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Original Article

THE INFLUENCE OF WOMEN'S ECONOMIC ACTIVITY ON CHILDBIRTH, EXAPMLE CITY OF BIJELJINA

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Abstract: *The economic activity of women has led to numerous changes in reproductive behavior patterns. Women who are economically active, or employed, often choose to delay or limit the number of children in order to maintain the financial stability of the family. The costs of raising children represent a significant burden for families, so many couples opt for a smaller number of children to better cope with economic challenges. The decline in birth in our region is closely related to the increased participation of women in the labor market, while in the developed parts of Europe, a higher level of birth among economically active women has been achieved through institutionalized support for parenthood. As today's women are both mothers and workers, there is less time available for balancing work and family obligations. Bijeljina, like the Republic of Srpska, is a low-fertility area that lacks over 30% of live births to achieve the magic number of 2.1 children for natural population renewal. This paper focuses exclusively on childbirth according to the type of economic activity of women in the process of forming the ideal size of the family in the area of the City of Bijeljina.*

Key words: *low birth, economic activity and employment of women, work-family balance*

JEL classification: J13

1. INTRODUCTION

Over the past 150 years, population fertility has undergone a complete transformation from the era of the first industrial revolution to the present day in line with the level of economic development. Demographic transition represents demographic changes of all populations on their path to transformation into modern industrial societies (Arsenović et al., 2018). Demographic transition involves the transition from high rates of reproduction (fertility, mortality, natural increase) typical of traditional underdeveloped societies to low rates of the same components in modern contemporary societies conditioned by economic, social, and cultural development. In many countries undergoing economic transition, a decrease in the fertility rate is observed. This may be the result of changes in socio-economic conditions, such as increased economic uncertainty, greater participation of women in the labor market, postponement of marriage and family formation, as well as changes in life priorities and values. As Micevska (2001) states, at the beginning of the demographic transition in the observed period from 1989-1998, there was a sudden decline in the total fertility rate and the general birth rate in most Balkan countries except Croatia (TFR from 1.63 to 1.45 children per woman) and Bosnia and Herzegovina (TFR from 1.9 to 1.8 children per woman), which only recorded mild changes in the mentioned rates. Before demographic transition, there was almost no country in the EU that had less than two children per woman, but by the end of the 20th century, all European countries except Albania had a total fertility rate below 2. Scientific literature offers broader explanations for the causes of declining fertility rates. In addition to biological factors, socio-economic determinants that dictate the present cost of parenthood play a significant role.

Higher levels of education have changed the position of women in society; they are no longer just mothers but also full-time workers whose employment and busyness affect the lack of free time for child care. In recent decades, there has been increasing participation of women and mothers in the labor market, and if women are much more involved in child care than men, this "double shift" for many employed mothers may represent pressure due to the incompatibility between roles undertaken in the labor market and in the family (Arpino, Luppi, 2020). Consequently, there is a negative correlation between the total fertility rate and the employment of women, who now constitute 40% of the global workforce (Behraman, Gonalanos-Pons, 2020). Concerns about occupation and income, as well as the lack of housing space, have led to a series of

changes not only in the size of the family but also in its survival. The high cost of preschool institutions, impractical working hours for parents, and the political and economic situation are just some of the factors determining aspects of family life. As society modernizes through economic and social changes such as industrialization, urbanization, and education levels, it first leads to a decline in mortality, and then to a decrease in fertility. Rising living costs and declining economic value of children are considered the main motives that have reduced reproduction and demotivated the desire for childbirth (Bongaarts, Watkins, 1996). Studies on the economic crisis and uncertainty that hit Europe and the USA explain the same effect on financial roots, fertility, and consequences for the real economy. Economic shocks dramatically affect family dynamics, with 22 out of 32 Western countries recording a decline in the fertility rate between 2008 and 2013.

The worsening labor market during the Great Recession largely accounts for the negative consequences for fertility rates. A sudden increase in the unemployment rate characterizing the recession has reduced the total fertility rate in the West by 3% from the beginning of the crisis (Comolli, 2017, Matysiak et al., 2021). According to the findings of Andrei et al. (2015), social changes, political situations, economic growth, and decline have reflected in the demographic picture of the country affecting both natural and mechanical movements of the population. Finally, it has been proven that employment uncertainty and financial uncertainty affect the postponement of family formation (Caltabiano et al., 2017, Zeman et al., 2018).

