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THE INFLUENCE OF DEMOGRAPHIC DYNAMICS ON THE LABOR MARKET

Branislav Sančanin[1] [0000-0002-4255-2634], Katarina Stojanović[2] [0000-0002-5261-3816], Aleksandra Penjišević[3] [0000-0002-0898-6818]

Abstract

The process of globalization and decades of negative demographic trends necessitate a swift and effective systemic response to stabilize the labor market, particularly concerning the skills and numbers of the unemployed able-bodied workforce. This paper highlights the essential legal and ethical alignment with real macroeconomic dynamics influenced by numerous new determinants, driven by technological advancements that create and eliminate various occupations. The objective is to stress the need to align the labor market with the evolving demands for new skills required by the increasingly complex global market. Key steps include the ongoing talent competition, expediting recruitment and selection processes, adequately motivating and retaining employees, and adapting rigid legislative regulations to allow work beyond the age of 65. These measures aim to mitigate current negative labor market trends that could otherwise hinder strategic developmental goals.

Key words: *labor market, fertility rate, immigration, aging population, demographic decline.*

1. Introduction

Global population growth in the 20th century fuelled an expanding labor force and supported economic development. However, the new century has introduced challenges: negative demographic trends are causing significant changes in the labor market and pose a real threat to many national economies. Policymakers are addressing labor market shortages through measures that encourage higher birth rates, promote later retirement, and create incentives for labor force migration.

[1] Medical College of Professional Studies, Belgrade, Serbia, sancanin.branislav@gmail.com
[2] Faculty of Economics and Engineering Management in Novi Sad, University Business Academy in Novi Sad, Serbia, katarina.stojanovic@fimek.edu.rs
[3] The College of Academic Studies "Dositej", Belgrade, Serbia, aleksandra.penjisevic@gmail.com

Serbia, a traditionally emigrant country, faces population decline, demographic aging, and insufficient economic activity. Nikitović (2013, p. 188) suggests that the quickest and most effective way to address labor force deficits and aging is through immigration. He notes that immigrants are often in their optimal reproductive age, which can increase fertility rates in the host country, aiding its long-term survival.

According to projections, Serbia will have 5.2 million inhabitants in 2040 and 4.7 million in 2050. By mid-century, traditionally depopulated areas are expected to lose over 50% of their populations, with significant losses in Borska (over 75%), Pčinjska (60%), Zaječarska and Rasinska (53% each), Pomoravska (51%), Pirotska (41%), and Raška (31%) (Nikitović, 2019).

Penjišević and Sančanin (2023) highlight the need for policymakers to create a dynamic framework that strengthens the role of the academic community and practitioners in the labor market. They emphasize the importance of intensifying education to meet labor market needs. Ignoring labor market signals jeopardizes natural generational replacement, accelerates internal and external migration, and leads to measures that extend working life and hinder the achievement of strategic goals.

Key indicators reflecting the labor market include the unemployment rate, the activity rate, the long-term unemployment rate, and the youth unemployment rate. In Serbia, the unemployment rate is higher than the average in most European Union countries, except for Spain and Greece. However, compared to other Western Balkan countries, Serbia had the lowest unemployment rate in 2021 at 11%, which is slightly above the benchmark of 10%. The activity rate for the population aged 15 to 64 increased from 59.4% in 2010 to 70.3% in 2021 (Kovačević et al., 2023).

2. Long-term reflections of low fertility on the labor market

The fertility rate is the average number of children born per woman of childbearing age, typically between 15 and 45 years. This rate provides insight into a country's economic condition, as well as the health and education levels of its population. In underdeveloped and developing countries, fertility rates are higher due to limited access to birth control and contraception, and because women often lack higher education or any education, as they are expected to take care of their families and household chores. In 2023, Taiwan recorded the lowest estimated fertility rate at 1.09 children per woman. Three countries from the former Yugoslavia are among the 20 with the lowest fertility rates: Bosnia and Herzegovina (1.37), Croatia (1.46), and Serbia (1.46) (O'Neill, 2024).

It is estimated that globally, 9% of couples experience infertility, with 50-60% of these couples seeking medical assistance. This translates to about 140 million individuals of reproductive age who are either unintentionally childless or undergoing reproductive treatment. Approximately 8% of men of reproductive age seek medical help for infertility-related issues (Esteves & Agarwal, 2013).

