Regional strategies and Unemployment Risks in Russia's Regional Labor markets.

Tatiana Blinova
Institute of Agrarian Problems Russian Academy of Sciences
E-mail: ruandre@mail.saratov.ru

Victor Rusanovsky
Saratov State Socio-Economic University
E-mail: Rusanovsky@ssea.runnet.ru

Abstract

Changes in unemployment rates are connected with both macroeconomic (symmetric) and sectoral (asymmetric) shocks taking place in the transitional Russian economy, causing the regional labor markets to react. We assumed that unemployment rates and the regional labor market behavior are determined by heterogeneous reactions of the regions to shocks. In the suggested theoretical model, the regions have different starting conditions, different employment structure, and pursue their economic policies in different ways.

Keywords: Regional strategies, Unemployment Risks, Russia's Regional Labor Markets.

INTRODUCTION

Changes in unemployment rates are connected with both macroeconomic (symmetric) and sectoral (asymmetric) shocks taking place in the transitional Russian economy, causing the regional labor markets to react. We assumed that unemployment rates and the regional labor market behavior are determined by heterogeneous reactions of the regions to shocks.

Regional labor market behavior depends on the combination of a set of macro - and microeconomic factors. One of the specific features of the transition period relates to the increasing role of regional factors. In the suggested theoretical model, the regions have different starting conditions, different employment structure, and pursue their regional strategies in different ways.

Regional strategies in transition period include privatization and promotion of private ownership, small and middle-scale businesses, the financial and crediting sector, trade, local infrastructure (roads, telecommunications, etc.) and investments in human capital. In general, from a theoretical point of view, this approach is actually the strategy of economic development taken by a region intending to increase its investment attractiveness. In equilibrium all regions spend a considerable part of their funds on infrastructure (institutional development), but the advantages on the labor market are only realized by those that, first, have a higher rate of institutional development and, second, have a more efficient structure of employment. In the regions where the employment structure has a considerable share of agricultural employment, the risk of unemployment is higher.

The industrial structure is formed over a long period of time and depends on the state's strategy of production placement within the territory of the country. The institutional structure of employment highly depends on the economic policy of the region and on the rate of development of small businesses, the private sector, enterprises with foreign participation, infrastructure, and on the amount of investment in human capital. If the economic policy implemented in the region has the aim to increase the efficiency of the institutional structure of employment, the risk of unemployment tends to be lower. At the same time, if the private sector, infrastructure, small businesses and education are underdeveloped, the risk of unemployment in that region is high.

Consequently, unfavorable starting conditions for entering the labor market and the inefficiency of the structure of industry employment can be to a certain extent offset by a regional economic policy intended to promote the non-state sector, small and middle-scale businesses, regional infrastructure and investment in human capital.

Comparative analysis of the employment structure allows one to see some certain imbalances on the Russian labor market. There is the disproportionately big share of employment in agriculture (if compared with that in economically developed countries) arising from the low labor productivity traditionally observed in that sector. Creation of highly specialized zones in agrarian regions could help overcome this imbalance by making labor productivity rise. Research shows that the process of creating such highly specialized agricultural zones should be implemented in parallel with further diversification of the employment structure of the region. For rural regions that means the development of agricultural services, food processing industries and expansion of non-agricultural employment.

PROBLEM STATEMENT

During Russia's transition the unemployment rate increased from 5, 2% (1992) to 13, 4% (1999), and decreased to 8% (2002). It would have increased by more if some workers did not choose to drop out of the labor market altogether), duration of unemployment became longer.

Regional differences in the unemployment rate vary from 1,4, % in Moscow to 44, 0% in Ingush Republic (2002).

In the neoclassic economic theory the problem of regional labor market differences is only a short-run problem. In the middle- and long-run perspective the inter-regional migration and regional policies tend to bring the labor market to a state of relative equilibrium. However, the Russian transition economy is in some respects specific, which requires specific explanation. The Russian labor market under transition is being formed as a regionally segmented model.

