

## Gender Segregated Labour Markets in the Baltics What are Prevailing – Similarities or Differences?

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### Abstract

This paper focuses on men and women and the gender segregation of jobs in the Baltic countries. Based on the Estonian, Latvian and Lithuanian labour force survey data, a look is taken at the employment structure of men and women by industries and occupations, as well as at the question whether or not gender segregation in the labour market has been increased after the collapse of the communist systems in the region under consideration. Empirical data demonstrate that in respect to industrial gender segregation there is some increase in Estonia and Latvia, but not in Lithuania. Occupational gender segregation demonstrates more stability in all three Baltic States. Compared to the Western European countries, the main trend is towards bigger similarities.

**Keywords:** Gender, segregation, labour market, (in)equality, Baltic states.

### Introduction

The gender segregation of jobs is under close attention in most countries, regardless of their wealth, population or location. It has been and still is one of the most important and enduring aspects of labour markets around the world (e.g. Rosenfeld & Kalleberg 1991, Anker 1998, Blau & Kahn 1999, Reskin 2000, Budig 2002, Karlin *et al.* 2002, Kmec 2005, Blackburn & Jarman 2006, Roos 2008).

There are many reasons to deal with the gender segregation of jobs. First of all, it is an important source of labour market rigidity and economic inefficiency. In addition, the gender segregation of jobs has a negative effect on how men view women and on how women view themselves (Anker 1997). This in turn leads to unequal earnings, authority and social status for women and men. Women are concentrated at low levels in the organisations that employ them, employers tend to reserve powerful positions for men, while women are less likely than men to exercise authority in the workplace (Reskin & Padavic 1994, Kraus & Yonay 2000, Fodor 2004, Huffman & Cohen 2004, Cohen & Huffman 2007, Sools *et al.* 2007). The persistence of gender stereotypes also has negative effects on education and training and, thus, causes gender-based inequalities to be perpetuated in future generations (Anker 1997).

This article concentrates first and foremost on the question whether gender segregation in the labour market of Baltic countries has increased/decreased during the 10-12 years following to the collapse of the communist system. It is a well-known fact that women's labour force participation rates in the former USSR were very high. At first glance, it supported the authorities to claim that the principle of gender equality in occupational opportunities had been achieved. The fact that women and men continued to occupy different jobs in different sectors and at different levels (*i.e.* were horizontally and vertically segregated - Blackburn *et al.* 2000, Charles 2003) received far less attention. Given the radical changes in the Baltic States' economic and occupational structure, we might expect that the established patterns of gender segregation shifted and perhaps weakened. In addition, we are interested in the question of what kind of tendencies are prevailing when comparing Estonia, Latvia and Lithuania with each other – are there greater similarities or differences? How different are Baltic countries from Western European countries in the sense of gender segregation? These questions are extremely important since occupational gender segregation (differential distribution of men and women in managerial positions) has frequently been assumed to be a structure of gender inequality in the labour market and high levels of segregation are equated to high levels of gender inequality in a society (Blackburn *et al.* 2000).

One more important moment should be pointed out. The author supports Richard Anker's statement, according to which 'most of the research literature on occupational segregation by sex is *not* concerned with occupational segregation *per se*, but with the effect it has on female-male pay differentials... This is unfortunate, since female-male pay differentials have many sources'. And most

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importantly: ‘... sex segregation of occupations is an important topic in its own rights’ (Anker 1997: 315). This statement is followed in this paper as well.

## Theoretical approaches

Western social science literature has traditionally used three broad kinds of explanations to account for job segregation by sex: (1) those that focus on the characteristics of workers themselves (neoclassical and human capital theories), (2) those that focus on the characteristics of the jobs (institutional and labour market segmentation theories), and (3) the non-economic and feminist or gender theories.

According to the neo-classical theory, workers seek out the best-paying jobs, taking into consideration their own personal abilities, constraints and preferences. These theories also stress that women are less productive compared to men and that they are almost exclusively responsible for housework and child care. More over, neoclassical/human capital theories (Mincer & Polacheck 1974) propose that women plan their lives differently from the way men do, fundamentally because women expect to (have to) withdraw from the labour market (at least temporary) in order to raise their children. Women, therefore, expect that their labour force participation will be discontinuous in nature and take this into account when they make occupational choices. They prefer occupations with relatively high starting pay, relatively low returns to experience and relatively low penalties for temporary withdrawal from the labour force, including occupations which are flexible in terms of entry and working hours (Anker 1997).

The second group of explanations – institutional and labour market segmentation theories – includes a *dual labour market theory* (distinguishing between a ‘primary’ and a ‘secondary’ sector, ‘static’ and ‘progressive’ jobs, also ‘formal’ and ‘informal’ sectors), and a *statistical discrimination theory* (Anker 1997). According to the dual labour market theory, one segment where jobs are relatively good in terms of pay, security and working conditions, comprised of ‘male’ occupations and another of ‘female’ occupations. And while each labour market segment may function according to the neoclassical theory (determining who is hired, fired and promoted and how much they are paid), it is difficult for workers to pass from one segment to another. The statistical discrimination theory proposes that there are differences in the productivity, skills, experience of groups of workers and – thinking about men and women – mostly women are discriminated against since they are considered to be less productive, have less skills, etc.

Feminist or gender theories (devaluation theory, discrimination theory, preference theory etc.) are mainly concerned with non-labour market variables, which economists take as a given (Anker 1997). These theories do not specify why jobs are filled by one sex or the other. Instead, they focus on the question what happens once they are. The starting point of these theories is that women’s disadvantaged position in the labour market – such as their concentration in lower level occupations and lower paying jobs – is caused by patriarchy and women’s subordinated position in the society and the family. Thus, for example, the devaluation theory claims that if a job is filled mostly by women, employers start seeing the job as less valuable or less demanding (Karlin *et al.* 2002).

## Segregation in the Soviet labour market and consequences of social change

There was a clear tendency for men and women to be employed in different industries and occupations in the former socialist countries (Sorensen & Trappe 1995, van der Lippe & Fodor 1998, Orazem & Vodopivec 2000). Thus, for example, in Estonia, according to statistical data, by the end of the Soviet period women’s share differed greatly by industries, ranging from 20-25% in construction and transport to 80-90% in education and health. In addition, the share of women among occupational groups like legislators, high officials and managers was quite low, while they were widely represented in less prestigious occupations where the wages were below the average (Vöörmann 2000). This means that women were ‘crowded’ not only into certain occupations, but also into certain industries, which were considered to be ‘female work’. In other words, there was clear vertical and horizontal gender segregation of labour in the Baltics as in other developed countries (Eamets 2001, Vöörmann 2000).

