Pilot Study on Evaluation Gap between Competencies Acquired by Economic Education Graduates and Requirements of Pitesti Employers

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This work aimed to assess the gaps between competencies and skills of economic education graduates and the requirements of employers' skills and abilities of Pitesti, the identification of these gaps' causes, and of viable solutions to eliminate the identified gaps. Therefore, the paper presents the results of a pilot study based on two empirical research, one conducted at the level of a sample of final year students from the Faculty of Economics, from University of Pitesti and one conducted on a group sample from Pitesti based-companies. The research results support the hypothesis from which we started, namely that there are differences of perception between prospective employees and employers. It is interesting that both prospective employees and employers consider that practical training is lower than expected.

Keywords: economic higher education, labor market, gaps, causes, solutions

Many Romanian employers consider that there is an obvious gap between the Romanian education system offer and the labor market requirements. One of this discrepancy's reasons is the transition of Romanian economy towards knowledge-based economy, labor market evolving faster than the educational system. As long as new activities
develop (trend enhanced by increasing the participation of Romanian companies entering the global market and a growing number of large multinational companies on the Romanian market), new jobs obviously require new competences and skills. Providing “specialists” according to the labor market needs is one of universities’ features, and according to the EU standards, each university should have one career consultant to guide students on their future career path. Ecaterina Andronescu argues that in order to ensure this guiding, there is necessary an education marketing system, although due to labor market dynamic character relevant results are very difficult to obtain. She also emphasizes that educational system needs time to create specialists. “It is relatively easy to increase the number of students when you identify a clear requirement on the labor market, but you have to take into account that this specialist will be part of the labor market in 4 or 5 years”. However, according to the employers the current gap between the higher education system and labor market is not necessary a quantitative one. According to employers, in essence, the gap between higher education and the labor market is a qualitative one, not necessarily quantitative. Their comments bind the orientation link education to the accumulation of knowledge, rather than to acquire essential skills for any company, from communication skills to analytical thinking, problem solving and teamwork.

According to Ruxandra Stoian, HR Manager at PricewaterhouseCoopers, due to this gap there is among youngsters a changing attitude towards learning. Arguing that there is a lack of practical applicability in their studies, students tend not to comply with educational requirements, treating them superficially. In this context, they graduate without many of those competences required on the labor market, which education system is not able to provide, as well as major gaps in generic economic education. This aspect is also favored by education system difficulty in keeping up with performance standards. Consequently, employers lose quality, time and money to train people. Academic education is still a matter of status for many students, although what remains after the few years of study will not help them in a job.

While Western Europe companies seeking for new employees will closely check the graduate’s study branch and registration document, the local market companies that do not have a landmark in the Romanian
educational system tend to evaluate previous work experience of the potential candidate. Lately, more employers understood that cooperation with academic system can be helpful thus, many partnerships with universities occurred. On the other hand, there are universities’ initiatives inviting professionals from the business area to participate in the educational process. Such initiatives bring to academic environment the necessary knowledge and practical education that support students and let them see the real image of employers (Ruxandra Stoian, 2008). Also, there is initiative from universities, which invite professionals to participate in the educational process. Such projects have the advantage that really bring in universities the necessary practical knowledge that help young people, on one hand, and unsure the promoting of employers image among students, on the other hand (Ruxandra Stoian). Another aspect would be a more intense implication of the employers in such projects, eventually through professional associations, and a more rigorous planning of these projects on medium and long term, so that universities can receive a feedback from the labour market in terms of future professional needs and to prepare certain specialization aligning the curriculum program with labor market needs.

All these debates and differences of opinions led to the establishment of the research question that generated this pilot study: To what extent there is such a gap between students and employers’ perceptions on the competences and skills acquired by the future employees in the context of transition toward knowledge based economy?

Taking into account that employers state more often that education is not achieved by coordinating with the requirements of the market and their real needs, through this study we aimed to assess the size of the gap between competence and skills of graduates and employers’ requirements in this regard and also to identify the underlying causes of this gap.

