

**BBK 65.04**  
**UDK 338.9**  
**L 85**

**L 85 Local Production Systems and Regional Economic Development /ed. by  
A.S. Novoselov and V.E. Seliverstov. – Novosibirsk, Sofia, Lodz, Ternopil,  
2014. – 352 p.**

This collection of papers contains the results of research carried out by the participants of the “International Project FOLPSEC № 295050 within the 7th EU Framework Program FP7-PEOPLE-2011 IRSES” “Functioning of the Local Production Systems in the Conditions of Economic Crisis (Comparative Analysis and Benchmarking for the EU and Beyond)”.

The papers study the following problems: sustainable development of local production systems, business strategies of LPS, innovativeness of clusters, critical infrastructure protection, corporate social responsibility, environmental protection, local production system management, governance of local production systems in Bulgaria, Poland, Ukraine and Russia, policy guidelines with some measures of general application, aimed at problems observed in all LPS, and some specific measures differentiated according to a typology of local production systems.

ISBN 978-5-89665-277-9

*EDITORIAL BOARD*

<i>Alexander S. Novoselov</i>	Prof. D.Sc. (Chief Editor), Head of Department, Institute of Economics and Industrial Engineering, Siberian Branch, Russian Academy of Sciences (IEIE SB RAS), Novosibirsk, Russia
<i>Stanka V. Tonkova</i>	Prof. D.Sc., Director, Center for Research and Education Projects, University of National and World Economy (UNWE), Sofia, Bulgaria
<i>Vyacheslav E. Seliverstov</i>	Prof. D.Sc., Deputy Director, Institute of Economics and Industrial Engineering, Siberian Branch, Russian Academy of Sciences (IEIE SB RAS), Novosibirsk, Russia
<i>Evgen V. Savelyev</i>	Prof., D.Sc., Ternopil National Economic University (TNEU), Ternopil, Ukraine
<i>Olga P. Burmatova</i>	Assoc. Prof., PhD, Senior Researcher, Institute of Economics and Industrial Engineering, Siberian Branch, Russian Academy of Sciences, Novosibirsk, Russia
<i>Sona Chapkova</i>	Assoc. Prof., PhD, University of Matej Bel (UMB), Banska Bystrica, Slovakia
<i>Mariusz Sokolovich</i>	PhD, University of Lodz (UL), Lodz, Poland

ISBN 978-5-89665-277-9

© IEIE SB RAS, 2014  
© Group of authors, 2014

# PROBLEMS OF MARKET INFRASTRUCTURE DEVELOPMENT IN THE REGIONS OF SIBERIA

*Alexander S. Novoselov*<sup>1</sup>,  
*Tatyana V. Volyanskaya*<sup>2</sup>

The paper presents the analysis of market infrastructure development in the regions of Siberia. Considered are the economic essence of regional market infrastructure and the concept of economic potential. Studied in the paper are the following issues: the degree of market infrastructure readiness to the new conditions of functioning; different types and component elements of market infrastructure; functional layout of market infrastructure and the content of the elements of this scheme. The paper examines the functional blocks of market infrastructure in terms of a system of markets. Of methodological and practical value is a comprehensive analysis of major functional blocks of regional market infrastructure – intermediate trade, informational, financial and credit, foreign trade, economic and legal markets. Considered are the problems concerning regional market infrastructure development with the emphasis placed on the aspects of strategic planning. The analysis of the external and internal environment of influence on development of regional market infrastructure is made. On the basis of the study conducted the conclusions about a significant lag of regional market infrastructure economic potential behind the increasing demand for its development in the period of transition in Russia are made. This lag does create additional difficulties in reforming the economy. Outlined in the paper are the possible directions for the development of regional market infrastructure.

## INTRODUCTION

Amid transformation of Russian economic and regional systems and the formation of a civilized market and socially-oriented market relations, the problems of market infrastructure development in Russia call for further study, both at national, and at regional levels. Macro – and microeconomic problems of market infrastructure formation and development are adequately elucidated in scientific literature. However, although the problems mentioned above have been sufficiently studied, the issues concerning regional infrastructure formation, especially in the context of system reproduction approach, are not exemplified in modern literature. Thus, the processes of market infrastructure development at regional level are still not well understood, as considered were only some of infrastructure elements.

