

Gender employment inequality in the transport and logistics industry: The specifics in the Republic of Serbia and the Republic of Macedonia

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ABSTRACT

In 2011, the average women's share of the workforce for the transport and logistics industry (TLI) was approximately 22% in the European Union. In the Republic of Serbia, the share was similar (22%), while in the Republic of Macedonia this share was only 13%. These data inspired us to explore the reasons for gender employment inequality (GEI) in the TLI and the possibilities to decrease it, while respecting their specific and complex environments. The Republic of Serbia and the Republic of Macedonia have many similarities, so it could be expected that the GEI rates in transport and logistics sectors are similar.

Both quantitative and qualitative research methods are used in the presented research. We compared the countries' main characteristics, by using a statistical database on gender employment in the TLI in both countries, "Gender Organization System" (GOS) perspective and gave an example to explore the gap between the women's share in the TLI labor force in the two countries, and possible reasons for it.

We went beyond the GOS perspective and explored both horizontal and vertical impacts on sex segregation in the TLI, as well as the impact of a macroeconomic context. The paper underpins the necessity for understanding gender-related industry specifics within an overall economy environment, and a need for a suitable database development. They are necessary preconditions for the continuous monitoring of gender mainstreaming and a starting point to set up the priority measures to improve gender equality and equity in the TLI in the future.

KEYWORDS: Gender inequality employment; Transport and logistics industry; Horizontal and vertical sex segregation; Gender organization system perspective; Republic of Serbia; Republic of Macedonia.

1. INTRODUCTION

The Transport and Logistics Industry (TLI) is traditionally considered a "man's world". According to some reports, the average women's share in the workforce was approximately 21.83% in the European Union (EU27 + Croatia) in 2011 (Davydenko, 2009, Eurostat). In the Republic of Serbia, this number was approximately the same (over 22%, according to the Statistical Office of the Republic of Serbia, 2011b, p. 19), while in the Republic of Macedonia the share was only 13% (Eurostat). These data inspired us to explore the nature of Gender Employment Inequality (GEI) in the logistics industry and the possibilities to decrease it, respecting the specific and complex environments in both countries. They are neighbors and former Yugoslav, Balkan landlocked countries, which hope to join the EU. Also, both of them have vulnerable economies that have been targeted with transition, a hard political situation and with an overall economic crisis. Therefore, it could be expected that the GEI rates in transport and logistics sectors are quite similar.

By exploring similarities and differences between economies, TLI, labor force characteristics, as well as the ones from gender perspective, the research aimed to identify and explain the possible reasons for such a gap in GEI, and prepare the directions (obtain the ground) for the set of related measures.

We used both quantitative and qualitative research to explore the nature and level of the GEI in transport and logistics. First we compared the statistical database on gender employment characteristics in both countries. Second, we used the theoretical lens of "Gender Organization System" perspective (GOS) to explain significant differences in gender employment and management position inequality. Besides the three main groups of

factors covered by GOS – individual, social and organizational, the impact of logistics industry specific characteristics on sex segregation within a macroeconomic context was also included into the analysis. A lack of data about vertical gender distribution was partly bridged with an example.

2. GEI IN TRANSPORT AND LOGISTICS SECTOR IN EUROPEAN ECONOMY

The transport sector is characterized by a great diversity and different transport modes that come with different technologies, regulations, challenges, know how, and skills requirements (Davydenko *et al.*, 2009). TLI is one of the most important sectors for the European economy and it takes up a substantial proportion of employment (Mallard and Glaister, 2008). Beside its size, its importance also stems from the fact that it plays a crucial role in interconnecting different economic actors. It traditionally belongs to the sectors with clearly expressed GEI, with dominant male workforces. This male dominated industry employs limited numbers of women with even fewer numbers of women in management, particularly in senior positions around the globe (French and Strachan, 2009). Such interference of profession-specific horizontal sex segregation, and traditional vertical sex segregation, related with women's under-representation in management structures, result in strong gender inequality and inequity⁶⁶ in TLI, and its range was from 6.28% in Turkey, to 32.93% in Iceland in 2011 (Eurostat).

The road freight transport sector is particularly dominated by men. Possible reasons for the low presence of female employees in this sector could be that the work has a higher physical workload. But social reasons like safety issues on European roads, especially concerning long distance freight transport and safe parking areas (rest areas), or that it is more unfavorable for family life, as well as the difficulties for women to enter male-dominated occupations, should also be considered (Davydenko *et al.*, 2009).

3. THEORETICAL FRAMEWORK

While the majority of logistics and transport research is focused on the social, economic and spatial needs of communities, a neglected area of research is relating to the strategies and employment policies of firms in the industry itself (French and Strachan, 2009).

The GOS perspective is used for the prescriptive part of our research, to explore the complex interaction between three groups of factors which constrain women from progressing toward higher management positions: individual, social and organizational ones (Fagenson, 1990). The GOS approach practically assumes that gender, organizational context and overall social framework, legal environment and culture may influence vertical sex segregation, i.e. the women's share in management positions. All three groups of factors will be briefly explained. Additionally, we included the macroeconomic and industry-specific factors into the analysis to comprise both vertical and industry specific, horizontal segregation into the research.

