## The horizontal segregation of university: the role of the private university

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#### Abstract

A marginal number of students in the Spanish university system have traditionally been enrolled in private universities. Hence, we can deduce that the social reproduction strategies of the middle and upper classes have tended to pass through the public university system. However, the data for Catalonia show that in the last decade changes have come about and the presence of students in private universitieshas increased significantly. This prompts us to explore, first, whether these changes in the university field can be explained by an increase in the prestige students bestow on private universities; and second, if the reproduction strategies of the middle and upper classes have likewise been modified. Based ona longitudinal survey following a cohort of young people aged 15 to 19 years from Barcelona, it is shown that the prestige conferred on private universities is low. As a result, students who perform poorly academically enrol at private universities more often than those who perform well, but amongthe more well-off classes good students attend private universities more than good students from lower class families. This could indicate that social reproduction patterns are changing, following a model we have called the boosting effect.

**Keywords:** Private universities; compensation effect; boosting effect; social closure; degree programs; transition to higher education.

#### Introduction

As the number of university graduates increases, the capacity of university provide social closuredecreases. Reproduction of the social position occupied by the family of origin through the achievement of university credentials is no longer guaranteed when there are so many people holding the same credentials (Klein, 2016). When this happens, the privileged classes now look for new forms of social closure not through vertical but horizontal segregation: vantages are obtained thanks to what is studied within the same university degree (Lucas, 2017; Raftery & Hout, 1993).

In Anglo-Saxon countries horizontal segregation is traditionally based on which higher education institution (HEI) is attended. In contrast, in Spain, like across almost all of continental Europe, differentiation comes much more from which degree program is studied than the university attended (Bloch, Mitterle, Paradeise, & Peter, 2017). In addition, a poor historical presence of private universities in Spain has meant that the hegemony of public HEIs in all the regions has been significant.

In the UK, there are examples of how the increased number of students is absorbed by the less prestigious universities—those who play a more "inclusive" role in the system—enabling the "old universities" to maintain their selective position (Boliver, 2011, 2013; Iannelli, Gamoran, & Paterson, 2011; Raffe & Croxford, 2015; Triventi, 2013). The same pattern can be observed for many other countries worldwide, possibly because of the internationalisation of the Anglo-Saxon model —see for example, China (Liu, 2018; Luo, Guo, & Shi, 2018), Korea (Byun & Park, 2017), Peru (Wells, Cuenca,

Blanco Ramirez, & Aragón, 2018), the USA, Brazil, and others (Scott, Gallacher, & Parry, 2016).

By contrast, Continental European segregation is traditionally linked to the differences between degree programs, irrespective of the HEI where they were obtained (Bloch et al., 2017). Nevertheless, this should be conceived as a continuum because research shows us that this phenomenon ranges from: a) models more unmistakably based on differences between degree programs (Antikainen, 2016; Helland & Wiborg, 2018);b) other models based on degree programs or tracks but with some hierarchy attributable to the HEI that offers them (Duru-Bellat, Kieffer, & Reimer, 2008; Munk & Thomsen, 2018; Triventi, 2013); c) other more extreme models more based on the HEI attended —although even in the UK and the US some interference of the degree program over the HEI has beendetected (Kim, Tamborini, & Sakamoto, 2015; Werfhorst, Sullivan, & Cheung, 2003).

In Spain, the processes of widening participation in tertiary education and horizontal segregation are coincident. When a larger number of people started accessing higher education, some degree programs decreased their social value while others kept their prestige through selecting their applicants academically. These degree programs ask for higher academic credentials (obtained by means of a centralised exam system) and set drawn-out, difficult requirements to complete their programs (Fernandez Enguita & Levin, 1997; Troiano, Torrents, Sánchez-Gelabert, & Daza, 2017). Private universities do not generally feature among these higher status institutions, since this has traditionally been a small sector with selection based on cost rather than academic credentials (Jerez, 1997).

