

European Research Studies Journal
Volume XXI, Issue 2, 2018

pp. 476-488

Investment Instruments to Stimulate Depressed Regions' Development

Yu.P. Maidanevych¹, T.S. Romanishina², L.E. Rysakova³,
N.G. Bondarenko⁴, O.V. Mihailuk⁵

Abstract:

There are a number of problems of regional development, including those that impress most of all – the growing differentiation and polarization of the regions' development. It caused the emergence of so called depressed territories with the level of social and economic development being the lowest among the territories of this type. In this context, it is quite urgent to stimulate the development of depressed territories, in particular, the development and efficient use of investment instruments in this process.

This research aims at stipulating investment instruments to support the development of depressed regions. The article considers theoretical grounds of the emergence and functioning of depressed regions, foreign experience on financial support for the depressed territories' development.

Based on experts' survey, investment instruments to support the development of depressed regions are stipulated, peculiarities of forming priorities of developing depressed regions are specified, an algorithm for selecting top priority areas for economic activity in the depressed region is offered, a generalized system of financial instruments to stimulate the development of priorities for sustainable development of the depressed region is given, and consequences of applying them in the region are characterized.

Keywords: Investments, depressed region, depressed territories, investment instruments, development priorities, financial instruments, funding sources.

JEL Classification: E20, E22.

¹V.I. Vernadsky Crimean Federal University, maidanevich@rambler.ru

²Federal state budgetary educational institution of higher professional education "Moscow aviation Institute (national research University)", romanishina-t@rambler.ru

³St. Petersburg State University, spbu@spbu.ru

⁴North Caucasus Federal University, 425257@mail.ru

⁵Federal State Budgetary Educational Institution of Higher Education "State University", ova@inbox.ru

1. Introduction

Sustainable social and economic development of a region is the key to the economic growth of the state as a whole. Maintaining the economic development at a progressive level requires relevant financial support which directly depends on the comprehensive formation and efficient implementation of the state investment policy. The use of its levers makes it possible to attract additional investments to ensure innovative development of the region's economy, to stimulate the maximum use of the natural resources' potential, to balance financing of strategically important investment projects, to minimize the impact of negative phenomena on the environment, and to raise the level of the country's investment attractiveness.

Works of foreign and national researchers mainly focus on researching theoretical basics of investing and determining the structure of sources to financially support the investment development. Mitra and Gassen (1981) defined investments as the ability of a certain amount of money to get a larger amount in the future. It is possible to see that in this definition the authors emphasize two important points: 1) the trade carried out at this moment should aim at a future profit, 2) the purpose of investments is to obtain more funds in the future as compared to the starting capital. Stiglitz and Walsh (2006) claimed that the increase in investments in the modernization of the economy should stimulate the economic activity and job creation. Internal investments the volume of which can be increased due to high tax rates for the wealthy strata of the population, can generate a financial fund to meet the state's needs in investments and ensure social protection for the underprivileged layers of the population including the unemployed ones (Stiglitz and Walsh 2006).

Markusen and Venaables (1999) summarized that the sustainability of the investment development in Europe is related to simple principles of functioning of the investments aiming mainly at increasing the initial capital and meeting the investors' needs. Consequently, the positive social development of the country depends on the efficiency of capturing and using investments by promising investors.

However, strengthening of interregional imbalances and the lack of balanced state financial support cause social and economic tension. It is obvious that depressed regions cannot overcome this state without forming and implementing effective measures of budgetary regulation aimed at stimulating and supporting their development. We interpret the depressed region as a region where negative development of social and economic components is characterized by such features as duration, systemic nature, complexity, scale, multidimensionality, depth of negative phenomena, dynamics of growth, insolvency of the region to overcome stagnation processes and, consequently, social and economic danger occurring in the region.

Cowell (2005) gave a comprehensive classification of depressed territories. Its determining factor is the genesis of depression. By genesis, they can be classified into:

- ✓ Cyclically depressed (occurrence of downward trends of development, gradual degradation of the region);
- ✓ Structurally depressed (different quantity and scale of innovations and uneven deterioration of fixed assets, depletion of resources as a result of uncoordinated development and degradation of regions);
- ✓ Functionally depressed (physical and moral deterioration of fixed assets in monofunctional regions, reduction of demand for products of this industry, loss of social functions in this region, and depletion of resources);
- ✓ Rapidly depressed (natural cataclysms, explosive, chemical, radiation hazardous enterprises in the regions and sudden disruption of their functioning as a result of accidents and disasters, social explosions).

