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AQU Agència per a la Qualitat del Sistema Universitari de Catalunya

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AQU Catalunya, 2010

Library of Catalunya (Biblioteca de Catalunya). CIP data:

Planas i Coll, Jordi

Catalan universities as a factor of equity and professional mobility : An analysis of the relationship between family status, academic background and professional employment in 2008 of graduates who completed their studies at Catalan universities in 2004
Bibliografia
ISBN: 9788469300251
I. Fachelli, Sandra
II. Agència per a la Qualitat del Sistema Universitari de Catalunya
III. Títol
1. Estudiants universitaris – Catalunya – Condicions socials
2. Llicenciats universitaris – Treball – Catalunya
378(467.1)

Collection coordination: Sebastián Rodríguez Espinar and Josep Manel Torres Solà

We would like to express our gratitude to AQU Catalunya for making the figures available from the survey on university graduates in 2004 in Catalonia, together with the commission for this study.

A joint study committee, made up of three members of the GRET research group (*Grup de Recerca d'Educació i Treball*), Josep M. Masjuan, Jesús Vivas and Guillem Sala, was set up to produce this report. Contributions in the form of comments were also made by Marina Subirats (UAB), Pedro López Roldán (UAB), Julio Carabaña (UCM) and Geoff Hayward (University of Oxford). Albert Sánchez Gelabert collaborated in the revising and final edition of the report. The ultimate responsibility for the text and, in particular, any possible errors, lies with the authors.

Translator: Charles Southgate
Edited by: Josep Turon i Sasha Cristòfol

First edited: March 2010
ISBN: 978-84-693-0025-1
Legal number: B-5.084-2010

Online version available at:
<www.aqu.cat>

SUMMARY

FOREWARD

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It makes very little sense to talk about quality without any measureable variables. If we have no idea of what we have and there are no benchmarks, it will be difficult to know which direction to go in and even more so to improve things.

One of the opinions that has penetrated most profoundly in the collective thinking, and which regretfully is still fostered in certain sectors, is that "public universities are a factory of unemployment". Is this assertion true?

In 2001 a first joint survey on the employment (labour market) outcomes of graduates from Catalan universities was carried out by AQU Catalunya and the seven public universities in Catalonia (University of Barcelona, Autonomous University of Barcelona, the Technical University of Catalonia [Universitat Politècnica de Catalunya/UPC], Pompeu Fabra University, University of Girona, University of Lleida and Rovira i Virgili University), in order to establish, amongst other things, the time, quality and pathways of graduate employment, together with the degree of graduate satisfaction with their university studies.

This pioneer project, which was carried out in an inclusive way for the very first time, involved the harmonisation of studies on graduate employment that Catalan universities had been carrying out separately. The purpose of this ambitious project was to be able to compare and integrate the information in order to draw reliable conclusions within the context of Catalonia.

Given the importance of the data provided by the survey, the decision was made to carry out further surveys on a three-year basis (2001, 2005 and 2008) in order for records to be kept and for trends in the entry into work of graduates to be followed and analysed.

The question I ask above can be answered from the figures that are available. According to the most recent graduate labour market outcomes survey in 2008, 93.5% of respondents were employed three years after graduation, 88% of which were full-time employed, with only 3% of all graduates being unemployed.

The current economic situation will probably have altered the employment situation of the university graduate population, and the fourth survey to be carried out next year will show the degree to which this is so. Nonetheless, the reflection that I wanted to introduce in this presentation is that, if we are not capable of measuring and subsequently analysing in a rigorous way the available information, it will be difficult for us to make the decisions that are most appropriate.

On the basis of the data obtained in the survey, AQU Catalunya presents three studies. The first analyses the relationship between family status, academic background and professional employment; the second makes an in-depth examination of university undergraduate studies in relation to the needs of the labour market (degree-job match); and the third, which was undertaken with the collaboration of the Catalan Institute for Women, deals with the quality of labour market outcomes in relation to gender, and puts forward an explanatory model for entry into work and employment for female graduates. All three studies are based on reliable data and give a perspective based on the actual situation in each case.

I am very grateful to the social councils of the public universities in Catalonia, the University of Vic and the Open University of Catalonia (UOC) for giving impetus, together with the Agency, to the carrying out of the three-year survey on graduate employment and labour market outcomes. The project is one of broad scope and will have an important impact in terms of the higher education system in Catalonia. I would lastly like to express our gratitude to the researchers and technical staff who participated in carrying out the three studies. Without the contributions made by research, there is no innovation or growth in a country. And with no figures or data, one is just another person with an opinion.

Joaquim Prats Cuevas

President, AQU Catalunya

PROLOGUE

PROLOGUE

Studies on graduate employment and labour market outcomes provide university institutions with a large number of indicators with which to improve course planning, curriculum design and student guidance systems.

Aside from the use of descriptive indicators on graduate employment for quality enhancement in the universities, studies on graduate labour market outcomes – at the system scale – enable important issues that are beyond the scope of an individual university institution to be dealt with, such as a more in-depth approach to issues of particular interest regarding the entry into work of graduates. It is for this reason that AQU Catalunya, aside from releasing the results of the graduate labour market outcomes studies, makes the databases available to social researchers to obtain a broader understanding of the key aspects of graduate labour market outcomes.

A very large sample is necessary for the employment outcomes database to provide useful information in terms of different degree programmes. With information now available on three different cohorts of graduates in Catalonia, each one covering more than 10,000 graduates, the available database is probably one of the largest in Europe and is of very particular interest for research on the entry into work of graduates.

With the encouragement of the social councils of the Catalan public universities, AQU Catalunya has made these results available to the scientific community and commissioned various studies on particular aspects of the transition by graduates from university to the labour market.

With three labour market outcomes surveys – carried out in 2001, 2005 and 2008 – and more than a dozen research projects by different groups in Catalan universities, the corpus of knowledge on the transition to the labour market is already quite considerable. The three new studies in the AQU Higher Education and Graduate Employment collection deal with three matters of great importance and interest for Catalan society: equity in labour market outcomes according to social origin, the influence of gender (gender equality) and the relationship between undergraduate studies and the labour market (education-job match).

The study on *Catalan universities as a factor of equity and professional mobility*, carried out by Dr. Jordi Planas and Dr. Sandra Fachelli from the Department of Sociology at the Autonomous University of Barcelona (UAB), focuses on the analysis of equal opportunities in the student body according to gender, regarding access, learning outcomes and job prospects. The study also analyses the impact of previous studies on academic performance and employment outcomes.

The study shows that Catalan universities have an important social function concerning equity and the occupational mobility of young people. In particular, it shows the important role played by the public universities outside of the Barcelona area in establishing this equity. According to the authors, these universities have played a key role in the democratisation of study at university in Catalonia.

The study titled *The match between university education and graduate labour market outcomes (education-job match)*, by Dr. Enric Corominas (Department of Pedagogy), Dr. Carme Saurina (Department of Economics) and Dr. Esperança Villar (Department of Psychology), all three at the University of Girona, makes a joint analysis, for the first time in Catalonia, of the three surveys carried out so far of the labour market outcomes of the university graduate population and, amongst other issues, assesses the match between undergraduate studies and the situation in the labour market (education-job match) and the change in trends in the period between the first (2001) and third (2008) surveys.

Despite the fact that the graduate population has a sufficient level of knowledge and understanding to cope with the demands of the labour market, the results show that the transformation towards a generic skills and job-based learning model is still at a very early stage. Although the cohorts analysed in the study correspond to pre-Bologna programmes, the level of change shows that the indicators of learning deficit detected in these graduate employment studies have not been used to introduce changes in teaching methodologies. Studies of graduates from degree programmes that have been adapted and brought in line with the EHEA are now needed to see the effect of the regulatory changes on the learning models.

The third study, on *Gender and the labour market outcomes of the university population in Catalonia*, which was carried out by the Agency's staff with support from the Catalan Institute for Women (*Institut Català de les Dones*), analyses the differences between male and female graduates, the results of which are somewhat surprising: having accounted for the effect of different degree programmes, there were no significant differences between male and female graduates three years after having completed their studies. There are two reasons that explain this phenomenon: firstly, the fact that a control was made of the effect of the level and type of studies on graduate labour market outcomes, which is not usually done in gender research; and, secondly, it is likely that phenomena like the glass ceiling and salary discrimination have still not had time to appear.

The variable that continues to have most weight in terms of the quality of employment outcomes is the degree studied. It is therefore important for continuous efforts to be made to break with stereotypes and models of masculinity and femininity that, in the present day, have a strong effect on the pathways chosen made by male and female students in higher education, and subsequently in their professional careers.

All three studies cover new ground regarding the entry into the labour market of the population of graduates from Catalan universities. AQU Catalunya intends to continue to support the analysis of the extraordinary information made available through these surveys and, in collaboration with the Catalan universities, to increase the database with new samples to enable ongoing developments and trends to be analysed and forecasted.

It is for the higher education authorities in Catalonia to use this information and knowledge as the focus of their policies and strategies.

Josep Anton Ferré Vidal

Director, AQU Catalunya

1

INTRODUCTION

1. INTRODUCTION

The crossover transition from school to work is one of the most determining periods in which a young person begins to construct his or her adult life, and the same can be said for the future of society as a whole. The study of this phenomenon is in keeping with the interest of social scientists to describe and interpret the process whereby young people enter adult life.

The specific way in which an individual disembarks on the adult period of his or her life is without doubt the result of decisions made by the person concerned, together with the social and cultural setting that they are inspired by (social class, gender, place of origin, etc.). It also depends however on the institutional setting that limits and/or channels these same decisions: the educational opportunities, the strategies of employers who will recruit the individual, the structure and preferences of the working population that the individual competes with, public youth employment policies, etc.

In short, the transition from school – and university in particular – to the world of work constitutes a subject for study that involves different dimensions, which can be interpreted according to perspectives that may often conflict, and that refers to the complexity and variability of the labour market.

In order to focus on a subject of study as complex as young people's entry into work and their transition to the labour market, it is essential for it to be set within a historical perspective (SALA *et al.*, 2007). Seen this way, the generation being analysed in terms of its professional entry into work is, in relation to its education, a generation that was educated during the time of the expansion of schooling for the masses, which was quite the opposite of what happened to their parents, who were born in the late forties and went to school at a time of educational scarcity under the Franco regime during the fifties and sixties.

The expansion of education was one of the most decisive social phenomena during the second half of the twentieth century in Europe. This was the result of a historical consensus between states, productive organisations and individuals and famílies, all of which were interested in contributing to raising the various levels of education. There was a huge spreading of education in terms of both population (through the educational system becoming much more widespread) and time (the average duration of education in general continued to increase from the nineteen sixties onwards). In comparison to other countries in Europe, the increase was initially delayed and then more sudden in Spain, resulting in much greater differences in the educational opportunities available to the generations studied and those of their parents compared to the same generations in other countries (BEDUWE, PLANAS, 2003, 173-175).

From the sixties onwards, and especially during the democratic period since 1976, a large increase began to take place in Catalonia in the number of students at all levels of education and particularly at university, as a result of a quantitative transformation based on the growth in the number of places offered at public universities in Catalonia, in terms of each university and the number of universities. The social function of the universities also changed as their elitist character was abandoned. Since the beginning of the democratic period the number of university students has almost tripled (IDESCAT, ROTGER, 2009). For this reason, any analysis of the labour market outcomes of university graduates at the present time should take into account the effects of the changes of a social nature on these outcomes. To understand the entry into work of graduates from the former elitist-type university, in addition to the quality of education, one would need to take into account their families' earning capacity (economic capital), their social relations (social capital) and their parents' level of education (cultural capital). In comparison, the families of graduates from the new university of the masses have less economic, social and cultural capital than those of graduates from the elitist university of their parents' generation. This factor should be taken into consideration when comparing the labour market outcomes of university graduates of their parents' generation with that of new graduates, although, as can be seen from the results given below, the level is very high.

This paper describes an analysis of the professional entry into work of the generation of university graduates from 2004 in relation to their learning outcomes, their academic achievement at university and their parents' social status and level of education. It can be considered to be a fairly emblematic case due to the fact that the period between the parents' date of birth and their children's graduation spans precisely the fifty-year period dominated by the expansion of education (the parents being born around 1950 and their children graduating in 2004).

For the generations analysed, the percentage admitted to university is around 40% for each generation. Prolonged school attendance increased substantially for working class females and children and became not much more than the "social duty" of the middle and upper classes (so as to prevent downward mobility). This growth was based on the certainty of both the social and individual value of education. In present-day society, especially in times of crisis, the uncertainty of the social and economic changes that have to be faced is accompanied by the certainty that a fundamental factor for dealing with such changes is precisely raising the level of education of the population as a whole, and in particular of young people.

Unlike the initial schooling-for-the-masses stage, however, the new context has given rise to growing expectations in the educational system that have not always been met by the available social opportunities: it coincides in time with the broad crisis in the labour market that began in the seventies and has been since reproduced on a cyclical basis. A break with the growth models began to take place

in Europe under the weight of technological and organisational changes together with globalisation of the market, which has led to economic crisis in key sectors and the instability of employment for skilled labour.

It is the welfare state that in fact is to be seen behind the commitment to deal with the economic crisis through an increase in public spending: unemployment benefits, social programmes for underprivileged sectors, subsidies to companies and key sectors in the economy, education, etc. The new economic and industrial panorama in Europe has generated a new political discourse where the roots of neo-liberalism and conservatism, namely, individualism, competitiveness and market, have been progressively asserted. The European social tradition however has forced states to deal with the social issue and, in both absolute and relative terms, expenditure on education has continued to grow and in this way support given to the growth in educational opportunities, particularly at the university level through the state-run universities.

The period analysed between the students' graduation and the survey on graduate labour market outcomes was marked by a slow increase in both the supply and demand for skilled labour. The period of professional entry into work that is analysed, from 2004 to 2008, was probably a very favourable one for young university graduates to enter the labour market. There are two reasons for this: on the one hand, the demographic decline had begun to reduce the number of graduates and, on the other, it was a period of economic growth, in spite of the fact that, within the functioning of the labour market and especially for young people, it was marked by occupational instability. At the same time, it was a period of growth in terms of both the participation rate and the rate of employment, especially for women (Esteban, Martín, Miguélez, Molina, Recio, 2009).

