

# Inequality in educational transitions: the case of post-compulsory education in Spain

## Desigualdad y puntos de inflexión educativos: el caso de la educación post-obligatoria en España

Fabrizio Bernardi

Miguel Requena

UNED, Facultad de Ciencias Políticas y Sociología. Departamento de Sociología II (Estructura Social). Madrid, España.

### Abstract

This paper seeks to identify mechanisms that may underpin part of the observed association between class of origin and educational attainment in the Spanish case. In line with a well established strategy in the field of social stratification sociology, we analyze educational attainment as the outcome of a sequence of transitions at each of which a student can drop-out or move on to the next educational level. According to this approach, the paper aims at making three contributions to the study of inequality of educational opportunities by means of an analysis of class inequality in the transition to post-compulsory education in Spain. First, it deals with the impact of social class on academic performance in terms of educational failure in compulsory secondary education. Second, it monitors the case of an educational 'failure' during compulsory education and assesses social class effect on retaking rates after failing. And, third, the paper analyzes class differences in the choice of the academic track (*bachillerato*) versus the vocational training track (FP) among students who have completed compulsory education on time. In doing this, it addresses the «diversion thesis» according to which working class students might be diverted from the academic track, with negative consequences for later access to the university, because vocational training offers an attractive short-term option for them. The empirical analysis is based on data collected from the first quarter of Spanish Labour

Force Surveys for the years 2005, 2006, 2007 and 2008. Our results find some support in the Spanish case for the three hypotheses put forward in the paper: not only significant class differences can be found among students of different social origins in the probability of completing compulsory secondary education on time, but clear class effects can also be seen in retaking rates after failure and in opting for vocational training track after completing secondary compulsory education.

*Key words:* educational transitions, retaking, class inequality, diversion thesis, Spanish educational system.

## Introduction

Although there is an ongoing debate about whether class of origin inequality in educational attainment is persistent or has declined over time, there is little doubt that class of origin still has a strong effect on educational opportunities (Breen & Jonsson, 2005). Following Mare (1980, 1981) there is a well established strategy in the field of social stratification sociology to analyze educational attainment as the outcome of a sequence of transitions at each of which a student can drop out or move on to the next educational level (Shavit & Blossfeld, 1993; Erikson & Jonsson, 1996). The Mare model is based on the assumption that individuals progress through the educational system exclusively in a sequential or vertical mode. It has thus been noted that at a given point of their educational career, individuals might have to choose between parallel branches of study. For instance, at completion of compulsory education students typically have to opt for either an academic or a vocational oriented track. Additionally, in many countries students can be held back a year in primary or compulsory secondary school, if they fail to reach a certain standard. In case of a previous failure, then the key educational decision is whether to retake the year or drop out without retaking. In more recent years the Mare model has, thus, been extended in order to also take into account the horizontal stratification of the educational system and the possibility of irregular trajectories (Breen & Jonsson, 2000; Lucas, 2001).

This paper applies this broader approach to the study of class inequality in the transition to post-compulsory education in the Spanish case. First, it studies

the impact of social class on academic performance and focuses on possible educational failure during compulsory education under the very plausible assumption that most capable students finish their secondary education courses on time. Second, we address what happens in the case of an educational failure during compulsory education. Only half the students of a given birth cohort manage to complete the four years of compulsory lower secondary education on time, while the other half fail at least one course. It is therefore interesting to investigate how various social class of origin might activate in order to compensate for a failure, especially in the early stage of young people's educational career. And, third, the paper studies class differences in the choice of the academic track (*bachillerato*) versus the vocational training track (*FP*) among students who have completed compulsory education on time. In doing this, we refer to the 'diversion thesis' originally developed to analyze class inequality in educational opportunities in Germany. According to this thesis working class students are likely be diverted from the post-compulsory academic track, with negative consequences for their potential later access to university, because vocational training offers an attractive option for them (Hillmert & Jacob, 2003; Müller & Pollak, 2007; Becker & Hecken, 2009a, 2009b).

The transition from compulsory lower secondary education to higher education is an important topic of research in Spain for at least two reasons. First, it is a key process for the intergenerational transmission of inequality. Making the transition to post-compulsory education is crucial if a student seeks to avoid the risk of unemployment or of employment in unskilled occupations. Second, our paper addresses a topic of pressing policy concern. As is repeatedly stressed in reports from international agencies, Spain clearly stands in the bottom part of the ranking of OECD countries, as far as upper secondary graduation rates are concerned (see for instance the recent OECD *Education at a Glance 2009*). Moreover, in the context of the Lisbon Strategy, one of the EU Council benchmarks is that, by 2010, an EU average rate of no more than 10 per cent early school leavers (population aged 18 to 24 with only lower secondary education or less) should be achieved. In Spain the rate of early school leavers in 2008 (population aged 17 to 18 out of educational system) was about 30 per cent (Spanish Labour Force Survey 2008/II).

