTS 2 level there are great contrasts between countries (Figure 45).
- Spain has an overall better performance and although a North – South divide exists, there are a large group of NUTS - 12 regions - with values above the 40% mark, three of them even surpassing the 50%: País Vasco (58,5%), and Madrid (54%) and Asturias (51,3%) (Table 28).
- Outside Spain the capital regions have the most significant scores: Lisboa (PT) with 40,1%, Attiki (EL) with 45,7% and Lazio (IT) with 31,6%.
- Outside Spain, only Lisboa (PT) and Attiki (IT) have scores higher than 40%.
- The lowest values can be found in Italy which has the overall lowest percentage of 30 – 34 population with tertiary education – Sardegna with 17,4% and Sicilia with 17,7%.
- It is however important to stress that there are not very wide regional disparities; the larger differences exist between countries.

FIGURE 44 – POPULATION AGED 30 – 34 WITH TERTIARY EDUCATION ATTAINMENT (%), BY COUNTRY, 2001 - 2014

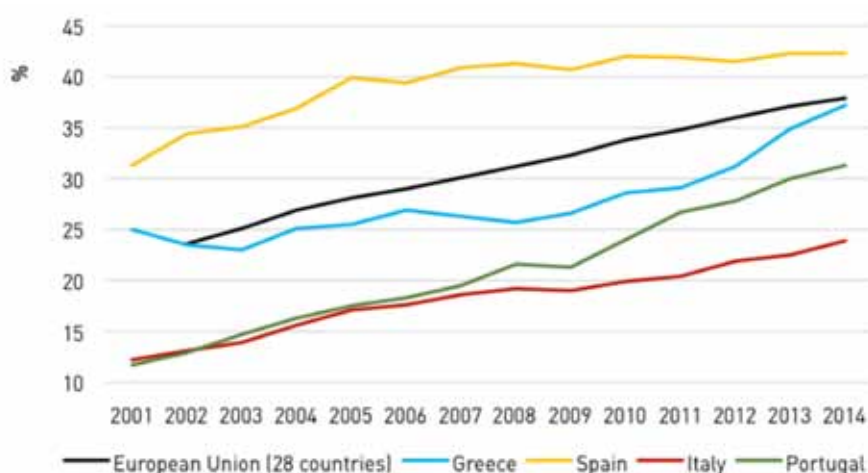
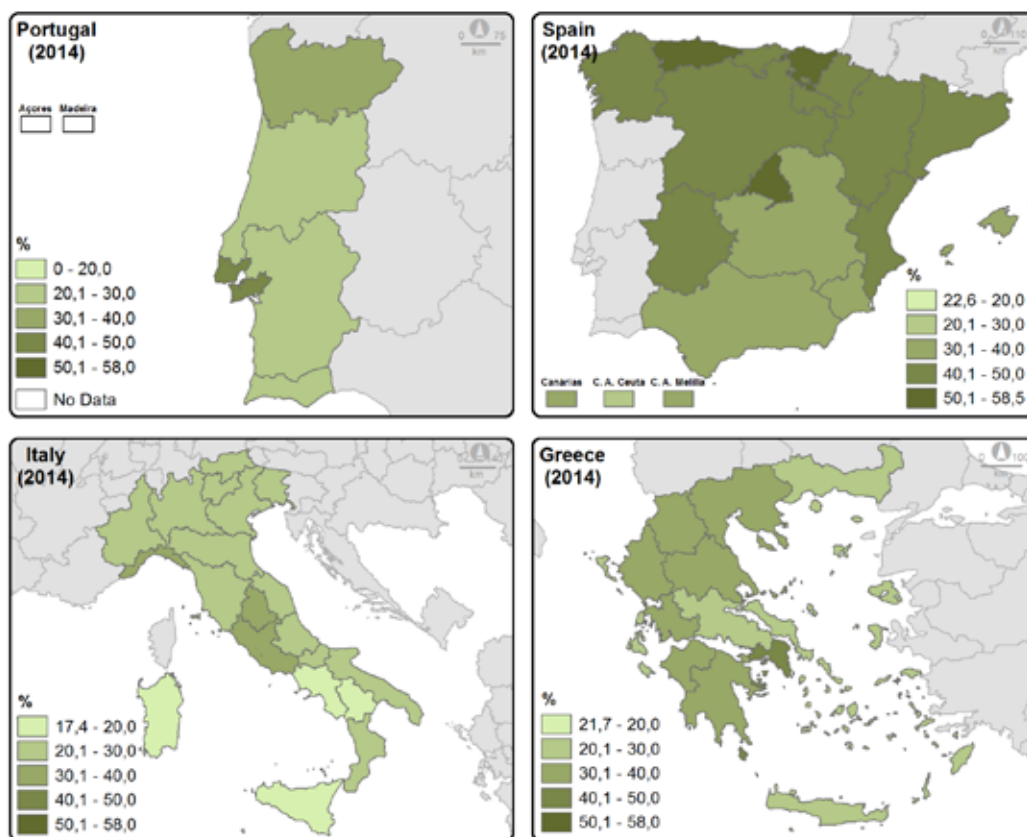


FIGURE 45 – POPULATION AGED 30 – 34 WITH TERTIARY EDUCATION ATTAINMENT (%) 2014



EU28 = 37,9%

TABLE 28 – POPULATION AGED 30 – 34 WITH TERTIARY EDUCATION ATTAINMENT (%) 2014

PORTUGAL	2014	SPAIN	2014	ITALY	2014	GREECE	2014
Norte	30,3	Galícia	44,1	Piemonte	24,2	Anatoliki Makedonia, Thraki	21,7
Algarve	23,7	Principado de Asturias	51,3	Valle d'Aosta	--	Kentriki Makedonia	38,1
Centro	28,7	Cantabria	43,9	Liguria	31,3	Dytiki Makedonia	35,4
Lisboa	40,1	País Vasco	58,5	Lombardia	25,9	Thessalia	37,4
Alentejo	24,9	C. Foral de Navarra	45,6	P. A. Bolzano	22,7	Ipeiros	33,1
R. A. Açores	--	La Rioja	46,1	P. A. Trento	27,3	Ionia Nisia	22,5
R. A. Madeira	--	Aragón	42,4	Veneto	23,5	Dytiki Ellada	31,3
		C. Madrid	54,0	Friuli-Venezia Giulia	27,0	Stereia Ellada	26,3
		Castilla y León	42,5	Emilia-Romagna	25,1	Peloponnisos	30,4
		Castilla-la Mancha	32,7	Toscana	24,8	Attiki	45,7
		Extremadura	42,2	Umbria	30,3	Voreio Aigaio	28,1
		Cataluña	47,0	Marche	24,9	Notio Aigaio	24,3
		C. Valenciana	40,6	Lazio	31,6	Kriti	28,8
		Illes Balears	35,3	Abruzzo	25,3		
		Andalucía	32,3	Molise	26,7		
		Región de Murcia	30,2	Campania	18,2		
		C. A. Ceuta	22,6	Puglia	21,2		
		C. A. Melilla	30,4	Basilicata	19,8		
		Canarias	34,8	Calabria	23,3		
				Sicilia	17,7		
				Sardegna	17,4		
PORTUGAL	31,3	SPAIN	42,3	ITALY	23,9	GREECE	37,2

Source: Eurostat

2. EDUCATION



- A complementary indicator to early school leavers is “young people neither in employment nor in education and training”;
- Since 2007 and 2008 all four countries in Southern Europe registered an increase (Figure 46);
- In 2014, all four countries display values higher than the EU27 average of 16,2%;
- Portugal has the lowest scores with 17,1%, in 2014.
- In contrast, Italy has the highest values reaching by 2014, 29,0%.
- At NUTS 2 level regions with the highest number of young people neither in employment nor education are Sterea Ellada (Greece) with 43,4% and Sicilia (Italy) with 42,1% and Calabria with 40,7% (Italy).
- Bolzano (Italy) with just 11,7%, Centro (Portugal) with 11,9%, País Vasco (Spain) with 13,0% and Lisboa, with 15,8% are the regions with the lowest values, all below the EU average.

FIGURE 46 – YOUNG PEOPLE NEITHER IN EMPLOYMENT NOR IN EDUCATION AND TRAINING, BY COUNTRY (%) – 2001 – 2014

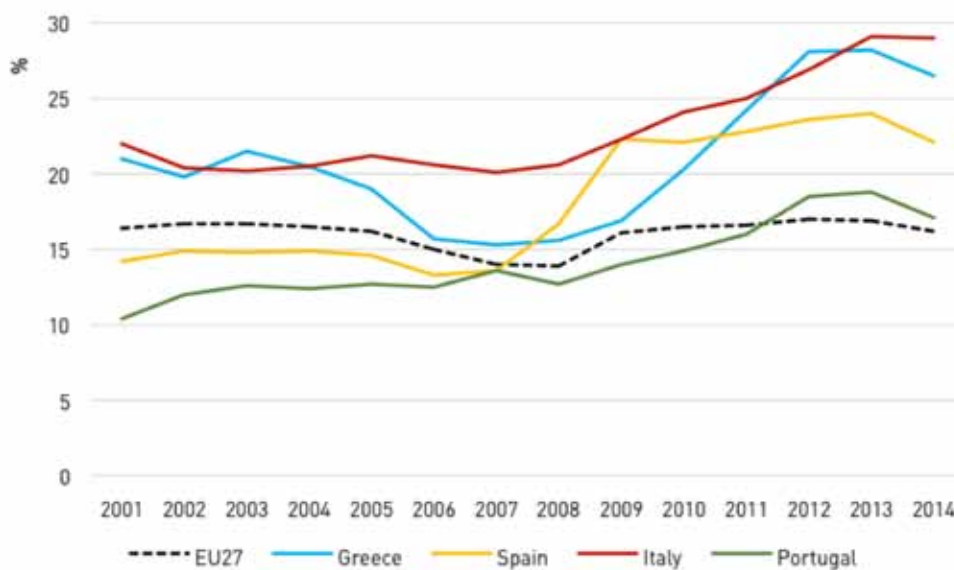
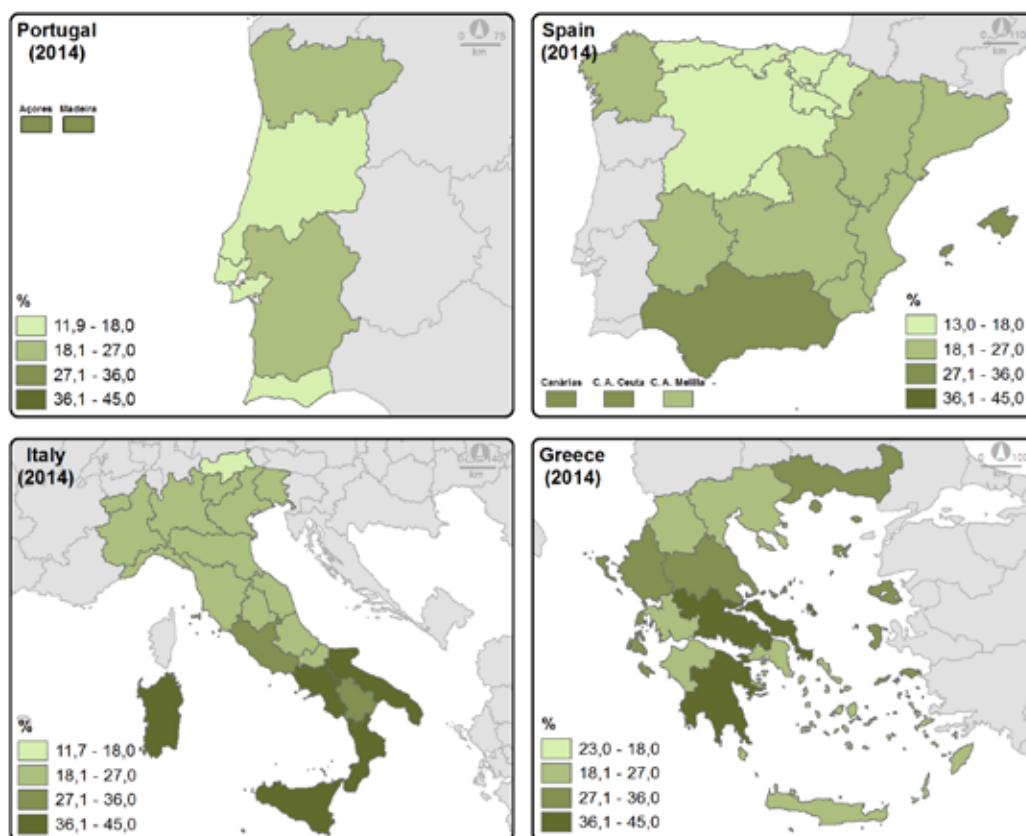


FIGURE 47 – YOUNG PEOPLE NEITHER IN EMPLOYMENT NOR IN EDUCATION AND TRAINING (%)



EU28 = 16,3%

TABLE 29 – YOUNG PEOPLE NEITHER IN EMPLOYMENT NOR IN EDUCATION AND TRAINING (%)

