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**The Failure to Restructure and Improve Efficiency
on the Romanian Labor Market**

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Abstract

Romania started the transition process by adopting a gradualist strategy for implementing its economic reforms, most of which being carried out independently and not through a concrete and cohesive policy package.

The dynamics of restructuring on the labor market is analyzed by the Index of Employment Restructuring, the Rate of Unemployment Absorption and the Net Rate of Private Sector Expansion. These indices show that the capacity of Romanian economy to absorb the unemployment is very modest because the private activities are insufficiently developed due to a major delay in market reforms aimed to effectively stimulate the private initiative.

With respect to efficiency, the Index of Labor Efficiency shows that the private sector loses continuously its efficiency because the privatization of public enterprises induced the phenomenon of sharing the inefficiency (the speed of restructuring the privatized firms is lower than the speed of privatization). The Index of Employment Adjustment indicates that this process is far from being completed in the Romanian economy, while the Index of Output Adjustment confirms that the private sector – despite its increasing share in overall activity – remains insufficiently developed in terms of productivity and economic efficiency.

1. Introduction

Romania started the transition process by adopting a gradualist strategy for implementing its economic reforms, most of which being carried out independently and not through a concrete and cohesive policy package, as argued by Staehr (2003). In many respects the stabilization of inflation and budgetary deficit have been used for promoting an illusionary growth that proved to be a huge burden for the population. In the real sector, the government priority consisted of restructuring state-owned enterprises prior to their privatization, instead of closing down the unprofitable companies. Direct and indirect subsidies, generously provided in various forms to public firms, slowed down the process of privatization and discouraged the private incentive. A significant proportion of prices has been kept administratively controlled until 1997, in the detriment of competition.

Substantial efforts have been made to restructure the enterprises but the effective results are still poor, since these efforts have been wrongly directed towards companies without economic perspective. At the same time, the restructuring has been often regarded as a process of improving the technological endowment of enterprises and less attention has been paid to institutional changes and policy measures aimed to adjust the labor market to the new conditions required by a market oriented economy.

The restructuring of the market for labor is important because of the hoarding phenomenon that existed in the socialist economy. The necessary quantitative adjustments (Masso and Heshmati, 2003) would imply a reduction of employment, together with significant variations of the job creation/job destruction ratio. If such adjustments take place, then labor efficiency improves and economic growth is resumed, as argued by Brada (1996) and by Orazem and Vodopivec (2003). In parallel, deeper market reforms helping the expansion of the private sector will develop and diversify the economic activities, which will absorb a substantial proportion of the initial unemployment. The speed of workforce adjustment at the firm level, as well as the incidence of excess labor, depends on labor market flexibility and the functioning of the labor market during the transition period (Treu, 1992). At the same time, a high speed of restructuring is conditional to high rates of job creation and destruction, as it is shown by Faggio and Könings (1999) and by Vodopivec (2003) in case of Estonia.

In this paper we try to evaluate the degree of restructuring on the Romanian market for labor, respectively the evolution of labor efficiency over the transitional period. The purpose of this exercise is to find out to which extent the transitional reforms have brought higher efficiency in the economy, how the privatization process increased the labor productivity in the private sector and what happened with the remaining state companies in terms of productivity and efficiency.

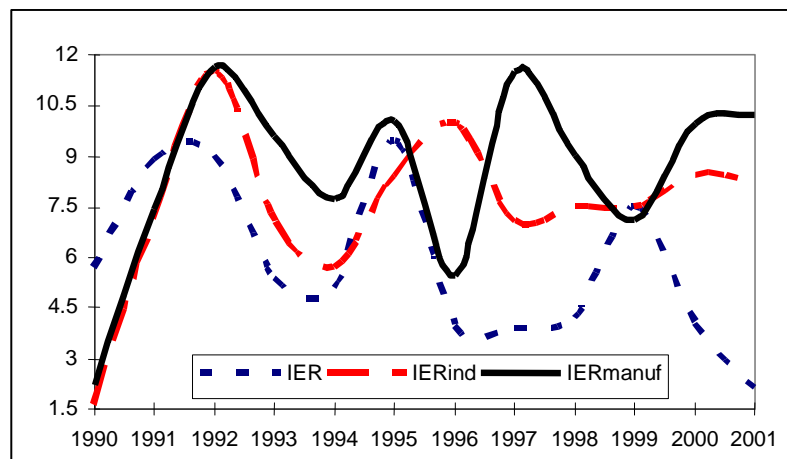
2. The restructuring of the Romanian labor market