Political, economic and social reforms that started in the beginning of the 1990s have significantly influenced the labour markets of all three Baltic States. The immediate reaction to economic uncertainty was a sharp decline in demand for labour (Paas *et al.* 2002). This brought about several unexpected consequences. First of all, the labour markets of transitional economies have witnessed the expansion

of unemployment and involuntary job shifts. This was a very different experience compared with the Soviet era, when employment was guaranteed by the State, and those who did not work were viewed with contempt by society as a whole. In other words, it was a shock for the people when guaranteed employment was replaced by competition for the rapidly reducing number of jobs.

Serious employment losses were experienced by the industrial sector and agriculture as well (except in Lithuania). This statement is illustrated by the fact that the most dramatic decline in agricultural employment took place in Estonia – from 140,000 (1989) to 35,000 in 2001 (Paas *et al.* 2002). At the same time, the economic restructuring has led to a growth in labour demand in the tertiary sector, especially for banking and other services. However, in Estonia, for example, the number of employed persons has been continuously decreasing since the end of the 1980s. At the beginning of this decade, the number of employed persons in Estonia was less than 600,000, that is over 200,000 less than in 1989 (Estonian Statistical Yearbook 2003). In Latvia, according to the Latvian LFS the number of employees declined between 1992 and 2000 by almost 260,000, which is about a 20% reduction (<http://laborsta.ilo.org>).

One more phenomenon – unemployment – which was unknown in Soviet times, became commonplace in the early 1990s. The unemployment rate in the Baltic countries has fluctuated over time, but in a certain sense the Baltic States are unique – they have experienced some of the highest levels of the unemployment rates in all Eastern European economies, with maximum rates of 13.7 in Estonia (2000), 19.4 in Latvia (1996), and 17.1 in Lithuania (1995) (Paas *et al.* 2002). After peaking in the mid-1990s, the unemployment level stabilised in all three countries, but since the end of 1998 it has increased further first of all in Estonia, possibly as a result of the economic crisis in Russia. In the beginning of this century, the main trend concerning unemployment has been a decline: in 2005 the unemployment rate in Estonia, Latvia and Lithuania was respectively 7.9%, 8.7% and 8.3% (<http://laborsta.ilo.org>). Since 2008, due to economic developments, there is a new growth in the rate of unemployment.

## Data and method

We make use of the Labour Force Survey (LFS) data, carried out in countries under consideration (<http://laborsta.ilo.org>). While the Estonian LFS (first survey was carried out in 1995) had a retrospective part of the questionnaire, which allows, principally, to follow labour market developments since 1989, the Latvian and Lithuanian LFSs did not include this topic. Because of that for Latvia and Lithuania there are two types of data used: (1) official estimates, covering the period of 1992 up to 2000 for Latvia and 1992-2001 for Lithuania; (2) labour force survey data, covering the period of 1996-2004 for Latvia and 1997-2004 for Lithuania.

At first, we analyse the composition of male and female employment by three – primary, secondary and tertiary – sectors of economy and according to their occupational groups based on the ISCO-88 scale (International Standard Classification of Occupations 1988). This is one way of assessing the gender-based division of employment in society. The next step, a more general one that allows for the analysis of the extent of gender-based division in employment, is to calculate the index of industrial and occupational gender segregation, the index of dissimilarity. This index is computed as follows:

$$D = \left(\frac{1}{2}\right) \sum_j [(F_j / F) - (M_j / M)],$$

where  $F_j$  and  $M_j$  denote the number of female and male employees in the  $j$ th industry or occupation, and  $F$  and  $M$  are total female and male employment, respectively.

Such an index can be viewed as a measure of the extent to which men and women are unevenly distributed across industries and occupations (see *e.g.*, Albelda 1986, Charles & Grusky 1995, Watts 1998, White 1985). In other words, as a percentage value, it shows what percentage of (fe)male labour force should change their jobs and be employed in an area where the respective sex has been underrepresented to achieve zero segregation, *i.e.* corresponding to the gender structure of the entire society. Another extreme would be total segregation, *i.e.* a population composed entirely of monks and nuns, as mentioned strikingly by Blackburn *et al.* (2000).

## Results

Following the logic of analysis, let us take at first a more precise look at the industrial and occupational employment structure by gender in the Baltic countries during the transition period. At the same time, this will provide some background information for further analysis of gender segregation.

### Industrial employment and gender

In addition to the overall decrease of employees, the transition process also brought about fundamental changes to the composition of male and female employment in the three main sectors of economy – primary (agricultural), secondary (industrial) and tertiary (service) – in all three Baltic countries. The changes in the shares of each of these sectors by gender over the last decade are shown in Figure 1.

The data indicate the following. The employment structure of men and women according to sectors of the economy were different, both in the beginning of changes (*i.e.* in the beginning of the 1990s) and in the beginning of the new century. First, let us take a look at the situation at the time when economic reforms started.

In 1992, the employment of women both in primary and secondary sectors was lower than that of men in all of the countries under consideration. At the same time, if the share of women and men employed in primary sector was almost on the same level in all three countries, this was not the case concerning the secondary sector. Although the biggest part of men in all three countries was employed in the secondary sector, the employment of men in this sector was highest in Lithuania, where it constituted a little bit less than half (46%) of all men employed. For Estonia and Latvia, which were considered to be more industrial countries than Lithuania, these figures were lower, respectively 42% and 37%.

Conversely, women had rallied around the service sector (tertiary sector), constituting over half or more of all women employed. The highest share of women in the service sector was found in Latvia (59%), the lowest in Lithuania (54%), and the respective figure for Estonia was 57%. This means that the differences between countries were very small. As for men, in Estonia and Latvia the share of men employed in service sector made up a little bit more than one third of all men employed, while in Lithuania the percentage was 29%.

The restructuring of the economy, which was launched at the beginning of the 1990s after the breakup of the former USSR and regained independence in Estonia, Latvia and Lithuania, was accompanied by significant changes in the employment structure of men and women according to the economic sectors. Large-scale manufacturing operations, which had been centrally controlled from Moscow, were either closed or broken down into smaller units (Pavelson & Luuk 2002, Vöörmann & Helemäe 2003). The collapse of collective (Soviet type) agriculture and the rapid development of the service sector also had an influence on the changes in sectorial employment by gender. The main trend was that, as a whole, it became more similar to the employment structure of advanced Western European countries.

