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THE IMPACT OF THE NON-PROFIT SECTOR ON THE SOCIO-ECONOMIC DEVELOPMENT OF THE REGION

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Abstract:
The inter-sectoral interaction plays an increasingly important role in the regional socio-economic development. The socially important issues are solved through the constructive partnership between the authorities, business and non-profit organizations, the infrastructure development of regions and municipalities is being carried out, the investment climate is being improved and various innovative projects are being implemented, as well as the new products, services and technologies are being created, and the level and quality of life of the population is being increased. The inter-sectoral cooperation presupposes various forms of partnership between two or three major sectors of the economy. In this regard, we can talk about the public-private and private-public partnerships, or about the inter-sectoral interaction involving all sectors, which can give the greatest effect in comparison with other options. The article considers the issues related to the impact of non-profit sector on the social and economic development of the region. We selected five subjects of Russia for the analysis: Krasnodar Krai, Republic of Tatarstan, Sverdlovsk Region, Irkutsk Region and Novgorod Region. We identified the main indicators of the non-profit sector development and analyzed the degree of influence of individual indicators on the level of the gross regional product on the basis of correlation-regression analysis. We have proved that the financial sustainability of the non-profit sector positively affects the overall level of the region's development. After the analysis, we offered recommendations to strengthen the positions of regional non-profit organizations.
Key words: *non-profit sector, non-profit organization, socio-economic development of the region*

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INTRODUCTION:

The non-profit organizations play an important role in the economic, social, political life of the society. The sector of non-profit organizations is the seventh largest economy in the world, behind France and the UK, and is ahead of such countries as Italy, Brazil, Russia, Spain and Canada. This is a large employer, involving about 40 million people around the world, and almost half of them are volunteering as volunteers. The non-profit organizations work in different spheres: education, health, science, culture, environmental and human rights activities, work with socially vulnerable categories of residents, etc. [9]

The non-profit organizations are the suppliers and producers of socially-significant services, have the ability to respond quickly to various social problems and the population needs, reflect the interests of various groups and strata. They can work under the order of the state or municipal authorities, as well as contribute to increasing the efficiency of the work of various state structures through the mechanisms of public control.

METHODS:

The growing role of non-profit organizations in the modern world is the subject of research by the scientists from different countries. A number of authors are studying the role of non-profit, non-governmental organizations in the fight against poverty [8].

Other authors focus on the problems of corporate social responsibility, which is often manifested in the fact that the corporations create the non-profit organizations for solving social, economic, environmental problems of the local community [2, 6, 7].

Bezerra, C.M.M., Araujo, D.R.B., Macario, V. study the effectiveness of the distribution and use of volunteer work using the example of Brazilian non-governmental organizations in their works [1].

There are also interesting works that describe the practice of NGOs on working with children and young people, for example, Mozgaleva, P., Zamyatina, O., Starodubtseva, D., Mozgaleva, A. reveal the technologies for attracting children to training their professional activities in school in their works, which makes it possible to increase the efficiency of training specialists for the real sector of economy [4].

There are a number of works that describe the mechanisms for increasing the publicity and openness of non-profit organizations [3, 5, 10].

As part of this study, we analyzed the impact of the non-profit organizations sector on the socio-economic development of a number of regions of the Russian Federation. For the analysis, we took five regions of the Russian Federation with a level of socio-economic development above the average and with a developed non-profit sector.

RESULTS:

To begin with, we can assess the real assistance provided by the non-profit organizations to residents of the analyzed regions.

Table 1: Number of people assisted by the non-profit organizations [11]

Number of people provided with social services				
	Republic of Tatarstan	Novgorod Region	Irkutsk Region	Sverdlovsk Region	Krasnodar Krai
2014	482,966	158,363	109,986	853,126	341,792
2015	695,570	35,946	188,457	616,132	172,370
2016	646,231	44,750	184,032	877,978	594,894
Number of people who received charitable assistance in cash				
	Republic of Tatarstan	Novgorod Region	Irkutsk Region	Sverdlovsk Region	Krasnodar Krai
2014	138,581	9,725	56,290	172,679	46,292
2015	61,316	9,625	29,208	58,962	39,108
					Continue....