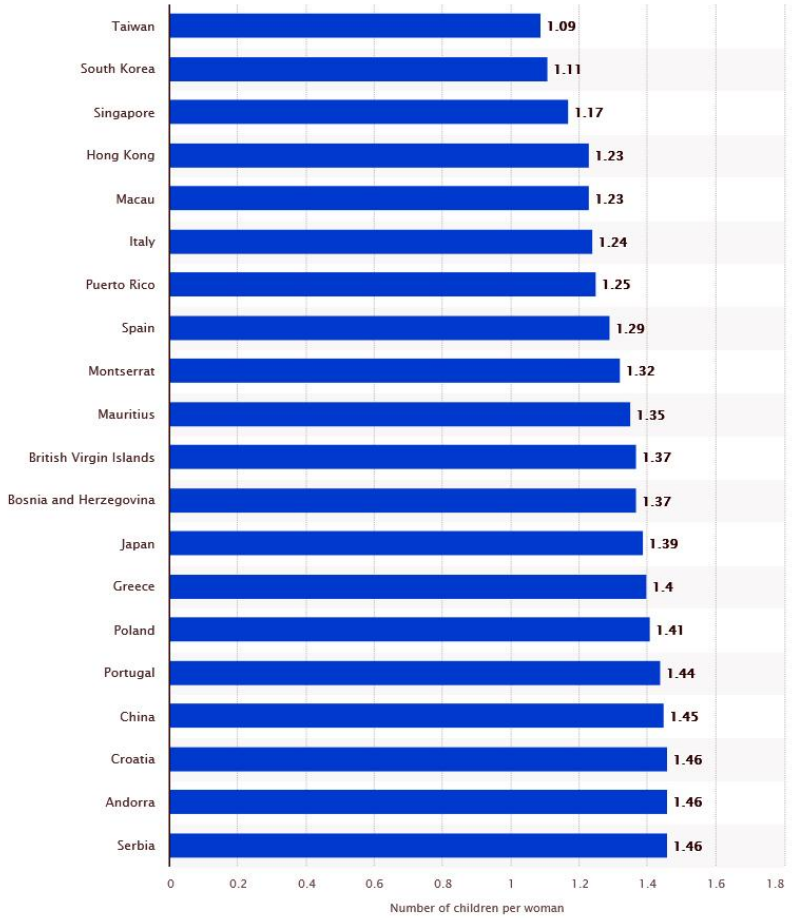

Figure 1: Countries with the lowest fertility rates 2023
Source: O'Neill, 2024.

The total population in Serbia increased from 4,819,430 in 1921 to 9,313,676 in 1981, but has been continuously declining since then. According to the 2022 census, Serbia had 6,647,003 inhabitants (Statistical Office of the Republic of Serbia, 2024).

Since 2005, Serbia's total fertility rate (TFR) has fluctuated but remains insufficient to sustain generational replacement. Until the 2011 census, only the municipality of Tutin had a TFR above the level needed for simple reproduction. The average age of mothers at the time of live birth increased from 25.9 years in 1991 to 29.8 years in 2017 (Nikitović, 2019).

In the Republic of Serbia, life expectancy in 2022 was 73 years. This indicator was 72.2 years in 2012 and 69.7 years in 2002. In each of these years, women had a life expectancy approximately 5 years longer than men. The average age of the population in 2022 was 43.8 years (Statistical Office of the Republic of Serbia, 2023).

Table 1: Estimated population - key demographic parameters

	Liveborn	Died	Natural increase	Completed marriages	Divorced marriages	Fertility rate
2022	62.700	109.203	-46.503	32.821	9.813	1,63
2012	67.257	102.400	-35.143	34.639	7.372	1,45
2002	78.101	102.785	-24.684	41.947	9.982	1,55

Source: Statistical Office of the Republic of Serbia, 2023.

3. Population migrations

Economic migrations are a common result of market liberalization. The freedom of movement, facilitated by visa arrangements, has accelerated the transfer of residents to more economically developed countries, posing a significant threat to underdeveloped countries and their markets through further depopulation (Stamenović & Ćizović, 2019).

The increasing demand for skilled labor in Western European countries threatens the labor markets of Central and Eastern European countries (CEE or CEECs). Emigration is most pronounced in countries with poorly organized states characterized by high corruption, weak rule of law, and poor quality of public services such as health and education. Countries with easier access to the European labor market, better-educated populations, and lower standards of living experience higher emigration rates (Petrović et al., 2020).

Depopulation is most evident through the exodus of young people from rural areas, leading to reduced populations, economic decline, and the shutdown of various activities. Joksimović et al. (2023) vividly compare depopulated areas to a black hole that expands and "sucks in" surrounding regions, exacerbated by state centralization policies and the gradual reduction of regional center functions. This shifts population distribution from merely a demographic issue to a challenge for future spatial and functional planning.