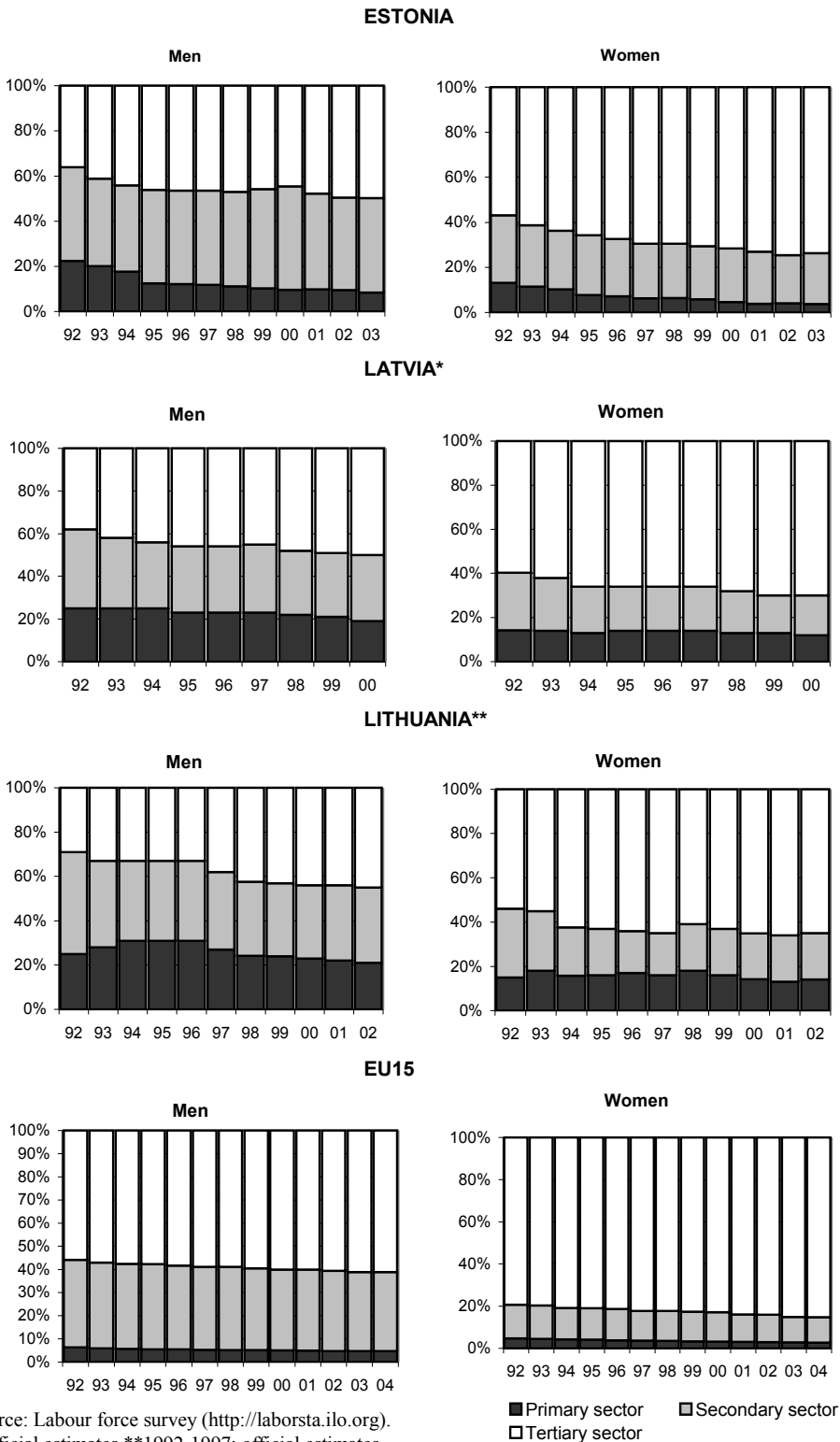
Let us take a look at the sectorial employment structure in the EU15 countries (*i.e.* in the West European countries, before enlargement of the EU in 2004) in order to see how different or similar it was compared with the Baltic countries.

The first and the most general conclusion is that it differs significantly from that of Baltic countries (Figure 1). The latter have a long way to go before becoming similar to the EU15 countries on average. Concrete data show the following. In the beginning of the 1990s, the share of men in the EU15 countries employed in the primary sector was about six per cent, among women the respective figure was less than five per cent. During the next dozen years these figures decreased just a little. Some bigger changes took place concerning the secondary and tertiary sectors. The share of both men and women employed in the secondary sector decreased – among men from 38% in 1992 to 34% in 2004, and among women from 16% to 12%. The tertiary sector was the only one that developed (at least by quantitative measures) quite rapidly. The share of men as well as women employed in this sector increased during the period under consideration – respectively from 55% to 61% and from 79% to 85% (<http://laborsta.ilo.org>).

On the backdrop of these data, let us analyse which tendencies were characteristic for Estonia, Latvia and Lithuania during the societal transition period.

At first, it should be said that there are remarkable differences between Estonia and Latvia, on one hand, and Lithuania on the other in respect to sectorial employment developments. The agricultural employment declined most remarkably in Estonia – among men from 23% in 1992 to eight per cent in 2003, among women respectively from 13% to four per cent. In Latvia, the decrease was not so sharp, especially among women: according to official estimated data from 14% in 1992 to 12% in the year 2000 (among men from 25% to 19%).

Figure 1. Employment structure by three economic sectors in the Baltic countries and EU15 countries



Source: Labour force survey (<http://laborsta.ilo.org>).  
 \*Official estimates \*\*1992-1997: official estimates.

A totally different picture can be seen in Lithuania. In Lithuania, by contrast, the share of men as well as women employed in the primary sector increased in the first half of the 1990s and it dropped to the level of the starting point only by the middle of this decade. One explanation for the increasing employment in agriculture in Lithuania lies in the high state subsidies and high tariffs on food import. Obviously another reason for this phenomenon is the fact that during the privatisation process the land was distributed free of charge to those who were employed in agriculture at that time (Paas *et al.* 2002), which made employment in agriculture very attractive. Thus, one can see that compared with the EU15 countries the trend is the same – the share of both men and women employed in the primary sector has decreased, but it has decreased more rapidly. However, in Estonia, Latvia and Lithuania the share of people employed in agriculture is still higher than in the EU15 countries on average.

