

EMPLOYERS' EXPECTATIONS OF HARD AND SOFT COMPETENCIES OF ECONOMICS GRADUATES

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Purpose: The purpose of the research was to identify employers' expectations regarding the hard and soft competencies of economics graduates.

Design/methodology/approach: The research was conducted in 312 companies in the Małopolska region that employ graduates of economic studies. The survey was cross-sectional and consisted of collecting opinions directly from employers in various industries, representing companies of different sizes, as well as various institutions. Computer-assisted surveying (CAPI method) and telephone survey (CATI method) were used as research tools. The results of the study were subjected to statistical analysis.

Findings: Employers consider soft competencies of economics graduates more important than hard competencies. The most desirable soft competencies are responsibility, ethical conduct, ability to organize own work and ability to communicate effectively. Among hard competencies, employers consider subject matter knowledge in marketing, accounting and finance, logistics, personnel management and information technology, IT skills (such as office packages, e.g. MS Office) and analytical skills (information and data processing, reasoning) to be the most important. For the most part, differences in the perceived importance of competencies by employers of business graduates do not depend on the size of the company, the industry, or the percentage of business graduates employed at the company.

Research limitations/implications: Further research will be related to identifying the competencies required from the perspective of new challenges, such as digitization and the replacement of human labor by artificial intelligence.

Practical implications: Findings from the research can help align the educational offerings of economics degree programs with current labor market expectations. In addition, the results of the research can provide valuable information for students who are planning their careers and want to know what employers expect in terms of competencies.

Originality/value: The result of the research is the ranking of expected competencies according to employers, as well as the determination of the relationship between hard and soft competencies of economics graduates.

Keywords: hard and soft competencies, economic studies, competencies of graduates, competency gap.

Category of the paper: research paper.

1. Introduction

Employee competencies play a key role in today's labor market. They consist of skills, knowledge and personality traits that allow an employee to effectively carry out assigned tasks. Changes in the conditions for the functioning of the organization and the increase in the complexity of operations cause the necessity of continuous improvement and development of employee competencies. This situation creates a special challenge for universities. It requires constant monitoring of employers' expectations and updating educational programs.

The article presents the results of a study of employers' expectations regarding the competencies of economics graduates. The research was carried out at companies in the Małopolska region, where graduates of economic studies constitute a significant percentage of the workforce. The survey, which was cross-sectional in nature, consisted of collecting opinions directly from employers in various industries representing enterprises of different sizes, as well as various institutions, employing graduates of economic studies. The analysis conducted as part of the study looked at both hard and soft competencies. The result of the research was the development of a ranking of competencies according to importance, as indicated by employers, as well as the determination of the relationship between hard and soft competencies.

The conclusions of the research can be useful for universities that educate in the field of economics and management. They can help identify the needs of the labor market and adapt the educational offer to the current requirements of employers. In addition, the results of the research can provide valuable information for students who are planning their careers and want to know what employers expect in terms of competencies.

2. Previous research on the competence of university students and graduates

With advances in technology and the introduction of new technologies, the requirements for workforce competencies are changing. In the context of digitalization, robotization and automation of work, skills related to programming, data analysis, automation or robotics are becoming crucial. Also important are skills related to creativity, innovation, problem solving or communication, which allow employees to effectively use new technologies and implement innovations in the workplace (Van Laar, Deursen, Van Dijk, Haan, 2020).

Contemporary approaches to assessing employee competencies highlight the importance of both hard and soft skills. Hard competencies, such as technical and administrative skills, are measurable and require specialized knowledge that is necessary to perform specific tasks in the workplace. Soft competencies, on the other hand, include interpersonal and social skills that

allow for effective collaboration and effective use of technical skills at work (Hendarman, Tjakraatmadja, 2012). Soft competencies include communication skills, problem solving, creativity, empathy, flexibility, adaptability to change, stress management and effective time management. These competencies allow employees to better understand the needs of their co-workers, customers, and to effectively manage projects and teamwork (Cimatti, 2016, Dwi Riyanti, Sandroto, Warmiyati, 2016).

The issue of the competence of students and university graduates is an issue that attracts the attention of researchers in many fields. Studies conducted in this area are primarily aimed at assessing the compatibility between the educational processes implemented and the expectations of the labor market. They make it possible to indicate the extent of the competency gap. This research is concerned with three main categories of competencies: academic, professional, and social and emotional. Academic competencies are related to the acquisition of analytical skills, problem-solving abilities, critical thinking and creativity (Anthony, Garner, 2016). Professional competencies relate to specific knowledge and specialized skills (Muff, Delacoste, Dyllick, 2022). Social and emotional competencies are related to the ability to form social relationships, work in teams, manage emotions effectively, and empathize (Anthony, Garner, 2016). Academic and social competencies are mainly soft competencies. Professional competencies, on the other hand, refer primarily to hard competencies.

Research on the competencies of university students and graduates is usually conducted through a combination of quantitative and qualitative methods, such as surveys, assessments, interviews and observations (Glass, Metternich, 2020).

The importance of soft and hard competencies for career success has also been the subject of much research into the competencies of college students and graduates. The most common research conducted in this regard was concerned with determining the relationship between soft and hard competencies. Studies have also been undertaken that have addressed various specific aspects related to the competency categories in question, such as the importance of soft and hard competencies during a job interview (DeLong, Elbeck, 2018), the development of competencies during the initial period of employment (Succi, Wieandt, 2019), and changes in expected competencies (Patacsil, Tablatin, 2017). Previous research indicates the predominance of soft competencies over hard competencies. This observation applies to most contemporary professions (Harjanto, 2019; Ahmad, Noorul, 2019). It is also emphasized that professional competencies become obsolete very quickly. They can also often be replenished very quickly through various forms of effective training. Values, attitudes, social skills, take much longer to form. At the same time, they represent an enduring ability to build and maintain interpersonal relationships.

Changes in the conditions of business development and the new challenges of civilization make the problem of researching the competencies of university students and graduates constantly topical. The complexity of the problem and the multidimensionality of the competence categories also require the development of research methods in this area.

3. The course of research in the identification of hard and soft competencies expected by entrepreneurs of graduates of economic studies

The methodology of the research conducted in identifying the hard and soft competencies expected by entrepreneurs of economics graduates included five stages:

1. Development of a model of competencies of an economics graduate.
2. Preparation of a research tool in the form of a questionnaire.
3. Determination of the research area.
4. Implementation of the research proper.
5. Analysis of research results and formulation of conclusions.

It was also allowed to adjust the competency model developed in the first stage of the research procedure if such a need is identified after the empirical research (Figure 1).