In order to analyze the dynamics of the restructuring process on the transitional labor market, we constructed the following *Index of Employment Restructuring*:

$$IER = \frac{\sum |\Delta N_i|}{N} * 100 \text{ where: } \Delta N_i = \frac{N_{i,t} - N_{i,t-1}}{N_t}$$

The index¹ provides information about job destruction ($\Delta N_i < 0$) and job creation ($\Delta N_i > 0$) in the economy. It is expected to take relatively high values in the first years of transition, when major restructuring of the labor force takes place, while declining afterwards and reaching a steady state level that corresponds to the “natural” rate of employment turnover. In Figure 1 we represented, for the period 1990 – 2001, the index corresponding to the whole economy, as well as its evolution in the industrial sector² and in case of manufacturing industry (14 branches, according to the standard classification). At the level of the overall economy the index has a declining trend but a strong cyclical component that follows very closely the election cycles. The three post-electoral years 1996 to 1998, for example, record a practically constant IER. The same cyclical tendency could be observed in the industrial sector and in the manufacturing industry, although the manufacturing seems to reach a relatively stable index after 1997.

Figure 1: The Index of Employment Restructuring



Romania has therefore conducted its employment policies inconsistently; political rather than economic criteria seem to be predominant in carrying out the reforms. Manufacturing has apparently reached certain stability, as the IER level is relatively high. This does not imply that restructuring process is over in this sector; the reforms have been more sustainable in

¹ We considered the standard classification of economic activities: 1.Agriculture, forestry and hunting; 2.Industry; 3 Construction; 4.Trade; 5.Hotels and restaurants; 6.Transport and storage; 7 Post and telecommunications; 8.Financial, banking and insurance activities; 9.Real estate and other services; 10.Public administration; 11.Education; 12.Health and social assistance sector; 13.Other activities.

² The following industrial sectors were considered: 1.Mining and Quarrying; 2. Manufacturing; 3. Electric and thermal energy, gas and water.

manufacturing, compared to the rest of the economy, and therefore the employment restructuring records certain continuity over time.

A significant part of economic literature on labor market analysis relies on models with endogenous job creation and destruction (for example Mortensen and Pissarides, 1994). A more complete analysis of transitional changes on the labor market should therefore take in consideration the unemployment, a phenomenon that is unknown for a socialist economy. The unemployment U_t at time t depends on its previous level at $t-1$ and the number of jobs destroyed J_t^D at time t . At the same time, U_t is negatively correlated with the number of jobs created J_t^C during the period t . Under this assumption, we can compute the *Net Job Creation* ΔJ in the economy:

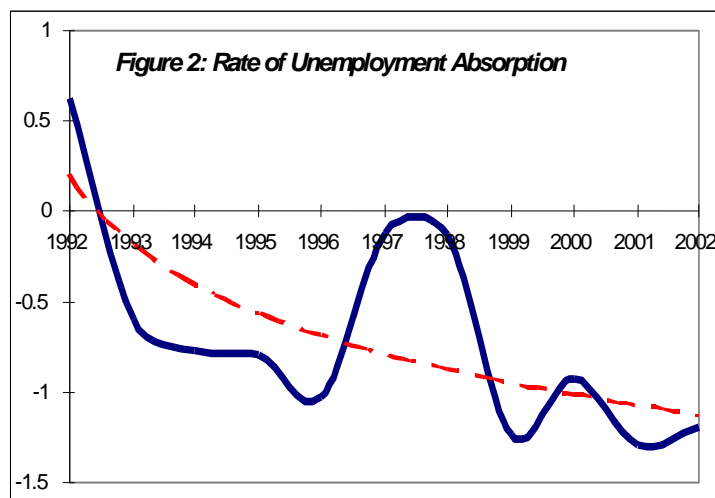
$$\Delta J = J_t^C - J_t^D$$

which allows us to compute the *Rate of Unemployment Absorption*:

$$RUA_t = \frac{\Delta J - U_{t-1}}{U_t}$$

The beginning of transition is usually characterized by high unemployment rates, due to the contraction of economic activity (Boeri, 2000). New private businesses created afterwards, as a result of reforms should normally reduce the unemployment; as a consequence, the Rate of Unemployment Absorption records relatively low levels in the first part of the transitional periods, while increasing afterwards. From the graphical representation of RUA (Figure 2) corresponding to the period 1991 – 2002 it can be seen that the capacity of the Romanian economy, through the net job creation, to absorb the newly created unemployment is very modest, the index recording negative values for the whole period. Moreover, there is a decreasing tendency of the index, showing that the economy is continuously destroying more jobs than it creates. This is the consequence of insufficient reforms aimed to stimulate the economic growth. In 2003, the GDP in constant prices is still below its level recorded in 1990; Romania is therefore the only country among the candidates to EU integration whose output has not recovered completely.

Figure 2: Rate of Unemployment Absorption

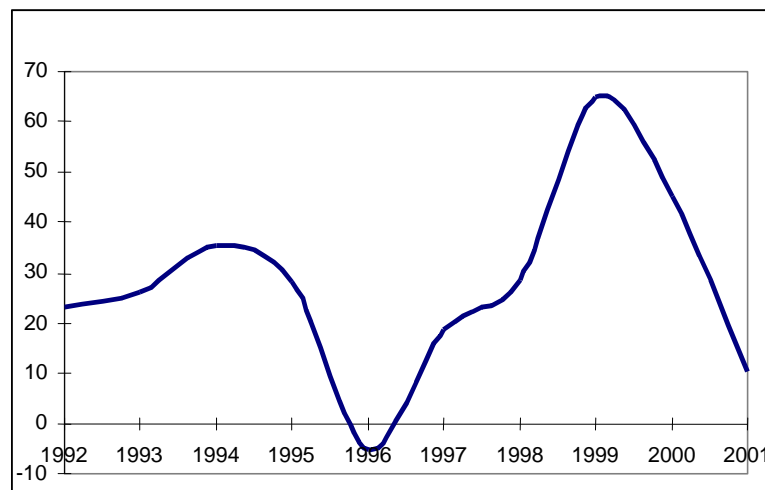


In order to estimate the degree to which the private sector responds to employment changes and the extent to which the additional unemployment in the economy is absorbed by the newly created private activities we constructed the *Rate of Private Sector Absorption* (p):

$$p = \frac{\Delta J_p}{U_t - U_{t-1}} \times 100$$

This index is therefore given by the ratio between the net job creation in the private sector and the change in unemployment over two consecutive periods. Its graphical representation is provided in Figure 3, where we can see that private activities are insufficiently developed and therefore unable to fully absorb the unemployment generated in the state sector. The necessary speed of private businesses creation corresponds to a Rate of Private Sector Absorption of 100%; at this level, the jobs destroyed by public enterprises are completely compensated by the creation of new jobs in private companies. While in the first years of the transition the absorption capacity of the private sector is still limited and thus the index is relatively low, the second stage of the process should bring a significant expansion of privately owned companies. As a result, the initial unemployment accumulated in the economy will be reduced by the development of the private sector. Therefore the values of the index should normally be superior to 100% in the second half of the transitional period, which is not the case for Romania. Insufficient reforms for stimulating private activities explain such an evolution.