Within this context, this paper attempts to provide feedback on a series of questions on the economic and social function of the university in Catalonia, based on the analysis of the figures given in the AQU survey on the recruitment of graduates who completed their studies at Catalan universities in 2004.

The survey introduces some new developments regarding the available variables. In addition to the variables considered previously for earlier generations, the survey on the generation of graduates who completed their studies in 2004 adds information on the social origin and level of education of the graduates' parents, as well as their entrance grades and average academic results during their time at university.

The figures given below offer a clearer idea of whether the higher education system, or in other words the group of universities, in Catalonia fulfils the role of social advancement as claimed by certain authors or whether, and quite the contrary, as certain others maintain, it reproduces the differences stemming from the social origins of young people by filtering out access to university and/or conditioning their academic achievement.

Special attention is also given in the analysis of the data to equal opportunities among students on the basis of gender, relative to both the opportunities for gaining access to university education and academic achievement, as well as professional outcomes in the labour market.

Particular attention is paid to the analysis of the impact of young people's previous education on their academic achievement and of these two factors on their professional outcomes in the labour market.

Note regarding the methodology used in the survey

Studies on the labour market outcomes of Catalan universities have been carried out by the Catalan University Quality Assurance Agency (AQU Catalunya) since 2001. The most recent study was carried out between 16 January and 13 March 2008. The total graduate population surveyed in the 2003-2004 academic year was 12,258; the reference population in the case of Medicine was students who graduated in 2001, due to the longer period of transition to the labour market than in other subjects (AQU Catalunya, 2008, 5).

As mentioned above, the most recent survey included a section on academic achievement and socio-economic status, where respondents were asked to give their transcript of records grade, their parents' highest level of education, and the current or past occupation of both their father and mother. Each graduate's entrance grade and average grade from the transcript of records were obtained from university records and added to the database by AQU Catalunya. These issues are studied in more detailed below.

The distribution of students according to universities in the public and private sectors in Catalonia is 90% in the public sector and 10% in the private. The survey that this study is based on does not include graduates from all of the universities in

[1] In order to distinguish the differences between the universities in a way that is comprehensible for the reader who is unfamiliar with the higher education system in Catalonia, aside from the difference between public and private universities, there are three ways they can be classified, according to: *a*) history, *b*) geographical location and area of influence, and *c*) orientation and/or vocation.

The survey includes the two "historical" universities in Catalonia, the University of Barcelona (UB) and the Technical University of Catalonia (Universitat Politècnica de Catalunya, UPC); one public university set up in 1968, the Autonomous University of Barcelona (UAB); the universities that came into being as a result of the decentralisation of the distribution of universities during the nineteen eighties, the University of Girona (UdG), the University of Lleida (UdL) and the Rovira i Virgili University (URV); and those most recently established, the public Pompeu Fabra University (UPF) and the private University of Vic (UVic).

Catalonia: this is because 1) it was considered that students at the Open University of Catalonia (UOC), which represent 18% of all the students, due to their characteristics, could not be analysed together with those from campus-based universities, and 2) the graduates from three private universities, which represent 7% of all the university students, were not interviewed.

The reference population for this analysis is therefore the graduates from all of the campus-based public universities and one private university (which represents 25% of the students in the private sector). In total, the respondents who were interviewed are graduates from universities that account for 75% of all Catalan universities.[1]

In terms of location, four of the universities in the survey are located in the Barcelona metropolitan area, which account for 71% of all campus-based university students in Catalonia. Campus-based universities outside of the Barcelona area, here referred to as "decentralised", account for 20% of the total number of students but have nevertheless played a key role in the growth and democratisation of the university population in Catalonia, through, amongst other things, the decrease in the indirect costs of university education stemming from young people who reside outside of the Barcelona metropolitan area not having to change itheir place of residence in order to be able to university.

With regard to orientation and/or vocation, the majority of the universities have a general orientation (with a wide range of areas of specialisation). As a result of its tradition, and as its name suggests, the Technical University of Catalonia/UPC is much more technologically orientated.

2

WHO ARE THE PARENTS OF UNIVERSITY GRADUATES?

2. WHO ARE THE PARENTS OF UNIVERSITY GRADUATES?

The sociological bibliography has customarily been very involved in analysing the relationship between level of education and occupational status, and it has been shown that there is a very close relation between these two factors (BOUDON, 1983, 40).

Pioneer research on this, such as the work by Blau and Duncan (1967), using a method of causal analysis, showed the effect of four variables on the occupational status of children (the father's education and occupation and the child's education and first job), which only accounted for 43% of the total variance. This technique was improved in 1975 with the Wisconsin model of educational performance and the addition of psychological variables although the results were no better, as it could only account for 40% of occupational achievement and 57% of the variance of academic achievement. The authors observed that the effects of the parents' socio-economic status on their child's academic and occupational achievement operate through other variables (the main reference for the child being its peers) that influence the children's educational and occupational aspirations (KERBO, 2003, 174-177). A revised version of the Wisconsin model, which analysed one generation prior to that of the parents', found that the socio-economic status of the grandparents also had no effect on their grandchildren's occupational and academic achievement (WARREN, HAUSER, 1997, 561-572).

The analysis of the socio-economic status of a given population through the application of one indicator or the other (or both) offers different perspectives. The education indicator refers to the family origin of students when at an early age in terms of cultural capital and relates to the educational opportunities available to each generation. The occupation indicator, on the other hand, reflects a situation that can be more easily modified than level of education, and it varies in time. The parents, for example, attain a certain level of education, which is then difficult for them to subsequently modify.

The survey on university graduates provides the variables of the parents' level of education and occupation, and this study deals with the graduates' family origin based on the analysis of these two dimensions. In the case of this particular analysis, occupation is an indicator of the socio-economic level of the parents at the time of the survey (2008), whereas the level of education indicator refers to when the parents were young, and there is in fact a relation between the two indicators (Pearson's $r = 0.51$). In terms of methodology, it should be pointed out that the response of university graduates to both of these issues (parents' education and occupation) was over 98%, which established a good basis for carrying out the analysis described below.

2.1. What is the parents' level of education?

In this analysis, the variable that serves to identify the parents' education includes both the father and mother and is classified according to five categories, as shown in table 1. In order to better describe and explain the origins of university graduates according to their parents' level of education, these categories were summarised into three groups: parents with up to primary education, parents with a secondary education (one or both parents) and parents with a higher education (one or both parents).

One initial figure in overall terms is that the majority of graduates have parents who, at the most, have a primary education (40.1%), while the rest are divided approximately equally between parents with a secondary education and those with a higher education.

Table 1 | Highest level of education of the parents of university graduates

Parents' highest level of education	Cases	%	Gouped into 3 categories	%
Both have a primary education or no studies at all	4,908	40.1	Up to primary education	40.1
One has a secondary education	1,828	14.9	With a secondary education	30.6
Both have a secondary education	1,918	15.7		
One has a higher education	2,054	16.8	With a higher education	29.3
Both have a higher education	1,524	12.5		
Total	**12,232**	**100.0**	**Total**	**100.0**

This distribution is heterogeneous for universities, learning pathways, and studying and working simultaneously.

2.1.1. Differences between universities

If we look at the parents' level of education, the situation is not homogeneous for the various universities in Catalonia.

The universities with the highest number of graduates whose parents had just up to a primary education are the University of Girona, with 46% of its graduates, followed by the Rovira i Virgili University, with 44%, and the University of Lleida and the University of Barcelona, with 42%.

The universities with a higher than average value for graduates whose parents had up to a secondary education are the University of Vic, with around 36%, and the University of Girona and the Rovira i Virgili University, with just under 32%.

The universities with a higher than average value for graduates whose parents had a higher education were the Pompeu Fabra University, with 40% of its graduates, and the Technical University of Catalonia (Universitat Politècnica de Catalunya/UPC) and the Autonomous University of Barcelona, both just over the average value with 32%.

2.1.2. Influence of the parents' level of education on their children's learning pathways

The existence of different levels of education among parents is non-homogenous for the graduates' learning pathways as well.

Subjects were originally classified according to five subject areas: Humanities, Social Sciences, Experimental Sciences, Health Sciences and Engineering and Architecture. 44.7% of graduates selected Social Sciences (AQU Catalunya, 2008, 6). For the purposes of this study, this latter subject area was subdivided because, in addition to it accounting for almost half of the sample, it takes in very different subjects. A distinction was therefore made between Social Sciences and Economics and Law, the latter including undergraduate programmes in Business Administration and Management, Economics, Actuarial Science and Finance, Market Research Techniques, the first-cycle Business Studies degree and the two-cycle degree in Law.

There are no great differences in terms of the graduates' choice of subject area according to their parents' level of education. In the case of children whose parents only had up to a primary education[2], approximately 32% chose Social Sciences, 22% Engineering and Architecture and 17% Economics and Law. This distribution, in the case of children whose parents had a secondary education, was slightly modified, especially in Social Sciences (27.7%), whereas for Engineering and Architecture and Economics and Law the percentage was very similar (22.3% and 16.9%, respectively). A higher proportion of children whose parents had a higher education chose Engineering and Architecture (23.8%), followed by Social Sciences (22.4%) and Economics and Law (16.6%).

As for the other subject areas, in Humanities the percentage of children whose parents with up to a primary education and those with a secondary education accounted for nearly 14%, and the children whose parents had a higher education was 15.3%. In the Health Sciences, the figure for children whose parents only had

[2] Either no studies or just up to primary education.

up to a primary education and also children whose parents had a secondary education was around 10%, while for children whose parents had a higher education it was 11.6%. Experimental Sciences, which accounted for 8.3% of the total number of graduates, was chosen the least by children of parents who only had up to a primary education: these graduates accounted for 6.7%, whereas those of parents with a secondary education accounted for 8.4% while the figure for those with parents with a higher education was just over 10%.

By analysing the cycle of studies of graduates according to the highest level of education of their parents, it can be seen that children whose parents only had up to a primary education take first cycle degrees (46.9%) to a greater extent, whereas the percentage among children whose parents had a secondary education was around 43%, and for children whose parents had a higher education the figure was lower (31%). In the case of graduates who took first and second cycle degrees, this relation changes to 40.6%, 46.1% and 56.8%, respectively. In the case of the second cycle degrees, graduates according to the level of education of their parents account for around 12% in all three categories.

Given that the duration of the cycles is different, the fact that there are more students from families with a lower level of education in first cycle studies may represent a certain degree of prudence when making the decision to enter university, with shorter programmes being chosen on their initial contact with the world of the university.

2.1.3. Influence of the parents' level of education on entrance grades and transcripts of records

It is interesting that there is very little variation in entrance grades in relation to the parents' highest level of education. The average value for children of parents with up to a primary education and those with a secondary education is 6.7, and for children of parents with a higher education it is 6.9. The grades given in the student transcript of records are also the same for the three groups (1.7). This grade is calculated on the basis of a score of 1 for a pass, 2 very good, 3 outstanding and 4 with distinction in all subjects in a degree course.

These results call for reflexion regarding the limited impact of the family origins of graduates' on their academic achievement, contrary to the theses upheld by certain authors associated with reproduction in education. As we shall see below, the differences in academic achievement are only significant for gender and they tend towards the side of females.

On the other hand, in terms of continuing their studies, 71% of children whose parents only had up to a primary education would continue to study, 74% for children whose parents had a secondary education would do so, and in the case of children whose parents had a higher education the percentage goes up to 77.3%. With

regard to those who would continue with a postgraduate course (either a Master's or a doctorate degree), the figure is 28.7% for the first group (children whose parents only had up to a primary education), 31.6% and 37.6% for the second and third groups respectively.

The above observations regarding graduates' preferences about continuing their studies and the types of pathway selected would lend credence to Boudon's observation of the fact that the children of people with a higher level of education have a higher requirement threshold than the rest, which forces them to continue studying (Boudon, 1983, 195).

2.1.4. Children's education and work according to their parents' level of education

Graduates who were full-time students during their university studies account for 40.7% of the total, although there are differences in this value according to the parents' origin. In the case of children whose parents had a higher education it goes up to 46.8%, whereas for children whose parents only had up to a primary education it goes down to 36.3%. This difference may quite rationally be associated with the factor of family economic capacity.

37.2% of all students combined part-time work with their studies, and this behaviour is relatively homogeneous according to the parents' level of education (36.7% in the case children whose parents only had up to a primary education, 39.5% for children whose parents had a secondary education and 35.6% for children whose parents had a higher education).

22% of all graduates worked full-time while they were studying. There are also differences here, with an approximate 10% difference between children whose parents only had up to a primary education and those whose parents had a higher education (26.9% and 17.7%, respectively).

It is interesting to associate the earlier observations in the findings of the Catalan Youth Observatory[3] regarding the analysis of the transition to adult life and its relationship with occupational stability, as it has been observed that, among young people who combine studies and work, once they have found their first job there are significantly fewer probabilities of them losing it (Simó i Noguera, 2008, 45). In any case, only 3.1% of the respondents were unemployed at the time of the survey.

It can be seen that there is no type of geographical mobility for study or work or for both causes for the greater majority of graduates (67%), although there is a difference in this distribution of 17 per cent in relation to the highest level of the

[3] Observatori Català de la Joventut.

parents' education, with 73.6% for those whose parents only had a primary education and 56.3% for those whose parents had a higher education.

Only 33% of the total therefore changed their place of residence, with this behaviour varying according to the parents' level of education. Children whose parents had a higher education have a higher level of geographical mobility (43.7%) than children whose parents only had up to a primary education (26.4%).

2.1.5. The parents' generation

In this section, in order to have an indicator for equity in obtaining a university qualification, we were interested to analyse the relationship of the graduates' parents with the average for the population of their generation. This figure cannot be deduced from the survey and as it is not easy to obtain, an exercise was carried out that is illustrative of the relationship, in terms of the level of education, between the parents of students who have graduated and their generation.