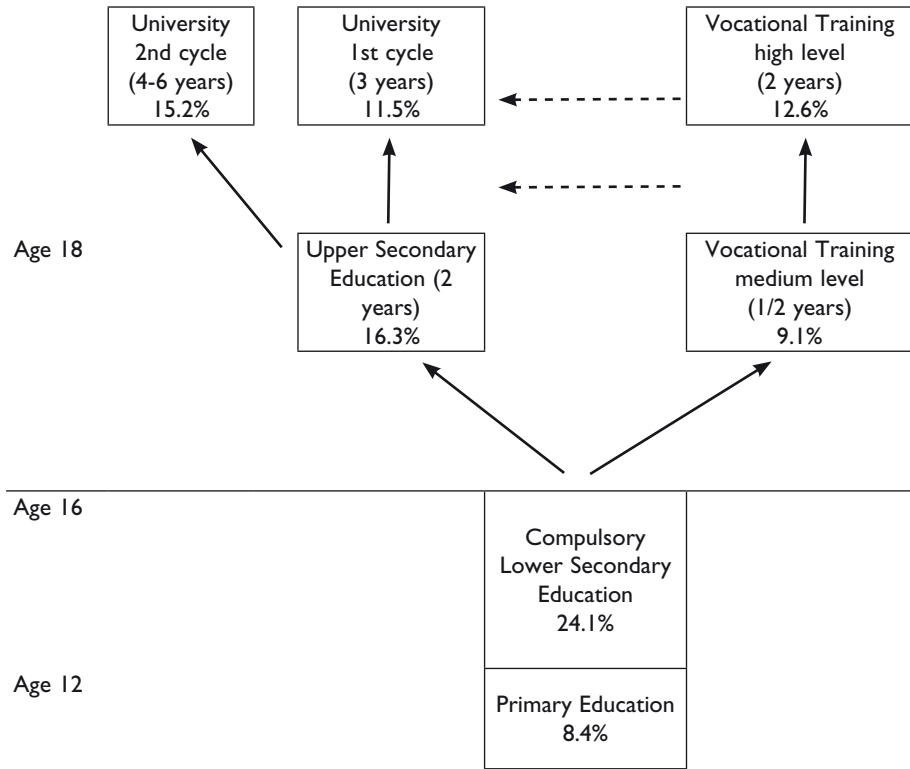
## The Spanish educational system

Figure I shows the structure of the Spanish educational system with duration and typical age of achievement at each educational level. The percentages associated with each educational level refer to the distribution of the population born in Spain and aged 26-35 by the highest level of education achieved in 2008 (SLF 2008/second quarter). For instance, 15.2 per cent of the population born in Spain and aged 26-35 in 2008 has a second cycle university degree, while 8.4 per cent have only completed primary education. For the purpose of the analysis of this paper a few key characteristics of the Spanish educational system should be highlighted.

First of all, education is compulsory until age 16 but at that age a student might not have finished *Educación Secundaria Obligatoria* [compulsory secondary education; from now onward CSE] if s/he has not passed one or more of the four courses of CSE on time. Under the *Ley de Ordenación General del Sistema Educativo* [Law of the General Order of the Educational System, LOGSE] –passed in 1990 by the Socialist Government– if the student failed in attaining the educational goals of the two first courses, s/he could remain an extra year in this first cycle, as well as another year in each of the two courses of the second cycle. Later, the *Ley Orgánica de Calidad de la Enseñanza* (Organic Law of the Quality of Education, LOCE), brought into force by the Popular Party in 2002 and put into effect in 2003, established a new criteria for retaking: at the end of each year at CSE level, if a student does not pass three subjects, s/he has, in principle, to retake the corresponding course. Once the Socialist Party came again to power in 2004, it blocked some of the most controversial measures of the LOCE (for instance, the streaming into separate tracks according to the students' performance at the age of 14) but it maintained the criteria for retaking. LOGSE and LOCE make up the legal framework under which individuals in our sample have studied. After LOCE, a new reform of the educational system was promoted by the Socialist government in 2006. The new law (*Ley Orgánica de Educación*, Organic Law of Education, LOE) partly relaxes the criteria for retaking; since now if a student fails three subject s/he can still move onto the next course if his/her teachers agree.

Whatever the effects of this changing legal context, the incidence of retaking is actually very high in Spain and about half of the students of a given birth cohort fail to complete one or more stages of CSE on time. Among them a significant proportion opt to drop out of the educational system once they reach age 16 without having achieved the level of CSE. Accordingly, the proportion of those with only primary education is about 10 per cent. On the other hand, a student who completes CSE can choose between the academic oriented upper secondary track that opens the door to university or vocational training. Those who opt for vocational training still have a chance to attend university by sitting special admission exams. The data from a longitudinal survey for the year 2001 shows, however, that transition from the vocational track to the academic track and on to university is rare: only a small minority (about 10 per cent) of those who completed a medium level vocational training course in 2001 moved on to a high level vocational training course or transferred to the academic track in 2001. Among those who completed a high level vocational training course in 2001, 25 per cent entered the university in 2002 (ETEFIL 2005, Table 2.3). In contrast, among those who had finished the academic track the corresponding figure goes up to 68 per cent.

FIGURE I. The Spanish educational system



Note: The figures associated with each educational level refer to the distribution of the population born in Spain and aged 26-35 by the highest level of education achieved in 2008 (SLF 2008/II). Thus, for instance, 15.2 per cent of the population aged 26-35 in 2007 have a 2<sup>nd</sup> cycle university degree.

Even though territorial cleavages are not at the core of this paper, geographical variation in retaking rates between CCAA plays an important role in understanding the functioning of the Spanish educational system. In fact there is a huge geographical variation in the retaking rates. If one focuses on the two extremes of the distribution, 71 per cent of the students complete CSE on time in the Basque country, while only 44 per cent do so in Extremadura.<sup>1</sup> It

<sup>(1)</sup> See Table III below.

is important to stress that these regional differences in retaking rates do not seem to reflect aggregate geographical differences in students' ability. In fact, the Basque country, with the highest percentage of students who finish CSE on time, score below the national average if one considers the scores in the PISA (the OECD Programme for International Student Assessment) test of the students attending the last year of CSE. On the other hand Castilla-León scores at the top of the PISA distribution, with 'only' 54 per cent of the students completing CSE on time (Lacasa, 2008).

### The logic of the analysis

In order to study the transition to post-compulsory education, we use the Spanish Labour Force survey (from now onward SLF) data from the first quarter (January, February and March) for the year T. We select those born in T-17 who are those who have become 16 years old in the previous year and who should have finished CSE, if they were on time, in T-1. For instance, in the year 2005 we select those born in 1988, being those who should have completed CSE in 2004, if they were on time. Then, we consider their situation at the time of the survey, i.e. in the first quarter of the year T. There are four possibilities: they might be retaking CSE, enrolled in upper secondary education, attending vocational training or be outside the educational system (employed, unemployed or inactive)<sup>2</sup>.

