Graduate Recruitment and Selection – A Linkage Between Labor Market and Higher Education

Zaharie Monica, Osoin Codruta, and Opre Adrian

Abstract—Increasing the quality of the education system is conditioned by continuously gathering feedback from the stakeholders. Employers’ requirements and their satisfaction with the quality of the university graduates, but also graduates’ employment outcomes when entering the labor market represent indicators for the quality of university teaching. An in-depth analysis of the employment process brings important input for higher education institutions. From a micro level approach, the present research focuses on the graduate recruitment and selection process, aiming to understand what criteria Romanian employers value during the job assignment process. Following the methodological insights brought by numerous employers’ surveys, this paper tries to determine how the employing companies use educational credentials in the job recruitment and selection process. A questionnaire based survey was conducted on 120 Romanian companies. The survey focused on the recruitment and selection stages used by employers during the hiring process. The results show that employers do not base their hiring decisions on the information provided by candidates’ education. The job selection process undergoes two stages: a screening phase and a hiring stage. During the screening stage the educational degree plays a crucial role. While screening the applications, the employers also consider the degree attainment, educational specialization, the level of the degree, reputation of the educational institution. On the other hand, during the hiring stage the educational degree plays a less important role. Candidates’ educational outcomes are outbalanced by the information the employer gathers about the candidate during the selection process. The employer wastes resources during the hiring process by not using the information offered by candidates’ educational credentials, especially when not satisfied with the quality of the education system. The more satisfied with the quality of the higher education institutions, employers will more strongly base their hiring decision on graduates’ previous educational outcomes.

Index Terms—Employers, graduates, higher education, recruitment.

I. INTRODUCTION

There is still an ongoing debate regarding how to assess the quality of higher education, especially due to the fact that there is no convergence towards a universally accepted definition of quality within the education system [29]. The quality remains thus a concept susceptible to interpretation depending on the perspective of approach - stakeholder relative concept [11]. In this respect, the quality stands to the concern of different categories of stakeholders, with a manifest interest for employers, both as graduate „consumers” and as collaborators of research activity or instruction activities [12]. The enhancement of the quality of educational services is conditioned by getting continuous feedback from the stakeholders. Both employers’ satisfaction and graduates’ outcomes when entering the labor market represent indicators for the quality of higher education system [36]. Although multiple approaches have been developed on the topic of client oriented quality management, the feedback from this category of stakeholders is highly fragmented. Nevertheless, the clients’ point of view can provide essential data for the allotment of resources and planning of curricula, so as to increase the stakeholders’ satisfaction.

A. Employers’ needs: graduate recruitment and selection

Considering the public and private investments in education there is a great need to value the highly educated labor force. In order to facilitate graduates’ search for suitable job positions, the in-depth analysis of employers’ hiring decisions represent an important input element. It offers valuable feedback for the quality of the university teaching process. Based on a better understanding of the labor market requirements, faculty staff will gain input for teaching the students accordingly.

There are numerous studies focused on employers’ needs in relation to the educational process [25], [22], [8]. Focusing on employers’ needs it is important to analyze:

• the demand for graduate labor force,
• job selection criteria used in the hiring process,
• employers’ satisfaction with the quality of the universities,
• stages and methods implemented in the job selection process.

In turn, the job selection process includes a set of stages and methods for gathering information about the candidates, selection criteria, and the selection decision [17]. During the selection process employers assess the candidates under conditions of uncertainty, not entirely aware about the chances of making a correct decision. Due to this reason, employers use indicators for candidates’ future job performance.

Economical and sociological theoretical approaches offer distinct explanations for employers’ needs, without consensus being reached despite numerous attempts [23], [4]. While neoclassical economists focus on the employers’ profit maximization objective by hiring the job candidates with future best work performance [13] and evaluate employers’ needs by using wage indicators, the sociological approaches
focus on the structural barriers in accessing the valuable jobs [3], and evaluate employers’ needs by addressing the skills necessary for successful job accomplishment [31]. Following Weiss’ sorting theory approach [34], which includes both screening and signalling theoretical perspectives, this paper tries to determine how employers use credentials and the skills they signal to the employers in the job selection process. In contrast to Arkes’ macro perspective [2], which used wage equations to establish the skills signaled by educational credentials, the present research offers a more qualitative approach. It addresses the relationship between employers’ needs and the quality of the educational system, focused on graduate recruitment and selection process.

