ABSTRACT – Effects of privatization and company restructurings performed up to now in Serbia, besides certain results, are unsatisfying generally observed. One of the key negative consequence of these processes is a severe downfall in number employed persons. However, the conducted analysis suggests that trends of employment (and unemployment) have been intensely influenced by the certain number of other factors, first and foremost by the negative effects of the global financial crisis. Nevertheless, the research indicates that the process privatization and restructuring had undoubtedly a powerful negative impact on the level of employment in Serbia. As though privatization and restructuring of a significant number state owned enterprises (which employ a large number of persons) are still to come, this processes could have a strong further negative impact on employment. Consequently, the paper provides some lessons that can help the policy makers in conducting forthcoming privatization and enterprises restructurings.

KEY WORDS: employment, privatization, company restructurings, correlation analysis, Serbia

Introduction

The privatization and company restructurings initiated a modification of the company’s workforce that affect both the quantitative features (number of employed persons) and the qualitative (skills and qualifications required). These adaptations, which are the result of many factors, such as changes in the company’s structure, organisation or production processes introduced by privatization and company restructurings, but also fluctuations in demand, globalisation, new technologies and the arrival of new competitors, etc. are necessary if companies want to be competitive.

The beginning of process of privatization and companies restructurings had strong effect on decrease of employment in all transition countries. Like the other transition countries, Serbia experienced similar trends.

Taking that in account, the aim of this paper is to examine the impact of privatization and company restructuring on the employment in Serbia in the period after 2001. The goals of the paper are to analyse: a) the trends in privatization and company restructurings in Serbia; b)

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the characteristic tendencies in employment; c) the impact of privatization and restructuring on the employment (through statistical analysis).

The paper investigates a very important question of Serbian society and provides to the general assessment of the privatization and company restructurings impact on employment.

By the the systemic, comparative and logical analysis of the results published in scientific literature, as well as the methods of the data study, with the help of statistical analysis (software package SPSS), this paper is an effort to lay a ground work for future advocacy and development of adequate framework to mitigate possible negative effects of further transitional changes in Serbia.

Literature overview

The phenomena of privatization has been extensively analysed and different authors were focused various aspects: the theory of privatization, privatization models, the effects of privatization on the company’s business performances, economic growth as well as society, the efficiency gains, the agency problem, the issue of sequences in restructurings, the post-privatization performances…

Many of the authors stress the importance of privatization noting that privatization moved from novelty to global orthodoxy in the period of two decades and often arguing that the success of privatization is indisputable in the transition (i.e. Megginson and Netter, 2001).

A number of studies have been focused on the impact of privatization on productivity and employment. Most of these studies (i.e. Megginson, 2005) show that privatization usually results in increased productivity, but also leads to a reduction or no change in employment. EBRD Transition Report (2011) indicates that the processes of privatization and restructuring had, especially in the initial stages of transition, a very negative effect on the labour market. The European Restructuring Monitor observed that in 11 000 cases of restructuring from 2002 to 2010 the ratio of job losses/job creations standing was 1.8:1. In the period 2008-2010, that ratio increased to 2.5:1. (Restructuring in Europe 2011, p. 3)

There are some papers 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. 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 analysed 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).

As time goes by the centre of analysis among Serbian authors has been transferred on some effects of privatization (i.e. Drašković, 2010, Kovačević, 2010). The impact of privatization on employment was of particular interest. Some authors (Zubović and Domazet, 2010; Djukić, 2010) draw attention to the negative effects of privatization on the labour market in Serbia. Most of the studies, focused on data analysis and case studies,
pointing out that privatization in Serbia had severe negative effects on total state economic performances and particularly employment (i.e. Kosanović, Paunović, Žigmund, 2014).

Results

The results of privatization and restructuring process in Serbia

Process of privatization and restructuring companies in Serbia was one of the priorities of intensive transitional changes. In the period 2002-2013, significant number of enterprises was privatized in the real sector of local economy. By various privatization methods (tenders and auctions, and the sale from portfolio of the Auction Fund on a capital market) 2,367 companies have been sold with some 334 thousands employees in them, and the revenue of € 2.6 billion has realized.

Table 1. Results of privatization process in Serbia in the period 2002–2013.