Bradley *et al.* (2015) studied the scale and depth of the regional depression dependent on the structure of the national economy types where the crisis became the main cause of the depression spread to the entire economy of the region. By this feature, depressed regions are divided into:

- ✓ Old industrial (loss of leading positions due to the contradictions between the scientific and technical progressiveness of the industry structure and its market efficiency);
- ✓ Agrarian and industrial (depopulation, high share of agricultural employment, low level of the population's income);
- ✓ Extractive (extraction of minerals from exhausted deposits, production characterized by high energy intensity and material consumption based on obsolete technologies).

Most depressed regions are old-industrial that had formed their structure by the 1960s-1970s (Armstrong 2010). Their development is associated with a cyclical nature when in the regions specializing in the dominant branches of the previous cycle each new cycle leads to depression. The region cannot stop the decline in the industry indices under a rapid change of factors that are determined by the allocation of productive forces. Structural changes are characterized by a long depressive period and severe social and economic consequences.

In the agrarian-industrial depressed regions, the share of the rural population prevails, there are no urban agglomerations, and the infrastructure and fixed assets are underdeveloped.

Depressed mining regions are found in mining and forestry zones located in sparsely populated areas of the country (Dunford 2013). These are regions that have problems that must be immediately solved, i.e. creation of alternative industries, the

need to support the infrastructure functioning, and the organization of excess population's resettlement.

By the degree of depressiveness, Petrosyants (2005) singles out regions with stagnant (stagnation in production, areas of the economic activity, the region loses its developmental positions, and is doomed to a crisis) and growing depression (a galloping decline in production, business activity and rapid growth of unemployment). At the same time, the main factors that cause the emergence and development of crisis situations include:

- ✓ Low competitiveness of the region (production decline and loss of internal and external markets, destruction of the production and technical potential, loss of food independence);
- ✓ High material consumption of production;
- ✓ Low level of financial resources;
- ✓ Broad stratum of the population below the poverty line (high unemployment in the region, weakening of labor motivation, the growth of economic criminality);
- ✓ Lack of natural resources and unsatisfactory climatic conditions;
- ✓ Unfavorable ecological situation and environmental pollution.

Thus, we have identified characteristics of depressiveness (reduction or suspension of growth in gross regional product, lack of expanded reproduction of resources, high unemployment, low income of the population, decline of competitiveness and investment attractiveness of the territory), and systemized classifications of types of depressed regions. It means that it is possible to state that depressed territories are such territorial entities where due to economic, political, social and environmental reasons, the conditions and incentives for development do not function any more. They cannot independently resolve depressive situations and require extraordinary support purposely provided from outside.

The results of foreign researches confirm that such regions not only lag behind in their social and economic development, but they are also a center of strengthening social tension and transfer to the state of social and economic danger (Scott 2013; Lengyel 2014) National researchers also support the same idea (Mansurov and Mansurova 2012; Bitarov 2013; Bibarsov *et al.*, 2017; Dzhukha *et al.*, 2017). This category may include a territory that has lost its development sustainability (worsening of financial, social and demographic, infrastructure, environmental components) and is characterized by a long crisis.

2. Methods

The purpose of this research is to stipulate investment instruments to stimulate the development of depressed regions. To achieve this goal, the expert survey of 44 entrepreneurs and representatives of regional and municipal authorities was conducted in the practical part of the research.

Previously, the experts were given a case-study of a certain single-industry city with a list of the existing problems and implemented state policy in relation to single-industry cities.

2.1 Case Study: Kirovsk, Murmansk Region

The city of Kirovsk is the second largest mono-city in the Murmansk Region in terms of population (26.7 thousand people in 2017). Its population has declined almost 2 times since the early 1990s. The city was founded in the summer of 1929 during the industrialization period when developing the Khibiny deposits of apatite-nepheline ores. The extraction and primary processing of the ore were carried out by the state Apatit trust (today it is OJSC Apatit, which is a part of the PhosAgro holding) that became the city-forming enterprise. In the autumn of 1931 it became the city under the district's jurisdiction and was named Khibinogorsk (today's Kirovsk).

