

UDC 332.12

THE ECONOMIC DYNAMICS OF RUSSIA AND ITS REGIONS IN THE CONTEXT OF A STRUCTURAL CRISIS: ANALYSIS AND FORECASTING

Gordeev Sergey Sergeevich,

Chelyabinsk State University, Leading Researcher,
Head of Scientific-Educational Centre of the
Institute of Economics affiliated to the
Ural Branch of the Russian Academy of
Sciences and Chelyabinsk State University,
Candidate of Economic Sciences,
Chelyabinsk, Russia.
E-mail: sgordeev222@gmail.com

Zyryanov Sergey Grigorievich,

Russian Presidential Academy of
National Economy and Public
Administration, Chelyabinsk branch,
Director, Doctor of Political Sciences, Professor,
Chelyabinsk, Russia.
E-mail: director@chel.ranepa.ru

Ivanov Oleg Petrovich,

Russian Presidential Academy of
National Economy and Public Administration,
Chelyabinsk branch, Deputy Development Director,
Senior Research Scientist, Candidate of Technical Sciences,
Chelyabinsk, Russia.
E-mail: oliva77@yandex.ru

Kocherov Andrey Valeryevich,

Chelyabinsk State University,
Research Scientist of the Scientific-Educational Centre
of the Institute of Economics affiliated to the
Ural Branch of the Russian Academy of
Sciences and Chelyabinsk State University,
Chelyabinsk, Russia.
E-mail: kocherov.andrey@gmail.com

Annotation

The present article studies some features of the dynamics of Russia and its regions in conditions of a structural crisis and economic instability. The analysis is founded on research results of the long-term dynamics of the system 'country – region' relating to the leading industrial areas of the Russia – the Sverdlovsk and Chelyabinsk regions.

A number of important points associated with various scenarios of regional development, including "turning points" of trends, as well as with a change in the quality of the economic growth, are considered in a context of stability issues. The construction of a model of economic dynamics is presented in terms of several heterogeneous, short and qualitatively incommensurable periods of time series. Some differences of the period of low growth ('depression - stagnation') from the those of the formation of new proportions of development and early growth are marked in the paper. A final trajectory of the development dynamics of each region is considered while imposing corrections which characterise the specificity of the region on general regional trends. Some peculiarities of the dynamics of the regional investment process – one of key features of the economy's growth prospects – are indicated. A variety of requirements concerning models of the regional dynamics in terms of the structural crisis are specified. They are regarded as universal and basic for studying problems of strategic planning. All this is set out in two variants articles in Russian and English languages.

Key concepts:

region, economic dynamics, structural crisis, analysis, trend, risk, model.

Some structural crisis phenomena which affect the dynamics and various proportions of Russian economy have become clearly manifest since 2014. A more than twofold drop in oil prices in the world market is a peculiar reflection of the scale of the changes. However, in some cases the consequences for the development and stability of economic systems became obvious much earlier, after the 2009 crisis. The structural crisis, as a conflict between the old structure of economy and the requirements imposed by a changed market environment and new technologies, breeds a number of problems. In a period of structural economic changes and crisis processes, the correction of the development strategy is inevitable [10, 11].

The structural crisis and new priorities of social and economic development

In contrast to short-lived market crises in the form of recession and recovery (crises with dynamics of indicators of "V" type), a structural crisis (crises with dynamics of indicators of "L" type) which implies long-term structural transformations causes a number of far-reaching consequences. Economic crisis consequences affect various entities of economic activities: from a rank-and-file enterprise to national economies and transnational structures. Among them, a special attention is to be paid to imbalances entailing the greatest risks of negative socio-economic consequences.

An important point of a structural crisis is the primacy of problems in a real sector of economy (a production sphere) and an eventual reflection of their consequences on society, a general *instability of dynamics of development with high risks of separate imbalances*. Such problems pass from a primary microeconomic level to a macroeconomic one and inevitably affect various social relations on a scale of territories (settlements and enterprises). It is obvious that the large-scale restructuring of a real sector of economy requires many changes, affecting a number of important provisions of economic and social policy. Their close interrelationship and the complexity of changes in all elements of *the complex socio-economic system* under study are an essential condition for effectiveness of transformations. In this regard, a number of key issues of sustenance and socio-economic development is shifted from a national level to a regional one. Resolving various issues of sustenance and socio-economic development (primarily those of social commitments, employment and others) virtually refers to the

sphere of shared responsibility of Russian regions and the federal centre.

