

The Financial Crisis and its Influence on the EHEA A view from Spain

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INTRODUCTION

The European Union is not only a political and economic structure but also a social construction. Its social dimension aims at reducing inequities among citizens and countries. In this process, education plays a key role as a way of facilitating the access to culture and the democratic participation in society. The social dimension of Higher Education (HE) means equal opportunities for people in having an education of quality, and it aims at providing opportunities, access, and outcomes independently of socio- economic background and other factors which may lead to educational disadvantage.

In the decade 2000- 2010 Spain tried to reduce the educational gap with other countries by substantially increasing public funding in all levels of education, including HE. This trend was reversed since 2010, and successive annual cuts in HE budget have been applied by central and regional governments to all chapters of expenditure, with no criteria of merit, benefit or value. Severe reductions in grants and study loans were introduced at a time when registration fees have suffered a substantial increase.

The effects of these cuts on the quality and the social dimension of HE in Spain are now emerging, and they will be devastating in a few years. The process is analyzed in this paper with reference to what is happening in other European countries. The

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authors fear that a double segregation in HE may appear in Europe: 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. Some corrective measures are also discussed with a special focus on Engineering Education.

1 THE CONTEXT

1.1 Higher Education in Spain

HE in Spain is provided, almost exclusively, by Universities. In 2012 they were 50 public Universities and 32 private ones. According to the latest figures available [1], 1.469.653 students were following undergraduate programmes and about 113.061 were registered in Masters. Regulation of Spanish HE according to the EHEA was not definitively established until October 2007 [2], defining the guidelines for “Grados” (equivalent to Bachelors), Masters and Doctorates as well as the competences to be acquired in the new study programmes to be recognized all over Spain. General competences for each level were defined according to the Shared Dublin Descriptor. Most of these programmes did not start until the academic year 2009- 10.

Minimum duration for first cycles is established in 240 ECTS (4 years). Final Thesis/ Project must have between 6 and 30 ECTS, and at least 6 ECTS are reserved for activities such sports, students representation, solidarity and cooperation, and others.

Many Engineering Degrees are related to the so called regulated professions, and their study programmes must include specific competences in each Engineering field. According to the existing regulations, Degrees directly grant access to the profession and the Engineering Councils. For instance, the competences for Industrial Technical Engineers (in the new programmes “Graduado” in Mechanics, Electricity, Chemistry ...), are defined in [3]. A first block of 60 ECTS is common to all Engineering and Architecture Degrees, and there are another 60 ECTS common to all Industrial Engineering Degrees. 12 ECTS are allocated for the Final Project and 48 ECTS are assigned to specific subjects of each Engineering field. The other 60 credits can be freely allocated by each University.

1.2 Financing

Spain did a big financial effort between 1995 and 2010 its HE in line with European and OECD countries standards. The changes in expenditure per capita in the period can be seen in the *Fig. 1*.

	1995	2009
Austria	77	87
Belgium	-	114
Denmark	83	104
Finland	91	115
France	-	116
Germany	92	109
Ireland	80	136
Italy	82	113
Netherlands	100	103
Norway	104	104
Portugal	74	103
Spain	59	113
Sweden	102	114
United Kingdom	74	120
United States	74	83
EU21 average	95	113
OECD average	94	109

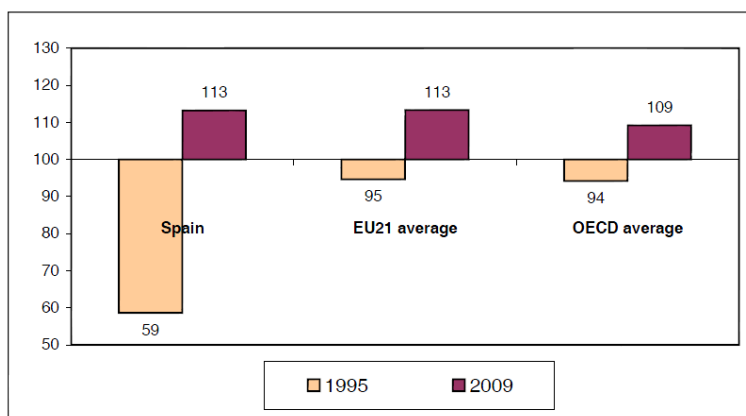


Fig. 1. Change in expenditure in HE per student. GDP 2005=100, constant prices [1]

Data for increases in annual expenditure in HE for different countries are shown in the *Fig. 2*. For Spain it was 45.2% while for OECD countries the average was 23.7%.

