New quality of economic growth in the tree of goals of economic development

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Abstract. The authors explore the tree of goals of economic development and make the tree model, economic development goals, analyze the existing methods of measuring the new quality of economic growth and produce new prospects of economic growth index as the most reliable and accurate tool for measuring the quality of the new economic growth at the present stage of development of world economy, considered the main components of the index and isolated components NPEG-index, as well as analyze the concept of a new quality of economic growth, identify accents, which it puts in today's global economic system, as well as the opportunities it provides for economic development.

Keywords: new quality of economic growth, tree of goals, economic development, global economy, NPEG-index.

JEL-codes: F43.

1. Introduction

A comprehensive and detailed analysis of the new quality of economic growth requires the determination of the last place in the tree of the economic development goals. The society is moving along a path defined by the target variable. The formulation of goals is different: some objectives are formulated explicitly, others implicitly (by implication); alone with the use of mathematical tools, while others using indicative action. But in any case, goal-setting is a necessary and inevitable process in the life of society. The purpose of economic development is the quantitative and qualitative results, which wants to achieve a society in their economic activity for a certain period.

2. The tree of goals of economic development

In a homogeneous society (for example, socialist) goals are determined on the basis of homogeneous interests of the whole society. In a society with heterogeneous economic interests objectives are defined by the regulatory body in the interests of the ruling classes and groups. Most appropriate in the goal-setting is
the method of tree construction economic development. It allows you to reconcile different objectives, priorities, highlighting at the same time the most important thing. Conventionally, the relationship between the different goals can be represented by the following scheme (Fig. 1).

The choice of targets, describing the strategy of economic development of the society is a difficult, complex problem, whose solution depends on the socio-economic and political development. On how to correctly formulate these or other purposes, they depend for successful execution.

The initial stage (and most important) in the construction of the tree is the extension purposes (fixing) the main goal of economic development (GTSER). In this case, one of the goals of economic development, most fully reflects the essence of the process of economic development. It is a guide to develop a strategy and adoption of interrelated economic decisions in the field of dynamics of economic results.

The formulation of the main goals of economic development is the first and most important step in the construction of the objectives tree. The nomination meeting the needs of the people causes a wave of accusations in the trend toward glorification of consumerism. But such charges cannot be justified, since poverty is not consistent with the economic development. Consumption for the sake of consumption has never been ideal, and in the era of building developed socialism in our country, although the problem of meeting the needs at the time, of course, to treat the problem of high practical relevance.

Fig. 1: The tree of goals of economic development

The need to have the impulse activity of the subject, the internal incentives begin. The classics of Marxism-Leninism were considered that the level and structure of demand depends “not on consciousness, and from being, not from thought, but from the life that depends on the empirical development and manifestation of an individual's life, depending, in turn, on public relations”.

Despite the fact that the requirements do suggest active individuals to meet them, but the general (main) goal of economic development, they cannot act. Firstly, there is the problem of unreasonable requirements. Even philosophers of the ancient world, considering the person as natural, corporeal beings, sought to determine the degree of rationality of human needs through a natural measure, prompted by nature itself.

Secondly, the needs of all members of the society cannot be met, as the level of education, age, health status, life habits formed - these and many other factors that shape each of us has their own idea about the necessary, the desired, the right. Thirdly, the need cannot be measured, because they are constantly changing.
and are not always clearly understood by the individual. Other representation comes from the needs of different awareness of the satisfaction of the individual.

A. September criticized the use of both wealth and utility (sometimes understood as happiness, satisfaction of desires or just a selection) as a measure of well-being, arguing that these categories provide a false space for evaluation [1]. Instead, he argues that welfare should be relevant to the prosperous state (being well), which in the most general terms, is the opportunity to live long, eat well, be healthy, educated, and so on. D. According to A. Sen, evaluation of the standard of living is a way of life, and not in possession of goods (which has a derivative and variant significance).

