

Dynamics of Development of Investment Processes in Belgorod Region

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Abstract

The present paper investigated results of an analysis of dynamics of changes in the investment structure of Belgorod region on the basis of private and integral indices characterizing the dynamics of structural changes. Structural changes in Belgorod region concerning investment capital were different from corresponding calculated figures in the Central Federal District. The revealed differences characterized features of the development in the investment processes and indicated changes in priorities of those investing in the economy of this region.

Keywords: investment processes; Investment dynamics; Structural changes.



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1. Introduction

The investment process is a mental framework that recognizes the implications of professional money management to answer these questions: When to buy or sell? What to buy or sell? How much to buy or sell? And why to buy or sell? The process of investment always starts with the investor and understanding his/her needs and preferences. For a portfolio manager, the investor is a client, and the first and often most significant part of the investment process is understanding the client's needs, the client's tax status and most importantly, his/her risk preferences. For an individual investor constructing his/her own portfolio, this may seem simpler, but understanding one's own needs and preferences is just as important a first step as it is for the portfolio manager. The next part of the process is the actual construction of the portfolio, which we divide into three sub-parts. The first of these is the decision on how to allocate the portfolio across different asset classes defined broadly as equities, fixed income securities and real assets. This asset allocation decision can also be framed in terms of investments in domestic assets versus foreign assets, and the factors driving this decision. The second component is the asset selection decision, where individual assets are picked within each asset class to make up the portfolio. In practical terms, this is the step where the stocks that make up the equity component, the bonds that make up the fixed income component and the real assets that make up the real asset component are picked. The final component is execution, where the portfolio is actually put together, where investors have to trade off transactions cost against transactions speed. While the importance of execution will vary across investment strategies, there are many investors who have failed at this stage in the process. The final part of the process, and often the most painful one for professional money managers, is the performance evaluation. Investing is after all focused on one objective and one objective alone, which is to make the most money you can, given the risk constraints you operate under.

The investment climate formation within the framework of the implemented investment policy of countries and regions affecting the development of investment processes, in theory and practice of state regulation of the economy is associated with actions aimed at their respective organization (Adamowicz, 2016); (Afonso and Fernandes, 2006) (Balaguer-Coll and Prior, 2009); (European Commission, 2012); (Geys and Moesen, 2009). The generally accepted approach to the study of the intensity of investment processes is related to the study of the dynamics of investment volumes, the directions, and the evaluation of investment efficiency. However, such an approach does not allow for a comprehensive study of the consequences of the investment policy being pursued, therefore, this study applies an approach to evaluate structural changes in investment sources, identify the development features of investment processes within the subject of the Russian Federation, and identify the main problems in this area of activity of the territorial administration bodies (Gralak, 2015); (Szlezak and Bojar, 2013).

1.1. Conditions and Methods of Research

The financial dictionary explains the concept of “investment climate” as a combination of socio-economic, political and financial factors that determine the degree of attractiveness of the investment market and the amount of investment risk (Panova, 2002).

The development of investment processes provides the possibility of investing in fixed assets, while investors can act as a state, regions, municipalities, and Russian and foreign private companies. An increase in participants in the investment process contributes to the reduction in the level of risk of each one (Faraji *et al.*, 2018).

In accordance with the Russian legislation, the investment is possible from sources of various forms of ownership. The most common approach involves the allocation of the following groups by forms of ownership: private, public, foreign and mixed (joint) investment (Kiseleva *et al.*, 2005); (Igonina, 2005). The dual name of the fourth group (mixed or joint) is associated, according to the author, with the fact that the Russian statistical service identifies both joint and mixed forms of ownership (Villalobos Antúnez, 2003).

A study was conducted to assess changes in the investment structure of Belgorod region in the form of ownership over five years covering the period of 2010-2014. Years are chosen subject to the pre-crisis period. The statistical reporting of the Russian Federation, associated with the reflection of the movement of investment, characterizes the distribution of investment in fixed assets in the field of state, municipal, private, and mixed Russian ownership. The rest of the investment in the study is considered as other investments that potentially include foreign investment, investment of public associations, and a mixed form of investment with foreign participation (Stat and Rosstat, 2016).

The study used an index method for analyzing structures, and partial and integral indices of structural changes were calculated. As particular indices, the following are taken: the mass, speed, intensity, direction, measure of monotony of structural changes; integral indices are the coefficient of structural activity (Cuentas *et al.*, 2017).

