Downgrading in the First job: Who and Why?∗

Clément David †, Hurlin Christophe ‡ and Serres Fabien §

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Abstract

We estimate the probability of being downgraded at the time of the first employment according to individual socio-demographic, professional and education characteristics. This study based on a very large French database reveals the influence of the subjective or objective definitions of over-education.

• Keywords: Overeducation, Fall in status, Overschooling, Downgrade, Logit
• J.E.L Classification: C25, J31.

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†Associated Regional Research Centre - CEREQ and LEO, University of Orléans.
‡LEO, University of Orléans. Rue de Blois, BP 6739, 45067 Orléans Cedex 2, France. email: christophe.hurlin@univ-orleans.fr.
§Associated Regional Research Centre - CEREQ and LEO, University of Orléans.
1 Introduction

The situation on the labour market is often summarized by the unemployment rate. However, it is also characterized by a number of indicators among which the first-job downgrading of young graduates. Indeed, downgrading corresponds to a devaluation of diplomas and to situations of queuing up to access the most qualified positions. An employee is considered as downgraded when the level of training required for the position he or she holds is lower than his or her level of initial training: the downgraded are thus overqualified as regards the job they hold. But contrary to unemployment, it is often difficult to quantify this phenomenon objectively. Indeed, we can conceive a subjective approach connected to the perception employees may have of their job depending on their initial training or on their level of study.

Our purpose in this paper is to modelize the probability of the occurrence of this phenomenon at the end of higher education according to individual socio-demographical, professional and education data. To that end, we shall keep three definitions of downgrading: a normative, a subjective and a statistical one. We show that though some individual characteristics (such as company size, type of work contract, duration of first-job seeking) have a similar influence on the probability of the occurrence of downgrading whatever the definition used, others on the other hand (such as the father’s profession, the level of study of parents, work placements) have a differentiated influence depending on whether the measure is objective or subjective. Finally from our data, it turns out that the prediction of downgrading remains disappointing whatever the definition used.

2 Three main approaches to measure over-education

There are three main complementary approaches to downgrading (Giret and Hatot, 2001). The normative approach is based on an equivalence between the diploma and the professional category. It is possible to compare the level of qualification with that ”normally” required for the job held. For instance, if we accept that university degrees prepare for intermediate or executive-level jobs, then those hired as clerks or blue-collar
workers are considered as downgraded. This measure thus seems natural and objective in the sense that a diploma corresponds to a specific type of job. So it corresponds to a "matching" perspective which is a match between the education level and the position held.

The subjective approach concerns the feeling of the person interviewed for a survey. This measure of downgrading refers to the perceived competence and not only to the diploma of the individual. Naturally, this approach can be criticized because the delicate choice of the wording of questions will have an incidence on the possible answers. Indeed, subjective answers can in some cases reflect unobservable individual dimensions such as dissatisfaction with the job with no direct relation to downgrading and influence answers negatively at the time of the survey. The perception of downgrading for an employee in a given job may be different from that of an employee with the same qualification holding the same job in another company. So, the feeling of downgrading will be all the stronger as there are landmarks or standards. For example, in a big company where tasks are standardized and the division of labour is clearly set, the young will tend to consider themselves as downgraded. On the other hand, in a small firm where the employees are given various assignments, young graduates will then have less information to consider themselves as downgraded. So, this is an essential approach because the feeling of downgrading can influence the motivation of employees, their involvement in their job and the way they consider their career.

Finally, there is a statistical approach to downgrading. It mixes types of jobs and types of diplomas. In this way, we try to distinguish which types of job the individuals hold given their education level. If the individual is within the statistical standard, that is in the neighbourhood of the job for which he is qualified (compared to the studied basis), then he is considered as not being downgraded. This measure has already been used by Forgeot and Gautié (1997) and also by Nauze-Fichet and Tomasini (2002). Such a definition enables one to overcome the criticisms of the previous two approaches. It is well adapted to the survey we carried out. It is flexible and enables to assess the downgrading of the individuals regardless of the period in which the survey was run.
3 Data

For this analysis, we use the study *Generation 1992*, of the Centre of Study and Research on Qualification (CEREQ), carried out in 1997. The sample contains 2,845 individuals fresh from higher education who left the education system in 1992. For every person, we have socio-demographic observations, information concerning their school curriculum and their professional integration. We also hold information on the opinion which the individuals have of their jobs and their studies.