The theory of evolution developed two main approaches to the role of income in the change in the level of well-being: income and potential. The theory of income considers motivation investment in human capital in terms of revenue in the future, defining income as a measure of well-being. In the philosophy of a measure refers to a unity of qualitative and quantitative aspects of the object, in which a certain quality must be linked with the required amount, in which qualitative and quantitative side correspond to each other; while the quantitative aspect of the object can be changed, be different, but only within certain limits, determined by the quality of the data subject. Potential approach proves that the human tendency towards a healthy lifestyle should have the intrinsic motivation, even if social investments pledged in advance with zero profitability.

The defenders of potential theory are inclined to attach great importance to social security as a means to increase private income and instrument of government, while the supporters of the theory of income (income-centered view) see the development differently. The comparison of Human Development Report 1990 and World Development Report 1990 clearly demonstrates this difference. In the latter as a fundamental objective of development is highlighted poverty reduction (from the perspective of the income and not only), great attention is paid on economic growth as a tool for poverty reduction, although important role and certain public organizations. In the Human Development Report, researchers have a different point of view, corresponding to the general theory of the potential, which is protected by Saint, noting that Social Security is a leading tool for human development, and the economic growth paying relatively less important [2].

Despite the fact that none of these approaches do not deny the importance of income and property and social security, given the theory on different emphases, which entails a difference in economic development policy. To increase the visibility of the difference between these two approaches is necessary to consider their respective goals. Theory of income refers to the social investment as a necessary means to improve human well-being. Supporters of the potential approach, by contrast, believe that the tendency towards a healthy lifestyle should have the intrinsic motivation.

The goal of economic policy is to achieve sustainable economic growth through the socialization of new quality of economic institutions, allowing provide real, worthy man logistical, economic, political and cultural conditions of its quality of life, which allows him to decide the extent of quantitative meet their needs.

The essence of the socialization of economic institutions, such as the content of NKER, - a set of objective and subjective relations to man as the highest social value, the main manifestation of which is: free non-profit activities, including wage labor. Such an approach allows us to construct conceptual tree objectives of social development.

But to achieve the main goal must be to achieve sub-economic development, the quantitative value of which is expressed in terms of the target variable to be solved with the help of targeted instruments.
Selection of sub-goals of social development is a challenge. They should act “safe and economic development”, “safe human development” and “safe environmental development”. Triad “society - the economy (agriculture) – nature” is the key to sustainable development of the national economy. Taken together, the sub-represent nothing other than the implementation of a new quality of economic processes, that is, the transfer of all economic processes to a new level.

A new quality of economic growth cannot be the primary purpose of economic development, although bears social significance, because itself has a goal - to practical implementation of the principles of humanism.

When building a tree of objectives must adhere to the principle of compensation Kaldor-Hicks, which is that “the transition from one state of the economy to another is the advancement of society if its members are those whose well-being has improved, can compensate for the losses incurred by other individuals, and while maintaining the level of well-being, at least equal to the original” [3].

Thus, the economic reforms of the state, as well as ongoing business leaders and economic activities should be comprehensive and focused, offsetting the negative effects of economic development. These solutions must be dynamic, not static in nature. “The situation of conflict and tension in our society, of course, is subject to change in response to changing historical circumstances and requires constant updating of strategic formulas for harmonization in each case, these formulas have been adequately addressed problems” [4].

Important for the conceptual design of economic policy is to provide the economic system “in the movement, integrity, development, unity and contradiction of its structural properties that characterize the one hand, their potential economic system, and on the other - reflect its relationship with the environment. The first group includes self-organization, self-planning, self-regulation, the second - adaptability, flexibility, compatibility, autonomy, hierarchy, security, reliability” [5].

3. Measurement of a new quality of economic growth

A new quality of economic growth is inextricably linked with the sub-goals that economic development carries within itself. Economic growth as one of the target variables of economic development is conductor of MPEG. A new quality of economic growth combines sub-economic development and ensure their harmonious conflict-free interaction.