Individual factors

Individual factors may be natural, e.g. physical and psychical strength, or related to early socialization and accumulated learning, whereby women traditionally take an inferior position. They include character, temperament, attitudes, language, gestures and interpersonal orientation (French and Sheridan, 2009).

The individual factors may be crucial for accepting or breaking traditional frames, in the occupation, or education choice, personal ambitions, or overall management skills. While the former two are rather related with horizontal sex (de)segregation, the latter two refer more to vertical sex (de)segregation, although it is hard to make a simple classification. For example, ambition and self-motivation skills impact both the level of education and the carrier's attitude.

Social and legislative factors

The social factors refer to social norms, expectations and gender stereotypes (French and Sheridan, 2009). Males are expected to be strong, independent and prepared to take risks, which, consequently, has an impact

⁶⁶ For further reading see also (French and Sheridan, 2009).

on the viewpoint that they have naturally better predispositions for managers, or for harder and more risky occupations.

Legislation, regulations and gender policies may set the framework that could gradually change some traditional occupational and/or hierarchical divisions. However, the success and the needed time for the changes is affected also by other environmental factors, i.e. macroeconomic and industry more specific characteristics. They will be discussed separately.

Organizational factors

The traditional viewpoint related with gender equality is that organizations should be gender neutral. However, it has been exposed to criticism, because deeper analysis reveals that it is developed on male values, just allowing the women to compete with men following men's rules (Smithson and Stokoe, 2005). Women have traditionally more responsibility for the family and the home, which rather directs them to a reduced work time than toward overtime hours. Therefore, women have often not been perceived to 'fit in' with the social characteristics of managers, particularly in senior positions (French and Sheridan, 2009). Negative attitudes towards maternity leave were also noted (*ibid.*).

Transport and logistics industry-specific characteristics which impact on individual and organizational factors

The study done for the European Parliament on women and transport highlights "the male-domination of employment within all areas of the transport labor force and the few examples of good practice that are trying to overcome women's under-representation in this industry" (IP/B/TRAN/ST/2005_008, p. i). The study points out that the EU missed addressing gender differences in employment between men and women in the transport labor market.

The male domination can be explained with the numerous risks that the staff faces throughout the industry. The most significant risks facing employees in the transport sector are noise, vibrations, lighting, temperature fluctuations/heat, emissions, dust, strenuous postures/lifting, challenging working hours for long-distance drivers, repetitive work, safety etc. (Davydenko et al., 2009). That explains why the majority of transport drivers, pilots, seafarers and handling operatives are male, as well as those employed in vehicle trades (e.g. as car mechanics).

Today, transport and logistics techniques and technology development, including supporting information technology development, give more opportunities to employ women. It has improved working conditions, e.g. in regard to ergonomics, assistance for handling heavy objects, reduction of noise and pollution, as well as safety and protection (Davydenko et al., 2009). New technologies have made it possible for physical workers to be replaced by controllers, planners, analysts and managers. These trends increase the number of jobs that require less physical strength and more skills and education level (Bragdon and Berkowitz, 1997). It seems that these opportunities have not been utilized enough to improve the GEI sector picture until now.

Women are also under-represented in professional and managerial positions within the sector; hence, their influence over the decision-making processes (IP/B/TRAN/ST/2005_008). Male superiority and centrism, combined with hard, risked and stressed jobs, support sexual harassment as a manifestation of society's gender-bias.

Macroeconomic factors

It is well known that economic growth is closely and positively correlated with human capital (e.g. see Piatkowski, 2002) and transport activities (Mersman, and Van der Voorde, 2008). The current economic crisis has intensified gender inequalities throughout the world. The crisis seems likely to affect women in such areas as employment and social safety nets, unpaid care work, education, migration and gender based violence (Baroni et al., 2009). Women in the developing world are even more exposed to the financial crisis, due to their vulnerable employment, lower earnings and lower levels of social and gender protection, while maintaining primary household care responsibilities (*ibid.*).

Additionally, the workforce faces many and hard challenges in economies which have past economic transition (e.g. see Fekete, 2009, Baroni et al., 2009). The economies suffer the consequences of transitions even after decades of transformation from a command economy to a market economy (Piatkowski, 2002). In cases of economies with an unsuitable business environment, with significant grey sector and/or rich labor

market, struggling enterprises and entrepreneurs cannot be reasonably expected to take into account labor rights and gender employment equality, even within the context of a fair legal framework.

All explored factors have separated and compounded, joined and synergized the impact on GEI.

4. THE MAIN CHARACTERISTICS OF THE ECONOMIC AND SOCIAL ENVIRONMENTS IN THE REPUBLIC OF SERBIA AND THE REPUBLIC OF MACEDONIA

4.1 *Common economic, individual and TLI characteristics in both countries*

The general characteristics of economies and TLI are similar in the Republic of Serbia and the Republic of Macedonia. Both countries suffer the coupled effects of the global economic crisis and the effects of a past economic transition, which make their economies very vulnerable. The post-socialist transformation processes, which involve changes towards a market economy, ownership transformation, and sector restructuring, have led to substantial changes in the characteristics of the labor market. They create an increase in unemployment and an informal economy (Gender Equality Council, 2008a). Women's income has had a more significant role in the family budget, but as a vulnerable workforce group, they often face more challenges to protect their rights in finding jobs, keeping them and making progress in their professions.

