## QUALITATIVE AND QUANTITATIVE CHARACTERISTICS OF HUMAN POTENTIAL IN PRIVOLZHSKY FEDERAL DISTRICT

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**Key words**: human potential; human development; index of human development; material well-being; education; longevity; theory of human development; index of the fullness of the incidence by education; index of longevity; index of education.

The regularity of human potential development in Privolzhsky Federal District has been researched. The main trends of this process are presented. The characteristic of different measurement of human development is shown: education, material well-being and longevity. The detailed classification of Privolzhsky Federal District regions is given and their main types are defined according to the main indicator of human potential.

The territory from the Urals to the Central Volga is one of the most heterogeneous according to the level of economic development. Privolzhsky Federal District includes 14 subjects of Russian Federation including six republics and seven regions and also a newly grown Perm Kray (in 2005 Komi-Permiatsky Autonomous District was consolidated with Perm region). 21% of Russia's population and about 17% of total gross regional product falls to the share of Privolzhsky Federal District<sup>1</sup>.

Privolzhsky Federal District is polycentric unlike the Centre and North-West. Several regions are approximately equal according to the level of human development, economic weight and density of population. They compete for the leading position, although Nizhny Novgorod is considered to be the official capital of the county. The absence of the dominant economic and demographic centre is added by the absence of internal connection between the territory and transport network, as all the arterial roads are oriented toward Moscow.

According to per head gross regional product the subjects of Privolzhsky Federal District are divided into three groups. Tatarstan and Bashkortostan, Samara region and Perm Kray with per head gross regional product that is above the average in RF or close to it belong to the most developed republics. All these regions are industrial and multi-structured. The branches of export economy (oil and chemical economy mainly) with developed food industry and more problematic mechanical engineering are combined in these regions. Every region has a large city with almost a million-strong population, and Samara region has the third agglomeration of the country (Samarsko-Togliattinskaya)

according to the density of population. This factor creates additional benefits for the services sector development.

The second group of the regions belongs to the medium-developed ones. The structure of their economy is different. The structure in Nizhny Novgorod region and Udmurtia is mainly industrial with the big part of mechanical engineering and agro-industrial in more southern Orenburg and Saratov regions. These regions differ noticeably in the sphere of social problems.

The third group has a lower level of development. 40% of regions and a quarter of Privolzhsky Federal District population belong to it. Problems of these regions are caused by the structure of economy. Penza and Ulyanovsk regions specializing in mechanical engineering survived a dramatic fall in the 90s of the last century; basic branch remains noncompetitive. As a result, per head gross regional product is almost twice less than the average one in RF regions (with the cost of living correction). Depressive condition of mechanical engineering in northern Kirov region is added by the problems of a timber branch and poorly developed infrastructure. General development lag in such republics as Chuvashia, Mordovia and Mari El is aggravated by stagnation of labor-consuming mechanical engineering. Economic position in Chuvashia and Mordovia is a little bit better than in Mari El because of the better conditions for agriculture providing raw materials for local food industry.

Despite economic development lag almost all the problematic regions of Privolzhsky Federal District are close to medium-developed ones according to the level of human development.

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So, index of the human development of Privolzhsky Federal District regions in the researched period fluctuates from 0,7 to 0,8. Therefore, there are no regions with development lag in Privolzhsky Federal District.

According to the esteem of the authors of the U.N.O.'s National report about human development, index 0, 800 corresponds to the level of developed countries. Only one subject in Privolzhsky Federal District- Tatarstan Republic crossed this borderline in 1999. Although next year this index declined to 0,792 (table

El Republic) was 7,9 percent points. In 2004 it increased to 8,1 percent points. "Calculations made by the Independent Institution of Social Policy show that regional differences of components of index of the human potential development (such as gross regional product per head and life expectancy) increase during the period of economic growth. According to these components Russian regions have development lag in comparison with the developed countries of the world", says report about the development of human potential during 2007<sup>2</sup>. Inequality in economic and social

Table 1
Index of human potential development in Privolzhsky Federal District
in 2001-2004

Region	2001*	2002**	2003***	2004***
Bashkortostan Republic	0,772	0,774	0,783	0,786
Mari El Republic	0,713	0,720	0,730	0,731
Mordovia Republic	0,740	0,738	0,757	0,770
Tatarstan Republic	0,792	0,798	0,807	0,812
Udmurt Republic	0,754	0,762	0,766	0,766
Chuvash Republic	0,736	0,747	0,754	0,761
Kirov region	0,728	0,733	0,732	0,737
Nizhny Novgorod region	0,755	0,758	0,754	0,757
Orenburg region	0,751	0,758	0,763	0,778
Penza region	0,725	0,739	0,738	0,744
Perm region	0,757	0,755	0,755	0,760
Samara region	0,768	0,776	0,78	0,787
Saratov region	0,741	0,749	0,756	0,759
Ulyanovsk region	0,731	0,739	0,744	0,747

<sup>\*</sup> Report about Human Potential Development in Russian Federation in 2004/ Edited by S.N. Bobilyov. Moscow, 2004. P.99-101.

