

## DETERMINANTS OF WOMEN'S EMPLOYMENT IN THE REGION OF SOUTHERN AND EASTERN SERBIA: AN ECONOMETRIC APPROACH

Sandra Milanović\*, Biljana Đorđević, Ivana Marjanović

Faculty of Economics, University of Niš, Niš, Republic of Serbia

### Abstract

During time, women's participation in the labour markets all over the world has increased. However, gender differences in the level of employment still exist, especially in underdeveloped and developing countries. Since empirical evidence shows that a higher degree of women's employment has many positive effects on the economy, it is of great importance for such countries' governments to create mechanisms for increasing it. These mechanisms are especially important for the Republic of Serbia, since women's employment is still lagging behind men's employment. On the interregional level, the gender discrepancies in employment are even larger, which slows down the development of the country as a whole. In order to create effective strategies and mechanisms which will increase the degree of women's employment in such regions, it is of great importance to discover which factors currently determine whether women will be employed or not. Since the problem of women's unemployment is particularly noticeable in the Region of Southern and Eastern Serbia, this paper aims to provide an analysis of the basic factors of women's employment in this region, so as to raise awareness about these factors and shed light on possible employment policies that could be designed accordingly. These policies are expected to enhance the economic development of this region and the country as a whole. For this purpose, primary research was conducted on a sample of 678 women. The results of the study indicate that age, educational attainment, household income, place of residence, and having children ages 7 through 18 represent significant factors that determine women's employment.

**Key words:** women, employment, labour market participation, factors, econometric approach

---

\* Corresponding author: Sandra Milanović, Faculty of Economics, University of Niš, Trg kralja Aleksandra Ujedinitelja 11, 18105 Niš, Serbia, sandramilanovic89@yahoo.com

## ДЕТЕРМИНАНТЕ ЗАПОСЛЕНОСТИ ЖЕНА У РЕГИОНУ ЈУЖНЕ И ИСТОЧНЕ СРБИЈЕ: ЕКОНОМЕТРИЈСКИ ПРИСТУП

### Апстракт

Током времена, број жена на тржиштима рада широм света се повећао. Међутим, родне разлике у нивоу запослености и даље постоје, посебно у неразвијеним земљама и земљама у развоју. Будући да емпиријски докази показују да већа запосленост жена умногоме позитивно утиче на привреду, од велике је важности да владе таквих земаља створе механизме за њено повећање. Ови механизми су посебно значајни за Републику Србију, јер у њој запосленост жена и даље заостаје за запосленošћу мушкараца. На међурегионалном нивоу, родне разлике у запошљавању су још веће, што успорава развој земље у целини. У циљу креирања ефикасних стратегија и механизма који ће обезбедити раст стопе запослености жена у оваквим регионима, од велике је важности идентификовати факторе који тренутно одређују да ли ће жене бити запослене или не. Будући да је проблем незапослености жена посебно изражен у Региону Јужне и Источне Србије, овај рад има за циљ да анализира основне факторе који утичу на запосленост жена у овом региону, како би се подигла свест о овим факторима и расветлиле могуће политике запошљавања које би се у складу са њима могле осмислити. Очекује се да ће ове политике допринети економском развоју овог региона, те и земље у целини. У ту сврху спроведено је примарно истраживање на узорку од 678 жена. Резултати студије указују да старост, степен образовања, деца старости између 7 и 18 година, приход домаћинства и место пребивалишта представљају значајне факторе који одређују запосленост жена.

**Кључне речи:** жене, запосленост, учешће на тржишту рада, фактори, економетријски приступ

### INTRODUCTION

One of the most significant changes in the labour market in the last century was the increasing number of women in the workforce. Data shows that women's labour force participation rates (of women ages 15 through 64) in the Republic of Serbia have recorded a constant growth since 2012, going from 54.2% to 63.0% in 2021. The decline in this percentage was inevitable in 2020, due to the coronavirus pandemic. When it comes to the European Union (EU-27), a similar state of affairs is evident. The female labour force participation (FLFP) rate was recorded to have gone from 64.5% to 68.5% in the same ten-year period (Eurostat, 2022).

As women's participation rate in the labour market increased, many positive effects were generated. Many studies found that there is a positive interrelationship between a higher degree of women's employment and the economic development of a country (Cavero-Rubio et al., 2019). Other studies showed that an increased FLFP rate compensates for the costs of an ageing population via positive fiscal effects (Bosch & Van der Klaauw, 2012). Some research also showed that the inclusion of skilled women in the economy expands the talent pool of the country,

which enables the economy to be more productive, diversified and innovative (OECD, 2017).

However, the data on women's participation in employment relationships is still not favourable. They participate less than men, both quantitatively and qualitatively – women have a smaller share in the workforce and the employment relationship, and generally have a lower educational attainment and fewer skills (Psacharopoulos & Tzannatos, 1989).

Since the increase of women's participation in employment relationships has many positive effects on the economy, and since their current participation is not satisfactory, it is of great importance that every country undertake measures to increase it. This is especially important for the enhancement of the development of developing countries. However, the first step in the process of creating effective measures should be the identification of the factors which currently determine whether women will be employed or not.

The Republic of Serbia is one of the countries in which women's participation in the labour force is still not favourable. Data shows that their participation rate in 2019 was 59.7%, while men's labour force participation rate was 74.0% (Eurostat, 2022). There are some other discouraging trends aside from this unfavourable data. For example, it was found that, during the process of transition, if employed, a Serbian woman would hold a job in sectors characterised by low pay, such as the public sector or the textile industry (Ivanović & Kufenko, 2020). Furthermore, it was discovered that one of the discouraging factors for women entering the Serbian labour market was, and still is, the discrepancy in earnings which makes men better-paid (Stanković, 2016). Ognjenović and Branković (2013) found that small children in the household, marital status, and opportunity costs are the main disabling factors of FLFP, while education is an enabling factor that almost linearly increases the participation rate.

Since the Republic of Serbia belongs to the group of developing countries,<sup>1</sup> and since much empirical research shows that there is a positive interrelationship between a higher degree of women's employment and the economic development of a country (Cavero-Rubio et al., 2019), increasing women's participation in employment could be beneficial for its faster development. This is especially important for its underdeveloped regions, such as the Region of Southern and Eastern Serbia, which has the lowest participation rate in the country's GDP (13.7%) (Statistical Office of the Republic of Serbia, 2021). At the same time, this region boasts the lowest percentage of unemployed women (43.17%) (Statistical Office of the Republic of Serbia, 2020). This is also a region that belongs to the

---

<sup>1</sup> According to the World Bank (2021), GDP per capita in Serbia in 2020 was 7,673 US\$.