However, some of these initial determinants are now changing. First, a series of policies beginning tentatively with the 1983 reform law (LRU) enactment have attempted to foster differentiation between degree programs depending on which HEI is providing them (Troiano, Masjuan, & Elias, 2007). And second, these changes have occurred due to some new private universities having been allowed to open, increasing the number of student admissions in the private sector. Consequently, the percentage of students in private universities rose from 7% in 1983 to 18% in 2016 (Rodríguez, 2017).

Within the context of HEI differentiation and the growth of the private sector, the question is whether there has been a change in the social consideration of the diversity of HEIs. The hierarchy may have changed in such a way as to make horizontal segregation currently based more on the HEI sector (public or private) than on the particular degree program followed. Alternatively, the increasing numbers of students in the private sector may not be attracted by prestige but are accessing these universities for other motives, which need to be explored.

#### The higher education system as a field

The sociological term "field" is defined as an autonomous space where constrictions are set for the agents in it, who occupy positions in a hierarchy and are constantly interacting with one another. In the field, there are always struggles because the different agents are trying to redefine their positions, despite having unequal opportunities to do so. Better positioned agents hold more resources and so their chances of reproducing their advantage in the field are higher. Meanwhile, those in worse positions seek external alliances to redefine the structure of the field and achieve/gain a better position in it. The structure of positions in a particular field is based on the worth conferred to every capital (symbolic, cultural, economic, social, and so on) at play, hence theyare the resources at the agents' disposal (Bathmaker, 2015; Bourdieu, 2013; Martín Criado, 2010).

The concept of field can be perfectly applied to the analysis of the education system. First, because educators, as the main stakeholders in the field, are professionals who have a large amount of control over their work and deal with specialised knowledge. And second, because the system supplieseducational credentials that havethe power to provide a legitimated social closure to gain a social position. A large number of organisations, social groups and institutions are interested in playing on a field with such power at stake (Martín Criado, 2010).

Furthermore, in the case of the higher education system the term field applies particularly well because it is even more autonomous than the rest of the education system (Bourdieu, 2013). In addition, power from other fields penetrates into the higher education field through alliances made by the agents in it (Bourdieu, 2008) and because the structure of the system as a quasi-market<sup>1</sup> provides a playground of competition and interdependence (Ball, 2003; Verger, 2013).Within this new context, it is to be expected that different kinds of universities will defend different kinds of capitals to gain good positions in the field. Marginson (2006) observes that universities obtain global prestige from renowned research worldwide, while prestige at a national level is based on student selection.

A university can select its students on an economic, academic or social basis; that is, by establishing higher fees, setting higher entrance marks or conducting acceptance interviews, respectively. Different social groups may respond to this selection, triggering a social composition with adiversified interest. For instance, Khan (2015), who studied the reproduction patterns of the elite classes in the USA, observes that some fractions of these elites prefer to access colleges that select according to economic and social criteria rather than academic criteria, hence the colleges that gather the traditional elites.

Thus, class closure, which seeks to gain advantage over competing groups in the field, might be performed as an economic, social or academic closure. This is not only due to the way HEIs are selecting students and the kind of capital mobilised by their families, but also because of the specific strengths the universities are selling and the preferred path of reproduction the families are pursuing. Hence the varied emphasis on the different qualities displayed by universities, including a good position in international research rankings, the excellence of their graduates, good opportunities to social

<sup>&</sup>lt;sup>1</sup>In fact, in Spain the quasi-market hybrid —which allows for election of the courses offered by universities as a commodity in a frame regulated by the state (Alegre, 2010)— has translated into a system with a new, important actor: the private university.

network among their students and the promise of getting good jobs when they graduate<sup>2</sup>, among others.

The role of private universities in a field such as this differs depending on what part of the world we are observing. In some places, there has been a significant proliferation of tiny universities specialised in economics, business and law, which absorb the additional demand for higher education qualifications. In others, such as the USA, we can find private HEIs with enormous worldwide prestige. There are also much more complex patterns, such as the one observed in Eastern Europe, where the state universitylost its prestige during the post-soviet period only to regained it later (Scott et al., 2016); or in Australia, where it is not yet clear what kind of students HEIs will attract once the government policies to widen participation are fully deployed (Shah & Sid Nair, 2013).