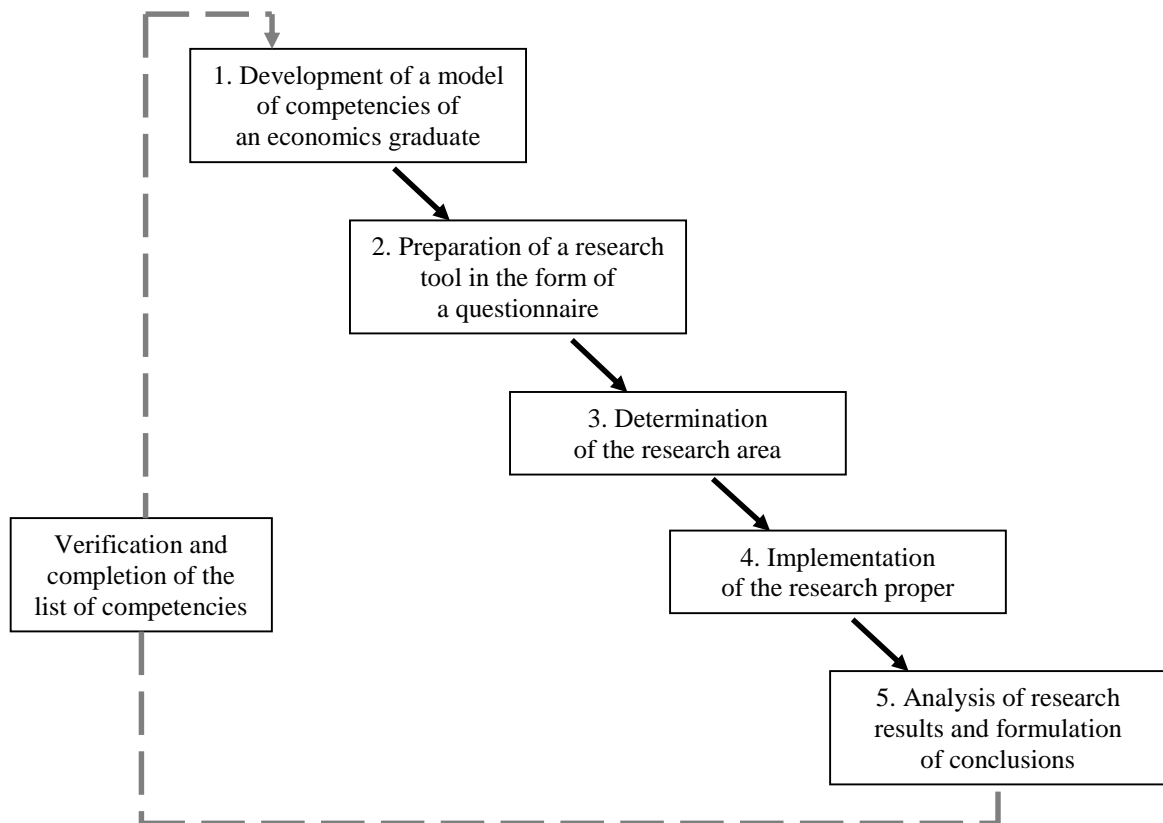


Figure 1. Research methodology in the task "Survey of entrepreneurs in the leading industries of the Małopolska region regarding the identification of jobs and expectations regarding the competence of employees".

Source: own elaboration.

The first stage of the research consisted in developing a model of competencies of a graduate of economic studies. The basis for the development of the model was the analysis of literature and reports, concerning the assessment of professional competencies of university graduates.

The following were used as research methods: the method of analysis and logical construction, expert evaluation and desk research. The model distinguished between hard and soft competencies, which were embedded in such elements as knowledge, skills and attitudes. Seven categories of competencies related to general and content knowledge, foreign language skills, and IT and analytical skills were considered hard competencies. Soft competencies, on the other hand, included twelve categories, among which were skills such as effective communication, teamwork, decision-making, organization of own work, and attitudes such as creativity, openness to learning and continuous development, critical thinking (logical argumentation), self-reliance, flexibility and adaptability, responsibility, ethical conduct and tolerance for employee diversity.

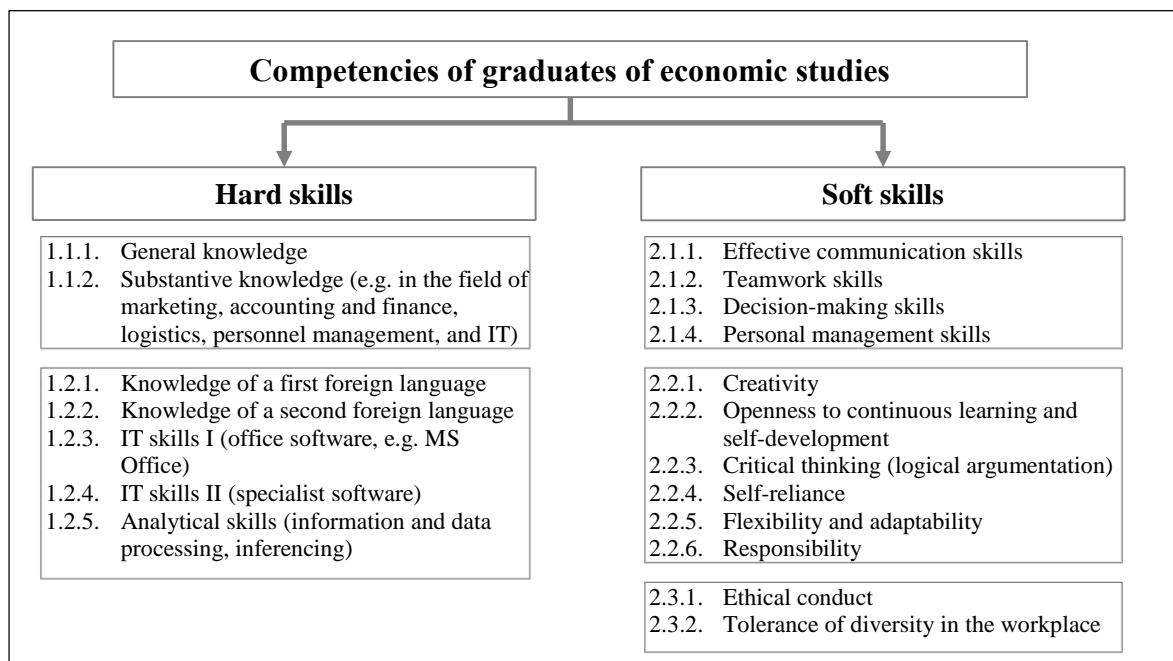


Figure 1. Competency model for economics graduates.

Source: own study.

The list of competencies developed as part of the literature study was reviewed as part of the proper research stage.

The study adopted four research hypotheses:

H1: for economics graduates, employers place more importance on soft competencies than hard competencies.

H2: the perceived importance of competencies of economics graduates depends on the size of the company.

H3: perception of the importance of competencies of economics graduates depends on the industry in which the company operates.

H4: the perception of the importance of competencies of economics graduates depends on the percentage of economics graduates employed at the enterprise.

The next stage of the research was the development of a survey form as the main research tool. The form's first question asked respondents to identify the key category of employees from a proposed list of occupations. This list included the professions in which economics graduates most often find work. The second question asked respondents to assess the importance of the competencies of economics graduates from an enterprise perspective. The third question asked respondents to assess the level of competence possessed by newly hired economics graduates at the company.