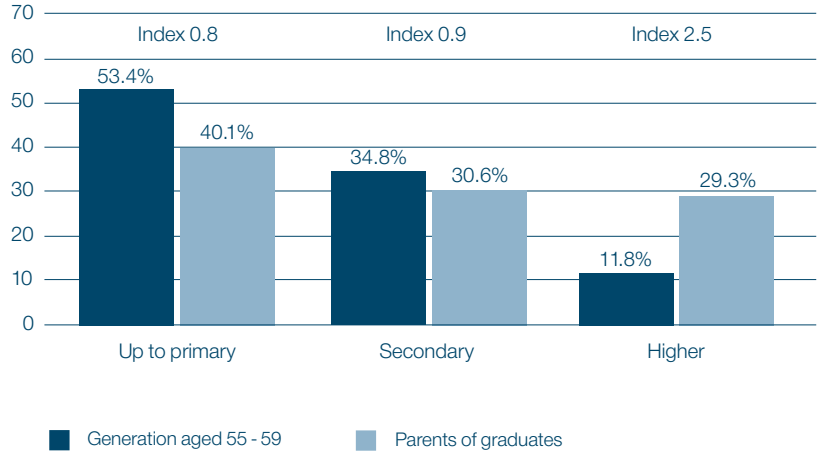
Although various different cohorts exist side by side in the university, those born in 1980 were selected as being representative of the whole for the purposes of carrying out this exercise. From the official statistical birth figures of the Spanish Institute of Statistics[4] for 1980, we know that the average age of the parents of all live births in that year was 30 for males and 27 for females.

From the figures given in the Working Population Survey (EPA, second half of 2005), an approximate level of education for these generations as a whole can be obtained.

On the basis of these figures and given that information on both the parents of university graduates is available, the relation between the two groups can be compared to illustrate the level of representativeness of the graduates' parents in relation to their generation. This relation is shown in the following diagram.

[4] Boletín Estadístico de Nacimiento, Instituto Nacional de Estadística.

Diagram 1 | Comparison of the level of education of the parents of graduates in 2004 with the level of education of the same generation (age group between 55 and 59). Presence index



Source: Microdata from the AQU Catalunya survey and the Working Population Survey (EPA, second half of 2005)

The presence index offers a comparison of the level of education of the generation aged between 55 and 59 with that of the group of parents of university graduates. A value of 1 implies the equal presence of the different levels of education of the parents of university graduates in relation to that of the same generation; a value lower or higher than 1 for the groups analysed here means that they are either under- or over-represented, respectively.

From the diagram above, it can be seen that parents without any studies at all or with just a primary education whose children are at university are slightly under-represented at university in relation to their generation (0.8). Parents with a secondary education are represented at university in a way that is almost proportional to their generation (0.9). Parents with a higher education are over-represented at university (2.5), meaning that the proportion of graduates of higher education with children who themselves graduated in 2004 was clearly higher than the presence of their generation, as only 11.8% of the people aged between 55 and 59 had a higher education, and within the university this percentage was almost 30%.

Presenting the same figures to show the probabilities of being a university graduate according to the parents' level of education, if the average probability of becoming a university graduate for the generation born in 1980 is 28% (Working Population Survey, second half of 2005), the probabilities of graduating from university according to the parents' level of education is obtained by multiplying this average figure by the presence index for each group (diagram 1).

However, this has not always been the case and is the result of a gradual increase in the participation of the "low professional categories" at university, as shown by Marina Subirats using the Barcelona Metropolitan Survey (2009, 19-20).

It is worth mentioning three facts concerning the figures given above: *a*) the great majority (70%) of university graduates in 2004 were children of people without a university education; *b*) there are very few differences in the opportunities for gaining access to university qualifications among children from families with a primary education or less and those from families with a secondary education, and *c*) children of university graduates, while being a minority at university at the present time, have many more opportunities of gaining access than those from families without a higher education.

It is important to point out the limitations of this exercise, as the comparison is made between an estimate of the level of education of the parents' generation and the information provided by their children in the AQU Catalunya survey on the highest level of education achieved by either the mother or father. This may lead to bias in the results, and it is for this reason that they are presented as a hypothesis. Nevertheless, it would seem to sum up the actual situation in Catalan universities today. Nevertheless, the inclusion of the question concerning the level of education of both parents and their age in subsequent surveys will offer the possibility of a more accurate analysis of this phenomenon.

2.2. What are the parents' occupations?

Studies in sociology have customarily focused on the occupation of the head of the household or, in general, that of the male worker to stratify society. One of the more prolific lines of work on this subject has been the work of John Goldthorpe and his colleagues at Nuffield College, Oxford. He considers that the occupation of a job in the labour market is a fairly appropriate indicator for assessing an individual's social position.

Goldthorpe developed a class squema, later improved, which initially had three categories, taking the male head of the family as a unit for analysis: service class (Classes I and II in his classification), intermediate classes (Classes III to V) and working class (Classes VI and VII) (Goldthorpe, 1980, 39-42). The great changes

however that have taken place in society have modified the perspective on the subject, and it became clear that this division of work according to gender corresponded to a separation of the spheres of activity of men and women, which had previously been considered to be natural (CROMPTON, 1999, 105). Women subsequently began to be included in this type of analysis.

On the basis of this background, we decided to take into account both elements, i.e. to use occupation as an indicator of stratification and to avoid a gender-based classification. This would differentiate between groups of people in work; in specific terms, we selected the highest occupational status of the parents, whether of the father or mother, in order to analyse the main characteristics of university students' families. The methodology used to analyse the parents' occupation is explained below.

Methodology used to analyse the parents' occupation

The categories used in the survey for both the father and mother are as follows: 1. Management; 2. Professional and/or technical capacity;[5] 3. Self-employed requiring university studies; 4. Skilled; 5. Self-employed, no university studies required, and 6. Unskilled.

For the actual analysis, these categories were transformed in the same way as the categories for the level of education. We first established a hierarchy of occupations and then considered the highest occupational level achieved by one of the parents (either male or female). Finally, two categories, those of parents who work in a professional and/or technical capacity and those who are self-employed with university studies, were combined into one category because, in terms of status, both call for similar knowledge and also because the self-employed group is very small (7.0% of parents) to be treated separately.

The classification therefore consists of the following five categories:

1. Management.
2. Professional and/or technical capacity (including those self-employed requiring university studies).
3. Skilled.
4. Self-employed, no university studies required.
5. Unskilled.

These five categories were then summarised into three groups, the same as with the parents' level of education, in order to better describe and explain the family origin of university graduates according to the occupational hierarchy of their parents. The results are given in table 2 below.

[5] With a university qualification.

This section gives the university graduates' characteristics according to the occupational status of their parents, following the methodology described and proposed above.

Table 2 | Highest occupational level of the parents

Highest occupational level of the parents	Cases	%	Occupational status	%
Managerial	1,894	15.7		
Professional and technical (univ. qual.)	1,523	12.6	High status	35.3
Self-employed requiring university studies	840	7.0		
Skilled	3,849	31.9	Medium status	31.9
Self employed: No university studies required	2,493	20.7	Low status	32.7
Unskilled	1,453	12.1		
Total	**12,052**	**100.0**	**Total**	**100.0**

Table 2 shows that the distribution of the occupational status of the graduates' parents forms three almost equal parts.

This distribution varies however according to universities, learning pathways and studying and working simultaneously.

2.2.1. Differences between universities

Overall, the universities with more students from families with a low occupational status are the University of Lleida, with 40.5% of all its graduates, the University of Girona (38.4%), and Rovira i Virgili University (36.4%). One distinctive feature in geographical terms that is evident here is that students at universities established in Barcelona tend to be from families with a higher occupational status.

The universities with an above average value for graduates with parents with a medium occupational status are the University of Girona (35%) and the Technical University of Catalonia/UPC (33%).

Universities with a higher than average value for graduates with parents with a high occupational status are the Pompeu Fabra University, with almost 47% of its graduates and, slightly above the average value, the Technical University of Catalonia/UPC, the Autonomous University of Barcelona and the University of Vic, all with 37% of their graduates.

2.2.2. Influence of the parents' occupational level on their children's learning pathways

The presence of the different occupational levels of the parents is also non-homogeneous for the different learning pathways of graduates.

If we analyse the choice of subject area by graduates according to their parents' occupational level, we can see that there are few differences relative to what we observed above in relation to the parents' level of education (section 2.1.2). In the case of children whose parents had a low occupational status, 29.2% chose Social Sciences, 21.7% Engineering and Architecture and 18.3% Economics and Law. This distribution, in the case of children whose parents had a medium occupational status, is slightly modified, especially in the proportion of those who chose Economics and Law (14.4%), compared to Social Sciences (30.7%) and Engineering and Architecture (23.1%), which as percentages are not really very different from the other groups. Children whose parents had a high occupational status showed some difference, especially relative to the Social Sciences, as proportionally speaking there are fewer (23.9%) compared to the other two groups, even though it is still the subject area with the highest proportion of graduates, followed by Engineering and Architecture (23.1%) and Economics and Law (17.6%).

With regard to the other subject areas, 14% of graduates chose Humanities and there is hardly any change in this according to the parents' occupational status. A similar thing occurs with Health Sciences, which was chosen by around 10% of children whose parents had a low and medium occupational status and 11.6% of children of parents with a high occupational status. In Experimental Sciences there is a higher proportion of children whose parents have a high occupational status.

2.2.3. Influence of the parents' occupational level on entrance grades and transcripts

It can be seen that there is hardly any variation in entrance grades in relation to the parents' highest occupational level, the same as with the parents' level of education. The average value for children of parents with a high occupational status is 6.8, only just very slightly higher (by 0.1) than the rest. The transcript grades are also the same for all three groups (1.7 points).

Analysis of the cycle of studies of graduates according to the highest occupational level of their parents shows that 45.5% of the children of parents with a low occupational status chose first cycle studies, compared to 42.2% who chose first and second cycle, and second cycle, starting from a previous first cycle qualification, in only 12.3% of cases. On the other hand, the children of parents with a medium occupational status chose first cycle studies in 43.8% of cases, 44.4% chose first and second cycle, and only 11.7% chose second cycle once they had completed first cycle studies. In the case of children of parents with a high occupational status, the percentages were 34.1%, 53.8% and 12.1%, respectively.

In this regard, the figures again confirm, as in the section on parental education, that a higher proportion of children of parents with a low occupational status select short cycle pathways and that more children of parents with a high occupational status select long cycles. On the contrary, graduates who go on to take a second cycle degree at the end of the first cycle are a minority, and there is no difference according to the parents' occupational status.

71.1% of children of parents with a low occupational status continue their studies, compared to 72.6% for children of parents with a medium occupational status and 77.3% for those of parents with a high status. The majority of these would take another degree or "some other type of studies". In terms of just those who would continue with a postgraduate course, Master's and/or doctorate programme, the figure was 29.1% for the first group (children of parents with a low occupational status), 30.5% for the second and 36.6% for the third.

2.2.4. Children's education and work according to their parents' occupational status

Graduates who were full-time students are not completely homogeneous from the analysis of their parents' origin according to occupational status. Children whose parents had a high status account for 44.6%, with the figure decreasing to 39.6% and 38.6% for the children of parents with a low and medium occupational status, respectively).

There were no big differences for students who combined part-time work and studies according to their parents' occupational level.

The percentage of graduates who worked full-time while they studied was 24.6% of the total number of children of parents with a low occupational status, and this goes down to 19% among the children of parents with a high occupational status. In this regard, different studies point out the obvious fact that there is a higher probability of young people whose parents have a higher occupational level being dedicated to their studies (Moreno Mínguez, 2009, 94).

With regard to graduates with no type of geographical mobility for either studies or work or both causes, 72.2% are children of parents with a low occupational status, whereas this figure goes down to 60.3% among children of parents with a high occupational status, which shows – as seen in the section on the parents' education – either the low level of interest or few possibilities for graduates to move away from their usual place of residence.

Graduates that experienced a higher level of studies-related or job-related mobility, or mobility for both reasons, were consequently the children of parents with a high occupational status (39.7%), as compared to the children of parents with a low (27.8%) and medium occupational status (31.1%).

3

COMPARISON BETWEEN THE OCCUPATION OF PARENTS AND THEIR CHILDREN

3. COMPARISON BETWEEN THE OCCUPATION OF PARENTS AND THEIR CHILDREN

A large amount of research has been carried out on the relationship between the occupations of parents and children using customary social mobility studies. Different theories have been developed in the various approaches to stratification in industrial societies. Leading authors at the present time include Goldthorpe and Erikson, who have analysed social mobility in contemporary societies.

The development of mobility studies began after the Second World War with the search for explanations for the development of industrial societies. Examples of this line of research are the studies by the team of David Glass at the London School of Economics (1949), the work of Lipset and Zetterberg (1956) and that of Lipset and Bendix (1959). Glass, for example, combined educational categories and socio-professional categories to carry out this type of studies (Hernández de Frutos, 1997, 152-154).

In general, and as mentioned above, occupation is the indicator that has been most used to determine social class and the first element in determining an individual's position in the social structure. Profession or occupation is considered to be a more complete and precise concept than earnings. Occupation is therefore something more than just a way of making money; it constitutes an index and a symbol of people's lifestyle and the degree of prestige accorded to them by others (Hernández de Frutos, 1997, 153).

In spite of the fact that this type of analysis is very well known, the wide use of these occupation indicators has only been applied to males, as mentioned above, which has given rise to a "...reductionist identification between social mobility and male mobility, the most immediate consequence of which is the practical invisibility of the female half as an object of study" (Salido Cortés, 2001, 43).

In order to be able to include the usage of this type of analysis, but without any sexist bias, our research focused on the highest occupational level, albeit of the father or the mother.

It should be pointed out that, for this analysis, the occupations were not reduced to three occupational categories because, for analytical purposes, it was interesting to maintain the five categories. In general, the resulting analyses for this way of organising the information (transition matrixes) are more interesting in that more categories contain the basic information. Given that our information on the parents was reorganised into five categories in the previous section, the decision was made to follow the same procedure with their children.

Methodology used to compare the occupation of parents with that of their children

In order to make a comparison, the first step was to classify the children (females and males) in the same way that the parents' occupation was classified in the survey. In order to avoid any difficulty in comparing the graduates who worked either full or part-time, we selected graduates who were employed full-time at the time of the survey, which accounted for 80% of the total sample.