2. METODOLOGY

The primary data sources used in this study are the published results of the censuses from 1991 and 2013. The methodology involved collecting data on vital statistics, analysis, synthesis, comparison, and tabular and graphical representation. Access to this data was sought from the Republic Statistical Office of Republika Srpska because certain data are not published for cities, municipalities, and regions, but only at the Republic level of observation. Statistical data relate to the administrative area of the City of Bijeljina, based on which the natural population movement was analyzed, specifically the analysis of birth rate for the period from 1998 to 2020. The Statistical Office of Republika Srpska has pre-war data from vital statistics (1992-1995); the only earlier available data are the total population figures from previous census years. Data from demographic bulletins (10-20) of the Republic Statistical Office of Republika Srpska were used, as well as data obtained from the archive of the office, relating to the economic activity of the population by gender, and births by maternal age, based on which the following indices were calculated.

Labor force utilization rate:

$$\alpha_{(15\text{-}64)} = \frac{P_{a\ (15\text{-}64)}}{P_{(15\text{-}64)}} \times 100$$

Overall activity rate:

$$p_{a} = \frac{P_{a}}{P} \times 100$$

Unemployment rate:

$$u = \frac{U_{15-64}}{A_{15-64}} * 100$$

Employment rate

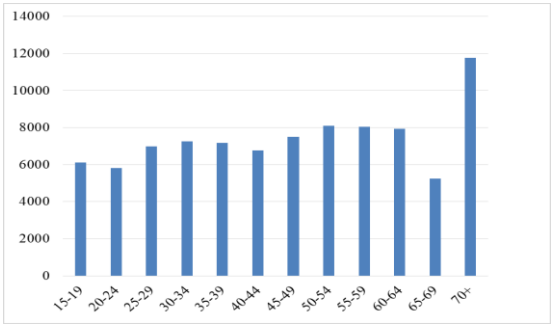
$$e = \frac{E_{15-64}}{P_{15-64}} * 100$$

2. ECONOMIC STRUCTURE OF THE POPULATION

In terminological sense, the economic structure of the population consists of economic indicators of activity, income, engagement in certain activities, occupations, and other factors. The working-age population consists of individuals aged 15-64 years, which is further divided into economically active and inactive.

According to the estimates of the Republic of Srpska Statistical Office in 2020, in the city of Bijeljina, 88,664 working-age population were registered, accounting for 85.43% of the total population. Of these, 52.25% are women and 47.74% are men. In terms of age structure, the highest participation is observed in the age cohorts of 45-49, 50-54, 55-59, and 60-64 years, which constitute the older mature population. There is also a noticeable increase in the participation of the older population aged 70 years and above. The economically active population comprises age categories of all employed and unemployed individuals, while the inactive population includes dependents, retirees, students, the incapacitated, and individuals engaged in household chores.

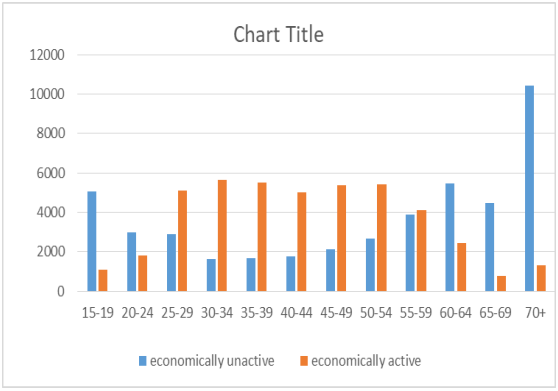
Graph 1. Working-age population of Bijeljina in 2020.



Source: Statistical Office of the Republic of Srpska, author's calculations

The economically active population consists of 44,600 individuals, accounting for 42.97% of the total population, while inactive individuals constitute 42.45% (44,064). In terms of age structure, the most numerous economically inactive population is aged 70 years and above, followed by the age group of 60-64 years (5,474), and then the younger population aged 15-19 (5,043). The economically active population mainly consists of mature individuals aged 25-54 years (Graph 2).

Graph 2. Economic structure of the population of Bijeljina in 2020.



