

УДК 332.146.2

Management Mechanism for Balanced Development of the Regional Economic System

Irina V. Filimonenko*

*Siberian Federal University
Institute of Business-Process Management and Economy
79 Svobodny Pr., Krasnoyarsk, 660041 Russia¹*

Received 02.04.2012, received in revised form 07.04.2012, accepted 27.06.2012

The article shows the method of management mechanism formation for balanced development of local markets of the region. The basic principle is the balance between the management mechanism elements and rules of local market development in the period when a regional economic system (RES) transits to an innovative model of development. Isolated elements of the management mechanism system of local markets, among which we consider functions – processes: balanced development regulation, financing, providing local markets' information development, motivation and encouragement of markets' participants, controlling the results of local markets' development. The trends of exposure to the elements of the management mechanism for each local market of RES. The development of integration processes in local markets in the region leads to the formation of associations that give rise to forms of liability depending on that allows you to distribute responsibility for the development of supply and demand in domestic markets of RES between regional government bodies, business representatives and consumers. We formulate a conclusion about the advisability of forming the local market management mechanism to the principles matrix structure.

Keywords: regional economic system, local markets of the region, balanced development, innovation growth, management mechanism of local markets.

Point

According to the definition of A.G. Granberg, *the regional economic system* (RES) is a complex, open management system for economic agents in the context of the territorial-administrative units of the Russian Federation, interacting in the sphere of production, goods distribution and consumption. This system forms the environment for humans living on its territory, the business-space for regional, national and international economic development, communication space for the region promotion

to internal and international markets. In accordance with the property of polystructure (Granberg, 2003), RES can be considered as a system of controlled local markets. Each of them, in turn, is a complex subsystem of the socio-economic processes and relations in the sphere of production, distribution and delivery to the final consumer products having consumer value. As the local markets are the components of the regional economic system, the possibility of achievement the sustainable economic growth and the region movement to the way

* Corresponding author E-mail address: IFilimonenko@sfu-kras.ru

¹ © Siberian Federal University. All rights reserved

of innovation growth depend from its level of development and accumulate potential.

The sustainable economic growth of RES expects:

the existence of the task trajectory of development, leading to quantitative changes in the socio-economic indicators of RES;

the presence of economic growth sources considered as factors, increasing the operating effect of RES, i.e. the ability to make the best use of its recourses and independently change them, continuously increase the development indicators. Herewith, the expenses of basic non-renewable resources must be permanent (Esekina B.K., Sapargali Sh., 2002);

the provision of RES by the complex of preventive measures helps to protect against external and internal disturbances and to achieve the target. The external disturbances occur under the influence of environmental factors in the effect of the regional economy (the competitive pressure increase, the danger of regional economy transformation into the primary processing centers in the production chain of transnational corporations, the exchange fluctuations and price range on commodity exchanges, etc.). The protection against external disturbances allows making the movement of RES along the trajectory of target development with the tolerance limits. First of all, the internal disturbances include the supply and demand imbalance in local markets of RES and social instability. The protection against internal disturbances provides internal stability in RES development.

The principles of the sustainable economic system organization are:

eco-efficiency – the process when the exploitation of resources, the direction of investment, the orientation of scientific and technological development, the carrying out of institutional arrangements increase added value

on conditions that cause resource consuming decrease, waste and pollution minimize;

balanced development of RES components, orienting on the local good markets integration, labour and education integration, timely broadcast of the requirements for structural changes in local markets and the preparation of complex solutions for its support.

The experience of leading countries that reach such level of development at the expense of innovation activity shows the necessity of formation of the local markets integrated system of the region (according to the classification of the World Economic Forum)¹. The key feature of local markets integrated system of the region is the participation of economic agents in determination of the development strategy of each local market of the system. This ensures not only a balanced development, but also creates the preconditions for the formation of a many-level system of responsibility (power-business-consumer).