Leading enterprises in the Małopolska region, which by virtue of their business profile represent a potential place of employment for graduates of economic studies, were selected as the object of the study. The survey, due to the representativeness of the sample, was planned to be conducted on a sample of 360 enterprises. Ultimately, 312 enterprises took part in the survey. Technical and organizational aspects of the survey were outsourced to Agencja Badań Marketingowych i Opinii Holding Profit Spółka z o.o., based in Kraków (31-162 Kraków, ul. Staszica 7/5, NIP: 864-000-26-96, REGON: 005670308). The survey was computer-assisted (CAPI method) and conducted under the supervision of the agency's auditors, using also a telephone survey (CATI method). In designing the survey, it was assumed that information would be obtained from companies with the following positions dedicated to graduates of economic studies:

- economic IT specialist,
- accountant/financier,
- administrative specialist,
- e-commerce specialist,
- IT specialist/administrator,
- logistics specialist,
- marketing/sales/advertising/PR specialist,
- real estate specialist,
- tourism specialist,
- quality management/quality control specialist,
- personnel management/payroll/HR specialist.

It was assumed that the preferred respondents were employees of HR departments, direct supervisors of newly hired graduates of economic studies, and persons indicated by the boards of directors of the surveyed enterprises.

The survey was dominated by small entities with up to 50 employees. The second-largest group was organizations ranging in size from 51 to 250 employees. The least numerous were entities with more than 250 employees. The structure of the survey sample is presented in Figure 3 and Table 1.

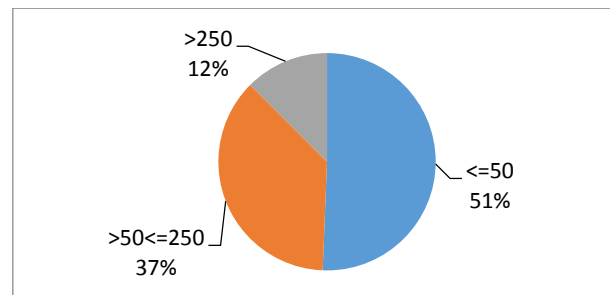


Figure 3. Structure of respondents in terms of the number of people employed.

Source: own study.

Table 1.

Structure of respondents in terms of the number of people employed

No.	Size of the organization	Volume	Percentage share
1	<= 50 persons	158	51%
2	> 50 <= 250	115	37%
3	> 250	39	12%

Source: own study.

The sample was diversified in terms of the assignment of entities to industries (Figure 4 and Table 2). The Polish Classification of Activities (PKD) was used. The largest share of the sample was from Section O (26%) (public administration and defense; compulsory social security), Section C (19.9%) (manufacturing) and Section M (12.2%) (professional, scientific and technical activities). The first group included, among others, local government units, institutions engaged in public finance, education or social policy. Section C entities included manufacturers of, among others: steel structures, electronics, sanitary and plumbing fixtures, machinery and equipment, aircraft engine parts, household chemicals or woodwork. Section M, in turn, included advertising agencies, research companies, management consulting firms, marketing, human resources or research and development units. The smallest share of respondents by industry was in Section L (1.9%) (Real estate activities), Section I (2.6%) (Accommodation and food service activities), Section H (2.9%) (Transportation and warehousing) and Section N (3.2%) (Administrative and support service activities).

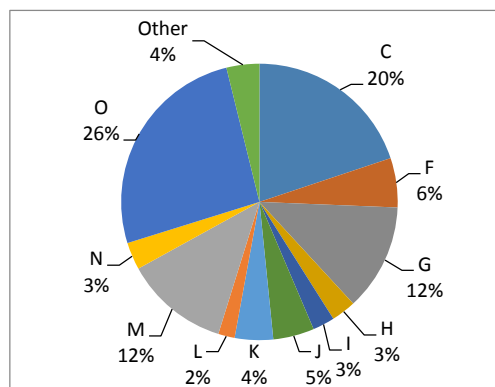


Figure 4. Structure of the sample in terms of assigning entities to industries according to the PKD classification.

Source: own elaboration.

Table 2.

Structure of the sample in terms of the assignment of entities from industries according to the PKD classification

No.	Section symbol	Section name	Volume	Percentage share
1	C	Manufacturing	62	20%
2	F	Construction	18	6%
3	G	Wholesale and retail trade; repair of motor vehicles and motorcycles	39	13%
4	H	Transportation and storage	9	3%
5	I	Accommodation and food service activities	8	3%
6	J	Information and communication	15	5%
7	K	Financial and insurance activities	14	4%
8	L	Real estate activities	6	2%
9	M	Professional, scientific and technical activities	38	12%
10	N	Administrative and support service activities	10	3%
11	O	Public administration and defence; compulsory social security	81	26%
12	Other	Other	12	4%

Source: own elaboration.

The surveyed facilities were also characterized by different levels of the percentage of economics graduates employed (Figure 5 and Table 3).

By far the largest number of facilities had a percentage of 10% or less. This was followed by subjects above 10 to 30%. The fewest were above 30%.

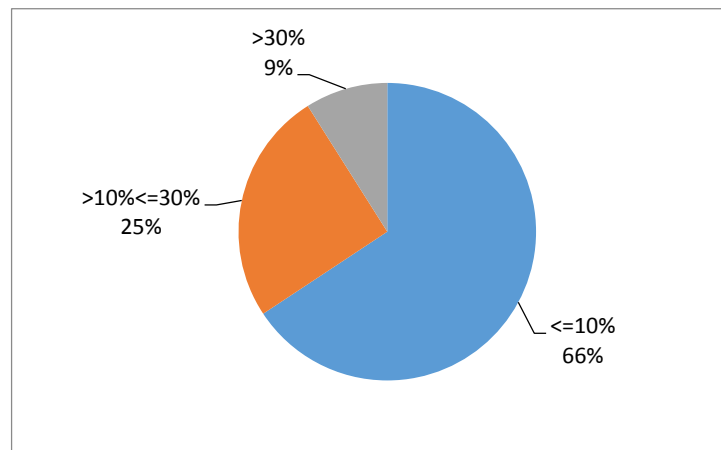


Figure 5. Structure of the sample in terms of percentage of employed economics graduates.

Source: own study.

Table 3.

Structure of the sample in terms of percentage of employed economics graduates

No.	Percentage of employed economics graduates	Volume	Percentage share
1	≤ 10%	205	66%
2	> 10% ≤ 30%	79	25%
3	> 30%	28	9%

Source: own elaboration.

For the purpose of preparing this study, a detailed analysis of question two of the survey was conducted, which reads: "How important in your company is it for newly hired employees to have the competencies listed below (applies to graduates of economic studies). Please use a scale from 1 to 5, where 1 means that the competency is not important at all, and 5 means that

it is a key competency." Thus, the idea was that respondents were to evaluate the importance of the competencies included in the model of the economics students and graduates they employ from the point of view of the tasks they are assigned to perform in their jobs.

Table 4 shows the adopted scale for assessing the importance of the competencies of students and graduates of economic studies from the point of view of the surveyed companies.

Table 4.

Adopted ranges for assessing the importance of competencies of students and graduates of economic studies employed in the surveyed companies

Verbal evaluation	Interval
Not important at all	<1; 1,8)
Low-important	<1,8; 2,6)
Moderately important	<2,6; 3,4)
Very important	<3,4; 4,2)
Key competency	<4,2; 5>

Source: own elaboration.

The ranges were set at equal intervals for the theoretical possible extreme ratings - the lowest at level 1 and the highest at level 5. The purpose of adopting them is to allow grading the importance of the importance of competencies from the point of view of the entrepreneurs surveyed.