Table I refers to the sample used in the analysis and combines the SLF data for the years 2005, 2006, 2007 and 2008. These data show not only the situation of 16 year old people with respect to the educational system in Spain, but also a clear association between social origin and educational attainment which can be interpreted as *prima facie* evidence of strong class effects on transitions from compulsory secondary education to upper secondary education. The odds between service class (professionals and managers) children and unskilled workers children are 2.7: 1 (i.e. 70.1/26) to attend upper secondary education; 0.5: 1 to retake compulsory secondary education; 0.4:1 to attend vocational training courses; 0.5:1 to be out of the educational system with a secondary degree; and 0.12:1 to be out of the educational system without a secondary

<sup>(2)</sup> A similar research design is employed in Calero (2006).

degree. Class inequalities in the transition from compulsory to post-compulsory education are thus very clear.

**TABLE I.** Situation of 16 year old people with respect to the educational system by two parent's social class

	Total	Service class (SC)	Unskilled Workers (UW)
Attending upper secondary education	44.5	70.1	26.0
Retaking compulsory secondary education	33.1	21.5	39.3
Attending vocational training	6.1	3.0	6.6
Out of ES (employed, unemployed, inactive) with CSE	4.9	3.2	6.2
Out of ES (employed, unemployed, inactive) without CSE	11.4	2.3	10.3
Total	100	100	100
N	7245	1373	1735

Source: SLF surveys (2005, 2006, 2007 and 2008; first quarters)

The analysis is based on a decomposition of the observed outcome presented in Table I in multiple processes. Figure II shows a simple flow chart of the percentages of various pathways at the point of the transition to post-compulsory education in the Spanish educational system.

Let's imagine that 7,245 subjects investigated attend CSE in the year T-1. Among them 55 per cent complete CSE on time that year, while 45 per cent do not, since they have failed at some point. This first process (Process 1) refers, thus, to the students' educational performance and, depending on its outcome, two other processes have to be considered. The other processes can be conceived as educational decisions concerning continuation in school that are taken by the students and their parents. Since the compulsory age has been achieved, the students can also opt to leave the educational system. The following options are, therefore, available:

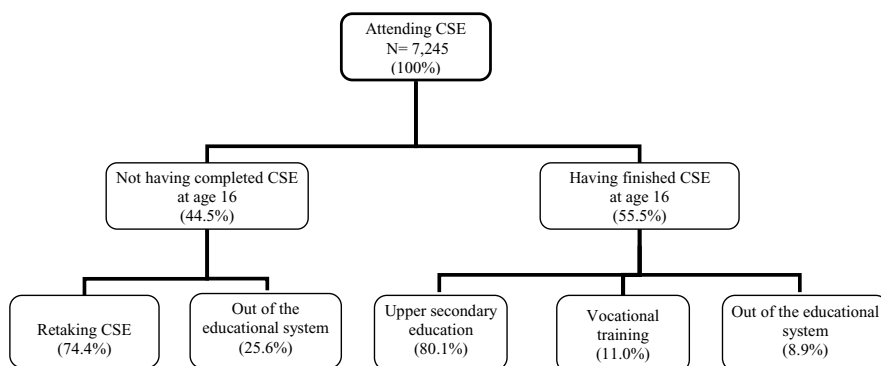
- Those who have failed at some point can *stay in the educational system and retake* the course or leave the educational system without having completed CSE (Process 2a).



- Those who have completed CSE can *move on to upper academic secondary education or to vocational training*, or can decide to leave the educational system (Process 2b).

Figure II shows that the likelihood of dropping out is much higher among those who have not completed CSE than among those who have completed it. About one in four of those who have not completed CSE leave the educational system, while less than one in ten of those who have completed it do so. Finally, among those who have completed CSE on time, the largest majority (80 per cent) moves on to academic upper secondary level and only a small group (11 per cent) opts for vocational training (Process 3).

FIGURE II. Percentages of students who choose various pathways at the point of transition to post-compulsory education in the Spanish educational system



Source: SLF (2005, 2006, 2007, 2008).

## Theories and hypotheses

Current research on inequality of educational opportunities builds on Boudon's (1974) seminal work and distinguishes between class differences in academic performance and class differences in the decisions to continue on to higher levels of education (Breen & Goldthorpe, 1997; Becker, 2003). Class differences in

academic performances («primary effects» in Boudon's original 1974 formulation) can be of a genetic or socio-cultural kind, while class differences in educational choices («secondary effects») are mainly related to costs, benefits and the probability of success of alternative educational transitions (Erikson & Jonsson, 1996).

National and comparative studies have repeatedly shown strong class inequality in academic performance measured either as grades or test results (for latest results, see Marks, 2005; Jackson et al., 2007; Grodsky et al., 2008; Erikson & Rudolphi, 2009; Kloosterman et al., 2009). In Spain, a long research line (Carabaña, 1979, 1999, 2004; Calero, 2006; Martínez, 2007) has found consistent relations between social origin and academic performance, with the differences being put down to parent's education level, occupational prestige, wealth and income, life quality, or even life style.

Whatever the specific mechanism that explains the association between social class and academic achievement, if one considers the decomposition of the transition from compulsory to post-compulsory education in the three processes discussed above, these previous results suggest that we can expect an effect of the social class of students on their academic performance and, therefore, on the likelihood of having completed CSE on time (Process 1 referred to above). Accordingly, our first hypothesis can be stated as follows:

HP1: To the extent that finishing the four secondary education years on time can be taken as an indicator of academic ability, we can expect significant differences in the rates of CSE completion depending on student's class origins.

With regard to educational decisions given educational performance (in our case, having completed or not CSE on time), the original explicative model proposed by Boudon (1974), and updated by Erikson & Jonsson (1996), Breen and Goldthorpe (1997) and Becker (2003), focuses on the decision on whether to continue to try and achieve the next educational level (E+1) or to exit the educational system at educational level E. Of central importance in this decision is the amount of status decline (SD) implied by the decision of stopping at E. In other words this model supposes that children and parents evaluate the amount of status decline associated with the decision of stopping at E by using the parents' socio-economic position as a yardstick. In general, one might argue

that the amount of status decline associated to a given E is lower for lower social classes. Basically, those coming from lower social classes have less to lose in terms of worsening their social position in respect of that of their family of origin by dropping out at an early stage of the educational system. An important implication for the purpose of this paper is that the higher the status decline implied by the decision of stopping at E, the higher the likelihood of moving on to E+1. One can, therefore, infer that class of origin particularly activates in order to correct an initial failure that would imply a large status decline. Breen and Jonsson (2000) found a result consistent with this claim that shows that origin effects on the transition to university in Sweden are strongest at more indirect and unusual pathways that would imply, if not corrected, a higher risk of social demotion. All these things considered, our second hypothesis can be put as follows:

HP2: In so far as dropping out implies a higher risk of social demotion for students from advantaged social origins, it can be expected that class effects will be stronger for retaking CSE after failure (Process 2a) than for continuing after completion (Process 2b).