B. Graduate transition to labor market

An in-depth analysis of the employers needs is not only important for the quality of educational system, but also for graduates’ transition to labor market. Due to its complexity, the transition process requires a complex analysis. The school to work transition is conditioned by the interaction between both external factors (e.g. characteristics of educational system and labor market) and internal mechanisms that guide the decisional process of the actors involved [18].

Graduates’ entry onto the labor market is both influenced by economic conditions (including employers’ needs) and the characteristics of the educational systems [35], [28]. Macro structural factors such as graduate cohort sizes, occupational structure [10], traditional and new graduate jobs [9], labor market regulations [5], influence the graduates’ transition to labor market. On the other hand, the educational system standardization, stratification [1], and vocational specificity shape graduates’ opportunities and their outcomes on the labor market [15]. Starting from these findings, the present paper aims to analyze the stages of the hiring process. It also focuses on the relation between employers’ satisfaction with the quality of higher education system and the graduate recruitment and selection process.

Besides that, the shift in most of the Eastern European countries from a centrally planned economy, to a market oriented one, changed the structure of the graduate labor market [6], youth generations facing even greater difficulties in successful job finding. During communist regime, Romanian higher education graduates used to follow a “traditional”, direct and irreversible path from full time education to full time employment. By means of a national censored job distribution system, graduates were placed in the nationwide vacant jobs. The job assignment was done according to the educational qualification attained and the hierarchy of the results obtained in the allotment exams. In a rather elitist higher educational system, the centralized employment process used to rely on the selection and evaluation functions of the universities.

The Romanian labor market regulations mainly focus on raising the employability of the jobless youth by offering financial stimulants to the employers who hire graduates, without focusing on understanding employers’ demand for skills, or addressing the general deficit of graduate jobs.

Compared to the classical youth education to work transition process, the recent trends on the labor market bring more complex issues: a general insufficient number of jobs offered for youth [21], mismatches between educational qualifications and employers’ needs [14], more varied professional trajectories, with longer periods of job searching, increased job instability, frequent unemployment periods intertwined with working positions.

Whereas many of the studies analyze the transition process from a macro level [24], [33], the present research brings a micro level approach. It focuses on the Romanian employers’ understanding of the graduates’ educational degree in the job assignment process. Considering the post-communism expansion of the tertiary educational system, this study analyzes the role played by students’ educational performance for the hiring decisions: how employers obtain, assess and use the information provided by graduates’ educational outcomes.

II. RESEARCH METHODOLOGY AND RESULTS

A. Research sample and instrument

Taking into account that there are multiple and at the same time different stakeholders for the higher education system [15], we have decided on narrowing this study to one of the perspectives: the employers’ opinion.

In order to conceptually delineate this perspective, by employers we understand public or private institutions, local or national, which employ the products of the university educational system, by hiring the higher education graduates [12]. This study is intended to clarify the concepts regarding the quality in higher education and analyze the quality dimensions from the perspective of one category of stakeholders: the economic agents, as employers of the university graduates.

In order to identify the premises of quality from the employers’ perspective, we have designed and distributed an online questionnaire to university employers. As we are dealing with a pilot empirical study, it holds an illustrative function and is not intended to generalize the conclusions to society level. Therefore we haven’t employed a probabilistic statistical sampling procedure and do not possess a relevant sample at the level of the whole population of employers. Still, for the validity purpose, we aimed for the theoretical sample of employers to follow the maximal variation principle [30]. Thus we sent the questionnaire to different types of employers (distinct sizes and distinct activity field and type of ownership: both state and private).

We received 120 answers from Romanian companies. The majority of the companies (63.3%) had previous contacts with our university, meaning that they were familiar with the quality of the graduates. Over 50% of the companies were of small dimension and the average age of the respondents was 46.3 years old.