1). And only in 2003 index of the human potential development exceeded the figure of 0,800. A sharp differentiation of social-economic development in Privolzhsky Federal District regions led to the following situation: there are only three regions where index of the human potential development is higher than average figures in Russia (0,781 according to the data of 2004). These are Bashkortostan and Tatarstan Republics and Samara region.

Analysis of index of the human development (table 1) within the researched period (2001-2005) shows that regional differences in Privolzhsky Federal District increased.

In 2001 difference in the level of human potential development between the leading region (Tatarstan Republic) and the region-outsider (Mari development of Privolzhsky Federal District subjects gain strength in spite of the increased redistribution of budget resources of different levels. Consequently, effectiveness of redistribution policy declines and a slow improvement of social indicators in most of the regions denotes a low quality of economic growth.

The analysis of the dynamics of Privolzhs-ky Federal District indexes during the last 20-25 years is of primary importance for understanding the regularity and estimating the perspective of the human potential development there. Let's look at the indexes of the human potential development and their components during 1979, 1985, 1989, 1994, 2001 and 2004.

There are three time intervals in the shown period (picture 1).

<sup>\*\*</sup> Supplement to Report about Human Potential Development in Russian Federation in 2005. Russia in 2015: goals and priorities of development / Edited by professor S.N. Bobilyov, A.L. Alexandrova. Tver, 2005. P.25-26.

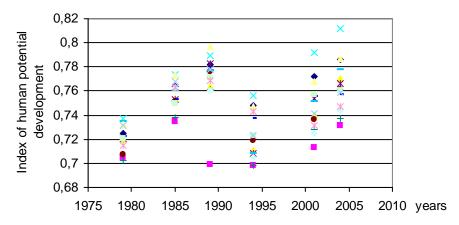
<sup>\*\*\*</sup> Report about Human Potential Development in Russian Federation in 2006/2007/Edited by professor S.N. Bobilyov, A.L. Alexandrova. Moscow, 2007. P.128-135.

Picture 1. Dynamics of the index of human potential development in the regions of Privolzhsky Federal District\*

- 1) 1979-1989 when there was a comparatively stable growth of index of the human potential development and of all its components;
- 2) 1989-1994 when there was a fall of the indexes of the longevity, material well-being, human potential development and just the index of education continued to rise;
- 3) 1994-2004 when a further increase of the index of education and a noticeable rise of the index of material well-being guaranteed the return of the growth tendency to the index of human potential development.

There were substantial changes in correlation of regional indexes of human potential development during the researched period. Regional differentiation was reduced in 1979-1990. After 1990s differentiation of index of human po-

tential development among the regions of Privolzhsky Federal District began a sharp increase (picture 2). So, in 1979 the highest figure of index of human development in Tatarstan Republic was just 3,5 percent points higher than the lowest figure in Kirov region. In 2001 this difference doubled making 8 percent points between the highest figure in Tatarstan Republic and the lowest one in Mari El Republic (table 2). These changes in the tendency of regional differentiation of index of human potential development in Privolzhsky Federal District can be counted as a result of unequal adaptation of the regions to the forming market conditions. It caused transition of regions to the groups of "leaders", "middle group" and "outsiders" according to the level of human potential development.



Picture 2. Dynamics and differentiation of the index of human potential development in the regions of Privolzhsky Federal District\*

<sup>\*</sup> Report about Human Potential Development in Russian Federation in 2004/ Edited by professor S.N. Bobilyov. Moscow, 2004. P.102-103

<sup>\*</sup> Report about Human Potential Development in Russian Federation in 2004/ Edited by professor S.N. Bobilyov. Moscow, 2004. P.102-103

In 1979-2004 the first three region-leaders underwent considerable changes. The regions that could support their high level of education with the high level material well-being got leading positions according to the index of human potential development in Privolzhsky Federal District. Nowadays such regions are those that fulfill the functions of a financial-industrial centre (Samara region), centre of oil extraction and refining (Bashkortostan Republic and Tatarstan Republic). The structure of regions-outsiders (the last three regions) was relatively stable during this period. As a rule Mari El Republic, Kirov and Penza regions belonged to this group (table 2).

the most perspective trends of Privolzhsky Federal District development - her head output of gross regional product. It means that production factor should be considered as the most meaningful curbing factor of human development potential in our region. The logic of esteem of the basic figures encourages to make such a conclusion. The change ranges from 0 to 1. And if the index of education is close to it to the maximum (0,919 according to the data of 2004 in Samara region) the index of income (0,765) and the index of longevity (0,678) are the most remote from the top value.

