Tuning the Competencies of Maria Curie-Sklodowska University Graduates from the Faculty of Economics with Employers’ Requirements

Grzegorz Grela
Faculty of Economics, Maria Curie-Sklodowska University in Lublin, Poland
grzegorz.grela@umcs.lublin.pl

Aneta Karasek
Faculty of Economics, Maria Curie-Sklodowska University in Lublin, Poland
aneta.karasek@umcs.lublin.pl

Abstract

Purpose – The present article aims at presenting the degree to which the competencies possessed by the graduates from the Faculty of Economics at Maria Curie-Sklodowska University are adjusted to employers’ requirements. Additionally, the article includes conclusions regarding the co-operation between the Faculty of Economics and the employers, as well as recommendations regarding some particular actions which should improve such collaboration.

Design/methodology/approach – The identification of opinions expressed by the employers’ on the graduates from the Faculty of the Economics and the Faculty as such was performed with the use of a number of research tools, such as:
• statistical analyses of questionnaires,
• focus meetings,
• individual structured interviews with employers,
• analyses of historical statistical data concerning the Faculty of Economics of UMCS (Maria Curie Sklodowska University),
• computer software for statistical analyses of the data and for creating charts,
• graphic presentation of the data, to enable a clear presentation of the major results and correlations.

Findings – The results of the research suggest that among the components of the competencies represented by the graduates of the Faculty of Economics that require enhancement are specialist knowledge and skills. The employers assess their co-operation with the Faculty of Economics as poor and, at the same time, they recommend closer collaboration between the employers and the university.

Originality/value – The methodology presented in the this article may be used for determining the degree of tuning the graduates’ competencies with the requirements of the job market and the level of co-operation with the employers at other departments offering studies in Economics. The results of the study and the conclusions may be used for reducing the competence gap of the graduates from the Faculty of Economics at UMCS, as well as for improving co-operation with the employers.
Introduction
In the contemporary environment employers set numerous requirements for their future employees, regarding the level of the latter’s qualifications and competencies. Studies suggest that job experience is vital to 68% of the employers looking for employees, while their sex was important to 65% of the employers, and educational background was significant to 63% of the employers. The employees searching for new employees determine in the first place competencies that should be possessed by an employee at a particular job position, which is related to the range of activities and duties planned for a particular job.

In order to prepare graduates meeting the expectations of potential employers, universities and colleges undertake a series of activities related to educating future employees fulfilling the requirements of the job market. These actions include acquiring information on the competencies desired by the employers, implementation of practical classes and adjusting curricula to the requirements of the job market. Studies suggest the existence of a competence gap regarding employers’ expectations and the competencies possessed by the graduates.

Each year there are analyses of the competencies required on the job market, among the graduates of the Faculty of Economics at UMCS. The studies are implemented within the project called “Synergy – developing the competencies of the students at the Faculty of Economics at UMCS through acquiring practical knowledge”, which aims at reducing the competence gap in the graduates due to increasing the degree of the practical aspect of their education. The purpose of the analyses is to implement a system of obtaining regular information on the degree of tuning graduates’ competencies with employers’ needs and to adjust curricula to the needs of the job market. The project was launched on 1st October 2009 and will close on 30th September 2014, within the Operational Program “Human Resources Development”; action 4.1, sub-action 4.1.1 – Enhancing the didactic potential of the university. It is co-financed by the European Union from the budget of the European Social Fund.

Competencies understood as a synthesis of knowledge, skills and attitudes are the key factor for successful human resources on the competitive job market. The lack of, or deficiency in, experience and practical skills is, in the employers’ opinion, the most vital disadvantage characterizing university graduates. Insufficient “soft skills”, which hinders, among others, effective team work, self-promotion, stress management and communication are an additional factor impoverishing their competitiveness on the market.

The analysis of the level of graduates’ competencies is based on the KSA model (knowledge-skills-abilities). The below definitions are defined by the U.S. Office of Personnel Management.

Specific KSAs are needed in performing certain jobs. Individual KSAs are demonstrated through qualifying experience, education, or training. KSAs are defined as:
- Knowledge – a body of information applied directly to the performance of a function.
- Skill – an observable competence to perform a learned psychomotor act.
- Ability – a competence to perform an observable behavior or a behavior that results in an observable product.
1. Competencies

At the time of globalization and changing environment, people need competencies to function in this environment and to fulfill their aims, which become increasingly complex and require a large number of particular skills. The Ministers of Education of OECD emphasize the fact that sustainable development and social cohesion depend critically on the competencies of all of our population— with competencies understood to cover knowledge, skills, attitudes, and values.