Industrial employment has declined less, compared with agriculture, in the three Baltic States. In each separate country, the situation is as follows. The share of Estonian men employed in the secondary sector has fluctuated just slightly over time, but in the beginning of the new century it is at the same level as it was a dozen years ago (and highest in the Baltics). In Latvia, some decline can be seen both among women and men. In addition, the share of men and women employed in industry in Latvia is the lowest among the three Baltic countries. The biggest decline of employment in the industrial sector took place in Lithuania, especially in the first half of the 1990s. In the second half of the 1990s and at the beginning of the 21st century, the share of men and women employed in the secondary sector in Lithuania has remained practically unchanged. However, it takes time to reach to the same level as the EU15 countries.

At the same time, the share of employment in the tertiary sector has grown in all three Baltic countries (mainly due to a decrease in the primary and secondary sectors in Latvia and Estonia, or only in the secondary sector in Lithuania). At the beginning of the reforms, the tertiary sector was the largest employer for women only. During the 1990s it had become the largest employer of men as well. However, in Lithuania the share of men employed in the service sector remained lower compared with that of the other two Baltic countries. A significant increase of employment in the service sector can be seen also among women, especially in Estonia. In Latvia and Lithuania, the respective figures are lower, but still quite high.

Based on these data we can draw some parallels with Western European countries. Firstly, it is important to stress that the employment structure of Baltic men and women (especially in Lithuania) continues to be different from that of advanced market economies, although no longer as distinctly as it was at the beginning of reforms. Secondly, a decline of employment in the primary sector (again, except Lithuania) and an increase in the tertiary sector confirm that the trend is towards more similarities. It allows concluding that, provided the same tendency continues, the differences in the employment structure between the Baltics and Western Europe should disappear in the not too distant future.

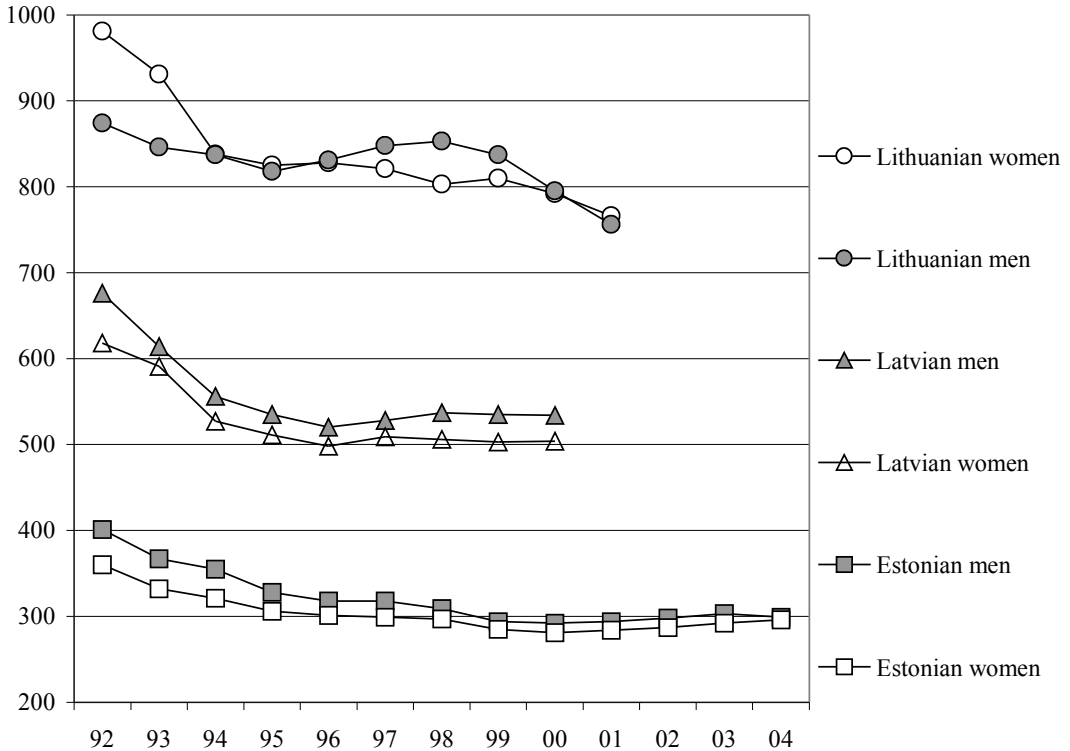
Thus, the employment structure of men as well as women by economic sectors in the Baltic countries has changed, first of all towards increasing the importance of the tertiary sector. The next question is how was this distribution achieved? At first glance, this change seems to mean that the number of people employed in the primary and secondary sector has decreased (except in Lithuania), while in the service sector it has increased. A closer look at the data, however, shows a somewhat different picture (Figures 2 and 3), which confirms the hypothesis for the primary and secondary sector, but not for the service sector.

Figure 2 presents data on the change in the total number of employees by gender. As one can see, the immediate reaction to economic reforms was a sharp decline in the demand for labour. This trend was typical for the first half of the 1990s in all three Baltic States. After that some stabilisation occurred, first of all in Estonia and Latvia, while in Lithuania starting from the end of the last decade a new decline in the number of employees can be seen.

When taking a look at employment by the three main sectors of economy, the following appears. The most significant decline (compared with the base year, *i.e.* 1992 level) took place in agriculture – in Estonia it dropped among men to the level of 28% in 2003, and among women to the level of 23%.

In Latvia, according to official estimates, employment in agriculture declined among men to 58% in 2000, compared with 1992. The respective figure for Latvian women was 67%. A totally different picture is offered by Lithuania – agricultural employment in that country during the first half of the 1990s increased, but only among men, and peaked in 1996, when men's employment in agriculture increased to 121% compared with 1992. Women's employment declined to the level of 91%. The second half of the 1990s and the beginning of the new century can be characterised by a falling trend of agricultural employment in Lithuania as well.

**Figure 2.** Change in the total number of employees by gender in Estonia, Latvia\* and Lithuania\*\*, in thousands



Source: Labour force survey (<http://laborsta.ilo.org>).

\*Official estimates.