**Literature review**

The academic environment through the activities it carries and through the role that it plays in society is set up as a form of response to the need for specialists. A good academic functioning influence the functioning of society, as the functional society support the effort of universities to create specialists, true professional and social values. In recent years,
universities in Romania have focused more on professional training for students because, on the one hand there was an influx of young people who wanted to traverse the path of education as a guarantee to increase the chances of occupying a certain position in an organization, and on the other hand, financial resources for basic research fell. Nowadays the university has to learn the students with the tools and scientific methods of work, to cultivate their interest in using them creatively to solve specific situations of the economic environment. The literature defines the professional training as a learning process during which participants learn the theoretical and practical knowledge necessary to develop activities and this is measured in terms of skills acquired and the results obtained by involving them in the good of society.

Nowadays, advanced knowledge and skills of individuals, as results of learning, are critical determinants of a country's economic growth because it materializes in an increased efficiency of goods and services production, in a more efficient public sector, a stronger civil society and a more favorable investment climate (World Bank, 2001). The problem of individual skills and competencies required by the knowledge-based economy is a vast field in which the process of defining the concept has not yet been finalized. OECD in The Knowledge-Based Economy (Paris, 1996) defines the knowledge-based economy as "the economy based directly on the production, distribution and use of knowledge and information". The key component of the knowledge-based economy is the increased attention given to intellectual qualities, at the individual level, and research and development activities at the firm level, in the detriment of confidence in the employee physical ability or natural resources. In a prosaic way, Ian Brinkley (2006) defines knowledge-based economy as a situation obtained when the companies provide a favorable climate for the well-educated staff and the high technology in order to create wealth.

Communication, cooperation and interpersonal relationship management skills are essential for a person working in the knowledge-based economy (Houghton and Sheehan, 2000), but they do not have to be limited to issues of social interaction in heterogeneous groups. Carrying self-autonomously activities and the interactive use of sciences or humanities specific tools also represents important individual skills in the knowledge-based economy (Trier, 2002). According to a study of the
Organization for Economic Cooperation and Development, the effective participation in the knowledge-based economy requires the following competencies (OECD, 2001): interpersonal skills (teamwork, ability to work together to achieve common goals and leadership and coordination skills), intra-personal skills (motivating attitude, learning ability, problem-solving ability, communication skills, analytical skills), skills to use technology.

Many specialized studies made in this area have succeeded to capture the specific skills that employers expect to provide higher education graduates: the ability to engage in self-directed learning, the desire and ability to take the initiative and responsibility, the higher order thinking, the high level of flexibility and adaptability (Arnold and Mackenzie, 1992, Stevens and Campion, 1994 Bills, 1998, Levenson, 2006). In the particular situation of economic education, several researchers have shown that besides technical skills, graduates need to develop personal skills that will facilitate the success in professional careers (Deppe and others, 1991; Watty and others, 1998; Agyemang and Unerman, 1998, Cleary and others 2007, Wells and others, 2009).

To this purpose, Miller (2000) or Elliott and Jacobson (2002) suggest that economic education students must have a multidisciplinary curriculum that will give them the opportunity to be engaged in processes of learning and to develop the critical and creative thinking. On the other hand, some specialists have pointed that the guarantee by the universities to acquire required skills generic necessary for graduates to meet all the requirements of employers, especially for certain specialties, is an unrealistic approach (Clancey and Ballard, 1995; Cranmer, 2006). However, the higher educational system should focus both on the specific skills forming and the development of graduates’ ability to form their own new skills and knowledge throughout life (Duke, 2002).