Within the processes of European integration, in both countries, the sets of strategic documents and regulations regarding the labor gender employment equality policy have recently been adopted.

TLI has additionally faced numerous challenges in the Western Balkan region that refer to aged transport and logistics technology, bad infrastructure and typically insufficient investments. The favorable geographical position in the Western Balkans brings out opportunities for the TLI in both countries. As a whole, the Republic of Serbia has more developed inland waterway transportation, several international ports and airports, which also contribute to industry development and employment. However, Serbia also has three times more inhabitants than the Republic of Macedonia, and as a result of that, the labor force is also that much larger.

Regarding the individual perspective, both countries are still pretty conservative regarding the woman's role in the family, which puts big pressure on them to have a job, but keep a traditional key role in the family. Of course, there are also urban/rural, and education-related differences like in most developed countries.

In the rest of the section, the particular characteristics that describe TLI and the related main gender employment characteristics will be briefly shown.

4.2 *The Republic Of Serbia*

Economic characteristics

The economy and the people in the Republic of Serbia still suffer the consequences of the economic transition and political events in the recent period. Once a mid-developed republic in former Yugoslavia, in the early 90s Serbia became an economy with an income per capita below US\$1,000, suffering of further stagnation and structural destruction caused by: loss of the former market, UN ban on foreign trade and direct investment, hyperinflation and, finally, the NATO bombing campaign, together with inconsistent and wrong policies (Cerović, 2006).

Labor market characteristics in Serbia

In Serbia, workers' rights are openly violated under the excuse of maintaining economic stability, while big companies and tycoons are free to refrain from paying taxes, salaries and other benefits (Baroni et al., 2009). In order to deal with the economic crisis within particular business environments, small, medium and micro enterprises may find the solution in informal and short-term employment and a grey economy.

The process of privatization has led to a significant transfer of the workforce to the private sector. However, it is interesting to note that the enterprises with state ownership employ a more female workforce (49.6%), than the male one (40.7%), while in private sector (registered) work 54.9% of male and 47.9% of female population (Statistical Office of the Republic of Serbia 2012a, p. 28). In the public sphere, the job positions may have a lower status and be paid less, but in praxis the labor rights are more protected than in the private sector. This phenomenon is similar with the experiences from other East European countries (Gender Equality Council, 2008b.), and is one of the underlying reasons for the fact that the total number of employed women

had a significantly lower decrease (0.6%) than men (4.6%) in 2011, compared with 2010 (Statistical Office of the Republic of Serbia, 2012b, p. 47). The overall number of employees who have formal – legal employment contracts decreased in 2011 by 2.8% (*ibid.*, p. 53).

In 2012, 76% of the population aged 15 years and over represented the share of the active population. The total employed population was 2,228,343 in the Republic of Serbia, of which 42% are women, while in the unemployed population (701,138 persons) the female rate is 44.2% (Statistical Office of the Republic of Serbia 2012a, p. 43). Women slightly prevailed among the inactive population group “willing and able to work” - 54.5% in 2012 (*ibid.*, p. 44). Further, in the inactive population, significantly more women than men report that they are not able to work due to diseases, inabilities, personal or family reasons.

Although the legal system related to the labor market and gender equality has been continuously improving in the last decade, and some strategic documents have been adopted, it is still fragmented and inefficient, and there is a gap between the normative framework and practice (see also Gender Equality Council, 2008b).

Serbian annual TLI statistical reports do not offer the female share and age distribution of the employed in the TLI. However, the overall female age distribution reveals that only 11.8% of employed females are aged up to 25 years, or 17.1% are younger than 30 in 2012. On the other side, 55.85% of employed females were older than 50 years of age in 2012 (Statistical Office of the Republic of Serbia 2012a, p. 47). This is an alarming situation, which can be a consequence of the overall long-term circumstances, including insufficient maternity support during the job, emigration of young, educated and skilled people, etc.

Transport and logistics labor market characteristics in Serbia

Although the process of privatization started in the early 90s, and emerged after the political change in 2000, some vital and big enterprises in the TLI, which do not belong to the road sector, have not been privatized until 2013 (e.g. the national post, the railways, the airport Nikola Tesla and state air company, the port of Novi Sad, main part of the public urban mass transport etc.). The recent economic crisis, combined with the abortive economic transition, has had a serious impact on the transport industry. A high level of grey economy is recorded, particularly in the road transport industry (Srbijatransport, 2013).

Regarding the salaries, in the TLI sector, men's salaries are 101% of the average industry salary, while women earn 97% of the average industry salary (Statistical Office of the Republic of Serbia 2011c, p. 65). It might be predominantly, but not exclusively, related to their occupations and lower management positions.

