

## **Problems on Forming System of Indicators to Estimate Efficiency of Social and Economic Development of the Country**

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*Abstract:* At the present time the task on increasing the efficiency of the social and economic development of the country prevails in Russia. It contributes to increasing the social and economic potential of Russia.

In this context, there is a need to develop theoretical and methodological provisions of estimating the efficiency of the social and economic development of Russia. In spite of a great number of works on the economic development of the country, it is necessary to note insufficient consideration of methodologies and indicators related to increasing the efficiency of social and economic development as a system. The existing methodologies of estimation are meant to measure indicators for every specific period. It cannot objectively estimate social and economic development. Thus, this article offers the development of theoretical provisions on estimating the efficiency of social and economic development in dynamics.

*Key words:* public production, social and economic development, integrational processes, transformation, dynamics.

### *1. Introduction*

Factors caused by the globalization have an impact on the social and economic development of any country [1]. One of the most important problems of the interrelated world community is not the cooperation of various social and economic systems any more but the interrelation of split-level economic structures that are characterized not only by the degree of development but also by the degree of the involvement in the global division of labor and the global economy [2, 5].

When considering the system of indicators that define social and economic development of the country, it is necessary to turn to the European experience of the social and economic development that is reflected in works of Wishlade F., Galbraith J. [3] and Fedorenko N.P. [21].

Russian authors paid more attention to the analysis of the system approach to researching indicators. They include works of Fedorenko N.P. (1975), Lopatnikov L.I. (1976) [9], Tyuhnin V.S. (1972), Tsygichko V.N. (1991), Syroezhkin I.M. (1976) [23], and Illarionov A. (1996).

## 2. Method

The main peculiarity of the economic system is the purposeful conduct of any of its elements when the relation of the system elements is supplemented by their indivisibility and mutual correlability.

The diversity of forms and methods related to researching the social and economic development points at the impossibility to reflect such development by one or several indicators. Problems disappear if an attempt is made to accept one indicator as a criterion, even if it rather comprehensively characterizes success of the social and economic development, for example, only GDP or the amount of the revenues earned by enterprises of the country [13].

That is why none of the cost or natural indicators of the economic activity results can become a thorough criterion of estimation. However, some economists think that “these are the tempos of the economic growth and speed of the GDP increase that reflect the level of the national economy efficiency” [4, 7].

This research offers to turn to the method of researching indicators of the social and economic development in dynamics.

The English economist R. Harrod formulated the fundamental equation of the economic growth that can explain various states of the dynamic balance. The basic idea of his theory is called “the accelerator principle”. It is related to the fact that the growth or decrease in the revenue causes the change of investments that is proportional to the revenue change.

Analyzing factors of the economic growth, R. Harrod paid attention to the labor employment. Besides, he included the endogenic function in his model. This function is based on the principle of acceleration and expectations of entrepreneurs in relation to the aggregate demand.

The starting point of the model is investing that aims at extending production capacities.

R. Solow offered the model that caused numerous researches on the basis of production functions. R. Solow relates the economic growth to the change of the level of savings, the increase in population, and scientific and technological progress. For his calculation he uses several indicators that reflect it: production volumes, capital, labor, and level of knowledge in the society. This model is more practical because it allows not only to observe how the economy has changed for a specific period of time but also to compare the growth of certain countries.

The R. Solow’s growth model is meant for researching the dependence of the economic growth on savings and capital formation.

Basic processes of the country development researched in works of Russian economists [8, 10, 14, 15] and indicators that characterize these processes most comprehensively were taken as the basis of conceptual and theoretic provisions on forming the system of indicators related to estimating the social and economic development.

In order to develop the system of indicators to estimate the efficiency of the social and economic development, we will give definitions to dynamic criteria, because the system is based on economic and mathematic, and statistical methods of analyzing temporal series.

The model of forming the dynamic criterion is based on the system approach that allows to reflect the most important social and economic aspects of the country development. This model offers the generalizing estimation of the actual dynamics of social and economic indicators when comparing it with the dynamics of their growth tempos taken as a dynamic standard.

Issues related to forming a dynamic standard have already been considered in works of a number of national researches. However, they have been considered exclusively on the level of a region or a certain enterprise. These are such researchers as Biyakov, Syroezhin I.M., Pogostinskaya N.N., Pogostinskiy Yu.A., Saareper M.I., Eissner Yu.N., Stojanovic Dragisa, Tonkih A.S., and Dianov A.Yu.