According to the evaluations made by the economic students about their career prospects, the most important outcomes of learning process should be the development of skills in communication and teamwork (Gabric and McFadden, 2001). The results of these evaluations are direct consequences of the trends in labor market for economists: employers are seeking graduates who have well developed skills in communication, teamwork and problem solving (AC Neilson Research Services, 2000).
Research methodology

For data collecting, we used the survey (interview face-to-face and online). The questionnaire used in order to measure the competences and skill acquired by students contained 16 closed questions. In order to measure the competences and skills that students consider they have acquired over years of study, we used a Likert scale with 5 steps. The questionnaire that has been applied to the level of companies’ sample contained 18 questions, 16 closed and 2 open. In order to measure the competencies and skills that employers considered to be achieved by economic graduates, we used, also a Likert scale with five steps.

Data were collected at a sample of 100 students from in final year, from different economic programs. Building the sample was done using proportional stratified random sampling. Also, data were collected at a sample of 30 companies, and its structure was: 14 companies in wholesale, retail, repair of motor vehicles and personal and household goods, 5 companies in the real estate, rentals and services, 4 companies in manufacturing, 3 companies in constructions and 2 companies in hotels and restaurants. The companies included in the sample were selected through a filter question. Thus, all companies included in the sample have employed economic graduates of Economic Education, University of Pitesti, in the last three years. The respondents were Human Resources managers or general managers of the companies included in the sample.

However, the perceptions of graduates in Economics and employers for the skills needed for a career are often different. In a study conducted in 1993, Kim, Ghosh and Meng show that the most important selection criteria used by employers for graduates in Economics are: the motivation or interest of graduates for jobs available, personal qualities and communication skills. Instead, graduates consider that employers are more interested in the expertise acquired. A similar study reveals that both students and employers have placed on top the verbal communication and understanding and problem solving skills, but there are different perceptions about the importance of other skills (Leveson, 2000). Results of more recent research indicate that there are similar views between students and employers about the skills needed for success in a business career. Thus, they consider very important the analytical and communication skills and
lifelong learning ability, but the assigned positions are different according to the specialty of interviewed students and the field activity of the employer (Kavanagh and Drennan 2008).

In Romania, according to the National Qualifications Framework for Higher Education created by Ministry of Education, Research and Innovation Order No 4430/2009 as a unique tool that ensures the international compatibility of qualifications acquired in the higher education system based on objectives set in the European Union by the Strategy Lisbon and Bologna process, the graduates’ skills fall into two categories:

• professional skills: the proven ability to select, combine and use adequately knowledge, skills, values, attitudes in solving a particular category of learning situations and which is expressed through knowledge, understanding and use of the specific language, explanation and interpretation, application, transfer and problem solving, critical and constructive reflection, creativity and innovation;

• transversal skills that represent value and attitudinal acquisitions that transcend a particular field having a cross-disciplinary nature and consist in teamwork skills, oral and written communication skills in their mother tongue/foreign, the use of the information and communication technology, the problem solving and decision making, the recognition and respect for diversity and multiculturalism, the autonomy of learning, the initiative and entrepreneurship, the opening to lifelong learning, the respecting and developing professional values and ethics.

In our country, the controversy about the quality of higher education has also generated numerous studies that evaluated, among others, the employers and students’ perceptions regarding the university education. Romanian Agency for Quality Assurance in Higher Education in 2009 published the report of an extensive research on the status of the academic quality in Romanian higher education system, which shows the existence of a gap in perception on the graduate profile provided by the universities. According to employers, the first 5 knowledge and skills that a graduate should have are: the ability to organize at work, the ability to work in a team, the ability to communicate, the punctuality and the morality. In
the perception of students, the hierarchy of most important knowledge and skills are: the ability to synthesize the information received the analytical thinking, the teamwork ability, the ability to organize at work and the critical thinking.

According to employers, there are three central factors in the selection and employment of graduates: the university reputation of the graduate, the work history (the graduate experience) and the candidate's ability to "sell" himself during the interview. Therefore, the main issues followed by employers from a graduate are poorly related to the preparation obtained during college. In the particular case of higher economic education graduates, employers appreciate, with predilection, the following competencies of graduates: the concern for the quality of the work, knowledge of foreign languages, skills in using computer systems, the ability to work in a team and the ability to implement the expertise (Vasiliu, 2009). Romanian employers' requests regarding to the skills of higher education graduates are not significantly different from those of employers in the European Union countries. A study made by "Gallup Organization" at the request of the Directorate General for Education and Culture of the European Commission in 2010, shows that most European employers consider very important the following competencies: the ability to work together, professional skills, communication skills, computer skills and the ability to adapt to new situations / contingencies.