Although it is pleasant to mention the dynamics of the indexes data at the researched

Table 2
Index of human potential development in Privolzhsky Federal District\*

Region	Index of human potential development				Rank of the index of human potential development					
-	1979	1985	1989	1994	2001	1979	1985	1989	1994	2001
Republic Bashkortostan	0,725	0,764	0,782	0,748	0,772	37	18	15	5	6
Mari El Republic	0,705	0,735	0,699	0,698	0,713	65	69	73	51	65
Mordovia Republic	0,720	0,754	0,764	0,711	0,740	53	36	42	34	35
Tatarstan Republic	0,737	0,774	0,789	0,756	0,792	16	7	6	3	3
Udmurt Republic	0,721	0,753	0,783	0,708	0,754	46	39	13	40	19
Chuvash Republic	0,707	0,751	0,776	0,719	0,736	64	48	23	27	37
Kirov region	0,702	0,738	0,761	0,698	0,728	69	64	51	49	50
Nizhny Novgorod										
region	0,722	0,753	0,777	0,737	0,755	44	37	21	11	18
Orenburg region	0,735	0,760	0,777	0,708	0,751	17	23	20	39	21
Penza region	0,721	0,763	0,760	0,705	0,725	48	21	57	45	55
Perm region	0,721	0,750	0,771	0,723	0,757	47	50	31	21	15
Samara region	0,732	0,773	0,797	0,747	0,768	22	8	3	8	7
Saratov region	0,731	0,768	0,778	0,723	0,741	24	11	19	20	34
Ulyanovsk region	0,715	0,763	0,769	0,743	0,731	56	20	32	9	44

<sup>\*</sup> Source: Report about Human Potential Development in Russian Federation in 2004/ Edited by professor S.N. Bobilyov. Moscow, 2004. P.102-103

Within the period of 1979-2001 Perm region (+32 places), Bashkortostan Republic (+31 places) and Udmurt Republic (+30 place) achieved the biggest progress in the rank in the index of human potential development. The biggest regress in the size of the ranks was noticed in Saratov region (-10 places), Penza region (-7 places) and Orenburg region (-4 places).

A high and weakly-differentiated level of education is a distinguishing feature of both region-leaders and region-outsiders. As a rule this level exceeds the index of longevity and material well-being witnessing about the fact that education is a stable basis of human development. The highest lag was noticed at one of

period. Index of income in Samara region was 0,695 in 1997. This figure increased more than 10 percent points within 7 years (table 2).

According to the theory of human development<sup>3</sup> all the regions can be divided into four types of regions with different correlations between measurements of human development<sup>4</sup>. The first type is "education - material well-being - longevity" that became widespread only in 2001. In 2001 there were 7 of 14, i.e. precisely a half, whereas in 1997 there were no regions of such a type at all. Already in 2004 their number increased up to 10 regions of 14 what makes 72%. The second type is "education - longevity - material well-being". In 1997 such a type was the only one among the regions of

Table 3

## Esteem of basic figures in Privolzhsky Federal District

Conventional indications: 1 - index of income; 2 - index of longevity; 3 - index of education.

Privolzhsky FederalDistrict. In 2001 there was precisely a half of the regions of such a type and their number continued to reduce making 4 regions (Chuvash Republic, Penza region, Samara region and Ulyanovsk region) in 2004. At that two regions of four - Penza and Samara regions - came from the first type group. Two other type groups are "longevity - education - material well-being" and "material well-being - education - longevity". There were no regions belonging to these groups in Privolzhsky Federal District within the researched period.

Depending on the peculiarities of correlations between different measurements of human development such as index of longevity,

material well-being, incidence by education (precisely this component of education is used as the most liable to the changes under the influence of social programs) and the size of the index of human potential development, all the regions can be divided into 8 groups<sup>5</sup>.

- 1. Leading regions:
- ♦ 1<sup>st</sup> group (index of longevity 0,707; index of material well-being 0,862; index of the fullness of the incidence by education 1,000; index of human potential development 0,855) is characterized by a high income, the highest fullness of the incidence by education, comparatively high longevity (longevity is the priority trend of human development);

<sup>\*</sup> Report about Human Potential Development in Russian Federation in 1999 / Edited by professor U.F. Fyodorov. Moscow, 1999. P. 101-103.

