

**CORRELATION OF A SPATIAL DEVELOPMENT OF A REGION  
AND COMPETITIVE ABILITY OF MUNICIPAL FORMATIONS  
(in terms of city districts of Samara region)**

© 2009 J.A. Zhichkina\*

**Keywords:** spatial development of a region, competitiveness of municipal formations, level of competitiveness of municipal formations, level of dynamics of development of municipal formations.

In the article the correlation between spatial development of a region and the competitiveness of municipal formations is considered by way of estimating the levels of competitiveness and the dynamics of the development of the city districts of Samara region. A method of estimating the competitiveness of municipal formations and the dynamics of development of municipal formations on the basis of calculating integrated coefficients.

Under present day conditions the main tasks of the regional authorities are the balanced development of the regional territory and establishing comfortable conditions in every municipal formation. The problem of increasing competitiveness of municipal formations gets special significance and is becoming the basic condition for their stable functioning. The regional policy of spatial development, which provides effective and rational use of regional resource potential, innovative development and economic growth, is a prime instrument of growth of competitiveness of municipal formations.

The correlation between the spatial development of a region and the competitiveness of municipal formation is shown in fig. 1.

Competitiveness of municipal formations is defined by its role and place in the economic field of the region. Dynamic and competitive municipal formations are the sources of growth

of regional economy. It determines the great significance of an adequate assessment system of competitiveness of municipal formations.

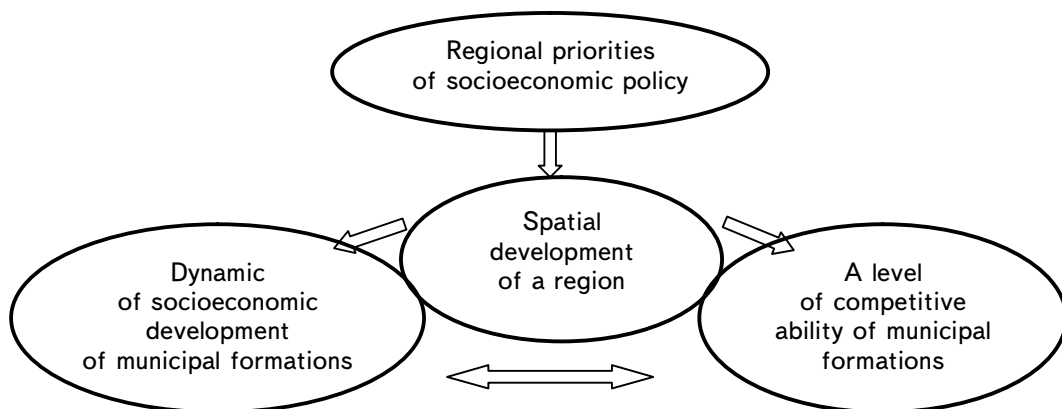
For the calculation of an integrated coefficient of competitiveness of municipal formations we suggest the following formula:

$$IKK = \frac{K_{pot} + K_{advantage}}{2},$$

where *IKK* is the integrated coefficient of competitive ability of municipal formations; *K<sub>pot</sub>* is the coefficient of competitive potential of municipal formation; *K<sub>advantage</sub>* is the coefficient of competitive advantage of municipal formations.

Thus, we can group municipal formations according to the level of competitiveness:

1. The first group - the level of competitiveness below the average:  $0 < IKK < 0,25$  ;



**Fig. 1. Correlation between spatial development of a region and competitiveness of municipal formations**

\* Julia A. Zhichkina, post-graduate student of Samara State University of Economics. E-mail: zhichkinaYA@economy.samregion.ru.

2. The second group - the average group of competitiveness:  $0,5 < IKK < 1$ ;

3. The third group - the level of competitiveness above the average:  $0,25 < IKK < 0,5$ .

The method of pattern is used for the estimation of levels of competitive advantage and competitive potential of municipal formations. This method makes it possible to get estimations of particular points by correlation of actual value and the best one:

$$O_{ij} = \frac{x_{ij}}{x_{\max}}$$

The value of the integrated coefficient is determined by this formula:

$$KI = \frac{\sum_{j=1}^n O_{ij}}{n}$$

The first component of competitiveness of a municipal formation is competitive potential of municipal formations, i.e. the resource pool, which is able to participate in the production of material values and in rendering services.

There are following types of resources that make up competitive potential:

- ◆ labor potential;
- ◆ material and technical potential;
- ◆ natural-resources potential.

The leading role in the competitive potential of municipal formation belongs to the labour potential. The labour potential is the sum total of human resources of a municipal formation.

The material and technical resources, which are also a part of competitive potential, form material and technical basis (potential) of a municipal formation.

Natural-resources potential (non-manufacturing tangible assets) includes lands, mineral wealth, natural biological resources, which estimate the potential investors' interest to one or another municipal formation.