PORTUGAL	2014	SPAIN	2014	ITALY	2014	GREECE	2014
Norte	18,3	Galícia	18,4	Piemonte	24,3	Anatoliki Makedonia, Thraki	30,3
Algarve	17,4	Principado de Asturias	16,6	Valle d'Aosta	22,9	Kentriki Makedonia	24,5
Centro	11,9	Cantabria	16,6	Liguria	21,8	Dytiki Makedonia	24,7
Lisboa	15,8	País Vasco	13,0	Lombardia	21,4	Thessalia	31,7
Alentejo	19,1	C. Foral de Navarra	16,4	P. A. Bolzano	11,7	Ipeiros	29,1
R. A. Açores	32,3	La Rioja	17,7	P. A. Trento	19,7	Ionia Nisia	31,4
R. A. Madeira	27,6	Aragón	19,5	Veneto	20,0	Dytiki Ellada	25,0
		C. Madrid	16,7	Friuli-Venezia Giulia	19,5	Stereia Ellada	43,4
		Castilla y León	17,0	Emilia-Romagna	23,8	Peloponnisos	39,8
		Castilla-la Mancha	24,2	Toscana	22,6	Attiki	23,0
		Extremadura	21,1	Umbria	26,1	Voreio Aigaio	28,2
		Cataluña	23,0	Marche	23,6	Notio Aigaio	25,2
		C. Valenciana	24,3	Lazio	27,2	Kriti	26,1
		Illes Balears	27,5	Abruzzo	26,6		
		Andalucía	27,2	Molise	25,0		
		Región de Murcia	22,9	Campania	38,3		
		C. A. Ceuta	29,2	Puglia	37,1		
		C. A. Melilla	23,2	Basilicata	31,8		
		Canarias	25,7	Calabria	40,7		
				Sicilia	42,1		
				Sardegna	36,4		
PORTUGAL	17,1	SPAIN	22,1	ITALY	29,0	GREECE	26,5

Source: Eurostat



- Gross domestic product (GDP) at current market prices - Purchasing Power Standard per inhabitant in percentage of the EU average, at country level (EU28 = 100) is the most common indicator to assess the global health of the economy of the European countries.
- The four countries in Southern Europe registered a very turbulent evolution from 2001 to 2013, the last year for which there are available data both for country and NUTS2 levels (Figure 48).
- Italy, in 2001, almost reached 120% of EU 28 average but ever since there has been a continuous decline and recently (2013), the indicator was already below the 100%.
- Spain has been near the EU 28 average almost all along the time-series, surpassing the 100% limit, between 2004 and 2009, although at present (2013) with 94%.
- Portugal presents the lowest values of the four countries for the all time-series, with 78% in 2013.
- Greece shows the most complex evolution with growth and decline since 2001; in 2009, Greece almost met the EU 28 average, with 94%; by 2013, however, Greece GDP was only 73% of that of EU 28. This value is even lower than the correspondent to Portugal.
- At NUTS 2 level regions GDP per capita in PPS is also the most common indicator to assess regional disparities and polarisation.
- Regions where the national capitals are located have the highest values for their countries, except for Italy: Lisboa 108%, Madrid 128% and Attiki 98%.
- Italy however, has the highest number of regions above the EU average – 11 regions, most of them located in the North of the country (Figure 49).
- There is a very sharp North-South divide in Italy in what respects GDP: the northern regions of Bolzano (149%) and Lombardia (134%) register the highest values of all four countries.
- On the lower end of the GDP scale there are 6 Greece regions below the 60% of EU 28 average: Anatoliki Makedonia, Thraki, with 52%, Ipeiros, with 55%, Thessalia, with 56%, Kentriki Makedonia, with 57%, Dytiki Ellada, with 57%, Voreio Aigaio, with 57%.
- No Greece region surpasses the 100% value.
- In Portugal, only Lisboa has a value over 100%.
- Spain, like Italy, presents a North-South divide and some NUTS 2 like Pais Vasco (122%), Navarra (116%) or Cataluña (111) largely surpass the EU 28 average.

FIGURE 48 - GROSS DOMESTIC PRODUCT (GDP) AT CURRENT MARKET PRICES - PURCHASING POWER STANDARD PER INHABITANT IN PERCENTAGE OF THE EU AVERAGE, AT COUNTRY LEVEL (EU28 = 100) - 2001 - 2013

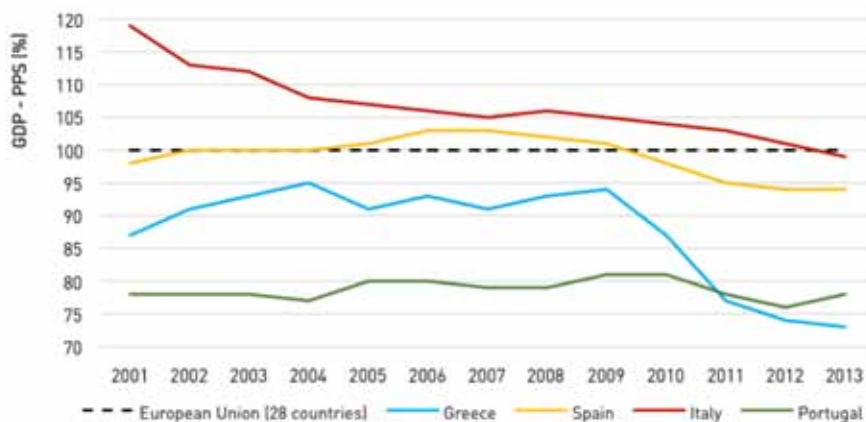
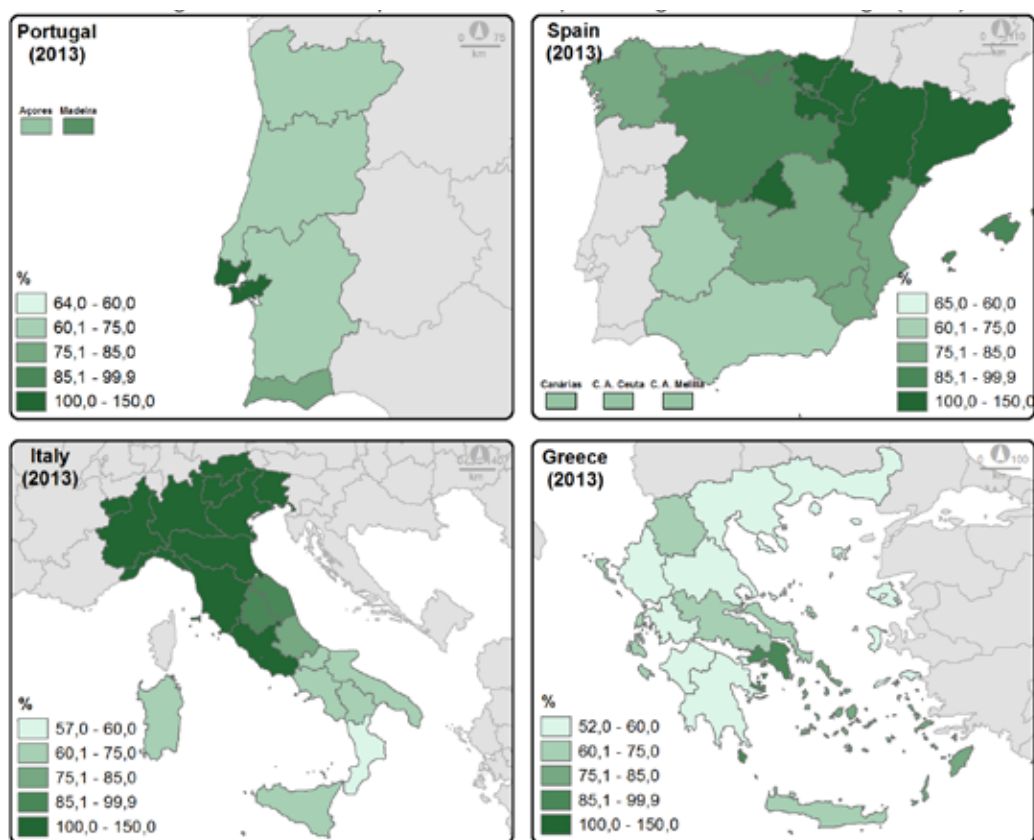


FIGURE 49 - GDP AT CURRENT MARKET PRICES - PPS PER INHAB. % (EU27 = 100) 2013



EU28 = 100

TABLE 30 - GDP AT CURRENT MARKET PRICES - PPS PER INHAB. % (EU27 = 100) 2013

PORTUGAL	2013	SPAIN	2013	ITALY	2013	GREECE	2013
Norte	64	Galicia	83	Piemonte	106	Anatoliki Makedonia, Thraki	52
Algarve	79	Principado de Asturias	84	Valle d'Aosta	132	Kentriki Makedonia	57
Centro	67	Cantabria	86	Liguria	112	Dytiki Makedonia	62
Lisboa	108	País Vasco	122	Lombardia	134	Thessalia	56
Alentejo	72	C. Foral de Navarra	116	P. A. Bolzano	149	Ipeiros	55
R. A. Açores	71	La Rioja	102	P. A. Trento	127	Ionia Nisia	68
R. A. Madeira	74	Aragón	103	Veneto	111	Dytiki Ellada	57
		C. Madrid	128	Friuli-Venezia Giulia	107	Stereia Ellada	62
		Castilla y León	89	Emilia-Romagna	120	Peloponnisos	60
		Castilla-la Mancha	76	Toscana	107	Attiki	98
		Extremadura	65	Umbria	91	Voreio Aigaio	57
		Cataluña	111	Marche	93	Notio Aigaio	76
		C. Valenciana	82	Lazio	118	Kriti	63
		Illes Balears	99	Abruzzo	85		
		Andalucía	70	Molise	70		
		Región de Murcia	77	Campania	63		
		C. A. Ceuta	77	Puglia	61		
		C. A. Melilla	70	Basilicata	69		
		Canarias	81	Calabria	57		
				Sicilia	61		
				Sardegna	69		
PORTUGAL	78	SPAIN	94	ITALY	99	GREECE	73

Source: Eurostat

3. ECONOMY



- Unemployment rates, as could be anticipated, have been rising in all the four countries in Southern Europe, mainly after 2009 (Figure 50).
- Italy remained all along the time series since 2001, near the EU 28 average; between 2002 and 2012, Italy performed even better than the average of the EU 28, displaying lower scores of the unemployment rate.
- In 2014, however, all the four countries in Southern Europe had higher unemployment rates than the EU 28 (10.0%): Greece with 26,4%, Spain with 24,1%, Portugal with 14,1% and Italy with 12,5%.
- At NUTS 2 scale, all regions in Greece have values between 20% and 30%; all Portuguese regions NUTS 2 have between 10% and 20% rates; all Spanish regions have values higher than 10% and a group of regions even reach values higher than 30%: Andalusia with 34,4%, Canarias with 32,2%, Ceuta with 31,1%.
- Italy presents a sharp North-South divide with the lowest values of the unemployment rate of all the four countries, in some of the industrial regions in the North, between 4,2% and 11,6%; for example, Bolzano with 4,2%, Trento with 6,8%, Veneto with 7,2%, Lombardia with 7,9%, Friuli-Venezia Giulia with 8,0%, or Emilia-Romagna with 8,2%, among others. The South of the country, however, is performing worst.

FIGURE 50 – UNEMPLOYMENT RATE BY COUNTRY (% FROM POPULATION 25 – 64)

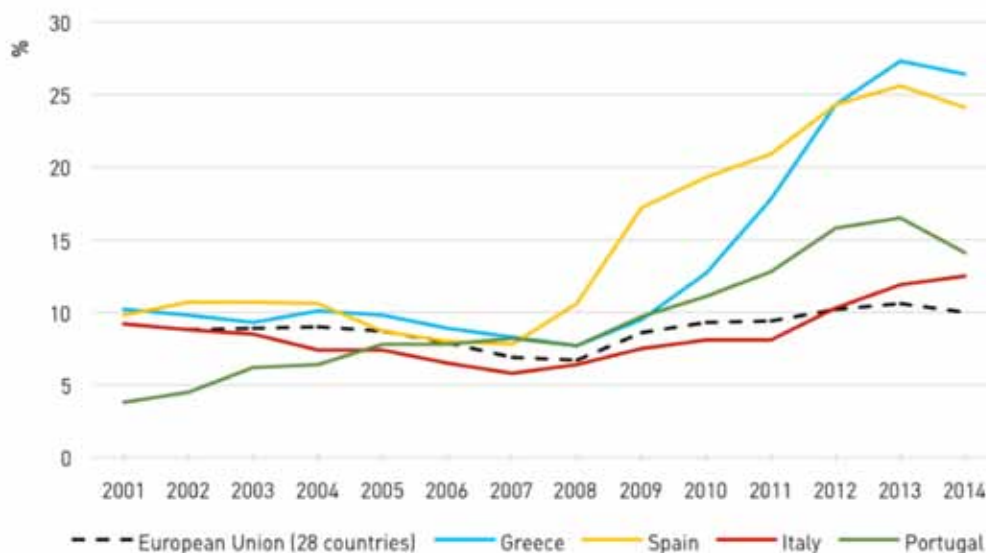
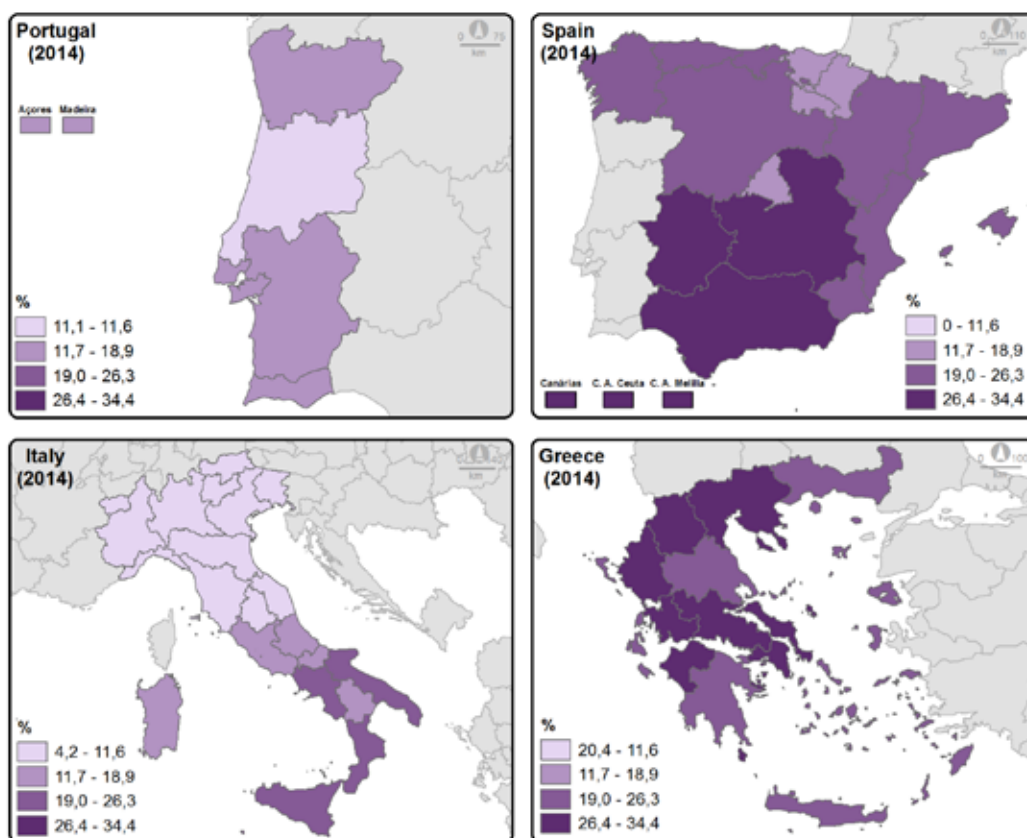


