Gender-specific obstacles and employment disparities in the V4 countries: a study on finding the ideal workplace

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Out of the European Union's 104 NUTS 1 (Nomenclature of Territorial Units for Statistics – Level 1) regions, those belonging to the Visegrád Group (also known as Visegrád Four or V4), have been selected for this study due to their comparable socioeconomic characteristics and regional relevance. This study aims to determine whether the obstacles to finding the right employer and job role differ between genders in the V4. These regions, through their background historical and intensive economic relations, influence not only their own territories but also the economy and value system of the entire continent. The results show significant differences between the countries in terms of the types and intensity of barriers. In Hungary, language barriers play a crucial role in restricting participation in the international labour market. In Poland, unequal access to educational opportunities is predominant. In lack of Slovakia, the flexible work arrangements tailored to family responsibilities emerged as the most significant obstacle. In certain areas of the Czech Republic, the influence of traditional gender roles was decisive. By identifying these barriers, this study contributes to understanding how gender disparities shape job-seeking experiences across the V4 countries. The research highlights that understanding the differences between countries is essential for a deeper comprehension of labour market barriers.

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gender differences, labour market barriers, Visegrád Group, ideal workplace, economic disparities among regions Based on these findings, targeted measures are required, such as expanding language training in Hungary, making educational opportunities more accessible in Poland, and promoting flexible employment forms in Slovakia and less-developed areas of the Czech Republic. The results provide valuable guidance for developing policies aimed at improving gender equality and labour market participation, particularly through region-specific approaches.

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Introduction

In the V4 countries (Czech Republic, Poland, Slovakia, and Hungary), various challenges can arise when attempting to find the ideal workplace. This study focuses on NUTS 1-level regions within the V4 countries, as these regions can exhibit significant economic, social, and labour market disparities. This approach enables a geographical analysis of gender-related labour market barriers, which is crucial for uncovering differences within and between countries.

The primary research goal of our study was to determine whether the obstacles to finding the right employer and job role differ between genders in the V4 countries. The foundations of theories on the ideal workplace and job design trace back to Hackman-Oldham (1975), who emphasized how well a job satisfies employees' personal requirements, incorporating Herzberg et al.'s (1959) motivational and hygiene factors. No job system is entirely ideal for all employees; therefore, organizations must consider implementing variations of different types of work activities (Oerlemans-Bakker 2018). The definition of an ideal workplace can vary based on the subjective perceptions of employees. Most people do not describe the ideal workplace as an entirely new, imagined utopia but rather as an improved version of their current one. According to Cunha (2022), the most important factor for employees is the work environment, which includes strong interpersonal relationships, team spirit, and a sense of trust. Although salary and fair performance evaluation also played a significant role, they were not the primary concerns. In addition, appropriate working conditions, physical infrastructure, and opportunities for professional development were key factors.

As per our definition, an ideal workplace is an environment where employees are committed to remaining part of the organization while having the opportunity for self-fulfillment in line with their abilities and possibilities. For an increasing number of employees, job searching is no longer just about securing any income-generating contract; it is also about finding the ideal or nearly ideal workplace. Using our non-

representative sample, we aimed to identify statistically significant gender differences and, if such differences exist, to explain them with social and sociological reasoning.

These four countries share similar historical backgrounds, laws, customs, geographical features, and transportation conditions, which can also explain their differences. Our meticulously crafted literature review highlights these potential obstacles. During the labour market research, the research team discussed which factors should be included in the questionnaire; from the outset, we continuously reviewed the relevant literature. It is worth mentioning a few important factors:

- worsening demographic situation (HCSO 2022);
- loosening or disappearance of attachment to the workplace (life-long employment) (Borgulya–Hahn 2008, Brixiova et al. 2009);
- emergence of a drastic labour and talent shortage (Astrov 2019, Schuh 2022);
- effects of income disparities within the European Union (Baláková et al. 2023);
- labour migration and the appearance of foreign workers (Hassan et al. 2023);
- economic difficulties caused by Covid-19 and the Russian–Ukrainian war (Tooze 2022, Shaik et al. 2023, Beck 2024).

These obstacles significantly hinder employment opportunities for some individuals, particularly those seeking a job out of necessity. However, several more people are not just looking for a job to ensure their livelihood but one that is the most suitable for them and that improves their quality of life. In this light, we will first present the foundations on which this part of the questionnaire is based, which was compiled over several years of international research. Following this, we will present the results of our statistical analysis for the four countries under study. Finally, we will summarize the key findings of our research and address the study's limitations.

Literature review

Barriers to finding the ideal workplace

The job-seeking patterns and preferences of men and women, along with their individual motivations, are significantly influenced by social, economic, and regional factors. Gender disparities in employment highlight structural characteristics that fundamentally affect individuals' opportunities in the labour market (Castellano–Rocca 2019). In the NUTS 2 regions of the V4 countries, employment data particularly reflect these differences, which arise from the dominance of the industrial and agricultural sectors, the accessibility of the service sector, and the economic disparities between urban and rural areas (Lovaglio–Perrelli 2024). While this analysis focuses on individual preferences and labour market strategies, understanding employment differences is crucial for a deeper comprehension of the underlying economic and social factors (Prada–Cimpoeru 2023). The higher employment rate of men in industry and agriculture, alongside the broader employment opportunities

available to women in urban regions, clearly shows the structural inequalities present in the labour market (Fachelli–López-Roldán 2023).

The publication highlights the individual challenges that men and women encounter when searching for the ideal workplace. While it acknowledges regional employment disparities from a macroeconomic viewpoint, the focus is on the social, economic, and cultural factors that influence gender preferences and opportunities in the labour market, extending beyond simply looking at gross domestic product (GDP). Finding the ideal workplace depends on numerous factors (Zhenjing et al. 2022, Fiaz-Qureshi 2023). Securing the right job is time-consuming and requires a great deal of energy, especially in a competitive labour market that, as per the literature, is becoming increasingly complex and challenging to navigate (Gandía et al. 2025, WEF 2023). Previous publications have highlighted that job seekers must devote sufficient time and energy to the job search process because these factors directly influence the chances of successful employment (Shrivastava et al. 2024, Stewart et al. 2021). The time and effort invested in a job search significantly contribute to successful job hunting. It is crucial for job seekers to allocate adequate time to searching for job opportunities, preparing application materials, and getting ready for interviews. Those who invest more energy in the job search are more likely to find a suitable job. As per Shrivastava et al. (2024), the time and energy spent on the job search are closely linked to the likelihood of successful employment. More intense efforts generally result in faster employment.

Connections and references play crucial roles in the job search process. A well-established network can help job seekers access hidden job opportunities, significantly increasing their employment chances. Hidden job opportunities are not publicly advertised positions and are only available to a select group of candidates. Jack—Bassett (2024) showed that looser connections are often more effective because they provide job seekers with a broader range of information. Good references enhance a job seeker's credibility and reliability in the eyes of employers. References typically come from the applicant's former employers, colleagues, or professors and provide information about the candidate's professional competence, work ethic, and achievements.

Professional experience is another important factor that employers consider when evaluating applicants. Relevant work experience demonstrates a candidate's skills and preparedness. As per research by Kiremitçi et al. (2023), professional experience is closely related to workplace success and career development. However, the requirement for professional experience can be a disadvantage for early-career individuals (Dymmott et al. 2024). Educational attainment is also an important factor for employers. Appropriate qualifications are essential for securing a good job (OECD 2014) because they reflect candidates' abilities and preparedness. Educational background often determines a candidate's position in the labour market and the career opportunities that are available (Kossek et al. 2021). Oreopoulos et al. (2012)

pointed out that individuals with higher educational qualifications generally enter the labour market with higher starting salaries and better career prospects. Employers primarily consider candidates' skills, knowledge, and adaptability (De Smet et al. 2022).

In the past, salary was one of the most crucial aspects for job seekers. The gap between expectations and offered wages often hindered the ability to find the ideal job. Barnard–Nash's (2023) research suggests that job seekers typically look for workplaces that match their salary expectations and meet their livelihood requirements (Stor et al. 2024a). Higher salaries generally make jobs more attractive; however, other factors such as workplace culture and growth opportunities also play a significant role. Al-Mamun–Sultana's (2024) research showed that language proficiency significantly increases employability and wages, especially in areas where language skills are crucial for job performance. Language skills are particularly important in global and multicultural workplaces. Job seekers who speak multiple languages are more likely to find jobs at international companies and may receive higher salaries. Recently, new and quite different demands have emerged in the job search process, including the desire for a personal and holistic lifestyle, the need for well-being (Stor et al. 2024b), and the possibility of hybrid work arrangements (Turner 2023).