In addition, the 'diversion thesis' suggests that the existence of a vocational training track as an alternative option to the academic track that leads to the university might divert working class students from the academic track and finally limit their chances to achieve a university degree (Müller & Pollak, 2007; Hillmert & Jacob, 2003; Becker & Hecken, 2009a, 2009b). The key argument in this respect is that vocational training is typically associated with lower returns than university degrees but is also less risky and requires less time to be completed. It is well established that if one focuses on people in their mid-career, the returns in the labour market of university degrees are higher than those associated with vocational training (Blossfeld et al., 2006). Nonetheless, for working class students, vocational training might involve a lower investment risk due to lower costs, shorter duration and clearer job prospects. Therefore, these working class students might be seen as betting against the expected long term economic returns from university education, and in favor of their status maintenance, which again is a crucial factor in class-specific educational decisions. This argument seems particularly valid for Southern European countries where the duration of

the first job search tends to be longer than in other countries (Müller & Gangl, 2002).

Table II refers to people aged 30 to 35 in Spain in 2007 and confirms that the returns of vocational training compares favourably with those associated with upper secondary education. Opting for the academic track of secondary education instead of the vocational oriented track pays off in terms of a lower risk of unemployment and of being employed in an unskilled occupation, only if one, then, manages to move further on and achieve a university degree. A vocational training course of 1st level takes a maximum of two years, while completing upper secondary education and achieving a 2nd cycle university degree take at least six years (and a further risk is added by the fact that there is a selection exam to enter university). Accordingly, our third hypothesis can be stated as follows:

HP3: Due to the higher investment risk implied in taking upper secondary academic degrees, working class students are more likely to opt for vocational training (Process 3).

**TABLE II.** Risk of unemployment and of being employed in an unskilled occupation by educational level (population aged 30-35 in 2007)

	Unemployment rate	% Unskilled occupations
Primary or no education	12.9	62.9
Compulsory lower sec. education	10.4	44.1
Vocational training 1	6.7	34.5
Upper secondary	8.5	37.7
Vocational training 2	6.3	21.8
University short	6.5	8.1
University	4.7	5.2
Total	8.2	30.6
N	11721	10771

Source: Spanish Labour Force Survey (2007)

## Data, variables and models

The data is drawn from the first quarter of SLF surveys for the years 2005, 2006, 2007 and 2008. For each year the subjects born 17 years before are selected. For instance, for the year 2005 those born in 1988 are singled out, while for the year 2006, 2007 and 2008 those born in 1989, 1990 and 1991 are chosen, respectively<sup>3</sup>. In this way one identifies 7,245 subjects who should have finished CE, if they were on time, in the year previous to the survey. One can then consider the level of education they achieved and their employment status at the time of the survey.

First of all, one can differentiate those who have completed CSE on time and those who have not. Besides, among those who have not completed CSE one can distinguish those who are still studying and retaking some courses at that level, from those who have dropped out and are either employed, unemployed or inactive at the time of the survey. Among those who have completed CSE, it is possible to separate those who are enrolled in upper academic secondary education, those who are enrolled in vocational training and those who have dropped out.

In this way, we can define four dependent variables that refer to the three processes that make up the transition to post-compulsory education, as has been illustrated in Figure I. The first one is a dummy variable that takes value 1 if one has completed CSE on time and 0 otherwise (Process 1). Among those who have not completed CE, a second dummy variable distinguishes those who are retaking CSE and those who have exited the educational system (Process 2a). Among those who have completed CE, a third dummy variable differentiates those who have made the transition to post-compulsory education (either academic or vocational) and those who have dropped out (Process 2b). Finally, among students with CSE completed we can compute a threefold categorical variable taking different values if they have decided to enroll in vocationally oriented education, to enter upper secondary education, or to quit the educational system (Process 3). With regard to the independent variables, the main advantage of the SLF is that it allows the tracking of the socio-economic characteristics of the parents of the selected 17 year olds at the time of the survey. In other words, detailed information is available on the type of occupation, duration in the job and type of

---

<sup>3</sup> The estimates based on SLF data of the percentages of those who are retaking CE at age 16 and those who have moved on from studying are very close to the administrative figures published by the Spanish Ministry of Education.

employment contract for the parents at a point in time very close to the moment when the decisions concerning the transition to post-compulsory education have been taken. A major drawback is that for those parents who are unemployed or inactive no information on the last job is available. The key independent variables refer to the social class of origin and to the employment insecurity faced by the parents. Social class is defined using a seven-fold version of the Erikson and Goldthorpe' class scheme that distinguishes the service class (managers and professionals), non-manual workers, large and small scale employers, urban self-employed with no employees, farmers, skilled manual workers and unskilled manual workers (including the unskilled workers in sales and services). The dominance principle (that selects the highest social class between members of a couple) is used to combine the information of fathers and mothers. Two additional categories were considered for those cases where both parents were unemployed and inactive. These two categories account for three per cent and seven per cent of the whole sample, respectively.

The other independent variables included as controls in the models are: gender, month of birth, country of birth (a dummy variable that distinguishes between students born in Spain and those born abroad), type of household in which the student lives (lone mother, lone father or both parents), calendar year (2005, 2006, 2007 or 2008) and a measure of the time spent in the same occupation by the head of the household, considered as an indicator of the employment security faced by the student's family at the time in which the decision on school continuation is taken. In commenting on the results we focus almost exclusively on the effect of social class.