FIGURE 51 – UNEMPLOYMENT RATE (% FROM POPULATION 25 – 64)



EU28 = 10,0

TABLE 31 - UNEMPLOYMENT RATE (% FROM POPULATION 25 – 64)

PORTUGAL	2014	SPAIN	2014	ITALY	2014	GREECE	2014
Norte	15,0	Galicía	21,5	Piemonte	11,1	Anatoliki Makedonia, Thraki	23,9
Algarve	14,5	Principado de Asturias	21,0	Valle d'Aosta	8,7	Kentriki Makedonia	28,6
Centro	11,1	Cantabria	19,4	Liguria	10,7	Dytiki Makedonia	27,4
Lisboa	14,8	País Vasco	16,2	Lombardia	7,9	Thessalia	25,9
Alentejo	14,5	C. Foral de Navarra	15,1	P. A. Bolzano	4,2	Ipeiros	27,0
R. A. Açores	15,9	La Rioja	17,7	P. A. Trento	6,8	Ionia Nisia	21,2
R. A. Madeira	15,4	Aragón	19,8	Veneto	7,2	Dytiki Ellada	28,5
		C. Madrid	18,3	Friuli-Venezia Giulia	8,0	Stereia Ellada	26,8
		Castilla y León	20,5	Emilia-Romagna	8,2	Peloponnisos	23,4
		Castilla-la Mancha	28,4	Toscana	10,0	Attiki	27,2
		Extremadura	29,3	Umbria	11,2	Voreio Aigaio	22,3
		Cataluña	19,9	Marche	9,9	Notio Aigaio	20,4
		C. Valenciana	25,4	Lazio	12,4	Kriti	23,8
		Illes Balears	19,5	Abruzzo	12,6		
		Andalucía	34,4	Molise	15,0		
		Región de Murcia	26,2	Campania	21,3		
		C. A. Ceuta	31,1	Puglia	20,9		
		C. A. Melilla	28,0	Basilicata	14,6		
		Canarias	32,2	Calabria	23,1		
				Sicilia	21,8		
				Sardegna	18,5		
PORTUGAL	14,1	SPAIN	24,1	ITALY	12,5	GREECE	26,4

Source: Eurostat



- Long-term unemployment measures unemployed people for 12 months or more, which is the type of unemployment that is the most difficult to mitigate (Figure 52).
- All four countries in Southern Europe show a steady increasing trend of the long-term unemployment rate since 2008 and 2009.
- All four countries are at present (2014) above the EU28 average of 49,4%.
- Portugal, Italy and Greece registered a similar evolution along the time-series from 2001 to 2014, although Greece reached a higher value in 2014.
- Spain had a more complex evolution, having reduced its long-term unemployment rate very significantly during the period between 2003 and 2008, well below the EU 28 average; since 2008 however, Spain registered a quick growth reaching the level of the other countries in 2014, with a rate higher than the EU 28 average.
- Nevertheless, Spain has the lowest rate of the four countries, in 2014; Spain has a higher unemployment rate but a lower long-term unemployment rate, in the context of the four countries in Southern Europe.
- A NUTS 2 analysis confirms the regional disparities evident in other indicators, namely the GDP, PPS per capita (Figure 49); it is very clear the North-South divide in Italy and Portugal and the critical situation in Greece.
- Spain, on the contrary, has a smoother pattern with fewer contrasts.
- The highest values are found in Greece, as is the case of Attiki with 77,3% or Dytiki Ellada with 76,7%, while the lowest values are found in some Italian regions in the North of the country, as is the case of Trento, with 33,6% or Bolzano, with 34,3%.

FIGURE 52 – LONG-TERM UNEMPLOYMENT (12 MONTHS OR MORE) AS PERCENTAGE OF TOTAL UNEMPLOYMENT, BY COUNTRY

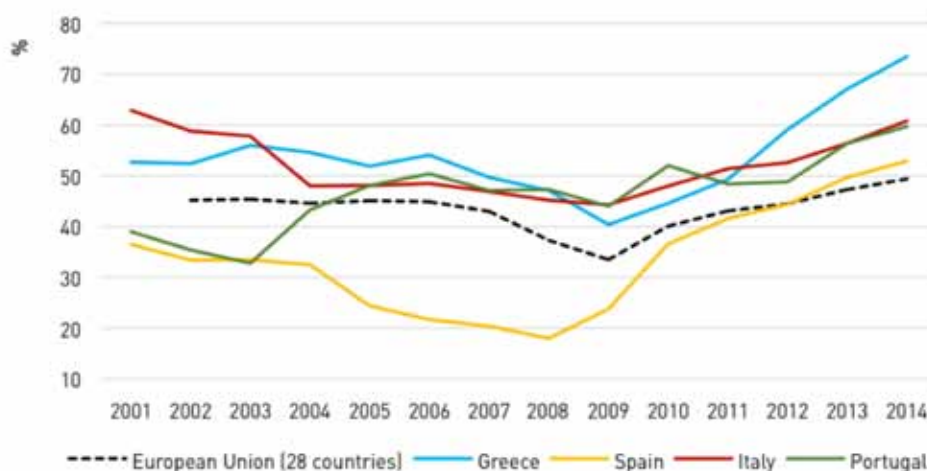
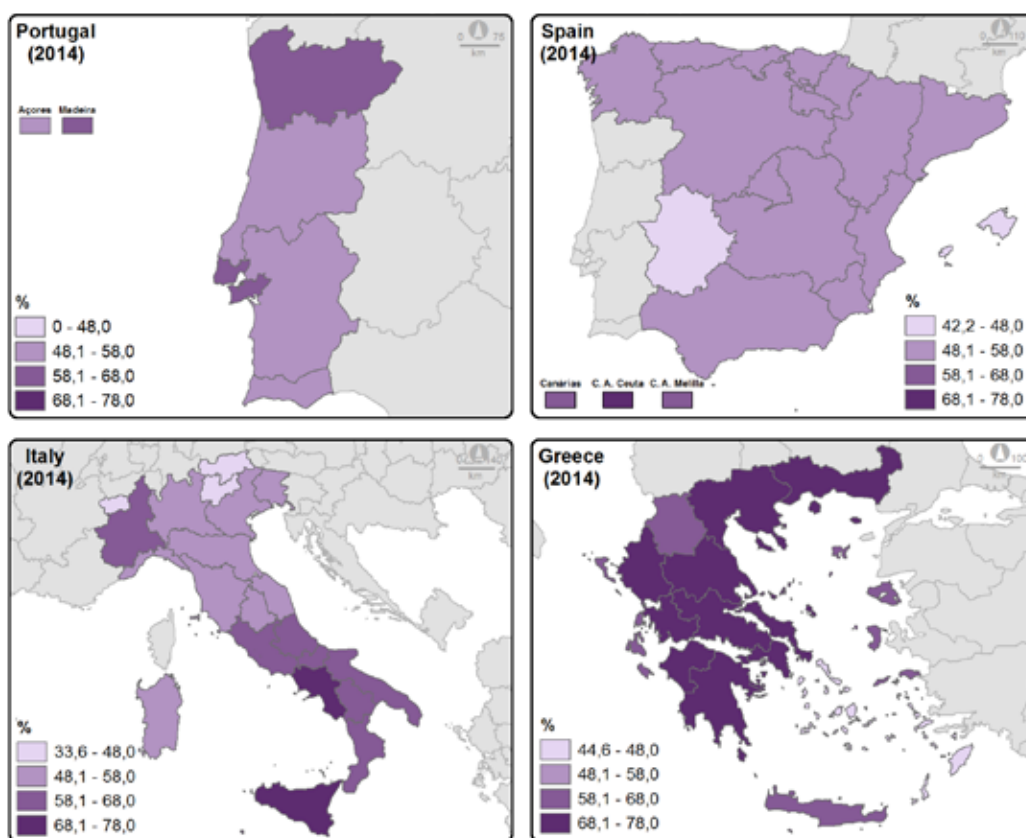


FIGURE 53 – LONG-TERM UNEMPLOYMENT (12 MONTHS OR MORE) AS PERCENTAGE OF TOTAL UNEMPLOYMENT



EU28 = 49,4

TABLE 32 – LONG-TERM UNEMPLOYMENT (12 MONTHS OR MORE) AS PERCENTAGE OF TOTAL UNEMPLOYMENT

PORTUGAL	2014	SPAIN	2014	ITALY	2014	GREECE	2014
Norte	64,3	Galicia	53,4	Piemonte	59,5	Anatoliki Makedonia, Thraki	70,8
Algarve	51,5	Principado de Asturias	55,9	Valle d'Aosta	43,4	Kentriki Makedonia	75,2
Centro	55,1	Cantabria	55,5	Liguria	56,0	Dytiki Makedonia	59,9
Lisboa	59,2	País Vasco	56,1	Lombardia	56,0	Thessalia	73,5
Alentejo	51,6	C. Foral de Navarra	48,5	P. A. Bolzano	34,3	Ipeiros	75,8
R. A. Açores	57,1	La Rioja	48,7	P. A. Trento	33,6	Ionia Nisia	60,9
R. A. Madeira	65,5	Aragón	48,1	Veneto	53,0	Dytiki Ellada	76,7
		C. Madrid	53,4	Friuli-Venezia Giulia	49,6	Stereia Ellada	72,2
		Castilla y León	53,0	Emilia-Romagna	49,4	Peloponnisos	73,8
		Castilla-la Mancha	54,7	Toscana	56,0	Attiki	77,3
		Extremadura	46,4	Umbria	50,3	Voreio Aigaio	66,9
		Cataluña	56,3	Marche	57,6	Notio Aigaio	44,6
		C. Valenciana	52,9	Lazio	60,5	Kriti	63,3
		Illes Balears	42,2	Abruzzo	59,4		
		Andalucía	50,0	Molise	67,1		
		Región de Murcia	50,6	Campania	69,2		
		C. A. Ceuta	72,0	Puglia	63,9		
		C. A. Melilla	66,7	Basilicata	64,8		
		Canarias	59,8	Calabria	67,2		
				Sicilia	69,3		
				Sardegna	57,7		
PORTUGAL	59,7	SPAIN	52,9	ITALY	60,8	GREECE	73,5

Source: Eurostat



- The employment rate (ages 15-64 years) of the four countries in Southern Europe has been suffering a decline from 2007, 2008 onwards, although a slight recover can be anticipated in 2014 (Figure 54).
- Nevertheless all four countries have an employment rate much lower than the EU28 average, since more or less the same period (2008, 2009), except Portugal that has begun to decline later on.
- At present (2014) the lowest value corresponds to Greece with 49,4%; Italy with 55,7% and Spain with 56,0% are in a similar situation and Portugal has a higher rate, with 62,6%.
- The EU 28 average in 2014 was 64,8%; the EU 2020 target for employment rate (% of the population aged 20-64) is 75%.
- At NUTS 2 level the regions with the highest employment rates are located in the North of Italy – Bolzano (70%), Emilia-Romagna (66,3%) and Trento (65,9%) (Figure 55).
- In contrast, Italy also has the regions with the lowest employment rate but in the South, as for example, Sicilia with 39,0%, Campania with 39,2%, Calabria with 39,3% or Puglia with 42,1%.

