The mobility and the job success of the Sicilian graduates

La mobilità e il successo lavorativo dei laureati magistrali siciliani

Ornella Giambalvo and Antonella Plaia and Sara Binassi

Abstract The paper focuses on the job success of Sicilians Graduates comparing people who remain in Sicily for work reasons (Stayers) and who moves from Sicily to another Italian region or abroad (Movers) during 2016. Data referred to the *Almalaurea Consortium* annual survey collecting data of first and second level graduates interviewed at one, three or five years from graduation. We model the probability to be a successful graduate by means of a logistic regression model considering job and curriculum characteristics. The results show that many factors influence the job success, with some differences between graduates interviwed 1 or 5 years after graduation, but it is clear that to be a Mover increases significantly the probability to be successful graduate.

Abstract *Il lavoro vuole analizzare il successo lavorativo dei giovani laureati siciliani che dopo un anno o dopo cinque anni dalla laurea lavorano. Nello specifico si analizzano le differenze fra le caratteristiche dei laureati Movers (quelli che lasciano la Sicilia) e Stayers (quelli che rimangono nella regione di studio) attraverso l'adozione di un modello logit che prende in considerazione variabili legate alle caratteristiche del lavoro e al curriculum universitario. I risultati mostrano che molti fattori influenzano il successo nel lavoro, con differenze tra gli intervistati a 1 e a 5 anni, ma è chiaro che essere un Mover aumenta significativamente la probabilità di essere un laureato di successo.*

Key words: Mobility, Survey Graduates' employment condition

1 Introduction

The complex reform process regarding issues of governance of the Italian University system (such as the progressive financial autonomy of the University and the reshape

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of the academic curricula) also caused the increasing spirit of competition among the universities. Every year, before the student's enrolment, Censis Institute, other research Institutions and other organizations (including Media), produce university rankings. Each of these takes into account several aspects referred to the university's organization, reputation and student benefits or referred to the student's actual characteristics. Some of them consider also the graduates employment rate one or three years after graduation. The Lisbon Strategy stressed the importance of the quality of employment regarding especially young people and young graduates. The strategic context for European cooperation in the education field estimates that the value of the graduates employment rate, for young people (20-34 years old) would be 82% in 2020. In 2016, the EU-28 employment rate of recent graduates (based on graduates – aged 20–34 – who had completed their education or training between one and three years prior to the survey) was 78.2%, ranging from highs of 90.2% in Germany and 96.6% in Malta to lows of 49.2% in Greece (52.9% in Italy). During the crisis period this employment rate followed a decreasing trend (-14% from 2008 to 2013) while in EU28 the decreasing trend was -6%. In Italy the economic crisis continues to produce its negative effects in employment and unemployment rates, particularly referring to young people (15-29 years old) and graduates: in 2016 the first rate reaches 49.5% whereas the second is 22.4%. Furthermore, the graduates employment rate varies according to the territorial differences: in 2016 it reaches the 43.4% in the Southern regions *vs.* the 65.9% in the Northern ones. Moreover, in the last fifteen years, students' enrolment has decreased significantly, while students' migration from the South to the Northern or the Central regions has increased [2]. This phenomenon creates further inequalities in within the country and a cultural and socio-economic loss for the South.

Based on the above results the paper focuses on the analysis of the job success of Sicilians Graduates between who remains in Sicily for work reasons (Stayers) or otherwise moves from Sicily to another region in Italy or abroad (Movers). Data referred to the *Almalaurea Consortium* annual survey collecting data of first and second level graduates interviewed at one, three or five years from graduation. We focus our attention to the second-level graduates interviewed after one and five years. In particular we consider the differences in job success according to some job characteristics and graduates' curriculum between Stayers and Movers. Who are the graduates that migrate and who are the students that stay? Is the migration of Sicilian graduates a consequence of personal and family dynamics? How do students that migrate from the South perform compared to students that stay? Who find a better job and when? This paper attempts to gives some responses to these important questions.

2 Data and variables

The 2016 AlmaLaurea survey on graduates' employment conditions [1] involved more than 16,000 first- and second-level graduates in 2015 enrolled in the universities of Sicily interviewed one year after graduation and 7,288 second-level gradu-