At the present time, market infrastructure should be studied not only in the context of macro- and microeconomics, but taking into consideration regionalistics and the spatial strategy as well. This is especially important in the case of the Russian Federation, with its significant inter-regional differences that affect the forms of general laws of market infrastructure development manifestation as well as inter-regional cooperation processes in the course of regional markets formation.

---

<sup>1</sup> Prof. D.Sc., Head of Department, Institute of Economics and Industrial Engineering, Siberian Branch, Russian Academy of Sciences (IEIE SB RAS), Novosibirsk, Russia

<sup>2</sup> Senior Lecturer, Novosibirsk State University, Novosibirsk, Russia

With the development of regional economy, with the emergence of new market structures, and with the deepening of specialization of enterprises and organizations – subjects of the regional economy, the demand for a wide range of infrastructure services, including: trade and intermediary, financial and credit, foreign economic, information, economic and legal services increases.

In connection with this, there develops a market infrastructure system that should serve economic entities of all patterns of ownership in the regions of the Russian Federation. Modern economy requires the development of powerful telecommunication systems, information and commercial networks, high-performance means of electronic money payments in each of the regions. The insufficient level of market infrastructure development in a number of regions of the Russian Federation inevitably leads to the decrease in business activity, poor development of production, and dislocation of a normal reproduction process in regional systems.

The establishment of methodological framework of regional market infrastructure development is an urgent problem today, as the viable solution of this problem will accelerate the pace and improve the efficiency of market relations development in the regions of the Russian Federation. The research objective is to work out the methodological foundations of regional market infrastructure functioning on the basis of the analysis of regularities of market infrastructure development and peculiarities of the national economy transformation, taking into consideration a new economic mechanism in the context of developed market relations.

To achieve this goal it is necessary to determine the objective factors, preconditions and general regularities of regional market infrastructure development in the current context, to describe the methodological principles of analysis of regional market infrastructure formation, to propose the classification of market infrastructure elements at a regional level taking into account the specific criteria for the selection of different types of infrastructure services, to evaluate the current level of regional market infrastructure development and its economic potential, to consider methodological principles of the concept of regional market infrastructure formation and development, and to propose methods of economic regulation of regional market infrastructure formation and development.

## **METHODOLOGICAL APPROACHES TO THE MARKET INFRASTRUCTURE CONCEPT ANALYSIS**

In the Russian economic literature the notion of market infrastructure formed in the late twentieth century. Studying the theoretical problems of infrastructure formation, economists have come to the conclusion that it is necessary to allocate a relatively independent subsystem of the market infrastructure, servicing processes in the sphere of circulation, along with other subsystems (production, social, institutional and environmental infrastructure), which have been discussed in sufficient detail in scientific literature of the last century. The most characteristic feature of that period of time was the understanding of market infrastructure as a part of a public sector, one of its special-purpose forms, the mission of which was to ensure favorable conditions for the realization of products. [1, 5, 8, 10].

In the early 2000s, the concept of market infrastructure acquired a new economic substance. At that point of time market infrastructure was understood as a complex of spheres of activity serving the market, the formation of which was necessary for the transition of the economy to the developed market relations. There appeared a large number of scientific papers devoted to the problems of market infrastructure development that considered only some of its elements serving specific types of markets such as a market of means of produc-

tion, a consumer market, a financial market, etc. [2, 4, 12, 13]. Less attention there was given to a comprehensive study of market infrastructure considered as a single system consisting of segments serving different types of markets. [6, 7, 9].

In modern economic literature, there are different interpretations of market infrastructure. Proceeding from the subject of research, there may be distinguished three groups of definitions of market infrastructure.

In the first group of definitions, market infrastructure is considered as a complex of industries, sectors and spheres of activity, the main task of which is to bring the goods from production to consumers. In the second group, market infrastructure is defined as a complex of enterprises, institutions and organizations. In this approach, market infrastructure is regarded as a frame of a market which represents multi-branch and interrelated network of enterprises and farms that serve the processes of barter and movement of products. In the third group, market infrastructure is understood as a set of technical facilities and equipment providing market processes. The most characteristic feature of this interpretation is the understanding of market infrastructure as a set of auxiliary and service departments and means supporting main market processes.