The investigation regarding competencies was carried out primarily in Anglo-Saxon countries, i.e., in Great Britain and the USA, whereas in Germany, the term of "qualifications" was applied more frequently. Such a different approach to the idea of competencies resulted from different traditions regarding education in Anglo-Saxon and Germanic countries.

Contemporary investigations combine both approaches, so the difference between competencies and qualifications becomes less vital, which is confirmed by researchers (Nihof, 1999; Achtenhagen, 1994) pointing at the equivalency these terms.

The definition of competencies according to Spencer and Spencer says that competencies are underlying characteristics of people and indicate "ways of behaving and thinking, generalizing across situations, and enduring for a reasonably long period of time". They developed also a competency dictionary consisting of twenty competencies distributed in six clusters.

The model of KSAs—Knowledge, Skills, and Abilities—has got the attributes which are required to perform a job and are generally demonstrated through qualifying service, education, or training. In the KSA model, knowledge, skills, and abilities are defined as follows:

- **Knowledge** — an organized body of information, usually factual or procedural in nature. For example, having knowledge of human resources' rules and regulations could be used as a KSA for a Human Resources Specialist position. To respond to this KSA, you should indicate what human resources rules and regulations you are familiar with, discuss how you applied these rules and regulations in the work environment, and describe other significant situations you were involved in where you applied these rules and regulations.

- **Skill** - the proficient manual, verbal, or mental manipulation of data or things. For example, having skill with operating personal computers could be used as a KSA for an Office Automation position. To respond to this KSA, you should indicate what type of personal computers you have operated, discuss the various types of software programs you have used, and describe how these programs were used in your work environment.

- **Ability** - the power or capacity to perform an activity or task. For example, having the ability to use a variety of laboratory instruments could be used towards a Laboratory Technician position. To respond, you should describe the types of laboratory instruments you have used, discuss the types of assignments you completed using the laboratory equipment, and describe the impact using the laboratory equipment had on your work environment.

As regards the explanation of the idea of competencies consisting of knowledge, skills, and abilities within a holistic typology of competencies, it should be stressed that...
it is obvious that competence, but not qualification or just the accumulation of skills enables to act in the different contexts and constantly changing situations (Figure 1).

Accordingly, outcomes are being defined in relation to the needs of working life within different professions, independently of the specific educational arrangements that might produce these outcomes. This is the idea of the competency movement: for each profession a number of necessary competencies should be identified and it is argued that educational institutions should then be judged in terms of the extent to which they develop these competencies in their graduates.

In a changing society where demands tend to be in constant reformulation, these generic competences and skills become of great importance. Furthermore, most of them can be developed, nourished or destroyed by appropriate or inappropriate learning/teaching approaches or materials.

Universities are expected to develop their graduates’ competencies which are indispensable to do their duties at work. There have been also changes in this direction in the legal regulations at the European and domestic level. The European Credit Transfer System (ECTS) for higher education was introduced in 1989 and it designed a potential for credit transfer system for enhancing transferability and mobility and has been given further impetus by the Bologna Declaration of June 1999.

EU Lifelong Learning Strategy established on 28 February 2002 and the Framework of Actions for the Lifelong Development of Competencies and Qualifications identify four priorities:

- identification and anticipation of competencies and qualification needs;
- recognition and validation of competencies and qualifications;
- information, support and guidance;
- resources (ETUC, UNICE/UEAPME and CEEP, 2002)
In order to meet these challenges, some actions have been undertaken in order to assess the level of competencies in the graduates of the Faculty of Economics of UMCS, in relation to employers’ needs.

2. The results of studying the adequacy of UMCS Faculty of Economics graduates in relation to employers’ needs

Within the „SYNERGY” project, regular analyses are performed to assess the adjustment of the competencies in the graduates of the Faculty of Economics of Maria Curie Sklodowska University (UMCS) in Lublin to employers’ needs. The “SYNERGY” project offers a possibility to develop competence profiles for the graduates from the university courses in Economics, Finance and Accountancy, and Management in order to tune them with the specific requirements of individual enterprises and institutions. Already during the course of their studies, future graduates can guide their personal development in the direction that will satisfy their future employers’ expectations regarding the required level of competencies and personality traits. Being familiar with the requirements concerning competencies desired on the job market by both university students and the authorities of the Faculty of Economics offers them a possibility to adjust the curricula to the needs that are communicated.

The aim and methodology of the research

During the first edition of the study at the turn of 2009 and 2010, different methods of data collection were tried out. At the beginning, a research questionnaire was sent by e-mail to 360 employers from the Lublin region. Due to low feedback (below 1%), direct interviews were organized, based on the questionnaire. A total of 78 questionnaires, partly or fully completed, were collected. The relatively low percentage of the questionnaires filled by means of the Internet may be treated as an index reflecting the existing poor co-operation between the Faculty of Economics and the employers in the region.

