CHAPTER 20

PRIVATIZATION, RESTRUCTURING AND UNEMPLOYMENT: THE CASE OF SERBIA

Ivan Stošić¹, Srđan Redžepagić², Zvonko Brnjas³

Abstract: The labour market in Serbia has undergone major changes in the past decade, partly due to the privatization and company restructuring. Namely, during the time of implementation intensive privatization and restructuring processes in Serbia the increase of unemployment, and decrease of employment has been recorded. Generally observed, effects of firms’ privatizations and restructurings performed up to now in Serbia, besides certain results, are unsatisfying, particularly in terms of job losing and unemployment growth. However it is difficult to separate with certainty the impact of privatization and restructuring on employment and unemployment trends. The conducted analysis suggests that trends of employment and unemployment have been undoubtedly influenced by the privatization and company restructuring, but as well as a certain number of other factors, first and foremost in the last years by the negative effects of the world financial crisis and by the lowering of active population due to way of solving problems of redundant persons. Furthermore, the social programs in companies undergoing privatization and restructuring have been inefficient in terms of new employment of laid-off employees. The result is that despite spending millions of dinars, Serbia has failed to gain satisfactory result in fight with the unemployment. Instead, unemployment and no active population grew considerably.

Key Words: Privatization, Restructuring, Labour Market, Unemployment, Serbia

Introduction

The aim of this paper is to examine the privatization and restructuring impact on the labour market in Serbia in the period after 2000.

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The objectives of the paper are to analyse: a) the characteristic trends in privatization and restructuring in Serbia; b) the redundancy programs in companies undergoing restructuring and privatization; c) the trends on the labour market in the period of intensive transitional changes in Serbia; d) the impact of privatization and restructuring on the labour market through statistical analysis.

The paper examines and attempts to improve the knowledge in a very important area for Serbia. Namely, this paper contributes to the overall perception of the impact of the privatization and restructuring have on the labour market in Serbia. Lessons learned in implementing a significant number of privatization and restructuring, as well as in specific empirical research, enable the creation of adequate framework to mitigate possible negative effects of further transitional changes in Serbia as the mistakes of the past would not be repeated.

**Materials and Methods**

More than 100 countries, on every continent, have privatized some or most of their state-owned companies, in every conceivable sector of infrastructure, manufacturing and services. Including the very large number of firms privatized in Central and Eastern Europe and the former Soviet Union, an estimated 75,000 medium and large-sized firms have been divested around the world, along with hundreds of thousands of small business units (Nellis, 2003). For that reason various aspects of privatization has arose the vast interest of many authors.

The privatization has been extensively analysed and different authors were focused on the theory of privatization, the privatization models, the effects of privatization on the firm’s business performances, economic growth as well as society, the efficiency gains, the agency problem, the issue of restructuring prior to privatization, the welfare effects of privatization, the post-privatization performances...

There are several excellent articles that discuss the theory of privatization and review the literature (Havrylyshyn and McGettigan, 1999) including Boardman and Vining (1989), Vickers and Yarrow (1991), Laffont and Tirole (1993), Sheifer (1998), Havrylyshyn and McGettigan (1999), Nellis (1999), Sheshinski and Lopez-Calva (1999), Shirley and Walsh (2000), and W. Megginson and J. Netter (2001). Many of these authors stress the importance of privatization noting that privatization moved from novelty to global ortho-
doxy in the space of two decades and often arguing that the success of privatization is indisputable (i.e. Megginson and Netter, 2001).

In addition to the discussion on a range of theoretical aspects of privatization a certain number of empirical researches and studies have been performed. Most studies focus on comparing the performance of firms under private and public ownership. Some run cross-section regressions on the large samples of both private and public firms estimating the effect of ownership controlling for other determinants of performance (Boardman and Vining, 1989).

The other influential approach focuses on privatization per se rather than on ownership and compares pre- and post-privatization performance of privatized firms (Megginson, Nash and van Randenborgh, 1994), allows for comparing privatized firms in different industries, countries and even time periods. The evidence suggests that privatization succeeds, but only if the relevant institutional environment is in place: private property rights protection, rule-of-law, hard budget constraints, competition and regulation. The analysis shows that trade-offs are resolved most effectively when privatization is transparent and open to foreign investors.