In order to test our hypothesis, we have estimated three separate probit models for the likelihood of: a) having completed CSE on time; b) retaking CSE versus exiting if CSE has not been completed; and c) continuing to upper education (with no distinction between upper secondary and vocational education) versus exiting if CSE has been completed. Then we estimate a multinomial logit of the likelihood of choosing the vocational training track or exiting the education system compared to moving on to the academic oriented upper secondary track: the goal of this second model is to evaluate the class effect on this decision between vocational and academic oriented learning and test the diversion hypothesis.

## Results

Descriptive results for the effect of social class and the CC AA of residence on the transition from compulsory to post-compulsory education are reported in Table III and Table IV. Table III refers to completion of CSE on time (i.e. educational performance, process 1) and to the decision of retaking in case of a failure at CSE (process 2a), while Table IV focuses on the various pathways chosen by those who have finished CSE on time and have decided to move on to post-compulsory education (process 3). These tables already document large class and geographical differences for the three processes considered. The CSE completion rates for service class children are higher than for the other classes; and, for example, the odds between service class (professionals and managers) children and unskilled worker's children are almost 2:1 (i.e. 75.7/38.1) to complete secondary education on time; 1.6:1 between service class and skilled worker's students; or 1.3:1 between service class and non manual worker's children. The same can be said of transition rates to post-compulsory education in case of completion, and of retaking rates in case of failure: service class children have a clear advantage in all these processes.

**TABLE III.** Distribution of educational performance and schooling decisions by class of origin and autonomous community of residence

	Process 1 Completion of CSE on time				Process 2a Moving on if CSE on time			Process 2b Retaking if failure at CSE		
	Yes	No	Total	N	Yes	No	Total	Yes	No	Total
<i>Class of origin</i>										
<b>Service class</b>	75.7	24.3	100	1372	95.8	4.2	100	90.7	9.3	100
<b>Non manual workers</b>	59.1	40.9	100	831	94.9	5.1	100	87.4	12.6	100
<b>Employers</b>	59.8	40.2	100	520	94.2	5.8	100	79.9	20.1	100
<b>Urban self-employed</b>	51.8	48.2	100	655	90.0	10.0	100	75.1	24.9	100
<b>Agricultural self- employed</b>	56.0	44.0	100	200	92.8	7.2	100	77.3	22.7	100
<b>Skilled workers</b>	48.2	51.8	100	1073	87.2	12.8	100	80.2	19.8	100
<b>Unskilled workers</b>	38.1	61.9	100	1737	84.4	15.6	100	69.7	30.3	100
<b>Unemployed</b>	31.5	68.5	100	241	69.7	30.3	100	59.0	41.0	100
<b>Inactive</b>	44.9	55.1	100	550	88.7	11.3	100	67.3	32.7	100

TABLE III. Continuation

<i>Autonomous Community</i>										
<b>Andalucía</b>	47.8	52.2	100	1544	89.8	10.2	100	70.5	29.5	100
<b>Aragón</b>	56.5	43.5	100	177	94.0	6.0	100	80.3	19.7	100
<b>Asturias</b>	59.1	40.9	100	149	98.9	1.1	100	88.5	11.5	100
<b>Baleares</b>	47.3	52.7	100	182	88.4	11.6	100	66.7	33.3	100
<b>Canarias</b>	45.9	54.1	100	392	88.3	11.7	100	79.2	20.8	100
<b>Cantabria</b>	60.0	40.0	100	95	96.5	3.5	100	83.8	16.2	100
<b>Castilla León</b>	54.3	45.7	100	376	93.6	6.4	100	84.3	15.7	100
<b>Castilla la Mancha</b>	49.1	50.9	100	391	92.7	7.3	100	68.3	31.7	100
<b>Catalonia</b>	59.3	40.7	100	1049	86.5	13.5	100	77.8	22.2	100
<b>Valencia</b>	47.4	52.6	100	747	92.7	7.3	100	70.0	30.0	100
<b>Extremadura</b>	44.3	55.7	100	219	97.9	2.1	100	75.2	24.8	100
<b>Galicia</b>	55.5	44.5	100	409	96.9	3.1	100	85.2	14.8	100
<b>Madrid</b>	58.2	41.8	100	818	84.7	15.3	100	80.1	19.9	100
<b>Murcia</b>	49.2	50.8	100	256	89.7	10.3	100	71.5	28.5	100
<b>Navarra</b>	51.7	48.3	100	89	100	0.0	100	88.4	11.6	100
<b>Basque Country</b>	71.2	28.8	100	281	96.5	3.5	100	92.5	7.5	100
<b>La Rioja</b>	54.2	45.8	100	48	88.5	11.5	100	82.6	17.4	100
<b>Ceuta</b>	50.0	50.0	100	12	85.7	14.3	100	83.3	16.7	100
<b>Melilla</b>	41.7	58.3	100	12	80.0	20.0	100	57.1	42.9	100

Source: SLF (2005, 2006, 2007, 2008).

TABLE IV. Distribution among different pathways (process 3) of the students who have completed CSE on time by class of origin and Autonomous Community.

	<b>Upper secondary education</b>	<b>Vocational Training</b>	<b>Out of the educational system</b>	<b>Total</b>
<i>Class of origin</i>				
<b>Service class</b>	91.9	3.9	4.2	100
<b>Non manual workers</b>	85.2	9.9	4.9	100
<b>Employers</b>	87.4	7.1	5.5	100
<b>Urban self-employed</b>	79.4	11.0	9.6	100
<b>Agricultural self-employed</b>	75.2	18.2	6.6	100
<b>Skilled workers</b>	75.8	12.5	11.6	100