McAleer et al. (2024) stated that communication skills are crucial for workplace relationships and professional advancement. Good communication skills increase job seekers' chances of successful employment and long-term career development as they facilitate integration into new communities. More effective communication leads to better information flow, which results in more efficient job performance. The ability to collaborate in a team, meaning the capacity of an employee to work effectively with others, is becoming increasingly important in modern workplaces. Employers seek candidates who can work well in teams because successful collaboration is essential for achieving corporate goals in most work environments. Surapto et al. (2024) found that effective teamwork improves organizational performance and increases individual satisfaction. As per Salas et al. (2008), effective teams consist of members who communicate well, adapt quickly to changes, and resolve conflicts without hindering group dynamics. Good team players contribute to workplace harmony and achieve common goals, making them more likely to secure employment. Teamwork skills include collaboration, communication, conflict resolution, flexibility, and adaptability. Job seekers should focus on developing these skills to increase their competitiveness in the labour market. One of the key issues in job search is commuting and worker mobility. Are employees willing to commute to their workplace daily, and within what distance are they searching for jobs? Are they willing to relocate if they are offered a higher-paying job in another region? Economic theories simultaneously examine job selection, residential location, and commuting behaviour. A lack of willingness to commute can limit job seekers' opportunities

(Levinson 1996). Commuting, or the daily travel between home and work, can significantly impact job search and selection. The length of commuting time and associated costs often influence whether a job seeker accepts a job offer. Surapto et al. (2024) found that commuting time directly affects job seekers' decisions. Job seekers generally prefer jobs closer to their homes or with acceptable commuting times.

Worker mobility, that is, the ability of employees to change geographic locations, is also a critical factor in job search. Wang et al. (2023) found that geographic mobility increases job seekers' chances of employment because it allows them to search in a broader labour market. Job seekers who are willing and able to relocate have a greater chance of finding employment, especially if the local labour market offers limited opportunities. Workers with high mobility are better able to adapt to economic changes and regional labour market differences. Surapto et al. (2024) stated that in dual-earner households, if the two earners' workplaces are far apart, it hampers mobility, as relocating can pose a challenge for both individuals. A lack of mobility limits the number of suitable job opportunities available to job seekers (Paluch-Shum 2022). Discrimination can pose a significant barrier to job search (Becker 2010). Job seekers often face discrimination based on various factors, such as gender, age, religion, and ethnicity. This reduces employment opportunities because certain groups may be unfairly treated during job interviews or the selection process. Gender discrimination frequently occurs during job searches, where women and men are treated differently. Guillamón et al. (2024) concluded that female applicants often receive lower salary offers and are less likely to be placed in higher positions than their male counterparts. Ethnic and racial discrimination also significantly affects job search. López-Cevallos et al. (2024) found that individuals from ethnic minorities face more difficulties in finding employment and generally receive lower pay. For older job seekers, age-related discrimination is a serious issue. Neumark et al. (2019) showed that older applicants often experience age discrimination, which reduces their chances of employment and limits their opportunities in the labour market. Older candidates are generally invited to interviews less frequently and have fewer job opportunities than younger applicants. In the literature review, the authors found that there has been little research on the abovementioned barriers. They did not find any studies or literature that specifically examined these factors in the V4 countries. This study aims to help fill these research gaps.

Methodology

The research was based on a labour market study conducted in the V4 countries – the Czech Republic, Poland, Hungary, and Slovakia – aiming to identify the factors hindering the search for an ideal workplace and the underlying gender differences behind these barriers. Furthermore, this study sought to uncover the social and

economic contexts of the identified obstacles. Data collection occurred between 2022 and 2024 using paper-based and electronic questionnaires. University faculty members from the countries involved assisted in the research, leveraging their corporate and institutional networks to distribute the questionnaires to the target group. As a result of data collection, 2,011 valid responses were included in the analysis, with the following distribution: 239 respondents from the Czech Republic, 302 from Poland, 1,152 from Hungary, and 318 from Slovakia. Although the sample was diverse in terms of respondents' age and educational background, it was not representative. In this study, only gender and country relevance were considered; therefore, detailed socio-demographic characteristics are not presented (Table 1).

Gender distribution of the sample

Table 1

Country of	Distribution	Ge	Total		
employment	Distribution	male	female	Total	
Creak Danublia	Frequency	86	153	239	
Czech Republic	%	35.98	64.02	100.00	
Lluncom	Frequency	371	781	1,152	
Hungary	%	32.20	67.80	100.00	
Poland	Frequency	157	145	302	
Poland	%	51.99	48.01	100.00	
Slovakia	Frequency	135	183	318	
Slovakia	%	42.45	57.55	100.00	
Total	Frequency	749	1,262	2,011	
Total	0/0	37.25	62.75	100.00	

In addition to gender distribution, the sample was analysed from other demographic perspectives (Table 2). The age distribution of respondents varies significantly across countries: while the proportion of the 18–29 age group is notably higher in the Czech Republic, Hungary, and Slovakia, it is considerably lower in Poland, where the share of respondents aged 60 and above is the highest. Regarding educational attainment, the proportion of respondents with vocational education is particularly high in Poland; the share of those holding a master's degree is also the highest in this country. In Hungary and Slovakia, the proportion of respondents with post-secondary vocational education is higher, whereas in the Czech Republic, the bachelor's degree level is more dominant. Examining commuting distances, most Polish respondents work within their own settlements, whereas in Hungary and Slovakia, commuting over longer distances is more common. Regarding income levels, the Polish sample differs from the others at both extremes, with the highest proportions of respondents in the *well above average* and *well below average* income categories. Among Hungarian respondents, the share of those who classify their

income as above average is particularly high, whereas most Czech and Slovak respondents fall into the average income category.

 ${\bf Table~2}$ **Demographic and socio-economic distribution of the sample**

					(%)
Category	Czech Republic	Hungary	Poland	Slovakia	Total
Age distribution					
18–29	69.8	63.4	22.8	59.1	57.7
30–39	14.1	16.7	23.5	17.6	17.5
40–59	14.9	18.4	28.1	20.0	19.6
60+	0.8	0.8	25.5	2.4	4.6
Education level					
primary education	0.0	0.5	0.7	0.3	0.4
vocational education	1.6	2.8	19.2	6.9	5.6
high school	56.9	39.5	27.5	43.6	40.5
post-secondary vocational education	3.5	16.9	8.9	9.6	13.0
bachelor's degree (BSc/BA)	30.6	32.4	11.6	27.5	28.5
master's degree (MSc/MA)	5.5	7.2	28.5	9.9	10.4
doctoral degree	2.0	0.4	3.6	1.2	1.2
Distance to workplace					
same settlement <25 km	57.6	59.0	74.8	52.2	60.0
same settlement >25 km	1.6	2.3	5.3	4.8	3.0
different settlement <25 km	22.0	15.2	7.6	19.1	15.6
different settlement >25 km	6.3	10.5	0.0	13.1	8.9
different settlement >50 km	5.5	7.1	6.0	3.9	6.2
different settlement >100 km	5.1	3.3	6.3	3.6	4.0
Income level					
well below average	4.3	4.0	7.9	5.7	4.8
below average	29.8	19.0	23.5	23.6	21.6
average	47.1	49.6	45.4	51.3	49.0
above average	13.7	21.1	16.2	13.4	18.3
well above average	1.2	1.9	6.6	2.7	2.6

The research used a 13-item questionnaire designed to examine factors hindering the search for an ideal workplace. Participants expressed their opinions on a four-point Likert scale (1 = strongly disagree, 4 = strongly agree), allowing the assessment of the relative weight of individual barriers. The questionnaire included factors such as insufficient qualifications, poor language skills, lack of networking opportunities, and mobility issues. The reliability of the questionnaire was tested using Cronbach's alpha, which yielded a value of 0.808, indicating good internal consistency. For data analysis, the Mann–Whitney U test was employed because the variables were ordinal in nature and did not follow a normal distribution, as confirmed by the Kolmogorov–Smirnov and Shapiro–Wilk tests. The gender differences for each barrier were analysed based on Z values and p-values. Negative Z values indicated that the factor posed a greater barrier for women, whereas positive values suggested a more significant issue for men. The analyses were conducted using the SPSS software,

ensuring accurate data processing and analysis. Although the non-representative nature of the sample limits the generalizability of the findings, the research provided valuable insights into gender differences in barriers to finding an ideal workplace. The results highlight the social and economic contexts that explain these barriers in the labour markets of the V4 countries. The identified differences serve as a useful foundation for the further development of labour market strategies and equality programs in the region. This study explored gender differences in factors hindering the search for an ideal workplace in the V4 countries. The following key research questions were expressed as follows:

- 1. What are the key barriers for men and women in finding an ideal workplace in the V4 countries?
- 2. To what extent are the observed barriers shared across the V4 countries, and where do the divergences occur?
- 3. Do gender-specific patterns emerge in the types or intensity of barriers to finding an ideal workplace?
- 4. How do regional and socio-economic contexts influence labour market barriers in the V4 countries?
- 5. What measures are effective in addressing the identified barriers and promoting gender equality in labour markets across the V4 countries?

The factors hindering the attainment of an ideal workplace are shown in our research model, which is presented in Figure 1.

Research model

Figure 1

Czech Republic Hungary O b s Poland t a c l Slovakia e Ideal workplace

Research results

Labour market data and regional differences

Before analysing the primary data, it is crucial to provide an overview of the labour market conditions in the 4 countries examined with a particular focus on gender-based disparities. Comparing employment rates by gender shows persistent differences between men and women, commonly referred to as the gender employment gap. This comparison enables a deeper understanding of how such disparities vary depending on the level of regional economic development.

Analysing regional labour market disparities is crucial for identifying employment trends and uncovering structural inequalities. Focusing on the NUTS 2 regions of the V4 countries, this section presents empirical data on gender employment differences alongside relevant economic indicators. The objective of this study is to examine the relationship between GDP per capita and the relative disadvantage women face in the labour market and to explore how various economic structures – such as the dominance of the service sector or the prevalence of industry and agriculture – contribute to gender inequality. This overview provides a conceptual foundation for interpreting the findings of the primary research and clarifies how regional labour market patterns are shaped by broader economic dynamics.