‘underdeveloped south’, as compared to the ‘developed north’ (Stamenković et al., 2021).

Based on the above, the main goal of this paper is to identify the factors that determine women’s employment in the Region of Southern and Eastern Serbia. The results could serve as a basis for the country’s creation of an effective regional policy for stimulating women’s participation in the labour market of this region, which would enhance the development of this region and have a positive influence on the country’s development as a whole. To achieve these goals, empirical research was conducted on the territory of the Region of Southern and Eastern Serbia, and the results of this research are presented in this paper.

The paper is structured as follows: the section following the Introduction provides a review of literature and the development of hypotheses related to women’s participation in the labour market; the third section of the paper discusses the methodology of research applied in this study; the fourth section details the results of the study; the fifth section of the paper consists of the discussion of the results and their practical implications; and the final section of the paper provides concluding remarks.

### *LITERATURE REVIEW*

FLFP has been the area of interest of many authors so far. Consequently, many aspects of this phenomenon have been studied. Some authors investigated the phenomenon of FLFP from a structural econometric modelling point of view, some from a financial incentives perspective, and some from the standpoint of a life cycle decision-making process (Euwals et al., 2007). On the other hand, some authors had a more qualitative approach, focusing on the historical analysis of women’s changing life courses (Goldin 2004; Goldin 2006 in Euwals et al., 2007; Ehsan, 2015).

The phenomenon of FLFP is also the subject of many theories, among which are the labour-leisure theory, the neoclassical theory, and the labour-seeking theory. According to the labour-leisure theory, a woman’s decision on whether or not to join the labour market depends on the relationship between the expected market wage and the value women give to the time they spend on unpaid work in their households (Tasseven et al., 2016). Brožová (2015) further noted that the neoclassical theory states that the abilities shared by workers should be reciprocally valued with the same wage. Finally, the labour-seeking theory is based on the assumption that neither employees nor firms have all the necessary information about the labour market. Consequently, acquiring additional information about the market causes additional costs related to the sacrifice of free time (Tasseven et al., 2016). Therefore, women calculate what the better option is and base their decisions about their employment status on those calculations.

Influential factors defining women's employment status have also been the area of interest of many authors. Therefore, numerous factors have been identified. Some of them include differences in economic development (Verick, 2014), technological progress (Greenwood et al., 2016), policies aimed at increasing the participation of women in the workforce (Pignatti, 2020), education levels (Cho & Cho, 2015), age (Anaman & Kassim, 2006; Lee et al., 2008; Chen et al., 2014), marital status (Chen & Hamori, 2010; AlAzzawi & Hlasny, 2019), household income (Mincer, 1962; Li et al., 2020; Xin et al., 2021), and family structure (Mincer, 1962).

When it comes to the level of a country's economic development, many studies found that FLFP is highest in some of the poorest and richest countries in the world. At the same time, it is lowest in countries with average national incomes (Verick, 2014). Therefore, it can be concluded that the relationship between female participation rates and GDP per capita follows a U-shape curve globally. Although recent data, obtained on a sample of 169 countries, shows weak evidence of a U-shaped relationship between the log of GDP per capita and the FLFP rate, a U-shaped relationship between these two factors still exists (Verick, 2014).

Technological progress also has a favourable impact on the employment of women. More specifically, households are impacted by technological progress which, in turn, reduces the amount of work needed at home, thus allowing more women to enter the labour market (Greenwood et al., 2016).

One of the factors that has lately gained great significance in stimulating women's entry into the labour market is the creation of policies aimed at increasing women's participation in the workforce. This factor is especially important in countries with highly educated women and an ageing population (Pignatti, 2020).

When it comes to education, Cho and Cho (2015) state that, as the level of education increases, the comparative advantage of women in the labour market increases as well, which means that women choose to spend less time on housework.

Bianchi et al. (2012) analysed the family structure, which is also a factor influencing FLFP. They claim that, historically, women were the bearers of unpaid domestic work, while men were those who provided financial resources for the family. According to the traditional workforce model, women have a comparative advantage in domestic work and consequently concentrate on housework, while men gain a comparative advantage in earning wages and focus on the labour market (Bianchi et al., 2012). However, in recent times, the family structure has changed, and more women are included in the labour market, building successful careers.

The inclusion of women in the labour market has both economic and social significance. From the economic aspect, the economic efficiency of the country improves with the inclusion of women in the labour

market. From the social aspect, the increase in women's participation has a favourable effect on women's bargaining power, and, thus, on their empowerment (Sarkar et al., 2019; Nazier, 2020). Additionally, minimising the earnings risk within the family becomes the role of female labour supply (Attanasio et al., 2005). In particular, if a household is faced with the primary earner losing his job, the woman, as a secondary earner, can provide security and stability for the family. It was revealed that a higher degree of women's participation in the labour market has a positive fiscal and demographic influence as well. Namely, a higher degree of women's participation in the workforce contributes to the fiscal sustainability of states, which are under more and more significant pressure due to an ageing society (Euwals et al., 2007).

#### *Development of Hypotheses*

Besides the aforementioned, there are many others factors influencing FLFP. For the purpose of this paper, these additional factors will serve as the basis for hypothesis development.

In that vein, Lee and his associates (2008), for example, believe that a woman's age is a proxy for possible work experience, and is thus expected to increase the likelihood of employment, but only up to a certain age. Chen et al. (2014) state that the age of women is an important factor to consider, since women of different ages have different experience, work abilities, and family accountabilities. Anaman and Kassim (2006) also state that the probability of a woman entering the labour market increases with age, and then decreases with older age (quadratic function). Based on the above, one of the hypotheses to be tested in this paper is as follows:

*H1 – The probability of a woman's employment increases with a woman's age, but only up to a certain age, at which point it decreases.*

According to human capital theory (Mincer, 1958), a higher level of education leads to better outcomes in the labour market (Alam & Mamun, 2016). Numerous studies found that higher levels of education bring higher incomes, making labour market participation more appealing (Chen, & Hamori, 2010; Chen et al., 2014; AlAzzawi & Hlasny, 2019). Generally speaking, the impact of education can be seen in two ways (Psacharopoulos & Tzannatos, 1989). Since education can be presented as an investment in human capital, a woman is motivated to work to recoup the costs of that investment. On the other hand, an educated woman is more motivated to enter the labour market and, due to her higher potential for earnings, the opportunity costs of leisure increase. In brief, a higher level of educational attainment is expected to increase the likelihood of a woman's employment. Therefore, another of the hypotheses to be tested in this paper is as follows:

*H2 – A woman's education has a positive impact on the probability of a woman's employment.*

Several studies have reported that the likelihood of a woman's employment increases if the woman is married (Chen & Hamori, 2010; AlAzzawi & Hlasny, 2019). The main reason for this could be the fact that marriage usually involves the expansion of the family, which leads to the necessity of more financial resources. Additionally, Fernández and Wong (2014) have found that a married woman who faces a higher risk of divorce is motivated to work because she faces different consumption preferences from her partner during marriage, and because it is more likely that she will have higher costs of living in case of a divorce. Consequently, another research hypothesis of this paper is:

*H3 – Marriage will have a positive impact on the probability of a woman's employment.*

The cost of raising children is also a factor that has great potential to influence a woman's decision to enter the labour market. Namely, having children was seen as the major obstacle to continuous female employment and career development in many cases, especially in those societies where there is no access to affordable public childcare services. However, the provision of affordable public childcare services has the potential to reduce a mothers' opportunity costs and motivate the employment of women (Lee et al., 2008).