ates in 2011, interviewed five years after graduation. Since a high share of first-level graduates who comes from the universities of Sicily, continues their education with a master's degree (58% versus 56% of the overall population of first-level graduates), here we analyse the employment performance of second-level degree, focusing on one and five years after graduation. One year after graduation, the share of Sicilians graduates of 2015 employed who remain in Sicily for work reasons is 71%. Most of all women, with a degree in medicine, architecture, humanities and economic-statistics. The 29% decides to move, for work reasons, outside the region, most of all women, mostly from engineering and economic-statistics. Movers seem to be younger at graduation than Stayers and they are more regular in complying with the expected duration of the degree program. The graduation mark is slightly better for Movers than Stayers. In evaluating the characteristics of the work carried out, such as, for example, the type of work activity, remuneration and the correspondence between university studies and work carried out, it should be noted that, among the Stayers employed, a part of them entered the labour market already during the Master studies, or even before (33 against 13% of Movers). A further 9% changed their jobs after the conclusion of their studies, a value slightly lower than that for the Movers, equal to 14%. Finally, 58% entered the labour market only at the end of the Master degree (73% among Movers employed). One year after obtaining the title, self-employment concerns 14% of Stayers employed (the share is decidedly higher than the percentage of Movers, 6%). Almost in line between Stayers and Movers is the share of employed on permanent contracts (including the contract with increasing protection): 29% on Stayers compared to 32% on Movers. Stayers employed claim to receive a lower than Movers average salary.However, regardless of the type of work performed, part-time activities concern the 48% of those employed in Sicily against 18% of those who moves from the region. A year after the title, Stayers employed is effective or very effective (an indicator which combines a formal request title for the exercise of one's own work and use, in the work carried out, of the skills learned during the university) for more than half of the graduates workers (58% against 56% of Movers). Five years after graduation, the percentage of Sicilians graduates of 2011 employed who remain in Sicily for work reasons is 65%. Self-employment reaches 37% of Stayers employed (the share is decidedly higher than the percentage of Movers, 12%). The share of employed on permanent contracts rises among Movers: 53% compared to 40% on Stayers. Large part of the Stayers declare to carry out their activities in the private sector (73% against 63% of the Movers). More in detail they work within the services (88%; 5 percentage points more than the Movers). The industry sector, on the other hand, absorbs 9% of the Stayers and 16% of the Movers. Stayers employed claim to receive, also at five years after graduation, a lower average salary than Movers: the net monthly salary in fact, it is equal to 1,126 euros for Stayers, compared to 1,479 euros for the Movers (part-time activities concern the 26% of Stayers against 13% of Movers). Stayers employed is effective or very effective for more than half of the graduates workers (68% against 63% of Movers). Finally, in terms of job satisfaction, the gap is still positive for Movers.

3 First Results and some comments

As described in the previous sections, in this paper we want to compare the *job success* of what we called *Movers* vs *Stayers*. We define a Successful Graduate a person with a monthly neat earnings over the average (conditioning on his degree subject grouping and the type of degree) who uses greatly the skills acquired through the degree course. Conversely, an unsuccessful graduates, is a person with a monthly net earnings below the average (conditioning on his degree subject grouping and the type of degree) who uses limitedly or in no way the skills acquired through the degree course. We model the probability to be a successful graduate by means of a logit model [3] with the following covariates (chosen according to previous literature evidence [1]): the subject grouping of the degree, the graduation mark, the gender, the duration of studies, the age at graduation, the type of degree (single cycle vs second-level degree), the job sector of activity, part-time vs full-time job, satisfaction for the current job, together with some socio-economic characteristics of the graduate's family, such as parents' education level. Moreover, the interactions between Parents' education level and Migration, Gender and Migration, Parents' education level and gender have been considered. Tables 1 (graduates in 2015 interviewed after 1 year) and 2 (graduates in 2011 interviewed after 5 year) show the results with all the significant covariates and interactions.

According to Table 1, all the degree subjects show a probability of being a successful graduate lower than a graduate in Medicine; Males show a higher probability than female; a graduation delay below the average corresponds to a higher probability, even if these results are not coherent with the significance of the Age at graduation (we need to investigate further this aspect); the probability increases if at least one parent is graduated; Movers show a higher probability than Stayers; the probability increases if, during studies, graduates were resident in a province different from the University one; graduates have a higher probability to be a successful one if he/she did not work at graduation.

It's interesting to notice that, if we limit our analysis to only those students that did not work at graduation (table not shown), the *Graduation mark* and both the *Graduation delay* and the *Age at graduation* are no more significant (and this in someway explains the apparently discordant effect of these two variables shown in Table 1), nor they are all the previous significant interactions.

Considering 2011 graduates interviewed after 5 years (Table 2), coming from the universities of Catania and Palermo increases (with respect to Messina) the probability to be a successful graduate; only some of the degree subjects show a probability of being a successful graduate significantly lower than a graduate in medicine; Males show a higher probability than female; a graduation delay below the average corresponds to a higher probability, even if, again, this results is not coherent with the significance of the Age at graduation; Movers show a higher probability than Stayers; the probability decreases if the graduate works in a private or not-for-profit company or is part-time, while it increases with the satisfaction for the job.