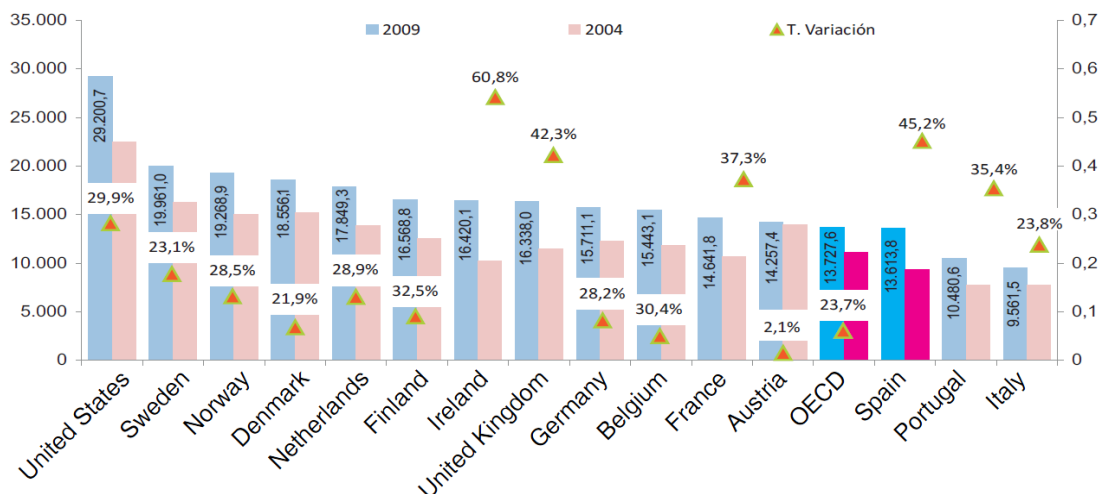


Fig. 2. Change in annual expenditure in HE per student for all services [4]

The Rectors of Spanish Public Universities prepared a declaration on public cuts in their budgets [5], remarking that:

1. The decrease in the 2013 General Budgets of the Central Government was 18% for HE and 80% in non financial expenditure for Research, Development and Innovation (I+ D+ i).
2. The deficit of all the Regional Governments and the cuts in the chapters they devote to public universities are putting the HE system near to its financial collapse, which will imply its irreversible deterioration.

The evolution of cuts in budgets applied to Research and Development (I+ D from the Spanish initials) during recent years can be seen in the Fig. 3. The recent evolution of the budget of the University of Valladolid can be followed in Fig. 4.