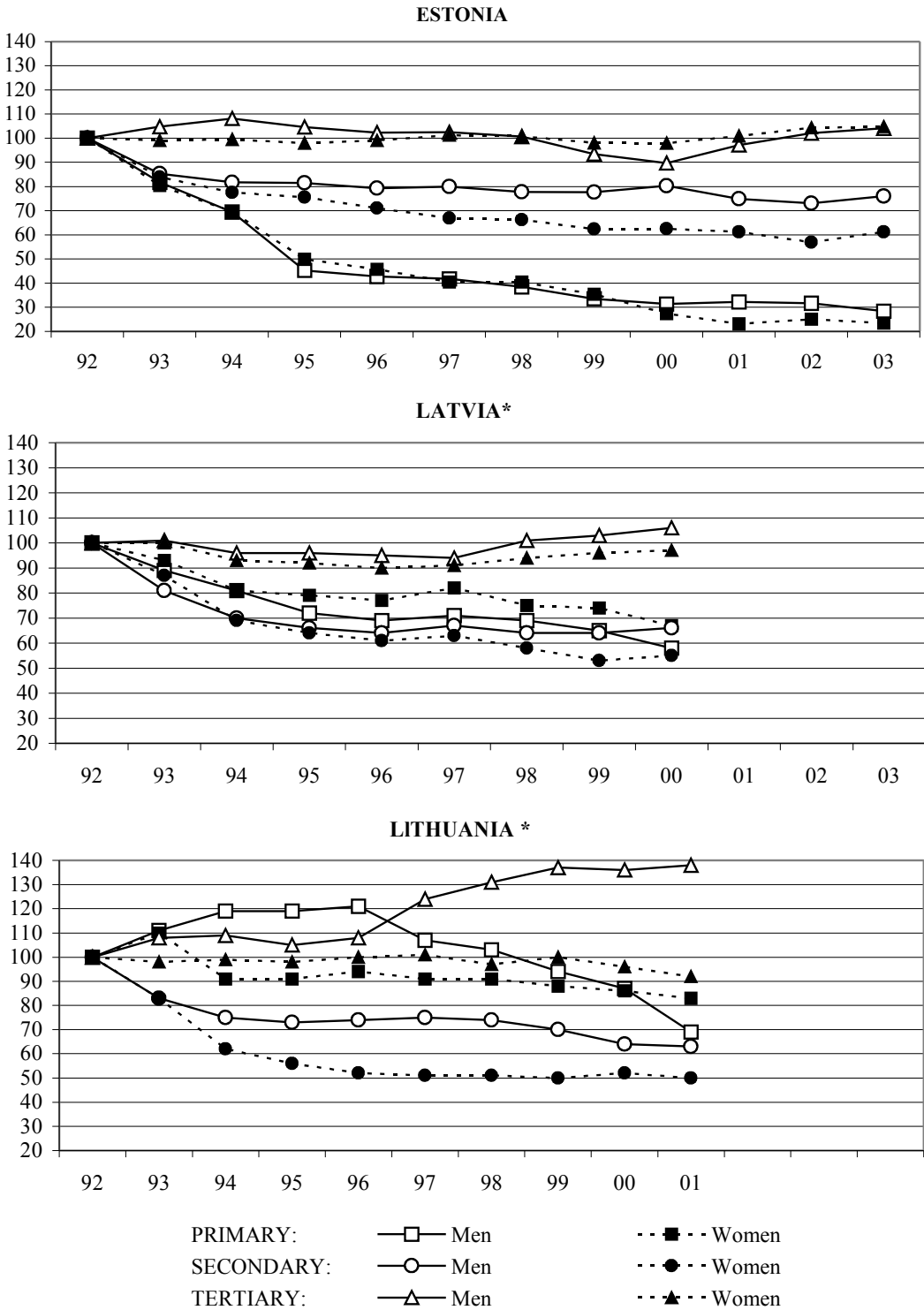
\*\*Official estimates, Statistical Yearbook of Lithuania 1998.

Serious employment losses were experienced also by the industrial sector, however, not as dramatically as by the agricultural sector. For example, in Estonia employment in the secondary sector among men dropped to 3/4 in 2003 compared with 1992, but in Lithuania the same level (3/4) was 'achieved' already in 1997. The biggest decline (to 2/3 in the year 2000) took place in Latvia, known earlier as the most industrialised country in the Baltics. Women's employment in the secondary sector declined a little bit more than that of men, especially in Lithuania.

The service sector is considered to be the most rapidly developing field of activity in the Baltic countries (as in the whole East and Central European region) (Eamets 2001). But if we take a look at the number of people employed in service sector, what can we see? What are the prevailing trends?

First, let us take a look at the Estonian data. In 1992, there were 145,000 men employed in the service sector. During the next years it was followed by a decline and then by a new increase. Among the Estonian women one can see an analogous tendency. In principle, the same picture is demonstrated by the other two Baltic countries as well. Latvian official estimated data show that men's employment in the tertiary sector increased between 1992 and 2000 by 106%, among women there was even some decline during the same period. Latvian labour force survey data, characterising the period between 1997 and 2002, demonstrate a modest increase of employment for both men and women in the service sector. In Lithuania (according to the official estimates), the number of women employed in the service sector almost did not change during the first half of the 1990s, while for men the increase was the highest among the Baltic countries. The end of the 1990s and the beginning of this century in Lithuania can be characterised by a decline for both men and women in the service sector, which is the opposite tendency compared with that of Estonia and Latvia.

**Figure 3 .** Change in number of employees by three economic sectors in the Baltic countries (1992 = 100%)



Source: Labour force survey (<http://laborsta.ilo.org>).

\*Official estimates.



All this allows to conclude that a change in the employment structure (a decline in primary and secondary sectors and an increase in the service sector) in the Baltic countries did not mean that people, both men as well as women, who were pushed out from agriculture or industry moved into the service sector. They moved mostly into inactivity. As a result, the share of people employed in the tertiary sector increased indeed, but the absolute number of employees in this sector remained almost unchanged.

## Occupational employment and gender

In addition to the fact that men and women are distributed unequally by industries, they are also unequally distributed by occupations, first of all in managerial positions (the glass ceiling effect). The following paragraph gives a short overview of the question how the occupational distribution of men and women has changed in the Baltic States during the decade starting with the social changes in the countries under consideration. For this purpose, the ISCO-88 scale of occupations (ISCO-88) was modified into three categories with conventional names: (1) higher white-collar workers (managers, professionals); (2) lower white-collar workers (technicians, clerks); (3) blue-collar workers (including service workers, plant and machine operators, etc.). This is quite a crude classification of occupations, however, according to the author's suggestion, it corresponds to the aim of this paragraph – to describe the distribution of men and women by occupations.