The gaps between the perceptions of Romanian students and employers regarding the skills necessary to practice in certain quality standards are generated, in part, by the lack of employers' interest to graduates of lifelong learning skills, even if, as Vasile, Prelipcean and Șandru (2009) observed, in the context of knowledge-based economy, the life cycle of knowledge and skills learned / acquired by the students is relatively short.

Analysis and interpretation of the results

Regarding the assessment of perceptions over the types of skills and abilities acquired by students at both students and employers in the survey results reveals some differences. Students consider they have acquired mainly during the approximately three years of study: communication skills (overall score +0.96), followed by knowledge computer (overall score + 0.9),
knowledge of general economic culture (overall score + 0.82), and teamwork abilities (overall score + 0.55), and foreign language knowledge (overall score +0.09). Based on experience, Pitesti employers consider that graduates of the Faculty of Economics, University of Pitesti, have acquired mainly computer knowledge (overall score +1.14), followed by communication skills (overall score +0.51), general culture knowledge and foreign languages (overall score +0.4), and considered that they have acquired to a lesser extent teamwork abilities (overall score +0.29).

**Students general score**

![Graph showing students general score](image)

**Companies general score**

![Graph showing companies general score](image)
It is interesting that regarding computer use, employers have a better perception than the students about their knowledge acquired in this field. Otherwise all measured directions we can notice that students have a better perception of their skills and abilities then employers. The biggest differences of perception are related to the communication skills and teamwork abilities, students having a better opinion about their competences acquired in these directions. An explanation of the fact that students are not adequately prepared in terms of communication and teamwork is that in teaching process are not used modern methods (for instance, simulations, role plays) and the fact that the teaching process don’t focus on free presentations that stimulate spontaneity, on team projects that should be presented by students which would have to develop creative and analytical thinking, communicational skills. In terms of assessing the relationship between theoretical knowledge and practical skills acquired by graduates of the Faculty of Economics, University of Pitesti, the results of research emphasis no relevant differences between the perceptions of students and employers. However, these results show that bought students and employers consider that there is not a balance between theoretical and practical knowledge acquired by students during the three years of study. This imbalance can be explained by the results concerning the theoretical and practical knowledge acquired by students. Thus, in terms of theoretical knowledge, bought students and employers are relatively similar in assessments (students generally score +0.79, +0.85 employers overall score), but the results for practical knowledge (students overall score -0.78, -0.66 employers overall score) reveal that both employers and especially students consider it insufficient.

An interesting aspect is that employers have a significantly better perception than the students about their theoretical knowledge. Another interesting aspect emerged from the research is that students who held a job during the three years of study have a closer view of the employers, in terms of practical knowledge (-0.64). Students also believes that many subjects studied during the three years of study are not compatible with the requirements of competence necessary for a job, overall score for this question was -0.29. However, the results showed that students who had a job during the last three years had a better appreciation of most subjects studied (overall score +0.02) than those who did not have a job (overall
score -0.15). This result can be explained by the fact that students that had a job were in a better position to make an objective assessment for the importance of subjects studied, as long as they had the possibility to practice the theoretical knowledge acquired.