According to the extent to which market infrastructure is developed in the economy there may be distinguished two basic approaches. From the perspective of the first approach, market infrastructure maintains conditions for all subjects of the economy. In this case, market infrastructure is understood as organizational and economic system on which functioning of economically efficient system as a whole may be based. From the standpoint of the second approach supporters, market infrastructure serves only the processes of product distribution in the economy. In this case, market infrastructure is considered to be a system of institutions and organizations providing free movement of goods and services in the market.

According to the items considered by the authors to be the components of market infrastructure, two groups of approaches are distinguished. The first group of authors interprets the concept of market infrastructure broadly and includes in its structure almost all market institutions, with some authors adding to them the elements of state regulation system of economy and such elements of social infrastructure as education, medical care, etc. The second group of authors includes in market infrastructure only the elements of commodity circulation system, such as warehousing, logistical support services, sales and transportation organizations.

The existence of a variety of market infrastructure definitions in economic literature suggests the absence of a single methodological approach. This is largely due to the nature of specific objectives and tasks of scientific research that are largely industry-oriented and are devoted to the study of certain types of markets (a consumer market, a market of means of production, a financial market and others), or specific types of infrastructure (intermediate trade, information, legal, etc).

From a widespread definition of market infrastructure as a set of economic terms for the functioning of business that provide a sustainable development of a market system it follows that market infrastructure is directly relevant to the productive forces of a society and may be a subject of branch economic sciences study – economy of trade, logistics, etc. But the given definition doesn't include public economic relations; and the main attention is given to material aspects of market infrastructure. It is necessary to distinguish, on the one hand, “a material content” of market infrastructure, its economic potential establishing favorable conditions for the functioning of a system of markets, and, on the other hand, economic relations regarding the activities of subjects of the market for the creation of appropriate conditions for commodity and currency circulation.

Being closely interrelated with the whole system of economic relations, market infrastructure is a necessary condition for regional markets economic entities development. Mar-

ket infrastructure makes an essential contribution to the acceleration of economic development rate by means of commodity and currency circulation efficiency enhancement and by rendering a range of market services to the economic entities creating favorable conditions for business and competition promotion [3].

Thus, market infrastructure represents a set of objects and institutional structures ensuring the formation of material, financial and information relations between subjects of a market. It is a complex economic-organizing system the basic elements of which are the branches of wholesale and retail trade, general commercial activities, crediting and insurance, information and legal services functioning in a regional social and economic environment. Market infrastructure represents a framework on which a system of regional markets is based. It integrates spheres of production, distribution and consumption, provides the acceleration of commodity, financial and information flows turnover, thus promoting the increase of social development efficiency.

There are various points of view as far as the structure of market infrastructure is concerned, as authors proceed from different criteria to relegate enterprises and organizations to market infrastructure in accordance with the target goal. The analysis of foreign experience, on the one hand, and Russian regional specifics, on the other hand, permits to suggest the following classification of market infrastructure: intermediate trade (associations of wholesale trade, commercial centers, commodity exchanges, etc.), financial and credit infrastructure (commercial banks, non-bank financial intermediaries, etc.), information infrastructure (information and marketing centers, means of collecting, processing and transfer of commercial information, etc.), legal infrastructure (arbitral courts, legal and consulting companies, etc.) foreign economic infrastructure (specialized foreign trade enterprises, trade representations of foreign firms, customs organizations, etc.).

The most considerable changes take place in intermediate trade infrastructure as a result of market relations development. First of all, the character and the functions of facilitating agencies and marketing organizations change, and to the forefront move retail trade system, wholesale and retail associations, trade and logistics companies which are of great importance in establishing horizontal relations between producers and consumers of products. The financial and credit infrastructure comprises commercial banks, non-bank financial intermediaries serving all regional markets, insurance companies creating financial and economic prerequisites for work of enterprises under high entrepreneurial risk.