1.2. Main Sections

A rather developed number of indices is due to the task of performing a complete structural analysis using absolute, relative and integral index, (Krasilnikov, 2000); (Eliseeva, 2004); (Vatiukova, 2016); (Abuziarova, 2011). To identify specifics of the development of investment processes occurring in Belgorod region, calculations of private indices are duplicated within the Central Federal District and the Russian Federation in general, and relative and integral - in the CFD (Sukharev, 2012); (Sukharev, 2015); (Samonova, 2014); (Kharin and Maliugin, 2000) (Shevchenko and Razvadovskaia, 2013).

Table-1. Calculation of the mass of structural shifts in investments within the framework of property forms in Belgorod region for 2010-2014, million rubles

Years	Type of investments				
	State	Municipal	Private	Mixed Russian	Others
2010-2011	-965365	-115756	-1362773	-385492	-138714
2011-2012	151904.2	12506.6	-1136977	-69977.2	-40056.2
2012-2013	633629	64774	312815	-271273	1554.5
2013-2014	425432	28844.8	-6573.1	310189.8	143506.5

The mass of the structural shift, as one of the particular indices, is calculated in terms of values. This index is determined by the number of economic elements that make up the structural shift (Table 1).

Results of analysis indicate that the mass of the structural shift is negative in all forms of ownership in the initial period; positive in the next interval within the state and municipal sources of investment and negative for the rest. In subsequent periods, the negative mass was noted only in the mixed Russian ownership.

The rate of structural changes, reflecting the dynamics over time, was calculated over a five-year period in monetary terms. This index is also absolute. The highest rate of structural shifts was noted in the framework of private investments (563.8 billion rubles), followed by state (435.3 billion rubles) and mixed with Russian participation (207.4 billion rubles). The rate of structural shifts in municipal and other investments is significantly lower. Table 2 presents the calculations.

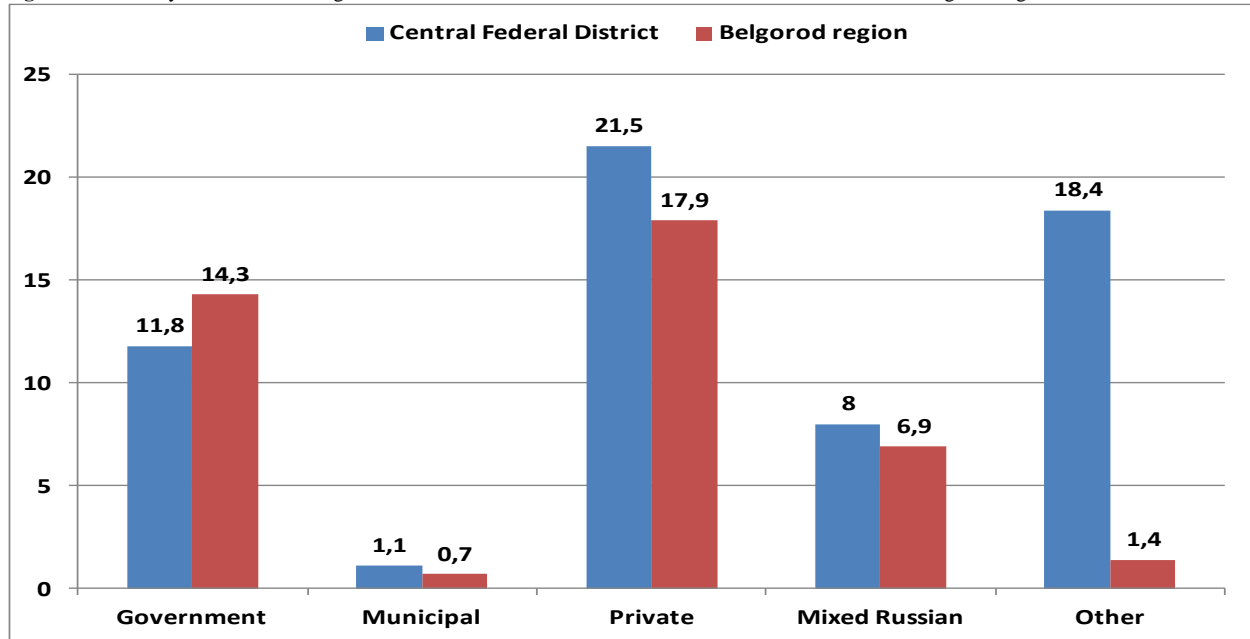
Table -2. Calculation of the rate of structural shifts in investments by forms of investments made in Belgorod region for 2010-2014, million rubles

Subject	Type of investments				
	State	Municipal	Private	Mixed Russian	Others
Russian Federation	23364536	4571624	52662129	22379206	16653522
Central Federal District	11841331	1276226	12548271	3628580	12415582
Belgorod region	435266.1	44376.26	563827.7	207386.4	64766.16

The intensity of structural changes characterizes the degree of change in the mass of a structural shift and is a relative index, calculated on average for the considered period. The calculation results presented in Figure 1 show that the intensity of structural changes in Belgorod region reaches almost 18% in private investment, 3.6% less in

public investment. According to the mixed Russian form of ownership, the intensity of structural changes is almost 7%, while for the other forms of ownership, the indices fluctuate around 1%.