2016	75,654	12,709	32,420	255,862	93,961
Number of people who received charitable assistance in kind					
2014	216,143	6,635	89,419	657,455	80,028
2015	71,758	6,216	44,400	605,452	49,797
2016	97,842	11,922	44,599	850,729	174,187
Number of people who received legal aid on a grant or on a preferential basis					
2014	6,461	4,174	6,155	73,795	37,912
2015	7,476	6,866	14,967	67,047	57,092
2016	15,670	7,619	23,827	833,178	87,335

The data presented indicate that the number of recipients of various kinds of assistance from the non-profit organizations is increasing every year. And this happens in all regions. This suggests that the NGOs activities are in demand and needed by the population. The Sverdlovsk Region ranks first in providing assistance to the third sector of the population, the last place is taken by the Novgorod Region.

It was put forward a hypothesis regarding the dependence of the level of socio-economic development on the availability of a developed sector of NGOs in the territory. To prove or disprove it, it was drawn up an equation of multiple regression showing how the development indicators of NGOs affect the GRP of the subjects of the Russian Federation.

The multiple regression equation has the following form:

$$Y = b_0 + b_1 x_1 + b_2 x_2 + b_3 x_3 + \cdots + b_n x_n$$

The regional GRP per year was taken as a dependent variable (Y), million roubles. The dependent variables included the indicators of the non-profit sector development level, namely, the total number of registered NGOs at the end of the year, units (X1); total amount of subsidies provided from the budget of the subject of the Russian Federation, thousand roubles (X2); number of NGOs receiving donations and grants (X3); income from the target capital, thousand roubles (X4); receipts from the foreign states, international and foreign organizations, thousand roubles (X5).

DISCUSSIONS:

For the analysis, we took five regions of the Russian Federation with a development level above the average.

1) Republic of Tatarstan

Table 2: Development indicators of non-profit organizations in Tatarstan.

Year	Y	x1	x2	x3	x4	x5
2010	105,343.8	5,839	51,192.3	287	25,974.0	13,265.0
2011	1,305,947.0	5,628	134,846.2	314	4,513.0	12,436.0
2012	1,437,001.0	5,595	229,767.0	378	6,771.0	39,932.0
2013	1,551,472.1	5,398	547,926.4	460	4,425.0	27,697.0
2014	1,671,397.1	5,486	922,592.6	549	5,312.0	45,103.0
2015	1,788,394.9	5,541	1,568,407.5	653	6,347.0	72,164.8

In order to make correct conclusions based on the analysis results, it is necessary to make a test for multicollinearity in order to avoid the presence of factors that can distort the real picture and lead to incorrect conclusions.

The test for multicollinearity was carried out using the Student's criteria. After testing for multicollinearity, we left the factors with the largest value in pair correlation, namely x_1 and x_4.

Thus, the regression equation has the following form:
$$Y = 7923415.63 - 1102.3X_1 - 51.97X_2$$

The determination ratio is as follows in this case:
$$R^2 = 0.956^2 = 0.914.$$
Thus, the variance of resultant trait is explained by the regression equation by 91.4%.

It can be concluded that the indicators of the development of non-profit organizations in Tatarstan affect the economic development to a large extent.

And we created the regression equations for the remaining subjects in the same way.

2) Novgorod Region

Table 3: Development indicators of non-profit organizations in the Novgorod Region.

Year	Y	*X1*	*X2*	*X3*	*x4*	*X5*
2010	127,407.8	1,007	10,555,000.0	98	423	12,436
2011	153,419.7	912	10,555,000.0	103	547	16,752
2012	170,605.7	852	18,729,000.0	117	680	15,244
2013	177,930.1	900	15,632,000.0	416	780	15,372
2014	205,930.1	892	7,450,000.0	131	762	13,885
2015	236,819.6	803	3,725,000.0	236	686	12,496.5

After testing for multicollinearity, we left the factor x_1.
Then the regression equation is as follows: $Y = 613132.93 - 485.79X_1$
Determination ratio: $R^2 = 0.856^2 = 0.733$

In this case, the relationship between the regional GRP and the development indicators of the NGOs is 73.3%.