At the same time, the situation is becoming problematic in many regions of Russia. A generalised macroeconomic index - the gross regional product (GRP) - shows a negative trend in a large number of regions (an index of GRP, in its economic content, is a regional analogue of that of the gross domestic product calculated for the country as a whole). In regions, changes in the socio-economic sphere of the state-wide level are imposed on local ones. Further, a variety of unpredictability problems - "black swans" - inevitably arise in complex non-standard conditions [12]. This calls for the deep rethinking of various provisions and for the identification of new priorities of socio-economic development for the system 'country - region'.

In such circumstances which were not experienced earlier a number of fundamental issues of stability, relating to a *complex two-level socio-economic system*, are addressed by analysts. Then there arise issues of correctness of assessing the current situation, priorities of prospective strategic forecasting, systematicity of the transformation of a market environment and the subsequent improvement of managerial practices. All this requires the construction of a qualitatively *new model of the strategic development of a region in the context of structural socio-economic transformations*. A number of key parameters of such a model which is constructed based on the results of studying the real economic dynamics of Russia and its regions are adduced below.

Contradictions of the economic dynamics and points of the change of trends

It is difficult to attribute the socio-economic development of Russia in recent years to the sustainable development of economy on the strength of the dynamics of trends displayed by key indices (where a trend is a smoothly varying component describing an influence of long-time factors). Here, *steadiness and consistency of trends in the course of a sufficiently long period of time, accompanied by their gradual evolution, is a condition of stability*.

However, some contradictions of fully formed trends of socio-economic development of Russia, reflected in dynamics of the most significant indices, were noticeable in the last decade.

An analysis of the most salient instances of the current economic situation involves an interrelated study of *three aspects of dynamics. They concern the current changes in economy, society, and market conditions*. In view of the real state of the existing information environment (the representativeness and correctness of the reflection of real socio-economic processes in reporting), we should consider a system '*real economy (production) - market environment - society*'. Accordingly, three indicators are considered in this regard. These are as follows: *annual growth of the gross regional product* - for economy; *annual growth of average nominal wages* - for society and *an inflation rate* (as a characteristic of a market environment).

The results of the study of the dynamics in Russia, according to Rosstat¹ [*The Russian Federal State Statistics Service*, with the construction of trends of time series [4], are shown in Fig. 1. Any further detailed elaboration does not fundamentally change this picture.

The displayed dynamics, demonstrated using the construction of linear trends for the above-considered indices, points to a drop in the growth dynamics of *the gross regional product (GRP)* and wages, antecedent to changes in inflation in Russia. Such a multi-annual imbalance inevitably leads to a shift of trends of GRP and wages indices to a *problem area below the level of inflation*. Here, the intersection point of the trends falls on the year 2015. Some external factors negative for the Russian economy in 2014 further restricted the possibility of the self-regulation and gradual levelling-off of negative trends.

However, due to some global external economic and geopolitical factors and a noticeable deterioration of conditions of the economic development in Russia, such a situation involving a "sag" of trends below the inflation level occurred the year before - in 2013-2014. The size of these boundary points is shown large in Fig.1.

A sharp aggravation of the situation and the incipience of conditions of economic instability have reinforced stress instances in markets (primarily in foreign currency exchange markets) and contributed to the development of various crisis processes with an abrupt change of dynamics and the emergence of turning points of trends [7]. In the situation shown in Fig.1, the

¹ Regiony Rossii. Sotsialno-ekonomicheskiye pokazateli [Regions of Russia. Socio-economic indices]. Statisticheskiy sbornik [Statistical Digest] / Rosstat. Moscow, 2015. 1266 pages.