The research of influence of local markets on the regional economic development helps to determine *the group of local markets of the region*, necessary for modeling the economic development and showing them as the managed *components inside of RES*. The research is conducted on the basis of the system analysis. The possibility of strategic management by local markets appears in the following traditional functions of the RES government entity in relation to the control objects (Alekhin E.V.).

Analytical. The economic diagnostics of markets development, the regional market conditions research, the research of competitive environment, the analysis of regional markets institutions, the general research of market infrastructure.

Organization and control. The process of building regional markets control elements, the ordering of their relationships and information flow for the good control.

Planning. The development of strategic and tactical plans for the development of the regional markets system.

Coordination. The development of laws, regulations, programmes.

Motivation. Organizations benefits, credits to increase the population purchasing power.

The comparative analysis of control capabilities of local markets by the RES government entities shows that there are a few markets that have local features in a full measure. *They are managed at the level of the RES* to achieve the balanced economic development. They are:

products market and market of capital goods producing and realizing in the territory of RES. They are the inner potential of the region while ensuring the volume of the domestic demand, gross regional product (GRP) and RES rate of growth;

labour market – ensuring the region's economy in terms of effective management of the communication processes with all the focus groups, competitive products output and building the long-term and mutually beneficial relationships between business partners and customers;

education markets – carrying out training, retraining and further training of professional staff for regional economy.

The achievement of targets of the regional economic development supposes the construction of effective interaction mechanisms between society, business and government. They should be focused on coordination of the efforts and the list interests of different social groups. The analysis of the economic environment of the local market management system and their rules of development provides the base for forming the special package of measures. These instructions should create the balanced development of the regional economic system (RES) in the period of

transition to stable economic growth, innovation potential increase and innovation growth.

The balanced development of RES is the development accompanied by planned, coordinated and consistent changes in the structures of the components of integrated system of local markets of the region. The pattern of achievement of the balanced development of RES associates with the action of following economic laws: supply and demand, productive relations and productive forces capability, competition law, money circulation. The pattern appears in the existence of relation between the development of essential features of local markets of goods, labour and education. The damage of relation leads to the supply and demand imbalance on regional labour and education markets, increase of uncompetitive production, and loss of market positions by regional manufacturers and to the other negative effects in the development of RES. To ensure the balanced development insufficient to control an individual local market of the region, it is necessary to create conditions for achievement the synergistic effect from the cooperative development. In that case it is very important to control the system of parameters, transferring the requirements and conditions from one local market to another. Just the achievement of balanced development of local markets promotes the creation of sustainable economic growth of the region.

The research of tendencies and laws of development of RES local markets (Filimonenko, 2011) permits to reveal five groups of factors that prevented the balanced development of RES (Fig. 1).

Although there are a lot of researches in the sphere of national and regional regulation (Shniper, 1996; Kotilko, 2001; Novoselov, 2002, Granberg, 2003; Minakir, 2005, etc.), the identification of features and construction of the system of coordination of labour and education