The inter–regional mobility is restricted by high transaction costs, low living standards, administrative and economic barriers and firms behavior. As a result, regional labor market segments are non-competing with each other and showing specific reactions to external shocks.

One group of regions has experienced rapidly rising and persistently high unemployment rates (Table 1), which have been accompanied by long spells of unemployment.

Table 1.   **Ratios of Regional to National Unemployment Rates**

	1992	1993	1994	1995	1997	1998	1999	2000	2001
Russia	5,2	5,9	8,1	9,5	11,8	13,3	13,4	10,8	9,3
Republic of Kalmykia	1,4	1,5	1,4	2,3	2,2	2,3	1,9	1,9	2,2
Kabardian- Balkar Republic	1,7	1,6	1,7	1,5	1,5	1,7	2,1	1,8	1,9
Ingush Republic	…	…	…	4,5	4,9	3,8	3,9	3,0	3,2
Republic of Dagestan	2,8	2,9	2,2	2,7	2,3	2,3	2,3	2,6	3,0
Karachaev-Circassian Republic	1,1	1,6	1,4	2,9	1,6	1,9	1,7	2,0	2,2
Republic of Tuva	1,3	1,1	1,4	2,3	1,9	1,6	1,9	2,1	2,1

By contrast, in the others regions   the unemployment rate has remained low and unemployment spells have been short.

OBJECTIVES AND HYPOTHESIS

The objective of this paper is to estimate the impact of specific regional factors such as the different starting conditions, different employment structure, and different regional strategies on labor markets behavior. During the transition period (1992-2002), the model of a segmented market with an inefficient structure of employment was formed, where regional clusters, which do not compete with each other, exist. The unified space of the labor market was broken. It seems quite impossible to regulate the labor market on the basis of maintaining unified economic conditions and applying market tools without weakening the stimuli for one group of regions and infringing on the interests of the others.   Due to the fact that the labor-market is so regionally heterogeneous, persistent regional differences form various behavioral reactions to external shocks. This means that inside the national labor-market parallel structures (or regional clusters) are functioning, and each of them is characterized by an employment structure of more or less the same type, as well as by similar behavioral reactions to external shocks. This paper tests the following hypothesis.

Hypothesis 1. *Different employment structure effect.* The regions with a high share of agricultural employment in the employment structure have a weaker position on the labor market.

Hypothesis 2. *Different regional strategies effect.* Formation of a certain ownership structure reflects the priorities of the economic policy. Regions with a higher share of non-state sectors, small businesses, service markets have a more advantageous position on the labor market.
.

METHODOLOGY OF RESEARCH

Data Description

The paper based on the data of the Labor Force Survey, that are conducted in Russia beginning with 1992 (questionnaires for households). Annual surveys enable to assess the total number of unemployed, rate of unemployment and duration of unemployment for both Russia in general and individual regions. Most figures presented here are based on the methodology   International Labor Organization (ILO). The definitions used in the paper follow the guidelines of the ILO.

The **unemployment rate** is the number of unemployed as a percentage of the labor force.

Unemployed persons are those who, during the reference week:
   (a) had no employment,
   (b) were available to start work,
   (c) had actively sought employment at some time during the previous for weeks.

The **total active population** or **labor force** comprises persons in employment and unemployed persons.

Employed are those who worked for pay or profit for at least one hour during the reference week or, if they did not work, had jobs from which they were temporarily absent. Unpaid family workers are also included.

The database of regions, made use of in the multi-dimensional sampling typology of regions and cluster analysis, contains indicators for 76 regions of Russia, including 20 republics, 49 *oblasts*, 6 *krais*, 1 autonomous *oblast* and 1 autonomous *okrug* (the rest are not included because of insufficient data). High variable values have greater weight than do variables with low values. In order to avoid distortions that might arise in our classification, we have calibrated the variables and adapted them to a common scale. All data on the employment branch structure was presented in relative values.

