Abstract: This article deals with the issue of the influence of the gender segregation of graduates on finding employment on the example of the University of Economics and Management. The aim of this article is to evaluate the influence of the higher education on the role of gender within selected factors influencing employment of graduates on the labour market on the example of the University of Economics and Management. The areas of the influence of employability of graduates have been analysed using the characteristics of a position level, persistence in a studied branch, perception of a financial reward as adequate and holding a position, for which the higher education is required. The theoretical frame of the article is made of a literary search based on an analysis of scientific articles and publications dealing with the influence of gender on employment of graduates and factors influencing it. The primary research was conducted as a questionnaire survey among graduates of the University of Economics and Management from the previous 5 years. We received back 206 questionnaires from the total of 805 graduates. The results show that, although the number of higher educated women is increasing, their position on the labour market is still different compared to men. The higher education does not lead to the elimination of the gender differences on the labour market and within the working environment. These differences show in a type of employment, working positions and also wages.

Keywords: Graduate, Gender, Labour Market, Employability, Job Position

JEL Classification: I29, J21, M54.

Introduction

The higher education can be considered an excellent investment, a prerequisite for achieving a career success and preparation for highly professional positions (Wilton, 2007; Kraftová, Matěja, 2014). Kraftová and Matěja (2014) further add that the university education is now becoming a standard. However, as professional studies show, although the number of higher educated women is increasing, improving their position on the labour market, the higher education itself does not lead to the elimination of gender differences in terms of a type of employment, working positions or wages (Burchell, Hardy, Rubery, Smith, 2014, O’Reilly et al., 2015). Eurostat data (2017) shows, that there has been no significant shift in the percentage difference between wages for women and men in the previous 15 years within the European countries. Despite the antidiscrimination policy, gender differences in wages evaluation for men and women still exist in practice (Chevalier, 2007). Kaiser (2007) mentions that the different opportunities for women to access the labour market vary from one country to another and reflect also the country’s economic potential, which correlates with the participation of women in different positions on the labour market and with different satisfaction with a job and working conditions in terms of gender. The existence of the difference in financial rewards according to gender also points to
the fact that women often hold lower working positions than men (Mora, Ferrer-i-Carbonel, 2009). A lower percentage of women in managerial positions is thus an indicator of clear gender segregation (Mora, Ferrer-i-Carbonel, 2009). Due to the fact that only a small percentage of women work in high managerial positions, this fact affects the difference in incomes by gender minimally (García-Aracil, 2007). Researches by Mora, Ferrer-i-Carbonel (2009) show that women-graduates are less satisfied with their wages than men-graduates; however, concerning satisfaction with the content of their work in respect of required knowledge, there has not been identified any difference between men and women. Based on this fact, we can state that there still exist a “glass ceiling” for women with the higher education (De la Rica, Dolado, Llorens, 2006; Mora, Ferrer-i-Carbonel, 2009; Stier, Herzberg-Druker, 2017). Researches show that differences in financial rewards according to gender are more striking in the private sector than in the public sector (Garcia-Aracil, 2007). Danihelová (2016) emphasizes that knowledge and skills in economics are not only a part of general education, but also a necessity for further employment.

The aim of this article is to evaluate the influence of the higher education on the role of gender within selected factors influencing employment of graduates on the labour market on the example of the University of Economics and Management.

For the purposes of the research, the employability is characterized by 4 areas: a position level, persistence in a studied branch, perception of a financial reward as adequate and holding a position, for which the higher education is required.

1 Statement of a problem

Current research points to several variables of demand for higher education, which include i.e. individual, social, economic, and other factors (Agbola, Cheng, 2017; Duong et al., 2017; Fürstenberg et al., 2017; Menon et al., 2017; Piróg, 2016). For students graduates, economic factors are broadly discussed as they drive their future social status and position. University graduates usually expect rates of return to higher education. But there are other additional determinates influencing the final income and social status after higher education and those are ability, gender, type of secondary school, area of residence and others. This paper focus specifically on the impact of gender on university graduates. According to Menon et al. (2017) and Guerin et al. (2017) there is a significant link between the perceived rates of return and the intention of a student to start and finish tertiary education. Also gender is strong determinant of the intention for higher education.