Figure 3: The rate of Private Sector Absorption

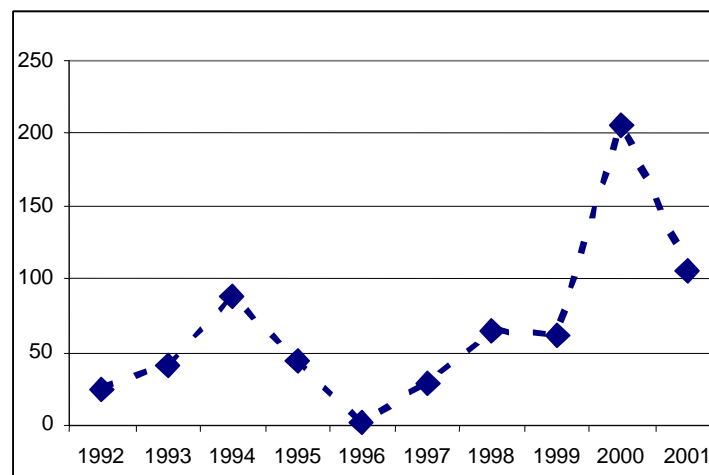


A second possibility to measure the extent to which the private sector is able to compensate the employment loss in state enterprises is the *Net Rate of Private Sector Expansion* (RPE), calculated as a percentage ratio between the number of jobs created in the private sector and the number of jobs destroyed in the state sector:

$$RPE = \frac{J_p^c}{J_s^d} \times 100$$

Whenever this indicator is superior to 100, it means that the economy faces a net expansion of private activities; in other words, the contraction of activity in the public sector is fully compensated by the development of private activities. In the opposite situation, for values below 100, the overall economic activity is shrinking because the speed of private sector development is insufficiently high, compared to the rhythm at which the public sector is shrinking. As it can be seen from Figure 4, a real and sustainable economic development based on a preponderantly private sector contribution is present only starting with 2000. Romania records therefore a major delay in market reforms aimed to effectively stimulate the private initiative. Moreover, the worst performance in terms of private sector expansion is recorded in 1995 and 1996, when the economy shows – at least statistically – a relative recovery of the GDP.

Figure 4: The net rate of private expansion sector



3. The labor market efficiency

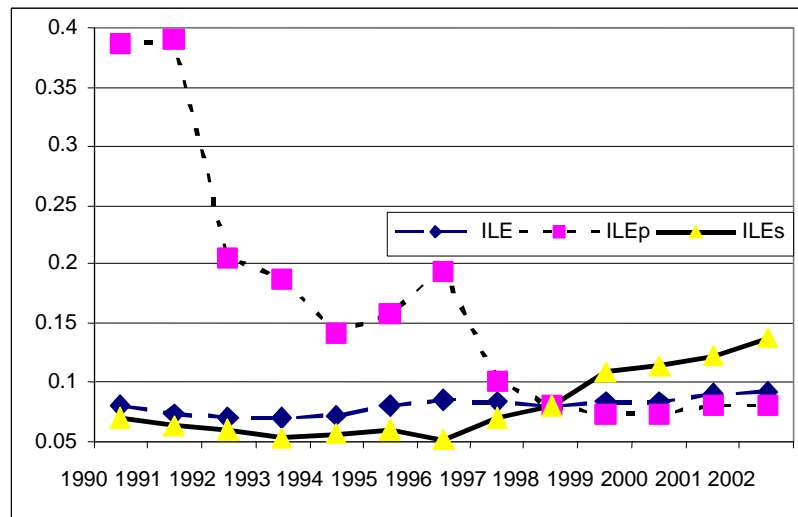
The extent to which the labor market is adjusting over the transitional period depends on the efficiency improvement of the workforce. As a consequence, we constructed an *Index of Labor Efficiency* defined as the ratio between the GDP in 1990 prices and employment level:

$$ILE = \frac{GDP}{N}$$

The index for the whole economy (ILE) is provided in Figure 5, together with its values that correspond to state (ILE_s), respectively private sectors (ILE_p). What is striking from this representation is that the private sector loses continuously its efficiency, while one might expect an improvement of this indicator. Moreover, starting with 1998 the state sector becomes more efficient than the private one. There are two explanations of this situation: firstly, the privatization of public enterprises induced the phenomenon of **sharing the inefficiency**: the speed of restructuring the privatized firms is lower than the speed of privatization. As a consequence, each new firm entering the private sector brings with it a low level of labor efficiency. This argument is sustained by the

fact that the average growth rate of private GDP is lower than the rate of growth of employment in the private sector. A second explanation relies on the tendency of Romanian authorities to restructure their firms prior to privatization. As a result, there is a slight improvement of labor efficiency in state companies, but this increase is lower than the improvement which the private sector would have brought in case of post-privatization restructuring.