So, we need to determine an integrated level of city district's development the summary coefficient, which is calculated by the following formula:

$$K_{yp} = \sqrt[n]{K_1 \times \dots \times K_n}$$

Thus, we can group municipal formations according to the level of competitiveness:

1. The first group - the level of competitiveness below average:  $0 < IKK < 1$ ;

2. The second group - the average level of competitiveness:  $1 < IKK < 1,5$ ;

3. The third group - the level of competitiveness above average:  $1,5 < IKK < 4$ .

Taking into account the components of competitive potential, competitive advantage and

Table 1

The system of rates for city districts of Samara region

The rates which describe		
competitive potential ( $K_{pot}$ )	competitive advantage ( $K_{advantage}$ )	dynamic of development ( $K_d$ )
Quantity of economically active population, thousand people	Cost of capital assets, thousand rubles	Natural population growth (decrease) per 1 thousand people
Average annual value of capital assets rated by total accounting value, million rubles	Grade of consumption of capital assets, %	Industrial production index, % to previous year
Shipped own make goods, executed work, million rubles	Per capita fixed asset formation, rubles	Monthly average gross payroll of large, medium and non-profit-making organizations, rubles
Fixed asset formation, million rubles	Shipped own make goods, executed work	Average annual quantity of the unemployed, people
Turn-round of retailing sector, mln rubles		Per capita fiscal capacity by means of tax and non-tax income, rubles
Volume of work, executed by construction contracts		Per capita fiscal capacity taking into account uncompensated receipts, rubles
Inner expenses for researches and developing, mln rubles		Per capita turn-round of retailing sector, rubles
Balanced financial result of all business activity, mln. rubles		

Table 2

**The estimation of competitive potential and competitive advantage of city districts of Samara region in 2003-2007**

Name	Coefficient of competitive potential ( $K_{pot}$ )						Coefficient of competitive advantage ( $K_{advantage}$ )					
	2003	Rank	2005	Rank	2007	Rank	2003	Rank	2005	Rank	2007	Rank
Samara	0,92	1	0,98	1	0,94	1	0,452	4	0,558	4	0,495	6
Togliatti	0,65	2	0,60	2	0,55	2	0,648	2	0,691	2	0,577	2
Syzran	0,06	4	0,07	4	0,07	3	0,392	6	0,357	7	0,364	7
Novokuibyshevsk	0,08	3	0,08	3	0,06	4	0,507	3	0,532	6	0,531	4
Chapaevsk	0,03	6	0,01	7	0,01	8	0,260	9	0,262	10	0,334	8
Otradny	0,03	7	0,03	6	0,03	5	0,572	5	0,490	1	0,543	3
Zhigulevsk	0,04	5	0,04	5	0,03	6	0,774	1	0,854	3	0,641	1
Oktyabrsk	0,00	10	0,00	10	0,00	10	0,317	7	0,305	9	0,259	9
Kinel	0,01	8	0,01	8	0,02	7	0,241	8	0,447	5	0,524	5
Pokhvistnevo	0,01	9	0,01	9	0,01	9	0,235	10	0,231	8	0,249	10

also the rates which have an effect on social-economic dynamics and the availability of information base, we consider it necessary to use the following groups of rates for the calculation of the coefficient of competitive potential, competitive advantage and the dynamics of development of the city regions (table 1).

Table 2 shows the results of calculation of  $K_{pot}$  and  $K_{advantage}$ . These coefficients are calculated on the basis of rates of competitive potential and competitive advantage of city districts of Samara region.

Table 2 shows that city districts have no uniform positions on competitive potential and competitive advantage.

That's why for complex estimation of the level of competitiveness of city districts we calculated an integral coefficient of competitiveness of a city district (IKK). The results of calculation of IKK and the coefficient of dynamics of development of city district from 2003 to 2007 are given in table 3.

Graphically the estimation of competitiveness and the dynamics of development of the city districts are shown in fig. 2.

On the basis of these results the city districts can be divided into three groups according to the level of competitiveness and the dynamics of development in 2007 (table 4).