An Empirical Strategy

The Impact of Regional Strategies

Regional strategies during Russian transition aimed at developing the private sector, small- and middle-scale businesses, the service market and the regional infrastructure affect the labor market in many aspects: the investment attractiveness of the region grows, it's prospects get better, the sphere of employment expands and new additional jobs are created. As a result of positive shocks, the "diversification effects" become apparent. Economic policy impact can be described by using a two-sector model. (Aghion and Blanchard, 1994). It is assumed that there exist "old and a "new" sectors of the economy. While the "old" sector is undergoing economic modernization based on market principles, it loses its labor resources; at the same time the developing "new" sector attracts these resources. The rate and duration of unemployment in a region depends on both the velocity and nature of the release of personnel by the "old" sector and the scope of "attraction" of the labor force by the "new" sector. So, the stagnating segments of the economy lose their labor force, and the developing ones attract

it. If the region implements economic policy aimed at expanding the labor demand in the "new" sector, then the risk of unemployment decreases. If small and middle-scale businesses, the private sector, infrastructure and education are underdeveloped in the region, the risk of unemployment increases.

Effect of Interaction

Interaction has the potential to explain not only the increase or decrease in unemployment over time, but also the regional differentials in unemployment rates (through the interaction of the shocks with different starting conditions, different employment structure, different regional strategies).

The link between labor market performance and specific regional factors such as the structure of industry employment and regional strategies during Russian transition can be described by simple model:

$$Y_{it} = F(X_{it}, Z_{it}) = \alpha + \beta X_{it} + \delta Z_{it} + \xi, \qquad (1)$$

Here:

Y_{it}-labor market performance in region (i), at time (t): U_{it}, D_Un_{it}, E_{it}, L_{it};

U_{it}-unemployment rate,

D_Un_{it}-duration of unemployment,

E_{it}-employment rate,

L_{it}- labor force participation,

X_{it} −a vector of regional compositions of the industry employment structure.

Z_{it} −a vector of regional shares of the "new sector."

Estimation of the influence of the regional structure of industry employment on labor markets behavior

The dependence of labor market performance on regional structure of industry employment was tested by using the following regression equations:

$$Un_{it} = \beta_0 + \beta_1 Sh\_Agr_{i,t-n} + \beta_2 Sh\_Ind_{i,t-n} + \beta_3 S_{i,t-n} + \beta_4 P_{i,t-n} + \xi, \qquad (2.1)$$

$$D\_Un_{it} = \beta_0 + \beta_1 Sh\_Agr_{i,t-n} + \beta_2 Sh\_Ind_{i,t-n} + \beta_3 S_{i,t-n} + \beta_4 P_{i,t-n} + \xi, \qquad (2.2)$$

$$E_{it} = \beta_0 + \beta_1 Sh\_Agr_{i,t-n} + \beta_2 Sh\_Ind_{i,t-n} + \beta_3 S_{i,t-n} + \beta_4 P_{i,t-n} + \xi, \qquad (2.3)$$

$$L_{it} = \beta_0 + \beta_1 Sh\_Agr_{i,t-n} + \beta_2 Sh\_Ind_{i,t-n} + \beta_3 S_{i,t-n} + \beta_4 P_{i,t-n} + \xi. \qquad (2.4)$$

Here:

Un_{it} − unemployment rate in region (i) at time (t);

D_Un_{it}-duration of unemployment in region (i) at time (t);

E_{it}-employment rate in region (i) at time (t);

L_{it}- labor force participation in region (i) at time (t);

$Sh\_AGR_{i\,t-n}$ − share of employment in agriculture in region (i) at time (t-n);

$SH\_IND_{i\,t-n}$ - share of employment in industry in region (i) at time (t-n);

$S_{i\,t-n}$ – size of region (i) at time (t-n);
$P_{i\,t-n}$ – population density in region (i) at time (t-n).

   To avoid deviations that might result from size differences among the regions, the regression equation includes such variables like the size of the region (S) and population density (P).
The regression equations were assessed for Russia as a whole and for agrarian and industrial regions separately. This resulted in a system of 12 regression equations. The results are presented in Tables 2.1 and 2.3.