The estimation of the social and economic development efficiency offered by the authors can be applied more widely, and not be limited by a specific set of indicators system.

I.M. Syroezhin [16] offered the research approach by using a dynamic standard. Then it was developed by his followers N.N. Pogostinskaya and Yu.A. Pogostinskiy [12] et al. The theory of dynamic standard is based on the principles of dynamic comparability and hierarchy of indicators of the social and economic development, i.e. characteristics that cannot be compared in the static position become comparable in dynamics. The matter is that taking into account the inhomogeneity of indicators, it is difficult to compare them if to consider them as statistic values [6, 18]. However, the dynamics reflects a sort of order that can act as a sample when ranging indicators according to the growth tempos. Moreover, in dynamics temporal characteristics of the system have a natural order, and can be ranged and subordinated to one another.

According to the concept of I.M. Syroezhin, the activity of any system is a selection and implementation of a set of relations from a variety of possible relations, as well as supporting or breaking the existing relations.

In its turn the system can be represented as a set of economic indicators. Using the ranging of indicators according to the growth tempos, it is possible to make such order that can express requirements to a better mode of activity and act as a sample. Such order is called a normative system of indicators, i.e. the aggregate of indicators organized according to growth tempos so that the support of this order during a long time interval provides the best mode of the economic system functioning.

Using the dynamic model, it is possible to reveal the efficiency of the social and economic development in dynamics unlike static characteristics that fix such development only at the specific moment.

Social and economic development constantly changes. Final results change at every new stage of such development. Accounting dynamics allows to differentiate one variant of development from another, a certain stage from the subsequent or preceding one.

We offer a process methodological approach. Its essence is in the fact that social and economic phenomena are considered as processes that interrelate with one another.

Social and economic development is formed as a result of parallel agreement of economic and social interests of many business entities that are related with many entities [19, 24].

This aggregate process is in the form of a number of particular processes implemented by social and economic entities via their economic activity [22].

Efficiency of the social and economic development lies in the organized functioning of all particular processes.

The estimation of the efficiency of social and economic development must take into account top priority areas of both economic and social development [17, 27]. For example, the Russian Federation sets such strategic goals as "... achievement of the level of economic and social development that complies with the status of Russia as a leading world state of the XXI century, and holding top positions in the global economic competition and reliably providing national safety and exercising constitutional rights of citizens".

It is offered to classify the particular process that forms the aggregate social and economic development according to the following systems:

1. System of basic processes that make up the nuclear of the social and economic development.
2. System of auxiliary processes that support the system of basic processes.
3. System of processes indirectly related to the social and economic development that fulfils functions of social provision.
4. System of processes that affect the implementation of the social and economic development.

System approach to analyzing the social and economic development is the tool that allows to successfully solve various management tasks, and the representation of the aggregate of processes of the economic subject as an integral system allows to estimate the efficiency of such development in terms of unified methodological positions.

The system approach means the use of a number of general methodological provisions when researching systems.

Firstly, it is necessary to form the criteria of estimating the efficiency of social and economic development.

Thus, it is possible to research social and economic development by using two types of criteria: static and dynamic. The static criterion is applied everywhere when forming statistic indicators of the social and economic development. However, the statistic criterion is not informative.

The dynamic criterion reflects the development of processes system. It reflects the state the system of processes aspires.

The model of efficiency of the social and economic development can be represented in the generalized form as follows:

$$A > B > C > D,$$

where A is the speed of development of basic processes of the social and economic development, B is the speed of development of auxiliary processes of the social and economic development, C is the speed of development of indirect processes of the social and economic development, and D is the speed of development of processes that affect the implementation of the social and economic development.

Every process provides several indicators that directly characterize every process of the social and economic development.

The set of indicators of the efficiency of social and economic development contains only those indicators that reflect basic social and economic processes.

Selection of the research object depends on the research goals and is not limited. It is offered within the research to trace indicators of the efficiency of social and economic development to the organized system where every process will be given a specific position in a certain system, i.e. indicators will have a special interrelation with one another.

Thus, the system of indicators will be allocated according to definite social and economic processes (Fig. 1).