Furthermore, a number of researches and studies have been focused on firm-level impact of privatization. The extant firm-level empirical researches on the change in productivity and employment around the world (Megginson 2005) show that privatization usually results in increased productivity but also leads to a reduction or no change in employment. There is also strong evidence that privatization to foreign investors’ results in higher productivity gains. S. Guriev and W. Megginson (Guriev and Megginson, 2006) suggest that privatization can deliver substantial benefits. But privatization is usually accompanied by either no change or a reduction in employment and the policy makers should be prepared to handle the increased unemployment.

A large number of studies explore privatization impact on employment and unemployment. Studies conducted in transition countries including Serbia (i.e. EBRD Transition Report) indicate that the processes of privatization and restructuring had, especially in the initial stages of transition, a very negative effect on the labour market.

There are some papers focused on post-privatization effects, including effects on human capital. A 2006 survey of 28,000 individuals in 28 post-communist countries (Denisova, Eller, Frye and Zhuravskaya, 2006) reveals overwhelming public support for the revision of privatization.
A majority of respondents, however, favours a revision of privatization that ultimately leaves firms in private hands. Authors identify which factors influence individuals’ support for revising privatization and explore whether respondents’ views are driven by a preference for state property or a concern for the fairness of privatization. Authors find that human capital poorly suited for a market economy with private ownership and a lack of privately owned assets increase support for revising privatization with the primary reason being a preference for state over private property.

The various aspects of privatization have been also extensively analyzed by Serbian authors. Some of them have been focused on theoretical aspects of privatization, arguing that private ownership is superior to the public and stress the importance of prompt and efficient completion of the privatization (i.e. Begović, 2005).

A large number of authors are focused on privatization models (i.e. Drašković, 2009), as well as the effects of privatization on economic growth and society (i.e. Djukić, 2009, Cerović, 2009, Kovačević 2010). Most of the authors are very critical on the results of privatization in Serbia. B. Drašković indicates that privatization has been inefficient for being based on wicked access, whereby the state income was preferred, while the economic development and maintenance of rate of employment were sacrificed. M. Kovačević argues that the privatization in Serbia failed in general, creating a number of unfortunate economic and social consequences.

As time goes by the centre of analysis among Serbian authors has been transferred on some effects of privatization. The impact of privatization on employment was of particular interest. Some authors (Zubović and Domazet, 2010, Djukić, 2010) draw attention to some negative effects of privatization on the labour market in Serbia. However, unlike to the practice in other transition countries where certain numbers of empirical researches have been performed, these kinds of studies are rare in Serbia.

The applied methodology is based on a combination of different qualitative research methodologies. Trends in privatization and restructuring, as well as in employment and unemployment in Serbia are reviewed through quantitative data analysis. In addition to this, the method of case study and empirical research, especially when it comes to solving the problem of redundant workers, has been applied (qualitative data analysis and cross-sectional study of micro data analysis).
Last but not least, the paper is based on the observations of authors who have participated in more than 50 cases of enterprise privatization and restructuring in Serbia ("experimental" studies). Starting from the authors' experiences in different processes of privatization and restructuring, as well as the specific empirical research and experience of authors, this paper seeks to highlight the key issues and gaps in the areas of privatization and the negative effects it had on the labour market.

**Results**

*The characteristic trends in privatization and restructuring in Serbia*

Process of privatization and restructuring companies in Serbia was one of the priorities since the beginning of implementation intensive transitional changes (in fact since the beginning of 2001).

In the period 2002-2011, significant number of enterprises was privatized. By tender and auction privatization, and the sale from portfolio of the Auction Fund, 2,381 firms have been sold with some 333 thousands employees, the revenue of € 2.6 billion has realized and € 1.2 billion for investments has been provided.