The following categories were therefore defined for full-time workers:

1. Management: a person who performs the function(s) of management.
2. Professionally qualified: a person who does not carry out any management functions but needs a university degree to obtain their job or where their functions call for a university education. This category includes self-employed workers who need a university degree for their job or undertake functions that call for a university education.
3. Skilled: a person who does not carry out any management functions, who is not required to have a university degree and where the functions that the person carries out do not call for a university education, and where the work is not an unskilled job.
4. Self-employed: a person who works for themselves but did not need a university degree to obtain their job, or where their functions do not require a university education.
5. Unskilled: all of those who do not conform to any of the above conditions, and where the functions that they carry out are unskilled.

Once the categories for the children (females and males) had been obtained by applying the same categories as those for the parents in the survey, the second step involved making a hierarchy of their jobs with the same pattern used for the parents in the previous section.

3.1. Relative positions between parents and their children

In overall terms, the following table shows the relation between the occupation of the children and their parents. It is possible to see the proportion of graduates who have jobs on the same level and those who have a job on a different level to that of their parents, either higher up or lower down the hierarchy. The result given below reflects the percentage distribution of all full-time employed graduates (total = 100).

Table 3 | Graduate occupation according to the occupation of their parents (percentages out of the total)

Highest occupational status of the parents	Full-time employed university graduates				
	M/ment	Prof.	Skilled	Self-empl.	Unskilled
1. Management	6.0	1.8	6.8	0.7	0.3
2. Professionally employed	6.2	2.4	8.6	1.1	0.6
3. Skilled	9.5	4.4	15.5	1.0	1.3
4. Self-employed, no univ. studies	6.4	2.9	10.0	1.3	0.8
5. Unskilled	3.7	1.3	6.3	0.4	0.7

A large proportion of the university graduates, even though they were in professional employment for the first time, attained positions higher than those held by their parents, who, because of age, were in the final stage of their professional career. 50.8% of the total number of graduates (obtained by adding all of the percentages below the shaded diagonal in the diagram) already had jobs of a higher level than their parents. The absolute values are given in table 1, appendix.

On the other hand, 25.9% had jobs of a similar level to that of their parents (sum of the shaded diagonal) and 23.3% still had jobs that were of a lower hierarchical status (percentages above the shaded diagonal). Of these 23.3% with a lower occupational level than that of their parents, the great majority (20.1%) were children of parents with occupations of either a managerial or professional nature. This result is consistent, as shown further below, with the fact that almost 80% of graduates had jobs appropriate to their degree (see section 6.4).

It is interesting to point out that it is the graduates' initial period of employment, or entry into work, being analysed, meaning that they still have a long way to go on the path to developing and progressing in their professional careers, and in many cases this will imply an occupational rise for the graduates, who will tend to exceed, to an even greater proportion than at present, the occupational positions of their parents.

If the observation is made according to gender, the males had jobs of a higher hierarchical level than the females, although the differences are small (52.4% and 49.8%, respectively). The absolute values are given in table 2, appendix.

Table 4 | Graduate occupation according to gender and parental occupation (percentages out of the total)

Highest occupational status of parents	Employed female graduates					Employed male graduates				
	1	2	3	4	5	1	2	3	4	5
1. Management	4.8	1.8	7.2	0.5	0.4	7.6	1.9	6.2	1.1	0.3
2. Professionally qualified	5.5	2.0	9.6	0.9	0.8	7.3	3.0	7.3	1.5	0.4
3. Skilled	8.3	4.4	17.4	0.7	1.6	11.3	4.3	12.7	1.4	1.0
4. Self-empl., no univ. studies	5.9	2.9	11.2	1.1	0.8	7.1	2.8	8.1	1.5	0.8
5. Unskilled	3.5	1.2	6.7	0.3	0.7	4.0	1.4	5.6	0.5	0.7

Females are therefore over-represented in jobs of a lower hierarchical level. For example, males with jobs in management whose parents are professionally employed or skilled workers totalled 18.6%; in the case of females it was 13.7%.

Looking at the occupations above the shaded diagonal (jobs of a lower level than those of their parents), as a whole the females represent 24.2%, compared to 22% for men.

The proportion of females and men with jobs of the same level as their parents is similar (26% and 25.6%, respectively). In both cases the highest rate is for skilled jobs (17.4% for females and 12.7% for men). Lastly, there is a higher proportion of males in higher positions than females (10.6% as to 6.8% in management and the professionally qualified).

3.2. Children's occupation in relation to that of their parents

If the parents' occupation is taken as an indicator of the family origin of the university graduate, we obtain the following results:

Table 5 | Graduate occupation according to parental occupation (as a percentage)

Highest occupational status of the parents	Full-time employed university graduates					
	M/ment	Prof.	Skilled	Self-empl.	Unskilled	Total
1. Management	38.0	11.7	43.4	4.8	2.2	100
2. Professionally qualified	32.6	12.7	45.4	6.0	3.3	100
3. Skilled	30.0	13.7	49.0	3.2	4.2	100
4. Self-employed, no univ. studies	30.0	13.4	46.7	6.0	3.9	100
5. Unskilled	29.8	10.3	51.0	3.0	5.9	100

1. Management: bearing in mind that this is the highest occupational category and that they can therefore not be promoted any higher, it can be seen that 38% of the children had jobs on the same level as their parents, there were 43.4% with skilled jobs and 11.7% who were professionally employed. Very few children were self-employed (4.8%) and only 2.2% had an unskilled job.

2. Professionally qualified: almost 13% of the children had jobs on the same level as their parents, whereas almost one third of these, with jobs in management, had a higher occupational level than their parents. On the other hand, 45% were skilled workers, with the remainder being either self-employed (6%) or unskilled (3.3%).

3. Skilled: almost 50% of the children had jobs on the same level as their parents, while 43.7% were in a higher category and 7% had jobs lower down the hierarchy.

4. Self-employed (with no university studies): in this case the children who had the same level of job as their parents decreased to 6%. Excluding the almost 4% who have unskilled jobs, the remaining 90% had jobs on a higher level.

5. Unskilled: 6% of the children had jobs on the same level as their parents and, given that this is the lowest occupational category, the rest had jobs of a higher level in the hierarchy.

The same analysis according to the graduates' gender gives the following results.

Table 6 | Graduate occupation according to gender and parental occupation (as a percentage)

Highest occupational status of the parents	Employed female graduates						Employed male graduates					
	1	2	3	4	5	Total	1	2	3	4	5	Total
1. Management	32.9	12.1	49.2	3.3	2.5	100	44.4	11.1	36.1	6.5	1.8	100
2. Professionally qualified	29.2	10.7	51.2	4.7	4.2	100	37.5	15.5	37.2	7.7	2.1	100
3. Skilled	25.6	13.5	53.8	2.3	4.8	100	36.7	14.0	41.5	4.6	3.2	100
4. Self-empl., no univ. studies	27.0	13.1	50.9	5.2	3.8	100	34.8	13.8	40.0	7.2	4.2	100
5. Unskilled	28.1	9.7	54.3	2.2	5.8	100	32.4	11.3	46.0	4.2	6.1	100

As can be seen, there are important differences according to gender. Out of the total number of male children of parents with jobs in management, 44% had a job on the same level, whereas for females it was 33%. This situation is compensated by a larger proportion of females in skilled jobs (50% as to 36% of males).

More male children of the professionally qualified had jobs in management (37.5%) compared to females of parents on this same level (29.2%). More than 15% of males had the same the place of origin of their parents, whereas for females it was approximately 10%.

There was a higher number (53.8%) of female children of skilled workers doing the same jobs as their parents, as compared to 41.5% for males.

For the category of parents who were self-employed and without any university studies, it can be seen that the percentage of children who surpassed their parents' level of occupation was similar for males (89%) and females (91%).

The figure for children doing unskilled work like their parents was around 6% for both males and females (this is the lowest category), with the remaining 94% in higher-level categories.

It is also possible to do the inverse exercise, i.e. analyse 100% of the graduates on each occupational level according to the parents' origin. The figures in tables 3 and 4 of appendix show that a fairly similar proportion of children originating from all occupational level was to be found on all occupational levels. The exception to this is for graduates who had unskilled jobs, although this is only of relative importance given that it accounts for only a very small number (3.9% of all graduates).

It is reasonable to conclude that the university would appear to be providing children with tools to gain access to jobs on a higher level than those of their parents, although an important fact is that, from the vertical analysis of the children's occupation according to that of the parents and as can be seen from the figures, there is little variability in the rates. From this it can be affirmed that the parents' origin in occupational terms does not a very great influence on their children's occupations.

4

GRADUATE OCCUPATION

4. GRADUATE OCCUPATION

An analysis is made in this section of graduate distribution in relation to their occupation according to university, subject area and certain specific degree courses.

4.1. Differences according to university

An analysis is made in this section of labour market outcomes, following the classification used above, according to the university of origin. The results are as follows.

Table 7 | Graduate occupation according to university

University	Graduate occupation (full-time) in hierarchical order					
	Mng/ment	Professional	Skilled	Self-empl.	Unskilled	Total
UB	27.0%	13.2%	51.8%	3.7%	4.3%	100%
UAB	29.1%	12.6%	50.6%	3.7%	3.9%	100%
UPC	41.2%	13.9%	37.1%	6.7%	1.2%	100%
UPF	42.9%	14.4%	34.6%	4.0%	4.0%	100%
UdG	32.6%	11.8%	44.6%	5.7%	5.3%	100%
UdL	30.0%	12.8%	50.2%	4.4%	2.6%	100%
URV	29.2%	10.3%	50.8%	3.7%	5.9%	100%
UVic	22.4%	10.5%	56.6%	6.1%	4.5%	100%
Total	**31.6%**	**12.7%**	**47.3%**	**4.5%**	**3.9%**	**100%**

References: UB: University of Barcelona / UAB: Autonomous Univ. of Barcelona / UPC: Technical University of Catalonia / UPF: Pompeu Fabra University / UdG: University of Girona / UdL: University of Lleida / URV: Rovira i Virgili University / UVic: University of Vic

Out of the total number of graduates at each university, the universities that clearly exceeded the average in terms of graduates who had jobs in management were the Technical University of Catalonia/UPC and the Pompeu Fabra University. On the other hand, the percentage for the University of Vic was considerably below the average. Graduates from the remaining universities were close (an interval of 4%) to the average.

Universities with a higher than average figure for graduates with skilled jobs were the University of Barcelona, Autonomous University of Barcelona, University of Lleida, Rovira i Virgili University and the University of Vic.

The figures are very low for the remaining categories – professionally employed, self-employed and unskilled – and are merely mentioned for guidance purposes (see table 5, appendix).

Nevertheless, the filters that operate according to university only have a low-level effect, given that all of the occupational levels are represented in a way that is not radically different, although the Pompeu Fabra University and the Technical University of Catalonia/UPC together did account for the highest proportion (50%) of children and parents with jobs in management. The University of Barcelona, Autonomous University of Barcelona, Rovira i Virgili University and the University of Vic together had the highest proportion of parents and children with skilled jobs (54%), while the figure for the University of Lleida was 50% and 47% for the University of Girona. These figures are given so as to clarify an issue that requires further research on filters that are socially selective according to university, either linked to the parents' origins or of another type.

4.2. Differences according to subject area, subject and certain degree courses

As for the question of whether the parents' occupation has an impact on the graduate's choice of subject area and degree course, various approximations can be made, although the main result apparent is that there is very little difference observed.

The following exercise is meant to be taken as hypothetical, given that any statistical significance is lost when the five categories for graduate occupation are explored. In order to observe a relatively homogeneous number of graduates and to avoid having to consider very small groups of graduates, an *ad hoc* threshold was established and subjects with more than 350 full-time employed graduates were selected, while in the case of degree courses a limit of 200 graduates was set (see table 6, appendix for the absolute values).

Table 8 shows the level of occupation of the full-time employed graduates according to subject area and subject. Although these figures are mentioned for guidance purposes only, as mentioned above, they do show different types of profile according to the specialisation chosen. This may give rise to specific questions that could be explored with a wider population (for example, through consideration of several generations), because with the current figures the only representative ones are those that refer to the occupational categories of management and skilled workers.

Table 8 | Full-time employed graduates according to subject area and subject

Subject area	Management	Profess.	Skilled	Self-empl.	Unskilled	Total
Humanities	21.8%	18.8%	47.6%	4.8%	7.0%	100%
Geography and History (101)	25.8%	20.4%	42.8%	2.5%	8.5%	100%
Economics and Law	46.0%	12.9%	31.3%	5.7%	4.0%	100%
Economics and Business Admin. and Management (201)	52.6%	12.9%	29.0%	1.4%	4.1%	100%
Business studies (202)	47.4%	14.8%	29.6%	3.5%	4.7%	100%
Law (203)	31.8%	10.3%	37.9%	17.1%	3.0%	100%
Social Sciences	24.1%	11.4%	58.9%	1.6%	3.9%	100%
Labour Relations (204)	44.7%	12.6%	33.4%	1.7%	7.6%	100%
Education (210)	9.3%	6.0%	82.4%	0.5%	1.8%	100%
Experimental Sciences	27.1%	15.0%	52.2%	1.6%	4.2%	100%
Biology and Nature (302)	27.8%	14.4%	50.7%	2.5%	4.5%	100%
Health Sciences	16.0%	6.9%	64.0%	7.8%	5.3%	100%
First-cycle specialisations in Health Sciences (401)	15.8%	7.8%	60.9%	8.0%	7.6%	100%
Engineering and Architecture	41.3%	13.0%	38.0%	6.2%	1.5%	100%
Advanced production technologies (505)	43.4%	12.8%	39.0%	2.7%	2.1%	100%
Advanced production technologies (506)	50.5%	9.9%	36.5%	2.1%	1.0%	100%
Information and Communication (507)	32.5%	18.7%	44.3%	2.7%	1.8%	100%
Information and Communication (508)	37.6%	14.4%	45.5%	1.9%	0.5%	100%
Total	**31.6%**	**12.7%**	**47.3%**	**4.5%**	**3.9%**	**100%**

The analysis of the results given in table 8 shows that:

1. Management

   - The subject area with the highest number of graduates above the average for jobs in management is, firstly, Economics and Law (46.0%). The figures for Law bring the average down, whereas those for Economics and Business Administration and Management raise it (52.6%).

   - The second highest subject area is Engineering and Architecture, with 41.3% of all graduates employed with jobs in management. The subject here with the highest number of people was Advanced Production Technologies (50.5%), whereas Information and Communication Technologies accounted for less than the average (32.5%).