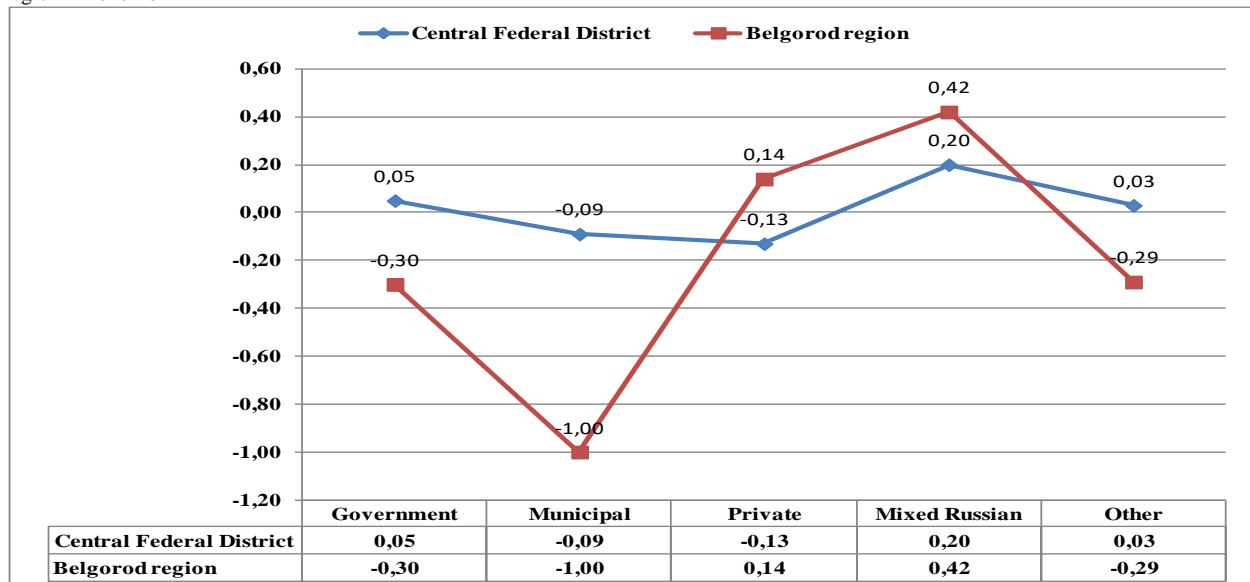
Figure -1. Intensity of structural changes in investments in the context of the Central Federal District and Belgorod region in 2010-2014.



Similar indices for the whole CFD make it possible to draw conclusions that are significantly higher (by 17%) than the intensity of structural shifts in other forms of investment, and it is not surprising since their significant part belongs to foreign and mixed with foreign investments. This is due to the fact that there are regions in which the investment attractiveness is much higher in the Russian Federation than Belgorod region. The intensity of shifts by 3.6% is higher in private investments, and by 1.1% in mixed Russian investments. The excess of this index in Belgorod region compared to the Central Federal District is observed in public investment.

The direction of structural changes, which characterizes their monotony and nature, is a very important index for analyzing the development of investment processes. Figure 2 shows results of calculations of this index in the context of Belgorod region and the Central Federal District.