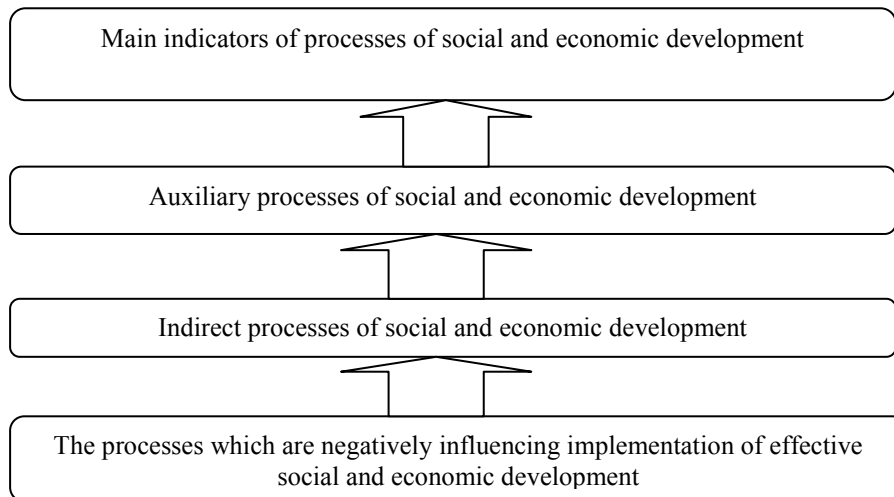


Figure 1 – System of Indicators of Social and Economic Development Indicators

The main requirement of the methodology is that indicators must reflect the process of the social and economic development: basic processes of the social and economic development, auxiliary processes of the social and economic development, indirect processes of the social and economic development, and processes that affect the social and economic development [26].

When estimating the efficiency of the social and economic development, one has to often face the impossibility to choose one generalizing indicator of efficiency, and moreover, the impossibility to define the goal of an indicator via quantitatively set parameters and characteristics.

Basic processes of the social and economic development are characterized by basic macro-economic indicators.

Indicators related to the efficiency of social and economic development that were formed for four main types of processes allow to form a comprehensive system of indicators that reflects the sample efficient social and economic development of the country (Table 1).

Table 1 – System of Indicators to Estimate Efficiency of Social and Economic Development

Position of indicator in the general system	Indicator
System of indicators reflecting basic processes of the social and economic development of the country	
1	GDP
2	Volume of foreign investments in Russian economy
3	Export
System of indicators reflecting additional processes of the social and economic development of the country	
4	Population
5	Economically active population
6	Students
System of indicators characterizing indirect processes of the social and economic development	
7	Living wage
8	Monetary expenses and savings of the population
9	Population's housing
System of indicators that affect efficient social and economic development	
10	Level of criminality
11	Level of unemployment
12	Infantine mortality

It is necessary to note that the system of indicators included in every process can change depending on the researches goals, researcher's preferences and specificity of the object under research.

We have offered 12 indicators that are directly related to one another and the social and development of the country. These indicators are ranged in a special manner: GDP must be the greatest indicator according to the acceleration, and infantine mortality must be the smallest one according to the acceleration. According to the authors, this is a sample of developing the ideal system of social and economic development.

### 3. *Result*

The offered model for estimating the efficiency of the social and economic development of the country is based on the following approach. Firstly, the structure of the social and economic development efficiency is analyzed. Then the integrating indicator that allows to provide comparability of estimations is formed.

There is such characteristic of a movement as acceleration. It is peculiar of uniformity in any types of inertial systems of references. It allows to compare dissimilar indicators

of the social and economic development regardless of the units of measure they are considered in.

In this research acceleration acquires a special economic content. The acceleration is used to achieve the comparability of indicators related to the social and economic development.

Indicators of the social and economic development and its efficiency estimation will be represented as temporary systems. The calculation of the indicator growth tempo results in defining the speed of its movement, and the acceleration is fixed by calculating the tempo of tempos. Having values of accelerations at every moment of time for all indicators, it is possible to define the efficiency of the social and economic system as a consequence of estimating the processes that take place in it. After defining the priorities of temporal changes for every indicator and in the system of indicators within the dynamic criterion, it is necessary only to compare the criterial state of the system and the actual one. In order to do it, it is necessary to use the rank correlation.

It is necessary to use only official statistical data for the analysis.

In this research we will only compare the systems of indicators of the social and economic development for 1994-2003 and 2004-2013 [11, 20]. It will allow to reveal the efficiency of the social and economic development over the recent 10 years as compared to the development of the country at the end of the XX century. The comparison of two decades allows to follow the changes in the social and economic development of the country in the synchronicity and coherence of the development of basic processes, etc.