By examining employment rates, gender gaps, and GDP per capita, the analysis highlights regional variations in labour market opportunities. The data illustrate how economic structures, sectoral dominance, and regional development influence employment patterns and gender disparities. Special attention is given to the impact of urbanization, industrial concentration, and the presence of the service sector, which collectively shape labour market outcomes. The findings provide valuable insights into the socio-economic dynamics underlying employment trends, contributing to a broader understanding of regional labour market challenges within the V4 countries.

Table 3 shows gender employment disparities across Hungary's NUTS 2 regions, highlighting the characteristics of the regional labour market. The smallest gap was found in the Budapest region, where the difference was only 8.8%. This trend can be attributed to the urban nature of the capital city and the significant presence of the service sector. Moderate disparities are observed in Central and Western Transdanubia, where the employment gap was 11.7%. In contrast, the largest gender employment gap, at 14.1%, was recorded in Northern Hungary. This is largely owing to the region's reliance on traditional economic activities, particularly the dominance of industry and agriculture. Similar trends are noted in the Great Plain regions, where disparities range from 11% to 12%, reflecting the influence of traditional economic structures. The analysis suggests that more urbanized regions tend to have more balanced employment rates, whereas areas dominated by traditional industries and agriculture experience larger gender disparities.

Table 3 Employment rate and GDP per capita in Hungary, 2022

Hungarian NUTS 2 regions	Female	Male	Gender gap	CDD non conito
Hungarian NO 13 2 regions		GDP per capita		
Budapest	65.7	74.5	8.8	56,100
Pest	61.3	71.9	10.6	23,100
Central Transdanubia	60.5	72.2	11.7	25,000
Western Transdanubia	59.6	71.3	11.7	24,100
Southern Transdanubia	53.3	64.9	11.6	18,500
Northern Hungary	52.6	66.7	14.1	17,600
Northern Great Plain	55.1	67.2	12.1	17,700
Southern Great Plain	56.6	68.5	11.9	19,600

Source: own editing based on Eurostat (2024a, 2024b).

Table 4 shows the disparities in employment between genders in the NUTS 2 regions of the Czech Republic. Prague exhibits one of the smallest gaps, with a difference of only 13.6% between male and female employment rates. This is likely owing to the significant role of the service sector, which offers broader opportunities for both genders. A similarly balanced labour market is observed in the Moravian–Silesian region, where the gap is 13.3%, which is attributed to economic diversification. In contrast, the southeast region has the largest disparity, with male employment exceeding female employment by 15.5%. This is closely followed by Central Bohemia at 15.1% and southwest at 14.3%; in these regions, the dominance of the industrial and agricultural sectors significantly contributes to the gender gap. Notable disparities are also present in the northwest (14.2%) and northeast (14%) regions, which are characterized by industrialized economic structures. In addition, the Central Moravia region shows a 14.9% gap, reflecting the prevalence of maledominated employment in the industrial sector.

Table 4 Employment rate and GDP per capita in the Czech Republic, 2022

Creak NILITS 2 regions	Female	Male	Gender gap	GDP per capita		
Czech NUTS 2 regions		0/0				
Prague	64.0	77.6	13.6	73,400		
Central Bohemia	59.5	74.6	15.1	28,100		
Southwest	58.5	72.8	14.3	26,000		
Northwest	54.9	69.1	14.2	21,400		
Northeast	56.6	70.6	14.0	25,600		
Southeast	57.3	72.8	15.5	29,300		
Central Moravia	55.8	70.7	14.9	25,900		
Moravian-Silesian	55.6	68.9	13.3	25,200		

Source: own editing based on Eurostat (2024a, 2024b).

Table 5 shows the disparities in gender employment across the Polish NUTS 2 regions. The smallest gap was found in the Warsaw capital region, with a difference of only 9.5%. This is largely owing to the benefits of an urbanized labour market that is primarily driven by the service sector. Conversely, the largest disparity was observed in the Lubusz region, where the gap was 17.1%; this trend can be attributed to the predominance of industry and agriculture in that area. The Subcarpathian region also shows a significant gap of 15.5%, primarily owing to limited economic opportunities and traditional employment structures. Moderate disparities are present in the Warmia–Masuria (15.1%), Greater Poland (14.6%), and Lesser Poland (14.7%) regions, where traditional economic activities continue to be important. Smaller but still significant differences are noted in the West Pomeranian (13%) and Podlaskie (13%) regions, where more balanced economic structures offer relatively equitable employment opportunities. Overall, urban regions tended to exhibit narrower gender employment disparities, whereas areas dominated by industry and agriculture showed wider gaps.

Table 5 Employment rate and GDP per capita in Poland, 2022

Polish NUTS 2 regions	Female	Male	Gender gap	GDP per capita		
Folisti NO 13 2 regions		0/0				
Lesser Poland	52.9	67.6	14.7	24,166		
Silesia	52.9	66.4	13.5	27,084		
Greater Poland	56.8	71.4	14.6	29,016		
West Pomerania	53.2	66.2	13.0	21,279		
Lubusz	51.0	68.1	17.1	21,499		
Lower Silesia	54.4	68.8	14.4	30,276		
Opole	53.9	67.9	14.0	21,025		
Kuyavia-Pomerania	53.8	67.5	13.7	20,761		
Warmia–Masuria	50.1	65.2	15.1	18,181		
Pomerania	56.6	70.6	14.0	25,401		
Łódź	55.1	69.5	14.4	25,240		
Holy Cross	51.6	65.7	14.1	18,667		
Lublin	52.6	65.3	12.7	18,114		
Subcarpathia	46.7	62.2	15.5	18,455		
Podlaskie	55.9	68.9	13.0	18,881		
Warsaw capital	64.9	74.4	9.5	57,932		
Mazovian regional	53.2	67.9	14.7	23,578		

Source: own editing based on Eurostat (2024a, 2024b).

Table 6 shows a detailed overview of the differences in employment rates between genders in the Slovak NUTS 2 regions. The smallest disparity was found in the Bratislava region, where the gap was 5.5%. This smaller difference can be attributed to the region's advanced economic structure and the dominant role of the service sector, which provides more balanced employment opportunities for men and women. In Western Slovakia, the gap was 8.8%, whereas in Central Slovakia, it was

8.9%. This disparity is primarily owing to the strong presence of the industrial sector in these regions. The largest disparity occurs in Eastern Slovakia, where the difference in employment rates between men and women was 10.6%. This significant difference is primarily a result of the dominance of industry and agriculture in the region, which typically offer fewer employment opportunities for women.

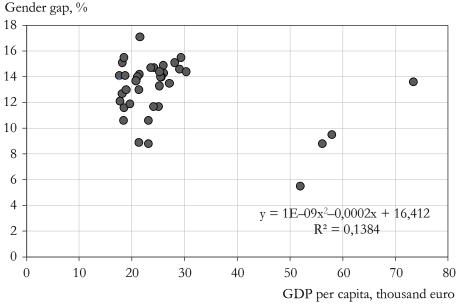
Table 6 Employment rate and GDP per capita in Slovakia, 2022

Slovakian NUTS 2 regions	Female			CDP por capita
Siovakian NO 13 2 regions		GDP per capita		
Bratislava region	66.8	72.3	5.5	51,900
Western Slovakia	58.9	67.7	8.8	23,100
Central Slovakia	57.5	66.4	8.9	21,300
Eastern Slovakia	52.5	63.1	10.6	18,400

Source: own editing based on Eurostat (2024a, 2024b).

Figure 2 analyses the gender employment rate gap (men minus women) in relation to GDP per capita across the NUTS 2 regions of the V4 countries. It includes a linear trendline that indicates a slight decline, suggesting that as GDP per capita increases, the gender employment rate gap generally decreases. However, the low coefficient of determination ($R^2 = 0.1384$) shows a weak relationship between GDP and the gender gap, implying that other factors also play significant roles. In regions with low GDP per capita (between \$10,000 and \$25,000), the gender employment rate gap is typically high, ranging from 12% to 17%. These areas are often dominated by the industrial and agricultural sectors, which traditionally favour male employment. As a result, women's employment rates tend to be lower, resulting in larger gaps. In regions with medium GDP values (between \$25,000 and \$30,000), the differences slightly decreased but remained significant, ranging from 12% to 15%. This suggests that economic structure and labour market characteristics remain crucial. In regions with higher GDP per capita (above \$40,000), such as the Bratislava region (5.5%) and the Warsaw capital region (9.5%), the gender gap is considerably smaller. These regions are characterized by economic diversification, the predominance of the service sector, and broader labour market opportunities, resulting in more balanced employment rates. The service sector, along with higher education levels, creates favourable conditions for women, thereby reducing employment rate gaps. In the case of Prague, the gender gap-reducing effect of a well-developed service sector may be counterbalanced by the fact that high-prestige, well-paid jobs in the technology, IT, and financial sectors are still predominantly held by men.

 $\label{eq:Figure 2} \textbf{Relationship between regional GDP per capita and the gender employment gap}$



Source: own editing based on Eurostat (2024a, 2024b).

Reliability test

After conducting the reliability analysis, we proceeded with the examination of the primary data, considering the insights and correlations revealed through the analysis of the secondary, region-level data. To evaluate the reliability of the questionnaire, 13 statements were analysed, allowing responses on a Likert scale (1 = strongly disagree, 4 = strongly agree). The aim of the analysis was to determine the extent to which the statements described barriers to finding an ideal workplace (Table 7). The overall Cronbach's alpha value was 0.808, indicating that the questionnaire is reliable. A value above 0.7 is considered acceptable, whereas a value above 0.8 reflected good internal consistency.