There is evidence to prove that the trends of reduced fertility rates and women delaying motherhood have improved the FLFP rate. Namely, some researchers found that university-educated women tend to delay motherhood until the completion of regular education, which later gives them a more favourable position in the labour market (Bratti, 2003). Preschool children represent a greater burden for women and the household income, since most women are responsible for caring for the children due to the lack of high-quality and affordable childcare. Having children of preschool age has been shown to reduce the likelihood of a woman's participation in the labour market (AlAzzawi & Hlasny, 2019; Xin et al., 2021). Conversely, the sole impact of having school-age children has not been determined. Some studies state that school-age children require less attention from their mothers, and that mothers get more free time and can decide to work due to the compulsory nature of primary education (Adair et al., 2002). AlAzzawi and Hlasny (2019) revealed that having school-age children has had a positive impact on the FLFP in Egypt, but a negative impact in Jordan. Therefore, the expected impact of having children depends on the age of the children. Accordingly, the following two hypotheses were developed:

*H4 – Having children younger than six will have a negative impact on the probability of a woman's employment;*

*H5 – Having children ages 7 through 18 will have a positive impact on the probability of a woman's employment.*

If household income, or wealth, increases, women can afford more free time, which causes a reduction in labour supply known as the substitution effect (AlAzzawi & Hlasny, 2019). A large number of studies indicate that the greater the wealth, or income, of a household, the less likely a woman is to be employed (Li et al., 2020; Xin et al., 2021). Thus, the next hypothesis to be tested is as follows:

*H6 – Higher household income (excluding the woman's income) has a negative impact on the probability of a woman's employment.*

Some studies suggest that women are more likely to be employed in urban areas than they are to be employed in rural areas (Giuliani & Duvander, 2016; Sarfraz et al., 2021). Giuliani and Duvander (2016) suggest that women in urban areas have greater job opportunities, access to better jobs, and better childcare opportunities. Sarfraz et al. (2021) found that an urban place of residence predicts decent job prospects for female employees. Therefore, bearing in mind migratory trends, which favour the urban areas in the Republic of Serbia, and the demographic deprivation trends present in Serbian villages (Kuzmanović et al., 2020), the following hypothesis will be tested:

*H7 – An urban place of residence has a positive impact on the probability of a woman's employment.*

## METHODOLOGY

### *The Context of this Research*

The Republic of Serbia is a country in which the employment rate of the population older than 15 years was 49.1% in 2020. Men account for 55.6%, and women account for 44.4% of employed individuals (Statistical Office of the Republic of Serbia, 2020). The Region of Southern and Eastern Serbia is characterised by more unfavourable data since the employment rate of women in 2020 was 43.2%, while the employment rate of men was 56.8% (Statistical Office of the Republic of Serbia, 2020). The low employment proportion of women is partly a consequence of the unfavourable development of the labour market during the transition process and lagged privatisation, when there was a significant decline in the employment rate of women (Stanković et al., 2015). Specifically, in 2002, the ratio of male to female participation rates was 1.3, and the ratio of female to male unemployment rates was 1.5 (World Bank, 2004).

### *Data Collection and Sample Characteristics*

This empirical research was conducted in the Region of Southern and Eastern Serbia. The female population of the researched region con-



sists of 488,767 women aged between 18 and 65, according to the 2011 Census (Statistical Office of the Republic of Serbia, 2019). The sample frame of this research comprised Facebook social groups that bring together almost 21,000 women from the Region of Southern and Eastern Serbia. The data was collected by the application of the convenience sampling method, through an online survey using the Google forms online tool. The survey was distributed to the respondents in the period between January and May 2019. The sample consists of 678 women of working age, and its structure is summarised in the following table.

*Table 1. Sample characteristics*

| Characteristic   |                | Number | Percentage |
|--|----------------|--------|------------|
| Age range  | 18-25          | 85     | 12.54      |
|  | 26-35          | 321    | 47.34      |
|  | 36-45          | 151    | 22.27      |
|  | 46-55          | 96     | 14.16      |
|  | 56-65          | 25     | 3.69       |
| Employment status  | Employed       | 476    | 70.21      |
|  | Unemployed     | 202    | 29.79      |
| Education  | Primary        | 20     | 2.95       |
|  | Secondary      | 233    | 34.37      |
|  | Bachelor       | 223    | 32.89      |
|  | Master         | 178    | 26.25      |
| Marital status   | Doctorate      | 24     | 3.54       |
|  | Married        | 472    | 69.62      |
| Children 0-6   | Not married    | 206    | 30.38      |
|  | Yes            | 246    | 36.28      |
| Children 7-18  | No             | 432    | 63.72      |
|  | Yes            | 163    | 24.04      |
| Monthly household income (excluding woman's income) (in RSD) | No             | 515    | 75.96      |
|  | 0-20,000       | 252    | 37.17      |
|  | 20,001-40,000  | 160    | 23.60      |
|  | 40,001-60,000  | 141    | 20.80      |
|  | 60,001-80,000  | 49     | 7.23       |
| Place of residence   | 80,001-100,000 | 33     | 4.87       |
|  | > 100,000      | 43     | 6.34       |
|  | Urban          | 522    | 76.99      |
|  | Rural          | 156    | 23.01      |
| Total  |                | 678    | 100.00     |

*Source:* Authors' calculation

### *Research Variables and Instruments*

Before defining the methodology for the estimation of the binary dependent variable (female employed or not employed), the independent variables were selected and defined based on available research. A number of the studies identify age, education, fertility and household income

as the basic factors of FLFP (Becker & Becker, 2009; Bütikofer, 2013; Chen et al., 2014). Additionally, a woman's decision to enter the labour market may be influenced by her place of residence. As a result, the following variables are included in the model: age, education, marital status, children under the age of 6, children ages 7 through 18, household income, and area of residence (Table 2).

