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Selected aspects of professional activity of women in the tourism and ICT industries in the Baltic Sea Region countries

Introduction

Increasing the level of professional activity of women is one of the priorities of the European Union (EU) policy. Sources of this approach should be seen primarily in demographic changes, and mainly in the problem of a growing number of post-working age people [Kotowska 2008; Sztanderska, Grotkowska 2009:57]. Research presented in the literature also shows that greater female labour participation rate may have a positive impact on economic growth [Tsani et al. 2013]. Professional activity of women is stimulated by a number of factors, the situation is, therefore, not uniform in the culturally and economically diversified Europe, and comparisons for the EU countries are presented, among others, in the papers by Jaumotte [2003], Genre et al. [2010], Cipollone et al. [2014], Matuszewska-Janica [2016].

The purpose of the study is to present the situation of professional activity of women in the ICT industry (information and communication technology) and the industry of selected tourist services in the countries of the Baltic Sea Region (BSR) which are EU member states. The Baltic Sea Region forms one of the micro-regions of the European Union for which special strategies are formulated. These strategies aim, among others, to strengthen transnational cooperation, which can as a result lead to greater territorial cohesion and potential of the region. The research was conducted as part of the WINNET

(*Winnet Centre of Excellence*) project, and more precisely, within the scope of measure defined as: *WP4 – Gender analysis of the SMEs in ICT and tourism in the BSR – quantitative approach*.

The research covered analysis of the structure and dynamics of employment rates by gender in the indicated industries. Because of the guidelines formulated in the Europe 2020 strategy, the analysis focussed on the 20-64 age group¹. The analysis takes into account 8 countries from the Baltic Sea Region that are EU member states: Germany, Denmark, Finland, Sweden (the so-called old member states designated as BSR-EU15) and Poland, Lithuania, Latvia and Estonia (states from the group that acceded to the EU after 2003, hereinafter referred to as BSR-NM10).

Selected aspects of professional activity of women

According to the Eurostat statistics, the level of professional activity of women² has been systematically increasing over the last decades. At present, for the EU as a whole (28 countries) in the 20-64 age group it accounts for 70.5% (professional activity has risen since 2002 by 6.1 p.p.)³. Professional activity of women is, however, characterized by large regional differences, which is mainly a result of diverse cultural, economic, social and political conditions. The main factors that motivate women to greater pro-

professional activity indicated in the literature include activities associated with the family policy (Cipollone et al. [2014] indicates for example access to care over children and dependent persons) and the labour market policy (Jaumotte [2003] tackles for example the issue of the possibility to increase the flexibility of employment). Another aspect pointed out in the literature are economic considerations. Eberharter [2001] indicates that women from less affluent families do not decide to limit their professional activity to such an extent as women from the more financially well-off ones.

Professional activity of women differs from professional activity of men. Apart from the fact that much fewer women are considered to be as labour force members, women more often decide to work on a part-time basis. According to the Eurostat statistics, women also less often take on a second job, less often become self-employed and face a higher risk of unemployment. Differences in the employment rates for women and men are usually explained on the basis of two theories: the human capital theory [Becker 1964; Blau 2012; Polachek 1981 and 2004; Haager 2000] and the preference theory [Hakim 2002 and 2006; Kotowska et al. 2007; Kurowska 2012; Kuropatwa 2014].

An important phenomenon associated with the participation of women in professional life is their increased activity in certain occupations and segments of the labour market. Women more often than men work in certain positions (such as e.g., office employees, service employees) and in certain branches of industry, such as education, health or social care [England 2005; Burchell et al. 2015] or in the public sector [Barón and Cobb-Clark 2010; Anghel et al. 2012].

Employment rates for women in the industries which the presented analysis relates to are also significantly varied. In the ICT industry, the representation of women is smaller than the representation of men (women account for approx. 31% of employees). A few facts are indicated in the report prepared in 2013 by order of the European Commission *Women active in the ICT sector* [2013]. First of all, only 29 out of 1,000 graduates have an IT or related degree. Secondly, only four of them later choose to work in the ICT industry. Thirdly, the report states that an increase in the number of women employed in this industry may contribute to the growth of the GDP in the EU by 9 billion euro. Therefore, paths were suggested to facilitate the introduction of changes. They relate to:

- increasing the role of women in the industry through more transparent career paths,
- making it easier for female entrepreneurs to access various programs aimed at raising funds for setting up and developing a business,
- improving working conditions in the industry.

The tourism industry is more feminised than the ICT industry. In 2014, female labour participation rate in this industry was 54% for the EU countries. It is indicated in the literature that the tourism industry is one of the main employers and has great potential to create new jobs. This is a consequence of the fact that many social classes have become wealthier and people have more free time [Jarosz 2006:40]. A characteristic feature of this industry is seasonal work. The report of [Karpińska-Mizielińska et al. 2008] presents a broad discussion on the seasonality of employment in the tourism services industry. The report analyses, among other things, preferences concerning the persons employed. It has turned out that employers were willing to employ women and students. On the other hand, the study of [Rykowska et al. 2013:184] indicates that the largest number of micro enterprises owned or co-owned by women⁴ provide accommodation and food services.

Definition of the ICT and tourism industries

Due to globalisation and technological advancement the Information and Communication Technologies (ICT) support the functioning of the other industries and have become an indispensable part of nearly any sphere of life. The ICT industry is regarded as one of the most innovative and comprises two subgroups of activities. The first one is associated with the production of communication devices, such as: computer hardware, communications equipment, network equipment, data transmission equipment and office equipment. The other group relates to the services, namely the creation of software, the telecommunications or IT services⁵.