<sup>\*\*</sup> Report about Human Potential Development in Russian Federation in 2004/ Edited by professor S.N. Bobilyov. Moscow, 2004. P.99-101.

<sup>\*\*\*</sup> Report about Human Potential Development in Russian Federation in 2006/2007 Edited by professor S.N. Bobilyov, A.L. Alexandrova. Moscow, 2007. P.128-135.

- ♦ 2d group (index of longevity 0,696; index of material well-being 0,955; index of the fullness of the incidence by education 0,693; index of human potential development 0,847) is characterized by the highest income in Russia, an average level of longevity and the incidence by education (priority trends are strengthening of the social direction of regional programs of development, education and longevity).
  - 2. Relatively successful regions:
- ♦ 3d group (index of longevity 0,672; index of material well-being 0,712; index of the fullness of the incidence by education 0,7; index of human potential development 0,759) is characterized by income and the fullness of the incidence by education that are above the average level, longevity below the average level (longevity is the priority trend);
- ♦ 4th group (index of longevity 0,732; index of material well-being 0,597; index of the fullness of the incidence by education 0,689; index of human potential development 0,738) is characterized by a high level of longevity for Russia, low level of income and the average level of the incidence by education (priority trend is the increase in income and the incidence by education).
  - 3. Depressive regions:
- ♦ 5<sup>th</sup> group (index of longevity 0,652; index of material well-being 0,637; index of the fullness of the incidence by education 0,658; index of human potential development 0,723) is characterized by the level of longevity, of the incidence of education and of income below the average level (priority trend is the increase in income);
- ♦ 6<sup>th</sup> group (index of longevity 0,638; index of material well-being 0,681; index of the fullness of the incidence by education 0,533; index of human potential development 0,719) is characterized by a low level of longevity, the average level of income and low fullness of the incidence by education (priority trend is the increase of longevity and the incidence by education, strengthening of social effectiveness of development programs).
  - 4. Crisis regions:
- ♦ 7th group (index of longevity 0,827; index of material well-being 0,455; index of the fullness of the incidence by education 0,452; index of human potential development 0,691) is characterized by the highest level of longevity in Russia, maximum level of income and the incidence of education (priority trend is the increase in income and the incidence of education);
- ♦ 8<sup>th</sup> group (index of longevity 0,342; index of material well-being 0,519; index of the fullness of the incidence by education 0,646;

index of human potential development - 0,579) is characterized by a minimum level of longevity in Russia, a very low level of income and the incidence of education below the average level (priority trend is the increase in income and longevity);

The regions of Privolzhsky Federal District are divided into three groups:

- 1) Bashkortostan Republic, Tatarstan Republic, Udmurt Republic, Nizhny Novgorod, Orenburg, Perm and Samara regions are relatively successful regions (3d group);
- 2) Mordovia Republic is a relatively successful region (4th group);
- 3) Mari El Republic, Chuvash Republic, Kirov, Penza, Saratov and Ulyanovsk regions are depressive regions (5<sup>th</sup> group).

The division into groups was carried out on the basis of klaster analysis results. The given distribution shows that all the regions of Privolzhsky Federal District have average social-economic development and the average level of human potential development.

The economic rise contributed and is still contributing to the growth of the index of human potential development in the overwhelming majority of Privolzhsky Federal District regions but with it all, the indexes of strong Privolzhsky Federal District subjects were improving faster than the majority of less developed ones. As a result it led to the growth of territorial inequality. Nowadays the development of practically all Privolzhsky Federal District regions is extremely accelerative and is based on the natural benefits (agglomerate effect and raw resources). Investment into human potential have a long-term character. Thus, the results from such investments don't have effect on the regions now. That is why they remain uncalled in our society. But there is no doubt that we need to understand their significance to make investments into human potential the most effective investments for our society in future.

<sup>&</sup>lt;sup>1</sup>Report about Human Potential Development in Russian Federation in 2006/2007/ Edited by professor S.N. Bobilyov, A.L. Alexandrova. Moscow, 2007. P.42

<sup>&</sup>lt;sup>2</sup> Report about Human... P.126

<sup>&</sup>lt;sup>3</sup> Fomenko E.V. Theory of Human Potential of a Region / / Vesntik of Samara State University of Economy. Samara, 2007. № 6(32). P. 187

<sup>&</sup>lt;sup>4</sup>Basis of Study of Human Potential / Edited by N.B. Barkalov, C.F. Ivanov. Moscow 1998. P.47-48

<sup>&</sup>lt;sup>5</sup> Report about Human Potential Development in Russian Federation in 2004. P.154