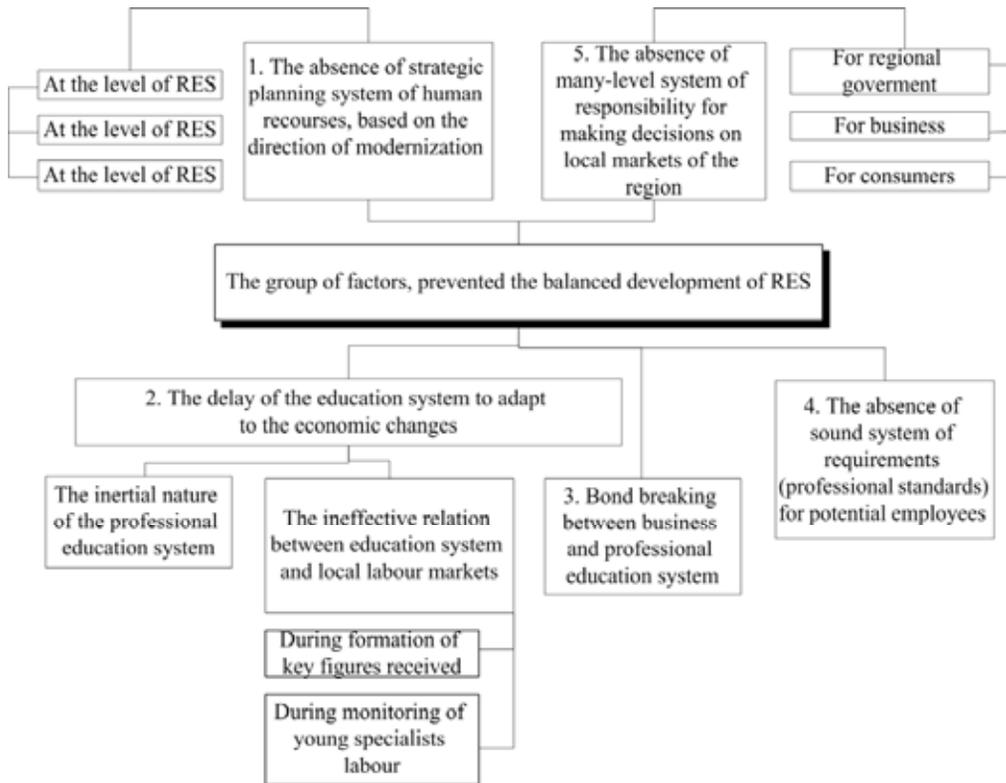


Fig. 1. Groups of factors preventing the balanced development of local markets (goods, labour, education) of RES

markets development (Sturov, 2003; Volkov, Kuzminov, 2008; Makeeva, Nekrestyanova, 2009; Sigova, 2010, etc.), the problem of the development of local mechanisms (in regard to local markets of RES) could not be considered as completely solved due to the following reasons.

First of all, the elements and relations between management mechanisms of local markets of goods, labour and education suffer changes due to the *continuously changing external environment* forming new challenges and conditions of the development for local markets of RES. For example, the extreme dynamism of globalization processes can lead to the transformation of local markets and, consequently, to the change in methods and opportunities of regional management. Firstly, it shows itself in the limits of distribution function

of the region that, nowadays, focuses on land resources controlled by the region or municipality. The possibility of social programmes developing stimulus and preferences for economic agents of the regional markets plays an important role.

At the same time, the competition increase and change of its character lead both to strengthening of a competition level on local and/or regional markets and to formation of mutually beneficial partnership between recent competitors. Both processes differently promote the increase of the internal and external demand of the region and provide the structural changes on the local markets:

the strengthening of competition forces the regional producers to strive for the early upgrade and transition to innovative development to ensure long-term competitive advantages of

products and services of all local markets (goods, labour and education);

following the principles of the long-term mutually beneficial partnership leads to activation of the vertical and horizontal integration of RES, particularly between domestic local markets of different types that ensure a healthy influence on a balanced regional development.

Secondly, the presence of *gaps in supply and demand* covering the whole chain of relations in the local market system leads to regional development imbalances. It demonstrates itself in the following problems:

a long term of recruitment and an increase of average duration of unemployment (up to 5 months as of 01.01.2012²) on the regional labour market due to the disparity between salary expectations and the quality of human resources employer requirements. This, in turn, creates a large number of vacancies and job seekers (unemployed potential workers) at the regional labour market. For example, for the first two months of 2012 about 18.1 thousand citizens visited the Agency of Labour and Employment of The Krasnoyarsk Territory seeking help in job finding (at the beginning of the year the number of candidates was 40.4 thousand including citizens registered as of 01.01.2012). At the same time, employers gave an information about the demand in 33.9 thousand employees (at the beginning of the year the Agency of Labour had 49.5 thousand vacancies including the claimed vacancies as of 01.01.2012). Consequently, in two months at least about 15.6 thousands of vacancies and about 22.3 thousand of citizens seeking jobs remained dissatisfied;