*Table 2. Summary of the variables*

| Code            | Description   |
|-----------------|---|
| Dependent       |   |
| $Y_t$           | Female employment status<br>=1 if a female is employed<br>=0 if a female is not employed  |
| Independent     |   |
| AGE             | Age of the respondents (adults aged 18 through 65)  |
| AGEQ            | The square of the age of the respondents  |
| ED2             | Secondary educational attainment<br>=1 if the respondent has secondary educational attainment<br>=0 if the respondent has no secondary educational attainment                         |
| ED3             | Basic academic studies educational attainment<br>=1 if the respondent has basic academic studies attainment<br>=0 if the respondent has no basic academic studies attainment          |
| ED4             | Master's academic studies educational attainment<br>=1 if the respondent has basic master studies attainment<br>=0 if the respondent has no master academic studies attainment        |
| ED5             | Doctoral academic studies educational attainment<br>=1 if the respondent has doctoral academic studies attainment<br>=0 if the respondent has no doctoral academic studies attainment |
| MarStat         | Marital status<br>=1 if the respondent is married<br>=0 if the respondent is not married  |
| Children6       | Having children under the age of 6<br>=1 if the respondent has children under the age of 6<br>=0 if the respondent has no children under the age of 6                                 |
| Children18      | Having children aged 7 through 18<br>=1 if the respondent has children aged 7 through 18<br>=0 if the respondent has no children aged 7 through 18                                    |
| HouseholdIncome | Monthly household income (excluding woman's income) in RSD  |
| Residence       | Place of residence of respondents<br>=1 if the woman lives in an urban area<br>=0 if the woman lives in a rural area.   |

*Source:* Authors

*Analyses and Procedures*

A binary probit model was used to determine the main factors of female employment in the Region of Southern and Eastern Serbia. What distinguishes the probit model from the standard linear model is the nonlinear relationship between the dependent variable and the independent variables. Furthermore, the dependent variable in this model is the binary variable with two possible outcomes: the female is employed (the binary variable has a value of one) or the female is unemployed (the binary variable has a value of zero). The mathematical formulation of the probit model can be expressed by the following equation:

$$P(Y_i = 1) = P(\alpha_0 + \sum_{j=1}^k \alpha_j x_{ij} + \varepsilon_i \geq 0) = F(\alpha_0 + \sum_{j=1}^k \alpha_j x_{ij}) \quad (1)$$

where  $P(Y_i = 1)$  is the probability that the female is employed, which corresponds to the likelihood that the disturbance term will have a value higher than the negative value of the deterministic part of the linear probability model, and  $F$  is the cumulative distribution function of the standard normal distribution (Krznar, 2004). More specifically, the probit model can also be expressed by the following equation:

$$\begin{aligned} P(Y_i = 1) &= \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{\alpha_0 + \sum_{j=1}^k \alpha_j x_{ij}} e^{-\frac{t^2}{2}} dt = \int_{-\infty}^{\alpha_0 + \sum_{j=1}^k \alpha_j x_{ij}} \varphi(t) dt = \\ &= \Phi(\alpha_0 + \sum_{j=1}^k \alpha_j x_{ij}) \end{aligned} \quad (2)$$

where  $t$  is a random variable which follows a standardised normal distribution and denotes the disturbance term,  $\Phi(\cdot)$  represents standardised normal distribution, and  $\varphi(\cdot)$  denotes the corresponding density function (Marjanović & Marković, 2019).

According to the previously stated hypothesis, the estimated model is specified as follows:

$$\begin{aligned} P(Y_i = 1) &= \Phi(\alpha_0 + \alpha_1 AGE_i + \alpha_2 AGESQ_i + \alpha_3 ED2_i + \alpha_4 ED3_i + \\ &+ \alpha_5 ED4_i + \alpha_6 ED5_i + \alpha_7 MarStat_i + \alpha_8 Children6_i + \alpha_9 Children18_i + \\ &+ \alpha_{10} HouseholdEarnings_i + \alpha_{11} Residence_i) \end{aligned} \quad (3)$$

where  $Y_i$  represents the binary dependent variable (female employed or not employed),  $\alpha_0$  denotes the intercept term and  $\alpha_1, \alpha_2, \alpha_3, \alpha_4, \alpha_5, \alpha_6, \alpha_7, \alpha_8, \alpha_9, \alpha_{10}, \alpha_{11}$  represent estimated effects.

### RESULTS

The estimation of the probit regression parameters was done using the Maximum Likelihood method, which evaluates the parameters by maximising the probability function, using Stata 13. The results are presented in Table 3.

*Table 3. Probit estimation of the influence of explanatory variables on the women's employment likelihood in the Region of Southern and Eastern Serbia*

| Variable        | Coefficient                           |
|-----------------|---------------------------------------|
| AGE             | 0.3031<br>(0.0495) <sup>***</sup>     |
| AGESQ           | -0.0034<br>(0.0006) <sup>***</sup>    |
| ED2             | 0.4811<br>(0.3380)                    |
| ED3             | 0.7471<br>(0.3485) <sup>**</sup>      |
| ED4             | 0.7808<br>(0.3591) <sup>**</sup>      |
| ED5             | 1.3117<br>(0.5414) <sup>**</sup>      |
| MarStat         | 0.0305<br>(0.1726)                    |
| Children6       | -0.1464<br>(0.1548)                   |
| Children18      | -0.2798<br>(0.1543) <sup>*</sup>      |
| HouseholdIncome | 4.18e-06<br>(1.42e-06) <sup>***</sup> |
| Residence       | 0.4791<br>(0.1327) <sup>***</sup>     |
| cons            | -6.5665<br>(0.9550) <sup>***</sup>    |

*Note:* \* p<0.1; \*\* p<0.05; \*\*\* p<0.01;

Standard errors in parentheses.

*Source:* Authors' calculation

LR statistics, used to test the joint null hypothesis that all the slope coefficients except the constant are zero, is rejected at a significance level of 1% (LR chi2 (7) = 116.39, Prob > chi2 = 0.0000). The value of McFadden R<sup>2</sup> shows a moderately good goodness-of-fit for the model (0.1515).

To perform a quantitative interpretation of the model parameters, it is necessary to establish marginal effects (Greene, 2003). The marginal effect determines the effect that the change in a certain explanatory variable has on the predicted probability of the dependent variable, when

the other covariates are kept constant (Aidoo et al., 2019). The marginal effects are presented in Table 4.