The statements were analysed based on the *mean if item deleted*, *variance if item deleted*, *item-total correlation*, and *alpha if item deleted* indicators. The *mean if item deleted* indicates how the removal of a specific statement affects the overall mean, and the *variance if item deleted* measures the variance after its removal. The *item-total correlation* shows the strength of the relationship between the specific statement and the overall scale, and the *alpha if item deleted* shows how the reliability of the scale would change if the statement were removed. The results showed that the statement "already found" had a *negative item-total correlation* value (-0.225), and its removal would have increased the Cronbach's alpha value to 0.844. This suggested that the statement did not align well

with the other items on the scale, potentially affecting the accuracy of the results. Therefore, this statement was excluded from further analysis. Several statements within the scale showed a strong correlation with the overall scale, such as "poor team player" (*item-total correlation*: 0.617), "poor communication skills" (0.64), and "poor references" (0.647). These statements significantly contributed to the internal consistency of the questionnaire. Furthermore, moderately strong items such as "poor professional experience" (0.465), "no right qualification" (0.513), and "poor network" (0.494) also fit well within the scale, supporting the questionnaire's objectives.

After excluding the "already found" statement, the questionnaire showed adequate internal consistency and was deemed suitable for further studies exploring barriers to finding an ideal workplace.

Reliability test

Table 7

Variable	Mean if	Variance if	Item-total	Alpha if
Already found	34.959	56.462	-0.225	0.844
Poor energy to searching	34.818	49.545	0.239	0.811
Poor professional experience	34.911	46.249	0.465	0.793
No right qualification	34.743	45.561	0.513	0.789
Poor language skills	34.771	47.224	0.393	0.799
Poor team player	34.107	45.404	0.617	0.781
Poor communication skills	34.206	44.827	0.640	0.779
Poor references	34.364	44.509	0.647	0.778
Poor network	34.579	46.154	0.494	0.791
Poor payment	34.687	46.653	0.455	0.794
Cannot commute	34.497	45.338	0.547	0.786
Cannot move	34.634	45.499	0.489	0.791
Gender, age, religion, and minority status	34.188	45.440	0.549	0.786

Normality test

The distribution was not normal, as indicated by the Kolmogorov–Smirnov and Shapiro–Wilk tests (p < 0.01); this refers to all 13 variables.

Differences between men and women by country

In this analysis, the Mann–Whitney U test with continuity correction was applied to assess the differences between men and women in the V4 countries regarding 13 variables related to job search challenges. The Mann–Whitney U test was used because it is a non-parametric test suitable for comparing two independent groups (men and women) on ordinal or continuous variables that do not follow a normal distribution. Significant differences were found in several areas, as outlined below. For each of the 13 variables, shorter names were used.

The Czech Republic: significant findings

The analysis examined the differences in factors hindering the attainment of an ideal workplace for men and women living in the Czech Republic (Table 8). Using the Mann-Whitney U test, the research identified factors that showed significant gender differences. The results clearly highlight that certain barriers affect women to a greater extent, providing important insights into labour market equality. The most pronounced difference was observed in the barrier of low wages. The data indicated a Z value of -4.167 and a p-value of 0.000, representing a statistically highly significant difference. The negative Z value shows that low wages are a greater obstacle for women than for men. Similarly, for poor references, the Z value was -3.414 and the p-value was 0.001, indicating that women perceive this barrier to a significantly greater extent. The lack of a network also showed a significant difference, with a Z value of -2.270 and a p-value of 0.023, indicating that this barrier is more impactful for women. Regarding poor teamwork skills, the Z value was -2.410 and the p-value was 0.016, indicating that this obstacle affects women more. In contrast, several factors, such as poor professional experience (Z = -0.631, p = 0.528), lack of language skills (Z = -0.584, p = 0.559), or barriers related to discrimination, such as gender, age, or religious affiliation (Z = -1.047, p = 0.295), did not show significant differences; this suggests that these barriers affect men and women to a similar extent. When interpreting the results, it is crucial to emphasize that negative Z values indicate that specific factors pose greater barriers for women. This is particularly relevant for low wages, poor references, and lack of network because these factors significantly influence women's labour market opportunities. Such findings can inform targeted labour market interventions designed to reduce barriers faced by women and promote equality. The analysis underscores the importance of considering gender differences when designing labour market strategies and ensuring equal opportunities.

Gender differences in the Czech Republic

Table 8

Test statistics	Mann– Whitney U	Wilcoxon W	Z	Asymp. sig.
Already found	5,645.5	17,273.5	-1.855	0.064
Poor energy to searching	5,581.5	9,322.5	-1.222	0.222
Poor professional experience	5,812	9,553	-0.631	0.528
No right qualification	5,989	16,142	-0.101	0.920
Poor language skills	5,809	16,105	-0.584	0.559
Poor team player	5,072.5	8,813.5	-2.410	0.016
Poor communication skills	5,547.5	9,288.5	-1.249	0.212
Poor references	4,665.5	8,406.5	-3.414	0.001
Poor network	5,221	8,962	-2.270	0.023
Poor payment	4,278	8,019	-4.167	0.000
Cannot commute	5,762.5	9,503.5	-0.814	0.416
Cannot move	5,527	9,268	-1.351	0.177
Gender, age, religion, and minority status	5,675	9,416	-1.047	0.295

Hungary: significant findings

The aim of the analysis was to identify the factors hindering men and women in Hungary from finding an ideal workplace and to examine the gender differences among these factors (Table 9). Weak language skills emerged as a prominent issue, with a Z value of -3.981 and a p-value of 0.000, indicating that this factor poses a significantly greater barrier for women than for men. A similar disparity was observed regarding the lack of teamwork skills, where the Z value was -3.112 and the p-value was 0.002, suggesting that the absence of these skills makes employment more challenging for women. The barrier of low wages also showed a statistically significant difference (Z = -2.293, p = 0.022), indicating that it is a greater challenge for women. Mobility issues, particularly the obstacle of relocation, were also notable, with a Z value of -3.130 and a p-value of 0.002, suggesting that the lack of relocation opportunities is a much more significant barrier for women. In contrast, several factors, such as poor professional experience (Z = -1.128, p = 0.259), lack of communication skills (Z = -1.152, p = 0.249), and weak networks (Z = -1.383, p = 0.167), did not show significant differences between men and women; this indicates that these barriers affect both genders to a similar extent. The findings of this analysis offer crucial insights into understanding labour market challenges. Factors such as weak language skills, lack of teamwork skills, low wages, and mobility constraints disproportionately affect women, highlighting the requirement for targeted measures to reduce gender inequalities. Such research can serve as a foundation for developing comprehensive labour market strategies aimed at addressing gender disparities and overcoming barriers for men and women.

Gender differences in Hungary

Table 9

Test statistics	Mann– Whitney U	Wilcoxon W	Z	Asymp. sig.
Already found	139,656	207,921	-0.852	0.394
Poor energy to searching	137,258.5	427,199.5	-0.021	0.983
Poor professional experience	131,499	421,440	-1.128	0.259
No right qualification	132,608.5	420,269.5	-0.870	0.385
Poor language skills	117,745	408,448	-3.981	0.000
Poor team player	123,960	188,221	-3.112	0.002
Poor communication skills	131,095.5	194,998.5	-1.152	0.249
Poor references	134,045.5	199,386.5	-0.676	0.499
Poor network	130,105	419,285	-1.383	0.167
Poor payment	125,687	414,867	-2.293	0.022
Cannot commute	127,093	414,754	-1.740	0.082
Cannot move	121,350	410,530	-3.130	0.002
Gender, age, religion, and minority status	136,512	201,853	-0.121	0.904

Poland: significant findings

The analysis aimed to identify the factors hindering the attainment of an ideal workplace in Poland, with a particular focus on gender differences (Table 10). The most significant difference was observed in the lack of appropriate qualifications, where the Z value was -2.220 and the p-value was 0.026, indicating a statistically significant disparity. This result shows that women are more likely to perceive their lack of qualifications as a barrier to finding an ideal workplace.

For the category "already found an ideal workplace", the Z value was -1.907 and the p-value was 0.057. Although this result does not meet the strict significance threshold, the trend suggests that women may face more challenges in this area. This finding warrants further attention in the analysis of gender-based labour market inequalities.

Other examined factors, such as lack of language skills (Z = -0.161, p = 0.872), poor teamwork skills (Z = -1.018, p = 0.309), or wage issues (Z = -0.557, p = 0.578), did not show significant differences between men and women; this indicates that these barriers similarly affect both genders in Poland.

According to the respondents' opinions, women more frequently perceive a lack of appropriate qualifications as a barrier to attaining their ideal workplace. This phenomenon may have several causes, including labour market expectations, discrepancies between qualifications and employer requirements, and socio-cultural factors influencing women's self-assessment and employment opportunities. Research indicates that women generally achieve higher educational levels than men; however, findings also suggest that they are more likely to feel that their qualifications are insufficient (Taparia-Lenka 2022, Bertrand 2018). This perception is partly linked to the glass ceiling effect, which refers to structural and informal barriers that hinder women's professional advancement. As a result, women often face hidden obstacles that make it more difficult for them to reach higher positions, even when they formally meet the necessary qualification requirements (Ganiyu et al. 2018). Respondents' experiences suggest that beyond objective qualifications, other factors, such as employer perceptions, access to professional networks, and differences in professional self-confidence, play crucial roles in career development. Studies have also highlighted that structural characteristics within workplace systems and implicit biases significantly contribute to women perceiving lack of qualifications as a barrier, even when no actual skill deficit exists (Ciminelli et al. 2021).