As already pointed out, while in Spain the private university has traditionally played a minor role in the field, students are now accessing this sector in increasing numbers. It has yet to be discovered whether this is due to the position of the private university in the field having been modified, or whether there are other causes.

A recent research study (Gutiérrez-Villar, Alcaide-Pulido, & Carbonero-Ruz, 2017) on the image projected by private HEIs concluded that overall students considered their main characteristic to be "expensive", while among private secondary school pupils the image was more positive, relating private HEIs with the opportunity of "finding a good job". However, it must be kept in mind that the traditional structure of the field of higher education in Spain is based on the different prestige of the degree programs, be it the perceived prestige (Alvarez Hernández, 2014) or the resulting social composition (Fernández-Mellizo & Salvo, 2019), and any modification of the field may overlap this structure.

#### Mechanisms of access to private universities

Different accessing strategies are expected depending on the economic and cultural resources available to the families, their offspring's previous academic performance, and the social consideration the private university enjoys. These variables, in turn, will have an impact on the prestige of the private HEI chosen. The first two strategies are more likely if the private university is positively considered. Families who are affluent enough to send their offspring to private HEIs and consider that these universities are more able to provide prestige, social capital and professional opportunities, among others, prefer tofollow two diverging strategies taking their children's academic ability into account.

a) Closure effect. Regardless of academic achievement, they invest in private education to attain higher positions in the social structure.

<sup>&</sup>lt;sup>2</sup>Elite or private universities often claim this advantage, although what part of the result is a consequence of the social composition of the group of students and what part is due to the advantage provided by the HEI itself in the labour market is not usually specified (Triventi & Trivellato, 2012).

As higher education credentials cannot guarantee social reproduction (in the same way as economic inheritance does), families look for a plus in their credentials to gain advantage over the rest (Martín Criado, 2010). Only some families can afford a credential issued by a private university. This scarcity means that the credential may work as a positional good and so is considered as a status commodity (Marginson, 2006).

b) Boosting effect (Ballarino & Bernardi, 2016). For children with previous good academic achievement, the family invests in private education to attain higher positions in the social structure.

Historically, new elites have defended their earned position against those who have inherited theirs (Martín Criado, 2010). Cultural "merits" are to be protected and so families justify seeking exclusive education in meritocratic terms (Van Zanten, Ball, & Darchy-Koechlin, 2015). Families simultaneously follow strategies that are only partially based on educational credentials if their children are less academically gifted, either investing in business or training their children to run companies (which they may inherit in the future), or mobilising social capital to find good employment opportunities, among others.

We can also expect to find the boosting effect among less affluent families, in which case greater consideration must be given to whether the investment is worth the effort, which maybe the case if their child has a good chance of academic success.

c) Compensation effect (Bernardi & Cebolla, 2014). Families of young people with previous poor academic achievement invest in private education to attain higher positions in the social structure, thus compensating for the consequences of their poor academic performance (which are either the impossibility of accessing their preferred higher education degree program or the low probability of completing their studies in a public HEI).

This last strategy is dependent on considering that the returns of private university are not a good enough trade-off for the greater investment it requires. Nonetheless, this option provides a better chance of obtaining the final credential due to greater monitoring and student support, lower ratios, lower academic requirements, and so on.

To summarise, the main purpose of this study is to assess the extent to which previous performance, social origin and the perceived prestige of private university are factors that shape the strategies of enrolling in private higher education.