   - Subject areas with an intermediate level of graduates with jobs in management were Experimental Sciences, Social Sciences and Humanities.

   - The subject area with the lowest number of graduates with jobs in management was Health Sciences, with 16.0% of the total.

2. Professional

   - Although the graduates with professional jobs accounted for 12.7% on average, it is important to point out that the highest quantity of graduates in relative terms was in Humanities (18.8%).

   - The subject area with the lowest number of professionally employed graduates, according to the criteria of this study, was Health Sciences (7%).

3. Skilled workers

   - It can be seen that the subject area with the highest number of graduates was Health Sciences (64.0%), in comparison with the low corresponding figure for jobs in management. This was followed by the Social Sciences (59%).

   - The subject area with the number of graduates in skilled jobs that was considerably below the average was Economics and Law, which only accounted for 31.3%.

Table 9 | Full-time employed graduates according to degree course chosen

Degrees	M/ment	Profess.	Skilled	Self-empl.	Unskilled	Total
Economics and Law	46.0%	12.9%	31.3%	5.7%	4.0%	100%
Business Administration and Management	53.9%	11.2%	29.4%	1.6%	3.9%	100%
Economics	52.8%	15.5%	27.5%	0.4%	3.8%	100%
Business administration	47.4%	14.8%	29.6%	3.5%	4.7%	100%
Law	31.8%	10.3%	37.9%	17.1%	3.0%	100%
Social Sciences	24.1%	11.4%	58.9%	1.6%	3.9%	100%
Labour relations	43.5%	12.6%	32.1%	2.3%	9.5%	100%
Early childhood education	6.6%	3.8%	88.8%	-	0.7%	100%
Primary education	6.2%	3.8%	89.5%	0.5%	-	100%
Health Sciences	16.0%	6.9%	64.0%	7.8%	5.3%	100%
Nursing	6.4%	6.9%	75.7%	-	11.0%	100%
Medicine	4.3%	1.7%	91.5%	0.4%	2.1%	100%
Technical	41.3%	13.0%	38.0%	6.2%	1.5%	100%
Computer Engineering	35.6%	12.9%	48.5%	2.5%	0.5%	100%
Total	**31.6%**	**12.7%**	**47.3%**	**4.5%**	**3.9%**	**100%**

From the analysis of the differences between the degree courses with more than 200 graduates (see table 7, appendix for the absolute values), it can be seen that:

- The degree courses with a high proportion of graduates with jobs in management were Business Administration and Management, Business Studies and Labour Relations.
- The number of graduates in Law with jobs in management is similar to the average (31.8%).
- Teaching (Early Childhood Education and Primary Education), Nursing and Medicine all accounted for a low number of jobs in Management.
- Economics was the subject with the highest proportion of graduates in jobs requiring a professional qualification.
- In terms of skilled jobs, Medicine is over-represented in proportional terms (91.5% of all graduates), Education (89%) and Nursing (75.7%).

- The lowest proportion of people with skilled jobs was in Economics, Business Administration and Management and Business Studies.

5

GENDER INEQUALITY

5. GENDER INEQUALITY

Although the number of females has surpassed that of males at university, there are two aspects that are still pending: their unequal distribution according to subject area and the conversion of the raised level of education of female graduates into opportunities in the labour market, particularly in terms of earnings.

5.1. University and subject

Females accounted for more than 60% of all university graduates in 2004. The universities with the highest proportion of females were the University of Vic, University of Barcelona and the Autonomous University of Barcelona. The university with the highest proportion of males was the Technical University of Catalonia/UPC.

Table 10 | Distribution of graduates according to gender and university

Gender	UB	UAB	UPC	UPF	UdG	UdL	URV	UVic	Total
Female	70.4%	66.4%	29.1%	63.1%	61.5%	59.9%	63.5%	75.6%	61.2%
Male	29.6%	33.6%	70.9%	36.9%	38.5%	40.1%	36.5%	24.4%	38.8%
Total	**3,279**	**2,605**	**1,694**	**892**	**1,100**	**975**	**1,226**	**487**	**12,258**

There was a higher female presence mainly in the Health Sciences, Social Sciences and Humanities. There was a similar proportion of males and females in Economics and Law, with the percentage of females being slightly higher. Experimental Sciences had an average figure and in Engineering and Architecture there was a higher proportion of males.

5.2. Earnings according to the parents' level of education

As mentioned above, there were considerably more female graduates (61.2%) than male graduates (38.8%). Nevertheless, there was a slight under-representation in terms of the average number of females whose parents had a higher education (58.2%) and a slight over-representation of males whose parents had a higher education (around 42%). The daughters of parents with a primary education

accounted for 62.0%, as to 40.1% in the case of males; this means that, in addition to there being more female graduates, they mostly came from families with a lower level of education.

As some researchers have observed, differences in earnings according to gender are also associated with other aspects such as area of study, the scope of the enterprise's activity (public or private), type of contract, job functions, etc. (Martínez Costa, Calvet Puig, Gallego Fernández, Pons Peregort, Roca Martín, Tura Solvas, 2007, 266-269; AQU Catalunya, 2003, 230). In this case, when looking at graduate earnings according to gender and the parents' highest level of education, differences are apparent, as the daughters of parents with a primary education earned slightly less than the rest, although the differences were not that big. This phenomenon does not occur among males, given that even those whose parents had a primary education earned slightly above the average.

Table 11 | Gross average monthly earnings of the full-time employed according to the parents' level of education

Parents' highest level of education	All			Female			Male		
	Earnings	St. dev.	N	Earnings	St. dev.	N	Earnings	St. dev.	N
Higher	1,889.8	591.9	2,366	1,785.6	556.8	1,366	2,032.3	608.7	1,000
Secondary	1,824.5	558.4	2,726	1,725.5	521.8	1,689	1,985.6	578.5	1,037
Primary + No studies	1,815.8	571.5	3,629	1,686.0	515.6	2,243	2,026.0	594.7	1,386
Total	**1,838.6**	**573.9**	**8,721**	**1,724.3**	**529.9**	**5,298**	**2,015.6**	**594.1**	**3,423**

5.3. Earnings according to the parents' occupation

It can be seen that, among children of parents with a high occupational status, females account for 59.3% and males 40.7%. Among children of parents with a medium occupational status, this percentage is 62.4% and 37.6%, respectively, and for parents with a low occupational status, the corresponding figures are 62.2% and 37.8%.

As a whole, there are no big differences in the earnings of full-time employed graduates on the basis of the parents' highest occupational status. There is, however, when an overall analysis is made of earnings according to gender. Although the difference in earnings between genders is 17% on average, it is 16% for both male and female children of parents with a high and medium occupational status, and this value increases to 18% among male and female children of parents with a low occupational status. In spite of the fact that the differences according to the parents' occupation are small, the daughters of families on a low occupational level are affected more.

Table 12 | Gross average monthly earnings of the full-time employed according to the parents' occupational status

Occupational status of the parents	All			Female			Male		
	Earnings	St. dev.	N	Earnings	St. dev	N	Earnings	St. dev.	N
High	1,897.0	589.6	2,944	1,776.9	551.7	1,732	2,068.7	599.6	1,212
Medium	1,809.8	561.9	2,752	1,705.6	520.0	1,706	1,979.7	586.1	1,046
Low	1,810.4	566.0	2,914	1,693.8	516.9	1,800	1,998.9	590.7	1,114
Total	**1,839.8**	**574,3**	**8,610**	**1,725.1**	**530.8**	**5,238**	**2,018.0**	**593.6**	**3,372**

In the comparison made in the previous section relative to the parents' level of education, the difference in the case of male graduates whose parents only had up to a primary education was 20%, 2 points higher than the difference in the case of graduates whose parents had a low occupational status.

5.4. Earnings according to graduate occupation

Lastly, from the analysis of the differences of the average earnings between males and females, it can be seen that, despite having equivalent job functions, university graduates earn different salaries.

Table 13 | Full-time employed graduates: differences in gross earnings between genders according to job

t-test for equal means	Management	Professionally qualified	Skilled	Self-empl., with no univ. studies	Unskilled
Mean difference	-333.3	-237.8	-255.8	-322.1	-129.2
Sig. (bilateral)	0.000	0.000	0.000	0.000	0.007
t	-15.127	-7.448	-14.929	-4.853	-2.691

The table shows the difference in mean earnings of females compared to males in each occupation category. The biggest differences can be seen in jobs in management and among the self-employed, where females earn, respectively, 333 and 255 euros less than males. The statistics (bilateral sigma and Student's *t*) show that the differences in earnings observed between both genders is not the result of chance.

These observations call for further thought regarding gender inequality. Having gained equality in educational terms, even though differences do still exist at the overall scale (Aikman, Unterhalten, 2005) in terms of access and the increase in the rates of female participation on the different levels of education, it is the labour market that appears to be the most important bastion where gender inequality persists. Although this subject has been dealt with extensively by many authors, what is important in the university context is that, when entering the labour market, they have a lower rate of return. This is not dealt with here although consideration of inequality can be widened to aspects that go beyond the inequality of access to earnings and jobs from a perspective of gender justice (Robeyns, 2007).

6

ENTRANCE GRADE, ACADEMIC ACHIEVEMENT AND LABOUR MARKET OUTCOMES

6. ENTRANCE GRADE, ACADEMIC ACHIEVEMENT AND LABOUR MARKET OUTCOMES

As mentioned at the beginning of this study, the AQU Catalunya survey on the labour market outcomes of university graduates enables an analysis to be made of entrance grades and academic achievement and an association made between these and their entry into work and social origin.

In overall terms, the generation that graduated in 2004 from the seven Catalan universities in the study had an average entrance grade of 6.7 and a transcript of records, on finishing their studies, of 1.7. This grade is calculated on the basis of 1 for pass, 2 very good, 3 outstanding and 4 with distinction in all courses in the degree programme. For purposes of statistical secrecy, the University of Vic does not provide information on grades.

As for grades according to gender, it can be seen that the grades of females are slightly higher than those of males. In the case of entrance grades, this is repeated in all universities except for the Technical University of Catalonia/UPC, where 70% of all graduates were males and they have the same grade as females.

In terms of transcript of records grades, in the majority of universities both males and females have the same grade, except in the case of the University of Girona and the University of Lleida, where the mean difference was 0.2 and 0.1, respectively, higher in the case of female graduates.

Table 14 | Entrance grades and transcript of records according to university and gender

University and gender		UB			UAB			UPC			UPF		
		F	M	Tot	F	M	Tot	F	M	Tot	F	M	Tot
Entrance grade	Mean	6.8	6.5	6.7	7.0	6.7	6.9	6.8	6.8	6.8	7.3	7.2	7.3
	St. deviation	1.0	0.9	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9
Transcript of records	Mean	1.7	1.7	1.7	1.8	1.8	1.8	1.5	1.5	1.5	1.7	1.7	1.7
	St. deviation	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4

Tabla 14 (*continuation*) | Entrance grades and transcript of records according to university and gender

University and gender		UdG			UdL			URV			Total		
		F	M	Tot	F	M	Tot	F	M	Tot	F	M	Tot
Entrance grade	Mean	6.6	6.4	6.5	6.4	6.1	6.3	6.2	6.0	6.1	6.8	6.6	6.7
	St. deviation	0.9	0.9	0.9	1.0	0.8	0.9	0.9	0.8	0.9	1.0	0.9	1.0
Transcript of records	Mean	1.7	1.5	1.6	1.7	1.6	1.7	1.6	1.6	1.6	1.7	1.6	1.7
	St. deviation	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4

6.1. Entrance grade

As is well known, the student's entrance grade may condition his/her admission to different subject areas and universities, as the cut-off grade varies according to the year in which the graduate is admitted and the chosen degree course. Bearing in mind that we are dealing with the overall entrance grades for graduates in 2004, irrespective of the year of admission to university, it can be stated that, in general terms, entrance grades to the Pompeu Fabra University, the Autonomous University of Barcelona and the Technical University of Catalonia/UPC were higher than the overall average.

An analysis of entrance grades according to subject areas shows that, on average, students in Experimental Sciences and Health Sciences had the highest grades (7 points), followed by Social Sciences (6.8 punts), Engineering and Architecture (6.7) and Economics and Law (6.6). Humanities had the lowest average entrance grade (6.4). From table 15 it can be seen that there are differences according to the different subject areas in different universities.

Table 15 | Entrance grades according to subject area and university

Subject	UB		UAB		UPC		UPF		UdG		UdL		URV		Total	
	E	D	E	D	E	D	E	D	E	D	E	D	E	D	E	D
1. Humanities	6.3	0.9	6.6	1.0	-	-	7.3	0.8	6.3	0.9	6.2	1.0	5.7	0.8	6.4	1.0
2. Social Sciences	6.7	1.0	7.1	1.0	-	-	6.9	1.2	6.7	0.9	6.4	0.9	6.2	0.8	6.8	1.0
3. Economics and Law	6.5	0.8	6.5	0.9	-	-	7.4	0.8	6.4	0.9	6.1	1.1	5.9	0.8	6.6	1.0
4. Experimental Sciences	6.9	0.9	7.1	0.9	7.6	1.0	7.7	0.5	6.9	0.9	-	-	6.1	0.8	7.0	0.9
5. Health Sciences	7.2	0.9	7.3	0.7	6.0	0.5	-	-	6.7	0.8	6.5	0.8	7.0	1.0	7.0	0.9
6. Engineering / Architecture	7.2	0.7	6.6	0.8	6.9	0.9	7.1	0.7	6.5	0.9	6.2	0.7	6.0	0.8	6.7	0.9
Total	**6.7**	**1.0**	**6.9**	**1.0**	**6.8**	**0.9**	**7.3**	**0.9**	**6.5**	**0.9**	**6.3**	**0.9**	**6.1**	**0.9**	**6.7**	**1.0**

References: E = Entrance grade / D = Standard deviation

Caution is required when analysing these percentages, given the diversity of the means for the different degree courses and the number of cases that they represent in absolute values (see table 8, appendix for the absolute values).

6.2. Transcript of records

An analysis of entrance grades according to subject areas shows that, on average, students in Humanities, Social Sciences, Experimental Sciences and Health Sciences had the highest grades, whereas students in Engineering and Architecture and Economics and Law had the lowest, which is paradoxical in comparison to their labour market outcomes. In spite of this general behaviour, there is some variability according to university, which can be seen in the table below.