The aim of the study was:

- to recognize the needs and expectations of employers regarding the graduates from the Faculty of Economics at UMCS,
- to become familiar with the employers’ assessment of the competencies revealed by the graduates of the Faculty of Economics,
- to obtain from the employers information on their needs and expectations in the sphere of adjusting university curricula to employers’ requirements.

To identify the opinions expressed by the employers on the graduates of the Faculty of Economics and the Faculty itself, a number of research tools were used, such as:

- statistical analyses of the collected questionnaires,
- focus meetings,
- individual structured interviews with employers,
- analyses of historical statistical data concerning the Faculty of Economics of UMCS,
computer software for statistical analyses of the data and for creating charts,
- graphic presentation of the data, to enable a clear presentation of the major results and correlations.

The first edition of the study was carried out at the turn of 2009 and 2010 and further editions were implemented in the analogical months, keeping annual intervals. In the first edition the data were collected regarding graduates’ competencies, irrespective of the year of graduation. The following editions focused on the data concerning the graduates of each respective year, who were at the same time participants in the “Synergy” project. The total number should include 1,000 people. In order to obtain comparable results, the study uses consistently the questionnaire developed prior to the first analysis.

Profile of the studied group
The majority of the employers (64.1%) estimated the adjustment of the graduates of the Economics Faculty on the basis of their observation of the graduate employed in the organization represented by the employer at the time of the study. 9% of the respondents made their assessment on the basis of observing the graduates from the Faculty of Economics, who had been previously employed in the respondent’s organization. 26.9% of the respondents formulated their opinions on the basis of other professional contacts with the graduates from the Faculty of Economics (e.g. job interviews, employees working for the company’s contractor, etc.).

Among the responding employers, the most numerous group was represented by large companies (employing above 250 people), while the less numerous groups were, respectively, medium-size organizations (employing 50 to 249 people), small businesses (with 10 to 49 employees) and micro companies (employing up to 9 people). A detailed picture of the structure of the studied organizations is presented in Table 1 below.

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
<th>Percentage of valid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid Micro</td>
<td>7</td>
<td>9.0</td>
<td>10.6</td>
</tr>
<tr>
<td>Valid Small</td>
<td>12</td>
<td>15.4</td>
<td>18.2</td>
</tr>
<tr>
<td>Valid Medium-size</td>
<td>18</td>
<td>23.1</td>
<td>27.3</td>
</tr>
<tr>
<td>Valid Large</td>
<td>29</td>
<td>37.2</td>
<td>43.9</td>
</tr>
<tr>
<td>Total</td>
<td>66</td>
<td>84.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Lacking data</td>
<td>Systemic data lacking</td>
<td>12</td>
<td>15.4</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 1:
The structure of the studied organizations according to their size

Source: author’s own elaboration based on study results.
The responding employers most frequently declared their activities (cf. Table 2) in the sector of services (45.3%), followed by the public sector (32%) and manufacturing (9.3%).

Regarding the context of the area of their activities (Table 3, Chart 2), the majority of the employers were active locally (i.e. at a district level, 30.8%), next there were two equally numerous groups acting at the country level and international level, 20.5% each. The least numerous group consisted of the employers whose activities were limited to the region of Lublin exclusively.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Manufacturing</th>
<th>7</th>
<th>9.3%</th>
<th>10.6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade</td>
<td>10</td>
<td>13.3%</td>
<td></td>
<td>15.2%</td>
</tr>
<tr>
<td>Services</td>
<td>34</td>
<td>45.3%</td>
<td></td>
<td>51.5%</td>
</tr>
<tr>
<td>Public</td>
<td>24</td>
<td>32.0%</td>
<td></td>
<td>36.4%</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>100.0%</td>
<td></td>
<td>113.6%</td>
</tr>
</tbody>
</table>

Source: author's own elaboration based on study results.

<table>
<thead>
<tr>
<th>Scale of activities</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Percentage of valid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local (district)</td>
<td>24</td>
<td>30.8</td>
<td>38.7</td>
</tr>
<tr>
<td>Regional (voivodship - województwo)</td>
<td>6</td>
<td>7.7</td>
<td>9.7</td>
</tr>
<tr>
<td>Country</td>
<td>16</td>
<td>20.5</td>
<td>25.8</td>
</tr>
<tr>
<td>International</td>
<td>16</td>
<td>20.5</td>
<td>25.8</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>79.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Lacking data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systemic data lacking</td>
<td>16</td>
<td>20.5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: author's own elaboration based on study results.