Table 10 Gender differences in Poland

Test statistics	Mann– Whitney U	Wilcoxon W	Z	Asymp. sig.
Already found	9,995	20,580	-1.907	0.057
Poor energy to searching	10,421	21,006	-1.331	0.183
Poor professional experience	10,517	22,920	-1.202	0.229
No right qualification	9,786.5	22,189.5	-2.220	0.026
Poor language skills	11,265.5	23,668.5	-0.161	0.872
Poor team player	10,658	23,061	-1.018	0.309
Poor communication skills	10,870	23,273	-0.722	0.470
Poor references	10,941	23,344	-0.621	0.535
Poor network	11,073.5	23,476.5	-0.425	0.671
Poor payment	10,982	21,567	-0.557	0.578
Cannot commute	10,725	23,128	-0.914	0.361
Cannot move	11,272	23,675	-0.152	0.879
Gender, age, religion, and minority status	11,224	23,627	-0.223	0.823

Slovakia: significant findings

This study analysed the factors hindering men and women in Slovakia from finding an ideal workplace, with a particular focus on gender differences (Table 11).

The results revealed that lack of energy for searching jobs was one of the most significant differences. The Z value was -3.571, and the p-value was 0.000, indicating that women struggle with this issue to a much greater extent than men; this finding could be attributed to the increased burdens arising from women's life situations and societal roles. Lack of teamwork skills also showed a significant difference, with a Z value of -2.008 and a p-value of 0.045, suggesting that women perceive this barrier as more severe than men. Furthermore, poor communication skills showed a notable difference, with a Z value of -2.441 and a p-value of 0.015, highlighting that the absence of these skills poses a greater obstacle for women in succeeding in the labour market. Relocation barriers also presented a significant challenge, with a Z value of -2.408 and a p-value of 0.016. This clearly indicates that difficulties in relocation represent a greater obstacle for women, potentially owing to family obligations or other social factors. Other factors, such as lack of professional experience (Z = -0.803, p = 0.422), weak language skills (Z = -1.189, p = 0.234), or wage issues (Z = -0.086, p = 0.932), did not show significant differences between genders, suggesting that these challenges affect men and women similarly.

Overall, the analysis shows that certain factors – particularly lack of energy for searching jobs, weak teamwork and communication skills, and mobility barriers – pose greater difficulties for women in finding an ideal workplace.

Table 11 Gender differences in Slovakia

Test statistics	Mann– Whitney U	Wilcoxon W	Z	Asymp. sig.
Already found	11,206.5	20,386.5	-1.393	0.164
Poor energy to searching	8,966.5	17,481.5	-3.571	0.000
Poor professional experience	10,497.5	25,548.5	-0.803	0.422
No right qualification	10,608.5	18,993.5	-1.368	0.171
Poor language skills	10,687	19,202	-1.189	0.234
Poor team player	10,309.5	18,824.5	-2.008	0.045
Poor communication skills	10,012	18,790	-2.441	0.015
Poor references	11,238	19,884	-0.765	0.444
Poor network	11,752.5	20,530.5	-0.082	0.934
Poor payment	11,749.5	27,859.5	-0.086	0.932
Cannot commute	10,653.5	19,299.5	-1.354	0.176
Cannot move	9,941.5	18,719.5	-2.408	0.016
Gender, age, religion, and minority status	11,337	20,115	-0.792	0.429

Discussion of the results in the context of the research questions

This section of the article provides answers to the previously developed research questions. The first research question explored was as follows: what are the key barriers for men and women in finding an ideal workplace in the V4 countries?

This study identified several key barriers affecting job seekers in the V4 countries. While these obstacles are present for both men and women, they tend to impact women more severely. Common barriers include economic issues, such as low wages; skill and qualification gaps; and limitations in professional networks. Furthermore, mobility constraints and challenges in balancing work with personal responsibilities further restrict access to ideal workplaces.

Low wages emerged as a significant economic barrier, highlighting persistent wage disparities. In the Czech Republic, low wages particularly hinder women's access to ideal workplaces. Harman–Bartůsková (2024) emphasized that the gender pay gap is especially persistent in lower-income brackets, although women generally exhibit better labour market indicators than men. Furthermore, Holienka et al. (2016) underscored that low wages reduce women's entrepreneurial ambition and overall labour market participation. The Covid-19 pandemic intensified these inequalities, significantly reducing women's incomes, as noted by Alwago (2021). Qualification gaps, particularly in access to training and education, were also notable, as was the difficulty of building strong professional networks. Ingham–Ingham (2002) further emphasized the need for targeted educational programs to address this issue and improve women's labour market participation.

Mobility constraints, including challenges with commuting or relocation, were consistently identified as barriers that are often tied to family obligations or regional economic disparities. In Slovakia, these constraints intersect with a lack of energy and

motivation for searching jobs. Dvouletý–Orel (2020) link this issue to family and household obligations, which disproportionately limit women's job searching opportunities. Fialová–Želinský (2019) highlighted that motivational programs and support systems could increase women's labour market activity, while Hornat (2021) identified cultural and social factors as significant influences on women's motivation. These findings underscore the complexity of labour market barriers, reflecting the interplay of systemic economic inequalities and broader social and cultural dynamics. Although these general findings highlight the pervasive nature of these challenges, country-specific patterns and gendered differences reveal additional nuances.

The second research question was as follows: to what extent are the observed barriers shared across the V4 countries, and where do the divergences occur?

Building on the general findings outlined above, this analysis reveals that certain barriers are shared across all V4 countries, reflecting systemic issues that transcend national boundaries. Low wages consistently emerged as a significant barrier for women in each country, although the severity varied depending on the national context. Similarly, weak professional networks and mobility constraints were common obstacles that disproportionately affected women across the region. These shared barriers suggest that structural gender inequalities are a persistent feature of the labour markets in the V4 countries. Despite these commonalities, the analysis also highlights significant divergences. In Hungary, weak language skills are a critical barrier for women, particularly when seeking employment in international markets. Arendt et al. (2024) demonstrated that inadequate language proficiency limits women's ability to secure higher positions and fully participate in competitive labour markets. This challenge disproportionately affects women from lower socioeconomic backgrounds, as argued by Nowiński et al. (2019). Additionally, Holienka et al. (2016) noted that weak language skills hinder the operations of female entrepreneurs in international markets. In Poland, inadequate qualifications were a major obstacle, particularly for women seeking higher-level positions, owing to disparities in access to education and vocational training. In Slovakia, women reported a distinct lack of motivation and energy for job search, which was not observed with the same intensity elsewhere. Conversely, in the Czech Republic, low wages and weak professional networks were particularly pronounced challenges, reflecting regional economic disparities. These findings show the importance of addressing shared and country-specific barriers through a combination of regional and tailored national strategies.

The third research question was phrased as follows: do gender-specific patterns emerge in the types or intensity of barriers to finding an ideal workplace?

As seen in the shared and divergent barriers discussed earlier, women across the V4 countries face disproportionately severe challenges, including weak language skills, inadequate qualifications, and mobility constraints. These barriers consistently highlight the systemic disadvantages faced by women in accessing ideal workplaces.

In Slovakia, women faced significant challenges related to motivation and energy for job search, reflecting additional burdens such as caregiving responsibilities. Mobility constraints, including relocation and commuting difficulties, were also more severe for women, limiting access to desirable employment opportunities. In Hungary, weak language skills emerged as a particularly pronounced barrier for women, affecting their ability to compete in international labour markets. Similarly, in the Czech Republic, women were more likely to experience barriers related to low wages and weak professional networks. In Poland, inadequate qualifications disproportionately affected women, reflecting broader gender disparities in education and training opportunities. These gender-specific patterns underscore the broader structural and cultural dynamics that contribute to labour market inequalities. Addressing these systemic challenges, as highlighted by studies such as Holienka et al. (2016) and Korotaj et al. (2024), will require gender-sensitive policies tailored to the unique barriers faced by women across the V4 countries.

The fourth research question focused on understanding how regional and socioeconomic contexts shape labour market barriers in the V4 countries.

To address the question of how regional and socio-economic contexts influence labour market barriers in the V4 countries, the analysis must first identify the most significant barriers in each country based on the empirical data and then contextualize these barriers using relevant literature. As previously discussed, barriers such as low wages in the Czech Republic or weak language skills in Hungary highlight systemic challenges that are often intensified by regional disparities and socio-economic contexts. Instead of restating these barriers, answering the research question will focus on the broader regional and economic factors that shape them.