Federalnaya sluzhba gosudarstvennoi statistiki [The Federal State Statistics Service] \ \ Official statistics \ [Electronic resource]. URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/ (accessed: 15.09.2016).

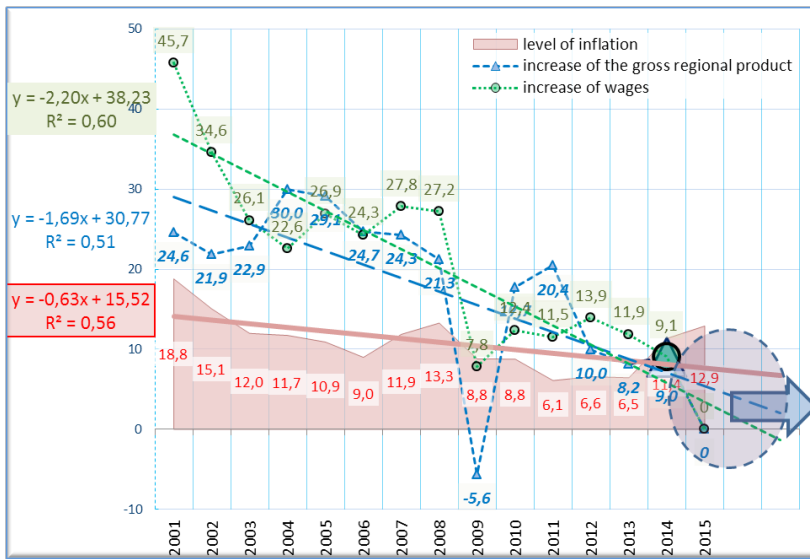


Fig. 1. The dynamics in Russia: annual growth of the gross regional product (in current prices, in percentage terms), annual growth of average nominal wages (in percentage terms), an inflation rate in the Russian Federation (in percentage terms), trends and points of the change of trends in the bifurcation zone

highlighted dots virtually designate *points of the change of trends in economic dynamics*. Here, the “turning” of trends in conditions of low growth leads to an abrupt and largely chaotic change of many proportions in the market, which are otherwise known as “zones of turbulence”. From a viewpoint of stability, this area of multidirectional irreversible changes is a certain vicinity of a point of *partial socio-economic bifurcation*. In this case, the term ‘bifurcation’ (from the Latin word ‘bifurcus’ – ‘forked’) is used in a broad sense, indicating the existence of qualitative and already irreversible changes in many socio-economic processes. This means bringing about a change in proportions, first in economy and then in the social sphere. Some noticeable “jumps” in the dynamics of all the indices are noticeable in such an area of bifurcation (it is marked with a circle in Fig. 1). *In a model of economic dynamics, while considering time series including a period of a structural crisis, it is necessary to single out several (three or more) heterogeneous and qualitatively incommensurable (regarding risks and other factors) short intervals.*

The change of trends and possible scenarios of development

The above-mentioned transition of the examined indices beyond boundary values, reinforced by the crisis processes, inevitably creates some risks of imbalance and depression. At best, these are new *risks of the*

slowing-down of structural transformations (which fact means a long-term multi-annual delay in the development on the “L” horizontal. In conditions of such risks, both the directions and the area of the trends and of the scenario of “near-zero growth”, that is to say that of ‘depression – stagnation’, are shown in Fig. 1 in the form of an arrow.

A symptom of a structural change in economy of a crisis period is *multi-directionality of local trends and high growth in prospective sectors*. It is the presence of high growth in prospective spheres and branches of economy that distinguishes a *scenario of the restructuring of economy from a scenario of low growth (depression – stagnation).*

Individual fluctuations occurring under the influence of external factors (e.g. temporal changes in the global market or in geopolitics) in conditions of low trends quite often cause a temporary deceptive appearance of growth, which, however, holds no promise for the future. Such *local fluctuations* on the “L” horizontal of development lead to a paradox of “a successive pit of crisis”. In reality, there is a certain range (“a corridor”) of *crisis fluctuations with upper and lower boundaries.*

The formation of stable trends in all major areas of economic development and the establishment of new proportions in the structure of economy is a criterion of the completion of a similar period. In such cases,

the formation of new trends and proportions corresponds to the principle of the Pareto optimum.