One of the sub-targets appears optimal economic growth. But in order to determine the optimal quantitative parameters of economic growth, it is necessary to answer the question: what place in the hierarchy of goals takes the individual income? The answer to this question is not straightforward.

The problem of the selection of indicators reflecting the degree of achievement of the objectives is to select the most appropriate indicators of many possible. There are a number of criteria: for example, they should be scientifically designed, clear, sensitive to changes in what they intend to measure, measurable and regularly complemented.

There are several indicators of well-being as an alternative to gross domestic product (GDP). Examples include the index of sustainable economic well-being and human development index.

Index of Sustainable Economic Welfare (Index of Sustainable Economic Welfare - ISEW) is sometimes called an indicator of real progress (Genuine Progress Indicator). At the beginning of the 1990s G. Daley and K. Cobb was improved team of experts from non-governmental environmental organization, “the New Economics Foundation” (NEF) and the Stockholm Environment Institute. As a result, the index ISEW turned into a comprehensive indicator of wealth. Create ISEW - the remarkable success of scientific thought,
because it symbolizes one of the first attempts to create a synthesis of economic, environmental and other ideas [6].

Comparison of two indicators: GNP and ISEW create an impressive picture. If before they are closely correlated with each other, since the middle 1970s create situation has changed. From this point on, the rate of ISEW for UK, USA and other OECD countries began to decrease, while the GDP has continued to grow. Firstly, environmental degradation leads to an increase in GDP (which is illogical), while the figure ISEW this decreases (which is reasonable). Secondly, reducing the ISEW in OECD countries observed since the mid-1970s., Helps to explain the paradox, which is as follows. Official statistics show a safe economic growth, but most people find that they have to make more effort to ensure that their former standard of living and it is not always possible. The fact that the official statistics do not take into account what you need. The main part of the growth, which she says is composed of the cost of corrective measures (related to losses and problems), and not on goods and services [7].

Today ISEW indicator exists as theoretical proposal scientists. It is necessary to take the next step - to move from theory to practice. It is about practical restructuring the global economic activity on the basis of non-compromised GDP and GNP and replacing them with ISEW or any other reasonable measure. While this issue is the subject of heated controversy and heated debate. Some scientists actively supported the ISEW. Others, however, believe that the economic indicators prevailing in today's economy, with all their imperfections, are only acceptable. In their opinion, the rate of ISEW, despite its appeal, is unlikely to be the basis for economic calculations and practical comparison of welfare states in the coming years.

The problem with these indicators is the subjectivity of selecting the necessary components and the method by which the estimated weight of each of them. It is necessary to establish monetary value as the basis for determining the importance of the indicator, but it is not easy even for such favorable natural resources such as fuel. Estimation of non-profit goods, such as diversity of wildlife, beauty and aesthetic qualities, it is not possible. Work on indicators of the environment in the UK and other countries are mainly concentrated on the calculation of the depletion of resources, emissions and losses in the physical sense because of the conceptual difficulties monetary value. Now, many international experts argue that the creation of “green GDP” is impossible because of the practical and methodological difficulties. Should statisticians try to work towards such a highly aggregated individual indicators, reach agreement on the components and their significance? Or is it better to stay on the larger package of indicators?

4. New prospects of economic growth index

Criterion for the effectiveness of qualitative transformation of the national economy can serve as an index of the new quality of economic growth (New prospects of economic growth index - NPEG-index). This index is a measure of the level of preparedness of the nation-state to participate in the process of post-industrial transformation, and includes three sub-indices and the variables that form the data codes (see Fig. 2).

NPEG-index is designed to have the following general basic properties: sensitivity, capacity for aggregation, ease of interpretation, the scientific validity. The complexity of the theoretical basis of content NPEG-index is the existence of uncertainty as to what is the index, and that is an indicator. Not clearly worked out the question of the relationship between them. There is no general agreement on the dimension indicators and indices, as well as the choice of the scale of measurement, that is, the range of their numerical values.
In this regard, the selection and construction of indices social dynamics occur quite randomly. Moreover, indicators and indices are often considered as identical. This inevitably leads to a rapid increase in the number of input indicators and indices, many of which are not.