#### Methodology

#### The analysis model

After a first descriptive approach to considering the prestige associated with different degree programs and universities, an analysis using a binary logistic regression model is carried out to explain the choice of private versus public university. Last, the probabilities of transition to private or public university are calculated and graphically represented. Not only do we introduce the variables under examination–student's

performance<sup>3</sup> (*Perf*), social origin (*EdBck* and *EGP*) andthe prestige conferred to the private university (*Prest*)– but we also include a selection of control variables (*Ctrl*)in an attempt to address the problems of unobserved heterogeneity (Mood, 2010)–such as financial problems at home, private or public ownership of the secondary school attended, and the area of knowledgeof the university degree enrolled on.Thus, analysis model 1, which analyses the transition to private university (*PR*), is represented by the equation:

$$ln\left(\frac{P_{PR}}{1-P_{PR}}\right) = \alpha + \beta_1 Perf + \beta_2 EdBck + \beta_3 EGP + \beta_4 Prest + \delta_1 Ctrl_1 + \cdots + \delta_n Ctrl_n$$

The three different mechanisms described in the theoretical section can be translated into an interaction of the terms social origin and student's performance, as follows:

Figure 1. Examples of graphics representing the three mechanisms of choosing the Higher Education Institution: Closure, boosting and compensation.

These three graphics display examples of different relations between the two lines under examination. Where parallels are made there is no interaction at play, and so we interpret this as a behaviour of social closure, where the families consider the advantage for every child irrespective of their performance. We understand that the most acute differencesbetween the good students area consequence of greater resources invested in the higher probability of social reproduction success through the educational system, or the boosting effect. Where the maximum distance is found among the poor performers the parents are "overinvesting" and searching for complementary academic assistance resources to compensate for the slim chance of their child achieving academic success.

Our aim is to test these interaction patterns. Using two proxies for social origin, one relating to the highest education level achieved by the parents (EdBck) and the other to the maximum occupational background (EGP), we test the interaction in two different logistic regression models, one for each social origin variable.

Thus, model 2a:

<sup>&</sup>lt;sup>3</sup>The variable 'performance' is constructed from the marks obtained during the three years after our survey. Each subsequent year after the baseline questionnaire, we asked for the marks obtained in the previous year. We consider a 'very good student' to be one who always obtained very good marks (9 or 10 out of 10 points); a 'good student' to be when in at least one year he/she obtained middle marks (6, 7, or 8 out of 10 points); and a 'student sometimes failing' to be one who declaredhaving failed some subjects, just passing or retaking an exam in at least one year.

$$ln\left(\frac{P_{PR}}{1-P_{PR}}\right) = \alpha + \beta_1 Perf + \beta_2 EdBck + \beta_3 EGP + \beta_4 Prest + \beta_5 Perf \cdot EdBck + \delta_1 Ctrl_1 + \dots + \delta_n Ctrl_n$$

And model 2b:

$$ln\left(\frac{P_{PR}}{1-P_{PR}}\right) = \alpha + \beta_1 Perf + \beta_2 EdBck + \beta_3 EGP + \beta_4 Prest + \beta_5 Perf \cdot EGP + \delta_1 Ctrl_1 + \dots + \delta_n Ctrl_n$$

Only for the statistically significant interactions do we offer the probability of enrolling at private HEIs ( $P_{PR}$ ), calculated on B coefficients drawn from the logistic regression analysis. Keeping all the rest of the variables at their means, the general transformation followed is:

$$P_{PR} = \frac{e^{(\alpha + \beta_1 Var_1 + \dots \beta_n Var_n)}}{1 - e^{(\alpha + \beta_1 Var_1 + \dots \beta_n Var_n)}}$$

#### Data and sample

This paper is based on data obtained from a longitudinal study of a sample of 2,056 students from 27 schools in the city of Barcelona in their last year of compulsory secondary education (tenth grade) during the school year 2013-14. The participants were surveyed each year up to 2017. The data comes from the International Study of City Youth and the sample was representative of the school ownership (public-private) and social background of schools in Barcelona. The sample attrition was corrected by the Inverse Probability Weighting (IPW) method.

The sample members who were studying at university in the last wave of the longitudinal study (2017) were selected for this study. The total number was 810 students, although the total N changes slightly for each analysis due to some subjects not answering some questions in the questionnaire.

#### Results

Four items in the questionnaire measured the extent to which the students conferred prestige on a degree program in relation to the track to which it belonged, the university it was taught at, the ownership of the university (private or public) and the specific degree program studied. Figures 2 and 3 reflect the distribution obtained for these last two items, both of which are examined in this paper.