The estimation of the efficiency of the social and economic development is modeled according to several stages.

At the first stage it is necessary to formalize the dynamic criterion reflected in the criterial order of the movement of indicators that were selected to estimate the efficiency of social and economic processes.

The criterial order is the rank series that contains the selected organized indicators in accordance with the adopted criterion:

- Basic processes of the social and economic development,
- Auxiliary processes of the social and economic development,
- Indirect processes of the social and economic development, and
- Process that prevent the social and economic development.

The criterial order is not an absolute value but a system of indicators that have dynamics of accelerating in accordance with their normative order.

At the second stage temporal series are smoothed.

It is necessary to perform the initial processing (smoothing) of the temporal series by using the procedure of standardizing according to Formula 1.

For example, in the temporal series  $X_1, X_2, \dots, X_k$  every new element of the smoothed series  $S_i$  is calculated according to Formula 1:

$$S_i = 1 + (X_i - M_e) / (X_{\max} - X_{\min} + 1), \quad (1)$$

where  $M_e$  is a median of the temporal series,  $X_{\max}$ ;  $X_{\min}$  are the maximum and the minimum terms of the series;  $i = 1, \dots, k$ .

The advantages of this approach lie in the decrease in the total inaccuracy of the transformation. The conducted researches (Buyakov O.A., 2004) showed that in case of the median smoothing we got the accuracy about 4%, in case of the sliding smoothing – 8%, and in case of the exponential one - 11%.

When calculating the growth tempos, the median smoothing allows to easily calculate all indicators, because the transformed temporal series lacks zero and negative components under the absolutely complete coincidence of this trend with the initial one.

At the third stage of the model formation, it is necessary to form the actual rank series of the indicators movement. That is why it is necessary to do the following actions:

- To calculate the tempo of indicators growth,
- To calculate the acceleration of the indicators values change, and

– To range the list of indicators according to the criterion related to the decrease in the value of acceleration of their movement. Thus, the first rank will be assigned to the indicator with the greatest acceleration, and the last one will be assigned to the indicator that has the smallest acceleration.

One of the problems that may occur when calculating indicators is to define ranks of indicators with the same values of acceleration. It is necessary to define them for substantial considerations that result from specific tasks of the research.

When calculating this third stage, several ranks series will be obtained (Table 2). They reflect the dynamics and structure of the movement of the analyzed indicators of the social and economic development.

Table 2 – Matrix of Positions of Indicators Movement

Indicator	Critical order of movement	Actual order of movement according to the period				
		T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>	...	T <sub>K</sub>
Indicator 1	1	X <sub>11</sub>	X <sub>12</sub>	X <sub>13</sub>	...	X <sub>1K</sub>
Indicator 2	2	X <sub>21</sub>	X <sub>22</sub>	X <sub>23</sub>	...	X <sub>2K</sub>
Indicator 3	3	X <sub>31</sub>	X <sub>32</sub>	X <sub>33</sub>	...	X <sub>3K</sub>
...	...	...	...	...	...	...
Indicator N	N	X <sub>N1</sub>	X <sub>N2</sub>	X <sub>N3</sub>	...	X <sub>NK</sub>

At the fourth stage of the research two rank series – critical and actual – are compared and correlated. In order to estimate the closeness, congruity or incongruity of actual and normative series, it is necessary to use coefficients of the Spierman (for fluctuations) and Kendall (for inversions) rank correlation.

1. For every indicator from the list, the square of difference (fluctuation) between its position (rank) in the normative regulation and the rank in the actual regulation is calculated according to Formula 2:

$$Y_i = (X_i - X_k)^2, \quad (2)$$

where  $Y_i$  is the difference between the rank of the  $i$  indicator in the critical regulation and in the actual one,  $X_k$  is a rank of the indicator in the critical regulation, and  $X_i$  is a rank of the indicator in the actual regulation.

2. Then we calculate the sum of squares of fluctuations for all indicators at the considered period of time and calculate the Spierman coefficient according to Formula (3):

$$K_s = 1 - \frac{6 \cdot \sum_{i=1}^N Y_i}{N \cdot (N^2 - 1)} \quad (3)$$

The coefficient of the rank correlation of Kendall is calculated in several steps.