Regarding the importance of extracurricular activities during the three years of study in the development of competencies needed to access a job, results reveal that most students (82%) did not participated in any extracurricular activity, while only 13% have participated in scientific sessions, 2% in the activities of students’ organizations, 2% in other activities organized by the university (for instance, competitions in partnership with the university) and 1% to other types of activities. These results show a contradictory situation because students believe that extracurricular activities are very important in development of skills and abilities necessary to access a job (overall score +0.54). Frequency degree can’t be an explication of the absenteeism of students in extracurricular activities because 51% of respondents had a very high degree of frequency, 30% of them had a high frequency and 18% a medium frequency. A possible explanation may be the fact that students are reluctant to participate in activities on their own initiative, without extrinsic motivation. Also, the faculty is not promoting such events sufficiently and the benefits of the participation in such activities, that these are organized in order to help students to develop their teamwork skills, communication abilities, analytical thinking, and practical skills.

Regarding the importance of the criteria used in hiring graduates by the surveyed organizations, employers attach the utmost importance to professional experience (overall score +1.37) and recommendations from a previous job (overall score +1.14), followed by school results (overall score +0.74), completion of the education (overall score +0.70), the prestige of the university (overall score +0.59), recommendations of teachers from the university completed by the applicant (overall score +0.48).
These results underline, once again, that the employers put more emphasis on practical training of candidates, which should be taken into account when carrying out the practice of students, and the university curricula. It can be also noticed that the reputation of the university in which the candidate graduated is a less important criterion in this hierarchy, which confirms that in the absence of a clear hierarchy of Romanian universities, employers do not have any mark in this sense; therefore the prestige of the university is a less important criterion in the candidates selection process, the prestige being more a subjective evaluation that each employer makes based on own experience. Last but not least, it is noted that the last criterion in the employers’ hierarchy is teachers’ recommendations. This also emphasis the employers luck of thrust in academic environment.

Conclusions

As expected, the research results have highlighted that in the perceptions between students and employers about the competencies and skills for economic education graduates there are some gaps. This is not a novelty, being a highly debated issue in the Romanian society in recent years. Interesting are the results of research revealed by the following: (1) employers recognize that economic education graduates in the position of
candidates who have visited a job, have a pretty solid theoretical view that they excel in what concerns, for example, computer use, (2) However, they consider that, in terms of pragmatism that the implementation in practice the theoretical knowledge acquired companies, economic education graduates have major problems. Therefore, these graduates are not immediately productive, requiring additional training period to become productive, (3) from this point of view, there is unanimity in perceptions about students having the same perception of their practical training.

The causes underlying the existence of these gaps are multiples, in many occasions being highlighted by members of the academic community, especially by the employers. From our point of view, they should be analyzed from the relationship: Institutions of Higher Education - Employers - Government.

Employers, for example, have too high expectations in terms of “immediate productivity” of graduates, neglecting two important aspects: (a) the need for skills by the students during academic training, the skills of 'lifelong learning' that will be more useful in your professional career (long term) than the immediate practical application skills of the theoretical knowledge, (2) graduates need training in specific corporate culture.

From our point of view, the fact that the graduate has the ability to learn and adapt quickly in the context of a job, it represent valuable skills, namely, the premise of a human resources able to adapt to a dynamic environment, constantly changing. Given the new type of environment in which firms operate - volatile and uncertain - they put an increasing emphasis on multi-skills employees. The fact that economic education graduates have a solid overall economic training, this represents the prerequisite for their rapid adaptation to a cross-functional environment. Last but not least, rapid environmental changes require that employees of a company to acquire new skills and competencies continuously. Therefore, we believe that the expectations of employers in this regard, are partly justified, given that many neglect this important aspect - training which is in direct relationship with companies' ability to adapt to the demands of business environment changing.

On the other hand, the lack of openness of the business environment for collaboration with academic environment, and the existence of prejudices, which lead to their lack of confidence in the
institution of higher education, represent another cause of these differences. We believe that employers’ point of view is partially justified. Without trying such collaboration, the employers label this aspect as being counterproductive and ineffective results. However, higher education institution is a provider of valuable manpower. We believe that companies, in collaboration with academia, would be able to recruit future employees, which ever since the student will be trained in company culture and become productive more quickly when hiring.