The dynamics of gender pay processes and career progress for men and women graduates is currently often discussed. The research by Ugarte (2017) shows that crisis generated a more gender-neutral distributional pay effect for graduates. By contrast, it also led to greater mobility. This condition suits more to men than women graduates because women tend to be more attached to their organisations (Ugarte, 2017) and tend to benefit from involvements in co-curricular activities predominated by the opposite gender (Duong et al., 2017). The author also confirmed that woman’s wage bargaining position is weaker because of genderstereotyping. Women suffer from employer prejudices constructed in reaction to preposition of family care and state support policies. Furthermore, Bunel, Guironnet (2017) found significant influence gender inequalities in higher wage penalty for women.
1.1 Gender segregation on the labour market

Participation of women within the higher education is steadily increasing and more women than men are being educated in some branches, as for example pedagogy, personal management, etc., (Sianou – Kyrgiou, 2012). In spite of this fact, the current education policy faces the problem of gender inequality, when women are rather discriminated at the highest levels of the education system (Šmídová, 2008; Sianou – Kyrgiou, 2012). The scholarship of today’s society is very closely linked to social mobility, i.e. the higher an individual succeeds to climb within the education system, the better job he / she should find on the labour market (Sianou – Kyrgiou, 2012; Wetterer, 2017). This correlation hypothesis, i.e. supposed relationship between a level of attained education and attained position at work applies differently for women and men (Weterer 2017). While for men, we can prove quite a high correlation between attained education and level of a position at work, the situation is different in the case of women (Weterer, 2017). Position of women on the labour market is generally associated with lower prestige, lower participation in management and decision-making process, lower wages on one hand and greater threats of attained position and higher unemployment on the other hand (Sianou – Kyrgiou, 2012; Weterer, 2017). Differences in status of men and women are smaller for lower positions, for which workers holding these positions are often requalified (Stier, Herzberg-Druker, 2017). Lower positions, for which the higher education is often not required, are held rather by women than men. As already mentioned in the introduction of this article, these facts point to the gender segregation and „glass ceiling“, which is reflected in the limited access of women to high positions and high financial rewards (Wei, Bo, 2008; Mora, Ferrer-i-Carbonel, 2009; Stier, Herzberg-Druker, 2017). In the Czech Republic, the relation between studied branch and subsequent job selection is rather freer and graduates often seek jobs within related branches (Koucký, Zelenka, 2011). The willingness to work in other than studied branch reflects not only the relation of such graduates towards the branch they studied, but also a situation on the labour market (Trhlíková, Vojtěch, Úlovcová, 2008), as well as the different approach of men and women to the necessity of working in positions corresponding to studied branch (Wilton, 2007), when women resort to this solution more often than men. The situation is percentually lower for women and men working in economical branches than for graduates in other branches (Wilton, 2007). The Czech Republic is one of the countries with the largest difference between financial rewards for women and men (Eurostat, 2016). On the average, women have a 22% lower financial reward than men, which, according to Eurostat (2016), is probably related to a childcare, which is predominantly done by women. Differences between wages after reaching the age of 35 the best illustrate how the parental leave affects a career, when Czech men are usually working on their career growth, while women return to work after their parental leave (OECD, 2017). In addition, women work in branches with statistically lower wages and they often have lower working positions (OECD, 2017). It is interesting that despite the negative job differences within working opportunities and lower wages (even in comparable positions), women are more satisfied with their wages in the working process than men, which can be described as a gender-job satisfaction paradox (Kaiser, 2007; Kifle, Hailemariam, 2012).
2 Methods

The theoretical data have been processed based on the analysis of professional publications and articles. The relevant resources were searched in the databases of the Web of Science, Scopus, etc. based on key words as graduate, factors influencing the employability of graduates, employability of university graduates, gender, etc. Subsequently, there were compared opinions and points of view of quoted authors in order to process the insight into the examined issues and to create the basis for the processing of the results of the primary research.

The data was collected using primary questionnaire survey. Within the research, there were questioned all University of Economics and Management graduates from the last 5 years (i.e. 2012 – June 2017). Totally 805 graduates were contacted using e-mail correspondence (with the link to the questionnaire). Finally, 206 questionnaires returned back, i.e. 206 university graduates participated in the survey (n = 206).