Assessment of competencies in the graduates from the Faculty of Economics at UMCS

In the survey the employers were asked to assess, among others, the actual level of competencies and the desired level of competencies expected from the graduates from
the Faculty of Economics at UMCS. The competencies in the questionnaire were defined as a synthesis of knowledge, skills and abilities. The respondents made their assessment on a five-degree scale. To analyze the obtained results synthetic indexes were constructed on the basis of averaged responses given by the employers. The main indicators regarded the basic components of competencies, i.e. background knowledge, skills and abilities. The indexes were calculated for both the assessed level and that desired by the employers.

The index of background knowledge included the following categories; manufacturing, sales, customer service, logistics, finance, accountancy, taxes, banking, insurance, law, human resources management, project management and the principles of business activities.

The index of skills consisted of the following categories: communicating, constructive criticism, self-presentation, public presentations, stress management, group work, creativity, openness to changes and adaptability, analytical thinking, synthetical thinking, making assessments and drawing conclusions, preparing reports and presentations, decision taking, planning and work organization, speed of learning, using knowledge in practice, using mathematical tools and techniques, using basic computer software (office programs, Internet browsers, using specialist software (e.g. for finance and accountancy, supporting graphic design), foreign languages.

The index of abilities included the following categories: respecting the principles of ethics, assertiveness, efficiency, being methodical, responsibility, loyalty, independence, entrepreneurship, honesty, reliability, intuition, orientation towards self-improvement and development.

The employers gave their highest recognition to the attitudes represented by the graduates of the Faculty of Economics at UMCS (the average result of 4.05 on the 1-5 scale), while their lowest marking was given to the graduates’ background knowledge (3.53 on the 1-5 scale). The skills of the graduates of the Economic Faculty were assessed at 3.76 on the 1-5 scale. The largest gap between the level observed in the graduates and the degree desired by the employers was observed in case of the index of knowledge assessment (mean result of 0.87 on the scale of -4 to +4), next in case of skills (mean result equal to 0.76 on the scale of -4 to +4). The lowest difference regarded the index of abilities’ assessment, which was 0.55 on the scale -4 to +4. All differences between the calculated discrepancies were statistically relevant.

In the study a few (7) results were observed where the values of the gap were negative. Such values result from the fact that the graduates, according to 7 respondents, had competencies higher than those expected by the employers.

The respondents gave their highest recognition to graduates’ knowledge concerning 1: customer service (68.3% of the marks is 4 - high level or 5 - very high level), finance (63.8% of the marks is 4 - high level or 5 - very high level), banking (58.49% of the marks is 4 - high level or 5 - very high level), accountancy (57.7% of the marks is 4 - high level or 5- very high level), taxes (55.2% of the marks is 4 - high level or 5 - very high level),

1 In all the categories listed the median of the marks was 4 on the 1-5 scale, where 1 meant very low, 2 - low, 3 - average, 4 - high, 5 - very high, in all the categories composing the index of knowledge was below 4.
• marketing (52.5% of the marks is 4 - high level or 5 - very high level),
• sales (51.8% of the marks is 4 - high level or 5 - very high level),
• Information Technology (51.2% of the marks is 4 - high level or 5 - very high level).

The largest discrepancy (gap) between graduates’ knowledge assessed by the employers and the desired knowledge was observed, successively, in case of: project management, legal issues, principles of running business activities, manufacturing and human resources management (the average difference on the 1-5 scale was higher than 1 in all the cases). The smallest difference (by ca. 0.6) was noted in reference to knowledge of sales and banking.

Among the skills possessed by the graduates of the Faculty of Economics, the employers assessed most highly:
• the use of basic computer programs (office packages, Internet browsers) (79.2% of the marks was 4 - high level or 5 - very high level),
• communicating (84% of the marks was 4 - high level or 5 - very high level),
• speed of learning (72.8% of the marks was 4 - high level, or 5 - very high level).

In case of all categories composing the index of skills the average difference between graduates’ skills assessed by the employers and the desired skills was below 1, in the 1-5 scale. The biggest difference (0.97) was observed in case of foreign languages, and the smallest in case of using basic computer programs, such as office packages and Internet browsers (0.45).

The average index of ability assessment was higher than both the knowledge index and the skills index. Among its categories, the median of marks was equal in all cases to at least 4 (in the 1-5 scale), whereas in case of honesty it amounted to 5. The categories of abilities which scored the highest marks were:
• honesty (80.3% of the marks is 4 - high level or 5 - very high level),
• reliability (83.6% of the marks is 4 - high level or 5 - very high level),
• responsibility (82.2% of the marks is 4 - high level or 5 - very high level),
• being methodical (83.8% of the marks is 4 - high level or 5 - very high level),
• respecting the principles of ethics (73.1% of the marks was 4 - high level or 5 - very high level).