B. Findings: recruitment methods

The first part of the survey set out to identify the chief recruitment methods used by companies. We grouped the recruitment methods under the two well-known categories: recruitment methods from external and internal sources.
TABLE I: FREQUENCY USE OF RECRUITMENT METHODS

<table>
<thead>
<tr>
<th>External recruitment sources</th>
<th>Mean (N=120)</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertisements in the press or other media</td>
<td>3.40</td>
<td>1.48</td>
</tr>
<tr>
<td>Internet job advertisement</td>
<td>3.84</td>
<td>1.50</td>
</tr>
<tr>
<td>Employment private consultancy agencies</td>
<td>1.68</td>
<td>1.37</td>
</tr>
<tr>
<td>Recommendations from acquaintances</td>
<td>3.48</td>
<td>1.45</td>
</tr>
<tr>
<td>Employment government agencies</td>
<td>2.57</td>
<td>1.56</td>
</tr>
<tr>
<td>Links with education institutions</td>
<td>1.82</td>
<td>1.11</td>
</tr>
<tr>
<td>Direct applications (walks in)</td>
<td>3.07</td>
<td>1.36</td>
</tr>
<tr>
<td>Job fairs/events</td>
<td>1.85</td>
<td>1.11</td>
</tr>
<tr>
<td>Head hunting agencies</td>
<td>1.14</td>
<td>0.38</td>
</tr>
<tr>
<td>Individual consultants/specialists</td>
<td>1.35</td>
<td>0.86</td>
</tr>
<tr>
<td>Internship programs</td>
<td>1.95</td>
<td>1.20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internal recruitment sources</th>
<th>Mean (N=120)</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal data base with employees’ competencies</td>
<td>3.58</td>
<td>1.36</td>
</tr>
<tr>
<td>Supervisors’ recommendations</td>
<td>3.88</td>
<td>1.15</td>
</tr>
<tr>
<td>Internal job advertisement</td>
<td>3.45</td>
<td>1.58</td>
</tr>
</tbody>
</table>

The scores establish that internal recruitment methods (Table I) as the mostly used. Among these, the mostly used are the recommendations from direct supervisors (mean 3.88), followed by the databases regarding employees’ competencies (mean 3.58) and the internal job advertisement (mean 3.45). This can be due to the decrease of employment against the crisis background, which may have compelled companies to better capitalize on the human resources available within the company, resorting thus to internal recruitment in particular.

In what regards external recruitment, the most frequent methods are: job advertisement on internet (mean 3.84), followed by recommendations from acquaintances (mean 3.48), and advertisements in the press or other media (mean 3.40). The least used recruitment methods are those entailing greater costs (specialized human resources recruitment agencies, human resources individual consultants, head hunting companies).

The sources based on links with education institutions seem not to be very used by companies. Still, as compared to the results obtained in other surveys [20], the frequency of resorting to the relation with the education institutions has slightly increased, as well as to the internship programs. This evolution is beneficial to the educational system, thus contributing to the reduction of companies’ costs incurred within the recruitment process.

C. Findings: job selection stages

The following section of the survey aimed to identify the stages most frequently used in the employment process. In the table below we pointed out the average results obtained for each stage (Table II).

It can be noted that the stages most frequently used are those traditionally implemented in a job selection process: individual interview (mean 4.65), followed by CV screening (mean 4.37), trial period (mean 4.27), and practical tests (mean 4.00). We mention that the trial period is not an actual selection stage, but follows it. With an efficient selection process, this stage should solely confirm the suitability of the employment decision, not represent a means of identifying the most adequate employee for the vacant job. It is worth mentioning that the selection stages considered to bear a better predictive value (the selection tests, the evaluation centers) are scarcely used in the employment process. This result proves unfavorable for the employment process, and could be a consequence of the poor concern with the quality of the selection process, of a reduced budget assigned to the selection, as well as of the insufficient qualification in the field on the part of the recruitment and selection responsible persons.