   Table 2.1. **Estimation results for all regions of Russia**

Y	X	B	Std Err	t	Sig (t)	F	Sig (F)	R^2	DW
Un	Const	25,31	1,90	13,3	0,000				
	Shind	-0,39	0,07	-5,5	0,000				
						30,7	0,000	0,299	1,569
D_un	Const	8,56	0,27	31,5	0,000				
	Shagr	0,05	0,02	3,0	0,004				
						8,9	0,004	0,110	1,414
E	Const	49,68	3,12	15,9	0,000				
	Shagr	-0,27	0,08	-3,5	0,001				
	Shind	0,20	0,08	2,5	0,016				
	S	0,003	0,001	3,6	0,001	24,4	0,000	0,511	1,178
L	Const	64,91	1,00	64,8	0,000				
	Shagr	-0,32	0,06	-5,4	0,000				
	S	0,003	0,001	3,8	0,000				
						28,0	0,000	0,441	1,658

Table 2.2. Estimation results for agricultural regions of Russia

Y	X	B	Std Err	t	Sig (t)	F	Sig (F)	R^2	DW
Un	Const	-4,95	6,17	-0,8	0,430				
	Shagr	0,96	0,27	3,5	0,002				
						12,6	0,002	0,411	1,195
D_un	Нет								
E	Const	41,0	3,0	13,7	0,000				
	Shind	0,34	0,13	2,5	0,021				
						6,4	0,021	0,262	1,530

Table 2.3. Estimation results for industrial regions of Russia

Y	X	B	Std Err	T	Sig (t)	F	Sig (F)	R^2	DW
Un	Const	17,56	1,42	12,4	0,000				
	Shagr	-0,24	0,13	-1,9	0,074				
	P	-0,06	0,03	-2,3	0,031				
						6,9	0,004	0,376	2,193
L	Const	66,72	1,02	65,1	0,000	13,9	0,000	0,654	1,291
	Shagr	-0,31	0,08	-3,7	0,001				
	S	0,002	0,001	2,0	0,061				
	P	-0,04	0,02	-2,1	0,051				

The results of the regression analysis show a significant dependence of the labor market performance on the structure of industry employment. An assessment of the regression equations testing the hypothesis shows a general positive correlation between the labor market performance and the structure of industry employment of the region. The share of employment in agriculture is a significant factor worsening the position of the region on the labor market. The share of employment in industry is a significant positive factor affecting employment growth and unemployment decrease in agrarian regions.

The negative correlation is the highest (for all regions) between the share of agricultural sectors and the employment rate in the region. Agrarian regions show a positive correlation between the unemployment rate and the share of employment in agriculture within the region. A negative correlation exists between the unemployment rate and the share of employment in industry. This is not surprising, as expansion of non-agricultural employment is an important factor improving the position of agrarian regions in the labor market. The correlation between these factors and the employment rate is a little bit lower. The other correlations are less significant.

Evaluation of the influence of regional strategies

In this section we evaluate the influence of economic policies implemented at the regional level on regional labor market performance. Hypothesis 2 poses a relationship between the behavior of regional labor markets and the development of the "new" sector, i.e., expansion of non-state ownership, small businesses and the service market.
The testing was done based on the following equations:

$$Un_{it} = \beta_0 + \beta_1 Sh\_Pr_{i,t-n} + \beta_2 Sh\_St_{i,t-n} + \beta_3 Sh\_For_{t-n} +$$
$$+ \beta_4 Sh\_Ros_{i,t-n} + \beta_5 Ent\_Agr_{i,t-n} + \beta_6 Ent\_Ind_{i,t-n} +$$
$$+ \beta_7 Ent\_Tr_{i,t-n} + \beta_8 Sh\_Tr_{i,t-n} + \beta_9 Sh\_Fin_{i,t-n} + \xi , \qquad (3.1)$$

$$D\_Un_{it} = \beta_0 + \beta_1 Sh\_Pr_{i,t-n} + \beta_2 Sh\_St_{i,t-n} + \beta_3 Sh\_For_{t-n} +$$
$$+ \beta_4 Sh\_Ros_{i,t-n} + \beta_5 Ent\_Agr_{i,t-n} + \beta_6 Ent\_Ind_{i,t-n} +$$
$$+ \beta_7 Ent\_Tr_{i,t-n} + \beta_8 Sh\_Tr_{i,t-n} + \beta_9 Sh\_Fin_{i,t-n} + \xi , \qquad (3.2)$$