In case of all categories composing the index of abilities, similarly to the index of skills, the average difference between graduates’ skills assessed by the employers and the desired skills was below 1, in the 1-5 scale. The biggest difference (0.72) was observed in case of independence, and the smallest in case of honesty and methodical attitude (0.47).

The highest conformity of the employers’ opinions regarded graduates’ abilities; the coefficient of variation was 17.2%. The most divergent opinions concerned graduates’
knowledge, with the coefficient of variation of 24.3%. For the opinion on graduates’ skills the coefficient of variation was 19%. The level of variance of marks, observed among the indexes calculated for all the responding employers, suggests initiating analyses in sub-groups. Consequently, the analysis of the results took into consideration divisions due to:

a) the time that passed since the assessed student’s graduation from university,
b) the size of the enterprise represented in the study,
c) the sector in which the represented enterprise is active.

The time that has passed since the assessed student’s graduation from university is significant due to the didactic offer that is changing in time at the Faculty of Economics at UMCS, both in its quantitative and qualitative aspect. The majority of graduates about whom the employers expressed their opinions (66.7%) graduated from university during the last five years. The results of the study reveal that the indexes of knowledge, skills and abilities are slightly higher (ca. 0.1) in case of the graduates who graduated from the Faculty of Economics during the last five years, yet the difference is not statistically relevant\(^4\).

While analyzing the differences in assessing competencies with a division into different sizes of organizations represented by the responding employers, non-parametric statistical tests were used, due to failure to fulfill the assumptions of parametric tests. The lowest assessment of competencies came from micro businesses. Statistically relevant differences were noted in case of the index of the desired level of knowledge and abilities between the employers from micro businesses and the remaining groups of enterprises. Detailed data are presented in Table 4. The opinions expressed by the employers from small, medium-size and large organizations did not differ to a statistically relevant degree.

In case of the analysis due to the sector represented by the respondents the data for services and the public sector were taken into account (Table 5), because the number of employers involved in manufacturing, trade and multi-sector organizations was too low (below 5). For all the indexes the opinions expressed by the employers representing the public sector were statistically significantly higher than for the sector of commercial services, both for the assessed and the desired level. The differences in the opinions formulated are reflected by a significantly higher divergence between knowledge, skills and abilities assessed and desired in the public sector and in the sector of commercial services. The mean gap observed in the public sector is ca. 0.5, while in the sector of commercial services it amounts to ca. 1. The graduates of the Faculty of Economics of UMCS fulfill the requirements of the employers in the public sector to a higher degree, as compared to the sector of commercial services.

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\(^4\) The adopted level of relevance at interpreting the results was \(\alpha = 0.05\).
### Table 4:
Mean values of indexes of knowledge, skills and abilities in total and with division due to the size of the respondents' organizations.

<table>
<thead>
<tr>
<th>The range of the index</th>
<th>Size of the studied organization</th>
<th>Mean value (level assessed)</th>
<th>Mean value (level desired)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Micro</td>
<td>2.3898</td>
<td>4.4490</td>
</tr>
<tr>
<td></td>
<td>Small</td>
<td>3.5180</td>
<td>4.4732</td>
</tr>
<tr>
<td></td>
<td>Medium-size</td>
<td>3.6431</td>
<td>4.2885</td>
</tr>
<tr>
<td></td>
<td>Large</td>
<td>3.7707</td>
<td>4.2936</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3.5296</td>
<td>4.3436</td>
</tr>
<tr>
<td></td>
<td>Micro</td>
<td>3.0335</td>
<td>4.5883</td>
</tr>
<tr>
<td></td>
<td>Small</td>
<td>3.5690</td>
<td>4.6974</td>
</tr>
<tr>
<td>Skills</td>
<td>Medium-size</td>
<td>3.9830</td>
<td>4.4688</td>
</tr>
<tr>
<td></td>
<td>Large</td>
<td>3.9671</td>
<td>4.4029</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>3.7970</td>
<td>4.4957</td>
</tr>
<tr>
<td></td>
<td>Micro</td>
<td>3.3918</td>
<td>4.7361</td>
</tr>
<tr>
<td></td>
<td>Small</td>
<td>3.9037</td>
<td>4.7396</td>
</tr>
<tr>
<td>Abilities</td>
<td>Medium-size</td>
<td>4.2484</td>
<td>4.6571</td>
</tr>
<tr>
<td></td>
<td>Large</td>
<td>4.1131</td>
<td>4.4185</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>4.0309</td>
<td>4.5863</td>
</tr>
</tbody>
</table>

Source: author's own elaboration based on study results.

### Table 5:
Mean values of indexes of knowledge, skills and abilities with the division into the sector of services and the public sector.