*Table 4. Marginal effects of the influence of explanatory variables on the women's employment likelihood in the Region of Southern and Eastern Serbia*

| Variable        | Coefficient               |
|-----------------|---------------------------|
| AGE             | 0.0861<br>(0.0128)***     |
| AGESQ           | -0.0010<br>(0.0002)***    |
| ED2             | 0.1366<br>(0.0955)        |
| ED3             | 0.2121<br>(0.0979)**      |
| ED4             | 0.2217<br>(0.1009)**      |
| ED5             | 0.3723<br>(0.1519)**      |
| MarStat         | 0.0086<br>(0.0490)        |
| Children6       | -0.0416<br>(0.0438)       |
| Children18      | -0.0794<br>(0.0435)*      |
| HouseholdIncome | 1.19e-06<br>(3.98e-07)*** |
| Residence       | 0.1360<br>(0.0366)***     |

*Note:* \* p<0.1; \*\* p<0.05; \*\*\* p<0.01;

Standard errors in parentheses.

*Source:* Authors' calculation

These results show that women's employment in the Region of Southern and Eastern Serbia increases with age, but this trend decreases after a certain number of years. More specifically, the breaking point of 43 years was obtained by fitting the U-shape curve of the age quadratic function. Based on these results, it can be concluded that hypothesis H1 is confirmed.

The results of the study support the second hypothesis, H2, as well. Namely, the results of the study show that women with a higher level of education are more likely to be employed. This effect starts to manifest with basic academic educational attainment (positive and significant influence of variables ED3, ED4 and ED5).

On the other hand, marital status is not a significant determinant of women's employment in the Region of Southern and Eastern Serbia (pos-

itive but not significant influence of variable MarStat observed). Consequently, hypothesis H3 is not confirmed.

When it comes to having children, it was found that having a child under the age of 6 does not show a significant impact on the probability of employment of women in the Region of Southern and Eastern Serbia (negative but not significant influence of variable Children6 observed), while having children aged 7 through 18 negatively affects the probability of women's employment (negative and significant influence of variable Children18 observed). Subsequently, neither hypothesis H4 nor hypothesis H5 are confirmed.

Household income (excluding women's income) shows a positive impact on the probability of women's employment (positive and significant influence of variable HouseholdIncome observed), which did not confirm the sixth research hypothesis, H6.

Place of residence is also a significant determinant of women's employment, with women living in urban areas being more likely to be employed than women living in rural areas (positive and significant influence of variable Residence observed). Therefore, hypothesis H7 is confirmed.

#### *DISCUSSION AND PRACTICAL IMPLICATIONS*

The results of the conducted study could be significantly indicative. The fact observed in the results of this research, that the probability of women's employment increases with age, and then starts decreasing after the breaking point, is supported by the results of several studies. One of them is the study conducted by Besamusca et al. (2015) who, on a sample of 117 countries, found that FLFP increases after the completion of the mandatory education process, and decreases as the retirement phase approaches. In addition, Xin et al. (2021) identified that the turning point for the influence of age on women's employment is between the ages of 35 and 40. The non-linear effect of age, and the low employment rate at the beginning and the end of a career can be justified by the fact that women at the beginning of their career lack the experience needed for the job, and by the fact that women's motivation to seek a job and their skills are inversely proportional to their age in the second half of their career, as they approach the retirement phase. In relation to the Republic of Serbia, the study's results could also be explained by the fact that many of the enterprises from the Region of Southern and Eastern Serbia went through a challenging process of privatisation during the 2000s, and many women lost their jobs during that period (Videnović et al., 2021). Most of them are now older than 40 and belong to a harder-to-employ group of people (Stanković et al., 2015). Therefore, policymakers should create programmes for the employment of such a group of women, some of which may involve the establishment of, for example, social enterprises, the or-

ganisation of training programmes, or a solution to the discrepancies between skills and labour demand<sup>2</sup>.

This study further shows the positive impact of education on the likelihood of women's employment, which is consistent with the results of other research (Chen & Hamori, 2010; Chen et al., 2014). However, when it comes to the Region of Southern and Eastern Serbia, the positive effects of education on employment are manifested only after the obtainment of a university degree. Having this in mind, the results of this study suggest that it is desirable to create policies aimed at *encouraging women to continue their education after high school by providing greater, primarily informal, financial incentives for further education*. Moreover, universities are typically located in large cities and tertiary education, therefore, involves the migration of children from their place of residence and costs connected to this (Maghnouj et al., 2020). In the area of education, it is advisable to *harmonise the needs of companies from a certain region with the educational system in the same region, so as to create a labour force with specific competencies, which will generate their prospects for future employment*.

When it comes to the impact that having children has on the probability of women's employment, the results of this empirical research indicate that having children aged 7 through 18 negatively affects the probability of women's employment. This result is supported by the results of the study conducted in Jordan, which indicate that having children aged 7 through 14 had a negative effect on women's employment (AlAzzawi & Hlasny, 2019). The results obtained in our study could be explained by the traditional role of women – women are expected to support their children during their primary and secondary education. However, since school-age children are considered to be sufficiently independent already, it is desirable to encourage this independence by including children in the process of completing household chores, so that the mother has more time to devote to full-time or part-time employment. However, Jakovljević and associates (2019) agree on the fact that women are not legally supported in engaging in part-time employment. Additionally, women are not protected from discrimination by employers, or from compensation systems which favour men. Based on the above, the suggestion for policymakers is to *make it easier for women to combine work and family*, which is likely to facilitate their entry into the workforce (Blau & Kahn, 2012).

The positive effect of household income (excluding women's income) on the probability of women's employment is not in line with expectations, but it is supported by the results of previous research. Chen

---

<sup>2</sup> The National employment agency provides some educational programmes, but as the number of employed women is still very low, it is obvious that there is still room for improvement in this area.

and Hamori (2010) found that women will be motivated to find a job if the family income is higher. Moreover, Chen et al. (2014) noted that both women from urban and rural areas will be motivated to take part in the labour market if their husband does the same. Our results can be explained by the fact that the Region of Southern and Eastern Serbia is a relatively poorer region, with average earnings lower than the national level (Statistical Office of the Republic of Serbia, 2019). Consequently, as many household members as possible should be involved in earning an income. This understanding of the problem is not without support in literature. Randelović et al. (2019) state that persons from low-income areas, such as the Region of Southern and Eastern Serbia, are to some extent forced to form the labour supply of that region (p. 15). On the other hand, women's participation in earning an income tends to remove the pressure of being the only contributors to the family budget from their husbands (Saikia & Mazumder, 2015). Accordingly, it is of great importance for women's employment that there are opportunities for both genders to find employment, that household members are employed, and that the average salary is not under the national level in these regions. *Thus, all policies should be aimed at creating workplaces and increasing the economic status of workers in the analysed regions.*

The results of this study show that the place of residence, i.e., an urban area, positively influences the probability of women's employment. Similar results were obtained in the research of Sarfraz et al. (2021). This can be explained by the fact that women in urban centres have more chances of finding employment. Sarfraz et al. (2021) state that an urban place of residence offers women not only the opportunity to work for a wage but also the opportunity to be an employer. Conversely, the employment of women in rural areas is rather vulnerable. Considering the employment opportunities in rural areas, and the fact that village demographic deprivation trends in the Republic of Serbia are continuing (Kuzmanović et al., 2020), *the government should target both problems in its programmes, so as to enhance the employment possibilities of women living in rural areas and to slow down the continuous migration process from rural to urban areas.*

### CONCLUSION

This paper emphasises the importance of women's participation in the labour force and the employment relationship, since a higher degree of women's employment has many positive effects on the economy. Therefore, it is reasonable to believe that women's greater participation in employment relationships will enhance not only the economic development of the Republic of Serbia but also the economic development of its underdeveloped regions, such as the Region of Southern and Eastern Serbia. Therefore, the



main goal of this paper was to identify the factors that determine women's employment in this region, so as to be able to propose measures for women's greater participation in the labour market of this region.