In the Czech Republic, low wages and the lack of professional networks and recommendations emerged as the most significant barriers. Literature suggests that regional economic disparities, particularly between developed regions such as Prague and rural areas, contribute to these challenges (Finardi 2022). Women in lessdeveloped regions are overrepresented in lower-paying sectors, limiting their ability to access better-paying jobs. The lack of professional networks is often linked to restricted career mobility and relocation opportunities, as highlighted by the structural barriers discussed in previous studies (Cukrowska-Torzewska et al. 2020). In Slovakia, regional disparities in urbanization and economic activity intensify challenges such as motivation and energy for job search. Hornat (2021) argued that women in rural areas face fewer employment opportunities and encounter greater structural barriers to relocation, further limiting their labour market activity. Moreover, these challenges are compounded by societal norms that disproportionately place caregiving responsibilities on women, as noted by Fialová-Želinský (2019). Similarly, in Hungary, regional economic disparities exacerbate issues such as weak language skills and mobility constraints. Access to language training is more limited in economically underdeveloped areas, further disadvantaging women in international labour markets

(Cefalo et al. 2020). Mobility constraints, already influenced by caregiving responsibilities, are further amplified by limited opportunities in rural regions.

In Poland, inadequate qualifications continue to be a significant barrier, particularly for women seeking higher positions. Recent studies indicate that although women generally achieve higher education levels than men, many perceive their qualifications as insufficient to meet labour market expectations (Zawistowska 2024). This issue is particularly evident in sectors where job market demands and women's skills show substantial mismatches, such as STEM and ICT (Dzieńdziora-Dacko-Pikiewicz 2018). The transition from education to employment is a critical phase in which discrepancies between acquired qualifications and labour market requirements become particularly pronounced. Research shows that young female graduates in Poland face significant difficulties in securing jobs that match their educational background, primarily owing to rigid labour market structures and limited career advancement opportunities (Niewiadomska-Cudak 2017). Moreover, studies have highlighted that despite their high education levels, Polish women encounter various employment barriers. These challenges are most prevalent in technical fields, where a lack of female role models and structural biases contribute to persistent gender disparities (Flaszyńska 2020). Efforts to bridge the gap between education and labour market needs, particularly in male-dominated fields such as STEM and ICT, are essential for reducing these gender-based barriers and ensuring equal employment opportunities.

In conclusion, regional and socio-economic contexts significantly influence labour market barriers in the V4 countries. Economic disparities between regions, access to education and training, and cultural norms all contribute to distinct challenges in each country. While earlier research questions focused on specific barriers in each country, this analysis underscores how regional contexts intensify these obstacles and create additional complexities. For instance, challenges such as weak language skills in Hungary or lack of motivation in Slovakia cannot be fully understood without considering the regional disparities and socio-economic divides that exacerbate these issues, as argued by Hornat (2021) and Cefalo et al. (2020). Although the empirical data in the article does not directly analyse regional contexts, the literature provides valuable insights into how these factors shape labour market outcomes. Future research should integrate more regionally disaggregated data to provide a deeper understanding of these dynamics and their impact on gender-specific barriers.

The fifth research question addressed the following issue: what measures could be effective in addressing the identified barriers and promoting gender equality in labour markets across the V4 countries?

Effective measures to address the identified barriers and promote gender equality in labour markets across the V4 countries must target shared and country-specific challenges, reflecting the systemic and contextual nature of the obstacles faced by women.

To address the pervasive issue of low wages, policies aimed at reducing gender pay gaps should be prioritized. Strengthening equal pay legislation, encouraging wage transparency, and introducing measures to encourage women's representation in higher-paying industries and positions are important steps. These policies should be complemented by broader labour market reforms that promote fair compensation practices and reduce wage disparities. Weak professional networks, which limit women's access to ideal workplaces, can be mitigated through targeted networking initiatives. Mentorship programs and professional networking platforms designed specifically for women can enhance their access to career opportunities. Expanding employer-sponsored training programs to develop skills and strengthen women's professional profiles would also help address this barrier.

Mobility constraints require the development of policies that promote flexible work arrangements, such as remote work options, flexible hours, and telecommuting. These measures can help women balance work with family responsibilities, which is a significant factor that limits mobility. Furthermore, investments in transportation infrastructure and subsidies for commuting costs would reduce geographic barriers to employment, particularly in rural or economically disadvantaged regions. To address weak language skills, particularly in Hungary, governments should invest in accessible language training programs tailored to women re-entering the workforce or seeking higher-skilled roles. These programs should focus on practical language use relevant to international or competitive labour markets. Partnerships between governments, employers, and educational institutions can ensure that training is affordable and aligned with labour market demands. In Poland, addressing inadequate qualifications requires expanding access to education and vocational training, particularly in rural areas where opportunities are limited. Policies should focus on providing financial support to women pursuing higher education or for reskilling programs. Integrating gendersensitive curricula and creating targeted scholarships for women in underrepresented fields, such as STEM, can help bridge qualification gaps.

For Slovakia, measures to increase women's motivation and energy for job search should address underlying societal norms and structural constraints. Public awareness campaigns promoting shared domestic responsibilities and the benefits of gender equality in the workforce can help shift cultural attitudes. Moreover, job search assistance programs, such as career counselling and coaching services, can provide women with the support and resources required to navigate the labour market effectively. Finally, regional cooperation within the V4 countries can amplify the impact of these measures. Sharing best practices, pooling resources for cross-border initiatives, and aligning gender equality policies can address shared barriers more efficiently. By combining regional strategies with tailored national interventions, the V4 countries can create a more inclusive and equitable labour market for women.

Summary and final conclusions

The primary research goal of our study was to determine whether the obstacles to finding the right employer and job role differ between genders in the V4 countries. Considering the findings presented here, we conclude that this goal has been successfully achieved. This was made possible by a thorough analysis of the research data collected and by providing detailed answers to the research questions.

However, it is important to acknowledge that the sample used in this study is not representative, which limits the extent to which the findings can be generalized to the entire population. As a result, the conclusions should be interpreted as indicative rather than definitive; future research should aim to collect a more balanced and representative dataset or complement the analysis with qualitative methods to provide deeper insights.

This study sheds new light on gender-based labour market barriers in the V4 countries, paying particular attention to the unique challenges faced by each country and situating the findings within the context of the existing literature. The results indicate that women face significantly greater barriers to labour market participation. Zwysen (2019) found that gender differences in educational participation rates significantly influence labour market opportunities, particularly in Central and Eastern Europe. Limited access to lower-level education hinders women's career advancement, which is particularly relevant in Poland's case. The impact of conservative gender roles has been emphasized by Fleckenstein-Lee (2017), who argued that these factors significantly restrict women's labour market participation. This finding aligns with data from Slovakia, where lack of motivation plays a key role in job search. The relevance of language barriers in Hungary is supported by Cefalo et al. (2020), whose studies show that lack of language skills is a serious obstacle in international work environments. Furthermore, Holienka et al. (2016) highlighted that the impact of barriers is strongly influenced by gender-specific social roles and the regions' economic development. This reinforces the current study's findings, which identified a combination of economic background and social norms as significant barriers.

Disparities between the NUTS 1 regions show that addressing labour market barriers requires considering the economic and social differences among the regions. For instance, the Central Hungarian region, which has the highest GDP, exhibits significantly different barriers compared with the eastern regions of the country, where economic underdevelopment is more pronounced. This research makes a crucial contribution to understanding labour market inequalities by presenting country-specific, empirical data. Finardi (2022) highlighted how gender pay gaps and maternity leave policies contribute to labour market inequalities in the Czech context. This study extends that work by showing how these barriers manifest differently across the V4 countries. As per Cukrowska-Torzewska et al. (2020), gender differences in employment often stem from structural barriers, the effects of which can persist in the long term. This supports the current study's conclusions regarding

the structural and cultural constraints. The research highlights that gender-based labour market barriers vary significantly not only between countries but also at the regional level. The analysis of the NUTS 1 regions confirmed that regional differences are closely related to social and economic conditions, which impact labour market participation and equality. For women, the lack of access to educational and training programs, particularly in Poland and Hungary, emerged as a fundamental barrier. Addressing these issues through targeted training opportunities is required to enhance women's labour market prospects.

The study also emphasized the significant role of family obligations and traditional social expectations in restricting women's labour market participation. Flexible work options, such as part-time roles and telecommuting regulations, could serve as key measures to mitigate these challenges. In Hungary, the lack of language skills poses a particularly significant barrier for women, hindering their access to high-quality international positions. Implementing targeted language training programs is not only crucial for improving employability but also vital for enhancing workforce mobility and competitiveness.

Furthermore, the research underscored the profound impact of conservative gender roles that restrict women's opportunities through societal norms and cultural stereotypes. Addressing these issues requires awareness campaigns and policy measures aimed at promoting gender equality.

Although the research provided several important insights, its non-representative sample limits the generalizability of the findings. Future studies should incorporate larger, more geographically and socially diverse samples to yield more reliable and comprehensive results. Moreover, longitudinal studies can offer a deeper understanding of the dynamics of labour market trends and changes over time. Following the findings of Heintzelman (2016), future research should also examine the interplay between social and political factors to further refine the understanding of gender differences. Overall, this study not only contributed to the detailed exploration of gender-based labour market disparities but also provided practical recommendations for overcoming these barriers. The findings clearly support the need for targeted interventions to improve women's employment opportunities, increase labour market flexibility, and promote economic development in the region. Such strategies can reduce barriers for women and strengthen social cohesion and sustainable economic growth in the long term. The results of this research can encourage policymakers and the employment sector to take proactive steps toward creating a fairer and more inclusive labour market, fostering equal opportunities for all.