Fig. 2: Index`s components

This index reflects the quality of growth and includes three components: economic, social, environmental, each of which is determined by the index (see Fig. 3).

The most studied of the presented indicators is developed by United Nations Development Program of Human Development Index. As a means of measuring the existing capacity to meet the material and spiritual needs and the needs of people, this figure is used by professionals to monitor the social progress of nations and humanity as a whole.

Badges indicator reflects the level of well-being and quality of life of the population of a country, and is the arithmetic mean of the three most visible indicators of the level of life: life expectancy index, education index, the index of real GDP per capita. The closer the value of the index to unity, the higher the degree of human development in the country, and the closer a society is on the way to the desired objectives.

Fig. 3: Components of NPEG-index
Scientists have long been in search of a more aggregated than the GDP, the statistical indicator level of development, which could reflect the vast majority, if not, then at least the key landmarks in the socio-economic progress of man. Search process has been fraught with many difficulties. Indeed, some analysts have suggested some economic and social indicators, but were unable to join them in the overall index, and policies considered challenging at the same time to compare the set of indicators. A number of proposed indicators do not have the necessary methodological framework, and was rejected after the first short-term test.

The Human Development Index can take values ranging from zero to one, and as the arithmetical mean of the other three indices, characterizing the three most important indicators of human development - life expectancy at birth, level of education and per capita income is determined by the formula:

$$J_{x,0} = \frac{J_{\delta_1} + J_{\delta_2} + J_{\delta_3}}{3}$$  \hspace{1cm} (2)

where $J_{\delta_1}$ - life expectancy at birth index; $J_{\delta_2}$ - index level of education (a composite indicator is calculated as the adult literacy index and the index of gross enrollment ratios in primary, secondary and higher education); $J_{\delta_3}$ - index of real GDP per capita, calculated according to purchasing power parity (PPP) rates of different countries in dollars.

According to the UNDP methodology, the calculation of each of the components of the composite index used by fixed standards of minimum and maximum values defined by the formula:

$$J_x = \frac{(\text{fact value of } x_i - \text{minimal value of } x_i)}{(\text{maximal value of } x_i - \text{minimal value of } x_i)}$$ \hspace{1cm} (3)

In the Human Development Report for 1999 adopted a new formula for calculating the income index. The income index is calculated as follows:

$$J_x = \frac{\log_{10}(\text{fact value of } x_i) - \log_{10}(\text{minimal value of } x_i)}{\log_{10}(\text{maximal value of } x_i) - \log_{10}(\text{minimal value of } x_i)}$$ \hspace{1cm} (4)

where logarithms of GDP per capita are used in the numerator and denominator.

An important advantage is the ability to index its adjustments as refine the concept of human development. HDI does not become a kind of frozen construct. On the contrary, experience shows that States and international organizations greatly stimulated further search of comparable methodologies for calculating the components of the index in order to improve the overall quality of this kind of statistics.

Basis for each component of the composite index is to assess the relative distance between its actual value and the maximum, which is the ultimate goal of development. Based on three basic choices of human development - a long and healthy life, education and improvement of knowledge, as well as an adequate level of income to maintain a decent standard of living for a variety of features, such as territorial or sexual differences, assesses human development in the country.

It is worth noting that none of the countries included in the comparison, cannot be a model at the same time on all social settings. For example, Sweden, being the first on the Human Development Index, life expectancy and education of the population, is a 10-th place on the GDP per capita. United Kingdom, ranking 1st place in terms of education, are to 8th place in life expectancy and 11th - GDP per capita and human development index - on the 5th place. France also took 5th place in the HDI, but by defining the parameters of this place on the 2nd, 3rd and 9th places. Germany on the HDI is on the 6th place, and by component parameters - on the 8th, 3rd and 7th places. In the first six human development index are still
Belgium, the Netherlands, Finland, Denmark and Austria, which in Russia cannot be a guide because of their small size.