At first, it should be mentioned that in Estonia as well as in Latvia and Lithuania the biggest share of men during the whole period under consideration was employed as blue-collar workers: 65-75%. Second group by size included higher white-collar workers: 16-25% and the third – lower white-collar workers: 6-12%. Among women the order of occupational groups is the same, but the shares are different – 46-55% of women are employed as blue-collar workers, 22-28% as higher white-collar workers and 18-30% as lower white-collar workers. All in all, the distribution of employees between the above-mentioned three occupational groups is quite similar in all three Baltic countries.

Now, taking a look at the tendencies of employment by occupational groups, the following picture appears. The distribution of people employed as higher and lower white-collar and blue-collar workers has changed very little over time in all three Baltic countries, fluctuating within one country at a maximum interval of five per cent. Thus, for example, in Estonia men's distribution between these three groups in 1992 was 22%, 7% and 71%; and in 2003 these figures were respectively 25%, 9% and 66%. Among women the situation was even more stable. Principally the same picture, meaning almost no changes in the distribution of men and women between occupational groups, appeared in Latvia and Lithuania.

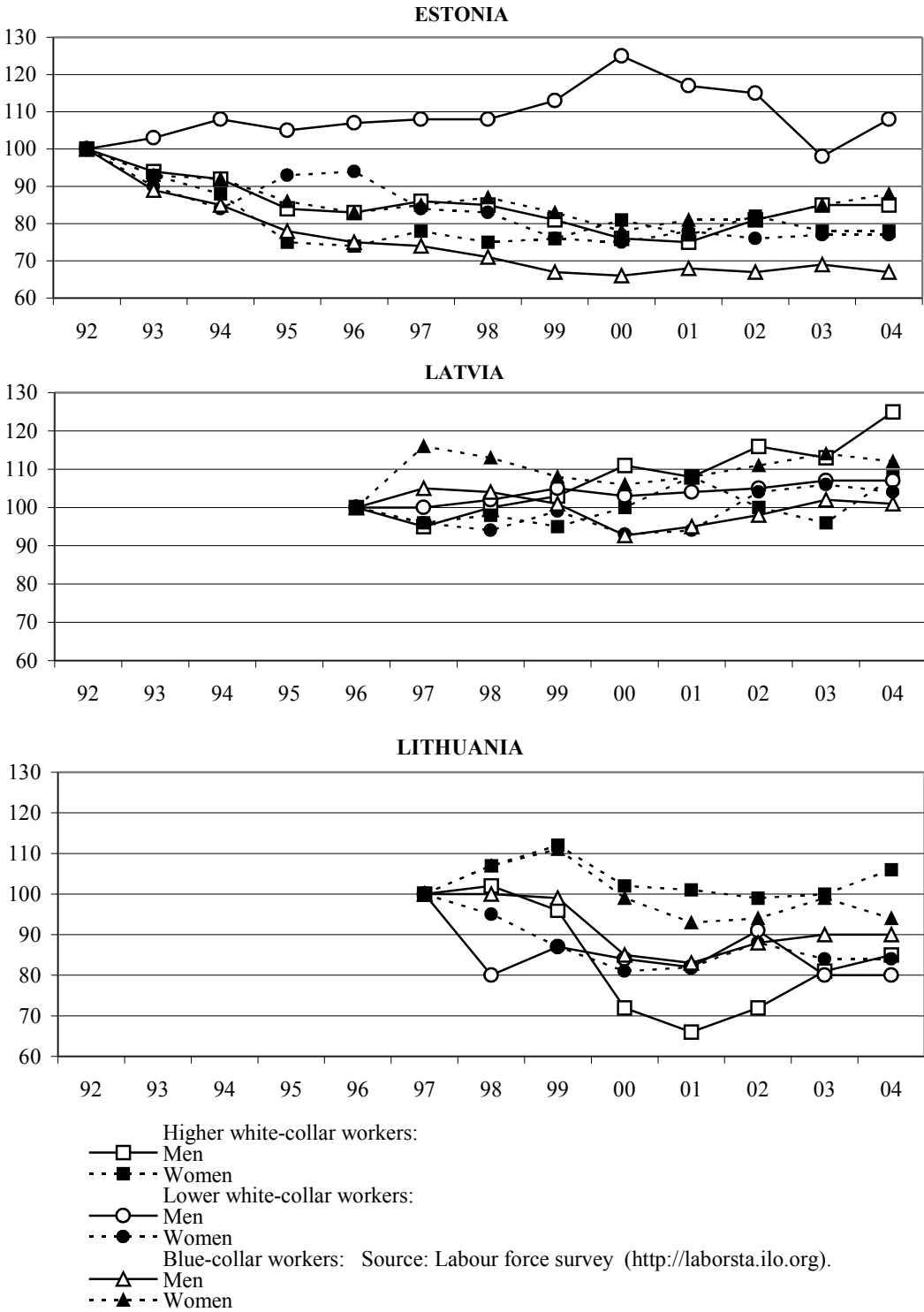
Based on the above-mentioned findings, it can be said that the transition period in the Baltic countries did not cause the changes in the distribution of both men and women employed as higher white-collar, lower white-collar or blue-collar workers. However, during the time between 1992 and 2003, the changes were not so straightforward.

This stability raises the question: did the absolute number of people employed as higher white-collar, lower white-collar or blue-collar workers change at all? A closer look at this question allows to respond – yes, it changed and quite notably so (Figure 4). Meanwhile, it should be remembered that the total number of employees declined dramatically in all three Baltic countries (take a look at Figure 2).

In Estonia, the biggest decline took place among blue-collar men. Between the years 1992 and 2003, the number of employees in this occupational group dropped from 284,000 to 197,000, *i.e.* to 69% compared with the year 1992. At the same time, the number of men employed as lower white-collar workers remained almost unchanged. Among Estonian women, the decline in the size of occupational groups under consideration was more equal.