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REFERENCES

- AL-MAMUN, A.—SULTANA, S. (2024): Language skills, employability, and sustainable development. In: HAMID, M. O.—SULTANA, S.—ROSHID. M. M. (eds.): Language and sustainable development in Bangladesh: Policies, practices, and perceptions, Routledge, London. https://doi.org/10.4324/9781003379799-8
- ALWAGO, W. (2021): Gender labor market outcomes during the Covid-19 pandemic: Evidence of she-cession in the Visegrad countries. In SÁVAI, M. (ed.): Green and digital transitions: global insights into sustainable solutions pp. 233–261., Szegedi Tudományegyetem Gazdaságtudományi Kar, Szeged. https://doi.org/10.14232/gtk.gdtgiss.2024.14
- ARENDT, Ł.–KUCHARSKI, L.–KUKULAK-DOLATA, I.–RUTKOWSKA, A. (2024): The labour market situation of population groups in the Visegrád countries *Comparative Economic Research. Central and Eastern Europe* 27 (4): 47–65. https://doi.org/10.18778/1508-2008.27.30
- ASTROV, V. (2019): Labour market trends in Visegrád countries: implications for Austria The Vienna Institute for International Economic Studies, Vienna.
- BALÁKOVÁ, I.—STÁVKOVÁ, J.—HUDEC, P. (2023): Determinants of individual income in EU countries: implications for social policy targeting *Frontiers in Sociology* 8: 1205094. https://doi.org/10.3389/fsoc.2023.1205094
- BARNARD, H.–NASH, G. (2023): Social contagion and migration: sources and implications of migrant ambivalence. In: *The Palgrave handbook of global migration in international business* pp. 67–90., Springer International Publishing, Cham. https://doi.org/10.1007/978-3-031-38886-6 4
- BERTRAND, M. (2018): Coase lecture the glass ceiling *Economica* 85 (338): 205–230. https://doi.org/10.1111/ecca.12264
- BORGULYA, A.-HAHN, J. (2008): Work related values and attitudes in Central and Eastern Europe *Journal for East European Management Studies* 13 (3): 216–238. https://doi.org/10.5771/0949-6181-2008-3-216
- BRIXIOVA, Z.–LI, W.–YOUSEF, T. (2009): Skill shortages and labor market outcomes in Central Europe *Economic Systems* 33 (1): 45–59. https://doi.org/10.1016/j.ecosys.2008.07.002
- CASTELLANO, R.–ROCCA, A. (2019): Analyzing the gender gap in European labour markets at the NUTS-1 level *Cogent Social Sciences* 5 (1). https://doi.org/10.1080/23311886.2019.1595294
- CEFALO, R.—SCANDURRA, R.—KAZEPOV, Y. (2020): Youth labor market integration in European regions *Sustainability* 12 (9): 3813. https://doi.org/10.3390/su12093813
- CIMINELLI, G.—SCHWELLNUS, C.—STADLER, B. (2021): Sticky floors or glass ceilings? The role of human capital, working time flexibility and discrimination in the gender wage gap OECD Economics Department Working Papers 1668. https://dx.doi.org/10.1787/02ef3235-en
- CUKROWSKA-TORZEWSKA, E.–LOVASZ, A.–RIGO, M. (2020): The labor market situation of women in the Visegrad countries *CERSIE Working Papers* 45 (1): 1–18.

- CUNHA, M. P. E. (2002): *Dreaming of cockaigne: individual fantasies of the perfect workplace* Faculdade de Economia, Universidade Nova de Lisboa. https://dx.doi.org/10.2139/ssrn.881845
- DVOULETY, O.—OREL, M. (2020): Determinants of solo and employer entrepreneurship in Visegrád countries: findings from the Czech Republic, Hungary, Poland and Slovakia *Journal of Enterprising Communities: People and Places in the Global Economy* 14 (3): 447–464. https://doi.org/10.1108/JEC-04-2020-0052
- DYMMOTT, A.—GEORGE, S.—CAMPBELL, N.—BREBNER, C. (2024): Sustaining our rural allied health workforce: experiences and impacts of the allied health rural generalist pathway *BMC Health Services Research* 24 (1): 749. https://doi.org/10.1186/s12913-024-11207-5
- DZIEŃDZIORA, J.-DACKO-PIKIEWICZ, Z. (2018): Barriers and constraints to women's career in Silesia province *Central and Eastern European Journal of Management and Economics* 6 (2): 125–137.
- FACHELLI, S.–LÓPEZ-ROLDÁN, P. (2023): Comparative analysis of regional gender disparities. In: DI BELLA, E.–FACHELLI, S.–LÓPEZ-ROLDÁN, P.–SUTER, C. (eds.): *Measuring Gender Equality* pp. 135–166., Springer, London. https://doi.org/10.1007/978-3-031-41486-2
- FIALOVÁ, K.-ŽELINSKÝ, T. (2019): Regional patterns of social differentiation in Visegrad countries *Czech Sociological Review* 55 (6): 735–790.
- FIAZ, S.–QURESHI, M. A. (2023): Looking at both sides, outcomes of positive workplace relational systems: a phenomenological study *Heliyon* 9 (4): e15442. https://doi.org/10.1016/j.heliyon.2023.e15442
- FINARDI, S. (2022): Determinants of the gender pay gap in the Czech Republic and selected European countries *European Financial and Accounting Journal* 17 (2): 33–47. https://doi.org/10.18267/j.efaj.270
- FLASZYŃSKA, E. (2020): Strengthening women's opportunities in the labour market the case of Poland *Olsztyn Economic Journal* 15 (3): 181–203.
- FLECKENSTEIN, T.-LEE, S. C. (2017): The politics of labor market reform in coordinated welfare capitalism: comparing Sweden, Germany, and South Korea *World Politics* 69 (1): 144–183. https://doi.org/10.1017/S0043887116000228
- GANDÍA, J. A. G.—GAVRILA, S. G.—DE LUCAS ANCILLO, A.—DEL VAL NÚÑEZ, M. T. (2025): Towards sustainable business in the automation era: exploring its transformative impact from top management and employee perspective *Technological Forecasting and Social Change* 210: 123908. https://doi.org/10.1016/j.techfore.2024.123908
- GANIYU, R. A.—OLUWAFEMI, A.—ADEMOLA, A.—OLATUNJI, O.I. (2018): The glass ceiling conundrum: illusory belief or barriers that impede women's career advancement in the workplace *Journal of Evolutionary Studies in Business* 3 (1): 137–166. https://doi.org/10.1344/jesb2018.1.j040
- GUILLAMÓN, M. D.-CUADRADO-BALLESTEROS, B.-RÍOS, A. M. (2024): Gender pay gap in Spanish local governments *Cities* 150: 105025. https://doi.org/10.1016/j.cities.2024.105025
- HACKMAN, J. R.–OLDHAM, G. R. (1975): Development of the job diagnostic survey *Journal of Applied Psychology* 60 (2): 159–170.

- HARMAN, J.—BARTŮSKOVÁ, L. (2024): The gender pay gap in the Visegrad Groups *Journal of Economic Studies* 51 (2): 142–157. https://doi.org/10.1108/JES-02-2023-0072
- HASSAN, E.—SIÖLAND, L.—AKBABA, B.—ČINOVA, D.—GASPERINI, M.—GERACI, M. (2023): *Annual report on intra-EU labour mobility 2022* European Commission, Brussels.
- HUNGARIAN CENTRAL STATISTICAL OFFICE [HCSO] (2022): Main indicators of the Visegrad countries Prepared by the Hungarian Central Statistical Office in cooperation with statistical offices of the Czech Republic, Poland and Slovakia, Budapest.
- HEINTZELMAN, L. (2016): Gender inequality in the Czech Republic: institutional and societal barriers to equality *Perspectives on Business and Economics* 34 (07). https://doi.org/10.18275/pbe-v034-07
- HERZBERG, F.-MAUSNER, B.-SNYDERMAN, B. B. (1959): *The motivation to work* John Wiley and Sons, New York.
- HOLIENKA, M.–JANČOVIČOVÁ, Z.–KOVAČIČOVÁ, Z. (2016): Drivers of women entrepreneurship in Visegrad countries: GEM evidence *International Entrepreneurship and Management Journal* 12 (4): 789–807.
- HORNAT, J. (2021): External and internal factors shaping the substance of Visegrad states' democracy assistance. In: *The Visegrad group and democracy promotion. The theories, concepts and practices of democracy* pp 103–133., Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-78188-0
- INGHAM, M.–INGHAM, H. (2002): Gender and labour market restructuring in Central and Eastern Europe. In: RAINNIE, A.–SMITH, A.–SWAIN, A. (eds.): Work, employment and transition: restructuring livelihoods in post-communism pp. 170–190., Routledge.
- JACK, A. A.-BASSETT, B. S. (2024): Pink slips (for some): campus employment, social class, and Covid-19 Sociology of Education 97 (4): 299–315. https://doi.org/10.1177/00380407241259793
- KIREMITÇI, O.—BOZ, B.—YILDIZ ÇAKIR, L. (2023): Job demands-resources model and burnout in physical education teaching: a mixed-method sequential explanatory study *Work* 76 (1): 171–187. https://doi.org/10.3233/WOR-220102
- KOROTAJ, T.-CHEN, J. M.-KURNOGA, N. (2024): School-to-work transition in the youth labor market in Central and Eastern Europe: a cluster analysis approach *Business Systems Research* 15 (2): 100–139. https://doi.org/10.2478/bsrj-2024-0020
- KOSSEK, E. E.—PERRIGINO, M.—ROCK, A. G. (2021): From ideal workers to ideal work for all: a 50-year review integrating careers and work-family research with a future research agenda *Journal of Vocational Behavior* 126: 103504. https://doi.org/10.1016/j.jvb.2020.103504
- LEVINSON, A. (1996): Environmental regulations and industry location: international and domestic evidence *Handbook of Regional and Urban Economics* 4: 2835–2874.
- LÓPEZ-CEVALLOS, D. F.–JONES, N.–PATTON-LÓPEZ, M. M. (2024): Examining the "white health advantage" effect among Latinos in the United States *Journal of Immigrant and Minority Health* 26: 1117–1122. https://doi.org/10.1007/s10903-024-01621-6
- LOVAGLIO, P. G.—PERRELLI, A. (2024): Individual and regional determinants of women's participation in the European labour market: a labour force survey empirical study *International Review of Economics* 71: 785–812. https://doi.org/10.1007/s12232-024-00465-8