As a separate form of activity, the ICT industry was isolated as late as in the NACE review of 2006, officially in force since 2008 (NACE 2). In this version, the ICT industry at the first level was classified as section J. Unfortunately this industry refers only to the ICT-related services. Production within ICT has remained in the large group associated with production and classified as section D. Generally accessible data of both Eurostat, as well as national

statistical offices mostly use references to the first level of the NACE classification. That is why this study focuses only on the analysis of employment rates in the service-related ICT industry.

The tourism industry is defined as an industry associated with the production of goods and services strictly connected with the tourist service, such as the operation of hotels, catering services, generally understood transport, operation of travel agencies, as well as the recreation and entertainment (cf. guidelines of the United Nations World Tourism Organisation – UNWTO). Similarly as in the case of the ICT industry, the Eurostat classification does not differentiate the tourism industry defined in this way. The main group isolated (at the first level) comprises only the accommodation and food activity, which in the NACE 2 is classified as section I (in the previous version of NACE 1.1 – as section H). That is why this study focuses only on analysing the employment rates in the accommodation and food industry.

The structure and dynamics of employment rates in the ICT and tourism industries

The situation in both industries will be analysed on the basis of Eurostat data from the 2008-2014 Labour Force Survey (LFS)⁶. The research methods applied comprise known measures of dynamics and defined indicators, i.e.:

- labour participation rate in a given industry in the total number of employees:

$$pSE_{it}^k = \frac{SE_{it}^k}{E_{it}} \cdot 100\% \quad (1)$$

where:

SE_{it}^k – number of persons employed in k industry and i country/region in the period t ; E_{it} – number of persons employed in i country/region in the period t ; $t = 2008, \dots, 2014$; $k =$ ICT industry, tourism industry, $i =$ Denmark, Finland, Germany, Sweden, Poland, Estonia, Lithuania, Latvia, UE28;

- feminisation rate in the industry:

$$pFE_{it}^k = \frac{FE_{it}^k}{SE_{it}^k} \cdot 100\% \quad (2)$$

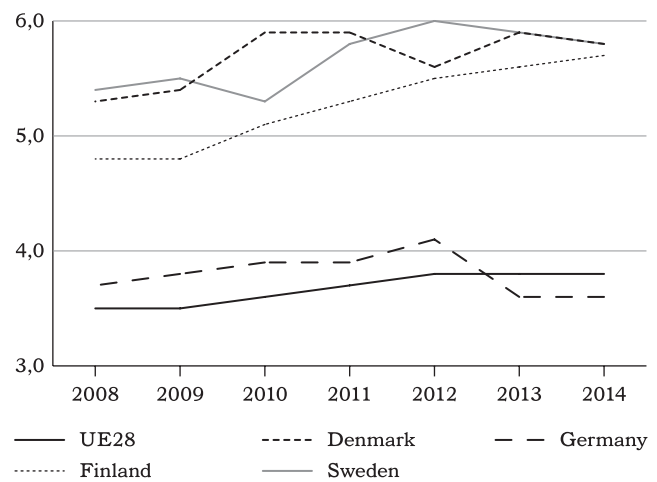
where:

FE_{it}^k – number of women employed in k industry and i country in the period t ; other designations the same as in formula (1).

Employment rate in the ICT industry

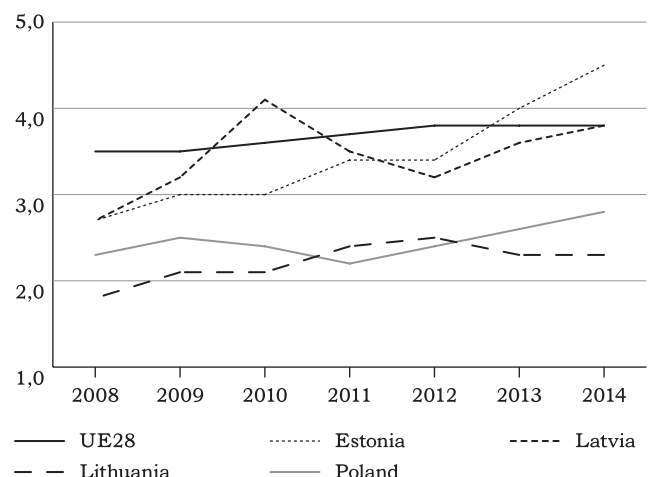
In the years 2008-2014, an increase in the employment rate in this industry of 2.8% to 3% was noted in the EU28 countries. For men this rate increased from 3.5% to 3.8%, while for women it oscillated between 2.1% and 2.0%. Detailed information on the evolution of this indicator in the BSR countries is presented in figures 1, 2, 3 and 4.

