

The influence of the Crisis on the future of the European Higher Education Area

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INTRODUCTION

The financial crisis which begun at the end of the last decade at the United States, has introduced big changes in economical, social, political and other aspects of citizen's life in many countries all over the world. This paper follows another one presented at the 2013 SEFI Annual Conference, which was also dealing with the influence of the crisis on the European Higher Education Area (EHEA) [1]. There are, however, some differences between both papers. First of all, a broader perspective has been taken this time by paying not so much attention to what is happening in Spain. On the other hand, there is another year with new data. Finally, we also have an extra year of the crisis, and more aspects of their effects become apparent.

For years, cuts in public funding have been implemented in many European Universities. Moreover, further cuts were applied to educational budgets, trying to reduce public deficits. Those cuts are affecting some basic pillars of the European Union, which is not only a political and economic structure but also a social construction. With reference to the EHEA, its social dimension means equal opportunities for people in having an education of quality, and it is focussed in facilitating access to HE and in getting a Degree, independently of the socio-economic background of students, and other factors which may lead to educational disadvantage.

In some countries, severe reductions in grants and study loans have been introduced at a time when registration fees have suffered a substantial increase and, at the same time, the number of teachers has been reduced, they have more lecture hours and their salaries are falling. These effects are a matter of discussion among common people in the street, and have been widely reported by the mass media in different formats (see, for instance and with reference to Spain [2], [3]). The authors discuss in this paper the effects of these cuts and analyze how a double segregation in EHEA is being enhanced: nationally, for students from more deprived groups, and across the EHEA, for countries with bigger financial problems with respect to those who are better off.

1 THE SOCIAL DIMENSION OF THE EHEA

Allowing access to Higher Education (HE) to a larger part of the society is necessary in a social environment where skills and competences are increasingly important, taking into account the social dimension of education, which has been defined as [4]: *"equal opportunities for access to quality education, as well as equity in treatment, including adapting provisions to individuals' needs", whereby "equitable education and training systems ... are aimed at providing opportunities, access, treatment and outcomes that are independent of socio-economic background and other factors which may lead to educational disadvantage"*

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The OECD has reviewed equity policies in HE to foster the goal of a socially inclusive system [5], which has to guarantee equity in the access. They found that admission and selection systems have to avoid the perpetuation of socio-economic exclusion patterns by focusing exclusively on either secondary school performance or performance in admission tests. Finally, they consider that action is required to allow students from under-represented groups to succeed in finishing their studies.

The reform and modernisation of HE in Europe has been linked in the Bologna process to the achievement of social and economic goals [6]: "... universities are key players in Europe's future and for the successful transition to a knowledge-based economy and society. However, this crucial sector of the economy and of society needs in-depth restructuring and modernisation if Europe is not to lose out in the global competition in education, research and innovation".

The Commission called on member states to focus funding on outputs rather than inputs. In that line, the Council marked for 2020 that "the share of 30-34 year olds with tertiary educational attainment should be at least 40 %" [7]. In a recent review by Eurydice of the social dimension in the EHEA [8] remarked that few countries have linked their policy on the social dimension to the Bologna commitment of raising the participation of under-represented groups, and have set targets for increasing the participation of those groups in HE.

2 SOME DATA ON FUNDING HIGHER EDUCATION

Public funding is the main source of resources for (HE) institutions [9]. The availability of public money is being reduced in many European countries, after years of being continuously upwards. The evolution of European governments' expenditure on education (not only in HE) in the period 2002-2012 is shown in Figure 1. The upper line is for absolute figures and the lower one is for those relatives to percentages of GDP, which shows a peaking in 2009.