TABLE IV. Continuation

<b>Unskilled workers</b>	65.9	19.6	14.4	100
<b>Unemployed</b>	59.5	13.1	27.4	100
<b>Inactive</b>	73.8	15.4	10.8	100
<b>Autonomous Community</b>				
<b>Andalucia</b>	79.6	10.6	9.8	100
<b>Aragón</b>	84.8	9.5	5.7	100
<b>Asturias</b>	94.4	4.4	1.1	100
<b>Baleares</b>	70.3	18.7	11.0	100
<b>Canarias</b>	78.2	11.4	10.4	100
<b>Cantabria</b>	83.1	13.6	3.4	100
<b>Castilla León</b>	83.5	10.6	6.0	100
<b>Castilla la Mancha</b>	83.4	9.8	6.8	100
<b>Catalonia</b>	70.9	15.7	13.4	100
<b>Valencia</b>	85.5	7.4	7.1	100
<b>Extremadura</b>	90.2	7.8	2.0	100
<b>Galicia</b>	87.9	9.2	2.9	100
<b>Madrid</b>	76.0	9.7	14.2	100
<b>Murcia</b>	80.2	9.9	9.9	100
<b>Navarra</b>	83.0	17.0	0.0	100
<b>Basque Country</b>	86.2	10.6	3.2	100
<b>La Rioja</b>	75.9	13.8	10.3	100
<b>Ceuta</b>	71.4	14.3	14.3	100
<b>Melilla</b>	80.0	0.0	20.0	100
<b>Total</b>	80.1	11.0	8.9	100
<b>N</b>	3,225	442	357	4,024

Source: SLF (2005, 2006, 2007, 2008)

In order to consider possible compositional effects and get a measure of the uncertainty of our findings, we have estimated three probit models for the processes 1, 2a and 2b under analysis (see Table AI in the Appendix). Since it is difficult to interpret the estimates of probit model besides their sign, the

coefficients in Table AI have been transformed into predicted probabilities that offer a more straightforward understanding of the findings (Long & Freese, 2001). Table V shows the predicted probabilities for the three processes when all the other independent variables are set to their mean and only the social class of origin is allowed to vary. As expected, the probability of finishing CSE on time is much greater (+33 per cent) among the students of parents who are from the service class than among the unskilled manual worker's children (HP1). And, more in general, we can say that students of higher social strata have much greater probabilities of getting a degree on time in compulsory secondary education than students of lower classes.

**TABLE V.** Predicted probabilities of educational performance and school continuation decisions by parents' social class, controlling for all the independent variables

	Educational performance		School continuation decisions			
	CSE on time		Retake (if failure at CSE)		Move on (if CSE on time)	
	Predicted Probability	95% Conf. Interval	Predicted Probability	95% Conf. Interval	Predicted Probability	95% Conf. Interval
Service class	0.75	[0.72...0.77]	0.92	[0.88...0.95]	0.96	[0.94...0.98]
Non manual	0.58	[0.54...0.62]	0.88	[0.84...0.92]	0.95	[0.93...0.97]
Employers	0.58	[0.53...0.63]	0.83	[0.77...0.88]	0.94	[0.91...0.97]
Urban self-employed	0.52	[0.47...0.56]	0.76	[0.69...0.82]	0.90	[0.86...0.94]
Agricultural self-employed	0.55	[0.48...0.62]	0.79	[0.70...0.87]	0.92	[0.87...0.98]
Skilled manual workers	0.48	[0.44...0.52]	0.81	[0.77...0.85]	0.88	[0.84...0.92]
Unskilled manual workers	0.42	[0.39...0.45]	0.70	[0.67...0.73]	0.87	[0.84...0.91]
Diff. Service class-unskilled	0.33	[0.29...0.37]	0.22	[0.17...0.27]	0.09	[0.05...0.12]

Note: All other variables are set to their average value

But class origin inequality is not only relevant for educational performance, but also for educational choices. If one focuses on school continuation decisions, it is clear that the largest class inequality is found to compensate for a previous

failure. Accordingly, the difference between the service and the unskilled working class in the probability of retaking is 22 percentage points. On the other hand, in the case of a good educational performance, when compulsory education has been completed on time, the difference in the probability of moving on to post-compulsory education is only 9 percentage points. As explained above, it is not surprising that class effects are stronger for retaking CSE after failure than for continuing after completion due to the greater risk of status decline involved in moving to upper educational levels for disadvantaged classes. All this means that in Spain the process of dropping out of school is clearly segmented by class.

**TABLE VI.** Predicted probabilities of choosing the vocational training track compared to moving on to the upper secondary track by social class, controlling for the other independent variables

	Upper secondary		Vocational Training	
	Predicted Probability	95% Conf. Interval	Predicted Probability	95% Conf. Interval
<b>Service class</b>	0.93	[0.91...0.95]	0.03	[0.02...0.04]
<b>Non manual</b>	0.87	[0.84...0.91]	0.08	[0.05...0.11]
<b>Employers</b>	0.90	[0.86...0.94]	0.04	[0.02...0.07]
<b>Urban self-employed</b>	0.82	[0.77...0.88]	0.08	[0.04...0.11]
<b>Agricultural self-employed</b>	0.75	[0.64...0.86]	0.17	[0.07...0.27]
<b>Skilled manual workers</b>	0.81	[0.77...0.86]	0.08	[0.05...0.11]
<b>Unskilled manual workers</b>	0.76	[0.71...0.80]	0.12	[0.08...0.15]
<b>Diff. service class-unskilled</b>	0.17	[0.12...0.22]	-0.09	[-0.13...-0.05]

Note: All other variables are set to their average value

As for the choice between vocational training and upper secondary education, a multinomial logit of the likelihood of choosing the vocational training track or exiting the education system compared to moving on to the academic oriented upper secondary track has been estimated. As in the previous case, we present only the predicted probabilities transformed from the multinomial logit (Table VI; see Table AII in the Appendix for the full set of results).

Our data show significant differences in the educational decisions of classes: service class students move on to upper secondary courses with a greater probability than working class students and children of urban and agricultural self-employed (+17 per cent difference); and, inversely, the alternative of vocational education, being at any rate a minority option, is more preferred by working class students than by children of managers, professionals and employers (-9 per cent difference).

Therefore, the results of the multinomial logistic regression shown in the form of predicted probabilities in Table VI largely support our second hypothesis. Not only are the off-spring of unskilled and skilled workers (and self-employed) more likely to leave the educational system once they have completed CSE, but they are also more likely to opt for vocational training. This is a less risky option in the short run when compared to upper secondary education in terms of unemployment and unskilled jobs (see also Table II). In the longer run, however, this option might have negative consequences for later access to university and thus foster class inequalities in the chances of achieving a university degree.