Figure 1. Male labour participation rate in the ICT industry in the total number of working men aged 20-64 in the EU and Denmark, Finland, Germany and Sweden, in the years 2008-2014



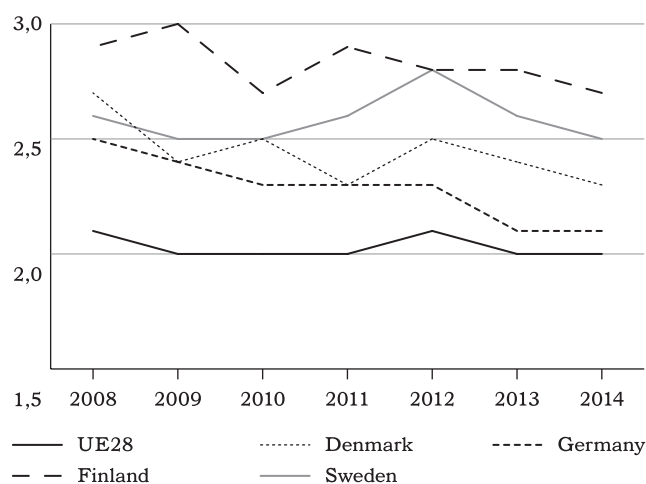
Source: own work.

Figure 2. Male labour participation rate in the ICT industry in the total number of working men aged 20-64 in the EU and Estonia, Lithuania, Latvia and Poland, in the years 2008-2014



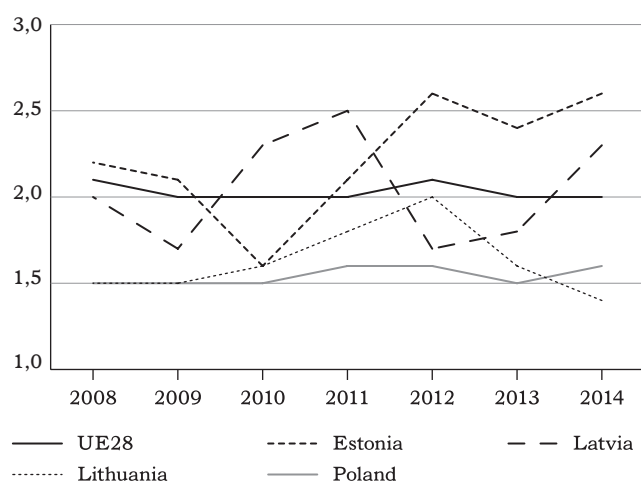
Source: own work.

Figure 3. Female labour participation rate in the ICT industry in the total number of working women aged 20-64 in the EU and Denmark, Finland, Germany and Sweden, in the years 2008-2014



Source: own work.

Figure 4. Female labour participation rate in the ICT industry in the total number of working women aged 20-64 in the EU and Estonia, Lithuania, Latvia and Poland, in the years 2008-2014



Source: own work.

In 2014, the largest percentage of men employed in the ICT industry was noted in Denmark and Sweden (5.8%) as well as in Finland (5.7%). For these three countries, one can observe an increase in the value of the *pSE* indicator and its convergence in the analysed period. In Germany, until 2012, the participation was slightly higher than for the EU28 as a whole; however, in 2013 and 2014, the value of this indicator dropped below the EU level. As regards new member states from the BSR, in 2014,

Estonia was the only country where the value of the *pSE* indicator exceeded the EU level, while the value reached for Latvia equalled this indicator. In Poland and Lithuania, it was much lower (2.8% and 2.3% respectively). In general, during the whole analysed period, the last two countries did not manage to reach the employment rate for men in the ICT industry that would exceed the EU average.

First of all, the female labour participation rate in the ICT industry is much lower than the male participation rate. Among the analysed countries, women most frequently chose to work in this industry in Finland and Sweden (in 2014 the participation rates were 2.7% and 2.5% respectively), then in Estonia (2.6%), Denmark (2.3%) and Germany (2.1%). Similarly as in the case of men, the employment rate for women in the ICT industry was lower than the EU level during the whole analysed period only in Poland and Lithuania (1.6% and 1.4% respectively).

Table 1 presents changes to the number of employees and changes to the *pSE* indicator for the ICT industry. The presented data show different dynamics of change for women and men (opposite trends). In the analysed countries, an increase in the employment rate was noted in the group of men, while decreases were more often noted in the group of women. As regards the EU as a whole, the employment rate for men in the ICT industry increased by 5.2% (annual average 0.9%), whereas in the case of women, it decreased by 3.3% (average per annum 0.6%).

Taking into account detailed changes to the employment rate, it must be concluded that large differences are observed between countries from the analysed group. The largest increase in the employment rate for men is noted in Estonia (by as much as 63.5%, annual average 8.5%). An over 20-percent increase in the employment rate was also noted in Poland (26%) and Latvia (20.3%). Among the new BSR countries, both increase in the employment rate for men and average rate of change was on average higher than in the group of the "old fifteen" countries. In the latter group, the largest increase in the number of working men was noted in Finland (13.7%). A decrease in the employment rate for men was noted only in Germany – by 1.8%.

The situation is different in the case of women. Although most countries noted drops in the employment rates; three countries saw an increase in the number of working women, namely: Estonia (10.3%), Poland (by 9.4%) and Sweden (1.7%).