Table 16 | Average grade for the transcript of records according to subject area and university

Subject area	UB		UAB		UPC		UPF		UdG		UdL		URV		Total	
	T	D	T	D	T	D	T	D	T	D	T	D	T	D	T	D
1. Humanities	1.8	0.5	1.9	0.4	-	-	1.8	0.4	1.6	0.5	1.7	0.5	1.7	0.4	1.8	0.5
2. Social Sciences	1.8	0.4	1.8	0.3	-	-	1.7	0.4	1.8	0.4	1.8	0.3	1.7	0.3	1.8	0.4
3. Economics and Law	1.4	0.3	1.6	0.4	-	-	1.6	0.4	1.5	0.3	1.5	0.3	1.4	0.3	1.5	0.3
4. Experimental Sciences	1.6	0.4	1.8	0.5	1.7	0.4	2.2	0.6	1.6	0.5	-	-	1.7	0.4	1.7	0.4
5. Health Sciences	1.7	0.4	1.8	0.5	1.2	0.2	-	-	1.8	0.4	1.9	0.3	1.7	0.4	1.7	0.4
6. Engineering / Architecture	1.7	0.4	1.7	0.3	1.5	0.3	1.7	0.2	1.4	0.3	1.6	0.3	1.5	0.3	1.5	0.3
Total	**1.7**	**0.4**	**1.8**	**0.4**	**1.5**	**0.3**	**1.7**	**0.4**	**1.6**	**0.4**	**1.7**	**0.3**	**1.6**	**0.4**	**1.7**	**0.4**

References: T = Transcript of records / D = Standard deviation

As with the results given in the previous section, caution should again be taken when analysing these percentages, given the diverse averages for the different degree courses and the number of cases that they represent in absolute values (see table 9, appendix for the absolute values).

6.3. Relation between entrance grade and transcript of records

In terms of the relation between entrance grade and transcript of records, even though there is a statistically significant correlation, its value is fairly low (coefficient of determination = 0.14). Nevertheless, particular features are seen when an analysis is made according to the different universities: the University of Girona and the Pompeu Fabra University have the highest correlations, followed by the Autonomous University of Barcelona and the University of Lleida.

Table 17 | Correlation coefficients between entrance grade and transcript of records according to university

	UB	UAB	UPC	UPF	UdG	UdL	URV
Pearson correlation	0.339(**)	0.443(**)	0.344(**)	0.503(**)	0.517(**)	0.436(**)	0.137(**)
Signif. (bilateral)	0.000	0.000	0.000	0.000	0.000	0.000	0.000

(**) The correlation is significant at the 0.01 level (bilateral)

The values for the Technical University of Catalonia/UPC and the University of Barcelona are just slightly over the average, and there is hardly any apparent relation between the two grades for the Rovira i Virgili University.

The most relevant results for each subject area are given below.

Table 18 | Correlation coefficients of entrance grade and transcript of records according to subject area

	Humanities	Social Sciences	Economics and Law	Experimental Sciences	Health Sciences	Technical
Pearson correlation	0.500(**)	0.310(**)	0.441(**)	0.585(**)	0.319(**)	0.303(**)
Signif. (bilateral)	0.00	0.00	0.00	0.00	0.00	0.00

(**) The correlation is significant at the 0.01 level (bilateral)

From this table it can be seen that:

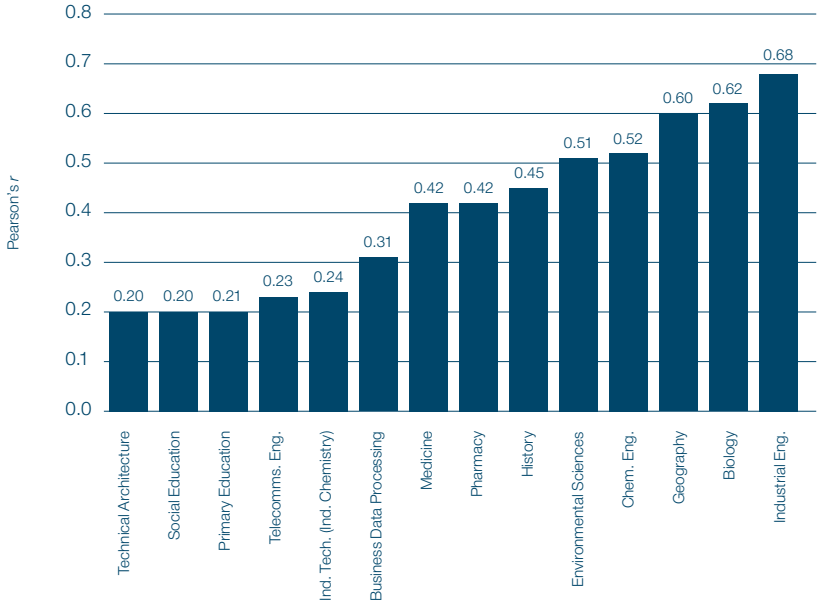
- The graduates with the closest relationship between their transcript of records and entrance grade are in Experimental Sciences.
- Next are graduates in Humanities and Economics and Law (0.50 and 0.44, respectively).

- The three subject areas with the lowest correlation (below the mean) are Health Sciences, Social Sciences and Engineering and Architecture, with correlation coefficients of 0.32, 0.31 and 0.30, respectively.

Out of the 114 degree programmes included in the study, only those with a significant correlation between entrance grade and transcript of records and a minimum of 100 graduates (sampling error of 10%) are given below.

On the basis of this threshold, it can be seen that the lowest correlation occurs in degree programmes such as Technical Architecture, Social Education, Primary Education Teaching and Telecommunications Engineering, whereas the highest levels of association are in Industrial Engineering, Biology and Geography.

Diagram 2 | Correlation coefficient between entrance grade and transcript of records according to the degree programmes selected



6.4. Education and job match; assessment of the factors of recruitment and education

In order to know the relation between the graduate's level of education and his/her job requirements, there is a useful indicator from a prior report produced by AQU Catalunya that classifies graduates as follows (Mañé Vernet, Miravent Arnau, 2007, 162):

a) Matched: graduates who affirm that their level of education is appropriate for their job, irrespective of the qualifications required to obtain the job.

b) Over-qualification: individuals who believe that their university qualification is not necessary for their job, irrespective of whether this was necessary or not prior to starting work.

c) Mismatched: graduates who affirm that they were required to have a specific qualification to be hired, but who consider that their qualification is not necessary for the work that they do.

By applying these criteria to full-time employed graduates, 79.6% considered they were appropriately educated for the job that they do, 13.6% were of the opinion that they were over-educated and the remaining 6.8% considered themselves to be mismatched. There were no great differences according to gender relative to this aspect.

In terms of entrance grade, the first group of graduates had an average of 6.8, the second 6.5 and the third 6.6. Relative to the differences in the average for the transcript of records of each group, the group of matched graduates had an average grade of 1.7, while the rest had 1.6. From these figures, it can be summed up that there are only minor differences according to entrance grade, and for the transcript of records differences are practically non-existent. This is consistent with the usual practice of staff selection and recruitment, apart from contracts given by the universities.

Moreover, relative to the matched group, it can be seen that the assessment they make of the education they received and its usefulness in their job differs according to the university. The graduates were asked to assess, on a scale from 1 (unimportant or no influence) to 7 (highly important or a very big influence), the education they received and its appropriateness to the work they carry out in their job.

The results show that, on average, the matched graduates rated their overall education at university with 5.1 out of a maximum of 7 (i.e. 7.3 out of 10). In specific terms, they rated theoretical learning as 5 and practical learning with 4.8. In general, the most highly rated aspects were theoretical learning, teamwork, critical thinking

and written expression, whereas computer-based skills, administration, leadership and languages were rated the lowest.

Table 19 | Mean assessment of the level of education received at university*

Assessment of:	UB	UAB	UPC	UPF	UdG	UdL	URV	UVic	Total
Theoretical learning	4.9	4.8	4.8	5.0	4.6	4.7	4.7	5.1	4.8
Team work	4.5	4.8	4.7	4.9	4.7	4.8	5.0	5.3	4.7
Critical thinking	4.5	4.7	4.4	4.7	4.5	4.5	4.5	4.9	4.5
Written expression	4.5	4.6	3.9	4.9	4.5	4.5	4.6	5.0	4.5
Documentation skills	4.4	4.4	4.3	4.7	4.4	4.5	4.4	4.7	4.4
Problem solving	4.1	4.2	4.8	4.5	4.3	4.3	4.5	4.6	4.4
Practical learning	4.1	4.1	4.0	4.2	4.0	3.9	4.3	5.0	4.1
Oral expression	4.0	4.1	3.7	4.4	4.0	4.0	4.4	4.9	4.1
Decision-making	4.0	4.0	4.1	4.3	4.0	4.2	4.2	4.5	4.1
Creativity	3.7	3.9	4.0	4.0	3.9	4.0	4.0	4.7	3.9
Computer-based skills	3.3	3.7	4.5	4.3	4.0	4.0	3.8	4.1	3.9
Administration	3.7	3.7	3.8	4.3	3.9	3.9	4.0	4.2	3.8
Leadership	3.3	3.4	3.5	3.9	3.5	3.5	3.8	4.1	3.5
Languages	2.6	2.7	2.4	3.5	2.6	2.8	2.7	3.3	2.7

* Scale of 1 to 7

As for the graduates' assessment of the competences (skills) necessary in their job, the most highly rated were problem solving, teamwork and decision-making. The least-highly rated were practical learning, theoretical learning and languages. It is also important to point out that the graduates' assessment of the usefulness of each competence in their job (the interval of variation is in the decimal points) was similar to that of graduates with skilled jobs in 2001 (Figuera Gazo, Dorio Alcaraz, Torrado Fonseca, 2007, 218).

Table 20 | Mean assessment of the skills necessary for their job*

Assess the usefulness of:	UB	UAB	UPC	UPF	UdG	UdL	URV	UVic	Total
Problem solving	5.3	5.4	5.7	5.6	5.4	5.5	5.4	5.5	5.5
Team work	5.3	5.4	5.5	5.5	5.3	5.4	5.5	5.7	5.4
Decision-making	5.3	5.3	5.6	5.5	5.3	5.5	5.4	5.4	5.4
Computer-based skills	5.0	5.2	5.5	5.5	5.2	5.3	5.0	5.1	5.2
Critical thinking	5.1	5.2	5.1	5.2	5.1	5.2	5.1	5.3	5.2
Written expression	5.1	5.2	4.8	5.4	5.0	5.1	5.1	5.3	5.1
Oral expression	5.0	5.0	4.8	5.2	4.9	5.0	5.2	5.4	5.0
Documentation skills	5.0	5.0	4.9	5.0	4.9	5.0	4.9	5.1	5.0
Administration	4.7	4.7	5.0	5.2	4.8	4.9	4.9	4.8	4.9
Creativity	4.7	4.7	4.7	4.7	4.7	4.9	4.7	5.1	4.8
Leadership	4.4	4.4	4.9	4.9	4.5	4.6	4.7	4.7	4.6
Practical learning	4.5	4.5	4.3	4.5	4.3	4.5	4.6	5.1	4.5
Theoretical learning	4.5	4.4	4.3	4.5	4.3	4.5	4.4	5.0	4.4
Languages	4.1	4.3	4.3	4.7	3.8	3.9	4.1	3.9	4.2

* Scale of 1 to 7

In overall terms, the entrance grade and transcript of records bear no relationship according to the graduates' mean assessment of their university education and the necessary skills required in their job (see table 10, appendix).

7

DO PARENTAL STATUS AND ACADEMIC RESULTS HAVE AN INFLUENCE ON THE LABOUR MARKET OUTCOMES OF UNIVERSITY GRADUATES?

7. DO PARENTAL STATUS AND ACADEMIC RESULTS HAVE AN INFLUENCE ON THE LABOUR MARKET OUTCOMES OF UNIVERSITY GRADUATES?

In the results given up until now, it has been seen that certain differences, which in general are subtle, are apparent between graduates when a comparison is made according to their parents' highest level of education or occupation. Slight differences that emerge in the analysis show that the parents' origin has an indirect impact on learning, and that this leads to differences between students in their learning pathways (choice of certain degree courses, full-time study, etc.), whereas for other aspects that are more closely linked to the learning process itself at university and its application in the labour market there are no differences according to the parents' origin (entrance grade, transcript of records, occupational quality).

Previous studies have produced similar results after observing a low level influence of social origin on student attitudes and behaviour, on the grounds that the idea that the absence of a relationship between social origin and motivation in studies is based on the fact that the influence of social origin on primary socialisation has been weakened by the changes in the social structure, the influence of secondary education and the present-day culture of the mass media (Masjuan, 2005, 127).

We also know that students whose parents have a low level of education face more difficulties in obtaining academic qualifications (López Blasco, 2009, 188) and that the motivations of students are different according to the type of degree course that they choose (Llosada Gistau, Morcillo Hernández, Troiano Gomà, 2005, 229-248). In the same way, it can also be said that social origin has very little influence en the process of entry into work, aside from the children of parents in management, who have a comparative advantage (Masjuan, Troiano, Vives, 2002, 109).

Another study (Casal, García, Merino, Quesada, 2006, 39-40) enables this weak relationship between social origin and entry into work to be put in context in that it reminds us that we are looking at a very particular group, i.e. university graduates, and that, in terms of the ways people make the transition to adult life, this is an "immediate success" category made up of young people who quickly and directly acquire successful professional positions and, on occasions, the category of "successive approach" that identifies young people who aim at successful employment that calls for decision-making and lengthy learning pathways, as well as certain delays or the adjustment to situations of study and/or work, as well as delays in gaining independence from the family (the process of leaving home). In other words, this is far from dealing with the overall group of young people who can be

classified, according to the aforementioned authors, into six different types of trajectory among young people in their process of transition to adult life.

From another analytical dimension, namely, the process of young people between 15 and 34 gaining their independence, a study carried out by the Catalan Youth Observatory has shown that, in spite of a young person's behaviour being influenced by his/her social origin, such as the duration of schooling and the higher probability of young people from families with higher level studies undergoing a more lengthy education, in itself the "net effect" of social origin does not affect their gaining their independence (Miret and Gamundi, Salvadó and Nayach, Serracant and Melendres, Soler and Martí, 2008, 27-28).