The results of this empirical study, conducted on a sample of 678 participants (women), indicate that the age of a woman, as the proxy of her experience, increases the probability of women's employment, but only up to the age of 43, after which the inverse relationship applies. Furthermore, this study demonstrates that educational attainment is also a significant determinant of the probability of women's employment. Nevertheless, to enjoy this effect, women must have at least a basic university education. On the other hand, the results of this study indicate that being married is not a significant factor determining women's employment status. Furthermore, the study shows that having children under the age of 6 does not have a significant negative impact on the likelihood of women's employment. However, having children aged 7 through 18 negatively affects the likelihood of women's employment. In addition, the study shows that household income has positive effects on women's employment, since the Region of Southern and Eastern Serbia is a relatively poor region. Consequently, in the attempt to achieve financial well-being, more family members must be included in the labour market. The probability of women's employment is also affected by the place of residence, with a woman living in an urban area being more likely to be employed than a woman living in a rural area.

Having in mind the obtained results, the authors of this paper suggest which actions can be undertaken to increase women's participation in employment relationships. Some of these actions are: encouraging women to continue their education after high school by providing greater financial incentives or organising different training programmes, harmonising the needs of companies from a certain region with the educational system in the same region so as to create a labour force with specific competencies, and creating workplaces (for example, social enterprises).

The conducted study contributes to the existing literature both empirically and theoretically. Empirically, it provides a model for the analysis of women's employment on the example of women from the Region of Southern and Eastern Serbia. Theoretically, it provides guidelines for policymakers to understand the basic factors influencing the probability of women's employment, and allows them to create tailored policies aimed at encouraging women's employment in the researched region.

The conducted research faces some limitations. They are reflected in the sample selected for analysis, which is not representative. Thus, the results of the study should only be seen as indicative. Therefore, to obtain more reliable results, which could be generalised to apply to the country as a whole, further research should be directed towards increasing the number of women in the research sample, and towards encompassing other regions.

**Acknowledgements:**

1. This paper is part of a project that has received funding from the European Union's "Horizon Europe" research and innovation programme under grant agreement No 101059994.
2. This paper is supported by the Ministry of Education, Science and Technological Development of the Republic of Serbia, Agreements on the implementation and financing of scientific research in 2022 [No. 451-03-68/2022-14/200371 and No. 451-03-68/2022-14/200100].

**REFERENCES**

- Adair, L., Guilkey, D., Bisgrove, E., & Gultiano, S. (2002). Effect of childbearing on Filipino women's work hours and earnings. *Journal of Population Economics*, 15(4), 625-645. doi:10.1007/s001480100101
- Aidoo, E. N., Ackaah, W., Appiah, S. K., Appiah, E. K., Addae, J., & Alhassan, H. (2019). A bivariate probit analysis of child passenger's sitting behaviour and restraint use in motor vehicle. *Accident Analysis & Prevention*, 129, 225-229. doi:10.1016/j.aap.2019.05.022
- Alam, K., & Mamun, S. A. K. (2016). The relationship between labour force status and educational attainment: Evidence from a system of simultaneous equations model. *Economic Analysis and Policy*, 52, 55-65. doi:10.1016/j.eap.2016.07.005
- AlAzzawi, S., & Hlasny, V. (2019). Household asset wealth and female labor supply in MENA. *The Quarterly Review of Economics and Finance*, 73, 3-13. doi: 10.1016/j.qref.2019.08.002
- Anaman, K. A., & Kassim, H. M. (2006). Marriage and female labour supply in Brunei Darussalam: A case study of urban women in Bandar Seri Begawan. *The Journal of Socio-Economics*, 35(5), 797-812. doi: 10.1016/j.socec.2005.11.038
- Attanasio, O., Low, H., & Sánchez-Marcos, V. (2005). Female labor supply as insurance against idiosyncratic risk. *Journal of the European Economic Association*, 3(2-3), 755-764.
- Becker, G. S., & Becker, G. S. (2009). *A Treatise on the Family*. Harvard university press.
- Besamusca, J., Tijdens, K., Keune, M., & Steinmetz, S. (2015). Working women worldwide. Age effects in female labor force participation in 117 countries. *World Development*, 74, 123-141. doi:10.1016/j.worlddev.2015.04.015
- Bianchi, S. M., Sayer, L. C., Milkie, M. A., & Robinson, J. P. (2012). Housework: Who did, does or will do it, and how much does it matter?. *Social forces*, 91(1), 55-63
- Blau, F. D., & Kahn, L. M. (2012, November). Female labor supply: Why is the US falling behind. In *AEA meetings, November*. Working Paper 18702. <http://www.nber.org/papers/w18702>
- Bosch, N., & Van der Klaauw, B. (2012). Analyzing female labor supply—Evidence from a Dutch tax reform. *Labour Economics*, 19(3), 271-280. doi: 10.1016/j.labeco.2012.01.002
- Bratti, M. (2003). Labour force participation and marital fertility of Italian women: The role of education. *Journal of Population economics*, 16(3), 525-554. doi:10.1007/s00148-003-0142-5
- Brožová, D. (2015). Modern labour economics: the neoclassical paradigm with institutional content. *Procedia Economics and Finance*, 30, 50-56. doi: 10.1016/S2212-5671(15)01254-X
- Bütikofer, A. (2013). Revisiting 'mothers and sons' preference formation and the female labor force in Switzerland. *Labour Economics*, 20, 82-91. doi:10.1016/j.labeco.2012.11.003