Table 1. Changes to the employment rate for women and men in the ICT industry in the years 2008-2014 in the BSR countries (in %)*

| Region/country | Labour participation rate: average rate of change | | Employment rate: average rate of change | | Change in employment rates 2014/2008 | |
|----------------|--|------|--|------|---|------|
| | Women | Men | Women | Men | Women | Men |
| UE28 | -0.6 | 1.6 | -0.6 | 0.9 | -3.3 | 5.2 |
| Denmark | -2.1 | 1.6 | -2.8 | 0.6 | -15.6 | 3.8 |
| Germany | -2.7 | -0.5 | -1.7 | -0.3 | -9.6 | -1.8 |
| Finland | -1.2 | 3.1 | -1.6 | 2.1 | -9.2 | 13.4 |
| Sweden | -0.4 | 1.2 | 0.3 | 1.6 | 1.7 | 9.9 |
| Estonia | 2.6 | 9.2 | 1.6 | 8.5 | 10.3 | 63.5 |
| Latvia | 1.7 | 6.0 | -0.7 | 3.1 | -4.0 | 20.3 |
| Lithuania | -1.6 | 3.4 | -2.5 | 1.6 | -8.0 | 12.7 |
| Poland | 1.4 | 3.8 | 1.5 | 3.9 | 9.4 | 26.0 |

* Calculations of statistical indices and indicators are quoted from [Witkowska (ed.) 2004].

Source: own work.

Table 2. Dynamics in the employment rates for men and women in the ICT industry (relative changes year-to-year, %)

| Region/ /country | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | |
|---------------------|------|-------|------|-------|-------|-------|------|-------|-------|-------|------|-------|
| | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women |
| UE28 | -0.6 | -3.4 | 1.3 | -1.0 | 1.0 | 0.8 | 2.6 | 2.2 | -0.9 | -4.0 | 1.7 | 2.1 |
| Denmark | -3.0 | -9.2 | 7.6 | 0.7 | 0.8 | -10.0 | -5.8 | 6.7 | 5.6 | -1.7 | -0.8 | -2.1 |
| Germany | 1.2 | -1.8 | 2.3 | -1.6 | 1.1 | -0.1 | 4.6 | 0.8 | -11.1 | -7.6 | 0.8 | 0.7 |
| Finland | -3.5 | 1.5 | 6.9 | -9.3 | 4.9 | 6.1 | 3.7 | -2.1 | -0.4 | -3.4 | 1.5 | -1.6 |
| Sweden | -0.6 | -5.3 | -2.5 | -0.2 | 10.0 | 5.8 | 3.7 | 8.1 | -0.4 | -3.6 | -0.1 | -2.3 |
| Estonia | -2.4 | -10.3 | -2.4 | -27.9 | 23.5 | 36.4 | 2.0 | 26.7 | 19.6 | -6.6 | 13.9 | 5.6 |
| Latvia | 1.5 | -22.8 | 18.5 | 25.6 | -12.5 | 9.2 | -5.0 | -29.9 | 15.8 | 5.3 | 3.9 | 22.8 |
| Lithuania | -2.3 | -6.5 | -4.8 | 0.0 | 18.3 | 11.0 | 7.0 | 13.5 | -6.6 | -19.8 | 0.0 | -8.9 |
| Poland | 10.4 | 2.3 | -5.7 | -3.7 | -5.6 | 7.4 | 9.5 | -0.6 | 8.2 | -1.6 | 8.2 | 5.9 |

Source: own work.

The largest decrease in the female labour force participation rate in the ICT industry occurred in Denmark (by 15.6%, annual average 2.8%), Germany (9.6%, annual average 1.6%) and Finland (9.2%, annual average 1.6%).

While analysing changes to the number of working women and men in the ICT industry (relative changes) – compare table 2 – one can note a few specific situations. In the case of Germany, in the group of men the only decrease in the employment rates was noted in 2013 compared to 2012, of as much as 11.1%. This was the largest drop in the employment rate for men year-to-year in the BSR-EU15 countries. During the other periods, the employment rates for men in Germany in this industry were on the increase, but not enough to compen-

sate for such a large drop. On the other hand, in 2011 compared to 2010, Sweden noted the highest growth of the employment rate for men among the BSR-EU15 countries (by 10%). Another increase in the employment rates took place in 2012 (by 3.7%). The other years saw drops, but they were so insignificant that in the whole analysed period, Sweden noted a nearly 10-percent increase in the employment rates for men. The largest changes occurred in the BSR-NM10 countries. In this case, the range of fluctuations (the maximum value minus the minimum value) of changes in the employment rates for men in the ICT industry is considerably larger than for the BSR-EU15 countries. For the analysed period, it accounted for 16.1 percentage points in the case of Poland to 31 percentage points in the case of

Lithuania. The largest *in plus* change year-to-year was noted in Estonia in 2011 (23.5%), and the *in minus* change in Latvia (-12.5%) in 2011 as well.

The largest drop in the employment rate for women from the BSR-EU15 countries in the ICT industry was noted in Denmark in 2011 (by 10%), and the largest growth in Sweden in 2012 – by 8.1%. Similarly as in the case of men, the employment rate for women in the ICT sector was characterised by a greater range of change in the BSR-NM10 countries. Here, the largest growth in the employment rate year-to-year occurred in Estonia – by 36.4%, and the largest drops were noted in Latvia in 2012 compared to 2011 (by 29.9%) and Estonia in 2010 compared to 2009 (by 27.9%).