FIGURE 54 – EMPLOYMENT RATE BY COUNTRY (AGES 15 – 64)

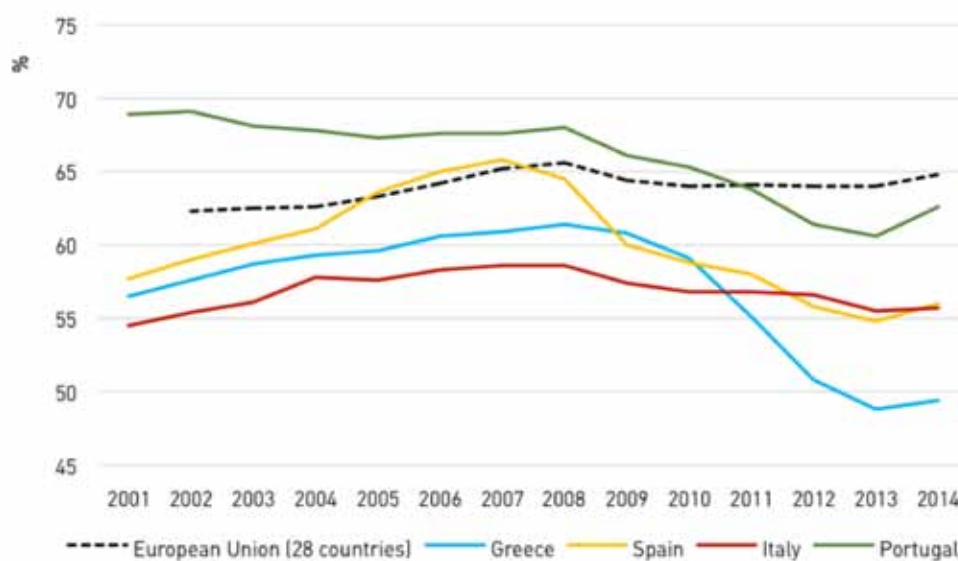
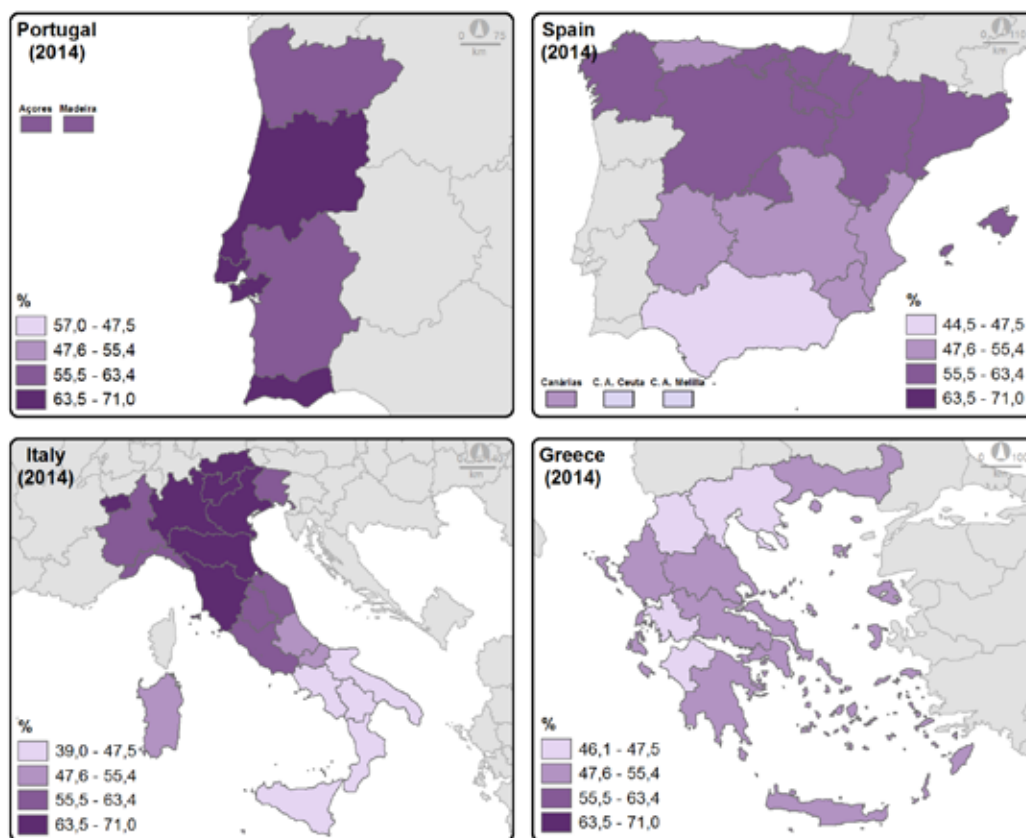


FIGURE 55 – EMPLOYMENT RATE (AGES 15 – 64) [%]



EU28 = 64,8

TABLE 33 – EMPLOYMENT RATE (AGES 15 – 64) [%]

PORTUGAL	2014	SPAIN	2014	ITALY	2014	GREECE	2014
Norte	60,5	Galícia	56,3	Piemonte	62,4	Anatoliki Makedonia, Thraki	49,8
Algarve	65,0	Principado de Asturias	54,4	Valle d'Aosta	66,2	Kentriki Makedonia	46,3
Centro	65,3	Cantabria	57,6	Liguria	60,7	Dytiki Makedonia	46,4
Lisboa	63,8	País Vasco	61,8	Lombardia	64,9	Thessalia	49,0
Alentejo	62,9	C. Foral de Navarra	63,2	P. A. Bolzano	70,8	Ipeiros	48,3
R. A. Açores	57,0	La Rioja	62,5	P. A. Trento	65,9	Ionia Nisia	54,4
R. A. Madeira	58,3	Aragón	60,4	Veneto	63,7	Dytiki Ellada	46,1
		C. Madrid	63,1	Friuli-Venezia Giulia	63,1	Stereia Ellada	49,0
		Castilla y León	58,0	Emilia-Romagna	66,3	Peloponnisos	54,4
		Castilla-la Mancha	51,8	Toscana	63,8	Attiki	50,0
		Extremadura	48,9	Umbria	61,0	Voreio Aigaio	49,2
		Cataluña	61,9	Marche	62,4	Notio Aigaio	54,5
		C. Valenciana	54,6	Lazio	58,8	Kriti	52,5
		Illes Balears	61,8	Abruzzo	53,9		
		Andalucía	46,4	Molise	48,5		
		Región de Murcia	53,7	Campania	39,2		
		C. A. Ceuta	44,5	Puglia	42,1		
		C. A. Melilla	45,6	Basilicata	47,2		
		Canarias	49,0	Calabria	39,3		
				Sicilia	39,0		
				Sardegna	48,6		
PORTUGAL	62,6	SPAIN	56,0	ITALY	55,7	GREECE	49,4

Source: Eurostat



- Human Resources in Science and Technology is usually taken as a proxy for human capital; Eurostat considers the number of people with tertiary education and/or employed in science and technology (Figure 56).
- All four countries show a slightly increasing trend since 2001.
- Spain shows the highest percentage with 40% and Portugal the lowest with 28,4%.
- At NUTS 2 level, Spain has the regions with the highest values, specially the in the North - País Vasco with 57,1% and Madrid with 54,3%.
- In all four countries, all the capital regions rank as first or second highest level of human resources in science and technology. Lisboa (PT) with 37,5%, Madrid (ES) with 54,3%, Lazio (IT) with 36,6% and Attiki (EL) with 43,6%.
- Although Portugal is the one that scores poorest at country level, the regions with the lowest percentages are located in Greece - Ionia Nisia with 20,6%, Sterea Ellada with 22,8% and Notio Aigaio with 23,1%.

FIGURE 56 – HUMAN RESOURCES IN SCIENCE AND TECHNOLOGY (PERSONS WITH TERTIARY EDUCATION AND/OR EMPLOYED IN SCIENCE AND TECHNOLOGY) – PERCENTAGE OF ACTIVE POPULATION, BY COUNTRY

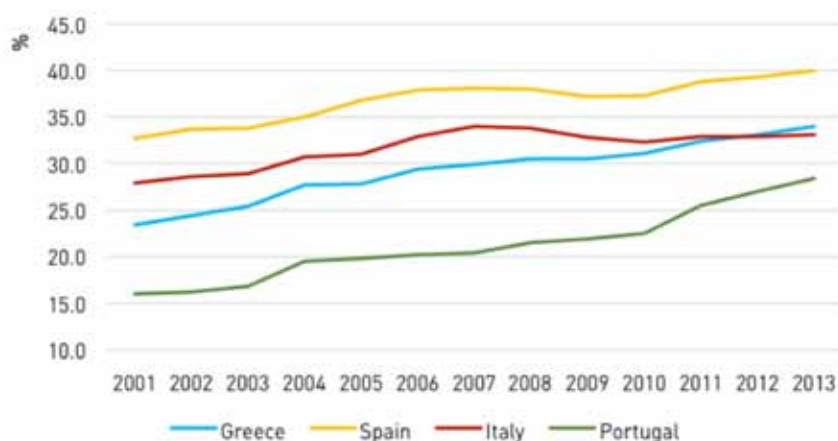


FIGURE 57 – HUMAN RESOURCES IN SCIENCE AND TECHNOLOGY (PERSONS WITH TERTIARY EDUCATION AND/OR EMPLOYED IN SCIENCE AND TECHNOLOGY) – PERCENTAGE OF ACTIVE POPULATION

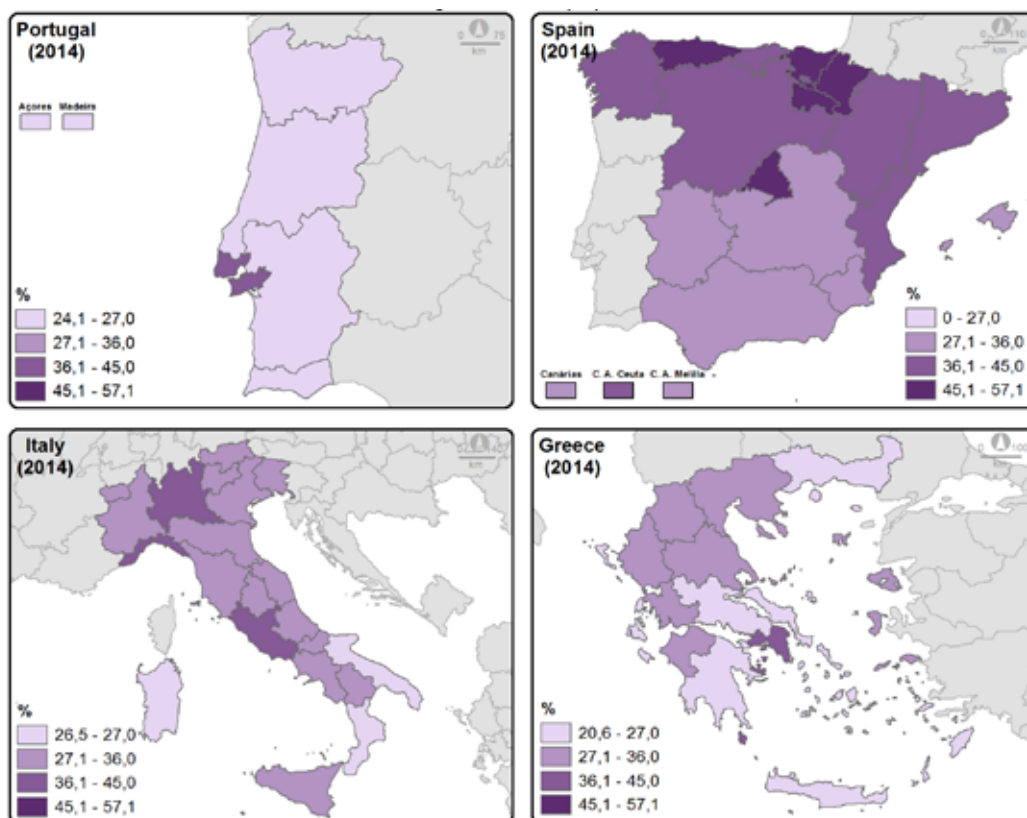


TABLE 34 – HUMAN RESOURCES IN SCIENCE AND TECHNOLOGY (PERSONS WITH TERTIARY EDUCATION AND/OR EMPLOYED IN SCIENCE AND TECHNOLOGY) – PERCENTAGE OF ACTIVE POPULATION

PORTUGAL	2013	SPAIN	2014	ITALY	2014	GREECE	2014
Norte	24,8	Galicía	39,7	Piemonte	33,9	Anatoliki Makedonia, Thraki	24,5
Algarve	26,7	Principado de Asturias	47,0	Valle d'Aosta	31,3	Kentriki Makedonia	33,3
Centro	25,3	Cantabria	42,7	Liguria	36,6	Dytiki Makedonia	28,5
Lisboa	37,5	País Vasco	57,1	Lombardia	37,3	Thessalia	30,1
Alentejo	26,0	C. Foral de Navarra	49,6	P. A. Bolzano	31,0	Ipeiros	31,8
R. A. Açores	24,1	La Rioja	46,3	P. A. Trento	34,8	Ionia Nisia	20,6
R. A. Madeira	26,0	Aragón	39,8	Veneto	31,5	Dytiki Ellada	28,3
		C. Madrid	54,3	Friuli-Venezia Giulia	35,8	Stereia Ellada	22,8
		Castilla y León	41,6	Emilia-Romagna	35,4	Peloponnisos	23,3
		Castilla-la Mancha	32,9	Toscana	32,4	Attiki	43,6
		Extremadura	32,6	Umbria	33,6	Voreio Aigaio	33,9
		Cataluña	38,6	Marche	33,7	Notio Aigaio	23,1
		C. Valenciana	36,9	Lazio	36,6	Kriti	24,6
		Illes Balears	31,7	Abruzzo	34,6		
		Andalucía	32,4	Molise	30,4		
		Región de Murcia	31,2	Campania	29,4		
		C. A. Ceuta	39,5	Puglia	26,5		
		C. A. Melilla	30,1	Basilicata	30,9		
		Canarias	32,6	Calabria	26,9		
				Sicilia	27,5		
				Sardegna	27,0		
PORTUGAL	28,4	SPAIN	40,0	ITALY	33,1	GREECE	34,0

Source: Eurostat

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- Research and Development (R&D) expenditure is one of the main driving forces for competitiveness and innovation in an economy and can also reflect a high accumulation of human capital.
- All four Southern Europe countries are clearly below the EU28 average of R&D expenditure of 2,03%.
- Portugal and Italy have the highest level of R&D expenditure with 1,29% although showing a slight declining trend in R&D expenditure since 2009.
- The other three countries all show similar behaviour with a slight increasing trend since 2001 and only Greece is lagging behind with 0,80%.
- At NUTS 2 level País Vasco with 2,09% (Spain) has the highest value on R&D expenditure followed by the Italian regions of Piemonte with 1,98% and Trento with 1,85%.
- Spain also has some of the regions with the lowest scores, the peripheral regions of Ceuta (0,06%) and Melilla (0,12%).
- Other regions with very low values are located in Greece - Ionia Nisia and Notio Aigaio, both with 0,25%.