Figure 5: The Index of Labor Efficiency

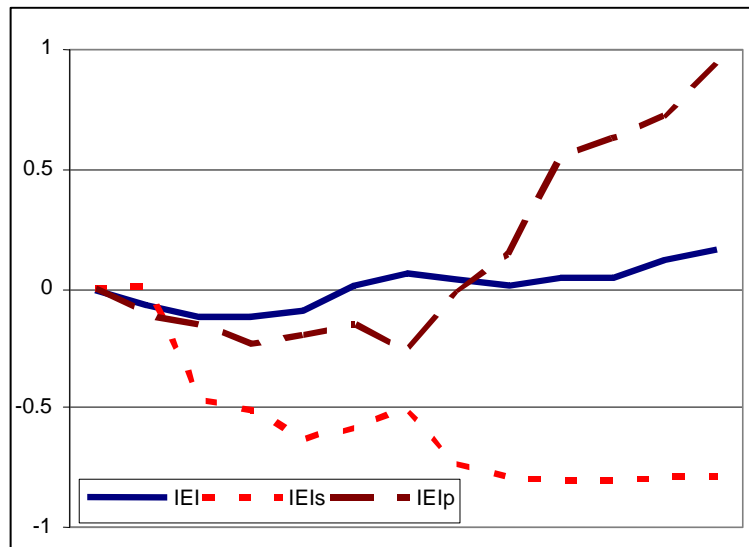


Considering that 1990 level of GDP represents the “reference output” for the transitional period, the Index of Labor Efficiency of that year (ILE_{1990}) will constitute the “reference labor efficiency”. Using 1990 as a base year, we can compute an **Index of Efficiency Improvement** (IEI), given by:

$$IEI = \left[\frac{ILE_t}{ILE_{1990}} - 1 \right] \times 100$$

The index is represented in Figure 6 for the overall economy, as well as for private and state sectors separately (1991 – 2001). Although the efficiency of labor is low, as shown in Figure 5, the private sector improves its efficiency in the second half of the transition, while the state sector is increasingly inefficient. In other words, each year the public firms gain efficiency by reducing the employment level, but they lose efficiency over time, since the output produced by the remaining labor force is below its potential. At the same time, the private sector loses labor efficiency because of privatization, which brings excessive employment with the newly privatized firms³. Over time, the output produced by an employee in the private sector is higher than the one produced by a state employee, which leads to an improvement of efficiency in case of private companies.

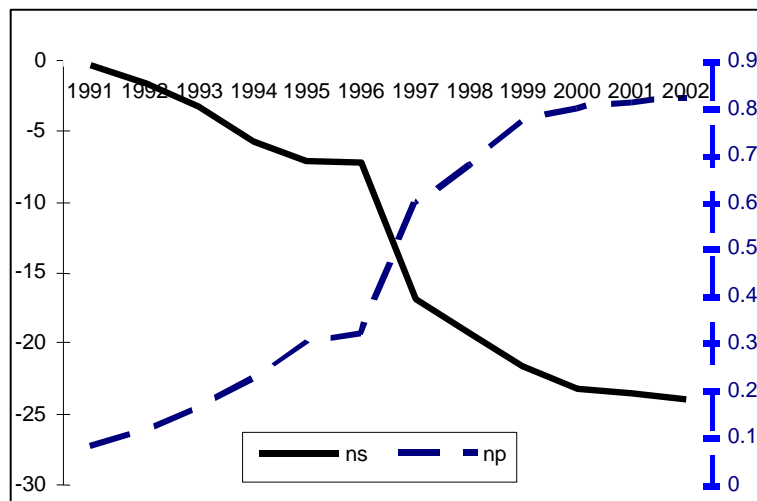
³ In most of the cases, when privatizing its enterprises, the government imposed to the new owner the condition of keeping the employment level for several years.