It should be noted that it is incorrect to consider scenarios of structural transformations and of subsequent investment and innovation growth in an "absolutely pure" form, without regard to stagnation and depression phenomena. In real-world scenarios of socio-economic development, such imposition is inevitable. *A fundamental aspect here is the multi-criterial evaluation of the quality of changes that separates a period of fluctuations of 'depression – stagnation' from that of the formation of new proportions of development and of subsequent transition to high growth.*

The region-wide reflection of the socio-economic dynamics of the country

The practice shows the presence of extremely limited abilities of the existing management system in the prediction of risks and their subsequent rapid and effective troubleshooting, especially at the regional level. Under such difficult and new conditions, there arises a need of the analysis of dynamics of individual regions.

Here and hereinafter, the term *region* implies an entity of the Russian Federation as

the majority of Russian regions can be attributed to a group of "old industrious" areas. They are characterised by a predominance of enterprises relating to "old" branches of industry, created as a result of industrial revolutions of the last century, over "new" ones, which are more knowledge-intensive.

For a more detailed study of problems of the structural crisis, in addition to a Russia-wide analysis, we will examine a situation throughout some leading regions of the Urals: (the Sverdlovsk and Chelyabinsk regions). The choice of these regions as "standards" and "problem indicators" is due to a number of circumstances. According to Rosstat, the Sverdlovsk and Chelyabinsk regions are among the largest fifteen regions of Russia.

Low performance indices were observed in the Chelyabinsk region in recent years. However, the latter has preserved a significant portion of its economic potential until now. In such a situation, the Chelyabinsk region is inevitably becoming an indicator of socio-economic problems. The Sverdlovsk region, which is in many ways similar, with its better dynamics of development, is now a leading industrially developed pace-making region and a reference standard.

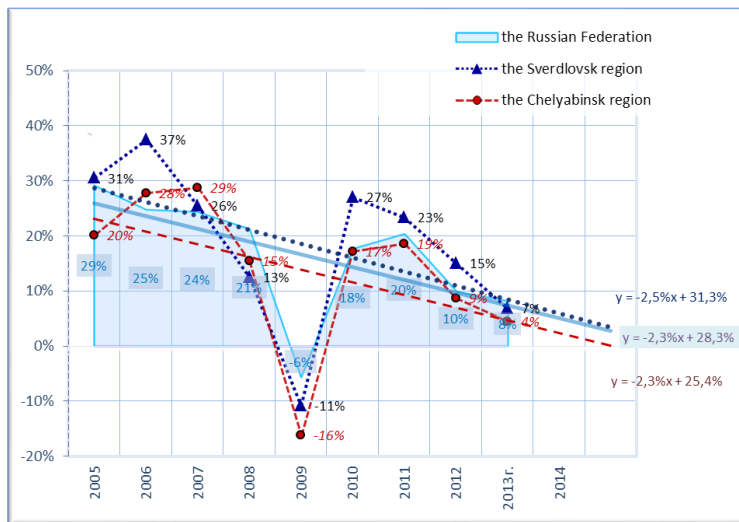


Fig. 2. Russia-wide and region-wide dynamics: annual growth of the gross regional product (in current prices in percentage terms)

a component of the control system. Indices of separate regions are becoming more valid *indicators of social and economic development* than mean generalised values of errors of averaging-out. In this instance, regions are considered as certain "standards" of areas, which provide, in the aggregate, the most representative insight. Despite their considerable individuality,

In the economy of Russia, overall national trends predetermine the development of regions. Dynamics of the gross regional product in most regions is determined by general trends of national economy, and a trajectory of regional dynamics echoes, in many instances, an average one for Russia, with small deviations (Fig. 2). However, in

a situation of low growth a region with the worst dynamics throughout its history, all other conditions being equal, appears to be in a more difficult situation, with increasing risks of negative consequences. In this particular case, the Chelyabinsk region is an area with lower *crisis resistance*. The Sverdlovsk region will be approaching a problem zone somewhat later, preserving some "margin of safety".