Source: Statistical Office of the Republic of Srpska, author's calculations

Fertility, mortality, migrations, age-gender structure, level of education, labor force, and numerous socio-economic factors directly determine the size of the economically active population. The economically active population constitutes 50.30% of the total 88,664 working-age population, based on which the rates of economic activity were calculated (Table 1).

The overall activity rate is around 42.97%, while the labor force utilization rate is 61.72%. The consequence of this dynamic can be seen in the unfavorable age structure or high proportion of agricultural population, which is characteristic of the fertile region of Semberija.

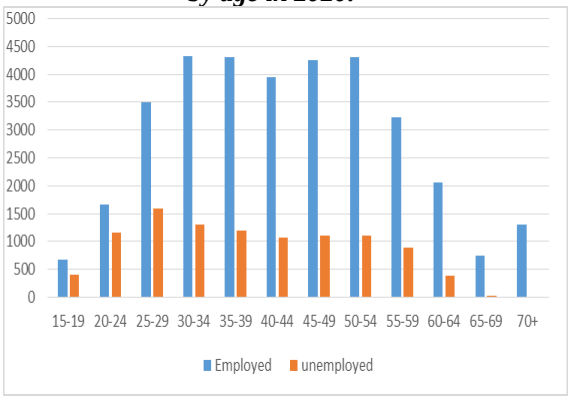
Table 1. Economic structure of the active population

Economicall active P_a	Total population P	Labor force active Pa 15-64	Overall activity rate $p_a=\frac{P_a}{P} \times 100$	Labor force utilization rate $\alpha_{(15-64)}=\frac{P_a}{P_{(15-64)}} \times 100$
44600	103783	42501	42,97%	61,72 %

Source: Statistical Office of the Republic of Srpska, author's calculations

The active population can best be understood through the structure of employed and unemployed individuals.

Graph 3. Employed and unemployed population by age in 2020.



Source: Statistical Office of the Republic of Srpska, author's calculations

The largest share of the employed population consists of age cohorts from 34 to 54 years old. As age increases, the number of individuals in employment decreases. Out of the total number of employed individuals (34,349), 60.74% are men, and 39.26% are women. The employment rate stands at around 24.11%, representing 38.74% of the total working-age population, which is below the national average (34.90%). The unemployment rate is around 49.88%, reflecting the increased proportion of older individuals in the total population.

Table 2. Rates of employment and unemployment of the population for the year 2020.

Unemployed	Employed	Labor force 15-64	Unemployment rate	Employment rate
10251	34349	68850	24,11 %	49,88%

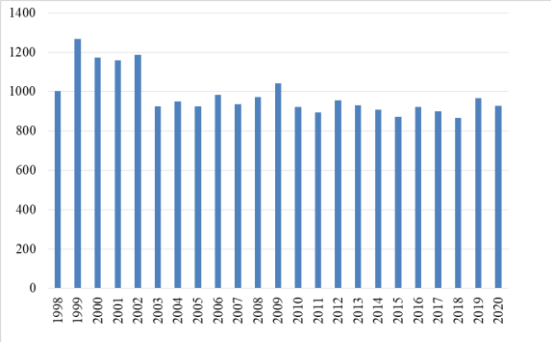
Source: Statistical Office of the Republic of Srpska, author's calculations

Unemployment, as a hallmark of an uncertain future and economic crisis, indirectly affects the delayed formation of marriages and the decision to have children. Local government authorities should consider the low employment rates and incorporate strategies to increase employment as a developmental goal for the city and region in the future.

3. ECONOMIC ACTIVITY OF CHILDBIRTH

During the observed period of 1998-2020 in Semberia, a total of 22,571 children were born, averaging 981 annually. The highest number of live births was recorded in 1999 with 1,266, while the lowest (865) was observed in recent years, specifically in 2018, with a percentage decrease of 31.67%.

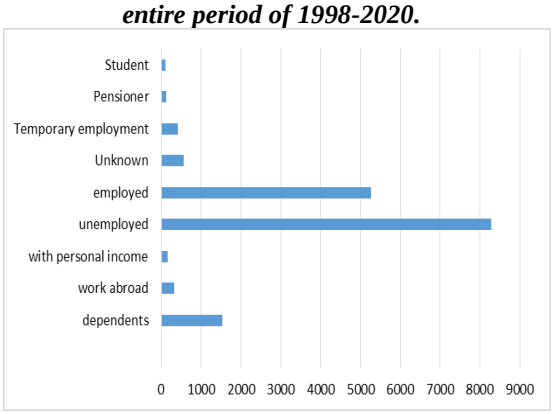
Graph 4. Live births from 1998 to 2020.