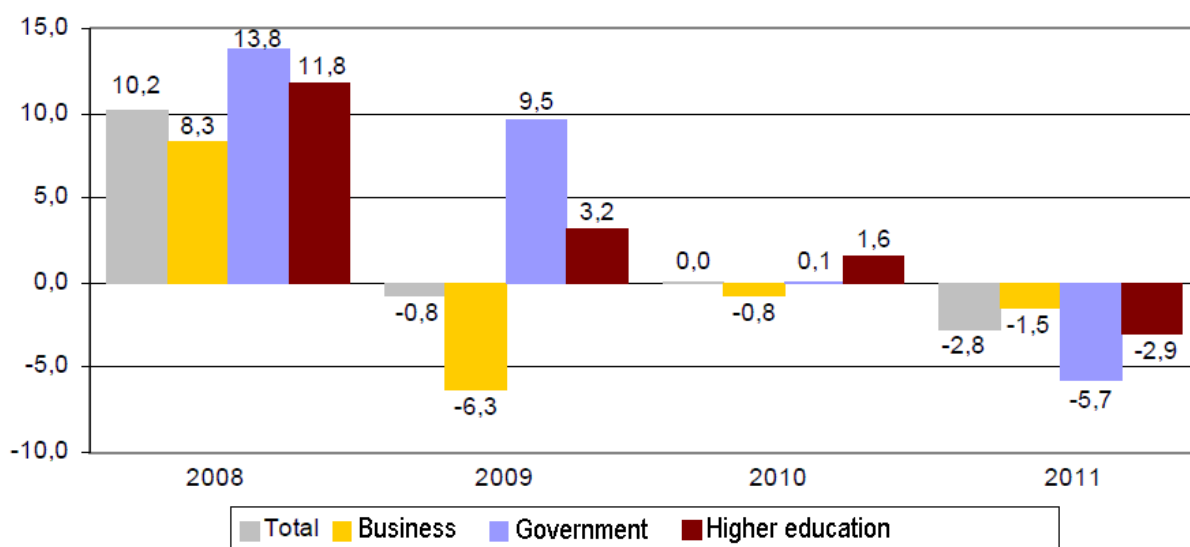


Fig. 3. Change in spending on R & D [6]

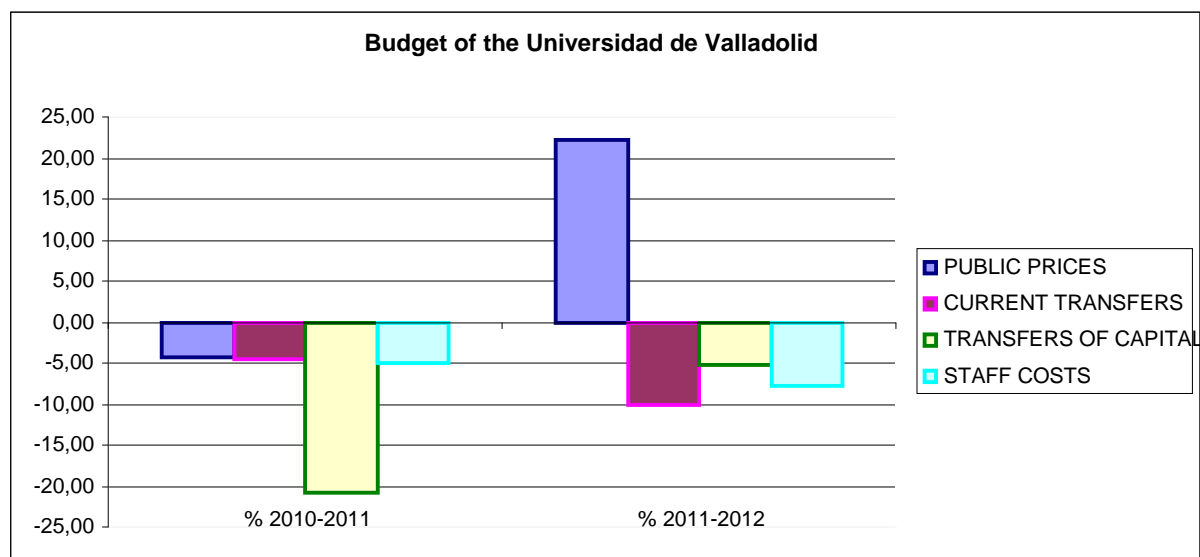


Fig. 4. Budgets 2010- 12. University of Valladolid

A similar evolution can be seen in other Spanish Universities. As an example, in the University of Valencia successive cuts have been applied in the last three years [7].

Almost all the Spanish universities have simply cut the investments for infrastructure, educational programmes on innovation and teachers training, and at the same time the allocation for running expenses have been heavily reduced.