- Cavero-Rubio, J. A., Collazo-Mazón, A., & Amorós-Martínez, A. (2019). Public recognition of gender equality in the workplace and its influence on firms' performance. *Women's Studies International Forum*, 76, 102273. doi:10.1016/j.wsif.2019.102273
- Chen, G., & Hamori, S. (2010). Bivariate probit analysis of differences between male and female formal employment in urban China. *Journal of Asian Economics*, 21(5), 494-501. doi:10.1016/j.asieco.2010.03.009
- Chen, J., Shao, X., Murtaza, G., & Zhao, Z. (2014). Factors that influence female labor force supply in China. *Economic Modelling*, 37, 485-491. doi: 10.1016/j.econmod.2013.11.043
- Cho, D., & Cho, J. (2015, January). Over-heated education and lower labor market participation of Korean females in other OECD countries. In *Women's Studies International Forum* (Vol. 48, pp. 1-8). Pergamon. doi:10.1016/j.wsif.2014.10.016
- Ehsan, S. (2015). *Female Labor Force Participation, Its Determinants and Effects on GDP in Pakistan* (Master's thesis, Eastern Mediterranean University, Gazimağusa, North Cyprus). Retrieved from: <http://i-rep.emu.edu.tr:8080/jspui/bitstream/11129/2906/1/ehsansaad.pdf>
- Eurostat (2022). *Employment and activity by sex and age - annual data*, <https://ec.europa.eu/eurostat/data/database>
- Euwals, R., Knoef, M., & van Vuuren, D (2007). The trend in female labour force participation: what can be expected for the future? *IZA Discussion Papers*, No. 3225, Institute for the Study of Labor (IZA), Bonn <https://www.econstor.eu/bitstream/10419/34511/1/559459173.pdf>
- Fernández, R., & Wong, J. C. (2014). Divorce risk, wages and working wives: A quantitative life-cycle analysis of female labour force participation. *The Economic Journal*, 124(576), 319-358. doi:10.1111/eoj.12136
- Giuliani, G., & Duvander, A. Z. (2016). Cash-for-care policy in Sweden: An appraisal of its consequences on female employment. *International Journal of Social Welfare*, 26(1), 49-62. doi:10.1111/ijsw.12229
- Goldin, C. (2004). The long road to the fast track: Career and family. *The Annals of the American Academy of Political and Social Science*, 596(1), 20-35. doi: 10.1177/0002716204267959
- Goldin, C. (2006). The Quiet Revolution That Transformed Women's Employment, Education, and Family. *American Economic Review*, 96(2), 1-21. doi: 10.1257/000282806777212350
- Greene, W. H., & Hensher, D. A. (2003). A latent class model for discrete choice analysis: contrasts with mixed logit. *Transportation Research Part B: Methodological*, 37(8), 681-698. doi:10.1016/S0191-2615(02)00046-2
- Greenwood, J., Guner, N., Kocharkov, G., & Santos, C. (2016). Technology and the changing family: A unified model of marriage, divorce, educational attainment, and married female labor-force participation. *American Economic Journal: Macroeconomics*, 8(1), 1-41.
- Ivanović, V., & Kufenko, V. (2020). *It's a man's world? The rise of female entrepreneurship during privatization in Serbia* (No. 07-2020; Hohenheim Discussion Papers in Business, Economics and Social Sciences). <http://nbn-resolving.de/urn:nbn:de:bsz:100-opus-18099>
- Jakovljević, M., Jovanović, M., Milovanović, O., & Radević, S. (2019). Extended Working Life Policies: Country Experiences – Serbia. In Á. Ní Léime et al. (eds.), *Extended Working Life Policies - International Gender and Health Perspectives* (pp. 395-405). Springer Switzerland. doi:10.1007/978-3-030-40985-2\_31

- Krznar, I. (2004). *Currency Crisis: Theory and Practice with Application to Croatia, (Working Papers 12)*. Croatia: The Croatian National Bank. <https://www.hnb.hr/documents/20182/121627/w-012.pdf/5216e5c3-0074-40c3-8531-f9ecc24211ed>
- Kuzmanović, M., Savić, G., & Pajić, K. (2020). Residential Attractiveness of Cities from the Perspective of the Efficiency, Residents' Perception and Preferences: The Case of Serbia. In *Advances in Operational Research in the Balkans* (pp. 139-165). doi:10.1007/978-3-030-21990-1\_9
- Lee, B. S., Jang, S., & Sarkar, J. (2008). Women's labor force participation and marriage: The case of Korea. *Journal of Asian Economics*, 19(2), 138-154. doi:10.1016/j.asieco.2007.12.012
- Li, H., Li, J., Lu, Y., & Xie, H. (2020). Housing wealth and labor supply: Evidence from a regression discontinuity design. *Journal of Public Economics*, 183, 104139. doi:10.1016/j.jpubeco.2020.104139
- Maghnouj, S., Salinas, D., Kitchen, H., Guthrie, C., Bethell, G., & Fordham, E. (2020). *OECD Reviews of Evaluation and Assessment in Education: Serbia*. Paris: OECD Publishing. doi:10.1787/225350d9-en
- Marjanović, I., & Marković, M. (2019). Determinants of currency crises in the Republic of Serbia. *Zbornik Radova Ekonomski Fakultet u Rijeka*, 37(1), 191-212. doi:10.18045/zbefri.2019.1.191
- Mincer, J. (1958). Investment in human capital and personal income distribution. *Journal of political economy*, 66(4), 281-302. doi:10.1086/258055
- Mincer, J. (1962). Labor force participation of married women: A study of labor supply. In *Aspects of labor economics* (pp. 63-105). Princeton University Press.
- Nazier, H. (2020). Female labor in Egyptian manufacturing sector: The demand side story. *The Quarterly Review of Economics and Finance*. 78, pp 1-11. doi:10.1016/j.qref.2020.01.012
- Nedeljković, M., & Čikić, J. (2021). My Job is to Enjoy! – The Serbian Experience of Lifestyle Entrepreneurship. *TEME*, XLV(2), 407-424. doi.org:10.22190/TEME200620024N
- OECD (2017). Women's participation in the labour market and entrepreneurship in selected MENA countries. In *Women's Economic Empowerment in Selected MENA Countries: The Impact of Legal Frameworks in Algeria, Egypt, Jordan, Libya, Morocco and Tunisia*, OECD Publishing, Paris, doi: 10.1787/9789264279322-5-en.
- Ognjenović, K., & Branković, A. (2013). Recent trends and development of the labour force in Serbia. *Ecologica: nauka, privreda, iskustva*, 229-247.
- Pignatti, N. (2020). Encouraging women's labor force participation in transition countries. *IZA World of Labor*. doi: 10.15185/izawol.264.v2
- Psacharopoulos, G., & Tzannatos, Z. (1989). Female labor force participation: An international perspective. *The World Bank Research Observer*, 4(2), 187-201. doi:10.1093/wbro/4.2.187
- Randelović, S., Žarković Rakić, J., Vladisavljević, M., & Vujić S. (2019). Labour Supply and Inequality Effects of In-Work Benefits: Evidence from Serbia. *Naše gospodarstvo/ Our Economy*, 65(3), 1-22. doi:10.2478/ngoe-2019-0010
- Saikia, P., & Mazumder, R. (2015). An Empirical Analysis of the Determinants of Women Labour Force Participation among the Tiwa Tribe in Assam of North East India. *International Journal of Social Science and humanities Research*, 3(3).
- Sarfraz, M., Andlib, Z., Kamran, M., Khan, N. U., & Bazkiaei, H. A. (2021). Pathways towards Women Empowerment and Determinants of Decent Work Deficit: A South Asian Perspective. *Administrative Sciences*, 11(3), 80. doi: 10.3390/admsci11030080