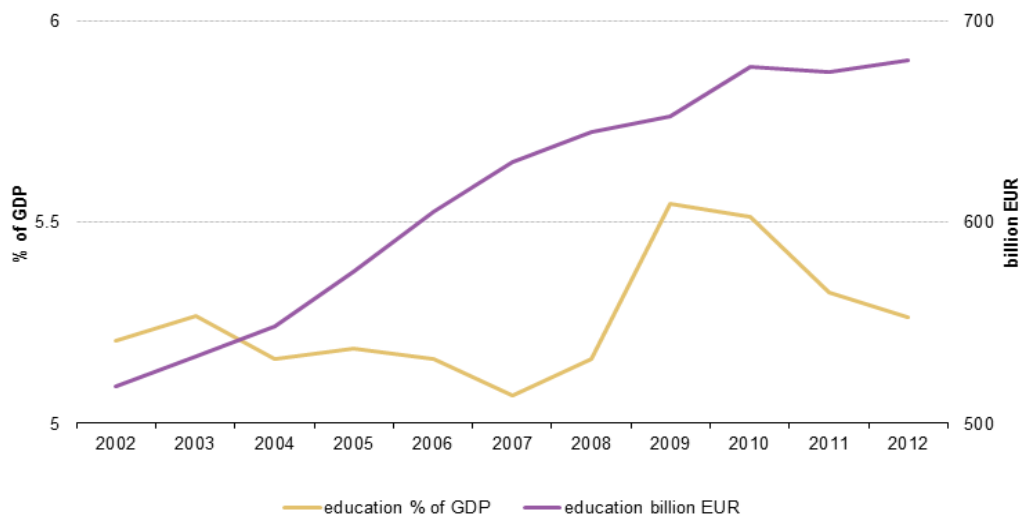


Fig. 1. EU-27 general government expenditure on education, 2002-2012 - Source: Eurostat and [10]

Comparative values of investment in HE for UE-21, OECD, and Spain for 1995- 2010 appear in Figure 2. The three categories have substantially increased their investment from 1995 to 2010. On the other hand, Figure 3 shows public expenditure at constant prices as a percentage of GDP between 1995 and 2010. After peaking at 2005, it decreased in all the three groups in the last period considered.

The evolution of funding in education for European countries in the period 2008- 2012 can be seen in Figure 4. Some countries, those on the left, are suffering severe cuts (higher than 40% in three years) while others on the right, have substantial increases, up to 15% for Denmark. However, the cuts have not taken place uniformly in the four years, but have been higher in the second half of it.

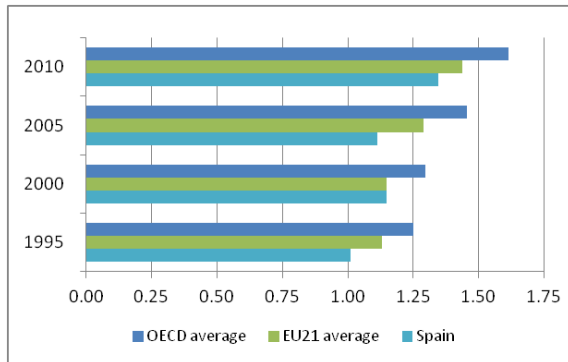


Fig. 2. Expenditure on educational institutions as a percentage of GDP. Tertiary education [From 11, Table B2.1.]

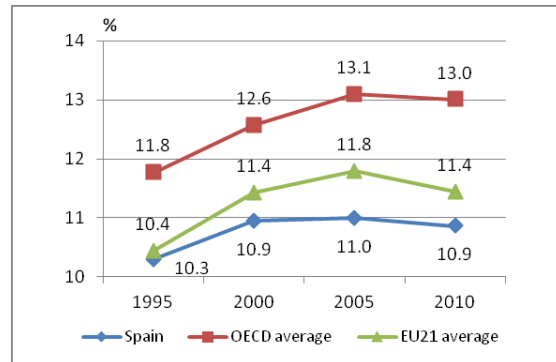


Fig. 3. Public expenditure on education as a percentage of total public expenditure [From 11, Table B4.2.]