**Table 1: Results of privatization process in Serbia in the period 2002–2011.**

<table>
<thead>
<tr>
<th>Period</th>
<th>Number of sold firms</th>
<th>Number of employees at sold firms (in 000)</th>
<th>Sales price (in mil. €)</th>
<th>Investments (in mil. €)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>211</td>
<td>37.3</td>
<td>318.8</td>
<td>320.1</td>
</tr>
<tr>
<td>2003</td>
<td>637</td>
<td>76.9</td>
<td>839.7</td>
<td>319.8</td>
</tr>
<tr>
<td>2004</td>
<td>237</td>
<td>38.8</td>
<td>154.1</td>
<td>99.6</td>
</tr>
<tr>
<td>2005</td>
<td>315</td>
<td>58.2</td>
<td>349</td>
<td>85.4</td>
</tr>
<tr>
<td>2006</td>
<td>271</td>
<td>42.3</td>
<td>231</td>
<td>115.6</td>
</tr>
<tr>
<td>2007</td>
<td>304</td>
<td>39.8</td>
<td>394.5</td>
<td>76.4</td>
</tr>
<tr>
<td>2008</td>
<td>262</td>
<td>26.2</td>
<td>245.9</td>
<td>61.8</td>
</tr>
<tr>
<td>2009</td>
<td>93</td>
<td>9.1</td>
<td>48.8</td>
<td>24.6</td>
</tr>
<tr>
<td>2010</td>
<td>33</td>
<td>1.9</td>
<td>18.8</td>
<td>1.2</td>
</tr>
<tr>
<td>2011</td>
<td>18</td>
<td>2.4</td>
<td>19</td>
<td>4.3</td>
</tr>
<tr>
<td>2002-2011</td>
<td>2,381</td>
<td>332.9</td>
<td>2,619.6</td>
<td>1,108.8</td>
</tr>
</tbody>
</table>

*Source: Bulletin of Public Finance of the Republic of Serbia*
The privatization and restructuring are not considered a goal, but key instrument that should enable the completion of transition from socialistic to market economy, i.e. to enable efficient corporate managing, dynamical and technological production modernizing, export growth, and to contribute to the improvement of entire efficiency and effectiveness of economic activities. In addition, the privatization only the first step (initial trigger on long way of reforms, which should enable the improvement of operating and growth of overall competitiveness and quality of economic activities of an enterprise (Stošić, Stefanović, Vukotic-Cotić, 2009).

The experiences in regard of effects of performed privatizations and restructuring in Serbia are different and in wide range from unfavourable to favourable effects (Erić, Stošić, Stefanović, 2009):

- In a significant number of firms privatization has been unsuccessful. A number of "annulated privatizations" in which purchase contracts were cancelled due to the method of business operating of new owners is increasing and by the end of the year 2011 is more than 26%.
- However, a number of enterprises, in which even after implemented privatization there were no visible improvements of performances, are much higher. In a certain number of enterprises, the privatization was mainly motivated by speculative reasons, in the first place by the acquisition of property that those socially owned enterprises possessed.
- Some new owners, not in rare cases with any experience in managing in some specific activity, were not capable to provide functioning of bought enterprises. Consequently many of the privatized firms are "closed" or reduced their activity to a minimum without major looks at the revival of business, employees do not receive salaries not paid their contributions .. Particularly difficult situation is in some places in central Serbia, where in fact "doing nothing" and where as a result of privatization of "lost" a large number of jobs.
- In some privatized enterprises changes were mainly directed towards rationalization of the number of employees and transformation of obsolete organisational structure. Activities were mainly directed to lay-off of redundant employees, and most often less skilled and administrative workers were left jobless. Thanks to that, overall operating costs were decreased and productivity increased. Nevertheless, that has strong impact on the total number of employed and the raise of unemployment.
- Nevertheless, in a significant number of companies, some important improvements have occurred, which are reflected in complete change
of “anatomy and physiology” of operating analogue to the world standards. Business portfolio was significantly improved and innovated, investments in modernization of production technology were made, operating is more based on marketing concept, and these enterprises are more and more oriented towards export, firstly towards adjacent markets and other markets as well.

- The total revenues of the privatized firms in period 2002-2010 have increased for 67%, the productivity have risen 4.3 times and the equity value of that sector of companies have enlarged for 47% in that period (Analysis of privatization effects).