For Lithuania and Latvia, there are (labour force survey) data characterising changes in the size of occupational groups, unfortunately, only for the second half of the 1990s and for the beginning of this decade. According to Lithuanian data, the most vulnerable was the occupational group of higher white-collar men, the size of which dropped to 72% in 2002 compared with the situation in the year 1997. The decline among lower white-collar and blue-collar men was about ten per cent. Women's situation in Lithuania appeared to be better if compared with that of the Estonian women. The biggest decline took place among the lower white-collar workers, while the two other groups lost fewer employees. Moreover, during the second half of the 1990s there was, *vice versa*, some increase in the size of occupational groups, like among the higher white-collar and blue-collar Lithuanian women.

Figure 4 . Change in numbers of employees by occupational groups in Baltic countries (1992 = 100%)



Latvia is to some extent a different example. If in Estonia and Lithuania the number of people in occupational groups under consideration declined, then in Latvia one can see the increase (or at least a stabilisation) in this respect, both among women as well as men between the years 1996 and 2002. The biggest growth took place in the group of higher white-collar men, which allows suggesting that the need for such kind of work in Latvia has increased.

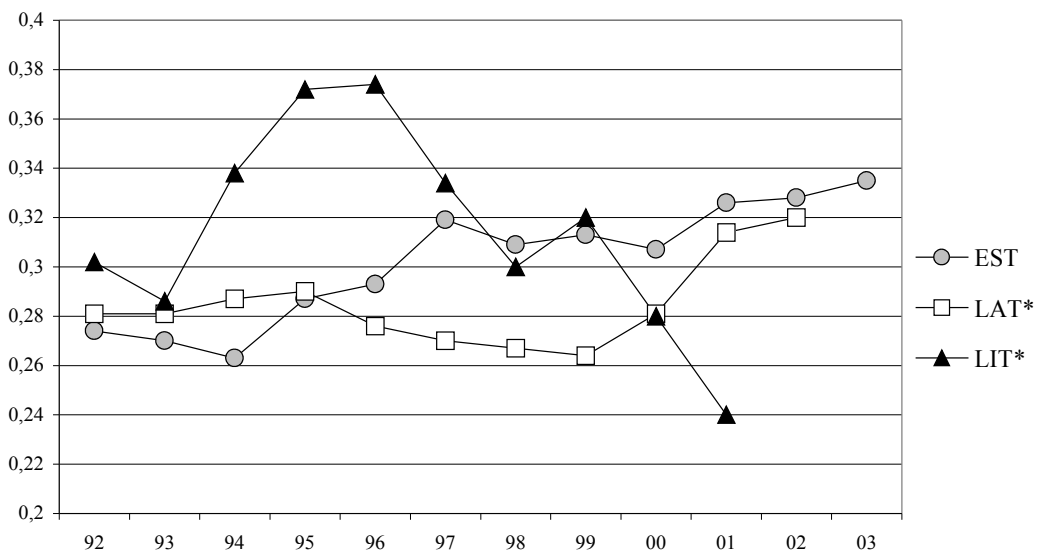
In conclusion of this paragraph, it should be said that the occupational structure in the Baltic countries has changed only slightly and this applies to both men and women. As for a change in the size of occupational groups – in Estonia and Lithuania the major trend during the whole period under consideration was towards a decline, while in Latvia, starting from the end of the last decade, the number of employees in the occupational groups of higher white-collar, lower white-collar and blue-collar workers has increased, as has the total number of employees.

## Industrial and occupational gender segregation

Figure 5 presents data on the industrial gender segregation index in Estonia, Latvia and Lithuania. One can see that in the beginning of the 1990s the value of the industrial gender segregation index in the three Baltic countries was at the level of 0.27 – 0.30, *i.e.* rather close to each other. This means that industrial gender segregation in Estonia, Latvia and Lithuania was quite the same and to achieve a balanced gender structure in fields of activities approximately 27-30% of (fe)male had had to change the industry. Taking a look at the industrial gender segregation indexes in some Western countries at that time almost the same picture appears: the values of indexes are on the same level or just a little bit higher, for example, in Switzerland: 0.29, in Austria: 0.31, in Germany: 0.32, in Australia: 0.33, in USA: 0.34 (Blau & Kahn 1996).

After the year 1992 as a starting point of our analysis, the industrial gender segregation index has fluctuated in all countries. The most rapid growth as well as the most rapid decline took place in Lithuania, at least according to the official estimated data. The growth is obviously connected to the increase of employment among men in the primary sector during the first half of the 1990s. Starting from the second half of the 1990s, the growth was replaced by a decrease of employment in the primary sector and this was reflected in the decline of the industrial segregation index as well. The most stable growth of industrial gender segregation took place in Estonia, where it reached the level of 0.34 in 2003. In Latvia, at first there was a weak growth of the gender-based division of employment, which was followed by some decline and then, starting in 1999, the industrial gender segregation index has grown again. In 2002, it was very close to the value of the respective index for Estonia in the same year.

**Figure 5 .** Industrial gender segregation in Estonia, Latvia and Lithuania, segregation index.



Source: Labour force survey (<http://laborsta.ilo.org>).

\*official estimates

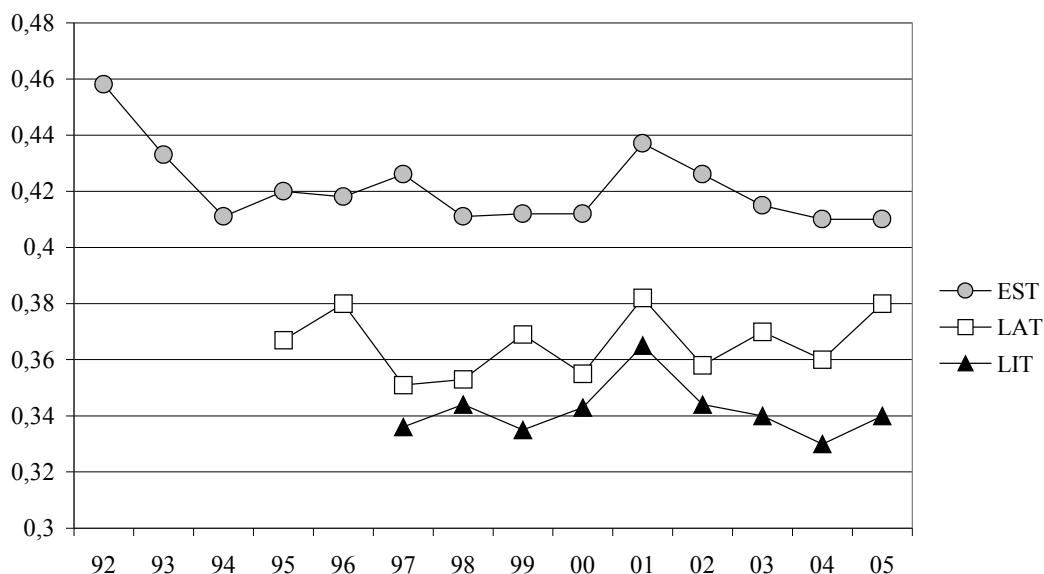
All this means that industrial gender segregation in Estonia and Latvia has increased and the domination of one or the other gender in certain fields of activities is more evident. At the same time, the situation is quite different in Lithuania – the decline of industrial gender segregation starting from the middle of the 1990s has taken place, the composition of different fields of activities is more and more gender-balanced. In turn, it means that differences between the Baltic countries have grown.