- Sarkar, S., Sahoo, S., & Klasen, S. (2019). Employment transitions of women in India: A panel analysis. *World Development*, *115*, 291-309. doi:10.1016/j.worlddev.2018.12.003
- Stanković, J., Makojević, N., Janković-Milić, V., & Radosavljević, M. (2015). The female labour force in an urban economy during transition: A view from the City of Nis. *Cities*, *42*, 109-117. doi:10.1016/j.cities.2014.10.006
- Stanković, S. (2016). The transformation of the Serbian labour market from a gender perspective. *Economic Themes*, *54*(4), 587-604.
- Stamenković, M., Milanović, M., & Janković-Milić, V. (2021). Multivariate Statistical Analysis of Regional Economic Disparities at District Level in Serbia. *TEME*, *XLV*(2), 681-698. doi:10.22190/TEME200715039S
- Statistical Office of the Republic of Serbia (2019). *Municipalities and Regions of the Republic of Serbia*. Belgrade: Statistical Office of the Republic of Serbia. <https://publikacije.stat.gov.rs/G2019/Pdf/G201913046.pdf>
- Statistical Office of the Republic of Serbia (2020). *Labor Force Survey in the Republic of Serbia, 2020*. <https://publikacije.stat.gov.rs/G2021/Pdf/G20215671.pdf>
- Statistical Office of the Republic of Serbia (2021). *Working paper: Regional Gross Domestic Product – Regions and areas of the Republic of Serbia, 2019*. <https://publikacije.stat.gov.rs/G2021/Pdf/G202110115.pdf>
- Taşseven, Ö., Altaş, D., & Turgut, Ü. N. (2016). The determinants of female labor force participation for OECD countries. *Uluslararası Ekonomik Araştırmalar Dergisi*, *2*(2), 27-38.
- The World Bank (2004). *Serbia and Montenegro: An agenda for economic growth and employment*. Report No. 29258-YU. Washington DC: The World Bank: <http://hdl.handle.net/10986/14487>
- The World Bank (2021). *The World Bank in Serbia*. Washington, DC: World Bank <https://www.worldbank.org/en/country/serbia/overview#1>
- Verick, S. (2014). Female labor force participation in developing countries. *IZA World of Labor*, *87*. International Labour Organization, India, and IZA, Germany. doi: 10.15185/izawol.87.v2
- Videnović, S., Hanić, A., & Sućeska, A. (2021). Ethically Relevant Values and Behavior of Employees in Serbia During the Covid-19. *TEME*, *XLV*(3), 821-842. doi:10.22190/TEME200901023V
- Xin, K., Zhang, Z., Zhou, Y., & Zhu, P. (2021). Time-varying individual effects in a panel data probit model with an application to female labor force participation. *Economic Modelling*, *95*, 181-191. doi:10.1016/j.econmod.2020.12.014

## ДЕТЕРМИНАНТЕ ЗАПОСЛЕНОСТИ ЖЕНА У РЕГИОНУ ЈУЖНЕ И ИСТОЧНЕ СРБИЈЕ: ЕКОНОМЕТРИЈСКИ ПРИСТУП

Сандра Милановић, Биљана Ђорђевић, Ивана Марјановић  
Економски факултет Универзитета у Нишу, Ниш, Република Србија

### Резиме

Бројна истраживања указују да укључивање жена на тржиште рада може имати значајне позитивне економске и социјалне ефекте. Наиме, повећањем запослености жена долази до раста броја запослених, што омогућава опстанак пензионог система који је под притиском због старења популације. Са друге стране, повећање запослености жена доводи до успостављања полне једнакости, еманципације жена и повећања њихове преговарачке моћи. Намеће се питање како подстаћи жене на већу укљученост на тржишту рада. Одговор на ово питање је значајан за све земље које се суочавају са мањом укљученошћу жена на тржишту рада, каква је и Република Србија. Посебно се истиче Регион Јужне и Источне Србије, у ком је неједнакост у проценту запослених жена у односу на мушкарце била најизраженија 2020. године. С тим у вези, циљ рада јесте анализа основних фактора запослености жена у Региону Јужне и Источне Србије. Истраживање је спроведено у периоду између јануара и маја 2019. године анкетирањем 678 жена. Ради оцене утицаја варијабли старости, образовања, брачног статуса, прихода домаћинства (без прихода жене), деце старости од 0 до 6 година, деце старости од 7 до 18 година и живота у руралној или урбаној средини на вероватноћу запослености жене дефинисан је пробит модел. Анализа је показала да старост, ниво образовања, деца од 7 до 18 година старости, приходи домаћинства (без прихода жене) и место пребивалишта представљају значајне детерминанте запослености жена. Тачније, идентификован је нелинеарни ефекат година старости на вероватноћу запослености жене. Другим речима, вероватноћа запослености се повећава са годинама старости, али се овај тренд смањује након одређеног броја година (преломна тачка је 43 године). Значајан податак за креаторе политика усмерених ка повећању запослености жена јесте да са повећањем нивоа образованости, посебно од основног академског образовања и више, долази до повећања запослености. Деца од 7 до 18 година старости негативно утичу на запосленост жена, док приходи домаћинства (без прихода жене) позитивно утичу на запосленост жена. Прва појава се може објаснити традицијом каснијег осамостаљења деце школског узраста, што дестимулишуће делује на жељу жене да ради. Друга појава се може повезати са ниским просеком примања у истраживаном региону, због ког је жена подстакнута да допринесе увећању кућног буџета иако већ постоје неки приходи у домаћинству. На крају, место пребивалишта позитивно утиче на запосленост жена, са нагласком на већи утицај живота у урбаној средини. У погледу значаја резултата истраживања, може се истаћи њихов допринос креирању политика усмерених ка повећању запослености жена међу којима су: стипендије и кредити за финансирање образовања, програми подршке запошљавања младих жена, али и жена у старијем животном добу, и флексибилни услови рада који би омогућили женама да балансирају приватни и пословни живот.