FIGURE 58 – TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE - ALL SECTORS (PERCENTAGE OF GDP), COUNTRY LEVEL

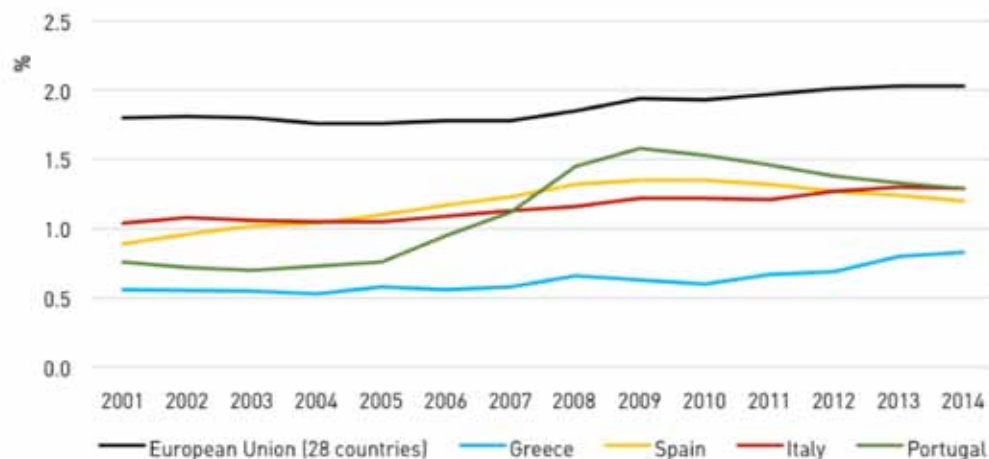


FIGURE 59 – TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE - ALL SECTORS (PERCENTAGE OF GDP)

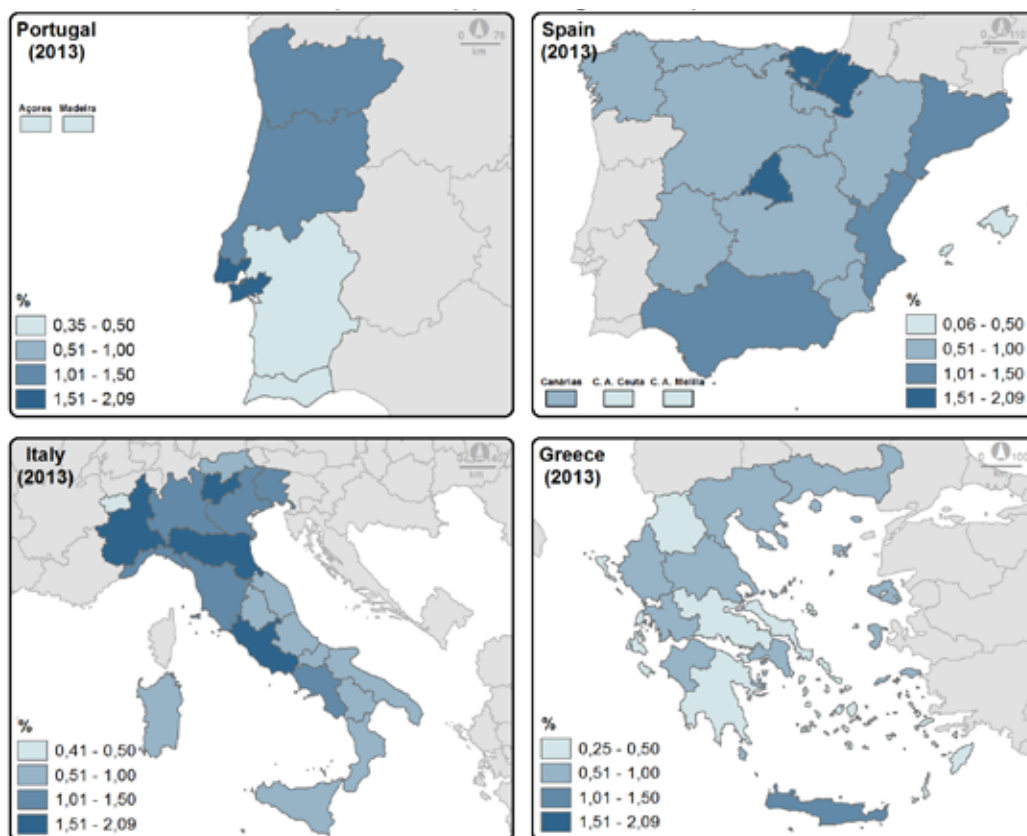


TABLE 35 - TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE - ALL SECTORS (PERCENTAGE OF GDP)

PORTUGAL	2013	SPAIN	2013	ITALY	2013	GREECE	2013
Norte	1,42	Galicía	0,86	Piemonte	1,98	Anatoliki Makedonia, Thraki	0,58
Algarve	0,37	Principado de Asturias	0,86	Valle d'Aosta	0,41	Kentriki Makedonia	0,75
Centro	1,3	Cantabria	0,91	Liguria	1,28	Dytiki Makedonia	0,45
Lisboa	1,67	País Vasco	2,09	Lombardia	1,27	Thessalia	0,53
Alentejo	0,45	C. Foral de Navarra	1,79	P. A. Bolzano	0,64	Ipeiros	0,92
R. A. Açores	0,35	La Rioja	0,79	P. A. Trento	1,85	Ionia Nisia	0,25
R. A. Madeira	0,35	Aragón	0,9	Veneto	1,12	Dytiki Ellada	0,92
		C. Madrid	1,75	Friuli-Venezia Giulia	1,49	Stereia Ellada	0,44
		Castilla y León	0,99	Emilia-Romagna	1,65	Peloponnisos	0,38
		Castilla-la Mancha	0,53	Toscana	1,26	Attiki	0,94
		Extremadura	0,76	Umbria	0,82	Voreio Aigaio	0,79
		Cataluña	1,5	Marche	0,83	Notio Aigaio	0,25
		C. Valenciana	1,02	Lazio	1,64	Kriti	1,35
		Illes Balears	0,33	Abruzzo	0,89		
		Andalucía	1,04	Molise	0,78		
		Región de Murcia	0,84	Campania	1,32		
		C. A. Ceuta	0,06	Puglia	0,87		
		C. A. Melilla	0,12	Basilicata	0,57		
		Canarias	0,5	Calabria	0,58		
				Sicilia	0,94		
				Sardegna	0,81		
PORTUGAL	1,33	SPAIN	1,24	ITALY	1,3	GREECE	0,8

Source: Eurostat

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TABLE 36 – TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE - BUSINESS ENTERPRISE SECTOR (PERCENTAGE OF GDP), COUNTRY LEVEL

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EUROPEAN UNION 28	1,16	1,16	1,14	1,12	1,11	1,13	1,13	1,17	1,2	1,19	1,25	1,28	1,29	1,3
GREECE	0,18	0,18	0,18	0,16	0,18	0,17	0,16	--	--	--	0,23	0,24	0,27	0,28
SPAIN	0,47	0,52	0,55	0,56	0,59	0,65	0,69	0,72	0,7	0,69	0,69	0,67	0,66	0,63
ITALY	0,51	0,52	0,5	0,5	0,53	0,53	0,59	0,62	0,65	0,66	0,66	0,69	0,71	0,72
PORTUGAL	0,24	0,23	0,23	0,26	0,29	0,44	0,58	0,72	0,75	0,7	0,69	0,68	0,63	0,59

Source: Eurostat

FIGURE 60 – TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE - BUSINESS ENTERPRISE SECTOR (PERCENTAGE OF GDP), COUNTRY LEVEL

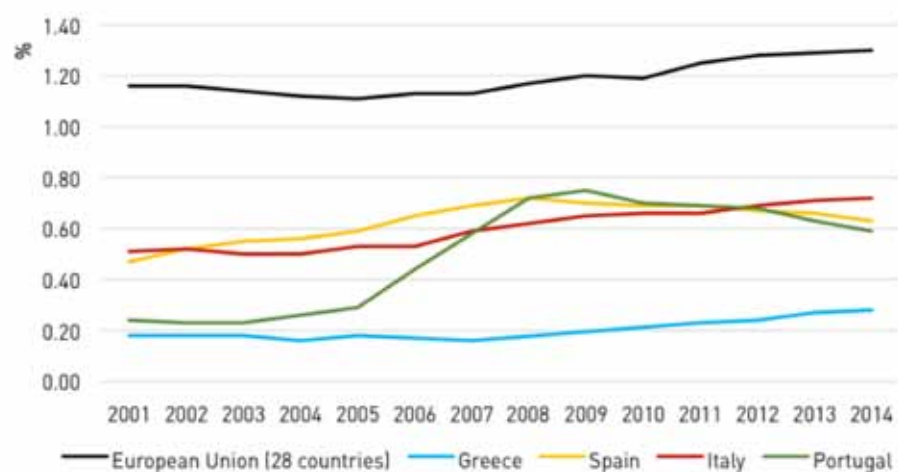


FIGURE 61 - TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE - BUSINESS ENTERPRISE SECTOR (PERCENTAGE OF GDP)

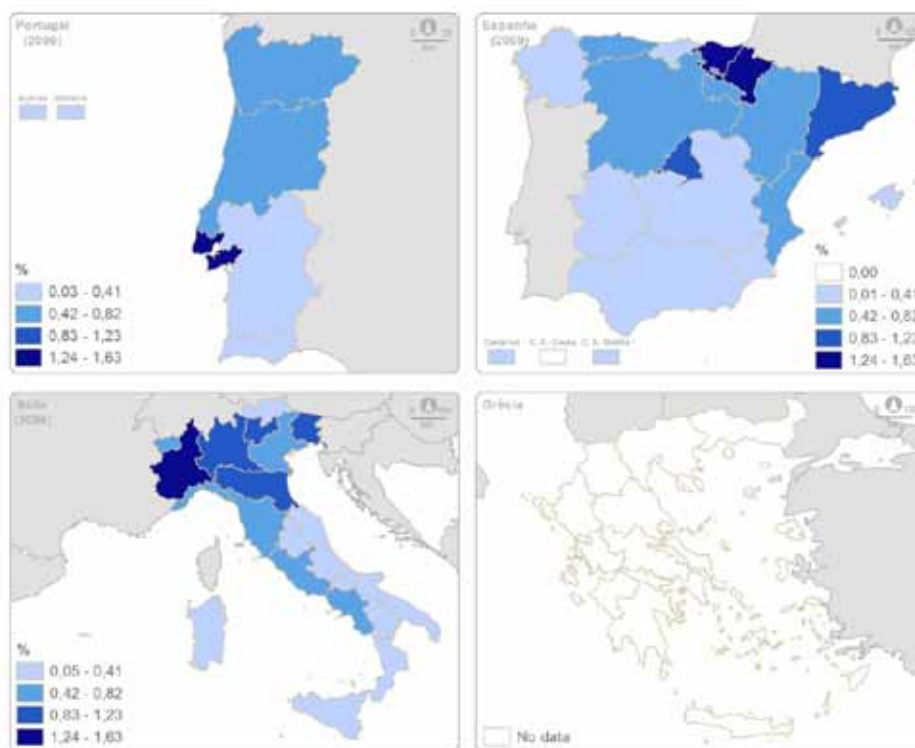


TABLE 37 - TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE - BUSINESS ENTERPRISE SECTOR (PERCENTAGE OF GDP)

PORTUGAL	2009	SPAIN	2009	ITALY	2009	GREECE	2009
Norte	0,62	Galicía	0,41	Piemonte	1,40	Anatoliki Makedonia, Thraki	--
Algarve	0,07	Principado de Asturias	0,42	Valle d'Aosta	0,49	Kentriki Makedonia	--
Centro	0,48	Cantabria	0,41	Liguria	0,72	Dytiki Makedonia	--
Lisboa	1,32	País Vasco	1,63	Lombardia	0,85	Thessalia	--
Alentejo	0,25	C. Foral de Navarra	1,51	P. A. Bolzano	0,36	Ipeiros	--
R. A. Açores	0,12	La Rioja	0,59	P. A. Trento	1,16	Ionía Nisia	--
R. A. Madeira	0,03	Aragón	0,64	Veneto	0,69	Dytiki Ellada	--
		C. Madrid	1,13	Friuli-Venezia Giulia	0,83	Stereá Ellada	--
		Castilla y León	0,61	Emilia-Romagna	0,87	Peloponnisos	--
		Castilla-la Mancha	0,32	Toscana	0,53	Attiki	--
		Extremadura	0,12	Umbria	0,24	Voreio Aigaio	--
		Cataluña	0,99	Marche	0,33	Notio Aigaio	--
		C. Valenciana	0,45	Lazio	0,65	Kriti	--
		Illes Balears	0,06	Abruzzo	0,40		
		Andalucía	0,35	Molise	0,08		
		Región de Murcia	0,34	Campania	0,50		
		C. A. Ceuta	0,00	Puglia	0,20		
		C. A. Melilla	0,01	Basilicata	0,17		
		Canarias	0,12	Calabria	0,05		
				Sicilia	0,24		
				Sardegna	0,07		
PORTUGAL	0,78	SPAIN	0,72	ITALY	0,67	GREECE	--