$$E_{it} = \beta_0 + \beta_1 Sh\_Pr_{i,t-n} + \beta_2 Sh\_St_{i,t-n} + \beta_3 Sh\_For_{t-n} +$$
$$+ \beta_4 Sh\_Ros_{i,t-n} + \beta_5 Ent\_Agr_{i,t-n} + \beta_6 Ent\_Ind_{i,t-n} +$$
$$+ \beta_7 Ent\_Tr_{i,t-n} + \beta_8 Sh\_Tr_{i,t-n} + \beta_9 Sh\_Fin_{i,t-n} + \xi , \qquad (3.3)$$

$$L_{it} = \beta_0 + \beta_1 Sh\_Pr_{i,t-n} + \beta_2 Sh\_St_{i,t-n} + \beta_3 Sh\_For_{t-n} +$$
$$+ \beta_4 Sh\_Ros_{i,t-n} + \beta_5 Ent\_Agr_{i,t-n} + \beta_6 Ent\_Ind_{i,t-n} +$$
$$+ \beta_7 Ent\_Tr_{i,t-n} + \beta_8 Sh\_Tr_{i,t-n} + \beta_9 Sh\_Fin_{i,t-n} + \xi .. \qquad (3.4)$$

Here:

$Sh\_Pr_{i\ t-n}$ - share of the private sector in the employment structure (region i, time t-n).

$SH\_ST_{i\ t-n}$ – share of the state sector in the employment structure (region i, time t-n).

$SH\_FOR_{i\ t-n}$ - share of mixed enterprises with foreign participation in the employment structure (region i, time t-n).

$SH\_ROS_{i\ t-n}$ – share of mixed enterprises without foreign participation in the employment structure (region i, time t-n).

$ENT\_AGR_{i\ t-n}$– share of employment in small agricultural enterprises (region i, time t-n).

$ENT\_IND_{i\ t-n}$ – share of employment in small industrial enterprises (region i, time t-n).

$ENT\_TR_{i\ t-n}$ – share of employment in small trade enterprises (region i, time t-n).

$SH\_TR_{i\ t-n}$ – share of employment in trade (region i, time t-n).

$SH\_FIN_{i\ t-\ n}$ – share of employment in the credit, financial and insurance sectors (region i, time t-n).

All the equations were assessed for all regions of Russian Federation included in the sample and for the group of agricultural and industrial regions.

The results are presented in Table 3.1. -3.4.

Table 3.1. Estimation results for all regions of Russia

Y	X	B	Std_err	T	Sig (t)	F	Sig (F)	R^2	DW
Un	Const	6,04	3,95	1,5	0,131				
	Sh_st	0,25	0,06	3,9	0,000				
	Sh_ros	-0,16	0,07	-2,4	0,020				
	Ent_ag	0,75	0,35	2,2	0,034				
						17,2	0,000	0,425	1,754
D_un	Const	10,10	0,38	26,7	0,000				
	Sh_ros	-0,04	0,02	-2,2	0,029				
						4,9	0,029	0,064	1,356
E	Const	43,19	3,38	12,80	0,000				
	Sh_ros	0,22	0,06	3,35	0,001				
	Ent_ag	-1,11	0,36	-3,09	0,003				
	shtr	0,60	0,30	2,02	0,047	14,4	0,000	0,382	1,216
L	Const	60,13	3,62	16,6	0,000				
	Shtr	0,96	0,30	3,2	0,002				
	Sh_pr	-0,26	0,06	-4,4	0,000				
						15,6	0,000	0,306	1,434