- One specific feature of the Serbian privatization process is the use of the restructuring model as one of the alternatives. The government i.e. the Privatization Agency has been trying to prepare a certain number of once large and/or significant enterprises on local level for privatization and more successful business operating. Key strategic ways of privatization through restructuring, which can be said to be narrowly understood, are implemented through the: financial restructuring (reducing indebtedness), labour restructuring (downsizing the number of employees), and organizational restructuring (fragmentation, spin-off of “non core” activities...). Changes, especially in some major enterprises, were in the first place directed to overcoming financial difficulties, and before all big indebtedness and present insolvency

Generally observed, effects of firms’ privatizations and restrukturings performed up to now, even besides certain results, are still unsatisfying. It is partially understandable, considering that rehabilitation process is long-lasting, often “painful”, followed by many undesirable effects, which include, among others, “cutting” the number employees and closing of numerous non-propulsive sections of enterprises, etc.

**The redundancy programs in companies undergoing privatization and restructuring**

The redundancy programs in companies undergoing privatization and restructuring were mainly based on so-called passive labour market measures, in which severances and pecuniary compensations were main instrument of solving problems of persons who lost a job in the process of privatization and restructuring (so called surplus employees). This concept has a lot of deficiencies and the Government of the Republic of Serbia has been trying to leave it over time.
The realization of labour restructuring was based on social voluntary declaring of employees for leaving a job and also included social dialogue between trade unions (employees), the management and state bodies (Ministry, Agency for Privatization). However, each of stakeholders in majority of cases had own visions of the program of labour restructuring through an implemented social programs and these aspects were different.

The management was in the first place turned to downsizing the number of employees (and realizing positive financial effects on that basis). Trade unions were consulted during bringing of the programme and implementation of solving redundancy, but their role was in numerous cases more of informative, than consulting character. There were doubts and misunderstandings among employees, partially due to existing qualification and age structure, and partially also due to "natural" fear from massive lay-off and loosing job. The characteristic stakeholder roles in realization of labour restructuring are presented in the table that follows:

**Table 2: Characteristic stakeholder roles in realization of labour restructuring**

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>As soon as possible</td>
</tr>
<tr>
<td>Trade unions</td>
<td>Communicating in good faith between management, employees and government, helping employees accept and benefit from social program (most of all severance payment), but also trying to postpone as far in the future as possible the program implementation</td>
</tr>
<tr>
<td>Employees</td>
<td>Preferably never be redundant or taking as high as possible severance payment, actively pursuing alternative employment</td>
</tr>
<tr>
<td>Ministry, Agency for privatization</td>
<td>Bringing pressure to find a solution, supporting policy dialogue, funding necessary but costly measures to cover short term needs of redundant employees</td>
</tr>
</tbody>
</table>

*Source: Based on authors empirical research and experience in implementing significant number of privatizations and restructurings in Serbia*
Based on empirical research (*Case Study on Labour Force Restructuring in Serbia*) the common characteristics of the process of labour restructuring in Serbia are following:

- Number of redundant employees was significantly downsized during the process of privatization and restructuring, which contributed to improvement of operating efficiency;
- The state played significant role, both in creating the programme of solving redundancy and finance of social programmes (severance payments);
- In solving redundancy, the principle of voluntary leave was prevailing;
- Within offered models, a share of redundancy who declared for severance payments and other passive labour market measures was dominant;
- Amount of paid severances was not enough for independent starting-up of new business;
- Received severances were mainly spent on consumption;
- In the process of restructuring, redundant employees who achieved the right for retirement in short term were in «the best» position;
- In the structure of redundancy, employees with lower qualifications and of older age prevailed;
- Response of administrative employees for voluntary leave was relatively weak;
- Role of representative trade unions in the process of solving redundancy was significant;
- Certain forms of collaboration with the Government, management and trade unions existed.

The most significant differences of the process of labour force restructuring are following:

- Realized effects in labour force restructuring (degree of downsizing the number of employees and change in structure of employees by relevant characteristics) were not the same for all enterprises;
- The amount of paid severances differs significantly from enterprise to enterprise and in payment time;
- Treatment of disable workers, was not identical at all enterprises;
- Information that employees got on conditions of leaving job and possibilities of re-integration on labour market were not the same at all enterprises. The best information system was realized at enterprises, which created the Transition Centre.
Main lessons learnt from the study of numerous cases are following:

- Redundant employees, and even trade union management as well, were in the first place interested in severance amount;
- Concept mainly based on passive labour market measures and severance was a dominant and most preferred for a long time. Reasons for such attitude, besides insufficient information and not understanding active labour measures are: qualification profile of redundancy, age, distrust, non-readiness for training/learning for new jobs, incapability and weak motivation to develop own business, and unfavourable ambient, lack of own capital for investment in business, insufficiently certain credit support to beginners in new business and other;
- However, it has to be stated that passive labour market measures have given good effects in a great number of cases, firstly employees of older age and with low wages, which were formerly paid to them, are considered
- Re-integration of redundant employees on labour market is impeded, both due to age and qualification profile of redundant employees, and due to unfavourable business ambient and insufficient demand for labour;
- In the most unfavourable position in regard of re-employment, specialized production personnel are (such as miners or railroad workers);
- Preferences of redundant employees for self-employment are very limited, both due to affinity of persons who lost their jobs, and also due to great risk of investment, lack of own capital and expensive bank funds;
- Weak interest was also shown for the measure «severance to job», which represents an opportunity to provide initial capital for starting-up own business by associating number of severances or to give severance to an employer to provide employment;
- Redundant employees are insufficiently informed about active labour market measures, therefore they are not very interested in their use;
- Centres for Transition of Employees justified theirs creation and contributed significantly to the affirmation of active labour market measures;
- It is necessary to improve social dialogue between trade unions and the Management, to be partnership relation. Employees should have the possibility to give their opinions and realize their interests through representatives. In that aspect, it is necessary to define behaviour rules and make the process of social dialogue transparent;
National Employment Service must put significant additional efforts in the promotion and implementation of active labour market measures, so that current and future redundant employees could get greater chance to acquire additional knowledge and skills and find new job.

The concept mainly based on passive labour market measures, in which severances and pecuniary compensations were main instruments of “solving” problems of persons who lost their jobs in the process of restructuring, has been partly altered and supplemented. Namely, it has been shown that severances have been relatively quickly spent, and that employees have found themselves fast in difficult social situation. In last 3-4 years the efforts of the Government and National Employment Service (NES) are on active labour market measures, firstly through the dissemination of information, consulting and contacts with employees who left the enterprises as redundant (active job search), then through the realization of numerous training and education programmes, and through subsidies to employer for employment of defined categories of unemployed persons (trainees, persons older than 55 or who perform jobs in activities of significance for regional development) and public works, as well as programs like „by severance to job“, “the first chance”, etc. This trend in increasing financing of active labour market measures has been maintained since 2007, when the funds allocated for these kinds of measures remained at the level of about 0.10-0.12% of GDP and in 2011 even reached 0.17% (Zubović and Subić, 2011).

Trends on the labour market in the period of intensive transitional changes in Serbia

The beginning of economic reforms in transition countries had strong effect on the increase of unemployment and decrease of employment. Like in other transition countries, Serbia experienced similar trends in the labour market that are characterized with the following developments:

During the 2000s Serbia has seen significant improvements in terms of macroeconomic stability and economic growth, particularly up to year 2008. In the period between 2001 and 2008 the GDP grew on average 5.4% annually in real terms and nearly doubled. However, these generally favourable economic trends have not translated into greater improvements within the labour market. On the contrary employment decreased and unemployment increased becoming one of the mayor economic and social problems of Serbian society.
Table 3: Key indicators of the Serbian labour market