Source: Eurostat

3. ECONOMY



TABLE 38 – TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE - GOVERNMENT SECTOR (PERCENTAGE OF GDP), COUNTRY LEVEL

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EUROPEAN UNION 28	0,24	0,24	0,24	0,24	0,24	0,23	0,23	0,24	0,26	0,25	0,25	0,25	0,25	0,25
GREECE	0,12	--	0,11	0,11	0,12	0,12	0,12	--	--	--	0,16	0,17	0,22	0,22
SPAIN	0,14	0,15	0,16	0,17	0,19	0,2	0,22	0,24	0,27	0,27	0,26	0,24	0,23	0,23
ITALY	0,19	0,19	0,19	0,19	0,18	0,19	0,16	0,15	0,16	0,17	0,16	0,19	0,18	0,19
PORTUGAL	0,16	0,14	0,12	0,11	0,11	0,11	0,11	0,11	0,12	0,11	0,11	0,07	0,09	0,08

Source: Eurostat

FIGURE 62 – TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE - GOVERNMENT SECTOR (PERCENTAGE OF GDP), COUNTRY LEVEL

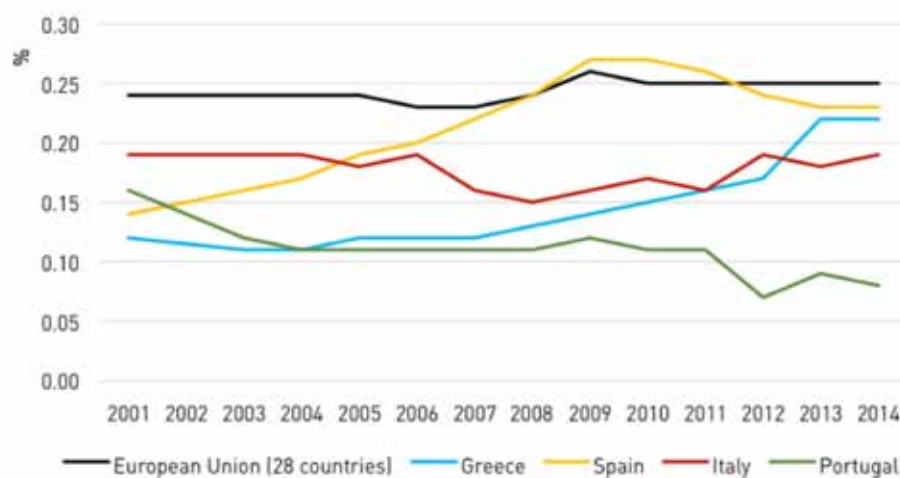


FIGURE 63 - TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE – GOVERNMENT SECTOR (PERCENTAGE OF GDP)

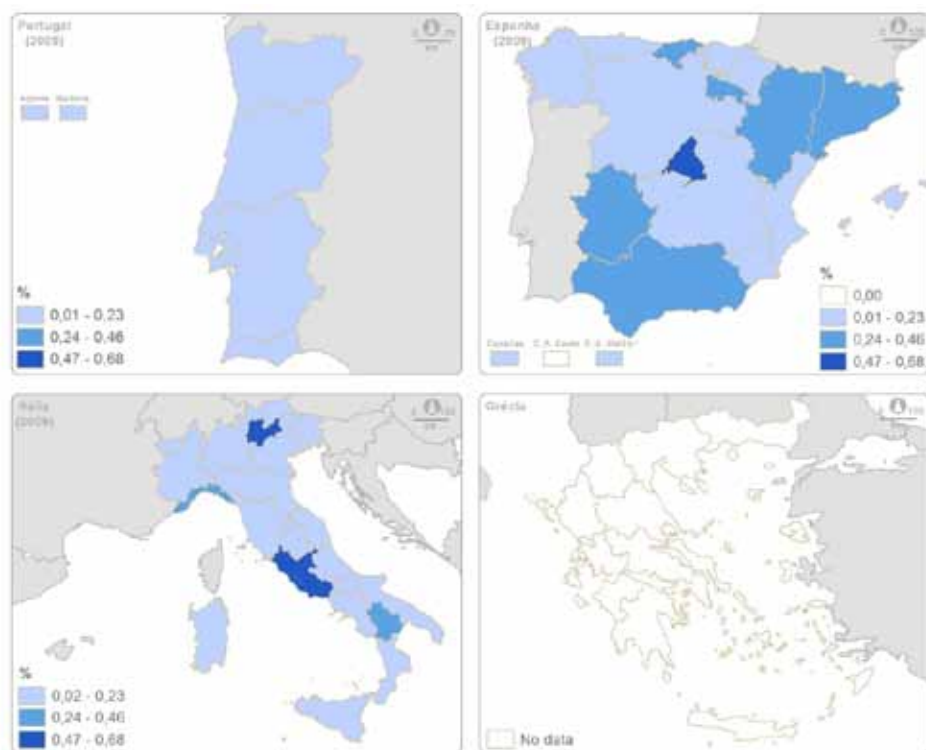


TABLE 39 - TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE – GOVERNMENT SECTOR (PERCENTAGE OF GDP)

PORTUGAL	2009	SPAIN	2009	ITALY	2009	GREECE	2009
Norte	0,09	Galicia	0,15	Piemonte	0,08	Anatoliki Makedonia, Thraki	--
Algarve	0,02	Principado de Asturias	0,17	Valle d'Aosta	0,06	Kentriki Makedonia	--
Centro	0,05	Cantabria	0,24	Liguria	0,28	Dytiki Makedonia	--
Lisboa	0,21	País Vasco	0,12	Lombardia	0,06	Thessalia	--
Alentejo	0,01	C. Foral de Navarra	0,21	P. A. Bolzano	0,06	Ipeiros	--
R. A. Açores	0,06	La Rioja	0,26	P. A. Trento	0,47	Ionia Nisia	--
R. A. Madeira	0,15	Aragón	0,25	Veneto	0,09	Dytiki Ellada	--
		C. Madrid	0,56	Friuli-Venezia Giulia	0,17	Stereia Ellada	--
		Castilla y León	0,14	Emilia-Romagna	0,11	Peloponnisos	--
		Castilla-la Mancha	0,09	Toscana	0,13	Attiki	--
		Extremadura	0,34	Umbria	0,05	Voreio Aigaio	--
		Cataluña	0,32	Marche	0,02	Notio Aigaio	--
		C. Valenciana	0,15	Lazio	0,68	Kriti	--
		Illes Balears	0,14	Abruzzo	0,11		
		Andalucía	0,27	Molise	0,09		
		Región de Murcia	0,17	Campania	0,15		
		C. A. Ceuta	0,00	Puglia	0,08		
		C. A. Melilla	0,01	Basilicata	0,27		
		Canarias	0,20	Calabria	0,05		
				Sicilia	0,09		
				Sardegna	0,11		
PORTUGAL	0,12	SPAIN	0,28	ITALY	0,17	GREECE	--

Source: Eurostat

3. ECONOMY



TABLE 40– TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE - HIGHER EDUCATION SECTOR (PERCENTAGE OF GDP), COUNTRY LEVEL

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EUROPEAN UNION 28	0,39	0,4	0,41	0,4	0,4	0,4	0,4	0,43	0,47	0,47	0,46	0,47	0,48	0,47
GREECE	0,25	--	0,26	0,25	0,28	0,27	0,28	--	--	--	0,27	0,28	0,3	0,31
SPAIN	0,28	0,29	0,31	0,31	0,32	0,32	0,33	0,35	0,38	0,38	0,37	0,35	0,35	0,34
ITALY	0,34	0,36	0,36	0,35	0,32	0,33	0,34	0,35	0,37	0,35	0,35	0,36	0,37	0,35
PORTUGAL	0,28	0,27	0,27	0,27	0,27	0,3	0,33	0,5	0,58	0,57	0,53	0,5	0,6	0,59

Source: Eurostat

FIGURE 64 – TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE - HIGHER EDUCATION SECTOR (PERCENTAGE OF GDP), COUNTRY LEVEL

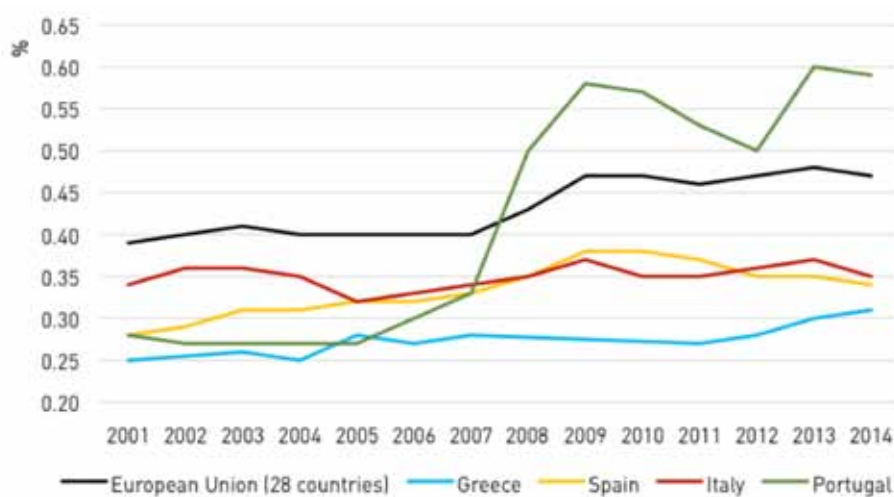


FIGURE 65 - TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE - HIGHER EDUCATION SECTOR (PERCENTAGE OF GDP)

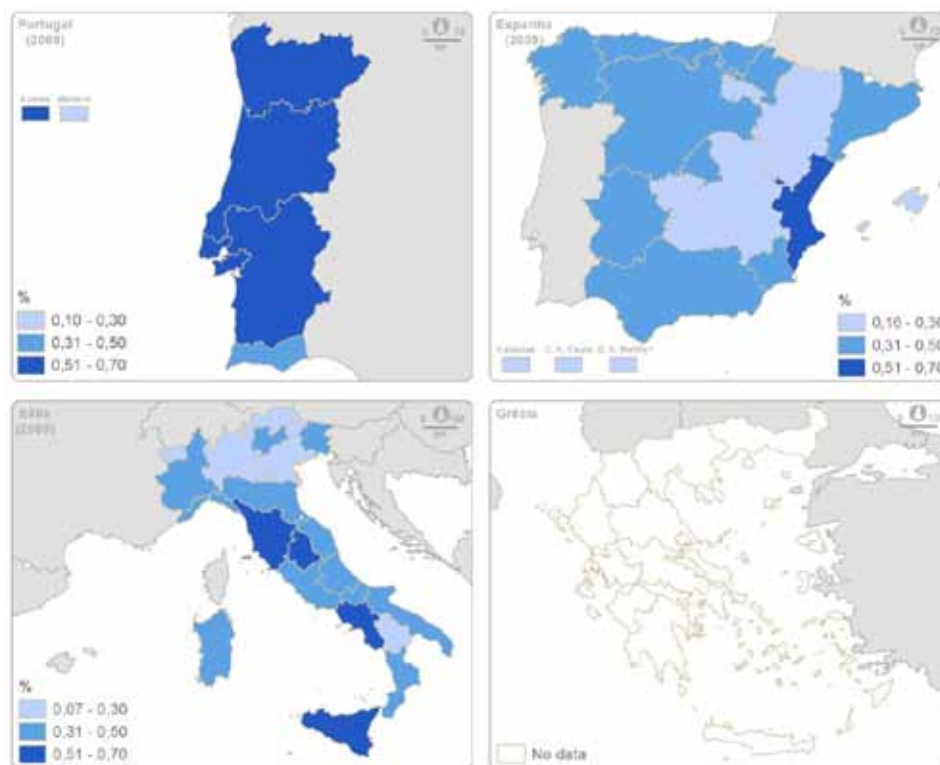


TABLE 41 - TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE - HIGHER EDUCATION SECTOR (PERCENTAGE OF GDP)

PORTUGAL	2009	SPAIN	2009	ITALY	2009	GREECE	2009
Norte	0,59	Galicia	0,37	Piemonte	0,32	Anatoliki Makedonia, Thraki	--
Algarve	0,36	Principado de Asturias	0,42	Valle d'Aosta	0,08	Kentriki Makedonia	--
Centro	0,62	Cantabria	0,49	Liguria	0,33	Dytiki Makedonia	--
Lisboa	0,67	País Vasco	0,37	Lombardia	0,24	Thessalia	--
Alentejo	0,51	C. Foral de Navarra	0,47	P. A. Bolzano	0,07	Ipeiros	--
R. A. Açores	0,55	La Rioja	0,21	P. A. Trento	0,44	Ionian Nisia	--
R. A. Madeira	0,10	Aragón	0,23	Veneto	0,28	Dytiki Ellada	--
		C. Madrid	0,36	Friuli-Venezia Giulia	0,46	Stereia Ellada	--
		Castilla y León	0,40	Emilia-Romagna	0,38	Peloponnisos	--
		Castilla-la Mancha	0,22	Toscana	0,56	Attiki	--
		Extremadura	0,44	Umbria	0,70	Voreio Aigaio	--
		Cataluña	0,39	Marche	0,36	Notio Aigaio	--
		C. Valenciana	0,51	Lazio	0,44	Kriti	--
		Illes Balears	0,18	Abruzzo	0,44		
		Andalucía	0,48	Molise	0,34		
		Región de Murcia	0,36	Campania	0,58		
		C. A. Ceuta	0,16	Puglia	0,45		
		C. A. Melilla	0,27	Basilicata	0,22		
		Canarias	0,28	Calabria	0,37		
				Sicilia	0,53		
				Sardegna	0,49		
PORTUGAL	0,60	SPAIN	0,39	ITALY	0,38	GREECE	--