In 2010, a comprehensive investment plan (CIP), one of the first in the Murmansk Region, was developed for the monocity of Kirovsk. It aimed at the city modernization and was submitted to the Ministry of Regional Development of the Russian Federation. However, its implementation was not supported on the federal level. At that time, the main area of Kirovsk's economic diversification was the development of the tourism industry, which was due to good prerequisites for the development of tourism associated primarily with the existing ski resorts that had been popular since the USSR period. Their modernization, increase in capacity, the creation of modern infrastructure, as well as the development of all-season tourism could provide a serious impetus to sustainable social and economic development.

When implementing a number of CIP projects in Kirovsk, significant progress was made even without the federal support. Thus, in 2015 with the help of the Government of the region and OJSC Apatit, OJSC Cableway was created that constructed a ski lift on the city territory. Therefore, it was the city-forming enterprise that became one of the locomotives of the urban diversification at that time.

Nevertheless, along with certain success, the city of Kirovsk has got new problems associated with the OJSC Apatit reorganization program being implemented since the spring of 2013. According to it, 2,420 employees of the enterprise were to be fired. Due to this, in 2014 Kirovsk was included in the list of monocities of the Russian Federation with the most difficult social and economic situation.

On June 22, 2015, the Government of the Russian Federation adopted Resolution No. 614 "On Peculiarities of Creating Territories for Advanced Social and Economic Development in Monoprofile Municipal Formations of the Russian Federation (Monocities)". According to it, it was possible to create territories for advanced development in monocities.

According to Decree No. 264 “On Creating the Kirovsk Territory of Advanced Social and Economic Development” dated March 6, 2017, they created the Kirovsk territory of the advanced social and economic development (hereinafter referred to as TAD Kirovsk) on the territory of Kirovsk with the territory under its jurisdiction. Its purpose is to assist in the development of the city of Kirovsk with its subordinated territory by diversifying the economy, attracting investments and creating new jobs that are not related to the activities of JSC Apatit, the city-forming organization. The resolution also defined the boundaries of the TAD Kirovsk, types of economic activity allowed when implementing investment projects in this territory, the minimum volume of capital investments of residents (RUB 5,000,000), and the minimum number of new permanent jobs (20 jobs).

The creation of the Kirovsk priority development area will allow attracting investments due to diversification, and the activities of residents will cause the foundation of new enterprises, creation of new jobs in the urban district through the multiplier effect and legalization of the labor market. Based on the above case, the experts got the following challenges:

- ✓ To specify financial instruments that could be used under special conditions of carrying out the investment activity in depressed regions;
- ✓ To indicate peculiarities of forming the priorities for the depressed regions development;
- ✓ To offer an algorithm for selecting top priority areas of the economic activity in the depressed region;
- ✓ To offer a generalized system of financial instruments to stimulate the development of top priorities for the sustainable development of the depressed region and to characterize the consequences of applying them in the region.

3. Results

According to the experts, financial instruments to be used under special conditions of the investment activity in depressed regions include the following:

- ✓ State order for products and services that can be provided by the region;
- ✓ State appropriations for the formation of infrastructure projects, development of top priority, clearly defined areas of the economic activity that do not require considerable funds, but allow achieving significant economic benefits;
- ✓ Tax holidays for newly created and reprofiled enterprises of the real sector of the economy, especially innovative ones;
- ✓ Tax privileges for promising enterprises that create additional jobs (for example, with a certain increase annually), manufacture socially significant products and services;

- ✓ Investment tax credits for innovatively active enterprises, i.e. delaying the term of paying tax liabilities related to the tax on income that was earned by a business entity from the implementation of investment and innovation projects (programs) for a certain period of time;
- ✓ Introduction of state programs to modernize the budget-forming enterprises of the depressed region, etc.