Information infrastructure includes regional marketing centers and firms providing modern telecommunication facilities as well, as a basis for commercial relationship and intra-regional and inter-regional economic interaction development. Besides, a normal functioning of the market depends to a large extent on a reliable legal support which is connected not only with the arbitration of various problems, but also with the proper drafting of agreements and transaction according to the established legal norms.

### **PROBLEMS AND PROSPECTS OF MARKET INFRASTRUCTURE DEVELOPMENT IN RUSSIA**

The formation of regional market infrastructure is directly related to every particular region and in many respects depends on a spatial organization of sphere of circulation in each region or in a city. Along with solving organizational problems concerning new infrastructure elements formation, the analysis of infrastructure development in the context of its marketability should be made.

In the initial stage of a transition period practically all regions of Russia (except for the metropolitan region) were characterized by the essential lagging of market infrastructure

development behind the market system demand for its services. The comparative analysis of market infrastructure enterprises and organizations availability parameters in Russia and in the USA shows that the availability of basic elements of market infrastructure in Russia is only 17.1 to 25.2% of that of the USA. The only exclusion is the stock exchange infrastructure availability in Russia; according to the data analyzed it is 72.7% more than that in the USA. It is accounted for by the rapid development of stock exchanges, dealer firms, brokers' boards and offices in the early nineties when there was no clearly defined trade and stock exchange legislation and which executed functions not characteristic to them such as consumer and not-consumer goods wholesaling in that period. The analysis of wholesale business availability parameters allows us to speak about the essential lag, both in the number of wholesale distributors, and in their modern trade and logistic equipment supply.

The index of financial and credit infrastructure availability in the regions of Russia (except for the metropolitan region) is 4.8–7.3 times that of the USA. But it is not the quantitative characteristics of availability; it is the considerable lag in the level and quality of intermediary and financial services, which is one of the constraints to the transition to the developed market relations. Lack of the developed market environment impedes small business growth, doesn't promote the attraction of the foreign capital and hinders the development of business activity in many branches of the real sector of economy.

While market infrastructure is generally underdeveloped in Russia, the unevenness and imbalance of its development is observed in each of its regions. Thus, much of infrastructure is concentrated in Moscow and Moscow region, where banking density is 15.6 units per 100 thousand people while in the other regions of Russia it is much lower, within the range of 3.9 to 6.9. The availability of trade and logistics infrastructure in the regions of Russia is 1.6 to 3.6 times that in the Moscow region.

To characterize the position of market infrastructure in the regional economy, it is necessary to analyze parameters characterizing its share in the total production, capital investments and employment in a regional economy. According to the calculations made on the basis of national accounts statistics, the share of services of market infrastructure in gross domestic product of Russia was 8.2% in 1990 and 29.1% in 2008. Unfortunately, the existing state statistics system can't give a full quantitative assessment of market infrastructure on all parameters both in Russia and in particular regions. Therefore, we'll consider the parameters of intermediate trade infrastructure that is sufficiently represented in the existing system of statistical reporting.

In 1990–2008, the share of services of intermediate trade infrastructure in gross domestic product increased nearly 3.3 times (from 5.0 to 16.5%), and the share of the employees grew about 3.3 times (from 6.6 to 8.7%). These trends are attributed to the increased intermediate trade activity, the high profitability of trading operations, the creation of new intermediate structures, and the development of new trade services in the context of economic reforms.

However, the share of the intermediate trade infrastructure in the total capital investment decreased (from 2.9 to 2.3%). This is accounted for both a general trend to reduce investment in the transition period, and maximization of profits of sole proprietors and their disinterest to invest into physical infrastructure development.

A comparative analysis of intermediate trade infrastructure development parameters in Russia, in the USA and in Great Britain shows that the share of services of intermediate trade infrastructure in the gross domestic product of Russia roughly corresponds to that of industrialized countries. At the same time, if taking into account its share in the total capital investment and the number of employees, intermediate trade infrastructure in Russia lags far behind the United States. A high level of physical infrastructure development in western countries is ensured by corresponding capital investments, which are in the order of 10–11% of the total investment in the economy.