Source: Eurostat

3. ECONOMY



TABLE 42 – TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE - PRIVATE NON-PROFIT SECTOR (PERCENTAGE OF GDP), COUNTRY LEVEL

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
EUROPEAN UNION 28	0,01	0,02	0,01	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02	0,02
GREECE	0	--	0,01	0	0,01	0,01	0,01	--	--	--	0,01	0,01	0,01	0,01
SPAIN	0,01	0	0	0	0	0	0	0	0	0	0	0	0	0
ITALY	--	0,01	0,01	0,02	0,02	0,04	0,04	0,04	0,04	0,04	0,04	0,04	0,04	0,04
PORTUGAL	0,08	0,08	0,08	0,08	0,09	0,1	0,11	0,12	0,14	0,15	0,13	0,12	0,02	0,03

Source: Eurostat

FIGURE 66 - TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE - PRIVATE NON-PROFIT SECTOR (PERCENTAGE OF GDP), COUNTRY LEVEL

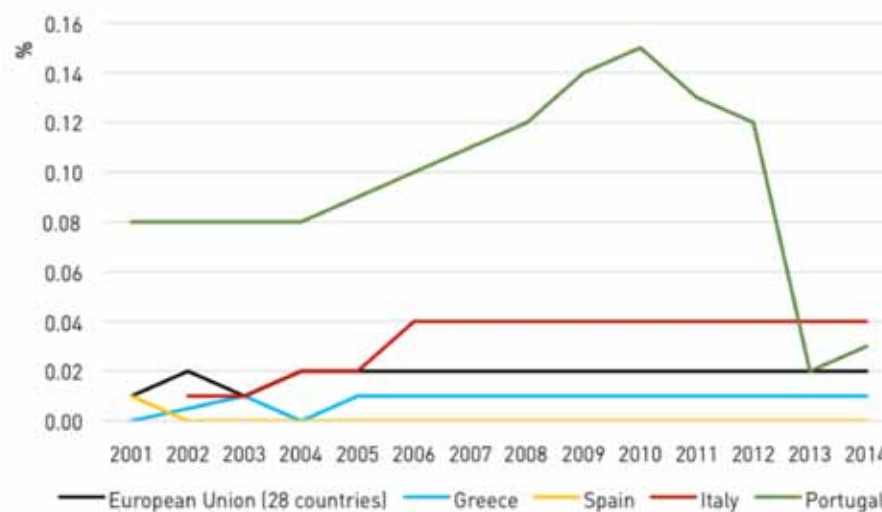


FIGURE 67 - TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE – PRIVATE NON-PROFIT SECTOR (PERCENTAGE OF GDP)



TABLE 43 - TOTAL INTRAMURAL R&D EXPENDITURE (GERD) BY SECTORS OF PERFORMANCE – PRIVATE NON-PROFIT SECTOR (PERCENTAGE OF GDP)

PORTUGAL	2009	SPAIN	2009	ITALY	2009	GREECE	2009
Norte	0,12	Galicia	0,00	Piemonte	0,06	Anatoliki Makedonia, Thraki	--
Algarve	0,00	Principado de Asturias	0,00	Valle d'Aosta	0,05	Kentriki Makedonia	--
Centro	0,09	Cantabria	0,02	Liguria	0,02	Dytiki Makedonia	--
Lisboa	0,25	País Vasco	0,00	Lombardia	0,12	Thessalia	--
Alentejo	0,01	C. Foral de Navarra	0,00	P. A. Bolzano	0,06	Ipeiros	--
R. A. Açores	0,05	La Rioja	0,01	P. A. Trento	0,06	Ionia Nisia	--
R. A. Madeira	0,01	Aragón	0,00	Veneto	0,01	Dytiki Ellada	--
		C. Madrid	0,00	Friuli-Venezia Giulia	0,01	Stereia Ellada	--
		Castilla y León	0,00	Emilia-Romagna	0,00	Peloponnisos	--
		Castilla-la Mancha	0,00	Toscana	0,01	Attiki	--
		Extremadura	0,00	Umbria	0,00	Voreio Aigaio	--
		Cataluña	0,00	Marche	0,00	Notio Aigaio	--
		C. Valenciana	0,00	Lazio	0,03	Kriti	--
		Illes Balears	0,00	Abruzzo	0,00		
		Andalucía	0,00	Molise	0,00		
		Región de Murcia	0,00	Campania	0,04		
		C. A. Ceuta	0,00	Puglia	0,05		
		C. A. Melilla	0,00	Basilicata	0,00		
		Canarias	0,00	Calabria	0,00		
				Sicilia	0,01		
				Sardegna	0,00		
PORTUGAL	0,16	SPAIN	0,00	ITALY	0,04	GREECE	--

Source: Eurostat



- Research and Development (R&D) personnel is another proxy for human capital development.
- There is a general increasing trend of the total R&D personnel and researchers by sectors of performance for all sectors (Percentage of total employment) in all the four Southern Europe countries, since 2001, although at a very different pace.
- Greece is the country with the highest score in 2013, with 2,35%.
- Portugal has the second best mark of all the four Southern Europe countries (2,15% in 2013) and is the country with the greatest increase throughout the time-series, starting at 0,77% in 2001.
- Italy, on the contrary, with 1,7% is the only country below EU28 average (1,93%).
- At NUTS 2 level Portugal and Spain show a good performance of their capital regions: Lisboa (PT) with 3% (the highest value across all regions) and Madrid (ES) with 1,8%.
- Italy has the regions with the lowest levels of R&D personnel, namely Calabria and Bolzano with 0,3%.

FIGURE 68 – TOTAL R&D PERSONNEL AND RESEARCHERS BY SECTORS OF PERFORMANCE BY COUNTRY – ALL SECTORS (PERCENTAGE OF TOTAL EMPLOYMENT)

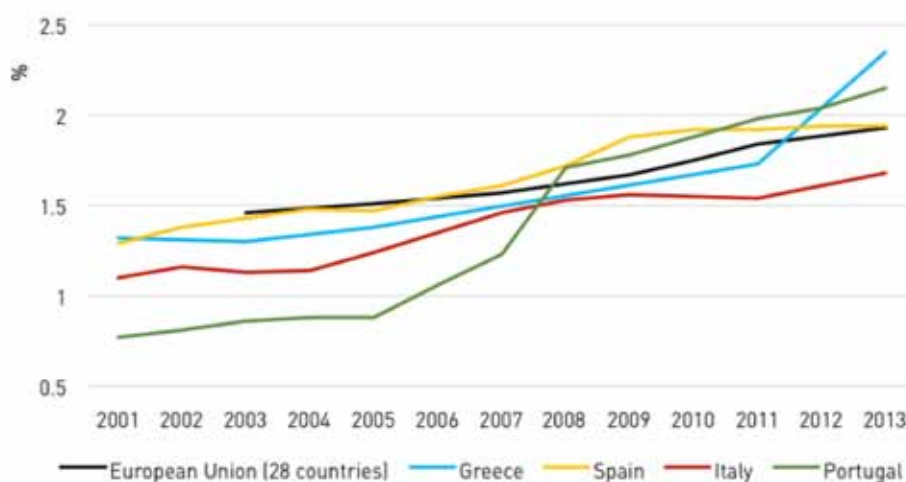


FIGURE 69 – TOTAL R&D PERSONNEL AND RESEARCHERS BY SECTORS OF PERFORMANCE – ALL SECTORS (PERCENTAGE OF TOTAL EMPLOYMENT)

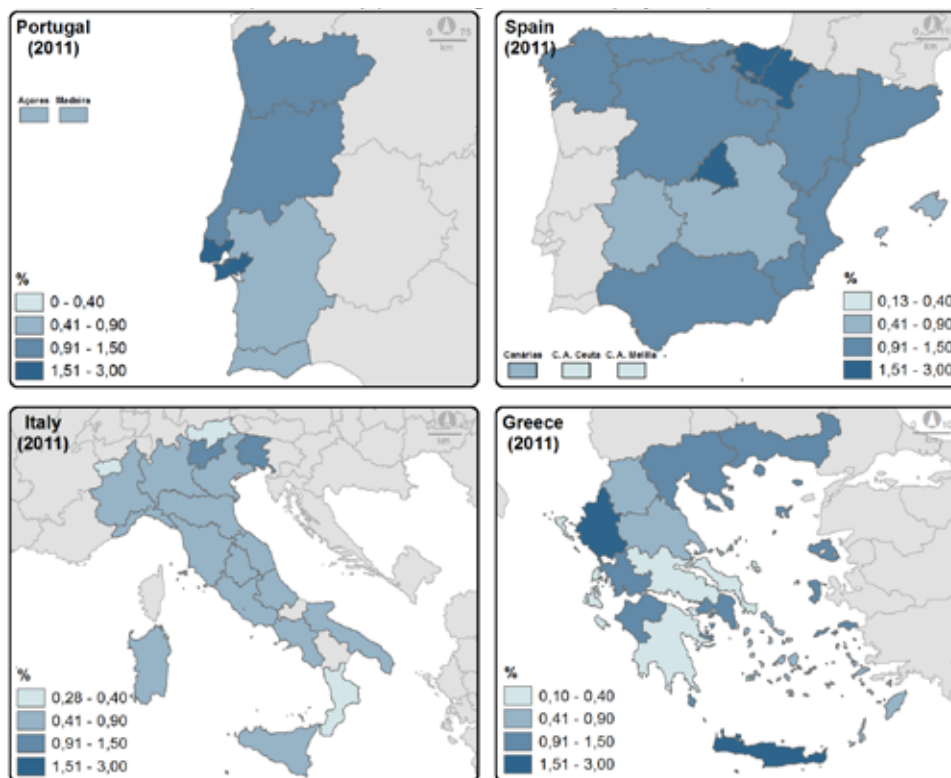


TABLE 44 – TOTAL R&D PERSONNEL AND RESEARCHERS BY SECTORS OF PERFORMANCE – ALL SECTORS (PERCENTAGE OF TOTAL EMPLOYMENT)

PORTUGAL	2011	SPAIN	2011	ITALY	2011	GREECE	2011
Norte	1,5	Galicia	1,0	Piemonte	0,7	Anatoliki Makedonia, Thraki	1,1
Algarve	0,8	Principado de Asturias	1,2	Valle d'Aosta	0,4	Kentriki Makedonia	1,3
Centro	1,5	Cantabria	0,9	Liguria	0,7	Dytiki Makedonia	0,7
Lisboa	3,0	País Vasco	1,8	Lombardia	0,7	Thessalia	0,9
Alentejo	0,6	C. Foral de Navarra	1,7	P. A. Bolzano	0,3	Ipeiros	1,9
R. A. Açores	0,5	La Rioja	1,0	P. A. Trento	1,0	Ionian Nisia	0,1
R. A. Madeira	0,5	Aragón	1,3	Veneto	0,5	Dytiki Ellada	1,3
		C. Madrid	1,8	Friuli-Venezia Giulia	1,0	Stereia Ellada	0,3
		Castilla y León	1,2	Emilia-Romagna	0,8	Peloponnisos	0,4
		Castilla-la Mancha	0,6	Toscana	0,8	Attiki	1,2
		Extremadura	0,7	Umbria	0,6	Voreio Aigaio	1,4
		Cataluña	1,2	Marche	0,5	Notio Aigaio	0,5
		C. Valenciana	1,1	Lazio	0,9	Kriti	1,7
		Illes Balears	0,6	Abruzzo	0,5		
		Andalucía	1,0	Molise			
		Región de Murcia	1,0	Campania	0,6		
		C. A. Ceuta	0,1	Puglia	0,5		
		C. A. Melilla	0,2	Basilicata			
		Canarias	0,7	Calabria	0,3		
				Sicilia	0,5		
				Sardegna	0,5		
PORTUGAL	1,7	SPAIN	1,2	ITALY	0,7	GREECE	1,1

Source: Eurostat



FIGURE 70 – RESEARCHERS AND R&D PERSONNEL, HEAD COUNT (%), ALL SECTORS, COUNTRY LEVEL (1995 TO 2010)