Firstly, for every indicator they calculate a number of other indicators that in the critical regulation have a higher position than the position of the indicator under consideration, and in the actual regulation it has a lower rank than the rank of the indicator under consideration (Formula 4):

$$S = \sum_{p=k+1}^N a_p$$

$$a_p = \begin{cases} 1, & x_k > x_i \\ 0, & x_k < x_i \end{cases} \quad (4)$$

where  $k$  is the position of the indicator under consideration in the critical regulation,

$S$  is a number of inversions for this indicator,  $p$  is positions of the indicators that are compared with the indicator under consideration,  $N$  is a number of indicators included in the list of the system characteristics,  $a_p$  is a function that shows whether the indicator under consideration is in inversion with the indicator compared with it (if so,  $a_p = 1$ ,

on the contrary  $a_p = 0$ ), and  $x_k(x_i)$  is a rank of the indicator in the actual regulation that has position  $k(p)$  in the criterial regulation.

Secondly, the total number of inversions for all indicators is calculated, and the coefficient of correlation of Kendal is defined:

$$K_k = 1 - \frac{4 \cdot \sum_{i=1}^N S_i}{N \cdot (N-1)} \quad (5)$$

Both coefficients ( $K_s, K_k$ ) estimate the closeness of this rank series to the series accepted as a sample (criterial) at the interval from -1 to +1.

The +1 estimate occurs when the actual series coincides with the criterial one, and -1 occurs in case of their complete multi-directionality.

The obtained results must be analyzed as follows. If the indicators are positive, it says that the social and economic development and its efficiency are improved. If the indicators are negative, the social and economic development is inefficient and there is a fluctuation of the development system from the optimal one. It also shows the worsening of the efficiency of the social and economic development.

The indicator of the resulting estimate of closeness of the actual structure of system indicators system to the criterial (sample) one is based on two coefficients of the rank correlation for this period of time and can be calculated using Formula 6:

$$R = \frac{(1+K_s) \cdot (1+K_k)}{4} \quad (6)$$

The resulting estimate shows how much the character of changes in the structure of the system relations complies with the selected criterion of the estimation. In other words, it is possible to say that this indicator allows to estimate the efficiency of the taken strategic decisions in accordance with the set criterion. The range of this indicator change is from 0 to +1. Herewith, +1 is a complete congruity of changes in the structure of the system relations with the selected criterion, and 0 is a complete incongruity of changes in the system in relation to the selected criterion. The section limited according to  $P^K$  at the time interval  $(t_1, t_k)$  reflects the situation when at any moment the potential of the country is used entirely (Fig. 2). The section limited by kinked and point-to-point curves at the time interval  $(t_1, t_k)$  reflects the real estimate of the efficiency of the social and economic development.

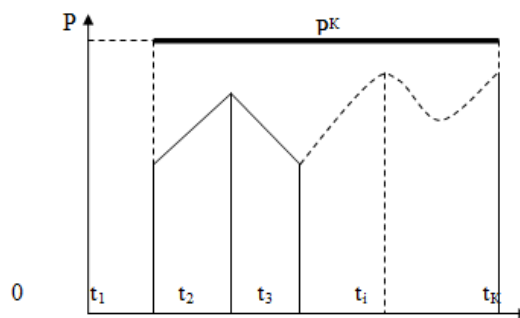


Figure 2 – Geometrical Interpretation of the Efficiency of Social and Economic Development

The value of this level can be estimated by correlating the areas of the second and first sections. Taking into account that  $R^K = 1$ , it is offered to use the following formula:

$$L = \frac{0,5 \cdot (R_1 + R_T) + \sum_{i=2}^{T-1} R_i}{T-1} \quad (7)$$

where  $T$  is a number of time periods, and  $R$  is an indicator of the resulting estimate obtained according to Formula 6.

The more coherent the processes of the social and economic development that take place in the country is, the greater value  $L$  (maximum  $L = 1$ , minimum  $L = 0$ ) will have.



Thus, the quantitative estimation of the efficiency of the social and economic development has been formed.

Then it is necessary to add the qualitative estimation that will allow to make the conclusion about strong and weak points in the social and economic development.

The initial data for such estimation will be acceleration of movement of indicators for every system related to estimating the efficiency of the social and economic development.

For this purpose, in this research the authors will use the weighing coefficients to reveal the values of the acceleration for every indicator under research.

The weight of every acceleration indicator will define its position in the system for a block of indicators.

Table 3 shows the numeric values of coefficients for a system of blocks including not more than ten indicators.