Thus, in Estonia and Latvia women are increasingly overrepresented in the field of activities like education and culture, financial intermediation, health and social care where, first of all, salaries are lower. Men make up the majority in construction, transport, manufacturing, *i.e.*, in industries that are better paid. In Lithuania, some stabilisation in this sense has taken place. All together these results on industrial gender segregation are in line with the devaluation theory, which claims that if a job is filled mostly by women, employers start seeing the job as less valuable, for which lower pay should be acceptable.

Occupational gender segregation is characterised by the vertical gender-based distribution of employment (by ISCO-88 scale). Labour force survey data for all three Baltic countries show that men are clearly overrepresented, first of all, among managers and officials, and they make up the majority among skilled and unskilled manual workers as well. Women dominate in such occupations as service and market sales workers. They are also significantly overrepresented among the professionals and technicians, but underrepresented at the very top, in the group of managers and legislators.

Looking at the index of occupational gender segregation (Figure 6), it is evident that the gender-based division of occupations is rather deep, especially in Estonia. At the beginning of the 1990s, the index of segregation was at the level of 0.46, which was followed by some decline and then stabilisation for ten years at the level of 0.41-0.43. In other words, more than 40% of (fe)male employees should change their occupation to balance the gender equality in Estonia. And again, the values of occupational gender segregation indexes in the Baltic countries were very close to those in several Western countries, for example, in Australia: 0.38, in Austria: 0.40, Germany: 0.42, and the UK: 0.44 (Blau & Kahn 1996).

**Figure 6 . Occupational gender segregation in Estonia, Latvia and Lithuania, segregation index**



Source: Labour force survey (<http://laborsta.ilo.org>).

Latvian (starting from 1995) and Lithuanian (starting from 1997) Labour Force Survey data demonstrate lower occupational gender segregation compared with that of Estonia: in Latvia the index of segregation

has been at the level of 0.35-0.38, in Lithuania at 0.33-0.36. In addition, it has changed very little over time, which means that there was no tendency towards declining or towards increasing occupational gender segregation in Latvia and Lithuania. This is correct for Estonia as well.

Findings on occupational segregation in Baltic countries support the dual labour market theory, according to which there is one segment that offers good pay, working conditions and consists of 'male occupations' and another one, where these conditions are not so good and which consists of 'female occupations'.

## Conclusion

This paper focused on men and women and the gender segregation of labour in the Baltic countries. Based on labour force survey data and official estimates, a look was taken at the employment structure of men and women by industries and occupations, also at the question of whether or not gender segregation in the labour market increased after the collapse of the communist systems in the region under consideration.

Analysis of sectorial employment shows that the employment structure of men and women by the three main sectors of economy (primary, secondary and tertiary) differentiated both in the beginning of reforms and ten years later, in the beginning of new century as well. However, the transition period brought about some changes in this structure. In addition, developments in the three Baltic countries in respect of these changes were quite different. If employment in the secondary sector declined in all three countries, both among women and men, then this was not the case concerning the primary sector. Indeed, in Estonia and Latvia employment in agriculture also declined, while in Lithuania, by contrast, the share of men employed in this sector increased in the first half of the 1990s. Mostly because in Lithuania the state subsidised agriculture and during the privatisation process the land was distributed free of charge to those who were employed in this sector. At the same time, the share of employment in the tertiary sector has grown in all three Baltic countries and it has become the largest employer of women as well as men (as in most Western countries). However, analysis also shows that a change in the employment structure does not entail the shift of people, pushed out from primary and secondary sector, to the tertiary sector. The real number of those employed in services remained almost unchanged and the increase in the share of employees employed in the service sector was achieved just by a decline of employment in agriculture and industry.

The occupational structure of employment differs by gender as well in the Baltic countries. But unlike in the industrial structure of employment, the transition period in Estonia, Latvia and Lithuania did not bring about remarkable changes in shares of both men and women employed as higher white-collars, lower white-collars or blue-collars workers. At the same time, looking at the size of occupational groups, it is evident that in Estonia and Lithuania the major trend was a decline, while in Latvia, starting at least from the year 1996, the number of employees has increased almost in all occupational groups under consideration.

The extent of gender-based division of employment, horizontal and vertical, was measured by the index of industrial and occupational gender segregation. Empirical data demonstrate that industrial gender segregation in Estonia and Latvia has fluctuated during the period under consideration, however, starting from the beginning of this century, and the main trend is towards greater segregation. In Lithuania after a rapid increase in the first half of the 1990s, the opposite trend can be seen – different fields of activities are more and more gender-balanced. The index of occupational gender segregation in the Baltic countries demonstrates that the gender-based division of occupations is a little bit deeper compared with the industrial one, especially in Estonia. As for time dependence, the index has fluctuated over time, but without clear declining or increasing trends in the value of the index.

Thus, one can say that in respect to industrial gender segregation there is some increase in Estonia and Latvia, but not in Lithuania. Occupational gender segregation demonstrates more stability in all three Baltic countries, but the respective value of the index is higher than the industrial one. Comparing these figures with the respective figures in Western countries, one can conclude that the differences are quite small and should disappear in the not too distant future. In other words – in respect to industrial and occupational gender segregation, the Baltic countries are not very different from Western Europe.

Relatively high values of the indexes of both horizontal and vertical segregation support both the labour market segmentation and devaluation theory. This means that the majority of workers are excluded from the majority of industries and occupations, which is wasteful of human resources. Gender-divided jobs also reduce labour market flexibility. Because of that, this question deserves greater attention also from policy-makers in order to carry out specific programs to reduce occupational and industrial segregation between men and women.

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