Employment rate in the tourism industry (accommodation and food)

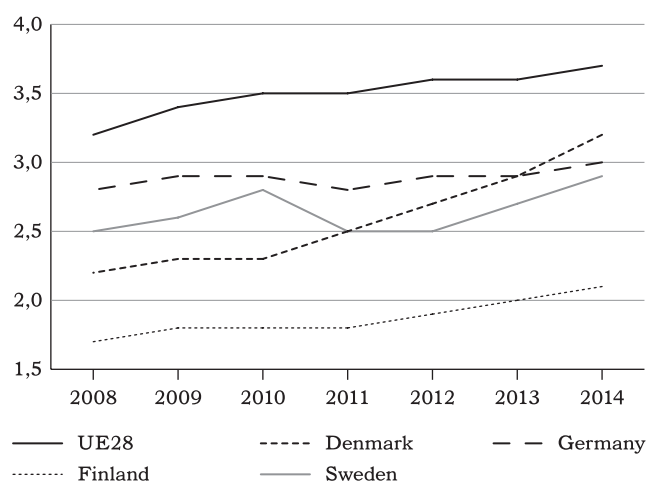
Labour participation rate (*pSE*) in the tourism industry (accommodation and food) in the years 2008-2014 in the EU28 increased from 4% to 4.4%. For men this rate increased from 3.2% to 3.7%, and for women from 4.9% to 5.2%. These numbers show by far greater female labour participation rate in this industry compared to the ICT industry and an increase in the employment rate for women in the accommodation and food industry, which indicates an opposite trend than in the case of the ICT industry.

Figures 5, 6, 7 and 8 show the values of *pSE* indicators in the BSR countries during the analysed period. In all the analysed countries, the male labour participation rate in the tourism industry was smaller than the rate for the EU as a whole. In 2014, it oscillated between 1% for Lithuania to 3.2% for Denmark. In addition, it should be noted that the male labour participation rate in this industry in the BSR-EU15 countries is on average higher than in the BSR-NM10 countries. In 2014, the female labour participation rate in the accommodation and food industry oscillated between 3.3% in Sweden to 6% in Estonia. In addition, Estonia was the only country, in which the *pSE* indicator for women exceeded the value for the EU28 as a whole.

Data presented in figures 5, 6, 7, 8 and in Table 3 show that upward trends have been noted for men in all the analysed countries (this relates both to the employment rates and labour participation rates in the accommodation and food industry). In the years 2008-2014, the employment rate for men increased

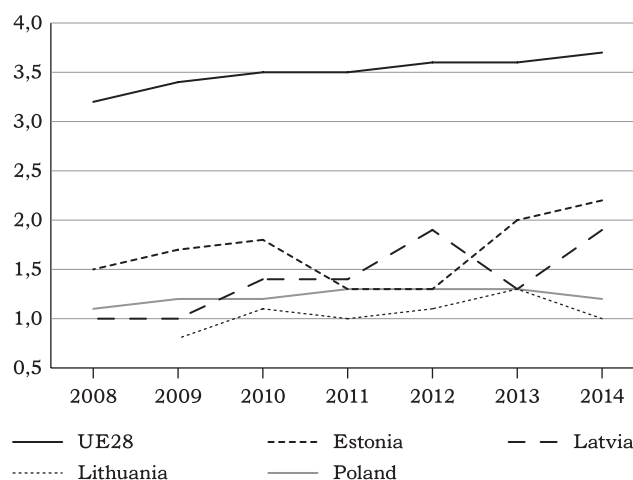
the most in Latvia (by as much as 68.8%) and in Estonia (37.5%), Denmark (37.2%) and Lithuania (36.2%). For women, a downward trend was noted in only two countries (Finland and Latvia). In these countries, the employment rate for women in 2014, compared to 2008, decreased by 12.3% and 4.2% respectively. The largest increase in the employment rates for women occurred in Denmark (by 31.1%) and Poland (by 11.7%).

Figure 5. Male labour participation rate in the tourism industry in the total number of working men aged 20-64 in the EU and Denmark, Finland, Germany and Sweden, in the period 2008-2014



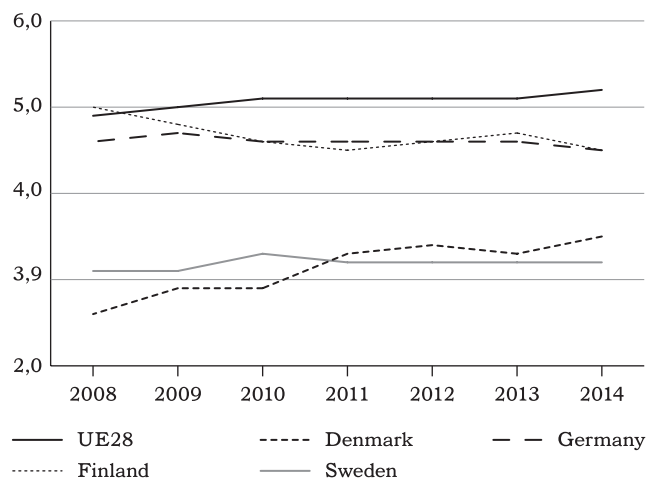
Source: own work.

Figure 6. Male labour participation rate in the tourism industry in the total number of working men aged 20-64 in the EU and Estonia, Lithuania, Latvia and Poland, in the period 2008-2014



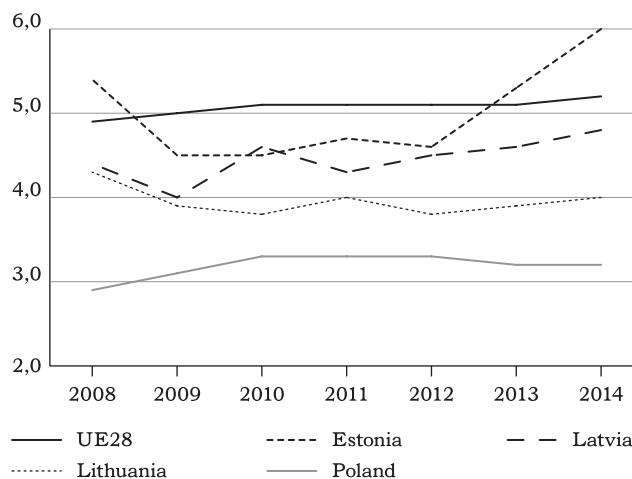
Source: own work.