D. Findings: job selection criteria

Upon analyzing the employers’ needs, a chief component is the criteria against which they perform the candidates' selection. With regard to the importance of the employment criteria for the companies included in the sample, the most important criteria are:

- Promptness and efficient use of time (mean 4.80),
- Honesty, trust inspired by the candidate (mean 4.63),
- Proactive, solution oriented attitude (mean 4.60),
- Motivation and candidate’s attitude towards work (mean 4.54).

It follows that the most important criteria are those oriented not so much towards general or specific competences (as it was expected in view of the results provided by the scholarly literature), but towards certain features in relation to the candidate's personality (promptness, honesty, motivation).

The criteria held as the least important relate to:
- Work experience in unqualified jobs (2.27),
- School results (2.58),
- Candidate’s physical appearance (media 2.67).

We analyzed the importance assigned to the educational credentials during the job selection process. We aimed to find out in which of the selection process the educational diploma is more important.

The results show that 80.8% of the employers consider themselves to be interested in the candidate’s educational degree during the CV screening job selection stage (N = 120). Contrary, only 4.1% of the employers proclaim to care about the education degree during job interview selection stage. This shows that the educational degree plays different roles.
along the selection process. It seems to be more important in the early job selection stage. Then, the candidate’s education loses its importance. A possible explanation could be related to the information the recruiter gets from the candidates. Along the employer acquires information about the candidate, the educational diploma becomes less relevant.

Regarding the study level, having a bachelor’s degree is important especially for jobs requiring higher education (48%), for the jobs that require a certain specialization (14%), for leadership jobs (11%). For 19% of the employers, the educational degree is not important.

Another aspect analyzed during the research regards the importance of the school results obtained by candidates during their studies (grades on certain subjects, final graduation grade, school projects results). Out of the hiring companies included in the research sample (N = 120), 20.8% declare not to be interested in the results obtained by the job candidates.

The research also aimed to identify the job positions for which companies require a specialized educational degree. The fields in which employers need higher education graduates are (multiple answers question, so the total number of answers exceeds 100%): accounting (50%), economic (30%), technical (15%), leading positions (14.1%), IT (10%), legal (7.5%). A small percentage of employers consider that a higher education degree is necessary for assistant manager positions, or other administrative jobs.

E. Employers’ satisfaction with higher education quality and job selection

In view of the research, the hypothesis we started from asserts that the value of the candidates’ educational competence is more important to the companies which have a more favorable opinion about the higher education system quality.

To this end, we attempted to identify whether the employers satisfied with the quality of the educational system implement a diverse assembly of selection stages and whether they use criteria connected to the candidates’ education more frequently.

For an overall assessment of the satisfaction level regarding the quality of the educational system, we computed a composite index. It represents the average value of the scores obtained for five items used to measure the satisfaction degree towards the quality of the educational system.

<table>
<thead>
<tr>
<th>Employers’ general satisfaction level (composite index)</th>
<th>Mean (N=120)</th>
<th>Standard deviation</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>2.76</td>
<td>1.21</td>
</tr>
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</table>

Analyzing the results, we notice that the employers’ general satisfaction level regarding the quality of the graduates is lower than average, with a mean value of 2.76 (on a scale from 1 to 5). The highest satisfaction level regards the general public universities in Romania (mean 3.3). The lowest satisfaction is expressed towards the private universities (mean 1.86).

Still, in employers’ opinions, the young graduates also have advantages when searching for a job. Their main qualities are considered to be the enthusiasm and motivation (51%) and their openness to new experiences (32%). In employers’ opinion the main disadvantage in graduates searching for a job regards lack of work experience (31%) and unrealistic expectations (23%). It is worth noticing that 10% of the employers do not see any disadvantage. It means that at least some of the employers do not disregard graduates in the job assignment process.

Another section of the study focused on employers’ satisfaction with the graduates’ quality. The most appreciated competencies of the higher education graduates are: computer usage (mean 4.4), communication skills (mean 4.2), teamwork (mean 4.1), and interaction skills (mean 4.1). On the other hand, the competencies considered to be insufficiently developed are: leadership (mean 3.2) and decision making (mean 3.2).