Thus, the limit of the research may be that the participation of graduates in the survey was voluntary, and that most of the university graduates did not send filled the questionnaire; only interested graduates responded.

The questionnaire focused on the employability and experience of the university graduates. It contained 31 questions (of which 6 were open questions, 24 tick questions and 1 question, where respondents expressed their agreement or disagreement with statements using a five-point scale (1 strongly agree – 5 strongly disagree)). Data was collected using the CAWI method (on-line questionnaire) and subsequently entered into statistical software. Anonymity of respondents was ensured by an on-line filling questionnaire, where respondents did not mention their names or other identification data, and the used software do not allow tracing respondents back. There was always the possibility to add comments to questions add information or explain them. The respondents often used this possibility and thus provided additional information about the causes of problems or plans for the future. This information then supplemented the quantitative research and provided explanations for partial results.

The research took place from the mid May 2017 until the end of July 2017. The results of the questionnaire survey were further processed into tables, where they are presented in absolute and relative frequencies.

There was tested the gender influence on employability of graduates, which is in this case characterized by the level of the position, the persistence in the branch of study, perception of financial rewards as adequate and holding a position requiring the higher education.

On the basis of the processed theoretical data, there were formulated 4 hypotheses which tested correlation between selected variables. The zero hypothesis presumes that there is no relation between two tested variables. Rejecting a zero hypothesis means acceptance of an alternative hypothesis that there is a correlation between the components of the random variable, they are not independent.

H01: There is no correlation between the graduates’ gender and the level of working position (managerial / non-managerial).

H02: There is no correlation between the graduates’ gender and working position not requiring the higher education.
H03: There is no correlation between the graduates’ gender and persistence in the branch of study.

H04: There is no correlation between the graduates’ gender and the perception of financial rewards as adequate.

All the hypotheses were formulated as zero. To test the hypotheses, correlation analysis using Spearman’s correlation coefficient was employed in SPSS statistical programme. Furthermore, regression analysis and analysis of differences using the \( \chi^2 \) test was conducted at the significance level of 0.05.

In the questionnaire survey, there participated 65 men (31.7%) and 141 women (68.29%), which corresponds to the ratio of men and women in the total number of graduates. The age structure of respondents shows that most respondents belonged to the age group of 26 – 30 years (66 respondents, i.e. 31.7%, 40 women (19.02%) and 26 men (12.68%)), followed by the age group of 20 – 25 years (44 respondents, i.e. 21.46%, 9 men (4.39%) and 35 women (17.07%)). The third biggest group consisted of the respondents at the age of 31 – 35 years (31 respondents, i.e. 15.12%, 11 men (5.36%) and 20 women (9.75%)). The age group of 41 – 45 years (26 respondents, i.e. 12.68%, 8 men (3.9%) and 18 women (8.78%)) and the group of 36 – 40 years (22 respondents, i.e. 10.73%, 18 women (8.78%) and 4 men (1.95%)) were placed as mentioned below. The smallest number of respondents was from the age group of 51 years and more (9 respondents, i.e. 4.39%, 4 women (1.95%) and 5 men (2.43%)) and 46 – 50 years (6 respondents, i.e. 2.92%, 4 women (1.95%) and 2 men (0.97%)) and 2 respondents did not fill in their age (0.97%).

All the primary data was first evaluated using descriptive tools of statistics. Subsequently, there were processed Pivot Tables. For further data analysis, there was used linear regression, correlation analysis (Spearman’s correlation coefficient) and analysis of differences between genders and other selected characteristics using the Pearson’s chi-squared independence test (\( \chi^2 \) test). Those tests were performed at the significance level of 0.05. Excel 2013 and IBM SPSS Statistics was used for data processing and analysis.