Figure 7. Female labour participation rate in the tourism industry in the total number of working women aged 20-64 in the EU and Denmark, Finland, Germany and Sweden, in the period 2008-2014



Source: own work.

Figure 8. Female labour participation rate in the tourism industry in the total number of working women aged 20-64 in the EU and Estonia, Lithuania, Latvia and Poland, in the period 2008-2014



Source: own work.

Table 3. Changes in the employment rate for women and men in the accommodation and food industry in the BSR countries in the years 2008-2014

| Region/country | Labour participation rate: average rate of change | | Employment rate: average rate of change | | Change in employment rates 2014/2008 | |
|----------------|--|-------|--|-------|---|--------|
| | Women | Men | Women | Men | Women | Men |
| UE28 | 0.7 | 2.4 | 0.8 | 1.7 | 4.8 | 10.7 |
| Denmark | 5.4 | 6.4 | 4.6 | 5.4 | 31.1 | 37.2 |
| Germany | -0.3 | 1.1 | 0.8 | 1.3 | 4.7 | 7.8 |
| Finland | -1.7 | 3.7 | -2.2 | 2.8 | -12.3 | 17.7 |
| Sweden | 0.8 | 2.4 | 1.5 | 2.7 | 9.2 | 17.6 |
| Estonia | 1.9 | 6.1 | 1.0 | 5.5 | 6.1 | 37.5 |
| Latvia | 1.7 | 12.1* | -0.7 | 9.1 * | -4.2 | 68.8 * |
| Lithuania | -0.9 | 5.8 | -1.8 | 6.4 | -10.5 | 36.2 |
| Poland | 1.8 | 1.7 | 1.9 | 1.9 | 11.7 | 12.0 |

* Values determined for the period 2009-2014 as no data are available for 2008

Source: own work.

An average rate of change relating both to the number of employees and the *pSE* indicator shows that in the accommodation and food industry the employment rates for men increase much faster than the employment rates for women.

Table 4 presents relative changes (year-to-year) in the employment rates for women and men. In 2009, Estonia, Lithuania and Latvia saw the largest drops in the employment rates for women, of more than 10% (20.1%, 11.1% and 16.7% respectively). On the other hand, the largest growth in the employ-

ment rates occurred in 2013 and 2014 in Estonia (by 14.2% and 13.7% respectively), in 2009 in Denmark (by 11.7%) and in 2010 in Latvia (by 10%). In some cases, annual changes in the employment rates for men were much larger, of over 30%. Such occurrences were diagnosed in Estonia – 56.4% (a change for the years 2013/2012), Latvia – 47.3% (a change for 2014/2013) and 34.5% (2012/2011) and Lithuania – 38.3% (2010/2009). Changes in the employment rates for women and men in Estonia, Lithuania and Latvia were characterised by

Table 4. Dynamics in the employment rate for men and women in the accommodation and food industry (relative changes year-to-year, %)

| Region/country | 2009 | | 2010 | | 2011 | | 2012 | | 2013 | | 2014 | |
|----------------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women | Men | Women |
| UE28 | 1.5 | 1.7 | 2.9 | 0.4 | 0.4 | 0.9 | 1.2 | -0.2 | 0.5 | -0.5 | 3.8 | 2.4 |
| Denmark | 1.3 | 11.7 | -2.6 | -0.9 | 7.7 | 9.7 | 10.6 | 2.9 | 7.3 | -1.5 | 8.7 | 6.4 |
| Germany | 1.6 | 3.5 | 2.2 | -0.6 | -3.5 | 0.8 | 3.7 | 1.0 | 0.0 | 0.7 | 3.8 | -0.7 |
| Finland | 1.0 | -6.2 | 5.2 | -4.7 | 0.9 | -1.1 | 2.2 | 2.9 | 6.6 | -0.4 | 0.8 | -3.2 |
| Sweden | 0.9 | -2.1 | 6.8 | 7.7 | -8.6 | -0.3 | 0.7 | 1.5 | 9.6 | 0.7 | 8.3 | 1.5 |
| Estonia | -2.1 | -20.1 | 2.1 | -3.8 | -20.8 | 6.3 | 2.6 | 0.0 | 56.4 | 14.2 | 8.2 | 13.7 |
| Latvia | -12.5 | -16.7 | 28.6 | 10.0 | 7.4 | -7.1 | 34.5 | 4.9 | -29.5 | 3.1 | 47.3 | 4.0 |
| Lithuania | N/D | -11.1 | 38.3 | -7.2 | -6.2 | 4.1 | 11.5 | -4.7 | 13.2 | 2.9 | -16.9 | 6.4 |
| Poland | 11.8 | 7.4 | 1.8 | 2.7 | 5.0 | -0.5 | 1.7 | 2.8 | -1.5 | -5.8 | -6.3 | 4.9 |

N/D – no data

Source: own work.