Characteristically, all the compared countries have sharply different grades for individual macrosocial parameters. And life expectancy Russian Federation gives all EU countries; by level of education ahead of only two EU countries (Luxembourg and Portugal), and ahead of the bulk of the countries applying for EU membership, giving, Estonia, Slovak, Poland, Lithuania and Hungary. On average per capita level of GDP, Russia is ahead of the twenty-eight countries compared, only five candidates for accession to the EU - Lithuania, Latvia, Turkey, Romania and Bulgaria.

In 1985, Russia ranked by HDI 13th place among the twenty-four EU countries compared, giving all countries except Portugal and ahead of all EU countries. However, since the beginning of perestroika human development index in Russia began to decline, and only before the end of the century began to grow slowly, but still 5.6% is not reached the level of 1985

At the same time, all the compared countries, except Lithuania and Romania increased HDI, including Portugal – 12%, Cyprus – by 10%, Belgium – by 7.3%. The largest EU countries: Germany HDI increased by 6.6%, France – 6.1% and the UK at – 8.2%. Thus, the gap in the index of human development between Russia and comparable countries increased by more than 12%, except in the ex-Soviet Baltic republics and a number of other candidates for accession to the EU, which in 1985 was ahead of the curve, and in 2000 arose lag.

The next element of the aggregated NPEG-index is the index of access to information technology (Idit). In the index included eight variables, covering five areas that define the overall situation of the country. These areas include the availability of infrastructure, an acceptable level of cost to access, level of education, the quality of services in the field of information and communication technologies (ICT) and the use of the Internet. IDIT overcomes the limitations inherent in other indices of ICT. Carefully selected criteria not only provide its global nature, but also transparency. The main focus here is on factors that have a direct impact on the determination of the potential of the population in terms of access to ICTs. Efforts to develop indicators for measuring access to ICTs are a testament to the increasing trend in the international community to the use of transparent and specific criteria for assessing the situation in the countries. ICTs are also considered an important tool in achieving the other development goals, including the Millennium Development Goals, including the Millennium Development Goals. Idit data are presented in Appendix 10 index reflects the overall ability of individuals in a country in terms of access to information and communication technologies and their use. It consists of eight indicators are grouped into five categories. Each indicator is given to the indicator with a value from 0 to 1, which is determined by dividing it by the maximum value or “target”. After that, each indicator is weighted in its category, and the resulting index values are averaged to obtain the total value of IDIT.

Improving the competitiveness of the economy - the fundamental direction of the qualitative socio-economic development. There variational criteria for the country's competitiveness both on macro and micro levels. The most authoritative and revealing of these is the study of the World Economic Forum. In the annual review of the organization's “Global Competitiveness Report” provides data on the competitiveness of most countries of the world [7]. Competitiveness of the country is estimated in two complementary indicators. The first of these - the index of competitiveness growth (Growth Competitiveness Index), developed by J. Sashom D. and J. MacArthur, and the second - the index of business competitiveness (Business Competitiveness Index), which is based on the theory of competitiveness M. Porter.

Growth Competitiveness Index determines the ability to achieve economies of sustainable economic growth in the medium-and long-term non-on the basis of three categories of variables: the macroeconomic
environment, public institutions and technology. In 2003, this indicator Russia ranked 70 position (in 2002 - 65), of 102 countries considered.

Based on the estimations of experts of the World Forum, Russia raised the credit rating (component of the macroeconomic environment), but the quality of public institutions remains extremely unsatisfactory, especially in such indicators as corruption. In Russia, focuses primarily macroeconomic environment on the basis of which is expected to further socio-economic development of the country, while the scientific and technical capacity and institutional factors that, along with macroeconomic stability, economic growth is determined are not dominant development our country.