Besides, the experts also think that forming priorities for the development of depressed regions are peculiar of:

- ✓ Involvement of professional consultants, on the one hand, and the public, on the other hand, in this process, the latter being the most interested in the region's development;
- ✓ Priorities should be formed taking into account potential competitive advantages of regions, results of SWOT analysis;
- ✓ Priorities should comply with the current trends in the development of science and technology;
- ✓ Formation of the target subgroup for each priority to ensure implementation;
- ✓ After the formation of a system of strategic and business plans for the implementation of priorities, they should be coordinated among themselves and according to implementation terms;
- ✓ When carrying out plans on implementing priorities, it is obligatory to ensure monitoring and control over the established evaluation criteria, including the public ones.

At the same time the business plan of the top priority development of the depressed region should be self-explanatory. Every specific task and activity listed in the business plan is subject to detailed management, technical and financial stipulation.

Besides, when defining priorities of developing depressed regions, it is necessary to take into account the experience of the leading world countries, the efficient regional policy of which allowed the regions to get out of the crisis and get a boost for self-development. The study of such experience allows identifying the most efficient top priority areas of depressed regions, in particular, the development of new, innovative high-tech industries, restructuring of low-potential production, modernization of budget-forming areas of the economic activity, stimulation of the cluster formations' development, and neutralizing negative consequences of unfavorable starting conditions when new economic entities enter the market.

In accordance with the experts' answers, an algorithm to select the priority areas of economic activity of the depressed region and to form strategic and business plans for their implementation was developed. It consists of 4 successive stages:

Stage 1: The creation of an initiative group includes the involvement of professional consultants, the formation of cost estimates for the work of consultants, and the search for funding sources.

Stage 2: The formation of a working group whose task will be the following; to form an information and analytical contour of the depressed region, including the SWOT analysis of the depressed region; to systemize the region's problems; to identify potential competitive advantages of the region; to further preliminarily form priorities related to the development of the depressed region; to adjust them in accordance with the top priority areas of science and technique development; and to finally form priorities for the development of the depressed region.

Stage 3: Formation of the target subgroup for each priority to ensure its implementation.

Stage 4: The development of certain priorities includes the following: to form a mission for the implementation of each priorities; to set operational objectives and terms of the implementation; to develop plans for the implementation of operational objectives; to publically discuss priorities and plans; to agree on priorities and adjust their plans; to implement the developed plans by priorities; to form criteria for evaluating the performance; and to monitor and control the performance.

Based on the experts' recommendations, a generalized system of financial instruments to stimulate the development of top priorities for sustainable development of the depressed region and consequences of applying them to the region was compiled as shown in Table 1.

Table 1. *Generalized System of Financial Instruments to Stimulate the Development of Priorities for Sustainable Development of the Depressed Region and Consequences of Applying them to the Region*

Priorities	Funding sources	Result
Development of new, innovative high-tech productions	State target order to train specialists for high-tech productions Free import of equipment for research laboratories Reduction of the tax for the amount of costs incurred for R&D	Increase in the competitive positions of the depressed region
Restructuring of non-promising productions	Repeal of benefits for non-promising productions	Efficient economy of the depressed region
Modernization of budget-forming areas of economic activity	Tax credits to purchase equipment	Strengthening the material and technical base
Stimulating the development of cluster formations	Initiating the creation of cluster groupings	Formation of powerful economic groupings
Delay of income taxes	Leveling negative consequences of	Competitive market

during the first years of enterprises activity	unfavorable starting conditions associated with entering the market	
--	---	--

The above system of financial instruments will allow depressed regions to get out of the crisis and provide motives for further self-development and self-financing.

4. Discussion

The results showed that it was possible to ensure the convergence of levels of sustainable development of Russian regions by applying a system of financial instruments, the comprehensive operation of which would allow forming a mechanism for the regional development convergence.

A depressed region is the problematic region that cannot independently (without external assistance) solve a complex of difficult large-scale problem that have recently become so deep due to the impact of internal and external factors. External assistance, first of all, includes state support for such territories because delaying the solution of these problems can cause deepening the crisis and further aggravation of the situation. That is why instruments for the convergence of sustainable development of regions should be focused on the implementation of large-scale quick impacts to eliminate the causes of the current situation to prevent irreparable consequences.