The first problem in exploring the women's share in the TLI labor force we faced is a lack, or non-consistency, of official data in different sources. For example, the Statistical Office of the Republic of Serbia offers two official sources with different number of employees in the TLI. According to one source, which uses survey methodology (2011b), the total number of employees in Transport and storage was 122,788, with the women's share being 23.82% in 2011. Another source, where the annual statistical data are obtained regularly from all sector enterprises, the data shows only 60,937 employees in the transport sector in the same year, without showing the women's share (2012b, p. 308). Furthermore, it is impossible to separate the labor data for passenger and freight transport. Therefore, in the rest of the section, we'll analyze the overall sector characteristics, with the limitation that it can be supposed that the gender distribution characteristics are similar across the sector.

The women's share of the total sector of the workforce has continuously recorded a growth until it was doubled at the beginning of the new century, when it was stabilized around 20% (Statistical Office of the Republic of Serbia, 2008 and 2012a). Compared with 2011 (23.82%), the share of women in the labor force shows a slight decline in 2012 (20.36%), but it still cannot be considered as a trend.

Transport and storage belong to the sections and activities with the largest drop in employment rates. However, it is hard to estimate how much this number is related to the shifting of business toward the grey economy. According to data from the Statistical Office of the Republic of Serbia, from 2007-2011, the number of employees in the TLI (including the postal section) has decreased 12% (Statistical Office of the Republic of Serbia 2012b, p. 318). The sector covers only 2.9% of total employed females in 2012 (Statistical Office of the Republic of Serbia 2012a, p. 21).

Although there are only 34 big enterprises among 4,586 in TLI, they employ the majority of the workforce – 64%, while approximately equal rates of employees share micro, small and middle enterprises (app. 12%)

(Statistical Office of the Republic of Serbia, 2011a, p. 22). Most employees in the transport and storage sector have full time jobs (92%) (Statistical Office of the Republic of Serbia 2012a, p. 60).

Due to a lack of data related to vertical sex distribution within the enterprises, for that purpose, we used an example. As the postal section keeps a good level of industry employment, it was explored more in-depth.

The example of "Pošte Srbije"

The postal operational network of Serbia stands as the largest infrastructure and logistics network in the country, although its activities are specific within the industry. The total number of employees in the public enterprise "Pošte Srbije" in 2011 amounted to 14,939. The gender structures of the occupations and the management positions are given in Table 1.

TABLE 1. The Gender Structure In Occupations And Management Positions In "Pošte Srbije" in 2012

Position groups	Males (%)	Females (%)	Total (%)	Total (no.)
1. Top management (Board of Directors, CEO, Deputy of CEO)	100.00%	0.00%	100.00%	10
2. Middle management	43.75%	56.25%	100.00%	16
3. Low management	64.94%	35.06%	100.00%	77
4. Experts, professionals (engineers, economists, lawyers)	59.07%	40.93%	100.00%	2018
5. Technicians, associate professionals, controllers (also mostly with high education – engineers, economists, lawyers, etc.)	37.49%	62.51%	100.00%	2059
6. Administrative staff	34.44%	65.56%	100.00%	360
7. Drivers and delivery workers	98.61%	1.39%	100.00%	1511
8. Technical and technological staff (handling workers, warehouse staff, walking deliverers)	57.38%	42.62%	100.00%	8923
9. Half-qualified and non-qualified workforce	61.76%	38.24%	100.00%	102
Total	58.56%	41.44%	100.00%	15076

The company employs 41% women, which is almost double than the industry average. The females slightly dominate among middle managers, technicians and controllers and administrative staff (groups 2, 5 and 6 in Table 1, respectively).

Although the women are surprisingly fairly presented in management, the gender inequality might be recognized in a couple of details – for example, the "zero presence" in top management and just 35% of the management positions in total. Also, comparing the position groups 4 and 5, both include high education (former entirely, latter mostly), but the less average salaries are in group 5. This means that women dominate in the position group where employees have less than average salaries for the same education level.

It can be concluded that the company "Pošte Srbije" mostly recognizes and uses equal employment opportunities, although there is room for improvement. However, according to the overall sector statistical data, it seems that the company can be rather used as a good example for cross-TLI sector benchmark study, than a sector representative one.

4.3 The Republic of Macedonia

Economy characteristics

The Macedonian economy has faced many challenges since claiming its independence from Yugoslavia. With the implementation of the "management/employee buyouts (MEBOs)" the formation of privatization has had negative consequences on future growth and labor market developments (Zalduendo, 2003). Also, the absence of good infrastructure, and many political events, like UN sanctions on Yugoslavia as Macedonia's largest market, the Greek economic embargo in 1995, NATO attacks on Serbia and the 2001 armed conflict in Macedonia, all created bad conditions for the development of the national economy.

In the last few years, the Macedonian government managed to develop a constant macroeconomic policy. Structural reforms and fiscal policy as well as a high level of public investments in the recent past, led to a stable macroeconomic condition and improved the business situation in the country.

The world economic crises had reduced economic growth of the country from 2009 to 2012, but on the other hand, numbers show that the crises did not have a negative impact on the unemployment rate. According to the data of the State statistical office (SSO), one of the key sectors that mitigated the effects of the world economic crises on the Macedonian economy in 2010 was the logistics sector (transport and communication) with a 5.1% growth. The government projections for the following years are expected to show further macroeconomic stability of the country that will reduce the unemployment rate and increase salaries.