Table 3 – Weighing Coefficients to Calculate the Average Value of the Indicator Acceleration in the Block

Indicator No.	Number of indicators in the block								
	2	3	4	5	6	7	8	9	10
1	0.622	0.472	0.386	0.329	0.288	0.256	0.232	0.211	0.195
2	0.378	0.286	0.234	0.199	0.174	0.155	0.140	0.128	0.118
3	–	0.242	0.198	0.169	0.148	0.132	0.119	0.109	0.100
4	–	-	0.182	0.155	0.136	0.121	0.109	0.100	0.092
5	–	–	-	0.148	0.129	0.115	0.104	0.095	0.088
6	–	–	-	-	0.125	0.111	0.101	0.092	0.085
7	–	–	-	-	–	0.109	0.098	0.090	0.083
8	–	–	-	-	–	–	0.097	0.088	0.081
9	–	–	–	-	–	–	–	0.087	0.080
10	–	–	–	-	–	–	–	–	0.079

After calculating the average values of accelerations of indicators for each of the four blocks, we will obtain the matrix (Table 4) to define weak (the least efficient) and strong (the most efficient) indicators of the social and economic development.

Using the changes of values in Table 4 and taking into account the criterial feature, it is possible to observe the process of transformation of the system of the social and economic development and make conclusions about the reasons that caused such transformation. In order to give quantitative estimation to the transformation, it is offered to calculate the level of synchronousness of the social and economic development [25].

Table 4 – Matrix of Data to define Strong and Weak Points

System of indicators	Average value in the block according to the period				
	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>	...	T <sub>K</sub>
Basic processes of the social and economic development	U <sub>11</sub>	U <sub>12</sub>	U <sub>13</sub>	...	U <sub>1K</sub>
Additional processes of the social and economic development	U <sub>21</sub>	U <sub>22</sub>	U <sub>23</sub>	...	U <sub>2K</sub>
Indirect processes of the social and economic development	U <sub>31</sub>	U <sub>32</sub>	U <sub>33</sub>	...	U <sub>3K</sub>
Processes that prevent the social and economic development	U <sub>41</sub>	U <sub>42</sub>	U <sub>43</sub>	...	U <sub>4K</sub>

In Table 4 values  $U_{11} \dots U_{4K}$  take into account the values of indicators shown in Table 1 for the specific period (quarter, year).

It is reasonable to define the level of synchronousness (SY) in relation to indicators of the basic processes of the social and economic development because they determine the tendency of the country development. This indicator will reflect the level of synchronousness of other systems of indicators in relation to the system of basic indicators. The range of the value change is from  $-1$  to  $+1$ . Herewith, the upper value is possible only in case of the absolute synchronousness of processes, and the low value  $-$  in case of complete asynchronous behavior of the processes development (Formula 9):

$$SY = (K_1 + K_2 + K_3) / 3, \quad (9)$$

where  $K_1$  is a coefficient of the correlation between the speed of basic and auxiliary processes development,  $K_2$  is a coefficient of the correlation between the speed of the basic and indirect processes development,  $K_3$  is a coefficient of the correlation between the speed of the development of basic processes and processes that prevent the social and economic development.

#### 4. Discussion

Thus, with the aid of synchronousness and mathematical statistics, it is possible to obtain more veracious data about the social and economic development.

Based on the obtained results of the research, it is possible to make the following classification of the efficiency of social and economic indicators (Table 5).

Table 5 – Function of Elements of the Social and Economic Development According to Stages of Its Life Cycle

Element/phase	Process	Process dynamics
Formation of efficient social and economic indicators	Integrating	Synchronization of processes
Development of efficient social and economic indicators	Selective	Accelerating processes
Recession of efficient social and economic indicators	Stabilizing	Slowing of processes
Depression of efficient social and economic indicators	Disintegrating	De-synchronization of processes

In all stages of the life cycle of the social and economic development, basic processes of the country act as a buffer that smoothens contradictions stimulated by such development.

We think that the ideal variant of the social and economic development is the one when particular processes related to basic processes have the greatest acceleration, and processes that prevent the social and economic development have the smallest acceleration. In other words, the aggregated process of the social and economic development must have the direction on the most optimal trajectory in relation to a criterion.

Based on the stipulated methodology of estimating the efficiency of the social and economic development, it is possible to represent an ideal model of management when all processes are synchronized and agreed. It is possible to achieve it if basic processes achieve the greatest acceleration, then auxiliary processes follow, indirect processes achieve the medium acceleration, and the processes that have a negative impact on the social and economic development of the country achieve the smallest acceleration.