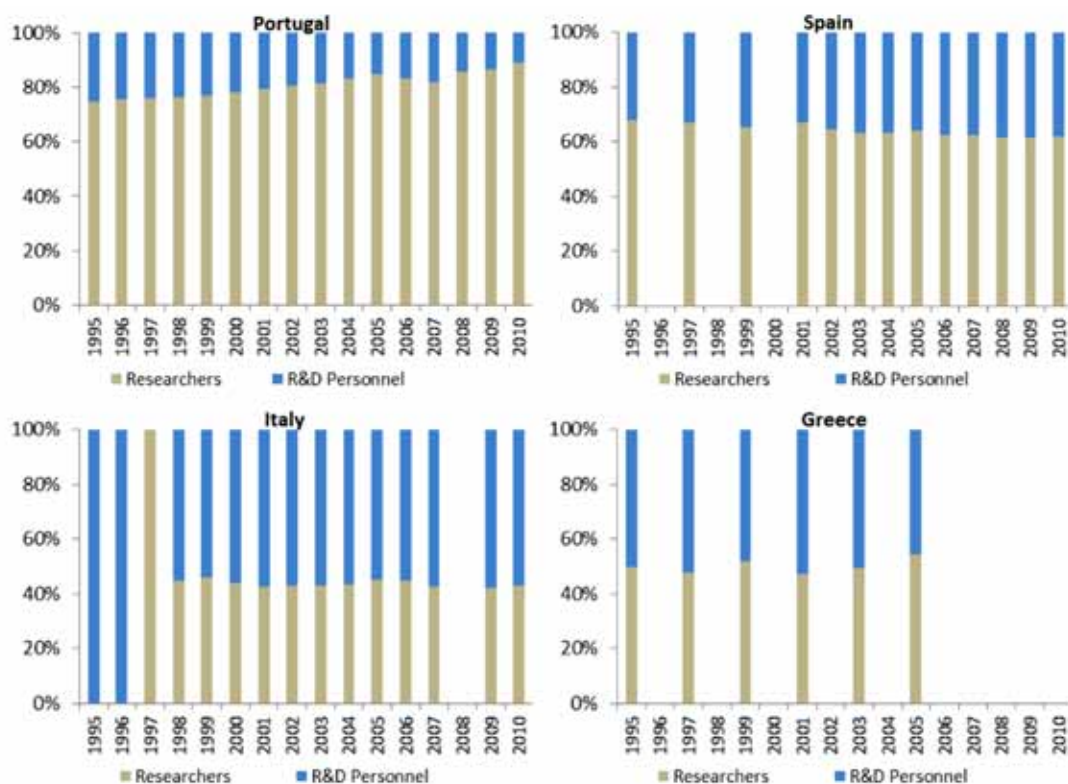
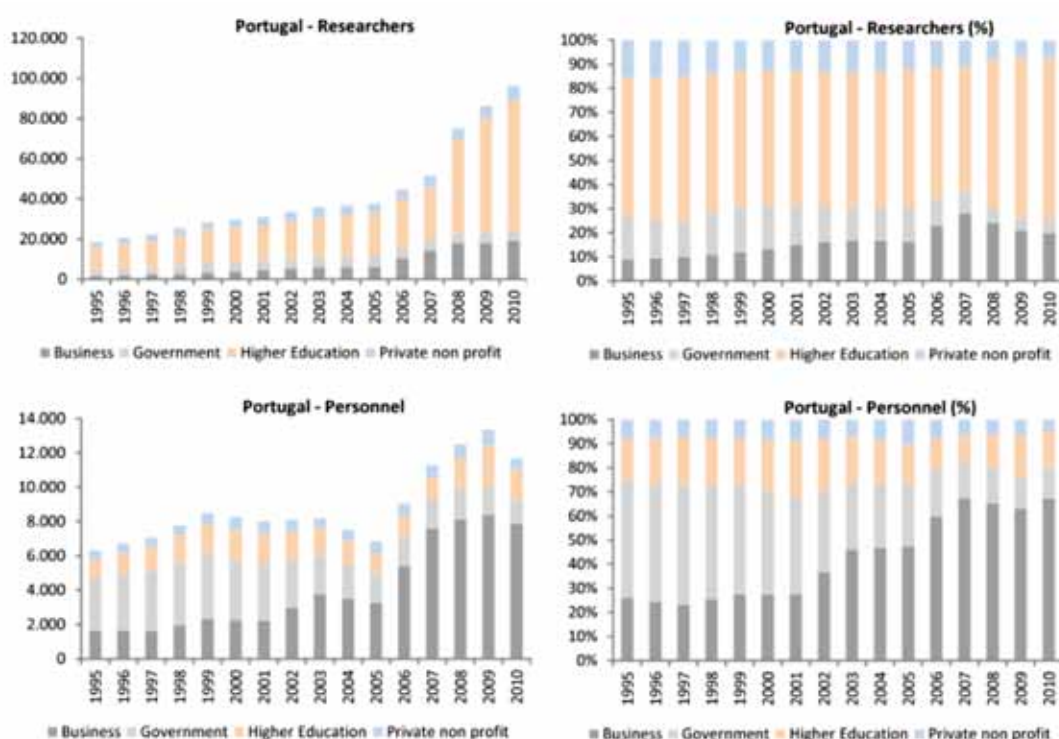
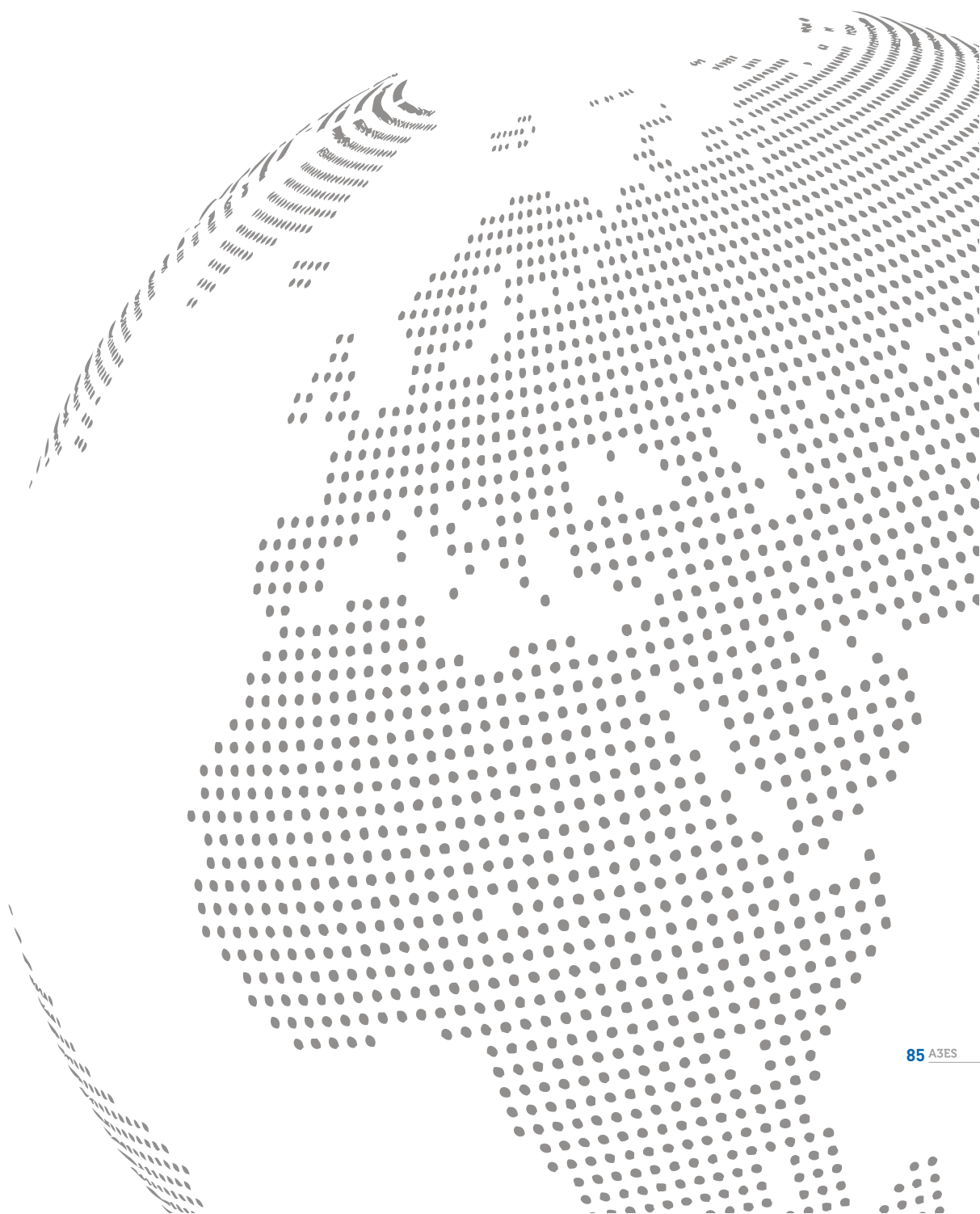


FIGURE 71 – RESEARCHERS AND R&D PERSONNEL, HEAD COUNT AND %, IN FOUR MAIN SECTORS, PORTUGAL (1995 TO 2010)





HIGHER EDUCATION AND HUMAN CAPITAL: PORTUGAL AT A GLANCE IN THE SOUTHERN EUROPE CONTEXT

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LIST OF VARIABLES

Annex I

ID	DESCRIPTION	UNIT	TEMPORAL SERIES	EUROSTAT TABLE
	EDUCATION			
V1	Students in tertiary education (ISCED 5-6) - as % of the population aged 20-24 years at regional level	% of total 20 - 24 population on the same region	1999-2012	educ_regind
V2	Ratio of the proportion of students (ISCED 5-6) over the proportion of the population by NUTS 1 and NUTS 2 regions	ratio	2001-2012	educ_regind
V3	Students (ISCED 5-6) at regional level - as % of total country level students (ISCED 5-6)	% of country level students	2001-2012	educ_regind
V56	Students L6	Total students	2001-2012	educ_renlrg1
V5	Number of students by level of education, orientation, sex and NUTS 2 regions. All ISCED 1997 levels	Total students	2010	educ_renlrg1
V7P	N.º students - Second stage of tertiary education leading to an advanced research qualification (level 6). Cartografado: Percentagem de alunos 6 da NUT, no total de alunos 6 do país	%	2012	educ_renlrg1
V8F	Persons aged 25-64 with lower secondary education attainment, by sex and NUTS 2 regions (%). FEMALES	% of population 25-64	2000-2014	n/a
V9F	Persons aged 25-64 with upper secondary education attainment, by sex and NUTS 2 regions (%). FEMALES	% of population 25-64	2000-2014	n/a
V10F	Persons aged 25-64 with tertiary education attainment by sex and NUTS 2 regions (%). FEMALES	% of population 25-64	2000-2014	n/a
V101F	Early leavers from education and training by sex and labour status FEMALES	% population age 18-24	2001-2014	edat_lfse_16
V102	Young people neither in employment nor in education and training by sex and NUTS 2 regions (NEET rates)	% population age 15-24	2001-2014	edat_lfse_22
V103	Population aged 30-34 by educational attainment level (Tertiary education ISCED 5-6)	% population age 30-34	2001-2014	edat_lfse_12



Annex II

ID	DESCRIPTION	UNIT	TEMPORAL SERIES	EUROSTAT TABLE
	POPULATION			
V11	Population on 1 January by age, sex and NUTS 2 regions	total	1991-2014	demo_r_d2jan
V11Txv	Population variation 2001-2014 - V11Txv	TxVar	2001-2014	demo_r_d2jan
V12	% Population From 0 to 19 years over NUT total	%	2014	demo_r_pjangroup
V13	% Population From 20 to 39 years over NUT total	%	2011	demo_r_pjangroup
V14	% Population From 40 to 59 years over NUT total	%	2011	demo_r_pjangroup
V15	% Population From 60 to 79 years over NUT total	%	2011	demo_r_pjangroup
V16	% Population 80 years or over over NUT total	%	2011	demo_r_pjangroup
V17	Fertility rates by age and NUTS 2 regions	births per woman	2001-2013	demo_r_frate2
V200	Population density	Habitants per Km2	2001-2013	demo_r_d3dens
V201	Life expectancy (age - less than one year)	total years	2009-2013	demo_r_mlifexp
V202	Old Age Dependency Ratio (Population 65+/Population 15-64)	%	2013	demo_r_pjangroup
V203	Population change - Crude rate natural change	‰ per thousand inhabitants	2001-2014	demo_r_gind3
V204	Population change - Crude rate of net migration	‰ per thousand inhabitants	2001-2014	demo_r_gind3
V205	Population change - Crude rate of total population change	‰ per thousand inhabitants	2001-2014	demo_r_gind3



Annex III

ID	DESCRIPTION	UNIT	TEMPORAL SERIES	EUROSTAT TABLE
	ECONOMY			
V19	Gross domestic product (GDP) at current market prices - Purchasing Power Standard per inhabitant in percentage of the EU average	%	2001-2013	nama_10r_2gdp
V26	Total intramural R&D expenditure (GERD) by sectors of performance - All sectors (Euro per inhabitant; Percentage of GDP)	% of GDP	2011-2012	rd_e_gerdreg
V27	Total intramural R&D expenditure (GERD) by sectors of performance - Business enterprise sector (Euro per inhabitant; Percentage of GDP)	% of GDP	2011-2012	rd_e_gerdreg
V28	Total intramural R&D expenditure (GERD) by sectors of performance - Government sector (Euro per inhabitant; Percentage of GDP)	% of GDP	2011-2012	rd_e_gerdreg
V29	Total intramural R&D expenditure (GERD) by sectors of performance - Higher education sector (Euro per inhabitant; Percentage of GDP)	% of GDP	2011-2012	rd_e_gerdreg
V34	Total R&D personnel and researchers by sectors of performance, sex - (Total R&D personnel; Researchers) (Total(M+F)) (Higher education sector) (Percentage of active population - numerator in head count; Percentage of total employment - numerator in head count; Head count)	% of employment	2009-2013	rd_p_persreg
V35	Total R&D personnel and researchers by sectors of performance, sex - (Total R&D personnel; Researchers) (Total(M+F)) (Private non-profit sector) (Percentage of active population - numerator in head count; Percentage of total employment - numerator in head count; Head count)	% of employment	2009-2013	rd_p_persreg
V36	Unemployment rates by sex, age and NUTS 2 regions (%): Total, 20-64 anos	% of population 20-64	2001-2014	lfst_r_lfu3rt
V40	Long-term unemployment (12 months and more) by NUTS 2 regions: Long-term unemployment as a percentage of the total unemployment	% of total unemployment	2001-2014	lfst_r_lfu2ltu
V306	Employment rates by sex, age and NUTS 2 regions (15-64) (%)	% of population 15-64	2001-2014	lfst_r_lfe2emprr
V308	HRST by category and NUTS 2 regions - Persons with tertiary education (ISCED) and/or employed in science and technology - Percentage of active population	% of active population	2001-2013	hrst_st_rcat