<table>
<thead>
<tr>
<th>The range of the index</th>
<th>Sector</th>
<th>Mean value (level assessed)</th>
<th>Mean value (level desired)</th>
</tr>
</thead>
<tbody>
<tr>
<td>knowledge</td>
<td>Services</td>
<td>3.2276</td>
<td>4.3499</td>
</tr>
<tr>
<td></td>
<td>Public</td>
<td>4.0846</td>
<td>4.5390</td>
</tr>
<tr>
<td>skills</td>
<td>Services</td>
<td>3.5758</td>
<td>4.4929</td>
</tr>
<tr>
<td></td>
<td>Public</td>
<td>4.1274</td>
<td>4.6093</td>
</tr>
<tr>
<td>abilities</td>
<td>Services</td>
<td>3.8259</td>
<td>4.5870</td>
</tr>
<tr>
<td></td>
<td>Public</td>
<td>4.4092</td>
<td>4.6968</td>
</tr>
</tbody>
</table>

Source: author's own elaboration based on study results.
3.3. Assessment of the potential of the Faculty of Economics and its graduates

The respondents were asked to perform a general assessment of the potential of the Faculty of Economics, UMCS, and its graduates. The answers were given in the 1-5 scale, where 1 was very low, 2 - low, 3 - average, 4 - high and 5 - very high.

On the basis of the replies acquired, two indexes were developed: general index of the assessment of the Faculty of Economics and general index of the assessment of its graduates. The first index included the following categories:

- the level of knowledge of the graduates from the Faculty of Economics, UMCS,
- the level of competencies in the graduates from the Faculty of Economics, UMCS, as desired on the job market,
- opportunities that the graduates from the Faculty of Economics, UMCS, have on the job market,
- job flexibility and mobility on the job market in the graduates from the Faculty of Economics, UMCS,
- the degree of entrepreneurship in the graduates from the Faculty of Economics, UMCS,
- the impact of the competencies in the graduates from the Faculty of Economics, UMCS, on increasing competitiveness and innovativeness of the economy.

The second index included the following categories:

- the level of co-operation of the Faculty of Economics, UMCS, with the employers,
- the attractiveness of the Faculty of Economics, UMCS, as a partner in business,
- the attractiveness of the Faculty of Economics, UMCS, as an institution educating future employees.

The general index of assessment of the Faculty of Economics calculated on the basis of the acquired data was 3.05 in the 1-5 scale. The obtained result should be regarded as average and requiring improvement. To all questions composing the index, the most frequently selected choice was 3 (this is the value of both the dominant and the median). The employers gave their lowest recognition to the level of co-operation between the Faculty of Economics, UMCS, and the employers, as much as 35.6% of the replies to this questions were low and very low marks. Only two employers estimated the level of co-operation as high (Figure 3). In most cases the lowest marks were given by the employers from micro companies, while higher marks (4 and 5) came from big organizations. The best assessment regarded the attractiveness of the Faculty of Economics, UMCS, as an institution educating future employees (46.7% of the respondents gave the marks of 4 - high level or 5 - very high level) and, similarly to the previous questions, the highest diversity of the marks was related to the size of the respondent’s organization. The lowest opinions were formulated by the employers from micro businesses, and the highest ones by those from medium-size and large companies (mainly from the public sector).
The general index of opinions on the graduates from the Faculty of Economics, calculated on the basis of all the data acquired, in the 1-5 scale, was 3.38. The highest recognition was given to the level of knowledge in the graduates from the Faculty of Economics. The lowest marks were given to the influence of the competencies found in the graduates from the Faculty of Economics on the increase in competitiveness and innovativeness of economy (69.7% of the marks was average, low and very low. Similarly to the case of the index of general assessment of the Faculty of Economics, the highest differentiation in the marks was related to the size of the organization represented by the respondent (Table 6).

<table>
<thead>
<tr>
<th>Size of the studied organization</th>
<th>Assessment index for the graduates of the Faculty of Economics</th>
<th>Assessment index for the Faculty of Economics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>2.6429</td>
<td>2.0556</td>
</tr>
<tr>
<td>Small</td>
<td>3.4028</td>
<td>2.5833</td>
</tr>
<tr>
<td>Medium-size</td>
<td>3.3130</td>
<td>3.1765</td>
</tr>
<tr>
<td>Large</td>
<td>3.5000</td>
<td>3.2798</td>
</tr>
</tbody>
</table>

Source: author's own elaboration based on study results.

Graph 1:
Histogram of the opinions on the level of co-operation of the Faculty of Economics, UMCS, with employers, in the 1–5 scale

Table 6:
Mean values of the indexes of assessing the Faculty of Economics and its graduates, depending on the size of the organization
3.4. Actions recommended by employers, aimed at strengthening the potential of the Faculty of Economics, UMCS, and its graduates

Within the framework of the study, the respondents were asked to give their recommendations in the sphere of actions which would strengthen the potential of the Faculty of Economics, UMCS, and its graduates. The employers could give one or more recommendations regarding possible actions.