availability of unemployed graduates having professional education. The share of graduates with professional education among unemployed (during one year after graduation) was 2.4% or 0.7 thousand people at average in the Krasnoyarsk Territory in 2009-2010³. This share

makes 2.2% from the total number of all full-time graduates with professional education. At the same time, this share includes only the graduates officially registered at the Agency of Labour and Employment of The Krasnoyarsk Territory. According to the information from educational institutions the rate of graduates unemployed for one year after graduation increases up to 6.4%;

the inconformity of professional and social competencies of graduates with professional education with the workplace requirements. Today, educational institutions in the first place focus on formation of students professional competencies. At the same time, the vector of employers' preferences has moved to personal competencies and business qualities of young specialists. The employers consider the following competences as the most significant: responsibility, achievement motivation, tolerance to stress, and some other qualities⁴ that are fully consistent with the principles of human resource formation in the innovation period. Not only the rise in proficiency, but also the development of employee's responsibility as well as the extent of their participation in various decisions play a very important role (Moiseev and Shurupova, 2010).

Thus, the management mechanism of local markets of a region should conform to the following requirements: to overcome the current regional development imbalance, to promote the achievement of targets of innovation growth of RES, to adapt to external environment changes. The key tasks of management mechanism building are the definition and substantiation of its principles of formation, concerning the internal local markets (producing goods, labour and education) with the separation of its clusters.

Example

One of the most effective approaches to the formation of the mechanism of the end-to-end control by interdependent processes of regional

development taking place in an integrated system of local markets of the region is a process-oriented approach. It is a many-component system consisting of a group of interdependent elements. These elements focus on achievement of the agreed changes in the structures of local markets of the region and are a part of the general management system of regional development.

From our point of view, *separation of the local markets system's management mechanism* (production, labour, education) is to be based on *three basic principles*:

employing the system approach to the regional local markets' management mechanism structure:

non-confrontation between priority directions of elements of the mechanism development and local market development laws in the period of RES transition to the innovation growth model;

sharing responsibility between the regional government, business and consumers for the development of each mechanism element.

According to the first principle, the management mechanism of regional local markets can be presented as a system that holds a set of sub-gears (processes, functions, (Ivanov, 2004) characterizing the general management system of the regional development. The stages of the regional local markets cooperation lay in the foundation of the following functions:

a) balanced development regulation through the system of interconnected strategic planning of local markets key features for the sake of achievement of economic and innovation growth of the region;

b) financing (investment in) the balanced development of local markets for the sake of providing targeted regional growth;

c) providing local market information development through tools of monitoring, forecasting, strategic planning;

d) motivation and market agents incentives for the sake of speeding-up processes of the internal and external demand factors formation for the sake of providing RES innovation growth;

e) controlling the results of local markets' development for acceptance of timely correction actions.

General aims of the sub-gear systems formation are:

to provide the RES transition to innovation growth;

to neutralize the factors leading to imbalance in the regional development.

According to the second law, for every process the priority directions are to be detected taking into consideration regularities of the local markets' development. The typical regularities taking place in RF RESs are:

- local markets' transformation to regional, inter-regional, national and/or global markets as innovation factories appear in the regional economy, competitive or non-analog goods are produced, foreign demand and export quantity increase;

- achievement of the local markets system's balanced development in the time of RES movement by the path of innovation growth;

- the change of the local market structure (production, labour, education) due to the economic modernization strategy;

- the change of local markets control forms, methods, approaches due to the chosen development path and continuously changing external environment;

- increasing a resource potential of local markets in the time of movement by the path of innovation growth.

For the process function "*Regulation of the balanced development*", from our point of view, these directions are the following:

a) providing conditions for the interconnected local markets development and strategic support

of modernization and innovation penetration in the spheres of regional economy and the professional education system, in the innovation and market infrastructure development, in new types of employment;

b) using tools for monitoring and forecasting to determine the structural changes in RES and value of staffing needs of regional economy; the support of development, introduction and using of normative and standards on the product local markets (goods quality system), labour (professional standards), education (educational standards of secondary professional education and basic professional education).