Many teachers under temporary contracts have seen how they were not renewed at the beginning of the academic year. Losses in teachers due to retirement are only covered by 10% which means a reduction both in the total number of teachers and in their educational experience.

With respect to the mobility of students, most of it is supported by the Erasmus European programme. There is also a programme for mobility within Spain, called Seneca. The evolution in the numbers of students and the amount of public funding can be seen in the table. For the Erasmus programme, the funding in the last three years have decreased about 3%, while the numbers of students have increased by around 30% (*Table 1*). More Spanish students now move with less financial support

Table 1. Students and funding for Erasmus and Seneca programmes [1]

	Erasmus programme		Seneca programme	
	Students	Funding (€)	Students	Funding (€)
2004-05	20.761	5.094.342	1.900	7.077.842
2005-06	22.816	5.599.232	1.900	7.243.529
2006-07	22.239	17.714.430	2.010	8.184.500
2007-08	23.407	32.213.450	2.093	8.524.320
2008-09	25.909	54.592.756	2.073	8.401.310
2009-10	29.719	62.039.594	2.209	9.985.780
2010-11	33.334	62.018.133	2.033	8.643.420
2011-12	37.477	60.012.540	1.986	9.161.080

The reduction in funding for Spanish universities have been accompanied by continuous increases in registration fees (*Fig. 5*). The fees depend on the

experimental degree of the studies, and the number of times the student register in the same subject. Those fees are approved by the Regional Governments and there big differences from Region to Region (Fig. 6).

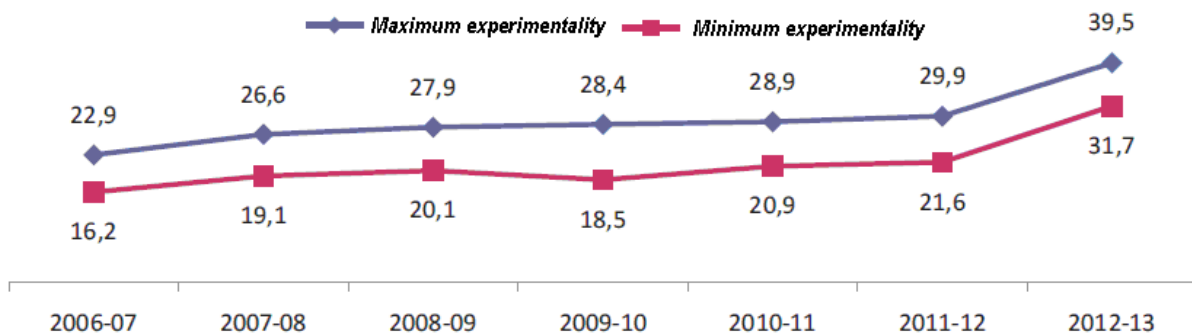


Fig. 5. Evolution of ECTS average price for Official Masters [1]