The results of the study were subjected to statistical analysis, in which, in addition to determining the average values of the importance ratings of competencies, tests of significance of differences between the averages were carried out. On this basis, the hypotheses adopted in the study were verified and final conclusions were formulated.

4. Soft and hard competencies of economics graduates in the opinion of employers

According to the adopted rating scale, the surveyed employers included the following competencies of graduates as key competencies: responsibility (4.48), ethical conduct (4.44), ability to organize own work (4.37), ability to communicate effectively (4.33), self-reliance (4.30), openness to learning and continuous development (4.29), ability to work in a team (4.26), substantive knowledge (e.g., marketing, accounting and finance, logistics, personnel management, information technology) (4.25). Except for the last one, all of those mentioned fall into the category of "soft" competencies. In the group of very important competencies were: decision-making skills (4.13), flexibility and adaptability (4.15), IT skills I (office packages, e.g. MS Office) (4.12), critical thinking (logical argumentation) (4.11), analytical skills (information and data processing, reasoning) (4.04), creativity (3.99), tolerance for employee diversity (3.75), general knowledge (3.57). The group of moderately important competencies included knowledge of the first foreign language (3.36), IT skills II (specialized programs)

(3.31). Only knowledge of a second foreign language (2.38) was classified as low-importance competence. Figure 6 and Table 5 shows the average responses regarding the importance of each competency among the entire surveyed group of respondents.

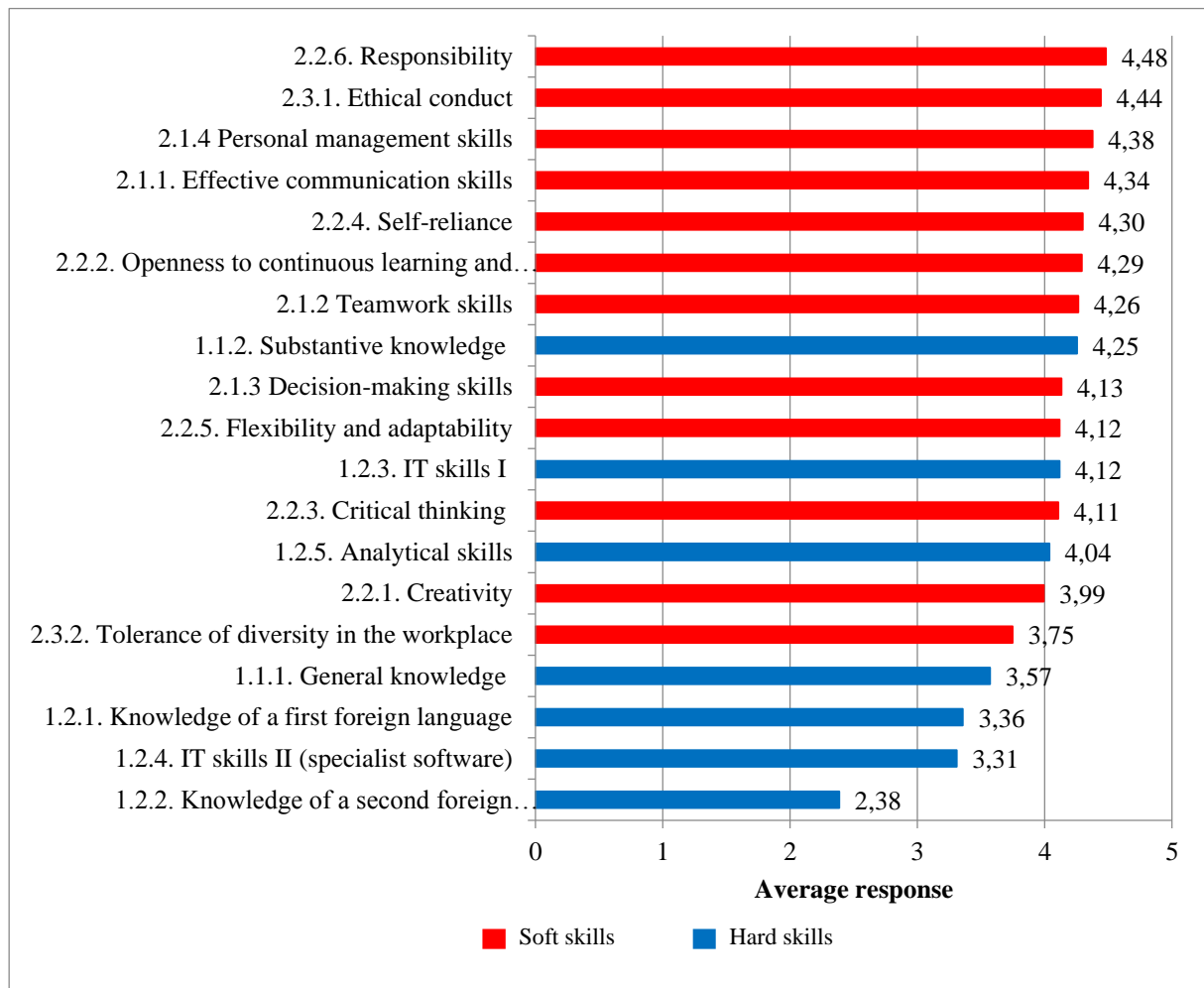


Figure 6. Importance of competencies of economics graduates according to employers.

Source: own study.

Table 5.

Importance of competencies of economics graduates according to employers

No.	Competence	Competence category	Average response
1	2.2.6. Responsibility	S	4,48
2	2.3.1. Ethical conduct	S	4,44
3	2.1.4. Personal management skills	S	4,38
4	2.1.1. Effective communication skills	S	4,34
5	2.2.4. Self-reliance	S	4,30
6	2.2.2. Openness to continuous learning and self-development	S	4,29
7	2.1.2. Teamwork skills	S	4,26
8	1.1.2. Substantive knowledge (e.g. in the field of marketing, accounting and finance, logistics, personnel management, and IT)	H	4,25
9	2.1.3. Decision-making skills	S	4,13
10	2.2.5. Flexibility and adaptability	S	4,12
11	1.2.3. IT skills I (office software, e.g. MS Office)	H	4,12

Cont. table 5.

12	2.2.3. Critical thinking (logical argumentation)	S	4,11
13	1.2.5. Analytical skills (information and data processing, inferencing)	H	4,04
14	2.2.1. Creativity	S	3,99
15	2.3.2. Tolerance of diversity in the workplace	S	3,75
16	1.1.1. General knowledge	H	3,57
17	1.2.1. Knowledge of a first foreign language	H	3,36
18	1.2.4. IT skills II (specialist software)	H	3,31
19	1.2.2. Knowledge of a second foreign language	H	2,38

Source: own elaboration.

Soft competencies were rated as key or very important. The averages for responses with regard to soft competencies are shown in Figure 7 and Table 6.