Even a slight advantage in "accumulated" dynamics of the socio-economic development of regions under conditions of low growth is becoming increasingly significant. Near a point of the changing of trends, specificity of socio-economic processes, structural changes and proportions can noticeably differ. In this regard, imbalances in major economic and social proportions are increasing, with a subsequent depression while they are self-regulated in the market. Here, a group of specific *regional crisis risks* inevitably appears, some of which were already mentioned earlier [6].

Thus, in conditions of low growth and a structural crisis, the magnitude and structure of transformations (diversification) can considerably differ even in apparently similar regions. Besides, the use of common and incorrect management stereotypes (beginning with the setting of objectives and

the choice of priorities), in this situation, can significantly increase various risks of negative consequences.

With the determinative nature of nation-wide trends, each region's own dynamics of the development is becoming apparent - already against their background. In this regard, points of the changing of trends under the influence of local features in different regions can be somewhat shifted in time, highlighted or, vice versa, smoothed out. Moreover, the appearance of *additional points of the changing of trends in separate aspects and indices of regional dynamics* may be possible [3]. Such specificity changes a situation in individual regions and needs a separate analysis and particular evaluations. *A final trajectory of the dynamics of the development of each region will be determined after imposing corrections which characterise the specificity of a region on region-wide trends (peculiarities of a regional vector of development).*

The reflection of prospects of regional development in dynamics of investments

While the current state of regional economy and sustenance are characterised by the general index of the gross regional product, future prospects are reflected to

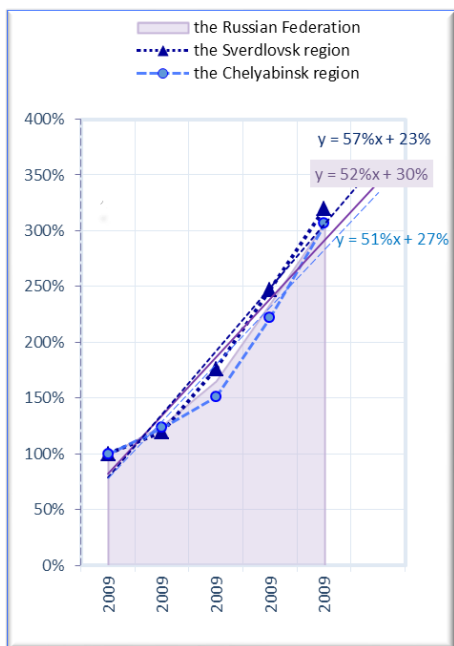


Fig.3. The dynamics of investments in fixed assets in the period of high growth (the growth in percentage terms as compared with the 2004 level and trends)

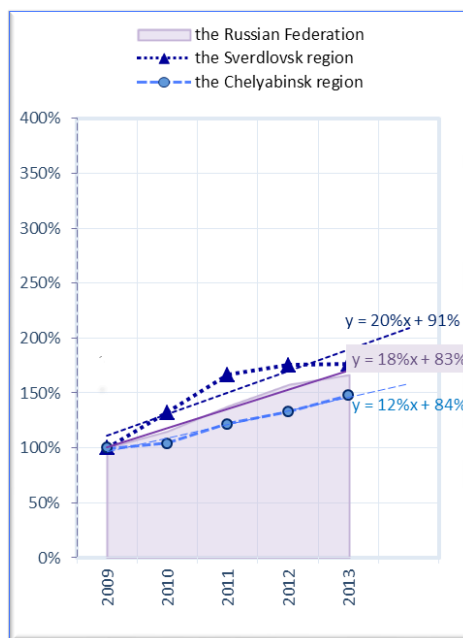


Fig.4. The dynamics of investments in fixed assets in the period of low growth (the growth in percentage terms as compared with 2009 level and trends)

a greater degree in indices of investment process, among these being a volume of investment in fixed assets. At the same time, the dynamics of this key index in regions differs markedly from that of the gross domestic product. Accordingly, prospects of development of regions and development risks also noticeably differ [7].