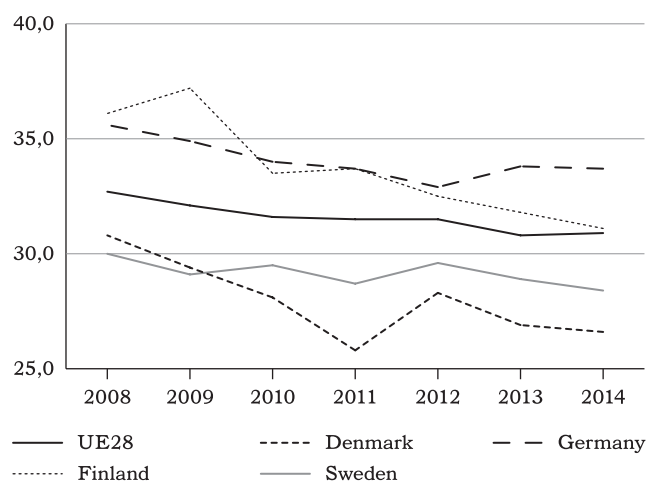
a wider range (wider scope) than those noted in the other countries. First of all, this phenomenon may be explained by the size of these countries' markets (compared to the other countries, Lithuania, Latvia and Estonia are much smaller). Much smaller population translates into much smaller labour force. Even small relative changes experienced by such force translate into large absolute changes. Secondly, these countries' markets are classified as emerging markets; and thus, they may be more sensitive to economic turmoil, which is a typical feature of the tourism industry [Zdon-Korzeniowska, Rachwał 2011]. On the other hand, adverse changes in the economy translate, among other things, into limiting the employment [Cazes et al. 2009].

Trends in the feminisation of the ICT and accommodation and food industries

Figures 9, 10, 11 and 12 show the indicators of feminisation (*pFE*) for the area of employment in the ICT, as well as the accommodation and food industries. In 2014, female labour participation rate in the ICT industry in the analysed group of countries oscillated from 26.6% in Denmark to 39.3% in Lithuania. It is worthwhile to point out that in only two countries from this group (i.e., in Denmark and Sweden), the feminisation rate of the ICT industry was smaller than the rate for the EU28 as a whole (30.9%). Furthermore, it was on average higher in the BSR-NM10 group than in the BSR-EU15 group.

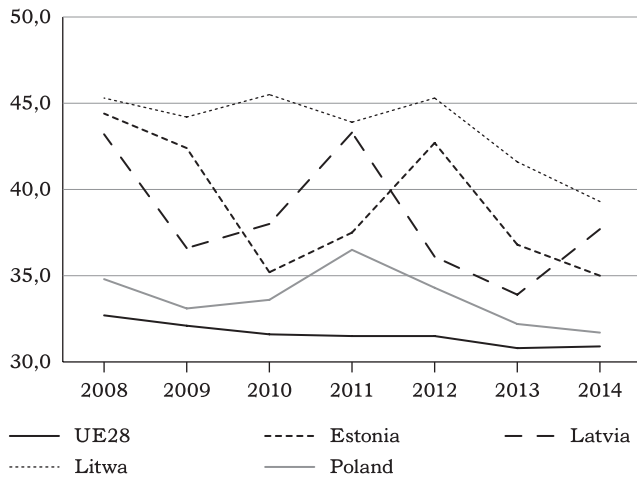
Downward trends in the feminisation rate of this industry confirm the above-presented results concerning decreasing employment rates for women. The female labour participation rate was limited to the greatest extent in the former Baltic Republics. During the analysed period, the values of the *pFE* indicator decreased: by 9.4 p.p. in Estonia, by 6 p.p. in Lithuania and by 5.4 p.p. in Latvia. As regards the group of BSR-EU15 countries, the largest decrease was noted in Finland (by 4.9 p.p.) and Denmark (by 4.2 p.p.).

Figure 9. Female labour force participation rates in the ICT industry in Denmark, Germany, Finland and Sweden against the background of the EU average in the years 2008-2014



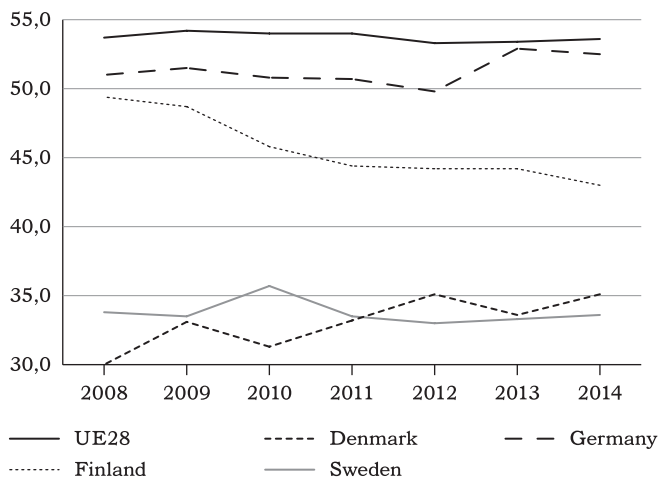
Source: own work.

Figure 10. Female labour force participation rates in the ICT industry in Estonia, Lithuania, Latvia and Poland against the background of the EU average in the years 2008-2014



Source: own work.