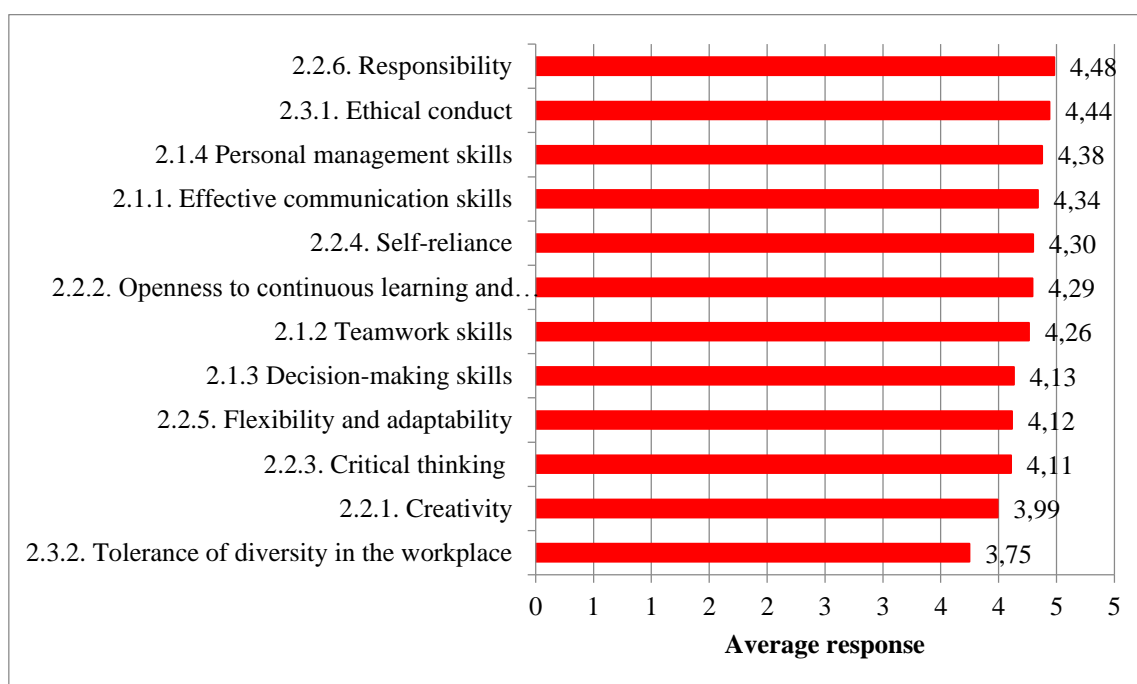


Figure 7. Importance of soft skills of economics graduates according to employers.

Source: own study.

Table 6.

Importance of soft competencies of economics graduates according to employers

No.	Competence	Average response
1	2.2.6. Responsibility	4,48
2	2.3.1. Ethical conduct	4,44
3	2.1.4. Personal management skills	4,38
4	2.1.1. Effective communication skills	4,34
5	2.2.4. Self-reliance	4,30
6	2.2.2. Openness to continuous learning and self-development	4,29
7	2.1.2. Teamwork skills	4,26
8	2.1.3. Decision-making skills	4,13
9	2.2.5. Flexibility and adaptability	4,12
10	2.2.3. Critical thinking	4,11
11	2.2.1. Creativity	3,99
12	2.3.2. Tolerance of diversity in the workplace	3,75

Source: own elaboration.

As for hard competencies, only one was included in the key competencies (subject matter knowledge, e.g., marketing, accounting and finance, logistics, personnel management, information technology, - the last item in the key competencies). Three competencies to important (IT skills - office packages, e.g. MS Office, analytical skills - information and data processing, reasoning, general knowledge). Two to moderately important (knowledge of the first foreign language, IT skills in specialized programs) and one to unimportant (knowledge of a second foreign language). Ratings of the importance of hard competencies were much more varied than those of soft competencies (Figure 8 and Table 7).

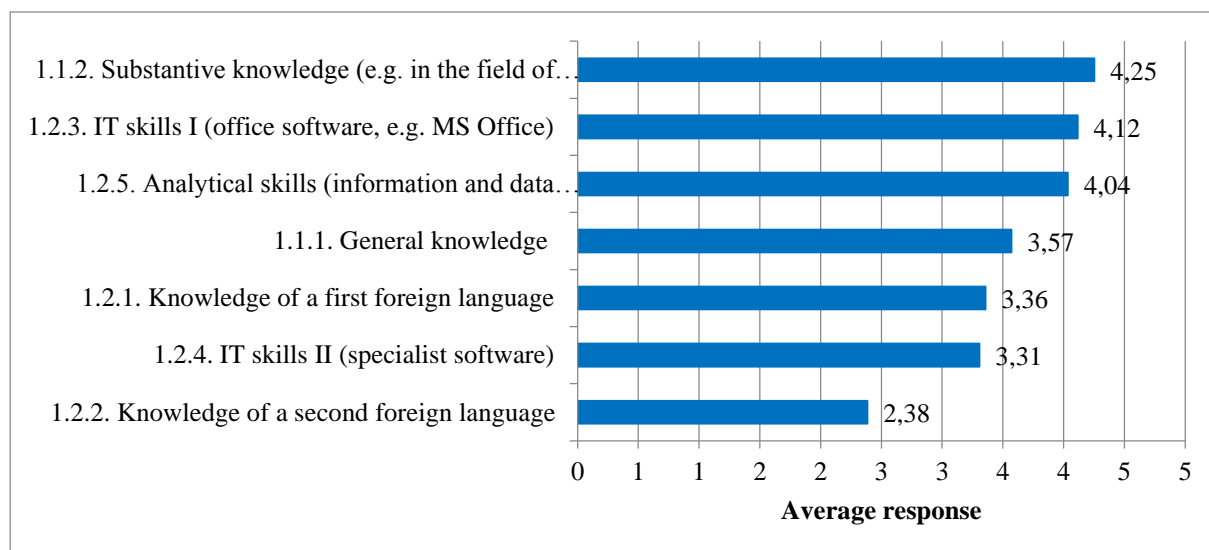


Figure 8. Importance of hard competencies of economics graduates according to employers.

Source: own study.

Table 7.

Importance of hard competencies of economics graduates according to employers

No.	Competence	Average response
1	1.1.2. Substantive knowledge (e.g. in the field of marketing, accounting and finance, logistics, personnel management, and IT)	4,25
2	1.2.3. IT skills I (office software, e.g. MS Office)	4,12
3	1.2.5. Analytical skills (information and data processing, inferencing)	4,04
4	1.1.1. General knowledge	3,57
5	1.2.1. Knowledge of a first foreign language	3,36
6	1.2.4. IT skills II (specialist software)	3,31
7	1.2.2. Knowledge of a second foreign language	2,38

Source: own elaboration.

The average of all responses for soft skills was 4.22, higher than the average response for hard skills of 3.57 (Figure 9). Testing using the Mann-Witney test confirmed the significance of the differences between the averages ($p < 0.001$). Thus, the statement that in the case of economics graduates, employers attach more importance to soft competencies than hard competencies turned out to be true. Thus, hypothesis H1 was positively verified. Thus, the analyses presented here prove that employers assign higher importance to soft competencies than to hard competencies.