The analysis of dynamics of parameters characterizing the share of intermediate trade infrastructure in the amount of man-power employed in the economy of Russia and the corresponding parameters in the western countries suggests that intermediate trade infrastructure is a fairly capacious sector of capital procurement of labor that is released in industry and other branches in the course of economy restructuring. Further development of intermediate trade infrastructure both in a quantitative sense (the increase of the number of trading firms and expansion of their material and technical basis), and in qualitative sense (diversification of commercial services providing both to enterprises, and to population) may result in the increase of the amount of man-power employed in intermediate trade infrastructure up to 17–18% of the total employment in the economy.

Thus, under current economic development of Russia, market infrastructure becomes a major sphere of social reproduction, with the sales revenue of services being nearly 1/4 of the gross domestic product of Russia.

During the last decade established was the basis of a new system of commercial banks in the regions of Russia. The analysis of commercial banks distribution in the regions of Russia allows us to draw a conclusion concerning their distribution by the principle “center – periphery”. Nearly a half of all commercial banks of the country (45%) are concentrated in the Central economic region while the share of other regions is within a range of 2 to 8% (with the exception of the North Caucasian region where 12% of commercial banks of the country are located).

The calculations of density coefficients of banking network including commercial branches showed that the level of development of banking infrastructure in some regions is nearly 1/3 of that in Moscow. The lowest values of density coefficient of banking network are in Central Chernozem (3.9), Northwestern (4.1), Volga–Vyatka (4.2), Uralsk (4.2), Volga region (4.8), West Siberian (4.9), the East Siberian (4.7) regions, while in Moscow it is as much as 15.6 units on 100 thousand people of the population.

The concentration of banking capital accompanied by acquisition of small and medium-sized regional banks by large Moscow banks becomes one of the main tendencies of commercial banks development. This tendency is strengthened due to the fact that many regional banks get into financial difficulties connected with a general unfavorable regional economic situation, disinvestments, shortage of current assets. Regional banks have to adjust the restructuring of the banking system and regulatory requirements of the Central Bank of Russia getting stringent.

For successful development of international economic relations and attracting foreign investments it is necessary to form the external economic infrastructure in the regions of the country. In the course of reforms set of positive changes took place in the regional external economic infrastructure. Among them there is the development of international banks branch network, the formation of regional financial markets, the management of representations abroad, consolidation of regional customs services, further development of modern media of communication and means of advertizing, international transportation services. In regions there have appeared big specialized foreign trade companies; in large cities of Russia there develops a network of world exhibitions and international fairs.

At the same time, despite Russia's accession to the World Trade Organization, a level of regional external economic infrastructure development in Russia doesn't meet the world requirements yet. Standardization and licensing procedures, when importing production, fall short of international standards, rules and guidelines, and this creates great difficulties in the course of execution of documentation. Insufficiently developed is the insurance system of export-import operations and investments, certification of production, product quality certification and requirements are not up to a standard. The system of patenting of scientific research results and financing of patenting operations isn't adequately developed as well. As foreign economic regional activity develops the absence

of a full-fledged information market is increasingly notable. A serious obstacle for its development is the high information services price for regional consumers. A leasing system still remains insufficiently developed.

The external economic infrastructure becomes of great importance for regional development providing not only the exchange of goods, services, and information, but also capital transfers. It is connected first of all with the attraction of foreign investments for the joint exploitation of regional natural resources, their complex use, the development of production of goods and services, etc. The developed external economic infrastructure promotes the attraction of foreign investments into a region, intensification of its international economic activity, more complete satisfaction of its needs in production and services, the attraction of additional financial resources, new technologies and modern managerial experience.

The development of external economic infrastructure may become the prime factor ensuring the development of international links of regions of Russia. The activities in that direction assume the cooperation of the subjects of regional economy not only with the committees and commissions of regional legislative and executive authorities, but with the scientific and public organizations when preparing application documents, projects and feasibility studies for various international funds and organizations. Now, among perspective regional projects having real chances of winning grants from the United Nations, European Economic Community or from other international organizations and funds, there may be projects concerning the creation of international scientific and ecological centers for the complex study and development of Siberian resources including the development of a complex of infrastructure facilities (transport, communication, trade, recreational, hotel service, etc.) [11, 14].