Table 3

**The estimation of competitiveness and the dynamics of development of city districts of Samara region in 2003-2007**

Name	An integral coefficient of competitiveness (IKK)						An integral coefficient of the dynamics of development (Id)					
	2003	Rank	2005	Rank	2007	Rank	2003/2002	Rank	2005/2004	Rank	2007/2006	Rank
Samara	0,69	1	0,77	1	0,72	1	1,34	2	1,31	2	1,58	3
Togliatti	0,65	2	0,65	2	0,56	2	3,39	1	2,78	1	3,61	1
Syzran	0,22	6	0,21	7	0,22	7	0,50	8	0,62	7	0,93	7
Novokuibyshevsk	0,30	5	0,30	4	0,30	4	1,01	4	0,97	5	1,08	5
Chapaevsk	0,14	8	0,14	9	0,17	8	0,46	9	0,43	9	0,90	8
Otradny	0,30	4	0,26	5	0,29	5	0,77	5	1,06	4	1,01	6
Zhigulevsk	0,41	3	0,45	3	0,34	3	0,54	7	0,59	8	0,79	9
Oktyabrsk	0,16	7	0,15	8	0,13	9	0,28	10	0,31	10	0,45	10
Kinel	0,13	9	0,23	6	0,27	6	1,03	3	1,09	3	1,81	2
Pokhvistnevo	0,12	10	0,12	10	0,13	10	0,61	6	0,69	6	1,34	4

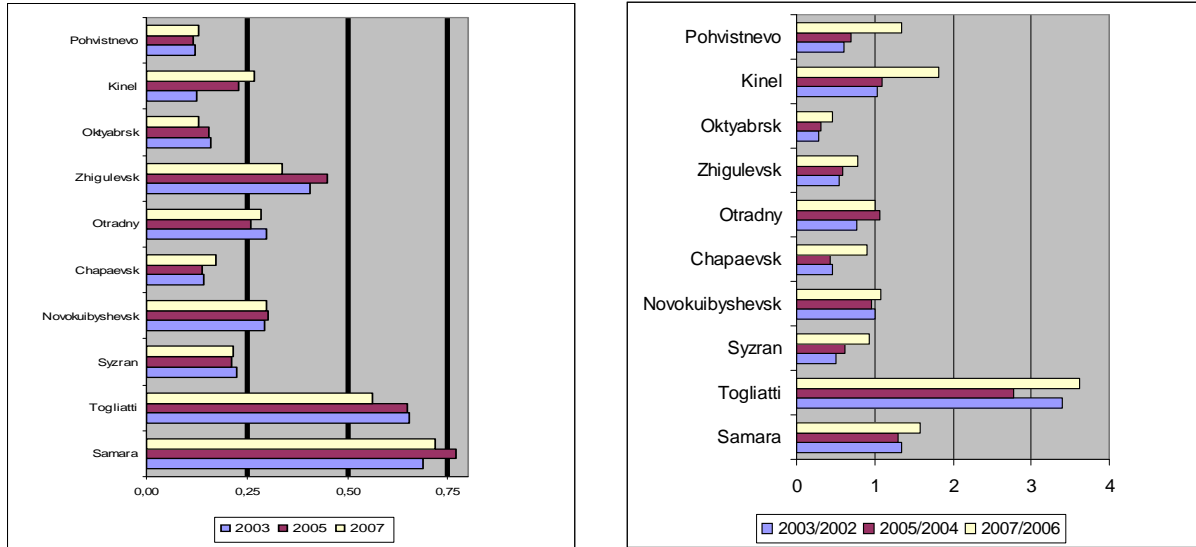


Fig. 2. The levels of competitiveness and the dynamics of development of the city districts of Samara region in 2003-2007

Table 4

Distribution of city districts according to the level of competitiveness and the dynamics of development in 2007

			The level of dynamic of development (Id)		
			1	2	3
			low $0 < Id < 1$	rather good $1 < Id < 1,5$	high $1,5 < Id < 4$
The level of competitiveness IKK	1	below average $0 < IKK < 0,25$	Syzran Chapaevsk Oktyabrsk	Pohvistnevo	
	2	average $0,25 < IKK < 0,5$	Zhigulevsk	Novokuibyshevsk Otradny	Kinel
	3	above average $0,5 < IKK < 1$			Samara Togliatti

Table 4 shows that positive dynamics of development doesn't always guarantee high level of competitiveness, and the rise in the level of competitiveness doesn't always improve economic and social situation of a municipal formation.

If the analysis is carried out properly, the competitiveness of the region should become the key concept for every municipal formation. The usage of objective advantages of the region stabilizes the formation of effective economy of a municipal formation and, consequently, the achievement of stable social progress.

*Pchelintseva J.* Competitiveness of municipal formation as an object of management of social-economic development of region. // Bulletin of Samara state economic university. Samara, 2008. № 6 (44).

*Uskova T.V., Baranov A.S.* The problems of estimation of competitiveness of regions // The questions of statistics. 2009. № 1.

*Smirnov V.V.* The theoretical aspects of analysis of competitiveness of region: preconditions, methods, estimation // Regional economics. 2008. № 5.

*Biyakov O.A.* The theory of economic space: methodological and regional aspects / edited by A.V. Dumin, Publishing house of Tomsk University, 2004.

*Surnina N.M.* Spatial economics: the problems of theory, methodology, practice. Ekaterinburg, 2003.

Received for publication on 17.06.2009