- MCALEER, R.—HANSON, L.—KENNY, A. (2024): Employers most desirable attributes in early-career physiotherapists: a content analysis of job advertisements *BMC Health Services Research* 24 (1): 1038. https://doi.org/10.1186/s12913-024-11470-6
- NEUMARK, D.—BURN, I.—BUTTON, P. (2015): Is it harder for older workers to find fobs? New and improved evidence from a field experiment *Working Paper* No. 21669. National Bureau of Economic Research, Cambridge, MA. https://doi.org/10.3386/w21669
- NIEWIADOMSKA-CUDAK, M. (2017): Barriers of women's political promotion in Poland. In: Women in Politics and Decision-Making pp. 195–211., University of Finance and Management in Warsaw, Warsaw. https://doi.org/10.18778/8088-410-6.12
- NOWIŃSKI, W.-HADDOUD, M. Y.-LANČARIĆ, D.-EGEROVÁ, D.-CZEGLÉDI, C. (2019): The impact of entrepreneurship education, entrepreneurial self-efficacy and gender on entrepreneurial intentions of university students in the Visegrad countries *Studies in Higher Education* 44 (1): 109–122. https://doi.org/10.1080/03075079.2017.1365359
- OERLEMANS, W. G. M.–BAKKER, A. B. (2018): Motivating job characteristics and happiness at work: a multilevel perspective *Journal of Applied Psychology* 103 (11): 1230–1241. http://dx.doi.org/10.1037/apl0000318
- OREOPOULOS, P.-VON WACHTER, T.-HEISZ, A. (2012): The short- and long-term career effects of graduating in a recession: hysteresis and heterogeneity in the market for college graduates *American Economic Journal: Applied Economics* 4 (1): 1–29. https://doi.org/10.1257/app.4.1.1
- PALUCH, R. M.—SHUM, V. (2022): Organizational mobility preferences and organizational career environments: a person-organization fit perspective *Journal of Vocational Behavior* 139: 103806. https://doi.org/10.1016/j.jvb.2022.103806
- PRADA, E-M.—CIMPOERU, S. (2023): Mapping and modelling the main determinants of migration flows at the NUTS 2 level in the European Union using spatial data analysis techniques *Management & Marketing* 18 (4): 594–607. https://doi.org/10.2478/mmcks-2023-0032
- SALAS, E.-COOKE, N. J.-ROSEN, M. A. (2008): On teams, teamwork, and team performance: discoveries and developments *Human Factors* 50 (3): 540–547. https://doi.org/10.1518/001872008X288457
- SCHUH, A. (2022): Labor and skills shortage in Central & Eastern Europe: Causes, effects and responses by foreign direct investors Master class Central & Eastern Europe 2021/22. Vienna Economic University (WU) Competence Center for Emerging Markets & CEE, Vienna.
- SHAIK, M.–JAMIL, S. A.–HAWALDAR, I. T.–SAHABUDDIN, M.–RABBANI, M. R.–ATIF, M. (2023): Impact of geo-political risk on stocks, oil, and gold returns during GFC, Covid-19, and the Russian–Ukraine war *Cogent Economics & Finance* 11 (1): 2190213. https://doi.org/10.1080/23322039.2023.2190213
- SHRIVASTAVA, S. R.—SHRIVASTAVA, P. S.—JOSHI, A. (2024): Escape rooms in medical education: unlocking realistic simulated clinical scenarios using interprofessional education *Journal of Pharmacy & Bioallied Sciences* 16 (3): S2938—S2940. https://doi.org/10.4103/jpbs.jpbs/1234/23

- STEWART, A.-OWENS, R.-O'HIGGINS, N.-HEWITT, A. (2021): Internships, employability and the search for decent work experience International Labour Office and Cheltenham, Geneva, Edward Elgar, UK.
- STOR, M.-HAROMSZEKI, Ł.-POÓR, J. (2024a): HRM responses to labor shortages and organizational employee retention from a human-centric management paradigm. In: STOR, M. (ed.): *Human at the center of the organization: visions, realities, challenges* pp. 10–25., Publishing House of Wroclaw University of Economics and Business, Wrocław. https://doi.org/10.15611/2024.59.8.01
- STOR, M.—HAROMSZEKI, Ł.—POÓR, J. (2024b): Workplace-related factors influencing employee loyalty and job performance in human-centric organizations. In: STOR, M. (ed.): *Human at the center of the organization: visions, realities, challenges* pp. 26–41. Publishing House of Wroclaw University of Economics and Business, Wrocław. https://doi.org/10.15611/2024.59.8.02
- SURAPTO, D.—SUHUD, U.—WOLOR, C. W. (2024): Agile leadership: enhancing trust, innovation ambidexterity, and job performance *Pakistan Journal of Life and Social Sciences* 22 (2): 9759–9767. https://doi.org/10.57239/PJLSS-2024-22.2.00737
- TAPARIA, M.–LENKA, U. (2022): An integrated conceptual framework of the glass ceiling effect *Journal of Organizational Effectiveness: People and Performance* 9 (2): 145–163. https://doi.org/10.1108/JOEPP-06-2020-0098
- WANG, S.–MACK, E. A.–VAN FOSSEN, J. A.–MEDWID, L.–COTTEN, S. R.–CHANG, C.-H.–MANN, J.–MILLER, S. R.–SAVOLAINEN, P. T.–BAKER, N. (2023): Assessing alternative occupations for truck drivers in an emerging era of autonomous vehicles *Transportation Research Interdisciplinary Perspectives* 19: 100793. https://doi.org/10.1016/j.trip.2023.100793
- ZAWISTOWSKA, A. (2024): Gender gap in education: how society, economy, and culture influence educational choices of women and men in Poland FRSE Publishing, Warsaw. https://doi.org/10.47050/67587143
- ZHENJING, G.-CHUPRADIT, S.-Ku, K. Y.-Nassani, A. A.-Haffar, M. (2022): Impact of employees' workplace environment on employees' performance: a multi-mediation model *Frontiers in Public Health* 10: 890400. https://doi.org/10.3389/fpubh.2022.890400
- ZWYSEN, W. (2019): Different patterns of labor market integration by migration motivation in Europe: the role of host country human capital *International Migration Review* 53 (4): 1076–1102. https://doi.org/10.1177/0197918318767929

INTERNET SOURCES

- BECK, R. (2024): The Visegrád four: disunity in Central Europe *Eurasia*, 23 February. https://www.fpri.org/article/2024/02/the-visegrad-four-disunity-in-central-europe/ (downloaded: August 2024)
- BECKER, G. S. (2010): *The economics of discrimination* University of Chicago Press, Chicago. http://bibliotecadigital.econ.uba.ar/download/Pe/187894.pdf (downloaded: August 2024)

- DE SMET, A.–DOWLING, B.–HANCOCK, B.–SCHANINGER, B. (2002): The great attrition is making hiring harder. Are you searching the right talent pools? *McKinsey Quarterly*. https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/the-great-attrition-is-making-hiring-harder-are-you-searching-the-right-talent-pools (downloaded: August 2024)
- EUROSTAT (2024a): Employment rates by sex, age and NUTS 2 region.

 https://ec.europa.eu/eurostat/databrowser/view/lfst_r_lfe2emprt/default/table (downloaded: August 2024)
- EUROSTAT (2024b): Regional gross domestic product (PPS per inhabitant) by NUTS 2 region.

 https://ec.europa.eu/eurostat/databrowser/view/TGS00006/default/map?lang
 =en&category=na10.nama10.nama 10reg.nama 10r gdp%3Flang%3Den
 (downloaded: August 2024)
- ORGANISATION OF ECONOMIC CO-OPERATION AND DEVELOPMENT [OECD] (2014): *Education at a glance 2014: OECD indicators.*https://www.oecd-ilibrary.org/education/education-at-a-glance-2014_eag-2014-en
 (downloaded: August 2024)
- TOOZE, A. (2022): Ukraine's war has already changed the world's economy *Foreign Policy*. https://foreignpolicy.com/2022/04/05/ukraine-russia-war-world-economy/(downloaded: April 2022)
- TURNER, J. (2023): Employees seek personal value and purpose at work. Be prepared to deliver. *Gartner*.

 https://www.gartner.com/en/articles/employees-seek-personal-value-and-purpose-at-work-be-prepared-to-deliver (downloaded: August 2024)
- WORLD ECONOMIC FORUM [WEF] (2023): Future of jobs report 2023 insight report. https://www.weforum.org/reports/the-future-of-jobs (downloaded: August 2024)