As regards downgrading, we built three dichotomous variables corresponding to the previous definitions. The first variable corresponds to the subjective measure and is derived from the CEREQ survey\(^1\). A person who feels employed below his or her level of competence is considered as downgraded. The normative variable is then determined from a table of correspondence. Finally, the statistical variable is worked out by means of a table of contingency. The diploma - work status situations considered as not downgraded are those in which, on the one hand, the diploma leads frequently to a job of this work status and on the other hand, the jobs of this work status are frequently taken up by people with this diploma. Each of these three variables is coded in the following way:

\[
y = \begin{cases} 
1 & \text{if we have a perceived/felt or actual/measured downgrading} \\
0 & \text{if not}
\end{cases}
\]

Of course, subjective, normative or statistical measures of downgrading do not lead to the same conclusions. People may consider themselves as downgraded in the subjective meaning of the term, yet occupy a job corresponding to their objective level of competence. So, in our sample, we see that 40.34% of people feel downgraded, while only 17.2% and 20.12% of them are downgraded if we refer to normative and statistical criteria. Also, 12.59% of the sample are considered as downgraded according to the three criteria. Therefore this justifies the use of three measures in our econometric model.

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\(^1\)The wording of the question was: "Would you say you were assigned work: - matching your skill level, -below your skill level or -above your skill level?"
4 Results

We here suggest modelling the probability of occurrence of downgrading in the first job of graduates according to socio-demographic, educational and professional characteristics. For this, we shall retain a dichotomous logit model estimated by maximum likelihood. The results of the estimates are reported in table 1. The first column corresponds to the results of the model when the explained variable is a statistical variable. The second one corresponds to the normative measure of downgrading, and finally, the third column contains results connected to the subjective measure.

Insert Table 1: Logit Models

We obtain two types of results: on the one hand, there are variables whose effect is independent from the chosen definition of downgrading. For example, whatever the considered model, company size is always going to influence the probability of downgrading in the same way. Compared to a company with over 200 employees, employment in a company with fewer than 10 people increases the risk of downgrading by 66.4% in the statistical model, by 64.69% in the normative model and by 15.34% in the subjective model. It is also the case concerning the nationality of the individual, his or her diplomas and those of his/her parents, his/her professional experience or even the length of unemployment. On the other hand, the impact of some variables depends on the definition used. This is for example the case of the place of residence. According to statistical or normative definitions, the fact of living outside Paris relatively increases the risk of downgrading by 22.35% and 26.06% respectively whereas the fact of living in the Paris area reduces by 3.76% the probability of downgrading in the subjective meaning of the term. Other variables influence the results differently depending on the chosen definition of downgrading: training courses or not, being a civil servant or not, or having a father who is an executive.

Concerning the predictive dimension of our results, it turns out that all three models do not succeed in predicting downgrading in a satisfactory way. By examining the predictive power of the statistical model, we conclude that this model forecasts the right
modality in 84.53 % of cases. However, whereas the model accurately predicts non-
downgrading 2,271 times (96.15 % of right answers), it enables to forecast downgrading
correctly only in 134 cases (27.74 % of right answers only). The same goes for the
other two models. So, an important difference appears between the percentage of right
answers for the modality of downgrading and that of the modality of non-downgrading.
Furthermore in all 3 models, the possibility of non-downgrading is always overestimated.
As a consequence, from a predictive point of view, models would tend to forecast non-
downgrading better than downgrading.

5 Conclusion

Although the proposed models highlight the main causes of downgrading, they tend to
predict non-downgrading rather than downgrading. So the study of downgrading turns
out to be more subtle. Thus it is possible to conclude that downgrading in the 1st job
is probably connected to other variables than those usually used in surveys on down-
grading. This is probably because wage downgrading is not taken into consideration:
the downgraded individual does not earn the pay he or she would deserve but a lower
amount. It would also be important to focus on the role of the economic situation and
on the strategies of entry on the labour market of young graduates who often show
their preference for job stability rather than for job interest or for its rate of pay.

References

of Downgrading", Economie et Statistiques, n°304.

Giret, J.F., and Hatot, C., (2001) : " Mesurer le déclassement à l'embauche des jeunes:
l'exemple des titulaires de DUT et de BTS", Formation Emploi, n°75, 59-73.

du travail : approches socioprofessionnelle et salariale du déclassement", Economie et
Statistique, n°354, 21-43.