Labor market characteristics in Macedonia

According to SSO, 56.5% (943,055 persons) of the population over the age of 15 were active and participating in the labor market, while 43.5% (726,910 persons) in 2012 were inactive. The unemployment rate for 2012 was 31% (292,502 persons), which places the country at the bottom of the European list of countries (SSO, 2013a).

The main characteristic of the labor market is that men participate much more than women (61% active men, 39% active women). Bearing this in mind, and considering the share of employed and unemployed men and women in the active population, a conclusion can be made that men and women in Macedonia have equal opportunities to find a job. Calculations show that the unemployment rate for women in Macedonia in 2012 was 30.3% and it is even lower than the unemployment rate for men – 31.5%.

What significantly contributes to the gender gap employment in the country is the high share of women in the inactive population. If we analyze the structure of the inactive population, data reveal that the share of women in the inactive population is 64%, showing significantly higher female participation, whereby over 46% of inactive women are considered to be housewives. This is specific to more traditional societies and strongly urges us to consider individual and social factors when analyzing gender employment inequality in the transport and logistics industry.

According to the education statistics, the data shows that 53.6% of the employed individuals have a secondary education, of which 33.9% are men and 19.7% are women. The smallest percentages of employed individuals are individuals who have completed a higher vocational education (3.1%), and individuals without an education (3.2%). Rendering to the statistical reports, 21.1% of the employed persons had completed university level education, of which 10.8% men and 10.2% women (SSO, 2013a). It indicates that educated women have as equal opportunities for employment as men do. It also shows that women participate in jobs that are close to the decision making processes in the work place.

Transport and logistics labor market characteristics in Macedonia

There were 6,445 active companies in 2012 in the transport and logistics sector in Macedonia, which is 8.7% of the total active companies in the country (SSO, 2013d). Most of them (90%) are small private companies with less than 10 people employed. Only 7 companies in this sector have more than 250 individuals employed and some of them, like railway companies (transport and infrastructure) and Macedonian post, are state owned companies. Our calculations, based on the data of the Statistical review 2.4.13.07/748, shows that over 43% of the total individuals employed in the sector work in the category of companies with 10 or less people employed. This indicates that these small companies create most of the employment potential in the transport and logistics labor market. Data shows that 72% of the employed persons in the sector work in private companies. More than 15% of the employed in privately owned companies are women, compared to the companies with state ownership, where more than 23% are women. Therefore it can be concluded that state companies employ more women than private companies do.

Table 2 shows that over 76% of the total employees in the transport and storage sector are working in land transportation. We can also notice that some logistics subsectors, like air transportation or postal and courier services which are using higher levels of technology, as well as more sophisticated equipment and working methods, have a low level of GEI. Still these subsectors are only 9% of the total labor force in the transport and storage sector and do not have much influence on reducing the gender employment gap in the logistics sector in the Republic of Macedonia. It should be noticed that according to this source, the women's share in TLI workforce is significantly higher, compared with Eurostat.

TABLE 2. Employees In Transport And Storage Sector By Types Of Ownership, 2012 (Data Are Weighted)

Sector/subsectors	Total		Ownership			
			Private		Other	
	Total	Women	Total	Women	Total	Women
Transport and storage	28441	4993 (18%)	20436	3146 (15%)	8005	1847 (23%)
Land transportation and transportation via pipelines	21750	3177 (15%)	17805	2402 (13%)	3945	774 (20%)
Air transportation	73	32 (44%)	73	32 (44%)	-	-
Warehousing and support activities for transportation	4167	869 (21%)	2347	603 (26%)	1820	265 (15%)
Postal and courier activities	2451	915 (37%)	212	108 (51%)	2239	807 (36%)

Source: SSO, Statistical review 2.4.13.07/748, p. 16

Land transportation has the highest disproportion of gender employment, as less than 15% of the total employees in this subsector are women. That is why we must point to gender employment improvements in land transportation. Reducing the gap in land transportation will cause a reduction in the overall gender employment inequality in the transport and logistics industry in the country.

One of the good signs of gender employment equality in the sector is that the number of persons employed in 2012 increased compared to 2011, as a result of employing more women in the land transportation subsector (SSO, 2013b, p. 11).

Most of the employed (95%) in this sector are full time workers. By economic status, the structure of the employed shows that 75% are employee, 8% employer and 15% are self-employed. According to the analysis of the structure of the employed by occupation in the business enterprises, most of the workers in this sector are plant and machine operators and assemblers (56% in 2012), which is expected bearing in mind the characteristics of the sector (Table 2). The number of employed in these positions has increased nearly 6.5% from 2011 to 2012. On the other hand, the share of managers and professionals in this sector, which includes individuals with higher levels of education, is low (7.4% in 2012) and has decreased in 2012 compared to 2011 (SSO, 2012a, 2013a). So, as we have noticed initially, one of the specifics of the Macedonian labor market is a lower participation of women without higher education. Thus we can conclude that at this point, the specifics of the transport and logistics labor market favors men over women.