Taking these antecedents into account and from the figures currently available, we decided to carry out two types of analysis to verify whether this phenomenon also occurs in working graduates four years after completing their studies at university.

The two approaches used to explore the subject are described below:

a) An analysis was made of the effect of the entrance grade, academic achievement, family status and gender on the gross monthly earnings of graduates.

b) An analysis was made of the effect of the abovementioned factors on the occupational quality index developed by Corominas et al. (2007).

Earnings are a variable that has been typically used to express a multitude of elements which have an influence in the labour market; it is used here as an indicator for the labour market outcomes of graduates. Graduates were asked the degree to which their university education, their parents' origin and gender had an impact on their earnings four years after graduating from university.

Corominas et al. developed an index that summarises the quality of the labour market outcomes of university graduates (Corominas Rovira, Villar Hoz, Saurina Canals, Fàbregas Alcaire, 2007, 127-136). The index combines the type and duration of the contract of employment, salary, the match (suitability) between the graduate's university studies and job, and job satisfaction in general. The index varies between 0 and 100, with the lowest value reflecting a lower quality of labour market outcomes and the highest value representing the highest quality. In the second exercise, an analysis was therefore made of the degree to which the process of university education, the parents' origin and gender had an impact on the graduate's occupational quality four years after graduating from university.

Methodology used to analyse the factors that have an influence on labour market outcomes

Multiple regression was used to analyse only those who were full-time employed, with the following variables in each situation:

1. Academic background: entrance grade of each graduate.
2. Academic achievement: average grade in each graduate's transcript of records.
3. Family status
   - 3.1. Highest occupation achieved by either the father or mother: management, professionally qualified (which includes self-employed work that calls for studies university), skilled work, self-employed work that does not call for university studies, and unskilled work (reference variable: skilled work)
   - 3.2. Highest level of education reached by either the father or mother: both received a primary education or had no schooling, one of the two received a secondary education, both received a secondary education, one of the two received a higher education, or both received a higher education (reference variable: both received a primary education or had no schooling)
4. Gender: males and females (reference variable: male)

It should be mentioned here that the University of Vic was not included in this analysis as no data were available for entrance grades or transcripts of records.

7.1. Overall results of full-time employed graduates

a) Gross monthly earnings of graduates

Taking into consideration as a whole all of those who graduated from university in 2004 and who were working full-time in 2008 and by applying the abovementioned methodology, it turns out that the explanatory power of the model used is only 9% ($R^2 = 0.087$). This means that the relationship is weak between university graduates' earnings and the other variables analysed (see the regression model in table 11, appendix). This low level influence of 9% can basically be explained by gender, due to the fact that males receive higher earnings than females and, to a very slight degree, because the children of people who are either professionally qualified or in management have higher earnings than the children of skilled workers and those with a higher entrance grade and better transcript of records earn slightly more than the rest.

b) Occupational quality of graduates

In this case we find that the explanatory power of the model used is 2% ($R^2 = 0.021$), that is, that when considering all of the variables overall there is practically no relationship between the occupational quality of university graduates and the variables analysed (see the regression model in table 12, appendix).

7.2. Results according to subject area

The finding of the weak relationship between the labour market outcomes of the group of graduates as a whole and the different variables analysed led to the exploration of whether it is possible to find a closer relationship according to subject areas. The following table shows the results obtained.

Table 21 | The coefficient of determination and level of significance of the model of the labour market outcomes of university graduates according to area of study

Dependent variable	Monthly earnings		Occupational quality index	
Subject area	R^2	Sig.	R^2	Sig.
Humanities	0.041	0.003	0.066	0.000
Social Sciences	0.027	0.000	0.040	0.000
Economics and Law	0.070	0.000	0.018	0.018
Experimental Sciences	0.045	0.011	0.013	0.779
Health Sciences	0.041	0.017	0.025	0.185
Engineering / Architecture	0.060	0.000	0.039	0.000

R^2: Coefficient of determination (proportion of explained variance). Sig.: Statistical significance

The coefficients of determination for the explanatory power of the model used are no higher than 7% in Economics and Law when analysing monthly earnings, and 6% in Humanities when analysing the occupational quality of graduates. In terms of subject area, there is therefore no improvement in the previous results on the weak relationship between labour market outcomes (characterised by monthly earnings and occupational quality) and gender, parental education and occupation, and the entrance grade and transcript of records.

7.3. Results according to selected subjects

The above results call for a deeper level of exploration and the model was re-examined at the level of the subject studied. The results show that an association is evident for at least two subjects: Fine Arts, with a total of 47% of the variance explained out of the total variance ($R^2 = 0.472$), and Civil and Technical Engineering, with a 32% explanatory power ($R^2 = 0.318$).

Table 22 | Coefficient of determination and level of significance of the model of the labour market outcomes of university graduates according to the subject studied

Dependent variable	Monthly earnings		Occupational quality index	
Subject*	R^2	Sig.	R^2	Sig.
Humanities				
Geography and History (101)	0.078	0.020	0.130	0.000
Fine Arts (108)	0.472	0.039		
Economics and Law				
Economics and Business Admin. and Management (201)	0.046	0.038	0.052	0.010
Business studies (202)	0.100	0.000		
Law (203)	0.100	0.000	0.062	0.023
Social Sciences				
Labour Studies (204)	0.095	0.002	0.067	0.039
Education (210)	0.037	0.001	0.046	0.000
Experimental Sciences				
Physics and Mathematics (303)	0.178	0.013	0.187	0.006
Health Sciences				
First-cycle degree specialisations in H. Sciences (401)			0.102	0.002
Technical				
Technical Civil Engineering (502)	0.318	0.012		
Advanced Production Technologies (505)	0.181	0.000	0.116	0.000

*Only subjects with a significant coefficient are included.
R^2: Coefficient of determination (proportion of explained variance). Sig.: Statistical significance

For occupational quality, however, the explained variance is smaller; Physics and Mathematics (18%) stand out here.

7.4. Results according to certain degree courses

It must be first pointed out that the separate analysis of each degree course raises the issue of how representative the figures are, given that only 35 out of the 114 degree courses had a minimum of 100 respondents. Even the analysis of just these degree courses only gives significant results for 14 courses. The following table shows the degree courses with more than 100 graduates and the acceptable level of significance, when applicable (statistical significance lower than 0.05).

Table 23 | The coefficient of determination and level of significance of the model of the labour market outcomes of university graduates according to degree course

Dependent variable	Monthly earnings		Occupational quality index	
Degree course*	R^2	Sig.	R^2	Sig.
Humanities				
Geography	0.211	0.034	0.252	0.006
History of Art	0.390	0.080		
English Philology	0.338	0.022		
Fine Arts	0.472	0.039		
Economics and Law				
Business Admin. and Management	0.082	0.033	0.081	0.023
Business Studies	0.100	0.000		
Law	0.100	0.000	0.062	0.023
Social Sciences				
Labour relations	0.098	0.017		
Physical Education	0.196	0.030	0.206	0.002
Early Childhood Education			0.113	0.025
Music Teacher			0.225	0.029
Social Education			0.197	0.006
Technical				
Industrial Tech. (Electronics)	0.230	0.009		
Industrial Tech. (Industrial Chemistry)	0.331	0.000	0.270	0.001

*Only degree courses with over 100 graduates and significant coefficients included.
R^2: Coefficient of determination (proportion of explained variance). Sig.: Statistical significance

From this analysis, there are acceptable coefficients of determination for the degree courses in Fine Arts (R^2 = 0.472), History of Art (R^2 = 0.390), English Philology (R^2 = 0.338) and Industrial Chemistry (R^2 = 0.331) from the analysis of gross monthly earnings as an indicator of labour market outcomes.

On the other hand, for degree courses where the dependent variable is the occupational quality index, it can be seen that the explanatory power of the model is lower, even though there are certain degree courses, such as Industrial Chemistry (R^2 = 0.270), Geography (R^2 = 0.252) and Music Education and Teaching (R^2 = 0.225), where it is higher.

7.5. Considerations regarding the above analysis

In order to analyse whether there was any effect of the learning pathways and social origin of university graduates on earnings and occupational quality, successively smaller groups of graduates were taken and classified according to subject area, subject and certain degree courses. In general terms, we found certain features were shared among the selected degree courses, which show that the earnings of females are lower than those of males, that the parents' level of education has no influence on labour market outcomes, that the parents' occupational level only has a certain impact in the case of parents with jobs in management and the professionally qualified, that in general the grade with a certain influence is the entrance grade, and that the transcript of records grade has no influence. These relationships can be seen when monthly earning are used as an indicator of labour market outcomes, and they are even weaker when taking into account the occupational quality index.

Establishing the fact that social origin has practically no effect on the labour market outcomes of university graduates may be counterintuitive. One of the possible explanations (Subirats et al., 2009; Carabaña, 2003, 2007) could be that the influence of social origin is to be found at an earlier age, i.e. during secondary education. This would explain, although only partially, why we did not find any important influence of social origin in the university: by the time the student enters university, the class filter selection process has already operated, although this is not very strong considering that the presence index of children whose parents have a lower level of education is 0.8.

Bearing in mind that our study deals with the group of university graduates in one particular year, there are limitations that stem from the impossibility of being able to compare them with students who did not complete their university studies or with those in secondary education who did not manage to get into university. For this reason, what can be stated is that, in overall terms, social origin was, by 2008, not an obstacle for the labour market outcomes of Catalan graduates who completed their studies in 2004.

8

CONCLUSIONS

8. CONCLUSIONS

The title of this paper, THE CATALAN UNIVERSITIES AS A FACTOR OF EQUITY AND PROFESSIONAL MOBILITY, is based on the analysis made of the figures obtained from the AQU survey of university graduates in 2004 regarding their professional outcomes in the labour market, their studies and their parents' occupation and studies. In answer to the question posed in the introduction, the results of the analysis make it possible to conclude that, in terms of the universities in Catalonia as a whole, they have actually played a role in social advancement, quite the opposite of the position maintained by other authors concerning their role as a reproducer of the differences that stem from the social origin of young people and how they act as a filter to gaining access to university and/or condition their academic achievement.

Before going any further, mention should be made of the high rate of employment. In 2008 the unemployment rate of graduates who graduated in 2004 from Catalan universities was only 3.1%, a figure that supports Manel Castells (2006, 15) who stated that "...one of the grossest errors repeated in the media in Catalonia is that 'the university is a factory of the unemployed'. Nor is this the case in Spain (where the unemployment rate for university students is much lower than for those who do not get beyond secondary education) nor in the world in general, as Martin Carnoy demonstrated with the high statistical correlation between the number of years in education and salary levels throughout an individual's career".

Moreover, in its role of raising the level of education of the population in Catalonia, it should be pointed out that there is a high level of equity in the higher education system in Catalonia in terms of the social origin of graduates. This fact coincides with the figures presented by the Organisation for Economic Development and Cooperation (OECD, 2007) in reference to Spanish universities as a whole in comparison to those in other OECD member countries. This can be seen in the following results:

- Although based on approximate estimations, the presence index for the different levels of education of parents, when comparing the level of education of the graduates' parents with the average for their generation, is non-homogeneous, although it is very near to 1 for both those with up to a primary education (0.8) and those with a secondary education (0.9). The difference is greater for the children whose parents had a higher degree, who had a presence index of 2.5.

- To summarise all of this, in relation to the level of education of the parents of university graduates, it can be affirmed that:

  a) The great majority of university graduates (70%) in 2004 were children of people with no university studies.

  b) The relative majority of graduates (40%) were from families with up to a primary level of education.

c) There are very few differences in the opportunities for gaining access to university degrees among children from families with a primary education or lower and those who were born into families with a secondary education.

d) The children of university graduates, while being a minority at university at the present time, continue to have many more opportunities to get into university than those born into families without a higher education.

- The second result to point out is the high ascending occupational mobility of graduates relative to their parents, in spite of this being a comparison between one generation, the generation of the parents, who are at the end of their professional career, and another, that of their children, who, with great difficulty, are starting theirs. It can be seen that the higher education system does help the majority of graduates to find jobs in occupations on a higher level than their parents within just four years after completing their studies. This does not necessarily mean that their job satisfies all of their expectations as new graduates, although the figures suggest that it does come close given that the percentage who consider their occupation matches their studies is around 80% and, as a whole, the respondents assessed their studies overall as being very good. In this aspect there are no significant differences to be seen according to entrance grade or transcript of records.

- This phenomenon is also apparent from the fact that graduates with the highest occupational positions are children from families of very diverse origin and from the similar proportions for each social stratum of the parents.

Strictly speaking, from the available figures, one can only talk about inter-generational occupational mobility, and not social mobility. True social mobility only occurs when changes take place in position relative to the same generation, given that inter-generational occupational mobility could simply be due to the change in the occupational opportunities from one generation to the next, i.e. structural mobility.

Nevertheless, if this were the case, the fact that graduates from 2004 had, in the majority of cases, already established themselves in an occupation higher than that of their parents by 2008 shows that their entry into work would at least correspond to changes in the demand for labour and consequently with an evolution in the social structure.

These higher results however need qualifying. Differences, albeit subtle ones, have often been observed between graduates, according to level of education and the father or mother's occupation, mainly in the probability of access to short or long cycles, in certain degree courses, in on-going study after graduation, in geographical mobility and in access to higher levels of occupation. Differences are also to be seen with regard to the combining of study and work. On the other hand, there are no

differences according to social origin in entrance grades, transcripts of records, in the distribution according to subject area or in earnings or occupational quality. Previous research has already produced similar results regarding the low-level relationship for university graduates between social origin, attitudes, behaviour and motivation to study (MASJUAN, 2005, 127). Social discrimination, on the other hand, can be seen more clearly in stages prior to university, as can be seen from the results of the PISA survey on secondary education (PISA, 2006, 104, 107).

- Only a certain amount of discrimination according to social origin is to be seen, on the one hand, from the higher relative number of graduates whose parents have a higher level of education, although in absolute terms they are a minority at the present time; and, on the other, from the higher number of students whose parents had a lower level of education as well as occupational status in short cycle degrees. Discrimination also occurs due to the slightly higher probability of a high level job among graduates whose parents also have a high level of occupation.

