

Companies, Competences and Graduates' Selection Processes: an Attempt to Quantify

Marisa Civardi, Emma Zavarrone¹

Department of Methods of Economics, University of Milano - Bicocca, Italy

Summary. The assessment of the employment potential of University graduates represents a direct evolution of the quality evaluation of higher education systems. This paper aims to identify competences that companies, which subscribed the Vulcano-database, require when selecting graduates for employment. Our analysis consists of two parts: one in which a quantitative score is associated through Rasch analysis to the companies' interest with respect to four classes of characteristics and competences they take into consideration when selecting candidates. In the second part, we apply a segmentation analysis to check whether there is correspondence between companies that prefer certain university degrees and the interest levels towards the characteristics and competences so quantified.

Keywords: Rasch analysis; Segmentation analysis; Rumm; C@rt; Graduates' competences.

1. A survey on companies' interests

Studies on self-assessment of work experience and career expectations of university graduates draw a general picture of graduates' transition from higher education to employment in Italy. Instead, studies on companies' interests are less frequent.

The awareness about the candidates' features companies consider relevant in the recruitment process may help universities to improve their educational offer.

This paper refers to a CATI survey carried out by Checchi & Pravettoni

¹ In this joint work, M. Civardi was responsible for the final editing of Sections 3, whereas E. Zavarrone was responsible for the other Sections.

(2004) at Milan State University² in 2003. The survey was conducted on a non-probability sample of 278 companies, out of the 476 that subscribed for at least one year the services of Vulcano database since its start in February 1998.

Vulcano database was set up in cooperation with Cilea³ to link university graduates and the companies. It is a free access service for graduates, who are given a password by their own university for writing and possibly editing their curriculum vitae (CV). Companies can have either free or fee access to the database for recruitment purposes.

The survey aimed to identify companies' structural characteristics and their willingness to collect some information about the candidates' profiles and competences from the database.

"Sections" D6, D7, D8 and D9 of the questionnaire suited the objectives of this study. The aim of these questions was to measure the importance companies attributed to four classes of "characteristics and competences" of graduates. Each section consists of a set of items obtained on a 4-grade ordinal scale ranging from 0=no interest to 3 = greatest interest.

2. Methodology and application context

The following data were analysed:

- the items of section D6 derived from graduates' administrative records (age, sex, schooling, grades, dissertation topic) edited by the university services;
- graduates' curriculum (study experience abroad, foreign language skill, IT skill, internships, military service), described in section D7;
- skills evaluated by companies at graduate's recruitment stage (communicating, speaking, listening, synthesising, emotion control, concentration, understanding different points of view, flexibility, problem solving, honesty, creativity, self-confidence, study and career expectation consistency), described in section D8 of the questionnaire;
- other competences the companies take into consideration while evaluating candidates for recruitment (behavioural, relational, and organisational attitude and professional skills), described in section D9 of the questionnaire.

² We are grateful to the Authors and to COSP (Centre for Study and Career Advice) of Milan State University for consenting us to use of micro data.

³ CILEA, established in 1974, provides Information and Communication Technology services on behalf of universities and related organizations, public organizations and enterprises. It provides also professional advice for both the planning and dissemination of advanced technologies in the fields of high performance computing, networking services and informatics.