Financial instruments to overcome the depressiveness of regions include, above all, investment ones, because a long limited investment in the economic complex and social infrastructure has caused the interference in the development of such territories. In order to ensure convergent processes, the investment policy in depressed regions should be based on nation-wide approaches and a strong focus on supporting the most problematic areas. At the same time, the stimulation of investment activity in such regions requires the systematization of anti-crisis financial instruments that will be implemented under special conditions of the investment activity. In this case the use of investment instruments fulfills the following tasks:

- ✓ Support for the most vulnerable and crisis areas;
- ✓ Simplifying the entry of new players to the market;
- ✓ Increase in the level of suitability of fixed assets, including the used share;
- ✓ Focus on long-term investments of financial resources.

In this case, the introduction of special conditions for the investment activity provides a special investment regime for depressed regions. At the same time, it is obligatory for such regions to define top priority areas of economic activity that, as a rule, correlate with top priority areas of the development of science and technology provided by the law to ensure sustainable development of the country. It is necessary to note that territorial imbalances in the social and economic development are

peculiar of almost all countries regardless of their size, economic potential, type of state structure, and political system. That is why to form basics of the state regional policy it is important to analyze foreign experience on solving problems of depressed territories and possibilities of financial provision of their development.

A characteristic feature of solving problems of depressed territories in developed countries of the world is the well-established mechanism of the budget and financial equalization. It reduces social and economic imbalances. Traditionally, problems of developing crisis, depressed and backward regions are solved at the expense of economically developed regions. At the same time it is necessary to note that there is no single consolidated state budget either in federal or unitary foreign countries. Issues related to the financial support for the development of depressed regions are also solved by using development funds, the costs of which are of an investment, strategic nature.

It is a regular practice for the developed countries of the world (USA, EU countries) to divide the local budgets into two components: the current budget and the development budget. Expenses of the current budget are meant to meet the current needs of regions, and revenues are generated from local taxes and fees, resource payments, state subsidies and subventions, and other revenues.

The development budget as a part of local budgets serves as an investment fund, the funds of which are used to develop social infrastructure, to make capital investments, and to implement investment programs. Its revenues are formed by state investment subsidies, bank and municipal loans. It is prohibited to use the development budget revenues to meet the current costs. It is the development budget as a part of local budgets that ensures the implementation of the sustainable development goals of depressed regions in foreign countries (Cuadrado-Roura 2011). The Italian experience of financial support for the depressed regions development is also worth of attention. It includes the following:

- ✓ A system of easy-term loans differentiated for 4 types of districts (South, developed areas of the Center, under-developed areas of the North, the rest of the country): an investment tax credit, loans from 40 to 60% of the investment provided for up to 10 years (up to 15 years in the South), the grace period of the loan is usually 3 years (5 years in the South). In the South the percentage can be reduced by 70%, and by 40% in the under-developed areas of the North and the Center.
- ✓ Subsidizing investment in the priority areas of the South - from 15 to 40% of the investment volume; if the conditions of "priority" are met, there is a premium to the subsidy in the amount of 1/5 of its basic rate, where both premiums can be accumulated; the upper limit of preferences for the South reaches up to 75% of the investment volume.

- ✓ Reduction of the taxable income down to 50% of investments that exceed the average annual volume for the previous 5 years; social insurance preferences.
- ✓ Accelerated depreciation (25% by the end of the first year, 50% by the end of the second year, and 70% by the end of the third year of service) (Baussola and Fiorito 1994).

The attraction of foreign investments is an important source of financial support for the depressed territories' development. In global practice the investment legislation tends to establish a regime that is far from unified for all investors. Instead, it is differentiated depending on the state's interest in certain investments. The scope and tempos of foreign investment in various countries are mainly determined by the nature of the investment climate. Changes in the elements of jurisdiction and economy of certain countries cause an increase or a decrease in the inflow of foreign investments (Faíña and López-Rodríguez 2004; Havlíček *et al.*, 2013; Menshchikova and Sayapin 2016).

Thus, global experience shows that it is necessary to attract investments to all problem regions. However, the instruments used to attract investments in economically, socially or environmentally depressed regions can vary. Therefore, to attract investments in economically depressed regions, first of all, it is necessary to create a favorable environment for foreign investments in those sectors of the economy that require accelerated development and in industries which products have a high export potential; in socially depressed regions - to stimulate foreign investments based on the combination of tax benefits, loans to create jobs and stimulate entrepreneurship; and in ecologically depressed regions - to create a favorable environment for investing in the economic activity related to the impact on the environmental and human health.