With a drop in economic growth rates (the dynamics of the gross domestic product), the significance of regional factors for dynamics of investment process is increasing (Fig. 3). In the period of the trends of high growth since 2004, with the region-wide component being determinative, differences in the dynamics of the regions were not so noticeable. The annual growth of volumes of investments in the Sverdlovsk and the Chelyabinsk regions (57% and 51% respectively) in effective prices is insignificantly different from the average nation-wide trend 52% (Fig. 4).

However, in a period of low growth, differences in trends become noticeable even with regions which earlier showed similar dynamics.

The massively lower average Russia-wide trend (Fig. 3), with its annual growth of volumes of investment 18%, is markedly different in its values from that in the regions: 20% in the Sverdlovsk region and 12% in the Chelyabinsk region. In such circumstances, when assessing regional perspectives,

an analysis of specificity in dynamics of investments is becoming increasingly important. The difference in points of the changing of trends of investments in fixed assets for each of the considered regions is displayed in Fig. 5 (the corresponding points of the change of trends are highlighted with enlarged dots marking the beginning of structural problems).

Additionally, an analysis of the dynamics of investments in fixed capital in comparable prices shows some fundamental problems of dynamics of development, associated with the irregularity of the drop of investment volumes in the regions. Thus, in 2015 the volume of investments in fixed assets of the Chelyabinsk region (141.2 billion roubles in prices of the year 2010) decreased below values of the crisis "drop" of the year 2009 (93%). This practically matched the volume of the year 2006. Further, with a negative tendency of a falldown by 10% (for the situation after the point of the change of the trend in 2014, see Fig. 5), the volume of investments is being reduced to values of 2004–2005.

Such curtailing of volumes of investments prevents large-scale diversification and creates risks for the emergence of an extremely difficult situation in the long term. The growth of the gross regional production at the expense of investments will be minimal with the exhaustion of old sources of growth.

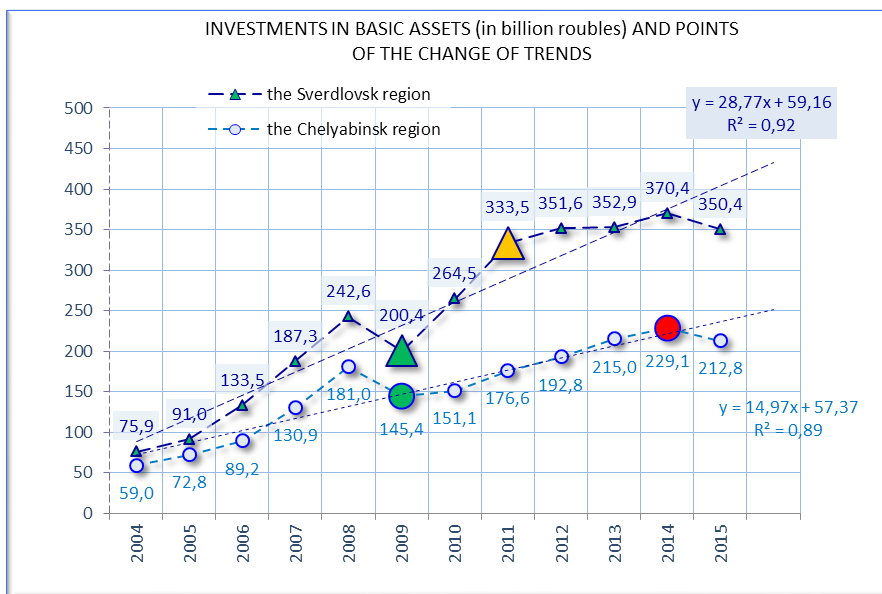


Fig.5. The dynamics of investments in fixed assets and points of the changing of trends region-wide (the growth in percentage terms as compared with the 2004 level and trends)

For comparison, the Sverdlovsk region retains markedly better indices, even with some recession in 2015, as compared with the previous years (126% of the 2009 level and 179% of the 2004 level) and accordingly retains prospects of economic development.