Table 3.2. Estimation results for agricultural regions of Russia

Y	X	B	Std_err	T	Sig (t)	F	Sig (F)	R^2	DW
Un	Const	4,95	7,87	0,63	0,538				
	Sh_st	0,40	0,14	2,86	0,011				
	Sh_ros	-0,31	0,14	-2,17	0,045				
						13,3	0,000	0,610	1,452
E	Const	42,28	2,06	20,52	0,000				
	Sh_ros	0,32	0,10	3,11	0,006				
						9,7	0,006	0,350	1,783

Table 3.3 Estimation results for industrial regions of Russia

Y	X	B	Std_err	t	Sig (t)	F	Sig (F)	R^2	DW
Un	Const	0,91	4,18	0,22	0,829				
	Sh_st	0,28	0,10	2,93	0,007				
						8,6	0,007	0,263	1,010
E	Const	48,32	2,71	17,82	0,000				
	Shtr	0,65	0,29	2,23	0,035				
						5,0	0,035	0,172	1,803
L	Const	41,70	3,97	10,5	0,000				
	Shtr	1,26	0,32	3,9	0,001				
	Sh_st	0,21	0,07	3,2	0,004				
						13,9	0,000	0,548	1,609

The results of the regression analysis signify some dependence of the labor market performance on the degree of expansion of non-state ownership, small businesses and the service market. Judging by the obtained evaluations of the system of regression equations, for different groups of regions (agricultural, industrial) different sets of factors are important. The positive effects of the private sector are still insufficient to offset a drop in employment in the state sector. Any significant negative influence of private ownership on employment is not observed either. This is in accord with the conclusions made by other authors that have revealed the weak influence of privatization on employment. Our study also proves that labor market performance weakly reacts to the expansion of the private sector. However, an indirect influence manifests itself in the shrinking of the state sector. For all groups of regions there exists steady dependence: the higher the share of the state sector in the previous period, the higher the regional unemployment rate values in the following period. The share of the state sector also has significant positive correlation with the reduction of employment, as excessive numbers of personnel was a feature of large enterprises. The development of mixed ownership exerts positive influence on reducing the rate and duration of unemployment. The share of employment at mixed-ownership enterprises was among the significant factors when the evaluation of the relationship between the unemployment and employment rates for all the regions included in the sample and the group of agrarian regions was done.

The study is based on the assumption that the economic structure of the region and the influence exerted by the "new" sector are exogenous. However, the situation when the non-state sector, small businesses and the service market develop in the regions with a favorable position on the labor market is possible. Another alternative is also possible, when the "new" sector develops in the regions with a crisis situation in the regional labor markets. In both cases incorrect evaluation is possible. In the first case the cause-effect relation between the behavior of the labor markets' and the economic policies implemented at the regional level will be biased. In the second case, the "accumulated unemployment" effects will manifest themselves in the new economic environment. In order to partially remove the endogenous effects, we used the lag structure of the equation.

CONCLUSION

Changes in unemployment rates are connected with both macroeconomic (symmetric) and sectoral (asymmetric) shocks taking place in the transitional Russian economy, causing the regional labor markets to react. We assumed that unemployment rates and the regional labor market behavior are determined by heterogeneous reactions of the regions to shocks.

Regional labor market behavior depends on the combination of a set of macro - and microeconomic factors. One of the specific features of the transition period relates to the increasing role of regional factors. In the suggested theoretical model, the regions have different starting conditions, different employment structure, and pursue their economic policies in different ways.

Research shows that the macroeconomic shocks cause differentiated regional labor market' behavior, because of differences in the regions' employment structures. Regional employment structure makes a region sensitive to sectoral shocks as well. However, diversification of a region's employment structure is a factor reducing these risks.

This paper presents an assessment of the "diversification effects," achieved through the development of the non-state sector, small businesses and the services market.

By using regression models, we analyze how labor market performance depends on the structural patterns of industry employment. Special attention is paid to the comparative analysis of agrarian and industrial regions. Our research shows that high rates of employment in the agriculture weaken the position of the region on the labor market. We study the relationships between labor market performance and the key elements of the economic reform like changes in ownership structure, development of small businesses and the service market. The reaction of regional labor markets to the development of the private sector appeared weak and ambiguous. Regressions show that the share of the private sector does not play an important role in making the region's position on the labor market better or worse. This can be explained in the following two ways. Firstly, the formal change in the "ownership title" of a number of enterprises did not bring about any real transformation aimed at increasing the efficiency of employment. Secondly, the private sector was mostly formed as a result of the re-organization of state-owned enterprises and to the least extent owing to the creation of new jobs and companies. Mixed-ownership companies with and without foreign participation produced a stronger impact.