#### 5. Conclusions

Thus, the authors have developed the adapted recommendations for estimating efficiency of the social and economic development of the country. They include various scenarios

of the system formation: formation, development, recession and depression. It is similar to the life cycles of economic processes.

Stages of the social and economic development depend on the speed of the development of processes described in the methodology of estimating the efficiency of such development.

After estimating efficiency of the social and economic development by using the offered methodology, it is necessary to aspire for forming and developing the ideal model of the system related to the social and economic development.

Table 6 shows the results of calculations according to the methodology offered by the authors. It is related to two periods and specifies types of the social and economic development in every year.

Table 6 – Types of Social and Economic Development during the 1<sup>st</sup> and 2<sup>nd</sup> Periods in Russia

Years	1 <sup>st</sup> period										2 <sup>nd</sup> period									
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Typological nomination of the efficiency of the social and economic development	Lagging I	Favorable	-	-	-	-	-	Lagging I	-	Favorable (ideal)	Favorable (ideal)	Favorable (ideal)	Depressive II	Depressive II	Lagging I	-	-	-	Depressive II	Favorable

It is possible to make the conclusion from the obtained results from Table 6 that during any crisis and post-crisis periods the whole Russian system of the social and economic development was in the form of systemless process. Period 1, i.e. during the transitional economy, contains the largest number of such systemless years.

In the second period the system character and efficiency of the growth of the social and economic development are observed more intensively. However, the 2008-2009 crisis and the post-crisis period show that economy of the country is not ready for such global problems. It is only by 2013 when Russia managed to achieve the favorable level of development. That is why it is possible to make the conclusion that in the second period indicators of the social and economic development are more systemized and can be estimated.

In case of the favorable ideal development of social and economic indicators (it was in 2003-2005), the speed of growth of basic and auxiliary processes surpass the speed of indirect processes. In this case it is possible to speak about stable social and economic development: the level of the population's life improves, a low level of unemployment remains, industrial production and social infrastructure, as well as other features of high economic activity are intensively developing.

In case of the favorable development of social and economic indicators (it was observed in 1995 and 2013), the basic peculiarity is the advanced growth of processes that prevail social and economic development in relation to indirect processes.

On the basis of the 2013 data, it is possible to imagine the development of social and economic indicators according to two scenarios. In one case the speed of indirect processes

will grow, and the speed of processes that prevent development will decrease. It is peculiar of the mode related to diversifying the country economy.

In other case, the situation may worsen up to the transformation of the social and economic development to the depressive type.

In order not to allow the second scenario, it is necessary to strive for the ideal model of the social and economic development like the one in 2003-2005.

In 2014-2015 it is necessary to pay attention to the growth of the following areas of the social and economic development: to increase the living wage in the country, to improve the conditions that allow to increase expenses and savings of the population, to develop new methods to provide the Russian population with housing with the aid of state programs, to decrease rates for mortgages, and to simplify administrative barriers when constructing new residential houses.

Thus, on the basis of the obtained results the work considers and offers to implement the adapted scenarios of developing the system of the social and economic indicators of the country: formation, development, recession, and depression. They are analogous to the life cycles of economic processes.

The stages of the development depend on the speed of development of processes related to the indicators of the social and economic development that are described in the methodology of estimating the efficiency stated in this article.

After estimating the efficiency of the social and economic development according to the methodology, it is necessary to strive to form and develop the ideal model of the system related to managing the social and economic development of the country. The ideal model of the efficient social and economic development is a system where all indicators are agreed, synchronized, and efficient.

Practical importance of the results is found in the fact that the offered adaptive methodology can be used on various levels of management. It is relatively simple for applying and can research various quantitative and qualitative indicators of the social and economic development of the country.

In order to approach the ideal model of efficient social and economic development of the country, it is necessary to take a number of measures, including the following: to start using the developed methodology in program products of the statistical informational system of Russia, and to automate procedures related to estimating efficiency of the social and economic development. It will allow to increase the veracity of the analysis of such development and to timely reveal disagreement of social and economic processes. It is also necessary, on the basis of constant monitoring of the social and economic potential of the country development, to form programs of the social and economic development of Russia, which, being within a system but not separately, will have an impact on indicators; to continue further research of the increase in the efficiency of the social and economic development by using the developed methodology with a more detailed and increased set of indicators by considering every subject, city, economic zone, and area.

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