When analysing the dynamics of the gross regional product (see Fig.2), differences in the prospects of the regions' development do not look so significant as while analysing the dynamics of investments (see Fig.5). Alongside with that, in proportion to the exhaustion of reserves of production capacities and the labour market, investments become a determinative factor for the growth of the gross regional product in the future. In this regard, investment dynamics thus becomes instrumental for the dynamics of the gross domestic product.

Such marked differences in the dynamics of the regions render attempts at any "averaging" of evaluations of future prospects incorrect. In such cases, regions take qualitatively different priorities and risks. Even greater differences in dynamics may be observed at a lower municipal level, where trends of the development of economically important but local areas (agglomerations, industrial centres) may radically differ from regional ones.

Such differences predetermine diversity of scenarios of the strategic planning of investment process and subsequent development of a region's economy. However, in all cases, while studying possible future scenarios, *in the context of low growth, investment activities become decisive for a choice of a development scenario of a region, and the classification and formalisation of all aspects of heterogeneous dynamics of regional investment process is becoming a basic condition for forecasting.*

Requirements for models of regional dynamics in conditions of a structural crisis

In the established practice of forecasting and strategic planning, there prevail approaches which involve the preparation of two schematic variants of forecast: very good ("optimistic") and simply good ("moderate", or "basic"). With respect to Russia, such options are determined by focusing on external factors (primarily a price of oil) and institutional changes on a national scale, whereas at the level of regions a choice of the options usually remains without any reference to specific scenarios, that is to say, without any detailed substantiation of regional structural changes and influence of separate growth

factors. With predominance of heuristic deductions and lack of formal evaluations, accuracy and validity of decisions founded on such a simplified and often distorted forecast basis appears to be insufficient [5].

However, the problem of the formalisation of individual tasks of evaluation and forecasting of economic dynamics, even in general, is complex due to a large diversity of examined objects and conditions of development. In a situation of instability and a structural crisis, the consideration of such issues becomes even more complicated and requires revising key provisions of methodology of forecasting and searching for scenarios of development.

Based on the results of the above-advanced analysis, it is necessary to refer the following provisions to the most significant ones in conditions of a structural crisis and a change of dynamics of trends:

1. With an increase of uncertainty, it is expedient to examine a system, that is a group of several multi-factorial models of regional dynamics, modified in proportion to the clarification of a situation.

2. In a model of economic dynamics of a time series in the context of a structural crisis, several (three or more) heterogeneous, short and qualitatively incommensurable (regarding risks and other characteristics) intervals are to be considered.

3. The multi-criterial evaluation of quality of changes becomes obligatory, which separates a period of fluctuations of low growth ('depression-stagnation') from that of the formation of new proportions of development and from the beginning of a period of sustained growth.

4. A trajectory of dynamics of the development of each region will be determined after imposing corrections characterising a region's specificity (peculiarities of a regional vector of development) on region-wide trends.

5. The classification and formalisation of the entirety of features of investment process in areas becomes one of prerequisites for the construction of a model of economic growth.

Within the framework of these provisions, under conditions of real information environment, it is further possible to use both classical mathematical models (primarily econometric) and models built on flexible modifiable algorithms (using principles of the methodology of "soft" systems) with the integration of expert procedures and information technologies.

In the future, the expansion of the sphere of such provisions is associated with the consideration of requirements specified for budget planning [1] and problems of society. Here, a possible list of conditions is very long [2], from requirements of minimizing crisis risks to the reflection of fundamental issues of social responsibility of business [8].

All the considered requirements specified for models of regional economic dynamics of the system 'country-region', which are necessary in the context of a structural crisis and instability, will be also useful, with appropriate adaptation, in other socio-economic conditions.