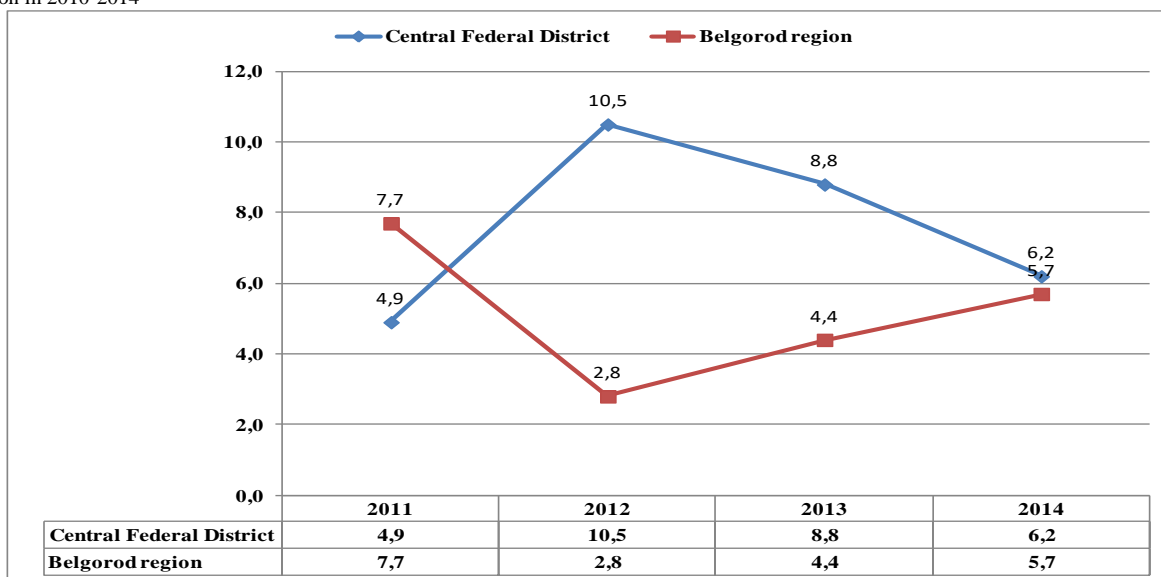
Figure-2. Directions of structural changes in investments by forms of ownership in the context of the Central Federal District and Belgorod region in 2010-2014



The regressive nature of the direction of structural changes in Belgorod region is marked by state, municipal and other (foreign) investments. Progressive nature is observed in private and mixed Russian types of investments, while the absolute values of the index under consideration for mixed investments are almost three times higher. A comparison of indexes with data from the Central Federal District allows us to note general trends in the regressive nature of movement of municipal investments although in absolute values these indices are hardly comparable (-1 and -0.09 respectively). The analysis shows a significant reduction in municipal investment in Belgorod region. The outlined features of the structural shifts in municipal investments in Belgorod region, which stand out sharply among the other subjects of the Russian Federation in the Central Federal District (the same index is only in the Kursk

region), are explained by the fact that the specialization of the administrative districts of Belgorod region is mainly agricultural, which is accompanied by a low level of tax levies, the predominance of the subsidized formation of local budgets.

Figure-3. The coefficient of structural activity of investments by forms of ownership in the context of the Central Federal District and Belgorod region in 2010-2014



The general trend of structures in terms of intensity nature of structural shifts is the progressive nature of mixed Russian investments. Similarly, indices of Belgorod region are twice as high as in the Central Federal District in general.

The integral index of structural changes - the coefficient of the structural activity of investments, reflecting the nature of investment flows in the context of ownership forms, shows the propensity of movement of the analyzed structure (Fig. 3).

The activity coefficient was determined for 2010-2014 and for the entire period on average. It is calculated as the half-sum of structural shifts, taken modulo.

The highest activity coefficient in Belgorod region was observed in the first interval (7.7%), and there was then a sharp decline, gradually leveling, but not reaching the initial level. In general, the reverse trend is observed in the Central Federal District: the largest coefficient is recorded in the second period accompanied by a gradual decline.

The coefficient of activity of structural shifts in Belgorod region in the analyzed period is lower on average than in the Central Federal District.

2. Summary

The conducted research on the development of investment processes by means of the analysis of investment structure by forms of ownership in Belgorod region allows us to draw the following conclusions:

- The greatest positive mass of the structural shift in public investment was observed in the range of 2012-2013; and there was a decline by 33%. In the last interval, there was a significant growth in the mass of other investments, which increased 95 times over the previous period;

- Belgorod region occupies a leading position among the subjects of the Central Federal District in the rate of structural changes. The rate of structural changes is higher only in the Moscow and Voronezh regions. In terms of private investment, the leaders are the Moscow and Voronezh regions, while Belgorod region is in the top ten in this index;

- Analysis of the intensity of structural changes in the context of the Central Federal District showed the need to increase the share of private investment; but special attention should be paid to attracting foreign investors, as evidenced by the need to expand the share of both foreign and mixed investment with foreign participation;

- The lowest average coefficient of structural activity for the analyzed period among subjects of the Central Federal District in Belgorod region shows a fairly stable structure of investments within the framework of ownership, and thus the structure of investment is quite stable with no abrupt changes. This characterizes the progressive implementation of an investment policy for Belgorod region.

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