

Precarious post-secondary school employment of Italian graduates - Class of 2001

La precarietà lavorativa dopo la scuola: il caso dei diplomati del 2001

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Riassunto: Il momento dell'uscita dal sistema educativo e dell'inserimento nel mercato del lavoro costituisce per i giovani diplomati una delle fasi più problematiche. A tre anni dal conseguimento del diploma poco più del 47% si dichiara occupato e il 35% di questi svolge un lavoro con caratteristiche di atipicità. Obiettivo del presente studio è investigare sulle determinanti della precarietà lavorativa dei diplomati utilizzando il patrimonio informativo dell'indagine "Percorsi di studio e di lavoro dei diplomati" realizzata dall'Istat nel 2004 sui giovani che hanno concluso un percorso di scuola secondaria superiore nel 2001. Per esplorare l'influenza di fattori personali e di contesto sulla condizione di lavoratore precario a tre anni dal diploma sono stati utilizzati modelli di regressione logistica binomiale.

Keywords: school-to-work transition, precarious employment, logistic regression model

1.1 The aim of the study

The aim of this document is to study the determinants of the work-related precariousness of Italian graduates three years after their graduation from upper secondary school. It has been hypothesised that individual characteristics (gender, school experience, etc.) and social and economic context (social extraction, geographical area, etc.) are important factors that define the condition the young person finds themselves in while they are being interviewed.

1.2 Presentation of the data

Data used for the analysis have been drawn from the "Survey on school-to-work transitions of secondary school graduates", conducted by the Italian National Institute of Statistics (Istat) in 2004 on young people who completed secondary school in 2001. This sample survey is part of an integrated system of surveys on the "education-employment transition" whose purpose is to evaluate the benefits of having an educational qualification in the labour market. The survey is carried out every three years with young

students that are interviewed approximately three years after their graduation from secondary school.

The sample design is composed of two stages, with the stratification of the primary units: the first-stage units are secondary schools stratified by geographical region, type of school and number of graduates; the second-stage units are the graduates who completed secondary school in 2001 (about 455.000 graduates). In total, 20.408 graduates, selected from a sample of 1.802 schools, were interviewed by telephone through the CATI system (Computer Assisted Telephone Interview).

The main subjects of the survey questionnaire are the following:

- programme of studies (secondary school and post-graduate vocational training activities);
- employment information (current employment, previous work experience and job searching);
- socio-demographic conditions (family background and personal data).

1.3 The decision to work after graduation: precarious or stable employment?

The bivariate analyses conducted on the data point out the different decisions that young people graduating in 2001¹ have to take, with regards to entering the labour market and/or continuing their studies, according to gender, type of school and family background.

Among the young people who decided to enter the labour market in the three years following graduation, 47.1% declared that they were employed at the time of the interview. Male graduates are more present in the labour market: 52.8% of male graduates employed, compared to 41.8% of female graduates. More specifically, male students who graduated from vocational and technical schools are much more likely to be employed following graduation. Males are more likely to find stable employment: 55.2% of employed male graduates are employed with an open-ended continuous contract, while the percentage drops to 46.9% for employed female graduates.

Almost 12% of graduates tried both employment and study in the years after graduation. The group of employed graduates includes students who work part-time, occasionally or seasonally, and those who consider their employment secondary to their studies.

Based on the information available on the questionnaire, we defined precarious workers as those employed under an atypical labour contract, essentially fixed-term labour contracts (Shimada, 1991) i.e. employed by a temp agency, employed part-time, seasonal-occasional workers, day labourers, or workers on call. We excluded those graduates who choose temporary employment following secondary school for personal reasons.

According to this definition, approximately 35% of employed graduates are part of this atypical category; among females this percentage rises to 39,5%, compared with 32% for young males.

¹¹ The purpose of the analysis is to study the decisions taken three years after graduation and thus excludes those who obtained their secondary school degree before 2001.

1.4 Methodology

Binomial logistic regression models were used to observe the influence of different factors on the decision-making process for students graduating in 2001. The use of this model permits evaluation and quantification of the effect of the different levels of each variable. These models were utilized with the specific purpose of estimating the probability of the young interviewees having precarious employment, three years after having obtained a secondary school diploma.

The choice of the independent variables included in the models was based on results of the descriptive analysis and on the understanding of the phenomenon. The variables can be classified in two groups:

- a) variables relative to the individual characteristics, such as gender, school experience and type of diploma obtained;
- b) variables relative to the social and economic context, such as social extraction, type of employment and geographical area.

The models are estimates made by applying the “Logistic” procedure of the SAS System software; the best model was selected by ways of backward elimination, progressively eliminating the non-significant variables from the initial model.

1.5 Main results

A student with precarious employment is considered the outcome variable. The base group consists of young men of low social extraction graduating from vocational schools located in northern Italy who have participated in post-diploma non-university training activities, and who have not continued studying at university after graduation.

The estimated effect of the type of school as a variable is more consistent, as graduates of a general type of school have a higher probability of finding unstable employment compared to graduates from vocational and technical institutes. In particular, graduates who have obtained specific “liceo” diplomas have almost twice the probability of having precarious employment as those with vocational diplomas (Table 1).

Graduates who attended professional training courses in the three years following secondary school are characterised by precarious employment. In fact, these professional courses are usually demanding and long-term (1-2 years) and the graduates attending them have only just entered the labour market at the time of the interview.

The decision to continue studying at university after graduation has a clear effect on employment stability; interviewees that state they are active university students (enrolled at the time of interview, with a first academic degree or those who completed at least one exam before stopping university study) are 81% more probable to have an atypical labour contract.

The multi-variate analysis confirms the results of the descriptive analysis with regards to the social extraction variable. Among those employed, 43% of graduates from families of high social extraction decide to continue studying at university in the three years following graduation, compared to 23% of those of low social extraction. Therefore, graduates of lower social extraction have a higher propensity to take part in the labour market with stable employment. Therefore those of high social extraction are more probable to have precarious employment, as a consequence of their choice to continue their studies at university.

Table 1: Odds ratio estimates and confidence limits modelling the probability of having precarious employment

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
Gender			
Female vs Male	1.20	1.09	1.31
Type of upper secondary school			
Artistic <i>versus</i> Vocational	1.29	1.01	1.64
Teachers' training vs Vocational	1.82	1.51	2.19
General vs Vocational	1.71	1.45	2.01
Technical vs Vocational	1.11	0.99	1.24
Geographical Area			
South vs North	1.47	1.33	1.63
Centre vs North	1.21	1.08	1.36
Professional training course			
Undone vs Done	0.71	0.65	0.77
Social extraction			
High vs Low	1.10	1.00	1.20
University enrolment			
Yes vs No	1.81	1.63	2.01

Source: Elaboration on "Survey on school-to-work transitions of upper secondary graduates" data, ISTAT 2004

The results, with regards to the geographical area of the school, suggest a significant relationship with the outcome variable: young people living in the south of Italy encounter more employment difficulties. The probability for a graduate of having precarious employment is higher in the south of Italy than in the north (47%) and slightly higher in the centre (21%).

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