<table>
<thead>
<tr>
<th>Period</th>
<th>Number of privatized companies</th>
<th>Sales price (in mil. €)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tenders</td>
<td>Auctions</td>
</tr>
<tr>
<td>2002</td>
<td>11</td>
<td>151</td>
</tr>
<tr>
<td>2003</td>
<td>16</td>
<td>515</td>
</tr>
<tr>
<td>2004</td>
<td>6</td>
<td>183</td>
</tr>
<tr>
<td>2005</td>
<td>9</td>
<td>157</td>
</tr>
<tr>
<td>2006</td>
<td>14</td>
<td>155</td>
</tr>
<tr>
<td>2007</td>
<td>7</td>
<td>167</td>
</tr>
<tr>
<td>2008</td>
<td>12</td>
<td>133</td>
</tr>
<tr>
<td>2009</td>
<td>4</td>
<td>44</td>
</tr>
<tr>
<td>2010</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>2011</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2012</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>1,527</td>
</tr>
</tbody>
</table>


The privatization process in Serbia took place more slowly than expected and the accomplished results are not fully satisfactory. According to the EBRD Transition Report 2012 Serbia realized solid results in privatization of small enterprises, while in the area of privatization of large enterprises, as well as in the company restructurings, the achieved results are still modest. These estimates indicate that the process of privatization and restructuring in Serbia is still incomplete and a lot more have to be done.

One specific feature of the Serbian privatization process is the model company “in restructuring” as one of the alternatives. Within this model of privatization, the Privatization Agency has been trying to prepare the certain number of once large and/or significant enterprises on local level for privatization and more successful business operating.

Basic strategic directions of restructuring were: a) financial restructuring (to restore the financial health through debts released, and even write-off, of debts by priority towards the
state and public enterprises in state ownership); b) organizational restructuring (mostly fragmentation and individual sale of parts of enterprises or property together with employees, and spin-off of “non-core” activities) and c) labour force restructuring – downsizing the number of employees (mostly based formerly on so-called passive labour market policies, in which severances and monetary compensations financed by the state, were the main instrument of solving problems of redundant persons.

Unfortunately, the restructuring process was completed with successful privatization in a very small number of these enterprises. The major part of companies “in restructuring” have been in this status for many years now. At the end of 2013. some 179 companies that employ more than 53 thousands workers are still in the process of restructuring.

The financial losses of these companies are typically large, most of them are not able to pay their current business obligations, and the state through a variety of incentives provides significant financial resources for their day-to-day operating (mostly wages). Unlike some transition countries, especially in the Central Europe that have realized relatively efficiently company restructurings, such tendencies have been not recorded in Serbia.

Moreover, the restructurings of around 700 public owned enterprises (with more than 166 thousands employees) still is delaying. Currently, there is no clear policy in relation to the issue of ownership restructuring of these companies. On one hand, there are some ideas to make massive privatization of most public owned enterprises at national and local level, but on the other hand, there is a lack of the real willingness to enter into these process.

Nevertheless, scrupulous restructuring of these companies has to be made in order to ensure that sector of Serbian economy become effective and sustainable, without outside financial support in the years to come.

The characteristic tendencies in employment in Serbia

In the period from 2002 to 2013 Serbia experienced negative tendencies on its the labour market.

Table 2. Key indicators of the Serbian labour market

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment in 000</th>
<th>Active population in 000</th>
<th>Nonactive population in 000</th>
<th>Unemployment in 000</th>
<th>Rate of unemployment (ILO definition) in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>2,066</td>
<td>3,459</td>
<td>2,709</td>
<td>904</td>
<td>15.2</td>
</tr>
<tr>
<td>2003</td>
<td>2,041</td>
<td>3,418</td>
<td>2,716</td>
<td>945</td>
<td>15.8</td>
</tr>
<tr>
<td>2004</td>
<td>2,050</td>
<td>3,596</td>
<td>2,888</td>
<td>970</td>
<td>22.9</td>
</tr>
<tr>
<td>2005</td>
<td>2,069</td>
<td>3,453</td>
<td>3,002</td>
<td>991</td>
<td>26.2</td>
</tr>
<tr>
<td>2006</td>
<td>2,026</td>
<td>3,323</td>
<td>3,188</td>
<td>1,011</td>
<td>24.7</td>
</tr>
<tr>
<td>2007</td>
<td>2,002</td>
<td>3,421</td>
<td>3,115</td>
<td>851</td>
<td>21.0</td>
</tr>
<tr>
<td>2008</td>
<td>1,999</td>
<td>3,267</td>
<td>3,083</td>
<td>794</td>
<td>15.8</td>
</tr>
<tr>
<td>2009</td>
<td>1,889</td>
<td>3,119</td>
<td>3,23</td>
<td>812</td>
<td>17.8</td>
</tr>
<tr>
<td>2010</td>
<td>1,796</td>
<td>2,965</td>
<td>3,352</td>
<td>803</td>
<td>20.2</td>
</tr>
<tr>
<td>2011</td>
<td>1,746</td>
<td>2,924</td>
<td>3,373</td>
<td>833</td>
<td>23.7</td>
</tr>
<tr>
<td>2012</td>
<td>1,727</td>
<td>2,929</td>
<td>3,348</td>
<td>869</td>
<td>22.4</td>
</tr>
<tr>
<td>2013</td>
<td>1,725</td>
<td>2,936</td>
<td>3,194</td>
<td>908</td>
<td>20.1</td>
</tr>
</tbody>
</table>

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

Total employment decreased during the last ten years and reached its minimum in 2013 (1.725 million employees) or about 17% less than in 2002. At the same time the number of economically active population fell down for 16%, leading to the reduction in activity rate to 59.7% - significantly lower than the average EU-28 – 72.2% (EC Labour force survey, 2013). At the same time the employment rate of 44.2% recorded in April 2013 (Labour force survey for Serbia, 2013) was significantly lower than the average EU-28 - 64.5% and most of neighbouring countries (Croatia, Bulgaria, Romania).