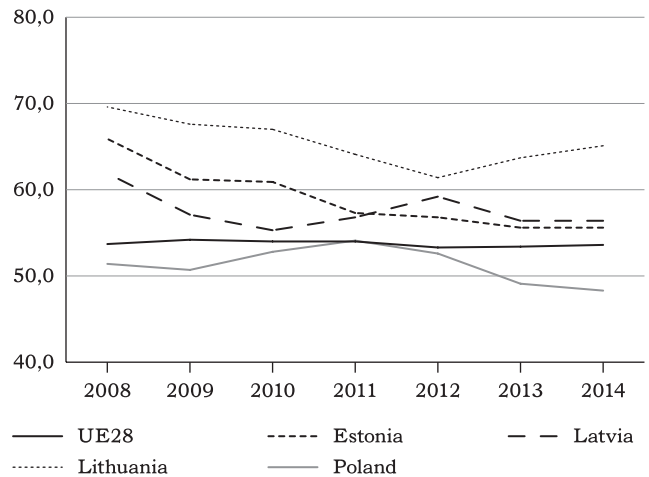
Figure 11. Female labour force participation rates in the accommodation and food industry in Denmark, Germany, Finland and Sweden against the background of the EU average in the years 2008-2014



Source: own work.

The accommodation and food industry is more feminised than the ICT industry. In 2014, the smallest female labour participation rate in this industry was noted in Sweden (33.6%) and Denmark (35.1%). In addition, two countries have not exceeded the limit of 50%, namely Finland (43%) and Poland (48.3%). In the other BSR countries, the value of the pFE indicator was higher than 50%. The EU level (53.6%) was exceeded only in the

Figure 12. Female labour force participation rates in the accommodation and food industry in Estonia, Lithuania, Latvia and Poland against the background of the EU average in the years 2008-2014



Source: own work.

former Soviet Republics, the most in Lithuania, where women accounted for 65.1% of those employed in this industry.

Summary

Eurostat data show that the level of professional activation of women has been steadily increasing. The labour market is characterised by a division into the feminised and masculinised sectors and occupations. The same situation was observed in the described industries: the ICT industry and the accommodation and food industry. The ICT industry is male dominated, which can result mainly from career paths pursued by women (far fewer women than men choose education in the field of information and communication technologies, cf. e.g., *Women active in the ICT sector*, 2013). Moreover, in the analysed period, 2008-2014, a clear trend was observed towards a growth in the employment rate for men and a drop in the employment rate for women.

The tourism industry is much more feminised than the ICT industry. Within the whole area of the EU, the employment rate for women in the accommodation and food services exceeds 50%. However, there are countries (in particular in the BSR group), where women do not account for more than 36% of employees (Sweden and Denmark). It is worthwhile

to note that in the analysed period, the employment rate for men in this industry increased much more than the employment rate for women, which translated into a decrease in the female labour force participation rate. The only exceptions were Denmark and Germany, where the feminisation rate was larger at the end of the research period than at the beginning. In addition, it should be noted that in both industries average female labour force participation rate was higher in the BSR-NM10 countries than in the BSR-EU15 countries.

Another phenomenon that has been observed is greater oscillation of changes (greater scope of changes) in the employment rates for women and men in the former Baltic Republics (Estonia, Lithuania and Latvia) compared to the Scandinavian countries, Germany and Poland⁸. This is due to the fact that small labour markets are more sensitive to changes in the employment structure than larger ones. However, during the whole analysed period, despite such large oscillations, the smaller markets finally noted a much larger relative increase in the employment rates (in particular in the case of men) than the larger markets.

As regards the employment structure, a clear division is drawn up between the BSR-EU15 and the BSR-NM10 countries. The latter group notes: first of all a larger female labour participation rate in the analysed industries (as mentioned earlier), and secondly, higher average (relative) growths or smaller average drops in the employment rates for men and women.

¹ The first target in the strategy, that should be achieved by 2020, is increasing the employment rate in the EU to 75%. This is to be achieved, among others, through greater mobilization of women in the labour market.

² The term economically active is used with reference to those employed and persons looking for a job (the unemployed). Theoretical grounds for this phenomenon are described, among others, in the following papers: [Kryńska, Kwiatkowski 2013], [Kwiatkowski 2002].

³ In the case of men from the same age group, the share of economically active was 83.2% in 2014 and has increased by 1.2 p.p. since 2002. Data relating to economic activity in the EU28 have been available since 2002.

⁴ Issues relating to female entrepreneurship are presented, among others, in the papers of Lisowska [2001] and Borowska [2013].

⁵ The Central Statistical Office defined ICT as a family of technologies used to process, collect and transmit information in electronic form [Społeczeństwo... 2015]. On the other hand, the Polish Information and Foreign Investments Agency (PAIIZ) defines the ICT industry as „activities aimed at the manufacturing of communications and information devices as well as the accompanying services” [Cygler 2003].

⁶ Statistical data on the functioning of the economy in relation to the industries are collected: by order of Eurostat with the support of the Statistical Classification of Economic Activities in the European Union (Nomenclature statistique des Activités économiques dans la Communauté Européenne), which is also used as a reference point for the Polish Classification of Economic Activities (PKD). The analysis covers the period from 2008, because in this year the new NACE 2 classification, in which the ICT industry was isolated, became effective.

⁷ According to the Eurostat data, in the group of small countries, in 2014, the employment rate in the ICT industry did not exceed 27 thousand of persons, while in the other countries subject to analysis, it was approx. 100 thousand or more. On the other hand, in the accommodation and food services industry, the number of employees in the first group was not higher than 33 thousand people, and in the other group it exceeded 75 thousand people. Thus, in the first case even small changes to the absolute number of employees will be relatively large compared to the changes to the larger markets.

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