References

1. Bochco V.S. (2012) *Ekonomika regiona*, no. 12, pp. 342–358 [in Rus].
2. Gordeev S.S. (2015) *Vestnik Chelyabinskogo gosudarstvennogo universiteta. Ekonomika*, no. 12 (367), pp. 62–70 [in Rus].
3. Gordeev S.S., Zyryanov S.G., Ivanov O.P., Kocherov A.V. (2015) *Socium i Vlast'*, no. 2 (52), pp. 48–55 [in Rus].
4. Gordeev S.S., Zyryanov S.G., Ivanov O.P., Podoprighora A.V. (2015) *Socium i Vlast'*, no. 3 (53), pp. 116–123 [in Rus].
5. Gordeev S.S., Kocherov A.V. (2014) *Vestnik Chelyabinskogo gosudarstvennogo universiteta. Ekonomika*, no. 15, pp. 102–107 [in Rus].
6. Gordeev S.S., Kocherov A.V. (2014) *Vestnik Chelyabinskogo gosudarstvennogo universiteta. Ekonomika*, no. 21 (350), pp. 121–127 [in Rus].
7. Ivanov O.P., Gordeev S.S., Zyryanov S.G. (2015) *Socium i Vlast'*, no. 6 (56), pp. 96–101 [in Rus].
8. Kozakov E.M. (2012) *Ekonomika regiona*, no. 1, pp. 21–29 [in Rus].
9. Mau V.S. (2015) *Ekonomicheskaya Politika*, vol. 10, no. 2, pp. 7–19 [in Rus].
10. Medvedev D. (2016) *Voprosy Ekonomiki*, no. 10, pp. 5–30 [in Rus].
11. Taleb N.N. (2007) *The American Statistician*, August, vol. 61, no. 3, pp. 198–200 [in Eng].

УДК 332.12

ЭКОНОМИЧЕСКАЯ ДИНАМИКА РОССИИ И РЕГИОНОВ В УСЛОВИЯХ СТРУКТУРНОГО КРИЗИСА: АНАЛИЗ И ПРОГНОЗИРОВАНИЕ

Гордеев Сергей Сергеевич,

Челябинский государственный университет,
ведущий научный сотрудник,
руководитель Научно-образовательного центра
Института экономики
Уральского отделения РАН и ЧелГУ,
кандидат экономических наук,
г. Челябинск, Россия.
E-mail: sgordeev222@gmail.com

Зырянов Сергей Григорьевич,

Российская академия народного хозяйства и
государственной службы при
Президенте Российской Федерации,
Челябинский филиал,
директор,
доктор политических наук, профессор,
г. Челябинск, Россия.
E-mail: director@chel.ranepa.ru

Иванов Олег Петрович,

Российская академия народного хозяйства и
государственной службы при
Президенте Российской Федерации,
Челябинский филиал,
заместитель директора по развитию,
старший научный сотрудник,
кандидат технических наук,
г. Челябинск, Россия.
E-mail: oliva77@yandex.ru

Кочеров Андрей Валерьевич,

Челябинский государственный университет,
научный сотрудник
Научно-образовательного центра
Института экономики
Уральского отделения РАН и ЧелГУ,
г. Челябинск, Россия.
E-mail: kocherov.andrey@gmail.com

Аннотация

Рассмотрены особенности развития России и регионов в условиях структурного кризиса и экономической нестабильности. В контексте вопросов устойчивого развития представлены результаты анализа многолетней динамики системы «страна-регион» для двух ведущих индустриальных регионов России: Свердловской и Челябинской областей, демонстрирующих сегодня различные сценарии развития. Предложена модель экономической динамики в условиях действия нескольких неоднородных и качественно несопоставимых периодов временного ряда. Отражены отличия периода низкого роста (депрессии-стагнации) от периодов становления новых пропорций развития и начала роста. Итоговая траектория развития каждого региона формируется в результате наложения поправок, характеризующих реально существующую специфику развития региона и общероссийские тренды. Рассмотрены особенности динамики регионального инвестиционного процесса – ключевой характеристики для оценки перспектив роста региональной экономики. Определены основные параметры моделей региональной динамики в условиях структурного кризиса, которые предлагается принимать как универсальные и базовые для изучения проблем стратегического планирования. Все вышесказанное изложено в двух вариантах статьи – на русском и английском языках.

Ключевые понятия:

регион, экономическая динамика, структурный кризис, анализ, тренд, риски, модель.