The drop in employment has been affected by two broad groups of factors: first, the impact of transition changes (first and foremost privatization and company 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 2008-2012 is 0.76).

The impact of privatization and company restructurings on employment - statistical analysis

It is difficult to determine the impact of privatization and company restructuring on employment (and unemployment) trends. We tried to perform statistical study through analysis correlation and covariance between privatization and restructuring (x - measured by the revenues from privatization presented in Table 1. of this paper) and the number of employed (and unemployed) persons (y), presented in Table 2. of this paper.

\[
\text{Correl}(X,Y) = \frac{\sum (x-\bar{x})(y-\bar{y})}{\sqrt{\sum (x-\bar{x})^2 \sum (y-\bar{y})^2}}
\]

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>
<thead>
<tr>
<th>Variable name</th>
<th>Pearson Correlation</th>
<th>Covariance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privatization / employment</td>
<td>0.697</td>
<td>23 827.903</td>
</tr>
<tr>
<td>Privatization/ unemployment</td>
<td>0.390</td>
<td>7 105.644</td>
</tr>
</tbody>
</table>

3 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 Statistical Office of the Republic of Serbia - National Employment Service, based on formal registration of employees and unemployed with the corresponding institutions. Due to difference methodology applied the data of these sources vary. For example number of employed persons in 2013 according to the Labour force survey is 2,207 thousands and according to the NES 1,725 thousands, etc.
Conducted statistical analysis suggests that there is significant, unexpectedly positive, correlation between privatization and employment (correlation 0.697) and the certain correlation between privatization and unemployment (0.390).

However, values of statistical significance testing among manifest variables are higher than 0.05 what leads to conclusion that there is no statistically very significant correlation between these analysed variables.

That applies privatization had a statistically specific 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 – what happens to workers**

Numerous studies (i.e. *Analysis of privatization effects*, 2011) indicate that privatization and company restructuring processes in Serbia had strong depressing impact on the level of employment. The number of employees in privatized companies dropped down by 60% in period from 2002 to 2011. In the privatized companies, where the purchase contracts were cancelled, the reduction of number employees was even higher – 86% (*Analysis of privatization effects*, 2011). Furthermore, the share of unemployed people with prior work experience increased from 34% in 2001 to around 66% in 2012 (*Labour force survey for Serbia*, 2012). This indicates that lay-offs have become a significant factor since the early 2000s.

Part of laid off workers in companies undergoing privatization and restructuring went through so called social programs. The common characteristics of these programs were the following (based on empirical research (*Case Study on Labour Force Restructuring in Serbia*, 2008):

- The state played significant role, both in creating the social programs and finance severance payments for redundants;
- Concept of the social programs was based on voluntary leave and mainly on passive labour market measures. Within offered models, a share of redundancy who declared for severance payments was dominant.
- Redundant employees, and even trade union management as well, were in the first place interested in severance amount;
- Reasons for such attitude, besides insufficient information and not understanding active labour measures were: the qualification profile and average age of redundancy, then non-readiness for training/learning for new jobs, as well as incapability and weak motivation to develop own business, and unfavourable
ambient, lack of own capital for investment in business, insufficiently specific credit support to beginners in new business and others;

- 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;

- The amount of paid severances differs significantly from company to company and in payment time – in the range from € 100 to more then € 300 per year of employment;

Amount of paid severances was not enough for autonomous starting-up of new business and it that circumstances received severances were mainly spent on private consumption. Namely, it has been shown that severances have been relatively quickly spent, and that employees have found themselves fast in difficult social situation. However, it has to be stated that severances have given well-mannered effects in a great number of cases, firstly persons of older age and with low wages;

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 privatization and company restructuring, has been lately partly altered and supplemented.

In last 3-4 years the efforts of the Government and National Employment Service 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 entrepreneurs 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.

However, those changes did not help a lot and number of employed persons as well as active population continued to drop. The data analysis has shown that a large number of persons who lost the job went out of the labour market and became inactive.

Namely, the problem of redundant has been “solved” by the massive retirements of large number of older persons. As a result, the level of labour activity rate in Serbia drop down and speeding for pension fund increased enormously.