Finally, focusing again on Movers and Stayers, it is evident that, even if we cannot say that "Being a Movers" is the first factor to be a successful graduate, the

Table 1 2015 Graduates at a Sicilian universities (interviewed after 1 year) participating 2016 Almalaurea's Graduates' employment conditions Survey: logit model for the probability to be a successful graduates. Baseline:Female Graduates in Medicine, with a graduation delay above the average, Stayers with no graduated parents, not employed during the studies and at graduation, resident in the same province of the University.

	B	S.E.	Sign.	Exp(B)
Graduation mark	0,043	0,015	0,005	1,044
Graduation delay (above average = 0)				
Below the average, conditioning on degree subject and type of degree	0,484	0,207	0,020	1,622
Age at graduation	0,143	0,022	0,000	1,154
Degree subject (Medicine = 0)				
Maths, Physics and Natural sciences	-4,316	0,695	0,000	0,013
Chemistry and Pharmacy	-2,810	0,564	0,000	0,060
Geology, Biology and Geography	-5,106	0,597	0,000	0,006
Healthcare sciences	-5,015	0,645	0,000	0,007
Engineering	-5,206	0,545	0,000	0,005
Architecture	-3,800	0,549	0,000	0,022
Agriculture and Veterinary	-3,641	0,744	0,000	0,026
Economics and Statistics	-4,084	0,522	0,000	0,017
Politics and Social Sciences	-5,036	0,620	0,000	0,007
Law	-4,748	0,659	0,000	0,009
Humanities	-4,142	0,550	0,000	0,016
Foreign languages	-3,843	0,599	0,000	0,021
Education	-3,880	0,601	0,000	0,021
Psychology	-4,214	0,597	0,000	0,015
Physical education	-4,490	0,721	0,000	0,011
Gender (Female = 0)				
Male	0,908	0,258	0,000	2,479
Parents' education level (none with a degree = 0)				
At least one is graduated	0,978	0,279	0,000	2,659
Movers to get the current job (Stayers = 0)				
Movers from Sicily	2,024	0,291	0,000	7,569
Parents' education level and Movers to get the current job				
(Stayers-none with a degree = 0)				
Movers - At least one is graduated***	-0,923	0,377	0,014	0,397
Employment condition during studies (no = 0)				
Lavoratore-Studente	1,484	0,348	0,000	4,412
Studente-Lavoratore*	0,162	0,197	0,411	1,176
Residence and University location (same province = 0)				
residence in a differente province	0,535	0,180	0,003	1,708
Residence in a different Region	-0,597	0,339	0,078	0,550
Employment condition at graduation (Working = 0)				
Not working	0,443	0,216	0,040	1,557
Intercept	-7,337	1,992	0,000	0,001

odd ratio of Movers relative to Stayers is 7.6 for 2015 graduates and 2.5 for 2011 graduates.

Table 2 2011 Graduates at a Sicilian universities (interviewed after 5 years) participating 2016 Almalaurea's Graduates' employment conditions Survey: logit model for the probability to be a successful graduates. Baseline:Female Graduates in Medicine, with a graduation delay above the average, Stayers with no graduated parents, not employed during the studies and at graduation, resident in the same province of the University.

	B	S.E.	Sign.	Exp(B)
University (Messina = 0)				
Catania	0,646	0,219	0,003	1,908
Palermo	0,618	0,225	0,006	1,855
Degree subject (Medicine = 0)				
Maths, Physics and Natural sciences	-3,290	0,748	0,000	0,037
Geology, Biology and Geography	-1,068	0,618	0,084	0,344
Healthcare sciences	-3,005	0,688	0,000	0,050
Engineering	-2,014	0,564	0,000	0,133
Architecture	-0,965	0,474	0,042	0,381
Agriculture and Veterinary	-1,516	0,654	0,020	0,220
Economics and Statistics	-2,120	0,576	0,000	0,120
Politics and Social Sciences	-1,487	0,587	0,011	0,226
Foreign languages	-1,140	0,609	0,061	0,320
Education	-2,091	0,642	0,001	0,124
Gender (Female = 0)				
Male	0,684	0,232	0,003	1,982
Movers to get the current job (Stayers = 0)				
Movers from Sicily	0,933	0,234	0,000	2,541
Sector of activity (pubblic = 0)				
Privat	-1,087	0,197	0,000	0,337
Not-for-profit	-1,237	0,479	0,010	0,290
Fyll-time/part-time (Full-time = 0)				
Part-time	-1,891	0,240	0,000	0,151
Satisfaction with the current job	0,492	0,050	0,000	1,635
Age at graduation	0,035	0,015	0,019	1,036
Graduation delay (above average = 0)				
Below the average, conditioning on degree subject and type of degree	0,458	0,161	0,004	1,580
Intercept	-4,663	1,871	0,013	0,009

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