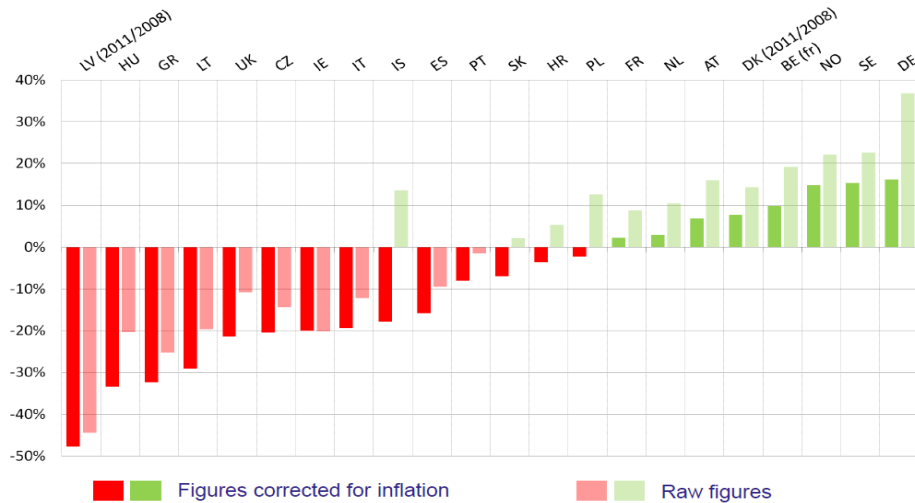


Fig. 4. Total funding to higher education in Europe. % variation 2012/2008 [12]

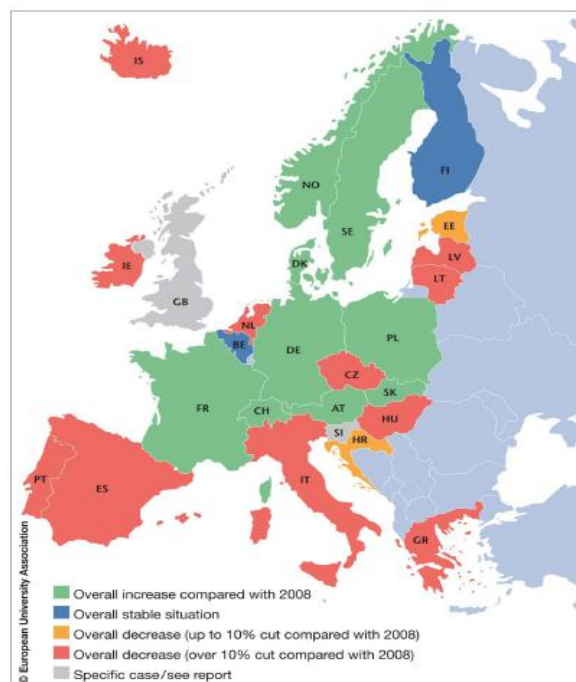


Fig. 5. Trends in public funding to higher education in Europe over the period 2008 -2012 [13]

Changes in education investment of European countries in 2012 compared to 2008, can be seen graphically represented in Figure 5. Some of them are increasing it while others are continuing cutting schemes which were started previously.

Table 1. Evolution of general government expenditure on education by country, 2006-2012
Source: Eurostat and [10]