5. Conclusion

The social and economic heterogeneity of some regions is caused by various geopolitical conditions, natural resources potential, the quantitative and qualitative component of labor resources, historical trends of development, which is found in instability and loss of sustainability in the development of the region's economic system, complicates the formation and implementation of budget regulation processes on the regional level.

Depressed regions need financial support for their development. That is why it is necessary to develop an efficient mechanism of budgetary regulation, which will allow overcoming not only regional inequalities but also leading the region out of the distress and defining opportunities for the further development. The global experience shows that only the flexibility of state management of investment processes, attraction of local authorities to active contribution to innovative development allow achieving sustainability and production efficiency. Therefore,

the issue of choosing the investment strategy should take the leading position in forming areas for the development of the regional economy, ensuring its effectiveness, as well as social sustainability.

The conducted research has shown that the increase in the level of financial convergence for sustainable development requires the use of a system of financial instruments that define tools for balancing local budgets, tax and investment instruments.

References:

- Armstrong, H.W. 2010. An Appraisal of the Evidence from Cross-Sectional Analysis of the Regional Growth Process within the European Union. Convergence and Divergence Among European Regions. London: Pion, 221-279.
- Baussola, M. and Fiorito, R. 1994. Regional Unemployment in Italy: Sources and Cures. *Journal of Policy Modelling*, 16(5), 497-527.
- Bibarsov, K.R., Khokholova, G.I. and Okladnikova, D.R. 2017. Conceptual Basics and Mechanism of Innovation Project Management. *European Research Studies Journal*, 20(2B), 224-235.
- Bitarov, L.G. 2013. Features of the Depressed Region as an Object of Financing Investment Activity. *Audit and Financial Analysis*, 3, 26-40.
- Bradley, J., O'Donnell, N., Sheridan, N. and Whelan, K. 2011. Regional Aid and Convergence, Aldershot: Avebury, 428.
- Cowell, F.A. 2005. Measuring Inequality. London: Prentice Hall, 357.
- Cuadrado-Roura, J.R. 2011. Regional Convergence in the European Union: From Hypothesis to Actual Trends. *Annals of Regional Science*, 35(3), 333-356.
- Dunford, M. 2013. Regional Disparities in the European Community: Evidence from Regio Databank. *Regional Studies*, 27(8), 727-743.
- Dzhukha, M.V., Kokin, N.A., Li, S.A., Sinyuk, Yu.T. 2017. Research and Development Intensity in Business: Russia and EU. *European Research Studies Journal*, 20(1), 64-76.
- Faiña, J.A. and López-Rodríguez, J. 2004. European Regional Policy and Backward Regions: Implications Towards EU Enlargement. *European Journal of Law and Economics*, 18(1), 5-32.
- Havlíček, K., Thalassinou, I.E. and Berezkinova, L. 2013. Innovation Management and Controlling in SMEs. *European Research Studies Journal*, 16(4), 57-70, Special Issue on SMEs.
- Lengyel, I. 2014. The Pyramid Model: Enhancing Regional Competitiveness. *Acta Oeconomica*, 54, 323-342.
- Mansurov, P.I. and Mansurova, G.I. 2012. Depressed Region: Essence, Referring Criteria, Main Problems. *Fundamental Researches*, 6-2, 506-510.
- Markusen, J.R. and Venaables, A.J. 1999. Foreign Direct Investment as a Catalyst for Industrial Development. *European Economic Review*, 43, 335-356.
- Menshchikova, V.I. and Sayapin, V.A. 2016. Model of Innovation-Oriented State Economic Policy. *European Research Studies Journal*, 19(1), 189-200.
- Mittra, S. and Gassen, C. 1981. *Investment Analysis and Portfolio Management*. New York: Harcourt Brace Jovanovich, 857.

- Petrosyants, V.Z. 2005. *Economic Policy of the Depressed Region: Problems of Formation and Implementation*. Moscow, Science, 384.
- Scott, A.J. 2013. *Regions and World Economy: The Coming Shape of Global Production, Competition and Political Order*. Oxford University Press, 856.
- Stiglitz, J.E. and Walsh, C.E. 2006. *Principles of macroeconomics* (4th ed.). New York: W.W. Norton & Company, 923.