Key directions for the investment function - process are:

a) business environment and innovation infrastructure creation;

b) investigation of the regional labour market, i.e. investigation of middle-term and long-term professional staff requirements;

c) developing labour market professional standards and education standards for all levels of professional education;

d) upgrading material and engineering bases of professional educational institutions;

e) establishing associations for education programme development and testing, including advance preparation programmes;

f) organizing new labour mobility forms in the region.

The directions for “**information procurement**” process-functions are formed according to the laws of transparency and openness that assume the free access to the information for all parties concerned. General directions of **information procurement** in the local market are:

a) forming of a multidimensional data base of strategic plans of the RES development; rates of growth; modernization of the economy; workforce demand against types of economic

activity; professions; levels of training; demands for employees, including staff requirements for innovation projects belonging to a regional economic subject;

b) forming and actualization of labour supply data bank against municipal formations, types of economic activity; professions; education levels;

c) professional personnel employment monitoring, including young specialists;

d) building short-term, medium-term and long-term forecasts of regional workforce demand for municipal entities, types of economic activity; professions; education levels.

For the process–function named “**Motivation and market agents incentives**” the increase of integration between local markets helps to overcome basic differences in the development of internal local markets of the region. The integration occurs at the expense of including different local market representatives (products, labour, education) in formation of development strategy. This trend helps, firstly, to eliminate distortions in the target values transmission in the system of interdependent development of local markets. In addition, the intersubjective cooperation leads to the formation of unions that give the forms of responsible relationship (Malakhovskaya M.V., Skrylnikova N.A., 2009). It allows you to allocate responsibility for creation of supply and demand in internal markets of RES. As a result, the effective flow of interaction processes between local markets makes a balanced development of the whole group of factors of internal and external demand and RES.

The process-function named “**Control**” proposes the stable-working system of adjustment mechanisms to provide regional economic stability in the chosen economic development dimension.

Basic directions of control are:

- forming of regional and municipal budgets through the taxation system;

- providing the civilized market development through the system of pricing laws and measures, competition forms and methods used, tools of goods and services advancement, protection of consumer and producer rights;

- forming of adjustment plans and programmes according to the economic development results (GRP growth rate, fixed capital investments growth rate, labour productivity growth rate and other indices) taking into consideration changes in the economic structure, employment, education, and defining the claimed number of applicants for higher education institutions, professional education institutions, secondary education institutions.

Basic elements (process-functions) of controlling the mechanism for a local regional economic subject (RES) and their dimensions are presented in Table 1.

According to the third principle of building the management mechanism for RES structure shifts, the responsibility for supply and demand development and optimization in local markets is to be shared between three interested parties:

regional governmental bodies, as the subjects of regional management and administration, are interested in innovation growth of the region, providing high standards of living and population satisfaction level. They also hold the concrete tools of influence upon social and economic development of the regional system;

business representatives as economic agents of the market are interested in their own business efficient growth. On the one hand, their business development success is directly connected with the RES development and Russia's development in general. On the other hand business is able to influence the regional development through acceleration of modernization processes and introduction innovations in production, service, building infrastructure and new jobs in the regional economy;

consumers (society) as the target group on all the regional local markets (production market, labour market, education market) influence the level of local markets' development through inside demand forming for the regional producers' production. They can influence changes at the education level, job and specialization, work place and scope of activity. In spite of the fact that consumer's choice is formed with reference group impact, consumers always hold a free choice opportunity. Population's standard of living and population satisfaction level frequently depend on this opportunity.

Thereby, the selected group for sharing responsibility for supply and demand development and optimization on the regional local markets is not only interested in concerned process advance, but holds the chance to influence them.