	million EUR						
	2006	2007	2008	2009	2010	2011	2012
EU-27	605 054	630 167	645 078	652 839	677 631	674 689	680 458
EU-28	:	:	:	:	:	:	682 663
EA-17	412 417	427 916	444 874	465 852	474 665	476 211	475 244
EA-18	413 788	429 667	447 016	467 638	476 227	477 859	476 978
BE	18 558	19 250	20 444	21 226	21 845	23 116	23 742
BG (p)	990	1 166	1 460	1 508	1 368	1 396	1 398
CZ	5 596	5 923	6 899	6 844	7 231	7 643	7 395
DK	15 419	15 353	16 283	17 816	19 050	18 670	19 317
DE	93 540	95 600	98 270	104 370	110 640	113 680	115 600
EE	800	944	1 090	994	962	1 028	1 115
IE	8 107	9 026	9 527	8 766	8 537	8 440	8 549
EL (p)	8 098	8 634	9 607	9 836	8 910	8 566	7 939
ES	42 311	46 088	50 137	52 902	51 651	50 278	46 030
FR	103 500	105 128	109 514	116 227	119 319	121 122	124 751
HR	:	:	:	:	:	:	2 204
IT	68 132	70 821	69 279	70 577	69 233	66 289	65 106
CY	934	1 006	1 166	1 220	1 297	1 284	1 185
LV	1 372	1 751	2 142	1 786	1 562	1 648	1 735
LT	1 286	1 486	1 875	1 820	1 687	1 794	1 845
LU	1 486	1 590	1 733	1 887	2 056	2 139	2 330
HU (p)	5 214	5 419	5 520	4 865	5 439	5 148	4 650
MT	287	296	312	321	362	381	405
NL	28 895	30 470	32 404	33 828	34 272	34 630	34 841
AT	13 574	14 155	15 189	15 854	16 332	16 733	17 088
PL	16 190	17 642	20 843	17 337	20 027	20 542	20 814
PT	10 623	10 406	10 743	11 464	12 228	11 240	9 350
RO	4 027	4 915	6 253	4 831	4 160	5 428	3 964
SI	1 974	2 051	2 273	2 313	2 343	2 392	2 265
SK	1 665	2 116	2 241	2 729	2 943	2 817	2 737
FI	9 932	10 335	10 944	11 338	11 735	12 074	12 213
SE (p)	21 952	22 560	22 808	21 133	24 136	26 225	27 800
UK	120 592	126 037	116 122	109 047	118 306	109 984	116 297
IS (p)	1 105	1 211	860	742	791	815	846
NO	14 537	15 487	16 168	16 492	18 655	19 607	21 275
CH	18 531	18 314	20 218	22 456	25 424	28 983	30 147

Table 1 shows that public expenditure in Education in Europe has increased continuously in the period 2006 - 2012. When looking closer at the figures, there is a group of Northern and Central Countries, like Denmark, Sweden, Norway, Germany, Austria, among others, following that trend and continue to increase their educational budgets. On the other hand, countries severely hit by the crisis, like Greece, Portugal, Spain, and also Italy, Hungary and others in Eastern and Southern Europe, have been applying cuts in educational budgets for years.

Investment in R&D in EU members as a % of GDP in 2012 is plotted against the 2020 goals in Figure 6. There is a wide gap in the figures among countries investing higher, as Finland and Sweden are those who are on the lower side. As a consequence, 2020 goals are difficult to be achieved by those countries that have been in the last years applying great cuts to their R&D budgets.

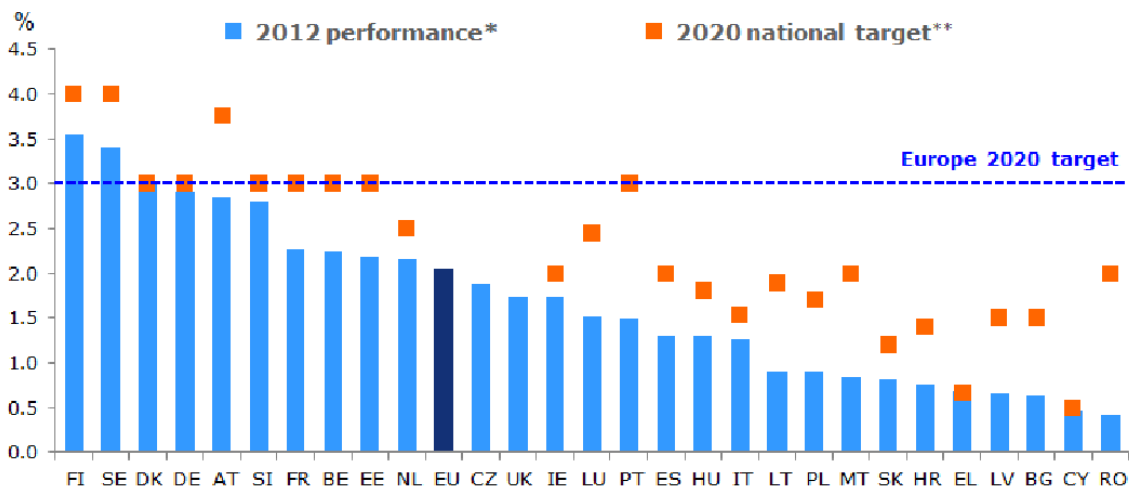


Fig. 6. R&D investment in EU Member States as a % of GDP [14]

With reference to registration fees, in Northern countries they represent around 5% of Universities' incomes, while in some others they approach to 20% of them [9]. This way of transferring educational cuts to students has been implemented not only in the UK but also in some other countries where registration fees have been sharply increased arguing that those using a public service should contribute substantially to maintain it. Figure 7 shows the evolution of average prices for ECTS in Master degrees for both experimental and non experimental studies in Spain.