Regarding higher education institution, it certainly must be more open to market demands and requirements of employers. Obviously, there must be a shift from emphasis on the theoretical to the practical training. We believe that this can be done firstly by increasing pragmatism and foster collaboration with business teachers. As an old Chinese proverb says: ”Tell me and I will forget, show me and maybe I will retain, ask me do and I have to learn”, experience in business theorists would reduce the gap between academics and practitioners. This would reflect on teachers’ teaching, which could turn back the theory and practice report as required by employers. Finally, the use of modern teaching methods such as simulations, role-plays, simulated enterprises anticipate this.

Regarding the role of government, it should create the legal framework to stimulate the above issues, namely public-private partnership. Incentives to employers who sign contracts for work carried out between students from professional internship would be a useful measure for preventing situations in which activity is more specialized practice a formality.

Developing the education and professional training of students and increasing the competitiveness of the capital socio-professional integration of rapid labor market flexible, modern and inclusive, in our view, it can be done, on the one hand by work on the direct relationship student and future graduate employer, on the other hand, actions designed to facilitate better anchoring scholars in the field of strategic and managerial issues of economic agents and the local community. We present some proposals in this regard:

- Development of guidance and counseling activities of students in order to better correlations of supply and demand (academic
environment, students, graduates) as a prerequisite for increasing the absorption of graduates into the labor market;

• Students’ awareness of individual need career circumscribed to the general and particular framework of the job requested by every graduate and the necessity of knowledge and understanding of firms employing high expectations and standards. This can be achieved by holding meetings with representatives of the business (human resources managers, top management) to help students better understand the necessity of acquiring knowledge and practicing skills and competencies, attracting specialist practitioners in teaching certain topics;

• Developing collaborative relationships between academics and potential employers in order to improve programs for students workplace learning. This is possible by involvement of guardians appointed for coordination of the students specialized, by law, in efforts to identify the profile of skills and abilities for specific job practical training of students of higher education graduates in related economic and guidance on actions and student assessment practices;

• Placing students in practical units taking into account the correlation profile of the job-specialization to whom the student is registered-individual features identified by guidance and counseling activities;

• Stimulate students to become more competitive by implementing human capital and innovative interactive methods of learning such as simulated enterprise;

• Improvement of relations between universities and economic environment, government, NGOs in order to resolve some problems of the Romanian education system related to the improvement of university curricula, the quality of learning, career guidance and counseling, labor market integration of graduates;

• Transformation of universities in systems capable of reaching a high economic, administrative level of integration, in order to respond effectively to the challenges of the knowledge society;
• Awareness of the importance of economic cooperation with the academic programs and promote common practices related to student;
• Identifying operators who show openness to collaboration with academia and initiate actions where students are primarily involved in, especially on line documentation for the preparation of license and dissertation work which has as its theme issues designed to lead to improvement performance of partner organizations;
• Supporting operators in recruitment activity through the establishment and operationalization of a database on individual capabilities of students that graduate with the Centers for career guidance and counseling shall be provided in the liaison between universities, student organizations and business;
• Involvement of academics in voluntary actions aimed at providing solutions on improving their internal environment by providing them an offer of research topics of interest to the business environment, in their solving students being involved and then to materialize in contracts;
• Initiation of projects by business associations, together with guidance and counseling centers in university career (company presentations, mock interviews, job fairs, internships paid, etc.) to facilitate interaction of students with employers in order to fully understand the requirements of the labor market where they are to integrate;
• Identification with the support of NGOs ways to collaborate with academic staff, the economic environment to enable flexible curriculum content in relation to the dynamic labor market demands and to maintain permanent contact with the practical side of theoretical training of specialists.

Limits of research and future research directions

The most important limit of this research comes from the fact that the sample size is not representative, results cannot be extended nationwide. But, as we emphasized, this is a pilot study, its results can be interpreted only in this context. Therefore, we propose that in the future to
expand this research in two directions: (1) to improve the two measuring instruments used by adding additional variables, namely to increase the number of skills and abilities assessed, (2) to extend the measurement nationally.

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