It is shown in this paper that the regions, in which the production decline was compensated by the development of the non-state sector, by small and middle-scale businesses and by the service market, and those regions which created positive incentives for businesses, managed to better adapt to the difficulties. Research shows that development of the services market, improves the regions' position on the labor market for all taxonomic groups. Development of the service sector can be the appropriate way to diversify the employment structure, which can reduce the risks for the regional labor markets.

Research on different labor markets behavior based on the classification of Russia's regions is also important. The results of the discriminant and cluster analyses prove that high rates of employment in the agrarian sector make the region's position on the labor market worse. The agrarian regions' weak position on the labor market does not only manifest itself in a quantitative way, i.e., through high rates of unemployment. It also brings about qualitative changes, causing unemployment to become increasingly chronic and stagnant. Under certain conditions, strategies aimed at developing the non-state sector, small businesses and the service market can smooth the imbalances in the structure of industry employment. However, in a number of regions, this will also require implementing special regional policies. In agrarian regions the development of non-agricultural employment produces positive effects on regional labor markets' behavior. In industrial regions the development of

the service market plays an increasingly important role. An increase in the share of non-state ownership and that of small and middle-scale businesses can produce positive effects on labor markets behavior even in regions with biased employment structures.

Application of a uniform approach and averaged Russian labor market assessment seems of little efficiency. Specific features of the regions in terms of how economic reforms are followed should be taken into account. Expansion of Russian labor market regional studies seems to be urgent and important.

REFERENCES

Aghion, P.and O. Blanchard (1994) On the Speed of Transition in Central Europe, *NBER Macroeconomics Annual,* 283-320.

Alogoskoufis, G.S. and A. Manning (1988) Unemployment Persistence, *Economic Policy* 7, 428-469.

Barbone, L., D. Marchetti, and S. Paternostro (1996) Structural Adjustment, Ownership Transformation, and Size in Polish Industry. WP 1624. (The World Bank, Washington).

Bean, C.R. (1994) European Unemployment: A Survey, *Journal of Economic Literature* XXXII, 573-619.

Bobeva, D. and Y. Hristoskov (1995) Unemployment in Agricultural Areas: An Overview of Central and Eastern-Europe and a Case Study of a Bulgarian Region (OECD, Paris).

Burda, M. (1988) Unemployment, *Economic Policy*. October, 393-425.

Demekas, D.G. (1990) Labor Market Segmentation in a Two-Sector Model of an Open Economy, IMF Working Paper 37 (4), 849-864.

Elhorst, P. (1994) Unemployment Disparities between Regions in the European Community (34th European Congress of the Regional Science Association, Groningen).

Ehrenberg, R.G., and R.S. Smith (1996) Modern Labor Economics: Theory and Public Policy. Addison-Wesley.

Layard, R., R. Jackman, and S. Nickell (1991*),* Unemployment: Macroeconomic Performance and the Labor Market (Oxford, Oxford University Press).

Mur, J. and J. Trivez (1994) Modeling Dynamic Interregional Labor Markets: An Application to the Spanish Case. (34th European Congress of the Regional Science Association, Groningen).

Nickell, St. (1990) Unemployment: A Survey, *The Economic Journal* 100, 391-439.

Saez, M. and C. Murillo (1996) Regional Disparities and National Similarities in Spanish Unemployment: A Case of Seasonal Cointegration?, *Applied Economics* 28, 1529-1544.

Regions of Russia (2001) Goskomstat of Russia. (Moskow).

Labor and Employment (2001) Goskomstat of Russia. (Moskow).

Russia in Figures: Concise statistical handbook (2002) Goskomstat of Russia. (Moskow).