International Mobility of University Students: the Italian case

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Abstract In recent years, International student mobility is changing the higher education, with an increasing number of students going abroad to scholarship and making an experience of life. The choice of going abroad for a student depends also on living conditions and costs (tuition fees and accommodation). The aim of this paper is to analyze motivations and obstacles to go abroad to scholarship. We analyze a sample of 4,499 students, the Eurostudent 2011 DB, to investigate on temporary international mobility. We propose a method to explore latent dimensions of student profiles, with regard to degree programme, field of study, year of enrolment, geographical area and sex.

Introduction

During the last years, an increasing number of students decided to study abroad. Verbik and Lasanowski (2007) underlines that motivational factors in the decision-making process for student application to an overseas destination with reference to UK include employment and residency opportunities, the quality of the 'student experience', including accommodation and social activities, and the costs associated with an international education. Moreover the Bologna process has harmonized the architecture of the European Higher Education System, providing a common framework for tertiary education in Europe at the bachelor, master and doctorate levels (Iezzi, 2005). This new "global" university system has facilitated student mobility among countries, recognising equivalence between similar programmes. In this paper, we analyse the Italian Eurostudent survey to study the international mobility of students. The Eurostudent Surveys are quite peculiar because they collect information about student temporary mobility phases together with those about practical activities linked with study courses.

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2 Data and methods

The EUROSTUDENT project collects comparable data on the socio-economic background and living conditions of students throughout Europe. In the sixth edition and the forth round of the study (2008-2011), 25 countries have taken part. The questionnaire is structured into nine different areas: 1) Demographic characteristics, 2) Access and entry to higher education; 3) Social background; 4) Accommodation; 5) Living costs; 6) Funding and state assistance; 7) Time budget and employment; 8) Assessment of studies and future plans; 9) Internationalisation and mobility. The Italian sample consists of 4,499 students, enrolled in public and private univesities at AY 2008-2009. The quota sampling by programme, field of study, year of enrolment, geographical area, and gender was selected. The fieldwork carried out in May and June 2010, using CATI Interviewing method (Lovecchio and Finocchietti, 2011). We apply logistic regression and multilevel logistic model[3] (Snijders and Bosker, 1999) to estimate relationship between international mobility and age, sex, and language skills. Moreover, we use logistic regression and multilevel logistic modeling, on sub-sample of 444 students in the group of students who have realised a foreign enrolment phase, to measure association between different types of mobility and age, sex, language skills, socio-economic family background, and sources of funding enrolment abroad.

3 Discussion

In Italy, the scant public financial support hampers to mobility in planning a study-related stay abroad. The percentage of students enrolled abroad is quite low and most of them come from highly-educated families. Table 1 shows the results of multilevel logistic model. The response variable is a binary indicator of whether a student has been or not abroad since he enrolled the University. The first level units are students, the second level fields of study courses degree. The most important predictor variables are age (only for two-level model), family status and knowledge of some languages, in particular any level of spanish and excellent french, as shown by table 1. The medium-high and high socio-economic levels of students, measured by social-background of parents, is strongly associated with the international mobility. In fact, in three out of four cases the mobility is funded almost exclusively by student financial resources or from the family of origin. The proportion of students of II level courses who experienced international mobility is 28,5% compared with 13,5% of those who did not, while for the first level students these percentages are 48,8% vs 69,3%.

Table 1 *Random intercept multilevel regression model for international mobility programme*

Parameter	***Single model***				***Two-level model***			
	Est	***(SE)***	***z***	***P>|z|***	***Est***	***(SE)***	***z***	***P>|z|***
Sex	0,2247	(0,1078)	2,0900	0,0370	0,2208	(0,1149)	1,9200	0,0550
Age	0,0189	(0,0116)	1,6200	0,1060	0,0274	(0,0119)	2,3000	0,0220
family_status1	0,1834	(0,1723)	1,0600	0,2870	0,175	(0,1757)	1,0000	0,3190
family_status2	0,3061	(0,1759)	1,7400	0,0820	0,3217	(0,1794)	1,7900	0,0730
family_status3	0,7121	(0,1632)	4,3600	0,0000	0,7211	(0,1662)	4,3400	0,0000
family_status4	0,8692	(0,1698)	5,1200	0,0000	0,8811	(0,1729)	5,1000	0,0000
English_1	0,5185	(1,0605)	0,4900	0,6250	0,3384	(1,0648)	0,3200	0,7510
English_2	1,0297	(1,0279)	1,0000	0,3160	0,7971	(1,0319)	0,7700	0,4400