3 Problem solving

This article focuses on testing and identifying the influence of the higher education on the role of gender for selected factors influencing employment of graduates on the labour market. The analysis was performed for the areas of a working position, requirement for the higher education in the branch and adequate rewards for a working position. Each of these factors was analysed and then tested separately in relation to gender differences. The Pivot Tables showing the classification of frequencies by gender for each tested factor were merged into one and the Tab. 1 shows them summarized. Absolute frequencies as well as relative frequencies are mentioned for each area in the Tab. 1. Thus there is evident the proportion of men and women separately for particular factors. As we can see, men more often than women hold managerial positions (32.3% men, 26.2% women) and also the higher education is required for positions they hold (49.2% for men, 37.6% for women). 72.3% of men and 59.6% of women work in a studied branch. As to the satisfaction with their financial rewards, the opposite ratio showed, when women (63.1%) more often consider it as adequate compared to men (53.9%). So we can state that although
women often hold non-managerial positions and in 40% it is in other than the studied branch, they are still more satisfied with their financial rewards. Obviously, this is associated with generally lower demands compared to men.

**Tab. 1: Employment of graduates by gender**

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial position</td>
<td>21 (32.3%)</td>
<td>37 (26.2%)</td>
<td>58 (28.2%)</td>
</tr>
<tr>
<td>Non-managerial position</td>
<td>44 (67.7%)</td>
<td>104 (73.8%)</td>
<td>148 (71.8%)</td>
</tr>
<tr>
<td>The higher education required</td>
<td>32 (49.2%)</td>
<td>53 (37.6%)</td>
<td>85 (41.3%)</td>
</tr>
<tr>
<td>The higher education not required</td>
<td>33 (50.8%)</td>
<td>88 (62.4%)</td>
<td>121 (58.7%)</td>
</tr>
<tr>
<td>Working in the studied branch</td>
<td>47 (72.3%)</td>
<td>84 (59.6%)</td>
<td>131 (63.6%)</td>
</tr>
<tr>
<td>Working in other than the studied branch</td>
<td>18 (27.7%)</td>
<td>57 (40.4%)</td>
<td>75 (36.4%)</td>
</tr>
<tr>
<td>Adequate financial rewards</td>
<td>35 (53.9%)</td>
<td>89 (63.1%)</td>
<td>124 (60.2%)</td>
</tr>
<tr>
<td>Inadequate financial rewards</td>
<td>30 (46.1%)</td>
<td>52 (36.9%)</td>
<td>82 (39.8%)</td>
</tr>
</tbody>
</table>

Source: own processing

As we can further see from the Tab. 1, 28% of surveyed graduates hold managerial positions. In other cases, the positions are non-managerial. Taking into account that this sample consists of graduates up to 5 years after their graduation and some of them mentioned further consequential development or practical trainings, it is quite a good development potential.

In half of the cases, the graduates also identically stated the higher education requirement for the position they hold. However, the proportion of the requirement for the higher education into the future (up to 5 years after a graduation) increases, as stated by the respondents, who planned to change their position, and who seek a new working position with the higher education requirement.

Totally 64% of graduates up to 5 years after their graduation work in the branch they studied. Again, some of them stated that they planned to change their working position soon to work in the branch they studied.

Totally 60% of respondents stated an adequate level of financial rewards. Despite the fact that many of them said that a human is never satisfied and costs increase with time and family, there is relatively a high level of satisfaction. Some graduates even stated that they consider their reward, which exceeded their expectations, as above standard. On the contrary, the table salary, that can’t be changed, was often the cause for dissatisfaction of respondents working in a state institution.

As shown in the Tab. 1, men and women are being employed or evaluate their working positions and their working conditions differently. For this reason, there were performed tests showing the extent of these differences or possible correlations, as mentioned in the methodology. The Tab. 2 shows the results of the statistical testing.