Figure 2. The prestige of a degree program depends on which degree program it is. Percentages.

Figure 3. The prestige of a degree program depends on the university being private. Percentages.

On comparing these two graphics it is clear that one follows the opposite trend to the other. While the prestige conferred on the kind of degree program is widely appreciated (only 13% of students do not agree), the prestige conferred on the private HEI is much more opposed, with over half the sample against the idea. Thus, we can conclude that strength remains in the structure of horizontal segregation associated with the degree program rather than with university ownership.

Scores 1 and 2 (53.9%) in one category and scores 3, 4 and 5 in the other (46.9%) were grouped to construct the variable summarising the appreciation of private HEIs, hence including a weaker agreement with the importance ascribed to the ownership of the institution. The category was then given the sense "Yes, to some extent the prestige of the degree program is due to it being issued by a private university". The new variable created was used as an independent factor to explain access to private HEI in the analyses, together with a range of other variables described in the methodology section. All of them are included in Table 1, which shows the percentage of students accessing private universities each category.

Table 1. Transition to private Higher Education Institutions (vs. public HEIs). Percentages. N = 810.

Table 1 shows that good students and those with parents with a university degree enrol in private universities less than poorer students and those with parents without a university degree. Thus, the data indicates that private HEIs are not very well appreciated in academic terms. Conversely, the opposite trend is found when observing parental occupational level: students with parents with a higher occupational position enrol more in private universities than those with parents in lower positions. Nevertheless, the fact that there is an economic factor associated with parental occupations should be taken into account as this places serious constrictions on the choices made, as the results of the variable 'economic stress' show. A greater number of students from private secondary schools were also shown to access private HEIs, as do students who confer prestige on these kinds of institutions, as was hypothesised in the initial sections.

Last, huge differences were observed among the areas of study. The number of degree programs available in each area varies dramatically, as do the positions the private HEIs have achieved for each area. Thus, the transition to private universities when the degree program is in the areas of science or engineering is very scarce, rising to a quarter of all students in the areas of health and social sciences, and a third in the area of the humanities.

Table 2. Logistic Binary Regression for the transition to private HEIs (vs. public HEIs).<sup>4</sup>

The multivariable analysis in Table 2 confirms the influential force of the descriptive variables explaining access to private universities in Table 1. Thus, the students with good academic performance and those who consider that degree programs issued by private universities do not provide more prestige are less prone to accessing private HEIs. Conversely, the offspring of professionals and entrepreneurs, youth in families with no economic strains, and students in the areas of the humanities, social sciences and health, have a higher probability of accessing private universities than their counterparts.

The interaction included in Model 2b (previous academic performance by occupational status) was shown to be statistically significant, even though the improvement of the model is very slight. A little improvement can be seen in the augmented figure of the R2 Nagelkerke (which indicates that a plus 9% of variance is explained by the interaction included in this model) and in the reduction of the AIC, although BIC shows the opposite trend.

The interaction included in the model can be interpreted as a boosting effect. The combination of students with parents who are professionals or entrepreneurs and good academic performance gives a positive association for accessing a private university. Hence, parents in higher occupational positions would invest more than the others in sending their children with good academic performance to private HEIs (coefficient Beta positive), while they would do it less than the others if their offspring were poor academic performers (significant interaction).

The predicted probabilities for the significant interaction 'previous performance' by 'occupational status' were calculated to provide an estimation of the effect. The estimated probabilities are shown in figure 4.

Figure 4. Predicted probabilities of enrolling in a private HEI by Previous Performance and Parents' Occupation.

In a general context where the public university system is more valued, investment in a private university degree is shown to usually be low. Within every occupational level this investment is even lower if the student is a good or a very good academic performer. However, among families in the professional or entrepreneurial category, access to private HEIs is higher than the rest if the student has good academic performance. Thus, we can assume that these families expect to draw some kind of advantage from enrolling their children in private universities. It is important to note that although the interaction is clear and statistically significant, distances between the different occupational categories are not very large.