We can support these findings by analyzing the employed individuals in the transport and logistics sector by gender. Barely 17.5% of the total workers in the sector are women and they only contributed with less than 2% of total women workers in Macedonia in 2012 (SSO, 2013b). Most of them are aged 25-64. An encouraging situation is that the number of young women employed in this sector has doubled in 2012 compared to 2011 (Table 3). It leads to an increase of the share of employed young women in the total young people employed in the sector from 10% in 2011 to 25% in 2012. Even though their share in total employment in this sector is insignificant, it still shows that young women are getting more chances than before for employment in the logistics sector. It might be an indicator of certain improvements in the sector on the gender employment issue. However, this picture is pretty different from the Eurostat statistics data about the Republic of Macedonia (13.3% of women share), although there is still much room for further improvement.

TABLE 3. Employed by Activity of Business Entities, Age and Gender

	Men			Women		
	15-24	25-64	65 and over	15-24	25-64	65 and over
2011*	1068	25260	40	129	3837	53
2012**	753	25608	-	264	3750	36

Source: * statistical review 2.4.12.11/727, p. 45, ** Statistical review 2.4.13.06/745, p. 56

Still, at this level of development of the country and the labor market, we cannot say that there is high potential for opening new job positions at the moment in the transport and logistics sector.

Now we can conclude that the employment in Macedonia is characterized by a very unfavorable gender structure. This situation also applies to the employment rate in the logistics sector. We have identified some reasons why this condition has not changed over a longer period of time: unstable economic and social conditions in the country; imbalance between the available and required profiles on the labor market; the traditional role of the female in a family, especially in rural areas; small number of women employed in land transportation as a result of low level of technical and technological development of this logistic subsector compared to other subsectors, etc.

5. DISCUSSION

Our research tackled an important question of GEI in the TLI in two Balkan countries. We used the official statistical database and GOS perspective in our research. The results confirm that there are many more similarities than differences between the two countries in many ways. The overall impression is that the women's personal capabilities and characteristics, social norms and gender stereotypes are not the source for the significant differences between Serbian and Macedonian female shares of the TLI labor workforce.

The impact of organizational factors on GEI is strongly related with industry-specific characteristics and circumstances. The number of middle-sized and big enterprises has strongly decreased in the recent period, and it is difficult to speak about career and vertical progress of management positions in micro and small firms. The available data from Serbia shows that, in big enterprises, organizational factors have similar characteristics as in other, more developed countries. However, in both countries, the dominance of small firms in the TLI sector limits the variability of impacts of organizational factors.

It was obvious that GOS was not enough to explain by itself the gap in women's share of the TLI workforce. Therefore, we expand the analysis on industry specific factors and, particularly, the impact of the macroeconomic environment on it. This extended research framework on GEI, which comprises horizontal, vertical and environmental impact factors, is given in Figure 1. The sector gender employment inequality is a result of complex (direct or indirect) impacts of all these factors. While GOS may find the same reasons for GEI in different sectors, the sector and environmental factors explain percentage variations between the sectors and economies and they are principal for sector improvement measures.

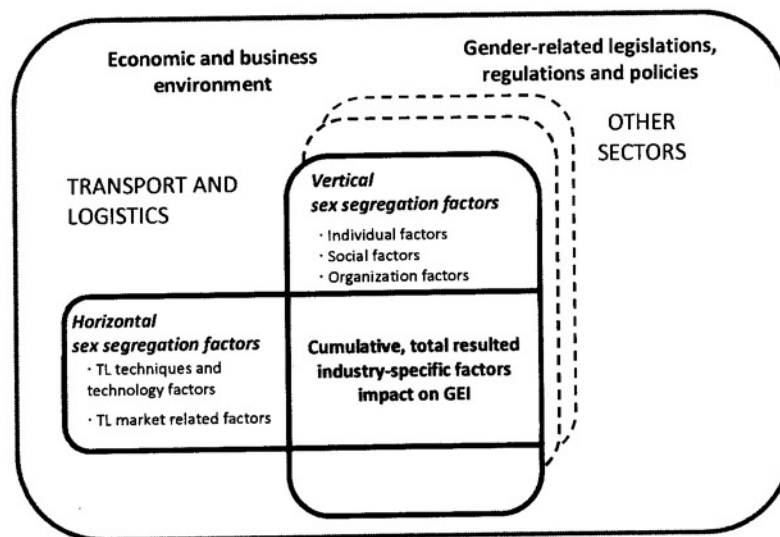


FIGURE 1. The sources of impact factors on sex segregation in transport and logistics sector

Old infrastructure, transport, storage and transshipment capacities strongly impact on competitiveness and the overall employment in the TLI in both countries. They also contribute negatively on the share of employed women in the TLI. Changing educational levels and improving technology are necessary preconditions to reconstruct the patterns of gender segregation. While the women's educational level has improved in recent decades, there are often transport capacities and equipment older than 10 years, where still traditional physical work is necessary. Therefore, improving technology should be considered in order for many limitations regarding GEI to decrease in the industry.