90.8% of the employers recommended improving practical preparation of the graduates. 69.7% of the respondents suggested that it was necessary to develop closer co-operation of the employers and the university, as a significant factor which, in their opinion, could lead to strengthening the potential of the Faculty of Economics. 40.8% of the responding employers recommended offering university curricula in English, while 35.5% of them suggested the participation of UMCS academics in domestic and foreign research fellowships. Among the respondents, 28.9% recommended improving the level of graduates’ preparation to function in the global environment, and 9.2% believed that it was necessary to improve graduates’ theoretical preparation.

Among the employers who recommended actions leading to improving graduates’ practical background, 66.7% of the respondents chose this answer while assessing the graduates who completed their studies in the last five years and 33.3% of the respondents assessing graduates who finished their studies earlier than in the last five years.

Tighter collaboration between the employers and the university was indicated by 68% of the responding employers, assessing the graduates who completed their studies in the last five years and by 32.1% of the responding employers who were assessing the graduates leaving university earlier than five years ago. University curricula implemented in English language were suggested by 59.1% of the responding employers assessing the graduates who completed their studies in the last five years and by 41% of the responding employers assessing the graduates who left university earlier than in the last five years. The participation of university lecturers and professors in domestic and foreign research fellowships was suggested by 63% of the responding employers assessing students graduating from university in the last five years and by 37% of the responding employers assessing students graduating from university earlier than in the last five years. Increasing the level of graduates’ social preparation was recommended by 74% of the responding employers assessing the graduates from the last five years and by 26.1% of the responding employers assessing those who graduated from university earlier than in the last five years.

Increasing the level of graduates’ readiness to function in the global environment was suggested by 59.1% of the responding employers assessing the graduates from the last five years and by 41% of the responding employers who assessed students graduating from university earlier than five years ago. Increasing the level of graduates’ theoretical background was pointed at by 57.1% of the responding employers estimating the graduates from the last five years and by 43% of the responding employers assessing graduates who completed their studies earlier than in the last five years.

Recapitulation of the focus meeting with entrepreneurs

Another source of information concerning the expectations of entrepreneurs was a focus meeting attended by the authorities of the Faculty of Economics, UMCS and
employers from the Lublin region. During the meeting the participants assessed the correspondence of graduates’ competencies and the requirements of the job market, the collaboration between science and business, and also determined some indispensable actions aimed at better tuning of graduates’ competencies and more efficient cooperation of science and business. The employers expressed their recognition of the initiative and believed that it was necessary to associate scientific and business circles. In their opinion, that is not only an issue for the environment of the university and business, but also for the Municipal Council which is facing the challenge of creating a strategy. At present it may not be sufficient to claim that Lublin is the city of universities; it is necessary to determine its specialization. Moreover, there was a question about what should become its strength. Since at the time of globalization we should find our distinctive feature. Claiming today that we are a strong academic center just because there is a large number of universities and colleges here becomes an insufficient argument. The fact that there is a will that the university should be competitive on the student market should be related to the region’s strategy of development and match employers’ requirements. There was also a reference to the SWOT analysis developed while formulating the Strategy of Promotion for Eastern Poland. Lublin was defined in it as a strong academic center, yet on the other hand poor correspondence of its educational structure with the needs of the job market, as well as poor entrepreneurship, were pointed at as its weak points.

During the meeting the employers suggested co-operation with business-support organizations for entrepreneurs which could offer internships and placements for university students. An interesting idea was put forward to implement regular practical projects aimed at solving particular problems or proposing actions for enterprises, using students’ knowledge and skills, as well as a potential selection of future employees.

The employers expressed their satisfaction with the fact that the students of the Faculty of Economics had obtained support in the form of extra classes in mathematics, internships and placements or practical projects which would be carried out in the companies. The Faculty of Economics at UMCS educates good graduates, which was confirmed by the employers, and offering the students practical background to do their jobs makes the most urgent need suggested by the employers.

The employers who have contact with the graduates of the Faculty of Economics, UMCS during job interviews or with those who have become their employees or contractors, emphasize the fact that the level of employees’ competencies makes a vital element which affects employment and collaboration. In the employers’ opinion, during a job interview they regard in the first place the candidate’s attitude (their conduct, presentation and appearance), as well as their ability of self-presentation and communication. The next element assessed is the candidate’s subject knowledge, the information that comes most frequently from course books. The last element taken into consideration while assessing a candidate for a job is their practical skills which are perceived through managers’ own experience of working for different organizations and with different tools.