## Conclusions

In general one finds some support in the Spanish case for the three hypotheses put forward in the paper. First of all, significant differences can be found among students of different social origins in the probability of completing CSE on time. The estimates of separated probit regressions strongly suggest that academic performance is segmented by class: students from the service class are more likely to finish their CSE at the age of 16 and thus avoid retaking some course.

Second, class inequality is stronger for retaking in the case of failure at CSE than for moving on to post-compulsory education in the case of having completed CSE on time. This finding is in line with the hypothesis that in the case of educational failure higher social classes activate to avoid social demotion. Students from advantaged social origins are, thus, more likely to have a 'second chance' in the case of previous failure in the educational system.

The third most significant result of this paper is that, among Spanish students with a good educational performance –i.e., those who have completed the CSE on time– the probability of choosing vocational training versus the academic track is definitively higher for working class children. In fact, our result is highly consistent with the so-called «diversion thesis»: in comparison with upper secondary education, vocational training implies lower costs in both time and money and better returns in labor markets in the short run, especially in terms of avoiding unemployment or unskilled occupations. As was shown in Table II, the academic track pays off only if one manages to study further and achieve a university degree. Because of this particular incentive structure, opting for vocational training reduces the labor market risks associated with achieving only an upper secondary academic degree or, even worse, failing to complete it. In sum, the vocational training track is a safer track than trying for an upper secondary degree for working class students. At the same time, however, it is likely to divert these students from progressing further to university and thus having access to the occupations at the top of the occupational structure. We know that only a very small fraction of those who opt for the vocational training track manage to access university. In this respect class inequality in the choice of the post-compulsory track among students with a good educational performance might translate class inequalities into opportunities for social mobility.

## References

- BECKER, R. (2003). Educational expansion and persistent inequalities of education utilizing subjective expected utility theory to explain increasing participation rates in upper secondary school in the Federal Republic of Germany. *European Sociological Review*, 19, 1-24.
- BECKER, R. & HECKEN, A. E. (2009a). Why are working-class children diverted from universities? –an empirical assessment of the diversion thesis. *European Sociological Review*, 25(2), 233–250.
- (2009b). Higher education or vocational training? An empirical test of the rational action model of educational choices suggested by Breen and Goldthorpe and Esser. *Acta Sociologica*, 52(1), 25–45.

- BLOSSFELD, H. P., MILLS, M., KLIJIZING, E. & KURZ, K. (Eds.) (2005). *Globalization, Uncertainty and Youth in Society*. London: Routledge.
- BLOSSFELD, H. P., MILLS, M. & BERNARDI, F. (Eds.) (2006). *Globalization, Uncertainty and Men's Careers. An International Comparison*. Gloucester: Edward Elgar.
- BOUDON, R. (1974). *Education, Opportunity and Social Inequality*. New York: John Wiley and Sons.
- BREEN, R. & GOLDTHORPE, J. (1997). Explaining Educational Differentials. Towards a Formal Rational Action Theory. *Rationality and Society*, 9, 275-305.
- BREEN, R. & JONSSON, J. (2000). Analyzing Educational Careers. A Multinomial Transition Model. *American Sociological Review*, 65, 754-772.
- (2005). Inequality of Opportunity in Comparative Perspective. Recent Research on Educational Attainment and Social Mobility. *Annual Review of Sociology*, 31, 223-43.
- CALERO, J. (2006). Desigualdades tras la educación obligatoria: nuevas evidencias. Documento de trabajo 83/2006. Fundación Alternativas.
- CARABAÑA, J. (1979). Origen social, inteligencia y rendimiento al final de la E.G.B. En *Temas de Investigación Educativa* (pp. 29-72). Madrid: INCIE, MEC.
- (1999). *Dos estudios sobre movilidad intergeneracional*. Madrid: Fundación Argentaria-Visor.
- (2004). Educación y movilidad social. In V. NAVARRO (Ed.), *El Estado de Bienestar* (pp. 209-237). Madrid: Tecnos.
- ERIKSON, R. (1996). Explaining Change in Educational Inequality – Economic Security and School Reforms. In R. ERIKSON & J.O. JONSSON (Eds.), *Can Education be Equalized? The Swedish Case in Comparative Perspective* (pp. 95-112). Boulder: Westview Press.
- ERIKSON, R. & JONSSON, J.O. (Eds) (1996). *Can Education be Equalized? The Swedish Case in Comparative Perspective*. Boulder: Westview Press.
- (2009). Change in Social Selection to Upper Secondary School—Primary and Secondary Effects in Sweden. *European Sociological Review*, doi, pp.10.1093/esr/jcp022.
- ETEFIL (2005). *Encuesta de Transición Educativo Formativa e Inserción Laboral*. Madrid: Instituto Nacional de Estadística.
- GRODSKY, E., WARREN, J. R. & FELTS, E. (2008). Testing and Social Stratification in American Education. *Annual Review of Sociology*, 34, 385-404.