The gender-related legislative framework progressing toward women's protection is similar in both countries. In the socialist period, women had legally protected rights, and it made way for their better share in the workforce in state-owned enterprises. According to the EU standards, both countries have started to introduce a set of laws and regulations that highlights a need for gender equality and equity, and constituted the governmental bodies and offices which continuously support their implementation and monitoring, but the developments of the institutions are yet to be finished.

They also improved the statistical database on gender employment and unemployment, but there is still a lack of some data and an inconsistency between the sources within and between the countries.

According to the obtained data, it seems that GEI is rather expressed in the structure of the inactive population, particularly in the "willing and able to work" group, than in the share of the unemployed workforce. Women desire full time jobs because they are key for increasing the family income.

The most recent trend is that the Republic of Macedonia records a slight increase in the women's share in the workforce in the TLI, while the Republic of Serbia records a slight stagnation in 2012. However, it is too early to make any conclusions, and further research on these trends in the forthcoming period is necessary.

The most important difference between the two countries is in the total number of employed in the TLI, and the employment rate in big and middle sized companies in Serbia, which are still mostly state-owned. Although these enterprises often record an excess of employees, they still treat them more carefully and with more sense for social factors than the private sector and, particularly, small firms in the industry. According to the results, we can express the concern that decreasing the number of state ownerships in Serbia could have a serious impact on further decreasing the women's share in the TLI workforce. This hypothesis has to be more thoroughly explored in further research.

According to the findings in this research, we can identify the main factors related to the improvement in gender employment equality in the TLI in both countries:

- Maintenance of macroeconomic stability of the countries, and improvement in the overall business climate and country competitiveness. It will contribute to the sector both through the increased transport activities and create a better business environment, particularly when it comes to the grey market.
- Increasing the level of technological development of the TLI and attracting the investments.
- Generating opportunities for part time employment and flexible arrangements with the intention of legal support to balancing women's private and public lives.
- Adjusting the educational system according to the labor market needs and introducing training programs to increase the skills and competencies of women.
- Availability and consistency of statistical data, necessary for making governmental policies on gender equality and equity in the TLI in both countries.
- Supporting sector programs for self-employment with improved access and facilities for women to start and run their own businesses.
- Further compliance of national gender-related regulations with European standards and their implementation in practice.
- As the big enterprises are still mostly under state control, it could be taken as an opportunity to implement and control selected gender equality policies, where possible.
- Caring not only about quantity, but also about quality in gender mainstreaming (Wittbom, 2011).

We are completely aware of the challenges involved in implementing the related measures, but we think that future research and praxis has to be directed at supporting them. Also, the aim shouldn't be only directed at closing the gap, but to mutually use the experiences, particularly of good examples in both countries, to make the improvements.

6. CONCLUSION

Women in the TLI suffer both horizontal and vertical sex segregation more so than in most of the other sectors. Therefore, the attention directed toward gender mainstreaming and efforts to reach it should be more

appropriate. Surprisingly, the literature research reveals that there are indeed small concrete directions related to higher women employment rates in the TLI.

In the post-socialist period, the economy transition, and recently, the economic crisis, both reflect on an overall unemployment rate and endangered labor rights in both countries. The TLI in such economies faces various challenges. They are related primarily, but not exclusively, with privatization, an increased level of unemployment, grey economy, old technology and insufficient funds for investment into further development. In such conditions, the enterprises try to survive in a more challenged market than in developed countries, and the workforce suffers the consequences in different ways. Although such consequences target the workforce as a whole, women, as a more vulnerable group, may often feel a synergy of negative impacts and, therefore, require additional efforts to be protected.

We identified a list of the most important factors that contribute to GEI. It is difficult to weigh their priority without more in-depth research, but intuitively, we think that overall economic development is the primary goal. For example, investing in education and training, without overall economic development and welfare, could have very serious and complex consequences. It may partly improve the level of women employed in the TLI, but it can also contribute to a higher level of unemployed highly-educated young women, or their migration from the countries.

The paper underpins the necessity to go beyond traditional GOS analysis and to understand industry specifics within the overall economic environment. There is a need for developing a more comprehensive database for continuous monitoring of gender mainstreaming in the TLI. It is one of the preconditions for applying all related current and future gender related policies, regulations and recommendations.