**Tab. 2: Analysis of the influence of gender on graduates’ employment**

<table>
<thead>
<tr>
<th></th>
<th>regression (y=ax+b)</th>
<th>correlation</th>
<th>p-value $\chi^2$ test</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: gender - non-managerial position</td>
<td>a -0.063, b 0.701</td>
<td>-0.061</td>
<td>0.000</td>
</tr>
<tr>
<td>H2: gender - higher education required</td>
<td>a -0.108, b 0.727</td>
<td>-0.114</td>
<td>0.000</td>
</tr>
<tr>
<td>H3: gender - work in the studied branch</td>
<td>a -0.116, b 0.757</td>
<td>-0.119</td>
<td>0.000</td>
</tr>
<tr>
<td>H4: gender - adequate financial rewards</td>
<td>a 0.088, b 0.630</td>
<td>0.093</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: own processing
From the results shown in the Tab. 2, there are obvious statistically significant differences between men and women for all surveyed factors. Position of higher educated men and women on the labour market is statistically significantly different. On the contrary, there were not found any significant correlations between genders and observed factors. The regression coefficient is always negative, but very low, except the factor for financial rewards. This confirms the overall outcomes showing the unequal position of women on the labour market, despite their long-term study and increase of qualifications compared to the same qualified men (in the sphere of education, other factors, e.g. practices are not included).

4 Discussion

The results of the primary research showed the gender imbalance in managerial positions. The higher percentage of men – graduates of universities working in managerial positions (32.3% of men compared to 26.2% of women) is in compliance with what Weterer (2017) mentions in his research. Arulampalam, Booth, Bryan (2007) in this context mention that the gender segregation and so called “glass ceiling” appears in most European countries. From the surveyed group, 72.3% of men and only 59.6% of women work in the studied branch. A higher percentage of men (49.2%) compared to women (37.6%) hold positions requiring the higher education. The primary research showed the conformity (in the sphere of working in their branch, managerial positions and wages) with the researches by Kaiser (2007) about the gender-job satisfaction paradox, because women (63.1%) expressed their satisfaction with financial rewards more often than men (53.9%). The identified level of satisfaction with wages level within the primary research is thus in contradiction with what Mora, Ferrer-i-Carbonel (2009) mention, when they say that women-graduates are less satisfied with wages compared to men-graduates. Women more often than men hold positions in the public and non-profit sector, where financial reward is lower compared to the private sector (Wilton, 2007). On the contrary, according to Sun et al. (2017), men self-esteem correlation coefficient is 0.43 (p < 0.001), for women, it is 0.59 (p < 0.001), which is in line with current results of the presented study.

However, the results of the primary research showed that more than a quarter (28%) of all the surveyed graduates hold managerial positions, which, since the period from graduation does not exceed 5 years, shows the importance of the university education for starting a career and achieving work successes. Various authors point to the fact that the university education is a fundamental prerequisite for achieving success at work and high expertise.

The primary research generally showed that, despite the whole-European effort to overcome gender differences, there still exists a difference in the status of men-graduates and women-graduates on the labour market. Women are more likely willing to make concessions in demands on employment (branch, position, wages), which only contributes more to the existing gender segregation.

Conclusion

The article analyses assumptions about gender stereotypes in working environment. When focusing on university graduates, namely the University of Economics and Management, where the survey on graduates from 5 previous years was carried out, there was confirmed that the number of university educated women increases, but their
position on the labour market is still different compared to men. Therefore, we can state, in conformity with the foreign researches mentioned in the literary search, that the higher education does not lead to any elimination of gender differences. These differences show within a type of employment, working positions and wages.

On the basis of the results we can conclude that there have been proven statistically significant differences between graduates according to gender within working positions as well as working in the studied branch and perception of financial rewards of graduates as satisfactory. Men, more often than women, hold managerial positions; however, the higher education is required from men more often than in the case of women. Almost three-quarters of men work in their studied branch compared to only less than 60 % of women. Women, however, are more satisfied with their financial rewards despite these handicaps.

There does not exist any statically significant correlation among gender of graduates and a level of working position (managerial / non-managerial) as well as working position not requiring the higher education, persistence in the branch of study or perception of financial rewards as adequate. The article limit is focusing on just one university from the sphere of economics. Similarly, the results could have been distorted by a voluntary participation of graduate respondents. In spite of the mentioned limits we can state, that the results can be considered as meaningful, because the surveyed group represents a proportion of men and women at the university and it is close to the representative sample of graduates over the previous 5 years.

For further research, it is possible to focus on the comparison of results from other universities, eventually to find out the causes of negative answers of respondents for each surveyed areas, i.e. reasons for dissatisfaction with wages according to gender, self interest in managerial positions by men or women and the possibility to achieve the position.

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References


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