The employers assess highly the level of knowledge in the students who completed their courses. However, the graduates are not able to use that knowledge in work practice
or when they start their own business activities. The entrepreneurs observed that they obtain a product - a graduate with good grades, who enters the stage of learning. Educating a good graduate consists of practical education including good practice at the place where they would function in the future. This becomes possible due to internships or placements.

School education should focus on developing entrepreneurial attitudes in young people in order to encourage them to start their own companies. Students should be able to acquire knowledge independently. Those who after five years at the university will continue acquiring knowledge will be able to find their place at work. In the employers’ opinion students should participate actively in programs of internships and placements, both in small and medium-size companies and in corporations. In case of SMEs there may be problems, in the employers’ opinion, concerning the implementation of internships, due to human resources problems and inadequate office space. The largest number of graduates finds work at SMEs which have never made an inventory of their needs and may not have any placements on offer, yet graduates will go there, anyway. University students should have an opportunity to do internships in foreign companies and transfer their practical knowledge to enterprises in Lublin. Employers would be willing to hire a graduate who would offer new solutions.

According to the employers, it is important that the co-operation of the world of science and that of business should be strengthened through active involvement of the existing institutions in the process, as well as through creating new ones. It is worth analyzing whether we have good patterns to copy in this area, since communication in this aspect is still a problem. That is why the employers suggested evaluating actions which should determine the shape of collaboration of the university and business circles, as well as resulting advantages.

Due to the fact that 99% of the firms in Poland are small and medium-size enterprises (SMEs), and 96% of the latter are micro companies employing up to 9 people, it will be very hard to build up relationships with them, yet this is 68,000 employed people and 50% of the GDP generated. Hence, they should be encouraged to collaborate with the scientific environment and to engage university students in co-operation with them through work placements or internships.

3. Conclusions
On the basis of data analysis from the first study on the level of correspondence of the competencies possessed by the graduates of the Faculty of Economics at UMCS with employers’ requirements the following conclusions may be drawn:
- among the components constituting the competencies of the graduates of the Faculty of Economics the ones that need improvement are specialist knowledge and skills, in accordance with employers' recommendations; the graduates do not have practical knowledge and skills,
- the employers give low recognition to their co-operation with the Faculty of Economics; at the same time, regarding the study performed, they recommend closer co-operation of the university and the employers,
- in the employers' opinion it is desirable to improve the level of graduates' practical background,
• initiating regular data collection regarding graduates' tuning with the needs of the employers will offer a possibility of more accurate adjustment of the educational offer to the changing needs of the job market,
• potential employers becoming familiar with competent students of the Faculty of Economics in action may improve the quality of the recruitment process,
• the graduates of the Faculty of Economics who meet employers' requirements are an attractive offer to the employers planning to develop their activities, or to potential foreign investors.

One of the proposals presented at the meeting of employers with the representatives of the Faculty of Economics was organizing classes combined with practice, which would let students meet entrepreneurs and exchange their knowledge and experience. Such co-operation may also occur within scientific associations which have a big influence on developing the awareness in young people. The employers emphasized the fact that there should be studies aimed at demonstrating what kind of employees will be indispensable on the job market in five years’ time. This would enable us to educate students in conformity with tendencies appearing on the job market. Accepting students for training and internships is in the employers’ opinion an opportunity for the latter to become familiar with their potential employees, and for the students to use their knowledge in practice. An employer willing to accept a trainee has to make an inventory of what they possess and to assess if they are able to accept a student for training or internship. In the employers’ opinion, a student should be sent for apprenticeship at the time when they have at their disposal a well-prepared and flexible internship supervisor, rather than during the period when full-time employees are on holiday. According to the employers, a supervisor appointed by them should be paid extra money for such additional duties.

It is important that students should be presented with authentic case studies, such as e.g. the Olimp company and its road to acquiring its position on the market. The employers believe that students should take advantage of internships or foreign placements in a wider range, which should let them acquire additional experience and broaden their knowledge. While assessing graduates’ competencies, the employers signaled a need to improve the latter’s entrepreneurship, knowledge of foreign languages, non-verbal communication skills, self-presentation, group work and creativity. It is vital that after graduation students should possess skills in the sphere of self-presentation and presentation of a problem.

In the light of the study presented here a thesis may be put forward that actions aiming at improving the quality of graduates’ education, undertaken by both employers and university authorities will be more efficient than analogical activities taken up separately. We can observe here the phenomenon of synergy of actions. The advantages resulting from jointly undertaken activities will be taken by all the parties involved. The employers will be able to hire graduates educated according to their requirements. The graduates, having adequate competencies, will find it easier to get a job. The perspective of good work will attract the best candidates to study at the Faculty and the Faculty itself will have an opinion of the one that offers curricula corresponding with employers’ needs.
Literature


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