3) *Irkutsk Region*

Table 4: Development indicators of non-profit organizations in the Irkutsk Region.

Year	*Y*	*x1*	*x2*	*x3*	*x4*	*x5*
2010	546,141.0	3,387.0	15,345,283.0	71.0	4,523.0	3,250.0
2011	634,561.4	3,049.0	20,511,403.6	65.0	2,143.0	12,305.0
2012	737,971.6	2,969.0	60,836,323.0	80.0	6,483.0	152,756.0
2013	805,197.5	2,908.0	25,349,000.0	147.0	1,638.0	190,624.0
2014	907,400.8	2,984.0	26,285,000.0	238.0	4,805.0	9,508.0
2015	998,140.9	3,043.0	27,073,550.0	380.0	3,844.0	3,803.2

After testing for multicollinearity, we came to the conclusion that when creating a regression equation, it is necessary to select the factor x_3.

Regression equation: $Y = 570627 + 1228X_1$

Determination ratio: $R^2 = 0.911^2 = 0.829$, that is by 82.9% the variance of resultant trait is explained by the regression equation. The economy development in the region is significantly affected by the number of NGOs, having received donations and grants.

4)   Sverdlovsk Region

Table 5: Development indicators of non-profit organizations in the Sverdlovsk Region.

Year	Y	x1	x2	x3	x4	x5
2010	1,046,600.1	7,499	16,838,000.0	1,923	998	356,279
2011	1,291,019.1	7,402	902,080,000.0	2,065	1,245	445,163
2012	1,484,879	7,011	1,326,907,000.0	2,127	1,293	652,145
2013	1,586,555.7	6,860	131,587,716.0	2,451	23,290	992,826
2014	1,661,431	6,634	145,836,721.0	2,859	25,346	641,781
2015	1,727,888.24	6,368.64	160,420,393.1	3,316.44	27,373.68	684,215

In this case we left such factors as x_1, x_3, x_4

The regression equation took the form of: $Y = 7810858.23 - 818.56X_1 - 271.56X_2 + 2.01X_3$
Determination ratio is equal to: $R^2 = 0.966^2 = 0.933$, that is by 93.3% the variance of resultant trait is explained by the regression equation.

5)   *Krasnodar Krai*

Table 6: Development indicators of non-profit organizations in the Krasnodar Krai.

Year	Y	x1	x2	x3	x4	x5
2010	1,028,308.4	6,816	640,395,000.0	135	41,236	426,421
2011	1,244,652.8	6,797	1,686,159,946.7	244	45,836	545,326
2012	1,459,490.8	6,942	1,536,251,661.1	211	9,496	1,464,444
2013	1,662,969.1	6,955	2,268,696,192.5	978	48,482	1,234,687
2014	1,792,048.2	6,706	74,475,000.0	532	44,695	8,244
2015	1,917,491.6	6,035.4	71,496,000.0	629	49,997	92,415

After testing for multicollinearity, we selected such factors as x_1, x_3.

Regression equation: $Y = 1307576.86 + 523.46 + 899.55X_1$

Determination ratio:
$R^2 = 0.962^2 = 0.925$, that is by 92.5% the variance of resultant trait is explained by the regression equation.

SUMMARY:
The above analysis made it possible to conclude that the total number of non-commercial organizations, the number of non-profit organizations that receive donations and grants from various structures, and the income from the target capital of NGOs could be considered as factors that had a greater impact on regional development.
In all regions, the development level of the non-profit sector is affecting the level of economic development

of the subject. However, the degree of this influence is not the same. The greatest dependence was revealed in the Sverdlovsk Region - 93.3%. Krasnodar Krai takes the second place - 92.5%; the Republic of Tatarstan shows close connection of 91.4%, the Irkutsk Region - 82.9%. And the Novgorod Region closes the top five regions with the value of 73.3%.

CONCLUSION:
The regression analysis conducted enabled to confirm the hypothesis of influence of some development indicators of the regional non-profit sector on the socio-economic state of this region. The state policy aimed at developing the public-private partnership mechanisms should be aimed at creating conditions for increasing the total number of active non-profit organizations in the region, as well as for increasing the financial sustainability of existing NGOs through more efficient use of own and attracted funds.

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