In addition to these results on the social function of the universities in Catalonia, the figures reveal other aspects that are interesting for both society in general and for parents, university students and, in particular, the university community as a whole.

University students are not all equal and neither are their parents, meaning that they are not equal in terms of entrance grade, academic achievement, the presence of males and females, nor with regard to their labour market outcomes:

- Although no great differences are evident, the Catalan universities are heterogeneous with regard to the parental occupational status and level of education of graduates. In an intermediate position we find the University of Barcelona, where parents with a primary education are slightly over-represented, the Autonomous University of Barcelona with a slight over-representation of parents with both a higher level of education and a high occupational status, and the University of Vic, where there is a slight over-representation of parents with a high occupational status. To one side of this, there is the Pompeu Fabra University, which stands out because parents with a high level of studies and occupational status are over-represented. On the opposite side, in the case of the University of Girona, Rovira i Virgili University and the University of Lleida, there is an over-representation of parents with a primary or lower level of education and a low occupational status. This shows that the universities outside of the Barcelona Metropolitan Area have played a key role in the social democratisation of the higher education system in Catalonia.

- There are also differences between universities relative to their graduates' entrance grades and transcripts of records. The differences in this case are again not very big however and vary according to the university.

- The biggest differences in the labour market outcomes have to do with subject area and gender. This is partially redundant however because, in a large number of the subject areas with better labour market outcomes, there are fewer females, as is the case with studies in Engineering and Architecture.

- In spite of the fact that females currently account for 60% of all university graduates, there are still two challenges pending relative to gender discrimination: the unequal distribution across subject areas and degree courses, and the transfer of learning opportunities and outcomes into employment opportunities. The main discrimination, between academic outcomes and professional employment, is seen to be due to gender and is to the detriment of females. This leads to the question of whether a society that seeks to establish its legitimacy on the basis of meritocratic principles can see this discrimination be maintained without having its very fundaments being called into question?

- Within a context characterised overall by slight differences relative to the majority of the factors concerning academic achievement and professional employment, the most acute differences continue to be professional outcomes according to gender, above all in terms of earnings.

To finish off, it is mentioned once again that the analysis made here is of the entry into work, or the professional outcomes in the labour market, of young university graduates just four years after completing their studies, and there may have been insufficient time for the influence of factors associated with the economic, cultural and social capital of the graduates' families to become totally evident.

Lastly, consideration of the results obtained should also be made in relation to the extensive reforms taking place in the higher education system in Catalonia: in overall terms, a highly positive assessment can be made of the role played by Catalan universities concerning equity and the occupational mobility of young people. This calls for reflexion regarding the effects of the changes that are under way so that the function of equity and occupational mobility played by the higher education system is not negatively affected. As an example, awareness is called for concerning the effects that the introduction of compulsory full-time studies stemming from continuous assessment may have; unless this is accompanied by a more generous system of grants, it may hinder access to the higher education system of children from a low social origin, given that the results show that full-time dedication to study has a clear relationship to a student's social origin. In the same way, the results call for consideration of the role of the public universities outside of the Barcelona Metropolitan Area, which, with a higher percentage of students from families with a low occupational status, have played a key role in the democratisation of university studies.

9

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APPENDIX

APPENDIX

Table 1 | Graduate occupation according to parental occupation (in absolute values)

Highest occupational status of the parents	Full-time employed university graduates				
	M/ment	Professional	Skilled	Self-empl.	Unskilled
1. Management	576	177	657	72	33
2. Professional	601	234	836	110	61
3. Skilled	918	421	1,500	97	128
4. Self-employed, no univ. studies	619	276	963	123	81
5. Unskilled	355	123	607	36	70

Table 2 | Graduate occupation according to gender and parental occupation (in absolute values)

Highest occupational status of the parents	Employed female graduates					Employed male graduates				
	1	2	3	4	5	1	2	3	4	5
1. Management	277	102	414	28	21	299	75	243	44	12
2. Professional	314	115	551	51	45	287	119	285	59	16
3. Skilled	476	252	1001	42	90	442	169	499	55	38
4. Self-employed, no univ. studies	342	166	645	66	48	277	110	318	57	33
5. Unskilled	200	69	387	16	41	155	54	220	20	29

Table 3 | Graduate occupation according to the parents' highest level of occupation (as a percentage)

Highest occupational status of the parents	Full-time employed university graduates				
	M/ment	Professional	Skilled	Self-empl.	Unskilled
1. Management	18.8	14.4	14.4	16.4	8.8
2. Professional	19.6	19.0	18.3	25.1	16.4
3. Skilled	29.9	34.2	32.9	22.1	34.3
4. Self-employed, no univ. studies	20.2	22.4	21.1	28.1	21.7
5. Unskilled	11.6	10.0	13.3	8.2	18.8
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table 4 | Graduate occupation according to gender and the parents' highest level of occupation (as a percentage)

Highest occupational status of the parents	Employed female graduates					Employed male graduates				
	1	2	3	4	5	1	2	3	4	5
1. Management	17.2	14.5	13.8	13.8	8.6	20.5	14.2	15.5	18.7	9.4
2. Professional	19.5	16.3	18.4	25.1	18.4	19.7	22.6	18.2	25.1	12.5
3. Skilled	29.6	35.8	33.4	20.7	36.7	30.3	32.1	31.9	23.4	29.7
4. Self-employed, no univ. studies	21.3	23.6	21.5	32.5	19.6	19.0	20.9	20.3	24.3	25.8
5. Unskilled	12.4	9.8	12.9	7.9	16.7	10.6	10.2	14.1	8.5	22.7
Total	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Table 5 | Graduate occupation (full-time) according to university (in absolute values)

University	Graduate occupation (full-time) in hierarchical order					
	M/ment	Professional	Skilled	Self-empl.	Unskilled	Total
UB	680	331	1,302	92	109	2,514
UAB	572	248	994	73	77	1,964
UPC	621	209	559	101	18	1,508
UPF	318	107	257	30	30	742
UdG	291	105	398	51	47	892
UdL	244	104	409	36	21	814
URV	300	106	522	38	61	1,027
UVic	85	40	215	23	17	380
Total	**3,111**	**1,250**	**4,656**	**444**	**380**	**9,841**

Table 6 | Full-time employed graduates according to subject area and subject (in absolute values)

Subject area	M/ment	Professional	Skilled	Self-employed	Unskilled	Total
Humanities	242	208	528	53	78	1,109
Geography and History (101)	115	91	191	11	38	446
Economics and Law	842	236	572	105	74	1,829
Economics and Bus. Admin. and Management (201)	424	104	234	11	33	806
Business Studies (202)	282	88	176	21	28	595
Law (203)	136	44	162	73	13	428
Social Studies	660	312	1,614	44	108	2,738
Labour relations (204)	206	58	154	8	35	461
Education (210)	110	71	972	6	21	1,180
Experimental Studies	188	104	362	11	29	694
Biology and Nature (302)	98	51	179	9	16	353
Health Studies	161	70	645	79	53	1,008
First-cycle degree specialisations in H. Sciences (401)	77	38	297	39	37	488
Technical	1,018	320	935	152	38	2,463
Advanced production technologies (505)	207	61	186	13	10	477
Advanced production technologies (506)	194	38	140	8	4	384
Information and Comm. Technologies (507)	146	84	199	12	8	449
Information and Communication (508)	138	53	167	7	2	367
Total	**3,111**	**1,250**	**4,656**	**444**	**380**	**9,841**

Table 7 | Full-time employed graduates according to degree course chosen (in absolute values)

Degree courses	M/ment	Professional	Skilled	Self-employed	Unskilled	Total
Economics and Law						
Business Administration and Management	264	55	144	8	19	490
Economics	140	41	73	1	10	265
Business Studies	282	88	176	21	28	595
Law	136	44	162	73	13	428
Social Sciences						
Labour relations	114	33	84	6	25	262
Early Childhood Education	19	11	254	0	2	286
Physical Ed. Teacher	13	8	187	1	0	209
Health Sciences						
Nursing	14	15	165	0	24	218
Medicine	10	4	215	1	5	235
Technical						
Computer Engineering	72	26	98	5	1	202

Table 8 | Graduates' entrance grades according to subject area and university (in absolute values)

Subject area	UB	UAB	UPC	UPF	UdG	UdL	URV	Total
1. Humanities	521	361	-	91	127	57	72	1,229
2. Social Sciences	847	716	-	190	238	163	315	2,469
3. Economics and Law	371	349	-	338	197	136	165	1,556
4. Experimental Sciences	321	328	41	36	110	-	10	846
5. Health Sciences	403	206	74	-	42	41	85	851
6. Engineering / Architecture	36	168	1,283	31	199	137	140	1,994
Total	**2,499**	**2,128**	**1,398**	**686**	**913**	**534**	**787**	**8,945**

Table 9 | Graduates' transcripts of records according to subject area and university (in absolute values)

Subject area	UB	UAB	UPC	UPF	UdG	UdL	URV	Total
1. Humanities	730	467	-	137	152	68	121	1,675
2. Social Sciences	1,155	883	-	267	306	240	382	3,233
3. Economics and Law	512	408	-	415	234	196	252	2,017
4. Experimental Sciences	369	377	50	37	113	-	66	1,012
5. Health Sciences	456	268	85	-	53	87	163	1,112
6. Engineering / Architecture	57	202	1,539	36	228	384	242	2,688
Total	**3,279**	**2,605**	**1,674**	**892**	**1,086**	**975**	**1,226**	**11,737**

Table 10 | Correlation between entrance grade, transcript of records, average assessment of studies and average assessment of the skills needed for their job

Spearman's rank (r_s) correlation coefficient	Entrance grade	Transcript of records grade	Spearman's r_s correlation coefficient for the usefulness of:	Entrance grade	Transcript of records grade
Theoretical learning	.042(**)	.040(**)	Theoretical learning	.023(*)	.031(**)
Practical learning	.040(**)	.110(**)	Practical learning	.048(**)	.097(**)
Written expression	-0.004	.085(**)	Written expression	0.019	.069(**)
Oral expression	-0.010	.069(**)	Oral expression	.031(*)	.074(**)
Team work	.029(*)	.099(**)	Team work	.042(**)	.096(**)
Leadership	-0.014	-0.017	Leadership	-0.005	-.067(**)
Problem solving	.024(*)	-.043(**)	Problem solving	.041(**)	0.001
Decision-making	-0.010	0.002	Decision-making	.027(*)	-0.001
Critical thinking	0.006	.105(**)	Critical thinking	.040(**)	.106(**)
Creativity	-0.007	.073(**)	Creativity	-0.006	.099(**)
Administration	-.045(**)	-.045(**)	Administration	-0.007	-.049(**)
Documentation skills	-0.006	.038(**)	Documentation skills	0.004	.048(**)
Languages	-0.005	.030(**)	Languages	.071(**)	.060(**)
Computers	-0.011	-.026(*)	Computers	-0.009	-0.012

** Correlation is significant at the 0.01 level (unilateral)
* Correlation is significant at the 0.05 level (unilateral)

Table 11 | Monthly earnings (results from the multiple regression model)

Model summary (b)

Model	*R*	*R* squared	*R* squared corrected	Typical error of the estimation	Durbin-Watson
1	0.295(a)	0.087	0.086	540.05809	1.7559

a. Predictor variables: (Constant), Transcript, Professional, Educ2_secondary, Gender, Educ1_secondary, Management, Unskilled, Entrance_grade, Educ2_higher, Self-educ., Educ1_higher
b. Dependent variable: Monthly_earnings

Coefficients (a)	Non-standardised coefficients		Standardised coefficients	Beta x Pearson's *r* (as a percentage)	*t*	Sig.
Model	*B*	Typ. error	Beta			
1 (Constant)	1089.574	56.654			19.232	0.000
Gender	303.038	14.015	0.262	6.877	21.623	0.000
Educ1_secondary	-4.921	20.481	-0.003	0.003	-0.240	0.810
Educ2_secondary	1.828	20.805	0.001	0.000	0.088	0.930
Educ1_higher	0.878	22.625	0.001	0.002	0.039	0.969
Educ2_higher	33.395	25.870	0.019	0.096	1.291	0.197
Unskilled	-31.965	23.202	-0.019	0.090	-1.378	0.168
Self-employed	30.446	19.300	0.022	-0.022	1.577	0.115
Professional	53.616	21.144	0.037	0.123	2.536	0.011
Management	99.077	21.888	0.064	0.446	4.527	0.000
Entrance grade	64.336	7.511	0.111	0.812	8.566	0.000
Academic transcript	-94.611	20.489	-0.060	0.289	-4.618	0.000

a. Dependent variable: Monthly_earnings

Table 12 | Occupational quality (results from the multiple regression model)

Model summary (b)

Model	*R*	*R* squared	*R* squared corrected	Typ. error of the estimation	Durbin-Watson
1	0.145(a)	0.021	0.020	16.79433	1.865

a. Predictor variables: (Constant), Transcript, Management, Educ1_secondary, Gender, Unskilled, Educ2_secondary, Professional, Entrance_grade, Educ2_higher, Self_empl., Educ1_higher
b. Dependent variable: Occupational quality index

Coefficients (a)	Non-standardised coefficients		Standardised coefficients	Beta x Pearson's *r* (as a percentage)	*t*	Sig.
Model	*B*	Typ. error	Beta			
1 (Constant)	49.117	1.721			28.540	0.000
Gender	2.514	0.424	0.073	0.50	5.932	0.000
Educ1_secondary	-0.928	0.626	-0.020	0.06	-1.482	0.139
Educ2_secondary	1.204	0.638	0.026	0.08	1.887	0.059
Educ1_higher	-0.158	0.692	-0.003	-0.01	-0.228	0.819
Educ2_higher	0.047	0.781	0.001	0.00	0.060	0.952
Unskilled	-0.684	0.713	-0.013	0.05	-0.959	0.337
Self_educ.	1.026	0.589	0.024	-0.01	1.744	0.081
Profess_higher	1.880	0.644	0.043	0.12	2.917	0.004
Management	3.224	0.664	0.070	0.45	4.853	0.000
Entrance grade	1.663	0.228	0.096	0.87	7.305	0.000
Academic transcript	-0.325	0.618	-0.007	-0.01	-0.525	0.600

a. Dependent variable: Occupational quality index

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