Source: Statistical Office of the Republic of Srpska, author's calculations

Although childbirth is a positive component of population dynamics, the trend of its decline is now an integral part of the demographic picture not only in this area but also in the Republic of Srpska. The causes of this trend should be sought in the psychological and socio-demographic structure of the post-war population, which, besides the process of displacement, has faced a significant decline in the economy, unemployment, and unstable political situation. Post-war traumas have left a mark on the demographic future of this area through later marriages, a decreasing desired number of children, and an increasing aspiration for economic and professional stability, further burdening the already low birth rates.

Graph 5. Economic activity of mothers for the entire period of 1998-2020.

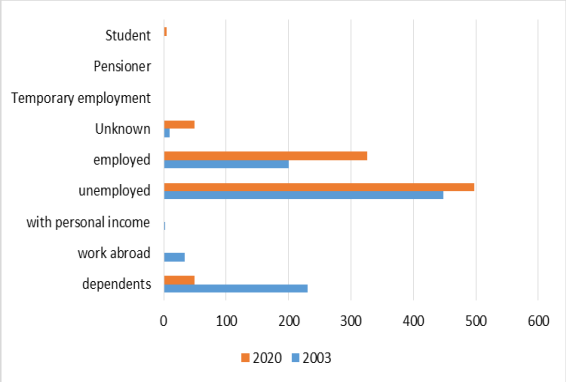


Source: Statistical Office of the Republic of Srpska, author's calculations

The highest share of live births for the period from 2003 to 2020 is among mothers who are classified as unemployed individuals, accounting for 49%. This can be attributed to the opportunities for independent childcare. Additionally, the number of live births among employed mothers accounts for 31.32%, while 9.1% are among supported individuals with no income. The remaining 10.58% includes mothers who are students, pension beneficiaries, in temporary employment, working abroad, with personal income, or with an unknown employment status (see graph 5).

Graph 6 presents a comparative analysis and changes in the number of live births among mothers with different economic activities at the beginning and end of the observed period. In 2003, the highest number was among unemployed mothers, accounting for 48.48%, followed by supported individuals at 25%, and employed mothers at 21.64%. The presence of births was not recorded among mothers who were students, pensioners, or in temporary employment. However, by the end of the observation period in 2020, there was a slight increase in the number of student mothers by only 0.43%, while mothers who were pension beneficiaries or working abroad were not recorded. Temporary employment was reported for only one individual, as well as personal income. The remaining births were distributed among unemployed mothers at 53.61%, employed mothers at 35.16%, and 5.2% with an unknown status.

Graph 6. Economic activity of mothers in 2003 and 2020.



Source: Statistical Office of the Republic of Srpska, author's calculations

What can be inferred from the parameters mentioned is that unemployed mothers mostly give birth due to having free time but without income, while employed mothers need access to cheaper preschool facilities that meet the demands of parenting and the parents' income level. Encouraging childbirth among student mothers during the most fertile period of life, between the ages of 20 and 24, should be considered along with providing free childcare and tuition during their studies.

CONCLUSION

With modernization and industrialization, there has been a change in the role of women in society. Women are no longer just mothers and housewives but also workers, which has led to changes in reproductive behavior and less time for family and its development. We are faced with the fact that the economic cost of parenthood is increasing in line with the modern societal value system, which, in conditions of depopulation, can be very unfavorable for the survival of future generations. Considering the overall situation, it can be concluded that the existing state of the economy, level of education, and personal attitudes of individuals have led to a decrease in childbirth and parental decisions to have fewer children (one or two) due to the inability to provide them with optimal living conditions. The economic component remains crucial for the survival of the family and the realization of basic life needs, thus acting as a limiting factor for increasing childbirth and expanding the family. In Central and Eastern European countries, the fertility rate largely depends on significant changes in the economy and specific socio-economic conditions. The persistently low fertility rate has led to increased public and political interest in trying to find ways to maintain or increase the fertility rate. To encourage the childbirth process in economically well-developed areas, family policies should focus on supporting families in the upbringing and education of children, employing women, and supporting their return to work after maternity leave with flexible working hours and work-family balance.

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