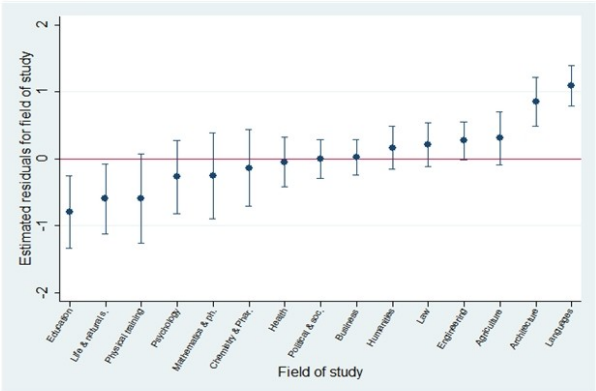
[3] Students are the level 1 units clustered within fields of study, that are the level 2 units. We use Istat field of study classification to merge university courses.

English_3	1,5816	(1,0318)	1,5300	0,1250	1,3058	(1,0363)	1,2600	0,2080
French_1	0,0813	(0,1413)	0,5800	0,5650	0,0648	(0,1425)	0,4500	0,6490
French_2	0,2254	(0,1319)	1,7100	0,0870	0,194	(0,1351)	1,4400	0,1510
French_3	0,7411	(0,2198)	3,3700	0,0010	0,7106	(0,2249)	3,1600	0,0020
Spanish_1	0,6075	(0,1428)	4,2500	0,0000	0,6088	(0,1443)	4,2200	0,0000
Spanish_2	1,0916	(0,1349)	8,0900	0,0000	1,0391	(0,1410)	7,3700	0,0000
Spanish_3	2,3333	(0,1816)	12,8500	0,0000	2,2079	(0,1905)	11,5900	0,0000
German_1	-0,0152	(0,1407)	-0,1100	0,9140	0,0109	(0,1423)	0,0800	0,9390
German_2	0,2998	(0,1806)	1,6600	0,0970	0,2103	(0,1855)	1,1300	0,2570
German_3	0,3314	(0,3947)	0,8400	0,4010	-0,0046	(0,4049)	-0,0100	0,9910
Const	-4,9911	(1,106)	-4,5100	0,0000	-5,0522	(1,1218)	-4,5000	0,0000
σ_u^2	-	-			0,3028	(0,1394)		
Log Likelihood	-1316,641				-1290,775			
					Intraclass correlation: 0,0843			

Legend: *family_status1=medium-low; family_status2=medium; family_status3=medium-high; family_status4=high; English_1=beginner, English_2=intermediate level, English_3=excellent level; France_1=beginner, France_2=intermediate level, France_3=excellent level; Spanish_1= beginner, Spanish_2=intermediate level, Spanish_3=excellent level; German_1=beginner, German_2=intermediate level, German_3=excellent level. (Reference categories are female for sex, low for family status and no knowledge for languages).*

Figure 1 can be used to compare the residuals in pairs: two residuals are significantly different (at 95% level) if and only if the corresponding intervals do not overlap (Gottard *et al*., 2007). Students of languages and architecture fields of study have partecipated more than other students in a mobility programme; conversely students of education and life natural science have attended less than others. At the end, we performed a correspondence analysis and a cluster analysis (Ward method) to classify the profiles of students who experienced different kinds of temporary mobility outside Italy. We detected four different groups: 1) the first group is composed by 62 students who attended courses of study abroad and most of them also joined the Erasmus programme; 2) the second one composed by 133 students who studied temporarily abroad via Erasmus programme choosing Spain and France as favourite destinations; 3) the third group (120 students) differs completely from the first since it marks a particular target of students who went abroad for internships or to work on research projects. The latter students came mainly from Architecture, Life and Natural Science or Medicine degree courses; 4) the fourth group is composed by 129 students who moved principally or to the UK or to Ireland with the aim to attend language courses and summer schools. They represent self-organised students who moved abroad without the help of any international mobility programmes. Each cluster identifies a particular type of student mobility.

Figure 1: *Estimates of the fields of stud effects (95% average confidence level)*



Starting from the classification we used the cluster variable to create four dummy variables which have become the outcome variables of four multilevel logistic models. These models allow us to inspect main factors that affect different types of enrolment abroad. In particular, models show interesting and significant results for students who performed internships and research stays (group 3), and for students who have attended language courses and summer schools (group 4). The most significant predictor variables for the students of third group are age class 24-25years old, and II level courses degree, whilst high-level of socio-economic background has a negative effect.
The analysis of most significant predictors for model run on group 4, shows that the probability of attending a language courses or a summer school increases for women, students who got contribution for international mobility from family, and have no high-level skills in foreign languages. In this case Business students have experienced this kind of foreign enrolment more than others.

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