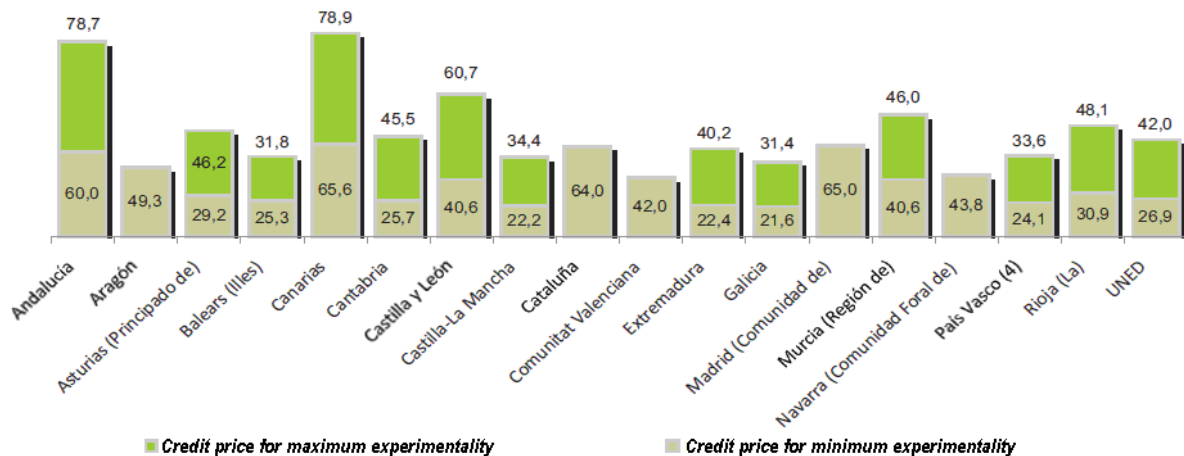


Fig. 6 . Fees in Master Degrees. Minimum and maximum (€ /Credit). 2012-13 [1]

At the same time the requirements for obtaining a grant have been raised both in academic and in economical terms. In April and May, the Spanish Ministry of Education was notifying to thousand of students that they will have no grants for paying their registration fees, and their living expenses since last September when the academic courses begun. The Universities have allocated emergency funds for covering registration fees for as many students as possible among those who cannot afford to pay for them. The situation for the next course is going to be worse, since many of those students will have to leave their students.

Engineering students may find more difficulties than others to face the new economical measures taken by national and regional governments. First, they are among those having lower marks and taking more years to complete their studies. On the other hand, they pay higher fees per ECTS than those studying non experimental degrees.

2 THE SOCIAL DIMENSION OF HIGHER EDUCATION

Increasing 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 [8] as:

"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"

The reform and modernisation of HE in Europe has been linked in the Bologna process to the achievement of social and economic goals:

"... 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" [9].

In this process 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 %" [10]. 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.

On the other hand, the OECD has reviewed equity policies in HE to foster the goal of a socially inclusive HE system [11], which has to guarantee equity in the access. In line with 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.

3 ANALYSIS

Spanish regions differ in the endowment of human capital as well as the return that individuals obtain from it and they have a big impact on regional wage gaps according to López-Bazo and Motellón (see [12]). Outside Europe, in Brazil education is the most important factor for explaining social differences among regions and increasing inequalities in human capital are likely to be associated with increasing economic inequalities (Azzoni and Servo in [12]).

An analysis of regional differences in the European Union both within and among different countries can be seen in [12]. It concludes that the highest rates of low-qualified people are mainly in Portugal, Spain, Italy and Greece, while the UK, Belgium, the Netherlands and Sweden have the lowest rates of low qualified people. With reference to tertiary education graduates the highest rates are in the UK, the Netherlands, northern Spain and Cyprus, while the lowest are in Italy, Portugal, and in some central and eastern countries.

Public funding is the main source of income for European HE institutions. While this source is being reduced, an increasing part of the cost is shifted to be paid by the students, as remarked in the previous section. This process is putting an extra burden on the most deprived sectors of the society that do not have proper information on the benefits of investing in HE. Taking this into account, an increase in the students' contributions to HE needs to be accompanied by support measures towards ensuring social equity. That is, higher fees have to be accompanied by additional grants and loans. There is a general agreement that the best way to foster the participation of lower socio-economic groups is the combination of tuition fees

with deferred payment, and it has been proposed that minimum or low tuition fees in HE should be charged in undergraduate courses for reducing social differences [12]. Present situation in different European countries, as shown in Figure 7, do not always guarantee social equity, and the situation is getting worse due to cuts aiming at reducing public deficit.