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP in mil. €</th>
<th>Active population in 000</th>
<th>Non-active population in 000</th>
<th>Employment in 000</th>
<th>Unemployment in 000</th>
<th>Rate of unemployment (ILO definition) in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>16,028</td>
<td>3,459</td>
<td>2,709</td>
<td>2,066</td>
<td>904</td>
<td>15.2</td>
</tr>
<tr>
<td>2003</td>
<td>17,306</td>
<td>3,418</td>
<td>2,716</td>
<td>2,041</td>
<td>945</td>
<td>15.8</td>
</tr>
<tr>
<td>2004</td>
<td>19,026</td>
<td>3,596</td>
<td>2,888</td>
<td>2,050</td>
<td>970</td>
<td>22.9</td>
</tr>
<tr>
<td>2005</td>
<td>20,306</td>
<td>3,453</td>
<td>3,002</td>
<td>2,069</td>
<td>991</td>
<td>26.2</td>
</tr>
<tr>
<td>2006</td>
<td>23,305</td>
<td>3,323</td>
<td>3,188</td>
<td>2,026</td>
<td>1,011</td>
<td>24.7</td>
</tr>
<tr>
<td>2007</td>
<td>28,468</td>
<td>3,421</td>
<td>3,115</td>
<td>2,002</td>
<td>851</td>
<td>21.0</td>
</tr>
<tr>
<td>2008</td>
<td>32,668</td>
<td>3,267</td>
<td>3,083</td>
<td>1,999</td>
<td>794</td>
<td>15.8</td>
</tr>
<tr>
<td>2009</td>
<td>28,883</td>
<td>3,119</td>
<td>3,23</td>
<td>1,889</td>
<td>812</td>
<td>17.8</td>
</tr>
<tr>
<td>2010</td>
<td>29,024</td>
<td>2,965</td>
<td>3,352</td>
<td>1,796</td>
<td>803</td>
<td>20.2</td>
</tr>
<tr>
<td>2011</td>
<td>29,575</td>
<td>2,924</td>
<td>3,373</td>
<td>1,746</td>
<td>833</td>
<td>23.7</td>
</tr>
</tbody>
</table>

Source: Statistical Office of the Republic of Serbia and National Employment Service

Total employment decreased during the 2000s reached its minimum in 2011 (about 1.746 million employees) or about 20% less then in 2001. The drop in employment has been affected by two broad groups of factors: first, the impact of transition changes (first and foremost privatization and restructuring) and second, the negative effects of the global economic crisis. The decline in employment caused by the global economic crisis was more severe in Serbia than in other countries and the reduction in the number of unemployed persons was more intensive than reduction in GDP (elasticity of employment in the period 2008-2011 is 0.79).

There are two basic sources of information on key labour market indicators – Labour force survey (the main source of internationally comparable data on labour market status of the population) and administrative registration data at National Employment Service, based on formal registration of employees and unemployed with the corresponding institutions. Due to difference methodology applied data of these sources vary. For example number of unemployed persons in 2010 according to the Labour force survey 566 thousands and according to the NES 803 thousands, etc.
Furthermore, in the absence of significant new opportunities, workers with formal employment contracts in "old" enterprises remain attached to their jobs, even if these are unpaid and offer no long-term prospects. However, many individuals have only a weak attachment to the formal labour market and are often moving in and out of various forms of temporary employment or jobs in informal economy.

Although the total population of working age (15+) has declined in recent years, the number of economically active people fell even more strongly, leading to a reduction in the activity rate to 59.9% in 2011 - significantly lower than the average EU-27 - 76.9% (EC Labour force survey). At the same time the employment rate of 45.3% recorded at the end of 2011 were significantly lower than the average EU-27 - 64.6% (Labour force survey), and most of neighbouring countries (Croatia, Bulgaria, Romania).

High unemployment is very persistent in Serbia, partly as an inherited problem and partly induced by privatization and restructuring. The privatization and restructuring of the Serbian economy starting in the early 2000s has changed the labour market. The proportion of unemployed people with prior work experience increased from 34% in 2000 to around 58% in 2005, and only 10% of unemployed individuals with prior work experience had left their former jobs voluntarily. This indicates that lay-offs have become a significant factor since the early 2000s.

The labour market in Serbia is characterized by high rate of unemployment, unfavourable age and qualification structure of unemployed persons, high share of long term unemployment, the low rate of activity primarily women, youth and elderly (55-64 years), reduction of number of employed, particularly in real sector and large discrepancies between demand and "supply" of labour force for certain jobs.

In successful transition countries more than half of workers changed job during the first few years of reform. As a result, many skilled workers and managers used their skills and market knowledge to set up new enterprises with more efficient organisational forms. These new enterprises, which were not always small, have become a major source of job creation in the early years of reform (Paunovic, Fabris, Ray, Fetsi and Huitfeld, 2005). In Serbia the laid-off workers have few opportunities in the formal economy, where there is a large overall deficiency of jobs. Furthermore, the number of new job opportunities is modest for the slow pace at which new jobs are being created within the formal sectors as well as the not develop SME-s sector.
The impact of privatization and restructuring on the labour market - statistical analysis

It is difficult to separate with certainty the impact of privatization and restructuring on the labour market, especially on employment and unemployment trends. We tried to perform statistical study through analysis correlation and covariance between privatization and restructuring (measured by the revenues from privatization presented in Table 1. of this paper) and the trends of employment and unemployment (presented in Table 3. of this paper).