Further on, we performed a correlated analysis between the satisfaction degree with the quality of the educational system and the selection stages, and then the selection criteria used by companies in the employment process.

In what regards the relation between the selection stages used and the satisfaction with the quality of the educational system, results show that employers who are more satisfied with the quality of the educational system tend to use group interviews (r = -0.39, p<0.05) and pre-selection interviews via telephone or e-mail less frequently (r = 0.38, p<0.05). Moreover, results show that within the companies which use knowledge tests for the selection process more frequently, the satisfaction level with the graduates’ training is higher (r = 0.41, p<0.05). Although a causal relationship cannot be established, this may indicate that through testing the candidates’ knowledge, the companies have selected candidates with whom they were contented later in what regards their evolution as employees.

As expected, in what regards the selection criteria, the companies who express a higher satisfaction degree with the education quality lay more stress on the criteria related to the educational system: level of degree, quality of the educational institution, school results (grades), and theoretical knowledge acquired during graduate training. The results show that the majority of the criteria related to a high satisfaction degree with the educational system entail exactly indicators of the candidates’ educational results. Practically, these results show that a high level of satisfaction with the quality of the educational system associates more frequent use of educational indicators in the job selection. Employers more satisfied with the education system better value the information provided by the candidates’ educational credentials. Thus, should the person conducting the selection prove contented with the education qualitative level, he/she will resort more often to the information about candidates provided by the education attained. Therefore, if the results of the survey showed that employers do not resort to references from the teaching staff and are not interested in the students’ performance during their academic studies, the companies more satisfied with the quality of the educational system capitalize more often on the information provided by the graduated educational degree.
Furthermore, interesting results are revealed by the employers’ answers regarding the fact that a quality educational institution is not the one that encourages students to work during their studies. This does not imply that employers do not appreciate graduates with work experience, but that employers would like graduates to allocate sufficient attention to their education during their study. Differences are noticed in the number of higher education graduates employed in the companies surveyed: small companies hire a higher percentage of graduates than industrial large companies. This fact can be associated with the lower number of vacancies for young higher education graduates in large companies, which have rather few qualified positions.

The results show that the job selection process undergoes two stages: a screening phase (where the educational degree plays a crucial role because the employer evaluates the degree attainment, educational specialization, level of degree, reputation of the institution) and the hiring stage (where the educational results play a less important role, being outbalanced by general, transferrable competencies).

III. CONCLUSIONS

The findings both support and contradict some of the sociological and economical premises. According to other studies, the results show that employers’ perspectives vary as a function of the enterprise size [26], field activity, and occupational type. Although there is a certain level of educational requirements for the majority of the graduate jobs, qualitative interviews show lack of clear opinions of what academic credentials actually signify. Employers seem not to use the educational outcomes as predictors for the candidate’s future job performance as an employee.

In comparison with other international results [32], we may point out the resemblances that occurred in the delineation of a high quality university from employers’ perspective. Thus, we notice that the dimensions employers are oriented towards are: the quality of the teaching staff and the accomplishment of the quality standards imposed by the accreditation system, the level of professional training of the graduates, the level of practical training of the students, the orientation of the university institution towards the collaboration with the economic environment. Starting from these dimensions, helpful suggestions may be raised for the ongoing improvement of university system quality. Without focusing on the development of improvement strategies for the university system in this particular study, we have endeavored to point out the utility of a continuous analysis of the relevant aspects (at different points in time) for a certain university quality from the perspective of the interested parties.

As concluding remarks, from employers’ perspective the strong points graduates’ have are the theoretical knowledge and language skills, while the weak points are their insufficient specialized practical knowledge. Starting from these findings, we notice that from employers’ perspective the universities should focus on raising the admittance standards, on developing students’ practical knowledge and on enhancing the connections with economical agencies. As expected, employers’ perspective is strongly influenced by their interests as a stakeholder group. Their opinion of what universities should do is directly connected with their own needs as graduates’ employers.

Regardless of the debate whether the mission of a university should be preparing students for labor market needs or preparing a future proactive human power, employers remain an essential category of stakeholders to be considered when setting university development strategies.

REFERENCES