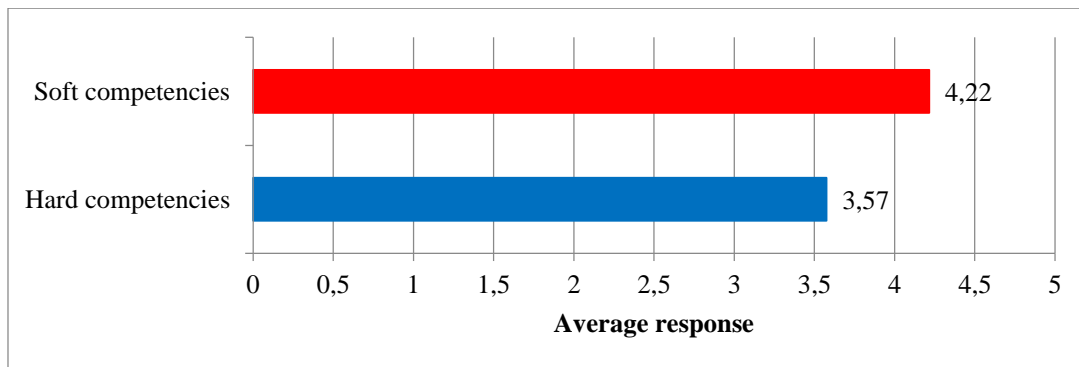


Figure 9. Average responses by soft and hard competencies.

Source: own elaboration.

Figure 10 and Table 8 shows the average responses to the question on the importance of graduate competencies by size of the surveyed companies.

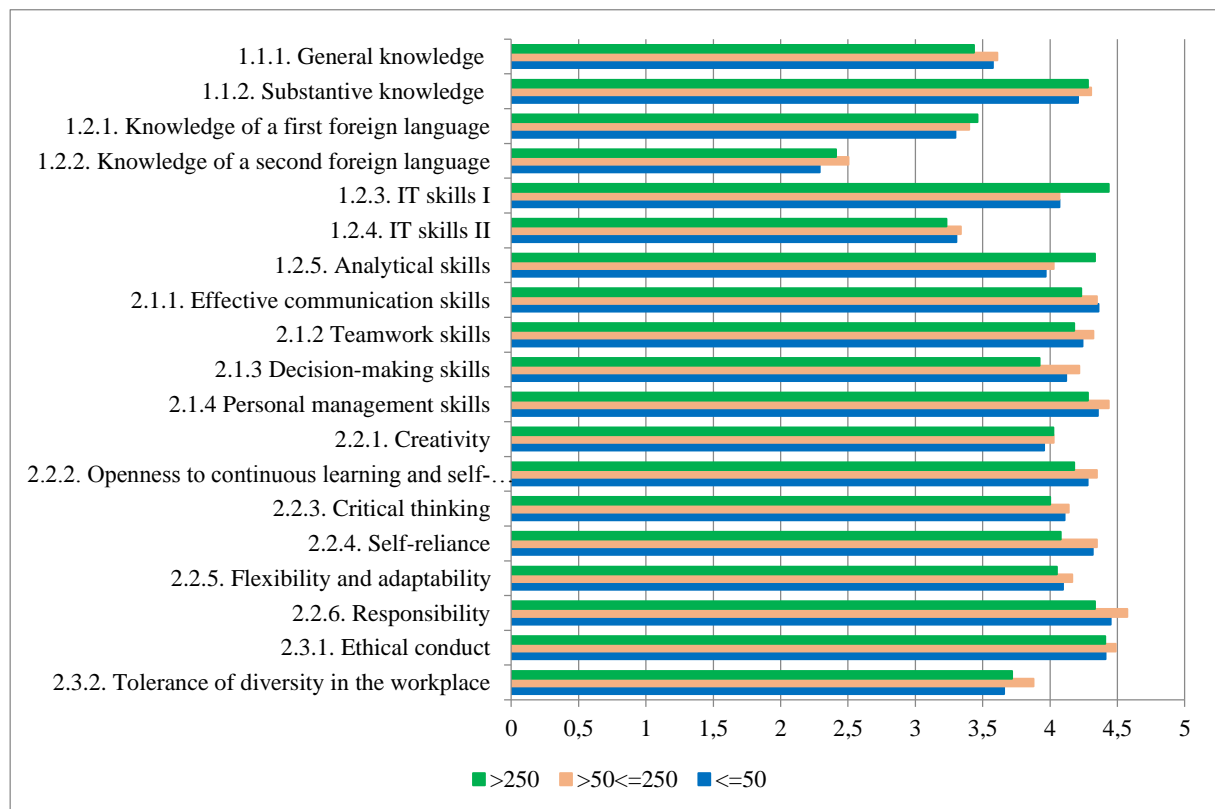


Figure 10. Average indications of the importance of competencies for each size of the surveyed companies.

Source: own study.

Table 8.

Average indications of the importance of competencies for each size of the surveyed enterprises

No.	Competence	≤ 50	> 50 ≤ 250	> 250
1	1.1.1. General knowledge	3,58	3,61	3,44
2	1.1.2. Substantive knowledge	4,21	4,30	4,28
3	1.2.1. Knowledge of a first foreign language	3,30	3,40	3,46
4	1.2.2. Knowledge of a second foreign language	2,29	2,50	2,41
5	1.2.3. IT skills I	4,07	4,07	4,44
6	1.2.4. IT skills II	3,30	3,34	3,23
7	1.2.5. Analytical skills	3,97	4,03	4,33
8	2.1.1. Effective communication skills	4,36	4,35	4,23
9	2.1.2 Teamwork skills	4,24	4,32	4,18
10	2.1.3 Decision-making skills	4,12	4,22	3,92
11	2.1.4 Personal management skills	4,35	4,43	4,28
12	2.2.1. Creativity	3,96	4,03	4,03
13	2.2.2. Openness to continuous learning and self-development	4,28	4,35	4,18
14	2.2.3. Critical thinking	4,11	4,14	4,00
15	2.2.4. Self-reliance	4,32	4,35	4,08
16	2.2.5. Flexibility and adaptability	4,10	4,17	4,05
17	2.2.6. Responsibility	4,45	4,57	4,33
18	2.3.1. Ethical conduct	4,41	4,49	4,41
19	2.3.2. Tolerance of diversity in the workplace	3,66	3,88	3,72

Source: own elaboration.

Statistical analysis of the respondents' answers, in terms of assessing the importance of each competency included in the model, broken down by the size of the surveyed companies, using the Kruskal-Wallis test, showed the following significant differences:

- 1.2.3 IT Skills I - between organizations with more than 250 employees and the others included in the survey,
- 1.2.5 Analytical skills - between organizations with up to 50 people and those with more than 250 people.

The revealed differences in the assessment of the importance of competencies of companies of different sizes allow us to conclude that hypothesis H2 is true, but only in the cases indicated above. Although the differences are significant from a statistical point of view, they are small in absolute terms. The remaining differences in average values from a statistical point of view are not significant.

Figure 11 and Table 9 shows the average responses to the question on the importance of individual competencies in the cross-section of the membership of the surveyed organizations in the PKD section.