- HILLMERT, S. & JACOB, M. (2003). Social inequality in higher education: is vocational training a pathway leading to or away from university? *European Sociological Review*, 19(3), 319-334.
- JACKSON, M., ERIKSON, R., GOLDTHORPE, J. & YAISH, M. (2007). Primary and Secondary Effects in Class Differentials in Educational Attainment. The Transition to A-Level Courses in England and Wales. *Acta Sociologica*, 50, 211-29.
- KLOOSTERMAN, R., RUITER, S., DE GRAAF, P.M. & KRAAYKAMP, G. (2009). Parental education, children's performance and the transition to higher secondary education: trends in primary and secondary effects over five Dutch school cohorts (pp. 1965-99). *The British Journal of Sociology*, 60(2), 377-398.
- LUCAS, S. R. (2001). Effectively Maintained Inequality: Education transitions, Track, Mobility, and Social Background Effects. *American Journal of Sociology*, 106(6), 1642-1690.
- MARE, R. (1980). Social Background and School Continuation Decisions. *Journal of the American Statistical Association*, 75, 295-305.
- (1981). Change and Stability in Educational Stratification. *American Sociological Review*, 46, 72-87.
- (1993). Educational Stratification on Observed and Unobserved Components of Family Background. In Y. SHAVIT & H.P. BLOSSFELD (Eds.), *Persistent Inequality. Changing educational attainment in thirteen countries* (pp. 351-376). Boulder: Westview Press.
- MARKS, G. N. (2005). Cross-National Differences and Accounting for Social Class Inequalities in Education. *International Sociology*, 20(4), 483-505.
- MARTÍNEZ, J. S. (2007). Clase social, género y desigualdad de oportunidades educativas. *Revista de Educación*, 342, 287-306
- MÜLLER, W. & POLLAK, R. (2007). Weshalb gibt es so wenige Arbeiterkinder in Deutschlands Universitäten? In R. BECKER & W. LAUTERBACH (Eds.), *Bildung als Privileg. Theoretische Erklärungen und empirische Befunde zu den Ursachen der Bildungsungleichheiten* (pp. 311-352). Wiesbaden: VS-Verlag.
- SCOTT, J. L. & FREESE, J. (2001) *Regression Models for Categorical Dependent Variable Using Stata*. College Station: Stata Press.
- SHAVIT, Y. & BLOSSFELD, H.-P. (Eds) (1993). *Persistent Inequality. Changing Educational Attainment in Thirteen Countries*. Boulder: Westview Press.
- SHAVIT, Y., ARUM, R. & GAMORAN, A. (Eds.) (2007). *Stratification in Higher Education. A Comparative Study*. Stanford: Stanford University Press.
- SLF (2008) *Spanish Labour Force Survey*. Madrid: Instituto Nacional de Estadística.

TOHARIA, L. & GARRIDO, L. (2004). La situación laboral de los españoles y de los extranjeros según la encuesta de población activa. *Economistas*, 99, 74-86.

### Electronic sources

LACASA, J. (2008). ¿Es la repetición el talón de Aquiles del sistema o una consecuencia? *Magisnet*. Retrieved on line at:  
<http://www.magisnet.com/articulos.asp?idarticulo=3157>

**Dirección de contacto:** Miguel Requena. UNED, Facultad de Ciencias Políticas y Sociología. Departamento de Sociología II (Estructura Social). C/ Obispo Trejo s/n, 28040 Madrid, Spain. E-mail: mrequena@poli.uned.es



## APPENDIX

TABLE AI. Probit models for four separate processes. People who are or are going to be 17 in the year of the survey

	(1)	(2a)	(2b)
	CE on time vs. failure	Retake vs exit (if failure at CE)	Move on vs exit (if CE on time)
<b>Women</b>	0.241***	0.261***	0.060
<b>Month of birth</b>			
<b>October or later</b>	-0.172**	0.257***	0.029
<b>Parents' social class (EGP)</b>			
<b>Service class</b>	0.872***	0.861***	0.648***
<b>Non-manual</b>	0.423***	0.656***	0.577***
<b>Employers</b>	0.424***	0.414**	0.470**
<b>Urban self-employed</b>	0.250***	0.167	0.179
<b>Agricul. self-employed</b>	0.333**	0.265	0.207
<b>Skilled workers</b>	0.155*	0.343***	0.084
<b>Unskilled workers (ref.)</b>	0.000	0.000	0.000
<b>Unemployed</b>	-0.116	-0.314	-0.487*
<b>Inactive</b>	0.130	-0.039	0.072
<b>Foreigners</b>	-0.551***	0.264*	-0.382*
<b>Type of household</b>			
<b>Couple (ref.)</b>	0.000	0.000	0.000
<b>Lone mother</b>	-0.128*	0.071	-0.094
<b>Lone father</b>	-0.061	-0.243	-0.259
<b>Employment security</b>			
<b>Tenure in the same occupation (months)</b>			
<b>Constant</b>	-0.416***	0.177	0.872***
<b>N</b>	7118	3223	3800
<b>pseudo R<sup>2</sup></b>	0.086	0.089	0.104

Note, pp.

(1) having completed compulsory education (CE) on time;

(2a) retaking CE if a failure has occurred at CE;

(2b) having moved on to upper secondary education if CE has been completed on time;

Controlling also for autonomous region and calendar year; ; \* p < 0.05. \*\* p < 0.01. \*\*\* p < 0.001

Source, pp. Spanish Labor Force Survey (First quarter) 2005. 2006. 2007 and 2008.

**TABLE AII.** Multinomial probit. Likelihood of choosing the vocational training track or exiting the education system compared to moving on to the academic oriented upper secondary track

	Vocational training		Exit the educational system	
	Coefficient	SE	Coefficient	SE
<b>Women</b>	-0,682***	0,173	-0,230	0,178
<b>Month of birth</b>				
<b>October or later</b>	-0,140	0,179	-0,114	0,204
<b>Parents' social class (EGP)</b>				
<b>Service class</b>	-1,566***	0,299	-1,307***	0,288
<b>Non-manual</b>	-0,565*	0,260	-1,046***	0,291
<b>Employers</b>	-1,165**	0,346	-0,947***	0,336
<b>Urban self-employed</b>	-0,533	0,288	-0,299	0,300
<b>Agricul. self-employed</b>	0,354	0,412	-0,448	0,449
<b>Skilled workers</b>	-0,462	0,247	-0,216	0,283
<b>Unskilled workers</b>	0,022	0,022	0,054	0,029
<b>Foreigners</b>	0,813**	0,307	0,679	0,357
<b>Year 2006</b>	-0,124	0,243	-0,710**	0,244
<b>Year 2007</b>	0,105	0,227	-0,150	0,218
<b>Year 2008</b>	-0,459	0,251	-0,630**	0,242
<b>Type of household</b>				
<b>Lone mother</b>	0,421	0,313	0,089	0,352
<b>Lone father</b>	0,795	0,451	0,656	0,482
<b>Tenure in the same occupation (months)</b>	-0,003*	0,001	-0,003*	0,001
<b>Constant</b>	-1,487*	0,568	-2,176**	0,763
<b>N</b>	3396			
<b>pseudo R<sup>2</sup></b>	0.0900			

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

Source, pp. Spanish Labor Force Survey (First quarter) 2005. 2006. 2007 and 2008.