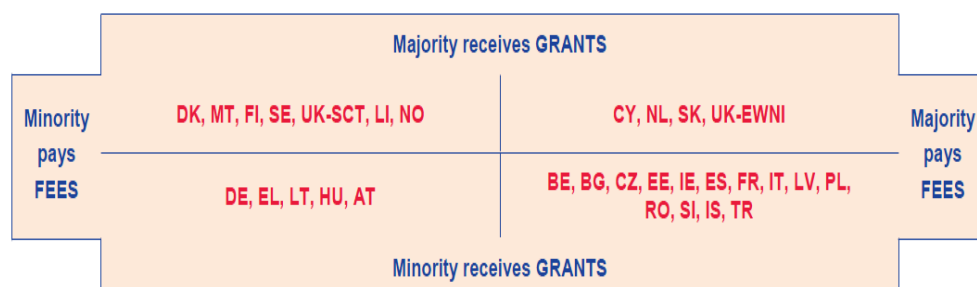


Fig. 7. Proportion of first and second cycle students paying fees and receiving grants, 2009/10. [13]

4 FINAL REMARKS

Cuts in expenditure in new buildings and equipments are going on for years in HE in Spain and in some other European countries. The effects of these cuts on the quality and the social dimension of HE in Spain are now emerging, and they will be devastating in a few years.

The authors fear that a double segregation in HE may appear in Europe. First, on a national basis for students from more deprived groups. And second, and across the EHEA, for countries with bigger financial problems with respect to those who are better off.

Some corrective measures have to be taken by the European Commission and the national governments to reverse the negative effects of present crisis on the social dimension of education.

REFERENCES

- [1] Ministerio de Educación, Cultura y Deporte (2012), Datos y Cifras del Sistema Universitario Español. Curso 2012-2013. On line, retrieved 30/03/2013 from: www.mecd.gob.es/dctm/sue/datos-y-cifras-sistema-universitario-espanol.pdf
- [2] Real Decreto 1393/2007, por el que se establece la ordenación de las enseñanzas universitarias oficiales On line, retrieved 20/04/2012 from: www.boe.es/boe/dias/2007/10/30/pdfs/A44037-44048.pdf.
- [3] Orden CIN/351/2009, por la que se establecen los requisitos para la verificación de los títulos universitarios oficiales que habiliten para el ejercicio de la profesión de Ingeniero Técnico Industrial. On line, retrieved 24/02/2010 from: www.boe.es/boe/dias/2009/02/20/pdfs/BOE-A-2009-2893.pdf
- [4] OECD (2012), Education at a Glance 2012: OECD Indicators, OECD Publishing. doi: 10.1787/eag-2012-en
- [5] Joint statement of Spanish universities rectors: The University, guarantee of future. On line, retrieved 24/03/2013 from:

http://www.ub.edu/web/ub/en/menu_eines/noticies/2012/12/020.html

- [6] INE (Spanish Statistical Office), Estadística sobre Actividades en I+D. Año 2011. Resultados definitivos. On line, retrieved 24/03/2013 from:
<http://www.ine.es>

- [7] Gil, O. (2012), The impact of the economic crisis. Case study: Universitat de València, Spain. EUA Funding Forum - University of Salzburg, Austria (11-12 June 2012). On line, retrieved 30/03/2013 from
www.eua.be/Libraries/Funding_Forum/Olga_GIL_MEDRANO_amended.sflb.a.shx

- [8] EACEA/Eurydice (2010), Focus on Higher Education in Europe. The Impact of the Bologna Process. Brussels: EACEA P9 Eurydice.

- [9] European Commission (2006), Communication from the Commission to the Council and the European Parliament. Delivering on the Modernisation Agenda for Universities: Education, Research and Innovation. COM(2006) 208 final. Brussels: European Commission, pp. 11.

- [10] EACEA/Eurydice (2011), Modernisation of Higher Education in Europe: Funding and the Social Dimension. Brussels: EACEA p9 Eurydice.

- [11] OECD (2008), Tertiary Education for the Knowledge Society. Vol. 2. Paris: OECD.

- [12] NESSE (2012), Mind the Gap: Education inequality across EU regions, independent report authored for the European Commission by the NESSE network of experts. On line, retrieved 30 March 2013 from
ec.europa.eu/education/news/doc/nesse/report_en.pdf

- [13] Eurydice (2008), Higher Education Governance in Europe. Policies, structures, funding and academic staff. Brussels: Eurydice.