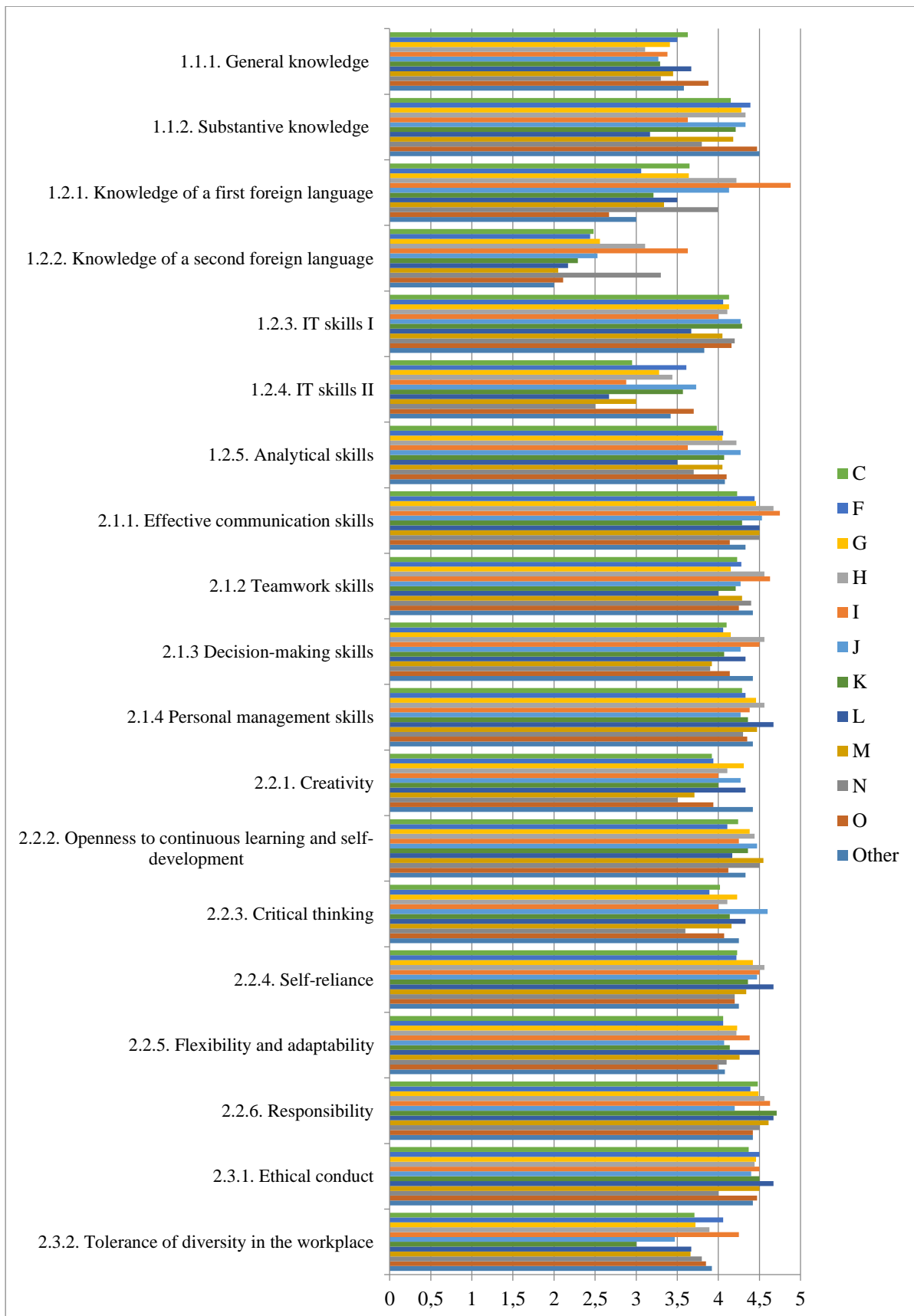


Figure 11. Average indications of the importance of competencies for all surveyed sections.

Source: own study.

Table 9.*Average indications of the importance of competencies for all surveyed sections*

No.	Competence	Section											
		C	F	G	H	I	J	K	L	M	N	O	Other
1	1.1.1. General knowledge	3,63	3,5	3,41	3,11	3,38	3,27	3,29	3,67	3,45	3,3	3,88	3,58
2	1.1.2. Substantive knowledge	4,15	4,39	4,28	4,33	3,63	4,33	4,21	3,17	4,18	3,8	4,47	4,5
3	1.2.1. Knowledge of a first foreign language	3,65	3,06	3,64	4,22	4,88	4,13	3,21	3,5	3,34	4	2,67	3
4	1.2.2. Knowledge of a second foreign language	2,48	2,44	2,56	3,11	3,63	2,53	2,29	2,17	2,05	3,3	2,11	2
5	1.2.3. IT skills I	4,13	4,06	4,13	4,11	4	4,27	4,29	3,67	4,05	4,2	4,16	3,83
6	1.2.4. IT skills II	2,95	3,61	3,28	3,44	2,88	3,73	3,57	2,67	3	2,5	3,7	3,42
7	1.2.5. Analytical skills	3,98	4,06	4,05	4,22	3,63	4,27	4,07	3,5	4,05	3,7	4,1	4,08
8	2.1.1. Effective communication skills	4,23	4,44	4,46	4,67	4,75	4,53	4,29	4,5	4,5	4,5	4,14	4,33
9	2.1.2 Teamwork skills	4,23	4,28	4,15	4,56	4,63	4,27	4,21	4	4,29	4,4	4,25	4,42
10	2.1.3 Decision-making skills	4,1	4,06	4,15	4,56	4,5	4,27	4,07	4,33	3,92	3,9	4,14	4,42
11	2.1.4 Personal management skills	4,29	4,33	4,46	4,56	4,38	4,27	4,36	4,67	4,47	4,3	4,35	4,42
12	2.2.1. Creativity	3,92	3,94	4,31	4,11	4	4,27	4	4,33	3,71	3,5	3,94	4,42
13	2.2.2. Openness to continuous learning and self-development	4,24	4,11	4,38	4,44	4,25	4,47	4,36	4,17	4,55	4,5	4,12	4,33
14	2.2.3. Critical thinking	4,02	3,89	4,23	4,11	4	4,6	4,14	4,33	4,16	3,6	4,07	4,25
15	2.2.4. Self-reliance	4,23	4,22	4,42	4,56	4,5	4,47	4,36	4,67	4,34	4,2	4,2	4,25
16	2.2.5. Flexibility and adaptability	4,06	4,06	4,23	4,22	4,38	4,07	4,14	4,5	4,26	4,1	3,99	4,08
17	2.2.6. Responsibility	4,48	4,39	4,49	4,56	4,63	4,2	4,71	4,67	4,61	4,5	4,42	4,42
18	2.3.1. Ethical conduct	4,37	4,5	4,46	4,44	4,5	4,4	4,5	4,67	4,5	4	4,47	4,42
19	2.3.2. Tolerance of diversity in the workplace	3,71	4,06	3,72	3,89	4,25	3,47	3	3,67	3,66	3,8	3,85	3,92

Source: own elaboration.

The study, on the differences in the perceived importance of competencies in the cross-section of the questioned entities' affiliation to the PKD section, showed the significance of differences between the average responses for the following competencies:

- 1.2.1. Knowledge of first foreign language,
- 1.2.2. Knowledge of a second foreign language,
- 1.2.4. Computer skills II (specialized programs),
- 2.2.1. Creativity,
- 2.2.2. Openness to learning and continuous development,
- 2.2.3. Critical thinking (logical argumentation).

The identification of significant differences gives rise to the statement of positive verification of hypothesis H3 only in the case of the above-mentioned competencies and between some sections. For the remaining competencies, the differences in mean indications are statistically insignificant.