The index of business competitiveness includes two sub-indices:

a. experience and functioning of the strategy (the complexity of the production process, the nature of competition, the costs of R & D, market expansion, etc.);

b. the quality of the national business environment, characterized by competitive factors of the diamond:
   - factor conditions (infrastructure, human resources, capital markets);
   - terms of domestic demand (as consumers, government procurement of advanced technology, the requirements for the protection of the environment, etc.);
   - availability and related service industries (the quality of local suppliers, access to local specialist research services, etc.);
   - structure and strategy of the firm and intra-industry competition (intellectual property protection, the effectiveness of the bankruptcy law, non-price barriers to trade, the value of imported foreign equipment, and so on. D).

Important in determining the extent to which the qualitative growth has and evaluation of environmental outcome of the process of growth. Currently, the role of environmental factors in the development of the economy is recognized in the international community decisive. Depletion of natural resources and environmental pollution are the basis for the deterioration of economic indicators in the future.

There are different approaches to the assessment of economic performance, taking into account the damage from pollution and depletion of natural resources at the macro level (e.g., a system of integrated economic and environmental accounts of the United Nations, the OECD projects, etc.). One of them is indicator of genuine savings, calculated by the World Bank.

Indicator of genuine savings is a result of adjustments in gross domestic savings based on estimates of the depletion of natural resources and damage caused by environmental pollution. This indicator is calculated as follows: GDP (PPP) - the total private and public consumption = Gross domestic savings - consumption (disposal) of fixed capital = Net domestic savings + spending on education - the depletion of energy - the depletion of mineral resources - the depletion of forests - the damage from emissions CO2 (and dirt) = True domestic savings (as% of GDP). For Russia, the genuine savings rate is important because it shows the need to compensate for the depletion of natural capital due to the growth of investment in human and physical capital.

Index genuine savings - the newly introduced index, calculated on the basis of genuine savings indicator similar to the Human Development Index:

\[ J_i = \frac{(\text{fact value of } x_i - \text{minimal value of } x_i)}{(\text{maximal value of } x_i - \text{minimal value of } x_i)} \]  

NPEG-index is calculated as the arithmetic value of all of its component indices, and thus represents the total integrated a qualitative indicator of socio-economic development of a country.
5. Conclusion

A new quality of economic growth in addition to qualitative transition involves a change of ideology socio-economic structure, according to Lenin, is a holistic system of socio-economic relations of one specific type, which is a social form of production. “The essence of the economic system – A. Polyakov, – is not the way to production, i.e., exploitation of one part of the people of the other, and the relations within the ruling class, in the Leninist sense of the word. Among those who organize production, makes decisions, enjoys advantage in the consumption of the finished product. Or, in other words, the essence of the economic system lies in the nature of horizontal connections that make up the economic system”.

Assessment of the quality of economic structure involves the allocation of basic components and entities that form of communication within order and are the creators of the horizontal and vertical motivations. Inside the lifestyle is important to identify the conditions that allow implementing any and all cells and determining the dominant target setting. The central idea of the concept of a new quality of economic growth is to construct such facilities, based not on the primary needs of, and in the representation of the individual and society to make their choice in favor of a multilateral development of the personality.

According to this concept, economic growth enables the public to realize the three groups of features:

- expanded reproduction of human resources;
- concentration of intellectual capital;
- preservation of ecological diversity.

The fundamental difference between the concept of a new quality of previous concepts of economic growth, its specific feature is the fact that economic growth is not seen as the goal of economic development, as well as a means of realizing the socio-economic potential and transformation, according to the theory O.V. Inshakova, conditions resource, and the resource factor. In this case, the concept of a new quality of economic growth puts the following key emphases:

- reliance on the real possibilities of society and the individual, taking into account not only the established institutional environment, but also the degree of continuity and availability of traditions;
- taking into account the interests of future generations, along with the accumulation of industrial, innovation and cultural potential.

6. References