Conclusion

To summarize all the aspects stated above, we can conclude that the local market management mechanism is to be developed according to the principles of the *matrix structure* (Fig. 2). On the one hand, it allows ensuring the integration of regional local markets development based on the formation of the complex system of functions and processes of management of the interdependent development. On the other hand, it helps to allocate responsibility for the supply creation between three levels: government, business, community. The strategic consequences of this management mechanism for the development of RES are: the provision of internal stability of economic development, closing the gaps in supply and demand throughout the relation chain in the system of regional local markets, the increase of responsibility for making decisions at all levels (regional authorities, business, society), and, as the final result, the overcoming of regional development imbalances.

Table 1. The direction of the management mechanism elements (process-functions) of local markets of RES

Local market type	Type of management mechanism elements (process-functions)				
	Balanced development regulation	Investment	Information support	Motivation and stimulation	Control
Product market	Use of plans, development programmes; Use of standards, product quality standards; Use of protectionist measures to support regional producers.	Business environment creation; Innovation infrastructure formation.	Forecasts of economic development, foreign economic activity, products and service markets; Information about the investment projects, tenders and competitions, etc.; Target programmes and development plans.	Resources allocation (regional and municipal land); Tax incentives; Compensatory policy for companies and organizations during innovation introduction and participation in social projects.	Prices, fines, payments for using resources; Forms and methods of competition; Tax liabilities; Changes in the economic structure.
Labour market	Active labour mediation on the open labour market; Professional standards development; Help to the forced unemployed in professional training, employment and moving to a new workplace; Psychological support.	Help to improve the competitiveness mobility of labour power; Help to study the needs of regional labour market.	Labour market development prognoses; Vocational-oriented programmes; Bank of vacancies and proposals; Employment monitoring, including young professionals; Multidimensional information database of the labour market needs.	Social insurance against involuntary unemployment; Electoral support of jobs and development of types of employment, considering labour market conditions (the development of motivation and preferences).	Key figures of reception to educational institutions; Changes in the employment patterns.
Education market	Development and promotion of educational standards.	Budgeting of SPE ⁵ and BPE; Modernization of the material-technical base of SPE and BPE.	Study of young specialists' employment and of effectiveness of training.	New forms and methods of payment; Encouragement for performance.	Key figures of reception to educational institutions; Changes in the employment patterns.

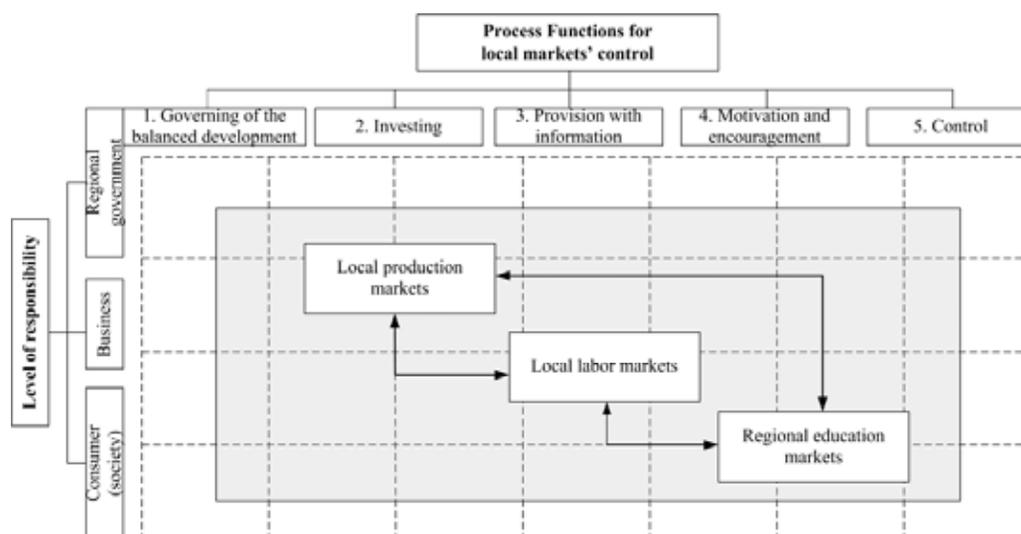


Fig. 2. The structure of the management mechanism of a local market

¹ The source: The Global Competitiveness Report 2011–2012; World Economic Forum, 2011

² According to the data from The Agency of Labour and Employment of The Krasnoyarsk Territory, <http://www.rabotaenisey.ru/market/situation>

³ According to the data from The Agency of Labour and Employment of The Krasnoyarsk Territory, <http://www.rabotaenisey.ru/market/situation>

⁴ According to the data from the employers of The Krasnoyarsk city and The Krasnoyarsk Territory, 2010 year. Career Center of SFU.