Using correlation analysis, as well as covariance, is pursued to investigate and determine whether two variables have a tendency to move together. The results and the descriptive statistics of applied direct correlation analysis between privatization and employment and between privatization and unemployment, conducted in SPSS, are as following:

Table 4: Results of correlation analysis between privatization and employment and unemployment and statistical significance test

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Pearson Correlation</th>
<th>Covariance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privatization / employment</td>
<td>0.452</td>
<td>13,068.53</td>
</tr>
<tr>
<td>Privatization/ unemployment</td>
<td>0.493</td>
<td>10,351.98</td>
</tr>
</tbody>
</table>

Table 5: Descriptive statistics of correlation analysis between privatization and employment and unemployment

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Sum of Squares and Cross-products</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privatization</td>
<td>238.145</td>
<td>245.150</td>
<td>600,985.4</td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>1,980</td>
<td>117.891</td>
<td>130,685.4</td>
<td>0.163</td>
</tr>
<tr>
<td>Unemployment</td>
<td>881.273</td>
<td>85.652</td>
<td>103,519.8</td>
<td>0.123</td>
</tr>
</tbody>
</table>

Conducted statistical analysis suggests that there is significant, but not too high, correlation between privatization and unemployment (correlation 0.493) and to the certain extend unexpectedly positive correlation between privatization and employment (0.452). However, values of statistical significance testing among manifest variables are higher then 0.05 what leads to
conclusion that there is no statistically very significant correlation between these analyzed variables.

That applies privatization had a statistically certain impact on the trends on labour market in Serbia, but also applies that trends of employment and unemployment have been influenced by some other factors.

Discussion

Privatization and restructuring were not the goal themselves, but key instrument to improve the competitiveness and total operating performances. Nevertheless, generally observed, effects of firm’s privatizations and restructurings performed up to now in Serbia, besides certain results, are unsatisfying.

Particularly very unfavourable trends are observed in the trends of employment and unemployment. During the time of intensive privatization and restructuring processes in Serbia the increase of unemployment and decrease of employment has been recorded. The total number employees fell down from 2.066 million in 2002 to 1.746 in 2011, and rate of unemployment grew from 15.2% to 23.7%. The number of employees in privatized firms dropped down for 60% in that period. The decrease of employment was even higher – 86% in the privatized firms where the purchase contracts were cancelled (Analysis of privatization effects).

The process of privatization and enterprises restructuring has depressing impact on labour market in Serbia. Namely, as a consequence of the process of privatization and enterprises restructuring, the number lay off workers increased. Furthermore, the social programs in companies undergoing privatization and restructuring were for a long time mainly based on so-called passive labour market measures and poorly targeted active labour market measures that have been inefficient in terms of new employment of redundant employees.

We tried to perform statistical study through analysis correlation between privatization and the labour market movements in order to separate with certainty the impact of privatization and restructuring on the employment and unemployment trends.

The conducted analysis suggests that trends of employment and unemployment have been influenced by the privatization and company restructuring,
but as well as by a certain number of other factors, first and foremost in the last years by the negative effects of the world financial crisis. Overview of economic trends and developments in the labour market shows that the impact of economic crisis Serbia has been very serious in terms of loss job.

Moreover the conducted statistical analysis has not shown the expected results due to fact a large number of persons who lost a job in the process of privatization and enterprises restructuring went out of the labour market and became inactive. Namely, the problem of redundant that lost the job due privatization and restructuring has been "solved" by the retirements of large number of older persons. As a result, particularly

Nevertheless the research shows that the process privatization and restructuring undoubtedly had a strong and negative impact on the labour market in Serbia. However, this process is not yet finalized, and privatization and restructuring of a considerable number state owned enterprises (which employ a large number of persons) are still to come and that could have a strong further impact especially on unemployment - one of the crucial economic and social problems of Serbia. Consequently, the paper provides certain lessons that can help researchers, in exploring relations between privatization and labour market, as well as the policy makers and practitioners in conducting forthcoming privatization and enterprises restructuring.

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