Figure 6: The Index of Efficiency Improvement


Considering the 1990 employment as a “reference”, an **Index of Employment Adjustment** (n) can be therefore constructed:

$$n = 1 - \left[\frac{N_t}{N_{1990}} \right]$$

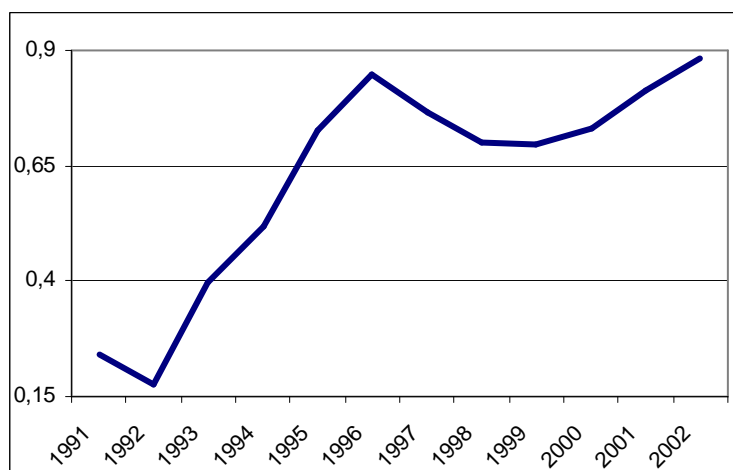
The index is represented in Figure 7 (on a double scale) for state and private sectors. If n_p and n_s record the same value in absolute terms and n_p is always positive it means that the loss of employment in the public sector is entirely compensated by the increase of labor force in private enterprises. At the same time, the employment adjustment is optimal if, during the second half of transition, n_p values are higher than the absolute values of n_s . From the graphical representation of the index it can be seen that the adjustment process of employment is far from being completed in the Romanian economy. The private sector is still insufficiently developed and therefore unable to absorb the labor freed by public enterprises.

Figure 7: Index of Employment Adjustment


For the already mentioned “reference output”, we can calculate an *Index of Output Adjustment* (g), given by the following expression:

$$g = \left[\frac{GDP_t^p - GDP_{1990}^p}{GDP_{1990}^s - GDP_t^s} \right]$$

The index expresses the speed at which the private sector takes over the activity from the public one and represents practically the ratio between GDP growth in private and public sectors, compared to the reference GDP of 1990. It follows that the index should have an exponential trend, since the activity in the private sector is expected to expand faster than the reduction of public output. As a result, the index should normally take values higher than unity in the second half of transitional period. This is not the case for the Romanian economy, as it can be seen from Figure 8, meaning that the private sector – despite its increasing share in overall activity – remains insufficiently developed in terms of productivity and economic efficiency.

Figure 8: The Index of output adjustment


4. Concluding remarks

Romania has conducted its employment policies rather inconsistently and therefore the capacity of the economy to absorb the unemployment is very modest; moreover, the economy has destroyed more jobs than it created. This is the consequence of insufficient reforms aimed to stimulate growth: in 2003, the real GDP is still below its level recorded in 1990. The speed of private sector development is low compared to the rhythm at which the public sector is shrinking.

As a result, the private sector loses continuously its efficiency because the privatization of public enterprises induced the phenomenon of sharing the inefficiency: the speed of restructuring the privatized firms is lower than the speed of privatization. Each year the public firms gain productivity by reducing the employment, but they lose efficiency over time, since the output produced by the remaining labor force is below its potential. In parallel, the private sector loses efficiency because of privatization, which brings excessive employment with the newly privatized firms. Over time, the output produced by an employee in the private sector is higher than the one produced by a state employee, which leads to an improvement of efficiency in case of private companies.

The adjustment process of employment is far from being completed. The private sector, despite its increasing share in overall activity, is still insufficiently developed in terms of productivity and economic efficiency and therefore unable to absorb the labor freed by public enterprises.

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