<sup>&</sup>lt;sup>4</sup>Model 2a has been excluded from this table because the interaction it provides is not statistically significant. The model is included in the appendix.

The logistic regression analysis shown in Table 2 reveals the importance of the perceived prestige attached to the ownership of the university to explain access to one or the other kind of HEIs. It may be thought that the interaction sought is produced differently depending on the perception of the prestige that families attribute to the private universities. Thus, Figure 5 shows the same predicted probabilities given in Figure 4 for the whole population, but splitting the sample into two groups, one of which confers prestige on private universities and the other does not.

Figure 5. Predicted probabilities of enrolling in a private HEI by Previous Performanceand Parents' Occupation, and Perceived Prestige.

As was expected, the boosting effect (which is produced when the maximum distance is found between the good students from different occupational backgrounds) occurs more intensively, albeit very slightly, among the population that considers private university to be a source of prestige.

#### Conclusions

The role played by private universities in the horizontal segregation of the Spanish university system appears to be weak, especially compared with the diversity of prestige conferred by the kind of degree programs offered among the disciplines. Thus, we can say that, despite the important rise of these private HEIs, their advance in the field is slow.

Regarding student enrolment, the progress of private universities is more acute in some areas than others. For instance, this figure reaches between a quarter and a third of our sample in the humanities, social sciences and health. It can also be seen that student enrolment in private universities is more linked to the availability of economic resources and parental occupational position than to the educational level of the family. Indeed, it was observed that although less academically able students access private HEIs more than good or very good ones in all categories, the pattern varies if we take differences in parental occupational or educational levels into account. While there appears to be no interaction between students' performance and educational background, this interaction emerges when considering the combination of performance and occupational background.

The highest EGP categories, professionals and entrepreneurs, show a pattern where their children with good academic performance access private universities more than the good performers from the rest of EGP families. Even though these good students enrol in private HEIs less than the poor performers from the same high EGP, the pattern resembles one of a boosting effect. In this situation, families would seek an advantage for their children derived from the assets issued by these kinds of institutions, boosting their good academic potential.

One possible explanation is that this pattern of atentative boosting effect has occurred since the sharp rise in fees in the public university system in Spain. Even if public university fees are still far lower than those of private universities, the change from often representing one sixth of the cost to now representing one third meansthat the rules of the market have altered. This new situation, together with private HEIs actively

pursuing a better position in the field, could have contributed to changing the strategies of social reproduction of the highest occupational categories.

It may also be that the pattern changes for every degree program. The advance of private universities varies greatly depending on the field for each degree program and the prestige they project. Hence the strategies followed by families could be diverse according to the subarea. Even if the results by area of discipline are controlled in this study, the variability could affect diversity within each area. Both the possible changes in patterns of social reproduction and the differences in behaviour among degree programs are of the utmost interest to scientists and politicians. Therefore, this issue deserves to be further researched. If indeed the advance is produced in different ways depending on the degree program and the strategies of social reproduction change for each of them, then further examination requires a much bigger sample to be able to study any subtle pattern differences in each subarea of study.

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### Appendix

Table 4. Logistic Binary Regression for transition to private HEIs (vs. publicHEIs). Model 2a: interaction 'Marks during secondary school BY Parents' level ofeducation'.

		Model 2a				
	В	Standar	Exp(B			
		d Error	)			
Marks during secondary school: (Ref. Student sometimes failing)						
Good or Very Good	-,767*	,296	,464			
Parents' Level of Education: (Ref. University	<i>י</i> )					
Non-university	,424	,435	1,528			
Parents' Occupation: (Ref. Rest of occupatio	ns-EGP)					
Profess. and Entrepreneurs	,641*	,278	1,899			
Economic stress: (Ref. With economic stress)						
Without economic stress	,735*	,326	2,085			
Secondary School Ownership: (Ref. Private S	School)					
Public school	-,267	,263	,765			
Perceived Prestige: (Ref. Due to private HEI	(s)					
Not due to private HEIs	-,593**	,194	,552			
Area (Ref: Engineering and Architecture)						
Humanities	1,417***	,353	4,126			
Social Sciences	1,123***	,296	3,073			
Science	-,118	,541	,888			
Health	1,240**	,371	3,454			
Interaction:						
Non-university BY Good or Very Good	007	192	1 007			
Student	,007	,405	1,007			
Intercept	-	51/	073			
	2,612***	,314	,075			
R2Nagelkerke		,131				
BIC		396,92				
		6				
AIC Akaike		339,88				
		5				
N total		752				
*n < 0.05 $**n < 0.01$ $**$						