⁵ SPE – secondary professional education; BPE – basic professional education

References

Granberg, A.G., *Basis of the Regional Economy* (Moscow: Higher School of Economy, 2003), in Russian.

Ivanov, O.V., *Strategic Development of a Regional Manufacturing Complex: an Innovative Way* (Krasnoyarsk: Krasnoyarsk State University, 2004), in Russian.

Kotilko, V.V. *Regional Economic Policy* (Moscow: Pub. RDL, 2001), in Russian.

Makeeva, T.E., *Regulation of the Interaction between Labour Market and Educational Services Market of the Region...* Dissertation of Candidate of Sociological Science: 22.00.08, Makeeva T.E.; [Place of defense: Belgorod State. Univ.]. Belgorod, 2009. Access mode: <http://www.disserscat.com/content>, in Russian.

Minakir, P.A., *Economy and Space (abstract thought)*, Journal of Solid Economy. 2005. No.1. pp. 4–26, in Russian.

Moiseev, A.D., Shurupova, A.S., *The Formation of a New Employment Model in Economy, Based on Knowledge*, Journal of Human Resource Management. 2010. No. 14. Available at: <http://www.top-personal.ru/issue.html?2480>, in Russian.

Nekrestyanova, S.Ya., *Organizational-Economic Mechanism of Integration of the Labour Market and Education Market...* Dissertation of Doctor of Economic Science: 08.00.05, Nekrestyanova S.Ya., [Place of defense: State. Univ.of Manag.]. Moscow, 2009. Available at: <http://www.disserscat.com/content>, in Russian.

Novoselov, A.S., *Regional Consumer Market. Problems of the Theory and Practice* (Novosibirsk: Siberian Agreement, 2002), in Russian.

Sigova, S.V., *State Regulation of Labour Market Balance in Modern Russia...* Dissertation of Doctor of Economic Science: 08.00.05, Sigova S.V; [Place of defense: Russ. Presidential Acad. of National Economy and Public Administration]. Moscow, 2010, in Russian.

Sturov, I.B., *the Interaction between Labour Market and Education Market in Transitive Economy...* Dissertation of Doctor of Economic Science: 08.00.01 / Sturov I.B; [Place of defense: Northern Caucasia. Academical state service]. Rostov on Don, 2003. Available at: <http://www.dissercat.com/content>, in Russian.

Filimonenko, I.V., *the Regional Labour Market as the Indicator of Economic Development of the Region* (Krasnoyarsk: Siberian Federal University, 2011), in Russian.

Shniper, R.I., *The region: Diagnosis and Prognosis* (Novosibirsk: Institute of Economics and Industrial Engineering, 1996), in Russian.

Volkov, A.E., Kuzminov, Ya.I. et al. *Russian Education in 2020: a Model of Education for Innovative Economy. Material for Discussion*, Journal of Education Studies. 2008. No. 1. p. 14–33, in Russian.

Механизм управления сбалансированным развитием региональной экономической системы

И.В. Филимоненко

*Сибирский федеральный университет
Институт управления бизнес-процессами и экономики
Россия 660074, Красноярск, ул. Киренского, 26*

В статье рассматривается подход к формированию механизмов управления сбалансированным развитием локальных рынков региона. Базовым принципом формирования является соответствие системы инструментов управления закономерностям развития локальных рынков при переходе региональной экономической системы на инновационную модель развития.

Ключевые слова: региональная экономическая система, локальные рынки региона, сбалансированное развитие, инновационный рост, механизм управления локальными рынками.