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REFERENCES

1. Policy Department Structural and Cohesion Policies. Transport and tourism, *Women and transport study*. European Parliament, IP/B/TRAN/ST/2005_008, Directorate General Internal Policies of the Union, Brussels, <http://www.ipolnet.ep.parl.union.eu/ipolnet/cms/lang/en/pid/456>, 2006.
2. Baroni, N., M. Dokmanović, G. Tisheva, and E. Sikazwe. Gender equality and the financial crisis. *Social Watch Report 2009: People first*. June 2013 at: http://issuu.com/socialwatchcz/docs/sw_report_2009
3. Bragdon, C., and Berkowitz, C. (1997). Intermodal transportation careers. In XIIIth World meeting of the International Road Federation, available at: library.tac-atc.ca/proceedings/1997/01_0258.pdf.
4. Cerović, B. (2006). Introduction, In: *Privatization in Serbia - evidence and analysis*. Faculty of Economics Belgrade - Publishing Centre. Belgrade, pp. xi-xvi.
5. Davydenko, I., G. Gijbbers, M. Leis, D. Maier, K. Verweij, Xun Li and F. van der Zee. Investing in the Future of Jobs and Skills - Scenarios, implications and options in anticipation of future skills and knowledge needs. Sector Report - Transport and Logistics, the European Community Programme for Employment and Social Solidarity - PROGRESS (2007-2013). DG EMPL report VC/2007/0866, Lot 13, Transport and Logistics, European Commission, 2009, <http://ec.europa.eu/social/main.jsp?langId=en&catId=89&newsId=569&furtherNews=yes>. Accessed June 2013.
6. Eurostat, The share of women employment in the sector Transport and storage in the European countries in 2011 European Commission, Brussels, Belgium, 2013. (last accessed in June, 2013).
7. Fagenson, E. (1990). At the Heart of Women and Management Research: Theoretical and Methodological Approaches and their Biases, *Journal of Business Ethics* 9, pp. 267-74.
8. Fekete, É. (2009). The role of women in the development of rural areas in a post-socialist Hungary, *Analele Universității de Vest din Timișoara, Geografie*, Vol. XIX, pp. 27-38.
9. French, E., and Strachan, G. (2009). Evaluating equal employment opportunity and its impact on the increased participation of men and women in the transport industry, *Transportation Research Part A*, 43, pp. 78-89.
10. French, E. L. and A. Sheridan (2009). Equal employment opportunity and diversity management: can either live up to the promise of achieving gender equity? In: *ESCP-EAP – Gender and Diversity in Organisations Conference*, 15 January, Paris, France.
11. Gender Equality Council. The position of women on the labour market in Serbia. United Nations Development Programme. Government of The Republic of Serbia, Belgrade, 2008a.

Careers

12. Gender Equality Council, Recommendations for measures for improving the position of women on the labour market in Serbia. United Nations Development Programme. Government of The Republic of Serbia, Belgrade, 2008b.
13. Mallard, G., and Glaister, S. (2008). *Transport Economics - Theory, Application and Policy*, Palgrave Macmillan.
14. Mersman, H., and Van der Voorde, E. (2008). The relationship between economic activity and freight transport, *In: Recent developments in transport modeling, Lessons for the freight sector*, (Ben-Akiva, M., Mersman, H., Van der Voorde, E.eds.), Emerald, UK, pp. 69-92.
15. Piatkowski, M. (2002). The new economy and economic growth in transition economies: The relevance of institutional infrastructure, WIDER Discussion Papers // World Institute for Development Economics (UNU-WIDER), No. 2002/62.
16. Smithson, J. and E. H. Stokoe, Discourses of Work–Life Balance: Negotiating ‘Genderblind’ Terms in Organizations. *Gender, Work and Organization*, Vol. 12, No. 2 March 2005, pp. 147-168.
17. Srbijatransport, Business Association for road transport, *Informator*, No. 102, Belgrade, Jun 2013.
18. State Statistical Office of the Republic of Macedonia, *Statistical review 2.4.12.11/727*, Skopje 2012a
19. State Statistical Office of the Republic of Macedonia, *Statistical review 2.4.13.06/745*, Skopje, 2013a
20. State Statistical Office of the Republic of Macedonia, *Statistical review 2.4.13.07/748*, Skopje 2013b
21. State Statistical Office of the Republic of Macedonia, *Statistical review 2.1.13.15*, Skopje 2013c
22. State Statistical Office of the Republic of Macedonia, *Statistical review 4.1.13.13*, Skopje 2013d
23. Statistical Office of the Republic of Serbia, *Two centuries of Serbian development*, Statistical review, Belgrade, 2008
24. Statistical Office of the Republic of Serbia, Basic results of business activity of enterprises and entrepreneurs in the year 2009, Bulletin, Belgrade, 2011a
25. Statistical Office of the Republic of Serbia, *Labour Force Survey*, Belgrade, 2011b
26. Statistical Office of the Republic of Serbia, *Women and Men in the Republic of Serbia*, Belgrade, 2011c
27. Statistical Office of the Republic of Serbia, *Labour Force Survey*, Belgrade, 2012a
28. Statistical Office of the Republic of Serbia, *Statistical Yearbook*, Belgrade, 2012b
29. Wittbom, E. (2011). Gender mainstreaming in transportation - Impact of Management Control, Women’s Issues in Transportation Conference Proceedings 46, Summary of the 4th International Conference, October 27–30, 2009, Irvine, California Vol. 2: Technical Papers, Transportation Research Board, pp. 264-275.
30. Zalduendo, J. (2003). Enterprise Restructuring and Transition: Evidence from the fyR of Macedonia, IMF Working Paper, No. 138.

A list of Acronyms:

GEI: Gender employment inequality

TLI: Transport and logistics industry

GOS: Gender Organization System" perspective

CEE/CIS: Central and Eastern Europe/Commonwealth of Independent States

WWII: World War II

PTT: Postal transport and telecommunications, an acronym used in the name of the company "PošteSrbije"

SSO: State statistical office