4. Changes in the labor market

In 2006, the National Employment Service recorded 913,293 unemployed individuals, including 493,599 women. By the end of May 2024, the number of unemployed had decreased to 375,793, with 210,798 being women (National Employment Service, 2024).

Table 2: Unemployed persons by duration of unemployment

May 31, 2024.		**1-2 years**	**2-3 years**	**3-5 years**	**5-8 years**	**8-10 years**	**Over 10 years**
Total	375.793	50.250	28.612	45.685	36.964	18.832	71.901
Women	210.798	27.151	16.024	26.015	21.775	10.958	43.884

Source: National employment service, 2024

The Serbian labor market is characterized by a high long-term unemployment rate, an unfavorable qualification structure, high youth unemployment, regionally uneven unemployment distribution, and insufficient active state employment policies. The unemployment rate in Serbia decreased from 18.1% in 2007 to 11.0% in 2021, with the highest rate recorded at 23.9% in 2012 (Šobić et al., 2023).

The long-term unemployment rate is a critical indicator, representing the share of individuals unemployed for over a year within the active population aged 15 to 74, tracked over a three-year period. High long-term unemployment rates suggest poor labor market functionality, as extended unemployment duration decreases the likelihood of re-employment (Kovačević et al., 2023).

In 2023, amendments to the Law on Employment of Foreigners and the Law on Foreigners were adopted in Serbia, unifying and simplifying the process for issuing temporary residence permits and work rights. That year, over 52,000 permits were issued to foreign citizens, a significant increase from the approximately 35,000 permits issued in 2022. Most work permits were granted to citizens of Russia, China, Turkey, India, and Nepal (Ristović, 2024). This trend was evident in the first half of 2023, with 24,785 work permits issued to foreigners, 1,000 more than the total for 2021. Additionally, foreign employers in the European Union can send their employees to Serbia without a work permit (Radosavljević, 2023).

Companies recognize that their employees are their most valuable assets and that finding unemployed individuals with suitable competencies who accept the offered working conditions is increasingly challenging. Sančanin and Dramićanin (2020) warn that the shrinking pool of qualified working-age individuals in the Serbian labor market could increase pressure on domestic companies and foreign investors, potentially reducing global competitiveness. Employment needs are increasingly misaligned with opportunities, and finding jobs for the large number of unqualified people is difficult in the 21st century.

The total number of pensioners has been decreasing since 2019: 1,708,293 (2019); 1,692,282 (2020); 1,660,460 (2021); 1,651,890 (2022); and 1,651,315 (2023). The average pension at the end of 2019 was 26,343 dinars, increasing to 38,320 dinars by 2023 (Statistical Office of the Republic of Serbia, 2024, pp. 40-41).

In 2019, Serbia had about 1.4 million residents over 65 years old (20.7% of the population), with more than 320,000 (4.6%) in the oldest age group (80+). This trend of population aging is expected to continue, with projections indicating that by 2041, the share of people over 65 will exceed 24%, and those over 80 will make up 7.5% (Matković, 2022).

A new indicator for population aging, which adjusts the fixed age limit based on life expectancy, is increasingly being used. In this context, Sanderson and Scherbov (2008) introduced the concept that classifies individuals with a life expectancy of less than 15 years as elderly. Using the conventional old age dependency ratio (OADR), the three oldest countries in the world in 2005 were Italy, Japan, and Germany, with Spain expected to replace Germany by 2045. However,

applying the Prospective Old Age Dependency Ratio (POADR), the oldest countries in 2005 were Ukraine and Bulgaria, and these countries are predicted to remain the oldest in 2045.

Raising the retirement age is not suitable for Eastern European countries. For instance, a 65-year-old man in Ukraine has the same life expectancy as a 69-year-old man in the United States.

5. Conclusion

The decades-long trend of declining populations and shrinking workforces has compelled companies to adopt new strategies for attracting and engaging both the unemployed and those interested in changing jobs. The focus has shifted significantly to foreign labor markets. In 2023, amendments to the Law on the Employment of Foreigners and the Law on Foreigners fully digitized and streamlined the process of issuing work permits, greatly improving access to the Serbian labor market. That year, over 52,000 work permits were issued to foreign citizens in Serbia, a substantial increase from the approximately 35,000 permits issued in 2022.

Balancing work obligations with private life, particularly by valuing parenthood, through formal guarantees of employment type, flexible work arrangements, and the ability to choose working hours, is essential for maintaining a balance between work and family responsibilities. Conversely, shift work, extended working hours, inadequate compensation, lack of career advancement opportunities, and neglect of employee motivation are among the most common reasons for leaving a company or opting not to have children.

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