Conclusions

The performed analysis suggests that trends in employment have been influenced by the privatization and company restructurings, but as well as by the certain number of other factors, first and foremost in the last years by the negative effects of the global financial crisis. Overview of economic tendencies and developments on the labour market in Serbia indicates that the impact of global economic crisis been very serious in terms of loss job. As a matter of fact, the cut down of number employed in Serbia was more significant in period after 2008, when privatizations had been practically stopped and when negative consequences of the global financial crisis were widely evident.
But no matter the reason, the solving status of laid off workers is an important issue. In forthcoming years it will become even more important as an extensive restructurings are expected in publicly owned companies and not privatized companies “in restructuring”. These companies will have to cope with high level of change in theirs way of operating, as well as in labour force. In that circumstances the solving status of laid off workers will be one of most challenging problems for the policy makers in the years to come.

Moreover, it should not be forgotten that, even in “normal” times, restructuring is a part of daily business life, and a process that is necessary in order to ensure that organisations keep pace with change and remain competitive. Restructuring is therefore a vital and constant part of organisational life and can create as well as destroy jobs.

The success of privatization and company restructurings can be measured, not only by the enhanced competitiveness and ability to innovate of the companies concerned and, but also by the number of the jobs safeguarded or created and the successful social management of adverse repercussions.

Unlike the attitudes prevailing in some areas of the world, the author of this paper believe that employed in the companies undergoing privatization and restructurings cannot be left to deal alone with the consequences of these processes. In order to limit the negative impact of restructuring as much as possible, it is vital that wide range of short term and long term actions of the state are put into place.

Countering the negative effects of privatization and company restructurings on employment it is necessary that certain state financial aid has to be provided. State aid should, at the first place, enable timely and targeted support to quickly reintegration of redundant persons into the labour market. In particular, the active labour market policy measures and reinforced matching of skills and jobs has to be supported.

But most important is the creation a more dynamic business environment by unlocking the business potential, particularly of SMEs freeing up businesses, and helping the unemployed to start up a new business quickly and cheaply.

References

*Analysis of privatization effects* (2011), Agency for privatization

*Begović Boris*, *Four years of transition in Serbia* (2005), Centre for liberal and democratic studies, Belgrade


*Case Study on Labour Force Restructuring in Serbia* (2008), ILO/CONZIT, Belgrade

*Cerović Božidar* (2009), *Serbia in transition and crisis*, Transition in Serbia, NDEJ and Economic Faculty Belgrade

Drašković Božidar (2010), *End of privatization and the consequences for development*, Research monograph: Kraj privatizacije posledice na ekonomski razvoj i nezaposlenost u Srbiji, Institute of Economic Sciences, Belgrade

Djukić Petar (2010), *Završetak privatizacije- efekti na razvoj i zaposlenost*, Research monograph: Kraj privatizacije posledice na ekonomski razvoj i nezaposlenost u Srbiji, Institute of Economic Sciences, Belgrade

Erić Dejan, Stošić Ivan, Stefanović Sasa (2009), *Privatization and restructuring process of Serbian economy*, Monograph: Economic integrations, competition and cooperation, Faculty of Economics Rijeka, Croatia


EC Labour force survey, Eurostat. www.ec.europa.eu - online

Labour and Welfare Impact Study of RTB Bor (2006), Institute of Economic Sciences and CONZIT, Belgrade


Uticaj privatizacije i restrukturiranja redućeća na kretanje zaposlenosti u Srbiji

REZIME – Efekti privatizacije i restrukturiranja preduzeća u Srbiji, i pored određenih pozitivnih rezultata, su generalno posmatrano nezadovoljavajući. Jedna od ključnih negativnih posledica ovih procesa je značajan pad broja zaposlenih. Ipak, sprovedena istraživanja ukazuju da su kretanja u oblasti zaposlenosti (i nezaposlenosti) snažno determinisana i uticajem odeljenog broja drugih faktora, a pre svega negativnim efektima globalne finansijske krize. Međutim, istraživanja pokazuju da su privatizacija i restrukturiranje preduzeća nesumnjivo imala snažan negativan uticaj na nivo zaposlenost u Srbiji. S obzirom da predstoji privatizacija i restrukturiranje značajnog broja javnih preduzeća i preduzeća „u restrukturiranju“ (koja zapošljava veliki broj lica), ovi procesi mogu da imaju jak negativni uticaj dalje kretanje zaposlenosti u našoj zemlji. Imajući sve navedeno u vidu, analize izvršene u ovom radu mogu pomoći kreatorima ekonomske politike u sprovođenju predstojećih privatizaciji i restrukturiranja preduzeća.

KLJUČNE REČI: zaposlenost, privatizacija, restrukturiranje preduzeća, korelaciona analiza, Srbija

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