The average responses to the question on the assessment of the importance of individual competencies included in the model in newly hired employees with the criterion of dividing the respondents by the percentage of employed economics graduates are presented in Figure 12 and Table 10. The differences in the hierarchy of the importance of individual competencies for the three categories of organizations distinguished in the study, from the point of view of the percentage of employed economics graduates, are small.

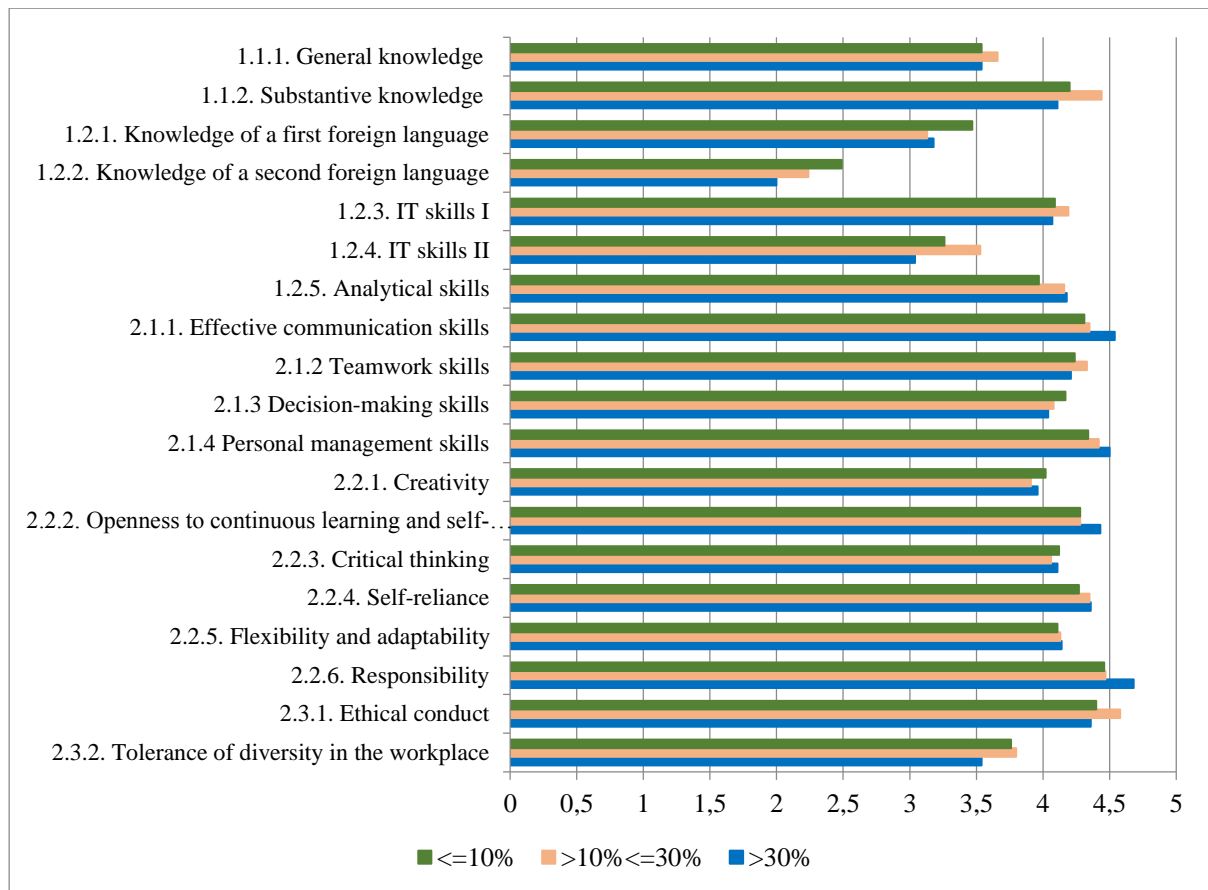


Figure 12. Average responses to the question on the importance of competencies by percentage of employed economics graduates.

Source: own study.

Table 10.

Average responses to the question on the importance of competencies in cross-section of the percentage of economics graduates employed

No.	Competence	<= 10%	> 10% <= 30%	> 30%
1	1.1.1. General knowledge	3,54	3,66	3,54
2	1.1.2. Substantive knowledge	4,2	4,44	4,11
3	1.2.1. Knowledge of a first foreign language	3,47	3,13	3,18
4	1.2.2. Knowledge of a second foreign language	2,49	2,24	2
5	1.2.3. IT skills I	4,09	4,19	4,07
6	1.2.4. IT skills II	3,26	3,53	3,04
7	1.2.5. Analytical skills	3,97	4,16	4,18
8	2.1.1. Effective communication skills	4,31	4,35	4,54
9	2.1.2. Teamwork skills	4,24	4,33	4,21
10	2.1.3. Decision-making skills	4,17	4,08	4,04
11	2.1.4. Personal management skills	4,34	4,42	4,5
12	2.2.1. Creativity	4,02	3,91	3,96
13	2.2.2. Openness to continuous learning and self-development	4,28	4,28	4,43
14	2.2.3. Critical thinking	4,12	4,06	4,11
15	2.2.4. Self-reliance	4,27	4,35	4,36
16	2.2.5. Flexibility and adaptability	4,11	4,13	4,14
17	2.2.6. Responsibility	4,46	4,47	4,68
18	2.3.1. Ethical conduct	4,4	4,58	4,36
19	2.3.2. Tolerance of diversity in the workplace	3,76	3,8	3,54

Source: own elaboration.

The Kruskal-Wallis test showed the significance of differences between the averages for only two competencies:

- 1.1.2 Substantive knowledge - between organizations employing up to 10% and organizations employing $> 10\% \leq 30\%$ of economics graduates,
- 1.2.1 Knowledge of the first foreign language - between organizations employing up to 10% and organizations employing in the range of $> 10\% \leq 30\%$ of economics graduates.

The identified differences make it possible to conclude that hypothesis H4 has been positively verified only in the cases mentioned above. The differences between the average indications for the other competencies in the analyzed cross-section (percentage of employed graduates of economic studies) should be considered insignificant.

5. Summary

The survey conducted indicates that employers perceive soft competencies of economics graduates as more important than hard competencies. The most desirable soft competencies they expect from economics graduates are responsibility, ethical conduct, ability to organize own work and ability to communicate effectively. Among hard competencies, employers consider subject matter knowledge in marketing, accounting and finance, logistics, personnel management and information technology, IT skills (such as office packages, e.g. MS Office) and analytical skills (information and data processing, reasoning) to be the most important. On the other hand, knowledge of a second foreign language is considered the least important competency.

For the most part, differences in the perceived importance of competencies by employers of economics graduates do not depend on the size of the company, the industry in which the company operates or the percentage of economics graduates employed at the company. Only two competencies out of 19 were found to depend on the size of the enterprise, six competencies were found to depend on the industry, and two were found to depend on the percentage of economics graduates employed at the enterprise.

The dynamics of changes in the socio-economic and technological environment of enterprises creates the need for continuous monitoring of the degree to which the competencies of economics graduates match current and future expectations of employers. Recognizing the competence needs reported by employers should therefore lead to a reorientation of study programs, apprenticeship programs, as well as the instruments used - methods and techniques of student education.

Further research in this area will be related to the identification of competencies required from the perspective of new challenges, such as digitization and the replacement of human labor by artificial intelligence.

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