### **THE STRATEGY OF REGIONAL MARKET INFRASTRUCTURE DEVELOPMENT**

Under current conditions it is necessary to draft fundamental concepts of regional market infrastructure development for the long-term period defining the main stages of its realization, determining the strategy of regional market infrastructure development including a system of high priority activities.

Fundamental concept of market infrastructure development at a regional level involves the following statements. First, the structure of a regional market system includes several types of markets (a market of means of production, a consumer market, a financial market, a real estate market, etc.), each of which has its own infrastructure and market regulations specifics. Secondly, each type of a market is characterized by specific subjects of market infrastructure which define its performance indicators, forms and methods of management. Thirdly, the infrastructure of each market develops under the influence of and in concert with the other elements of a market system. Fourthly, the mechanisms of regulation of infrastructure of different types of markets should be developed on a consistent basis considering interrelations of all types of markets.

In accordance with this concept a long-term goal of development should be the creation of regional market infrastructure system on the basis of trade and intermediary, financial and credit, information and commercial, foreign economic and administrative relations between all elements of a market system. To establish a scientific rationale of a long-term regional market infrastructure development it is necessary to define the strategic objectives and priorities of a regional market system, the main directions of market processes development and the means of its regulation.

The concept under development should be based on a long-term forecast of social and economic development of a region including the forecast of rates and proportions of economic development, changes of economic structure, dynamics of production and consumption of goods and services, tendencies of scientific and technical development, interregional market relations, living standard of the population and the development of social sphere, etc. The concept of regional market infrastructure development as a long term instrument may provide local authorities with long-run guiding lines taking into account a choice of possible implementations; determine the ways of developed market infrastructure formation; reveal social and economic, investment and environmental problems of regional market infrastructure development in the long term and real possibilities of their solving; substantiate forms and methods of economic and legal regulation of infrastructure of regional markets of all types.

The elaboration of the concept of regional market infrastructure development at the level of oblast, krai, or autonomous republic and its practical realization can be entrusted to the local authorities' regional infrastructure development commission of oblast, krai or republic. The establishment of such a body at the level of a region will allow filling a void in a managerial system and may help to cope with the following tasks:

- to establish a unified information system of regional market infrastructure development analysis and forecasting;
- to create conditions for the development of the whole system of regional market infrastructure and the enhancement of regional economy efficiency;
- to work out a single economic and technical policy of regional market infrastructure development;
- to coordinate a work of separate elements of market infrastructure so as to solve shared regional problems;
- to ensure a proportional development of all subsystems of regional market infrastructure;
- to create favorable economic conditions and a congenial investment climate in a region for the development of business activity and attracting new investments from the other regions and states.

These problems can be solved on the basis of an adequate economic mechanism of regional infrastructure development.

## REFERENCES

1. **Analysis** of the role of integrated structures in the Russian commodity markets. – M: TEIS, 2000.
2. **Globalization** and national financial systems / Ed. by D.A. Hanson and others – M, 2005.
3. The state competitive policy and stimulation of competition in the Russian Federation / edited by S.S. Sulakshina – M., 2009.
4. **Ibragimov L.A.** Commodity market infrastructure. – M, 2001.
5. **Kolodin O.F.** Logistics infrastructure of a regional commodity market. – Irkutsk, 1999.
6. **Komarov M.P.** Infrastructure of different parts of the world. – Saint-Petersburg, 2000.
7. **Competitiveness** and strategic directions of regional development / Ed. by A.S. Novoselov. – Novosibirsk, Russia, 2008.
8. **Mukhanova Ye.B.** Theoretical foundations and ways of market infrastructure development. – M, 1994.
9. **Novoselov A.S.** Market system of the region. Theoretical and practical problems. – Novosibirsk, 2007.
10. **Seleznev A.Z.** Competitive positions and market infrastructure in Russia. – M, 1999.
11. **Siberia** in the first decade of the XXI century / Resp. amended by V.V. Kuleshov – Novosibirsk, Russia, 2008.
12. **Fedko V.P., Fedko N.G.** Infrastructure of commodity market. – Rostov-on-Don, 2000.
13. **Schumaev V.A.** Problems of functioning of market infrastructure enterprises and product distribution. – M, 2001.
14. **Siberian** economy: strategy and policy of modernization. – M., 2009.