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

Table 1. Transition to private Higher Education Institutions (vs. public HEIs). Percentages. N = 810.

Variable	Variable Category		
		of access to	
		private HEIs	
Global of the students		20.4	
Marks during secondary	Good or Very Good student	18.1	
school			
	Student sometimes failing	33.9	
Parents'Educational Level	Non-University	21.6	
	University	19.6	
Parents' Occupation (EGP)	Professionals and Entrepreneurs	21.6	
	(I+II)		
	Rest of EGP	15.7	
Economic stress	Without economic difficulties	22.1	
	With economic difficulties	10.9	
Secondary School	Public	16.1	
Ownership			
	Private	21.5	
Perceived Prestige	Not dueto private HEI	16.1	
	Due to private HEI	25	
Area	Humanities	30.5	
	Social sciences	25	
	Science	7	
	Health	22.1	
	Engineering and Architecture	10.4	

	Model 1			Model 2b					
	В	Standar	Exp(B	В	Standar	Exp(B			
		d Error	)		d Error	)			
Marks during secondary school: (Ref. Student sometimes									
failing)									
Good or Very Good	-,764**	,237	,466	-1,689**	,496	,185			
Parents' Level of Education: (Ref. University)									
Non-university	,429	,225	1,536	,486*	,225	1,626			
Parents' Occupation: (Ref. Rest of occupations-EGP)									
Profess. and Entrepreneurs	,641*	,277	1,899	-,189	,473	,828			
Economic stress: (Ref. With economic stress)									
Without economic stress	,735*	,326	2,085	,725*	,326	2,064			
Secondary School Ownership: (Ref. Private School)									
Public school	-,267	,263	,765	-,297	,266	,743			
Perceived Prestige: (Ref. Due	to private .	HEIs)							
Not due to private HEIs	-,593**	,194	,552	-,585**	,195	,557			
Area (Ref: Engineering and Ar	chitecture	)							
Humanities	1,417** *	,351	4,124	1,416***	,352	4,121			
Social Sciences	1,122** *	,295	3,072	1,090***	,295	2,973			
Science	- 118	541	888	- 172	542	842			
Health	1 239**	371	3 4 5 3	1 235**	371	3 4 3 8			
Interaction:	1,207	,571	5,105	1,200	,071	5,150			
Professionals and									
Entrepreneurs BY Good or				1.188*	.564	3.281			
Very Good Student				1,100	,001	0,201			
Intercept	-								
	2.614**	.503	.073	-	.567	.185			
	*	9	<b>y</b>	1,980***	,	,			
R2Nagelkerke		.131			.140				
BIC		390.2			393.0				
AIC Akaike		337.9			336.0				
N Total		753			753				

Table 2. Logistic Binary Regression for the transition to private HEIs (vs. public HEIs).<sup>5</sup>

<sup>&</sup>lt;sup>5</sup>Model 2a has been excluded from this table because the interaction it provides is not statistically significant. The model is included in the appendix.

Figure 1. Examples of graphics representing the three mechanisms of choosing the Higher Education Institution: Closure, boosting and compensation.



Figure 2. The prestige of a degree program depends on which degree program it is. Percentages.



Figure 3. The prestige of a degree program depends on the university being private. Percentages.



Figure 4. Predicted probabilities of enrolling in a private HEI by Previous Performance and Parents' Occupation.



Figure 5. Predicted probabilities of enrolling in a private HEI by Previous Performanceand Parents' Occupation, and Perceived Prestige.