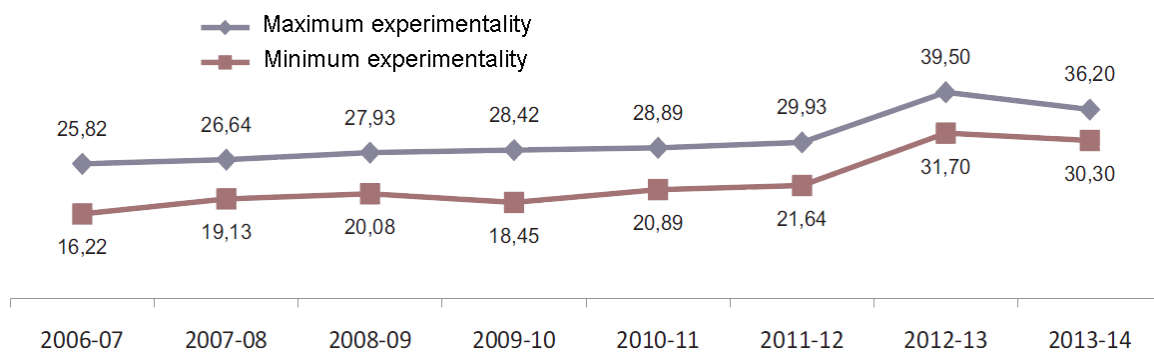


Fig. 7. Evolution of ECTS average price (Euros) for Official Masters in Spain [15]

3 ANALYSIS

Cutting investment in education in general, and in HE in particular, is a matter of concern in many countries all over the world. Analysis of its probable effects can be seen in specialised papers on education as well as in newspapers of general interest. In most of them the emphasis is put on the lasting effects for the future of cuts applied in the last five years. Printed and digital media are not only offering a first evaluation of the effects of the crisis on HE but also providing more updated data than those found in official statistics [16], [17] and [18].

Generally speaking, many Eastern and Southern European countries appear to be more affected by the crisis than others in Northern, Central and Western Europe, although there are notable exceptions. Not surprisingly, among the countries introducing bigger cuts in funding HE are many of those having in previous years lower rates of expenditure in education with reference to their GDP. As a consequence, their educational gaps are increasing with respect to those European countries investing more in education and there is also an enhancement of brain drain from countries in the first group to others in the second.

Cuts in public funding increase the pressure on Universities to look for other financial sources, and also for increasing student fees. This process has been especially hard in countries like Spain where some universities increased fees by almost 70% between 2012 and 2013, at a time when the Ministry of Education was reducing the average value of university grants and raising the requisites to obtain them. This process, which has also taken place in other European countries is clearly against the principles of the Social Dimension of EHEA, and introduces greater inequities in accessing and continuing in HE, depending on the economic status of the students. More deprived students are usually the first in suffering the cuts which, in general, reduce their possibilities for entering and staying at the University until their graduation. Another group severely hit by the crisis is that of young teachers, who find more difficulties for enrolling at the university and lower prospects for an academic career.

Another very negative effect also derives from cuts in HE and in Research, Development and Innovation. Countries who are applying bigger cuts may not be able to collect funding from European Sources as the Framework Programme and Horizon 2020, since they have no money to put their part in co financed projects. The EUA [19] warns that divergent trends in funding HE and research reduce the potential for trans- national academic and scientific cooperation and also that they compromise the completion of European Higher Education and Research Areas. European Funds like Horizon 2020, Erasmus+ and others, should take into account those problems and establish appropriate and compensatory actions. The Commission [14] states that there is a North- South divide in R&D investment. Expenditure in R&D as a share of GDP in 2000 ranged from 0.37% in Romania to 3.35% in Finland. In 2012 the figures were 0.42 and 3.55 respectively, so the gap between them increased from 2.98 to 3.13.

While the EU has been named by the World Bank as a “convergence machine” [20], *“this convergence process has slowed down and even gone into reverse in parts of Europe as a result of the accumulation of imbalances under the pressure of the crisis”*.

The Commission has prepared a review of the present state of the Europe 2020 strategy [14], addressed to the Parliament and other European organisms. Some of the points remark problems in educational and social issues. Since mid- 1980s the top 20% earned 5.1 times as much income as the bottom 20%, peaking the difference at 7.2 in Spain. Also to remark is that the number of people at risk of poverty and social exclusion in the EU- 27 increased between 2009 and 2013 from 114 to 124 million.

In European countries with more economic difficulties, there is a general trend in Universities towards cutting in capital investment, and in the maintenance and development of infrastructure in campus facilities, and research and education equipments. Also suffering from the first moment of the cuts, are the innovation programmes and those for teachers training. Moreover, the replacement of teaching positions is severely reduced.

The new Erasmus + programme may be not the right tool for overcoming social differences among European students. The reduction of the granted period to 3 or 5 months, disappearing grants for the whole academic year, is a burden for most deprived students who should go back to their countries when the grants finish, while well off students can stay longer and enjoy more possibilities for learning. Many countries do not provide grants complementary to Erasmus + while others they do it. In Spain higher levels in foreign languages will be requested from 2014-2015, which put students in front of another inequity, since high levels in foreign languages are not common among deprived groups.

As we see, cuts are severely affecting some factors that are critical for the day to day running of Universities as well as for their future prospects. These factors are considered in Quality Assurance evaluation procedures, and lowering those standards will imply a reduction of the product´s quality. If HE is a citizens´ right, that process may compromise minimum standards in the near future. But if HE is only a commodity, no minimums are required, and lowering the quality in the educational product will only mean a lower price in the market, to be offered to those who will not be able to enter in centres of excellence.

The cuts in HE are going in the direction of offering it more as a commodity than as a citizen´s right. The increases in fees, which in many countries like Spain are not accompanied by a sensible policy of grants and loans, and some compensatory measures addressed to more deprived parts of the society, are increasing present inequities.

These facts are affecting both to potential and actual engineering students. First of all, in many countries registration fees are higher for engineering degrees than those in non experimental fields of study. On the other hand, drop out rates and times for finishing studies are higher for engineering than for other tertiary studies all over Europe. Finally, marks tend also to be rather low in engineering faculties. Finally, these facts usually imply for engineering students more difficulties to obtain and maintain grants and study loans than for other fields of study. These difficulties move young people from most deprived sectors to follow studies that they consider more affordable and with lower risks for the future, but not engineering.

4 FINAL REMARKS

To overcome these problems, some actions can be proposed with reference to:

- *Increases in tuition fees.* They should not be introduced without a policy of grants and study loans, and other compensatory actions to allow most deprived sectors possibilities for entering and staying at universities. While this is not implemented, increases in fees should stop and then reverse to symbolic or zero cost.
- *Cuts in investment in new buildings and equipments.* As referred above, they are going on for years in some European countries. The effects of these cuts on the quality and the social dimension of HE in countries under severe crisis is now emerging, and they will be devastating in a few years.
- *Avoiding educational gaps in Europe.* For the authors a double segregation in HE is advancing in Europe and compromising the building of the EHEA with respect to its social dimension. First, on a national basis for students from more deprived groups. And second, across the EHEA, for countries with bigger financial problems with respect to those who are better off.
- *Corrective actions by the European Commission.* To be taken through programmes like Erasmus+, or Horizon 2020, to guarantee that students will find equity in accessing to HE and in the possibility to finish their studies. The Commission should also encourage national governments for adopting actions in order to reverse the negative effects of present crisis on the social dimension of education.

The crisis, not only economical but also social and political, is creating great differences among European countries and also among different social sectors within each of them. These differences are compromising the EHEA and its social dimension, and also the building of the European Research Area, since some countries are lagging further behind of those who are leading research, development and innovation in Europe. In this atmosphere we cannot claim the sustainability of the European educational system.

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