# Sustainable economy: concept of post-global development

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**Abstract:** The paper: - scientifically substantiates that the global economy, which at the current stage of its development demonstrates aggressive expansionism, the elimination of the economic basis of progress, shows signs of an upcoming phase transition that is able to reformat the world economic system; gives a definition of a sustainable economy, the long-term growth of which is ensured by the conditions for maintaining its competitiveness, which are minimally dependent and determined by the dynamics of the conjuncture of foreign markets; proposes a methodology for assessing the economic stability of modern states economic based on the aggregation of economic sustainability predictors and stabilizers (in the spheres of traditional, human and natural capital); defines the concept of modernizing the principles of state economic regulation;

#### 1 Introduction

Despite the long history of scientific research on the problems of instability and finiteness of globalization, only the global crisis of 2008 clearly demonstrated the need to search for new directions for the development of mankind, more related to sustainability, responsible consumption, and the formation of socio-economic systems that are not only internally stable, but also externally competitive in unpredictability and dynamics of the world market.

The instability of the 20s of our century, the inability of the global economy not only to form a system of predictors and stabilizers of crisis situations, but also to overcome their consequences, based on the initial principles of the market efficiency, private property, division of labor dominance, actualize the problems of research in the field of a sustainable economy, correlate assessment of the factors and conditions for a sustainable economy with prospects for the long-term progress of the countries.

The purpose of the study is to characterize the global economy as a fundamental concept of the current stage of the development of society in terms of its finiteness, limitation, alternativeness; objective signs of the inevitability of the forthcoming phase

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transition of the world economy; to define a sustainable economy in the structure of the world economy, its modern functional content.

## 2 Theoretical analyze

The issues of finiteness, limited prospects of development (Frank, 1998; Friedman, 2005; Piketty, 2014; Yakovlev, 2021) and lack of self-preserving functions (Wallerstein, 2000; Draskovic, 2014; Polanyi, 1944) of the global economy, the concept of which, in fact, is dominant and determines world economic progress after the collapse of the bipolar system in 1991, the growing destructive impact of globalization (Baudrillard, 2006, 2015; Buchanan, 1997; Delyagin, 2003; Zingales & Rajan, 2004; Lukach, 2006; Sen, 1999), its inability to solve problems of planetary importance (Birdsall, 2006; Dabla-Norris, 2015; Milanovic, 2016) have been actively discussed in academic circles over the past decades, have formed a powerful theoretical and methodological basis for proving the inevitability of the upcoming transition to a new phase of the world economic order (Kagarlitsky, 2007; Maksimov, 2008; Mezhuev, 2006; Pereslegin, 2010; 2006), which focuses, among other things, on self-sufficiency and stability of the national economic systems.

The fundamental definition of the sustainability of the system (including socio-economic ones) was presented in the studies by (Gaponenko, 2008; Lange, 1968; Leontiev, 1990). Criteria of the economic system stability were also analyzed and classified (for example, Abalkin, 1994; Borodin & Kiseleva, 2011).

The issue of a society's ability to sustain its mode and level of wealth production has been a key problem in economic theory since the early19th century. In particular, the problem of availability of natural resources (Jevons, 1865), the consequences of depletion (Stiglitz, 2015; 1974; Hotelling, 1931), restrictions on economic growth (Meadows et al., 1972), public sector deficit, payment imbalance (Feldstein, 1972); the limits of capital expansion (Domar, 1946); the efficiency of the state system of redistribution of national wealth (Kaun, 2005).

The neoclassical paradigm was central to economic thinking in the 20th century and justified the limitation of productivity growth by the possibilities of industry, defending the possibility of sustainable growth in any sector (theories of growth by (Domar, 1946; Harrod, 1939) and has recently been replaced by ideas about the impact of technological progress and environmental constraints on the sustainability of the economy (Solow, 1956), creating a platform for popularizing numerous endogenous models of economic growth (Kaplan, 1976; Kuznets, 1966; Noorman, 1995).

In the middle of the 20th century human capital became the central issue of economic sustainability. The value of human capital has increased dramatically in the context of the intellectualization of labor and the active post-modernization of capitalist relations (Becker, 1971; Ben-Porath, 1970; Shultz, 1971).

Since the beginning of the 21st century, environmental issues have firmly entered the list of problems of economic sustainability and have become a leading factor in the transition to a model of sustainable and self-sufficient growth (Kenneth & Bert, 1996; López et al., 2011; Mesagan, 2015; Turner, 1999).

Much research on economic growth in the era of ecological globalization has been carried out in an industry context (Kenneth & Bert, 1996) in regional context (Ayesha & Kashif, 2004) in order to justify the feasibility of purely economic (Ayong Le Kama & Schubert, 1999), political (Ederington et al., 2007) and even social (eg, changes in consumer behavior, for example) (Winston, 1982; Diwan, 2000; Diener & Biswas-Diener, 2002) transformations.

## 3 Institutional Aspects of the Post-Globalization Transition

Evolving, humanity went through several phase transitions, each of them was accompanied by cardinal transformations of the governing principles, was stimulated by a crisis (or even catastrophic) own awareness of the limited resources and prospects for the effectiveness of existing production relations, had a global character, further reformatting the world system of division of labor and competitiveness, required significant costs on the part of each member of society, which determines social inertia, attempts to disrupt modernization through external expansion, which does not cancel, but only delays inevitable modernization, and in itself characterizes the approach of the socio-economic system to the transition.

The inflationary nature of the industrial system, the lack of balance between the most important components: consumption, production of means of consumption and production of means of production; the commodity's value acquisition before utility; the close relationship between production and the financial sector, giving rise to numerous "whirlwinds", determine its instability – it must either constantly grow or stagnate, requiring a transition to a new quality of the systemic relations content.

Logically, having chosen the first, the industrial system moves to the global phase of its development, the world concept of the global economy is formed. This transition was accompanied by structural crises, and wars for the redivision of the world and the restructuring world economic relations.

Despite the driving forces of economic globalization (countries, companies, groups of people)at each historical stages, globalization was the result of a synergy of interests in accordance with the hierarchy of subjects, which are their spokesmen.

The most important principle of the global economy – the growth of the mobility of productive factors both extensive (due to geographical expansion) and intensive (due to the inclusion of more and more new productive factors in the mobilization trend) – is possible only in conditions of world economic space fragmentation, in the presence of barriers and obstacles to free movement of productive factors between owners, corporations, industries without any regard to their jurisdiction and state borders.

The dialectics of changing phases of extensive and intensive growth in the mobilization of production factors in the development of globalization is unbalanced. Thus, the duration of the phases is reduced after each transition, which threatens the long-term progress strategy. Despite the unlimited prospects for the global economy growth, the question about the finiteness of their extension in time arises.

Globalism, despite numerous declarations on the alignment of the world and the universalization of economic conditions, has effectively fragmented the world economy, defining an ever-widening gap between countries and regions, "planting" liberalization within the fragments of the world economy, which contribute to the adaptation of the national market not to local, but to global priorities, world market conditions.

Among the goals of economy globalization, the localization of consumption is also defined. It simplifies the logistics and management of global production and distribution systems, however, at present, it seems possible to mobilize, detach from the national characteristics of consumption itself, form the infrastructure of world prices for consumer goods (within the framework of the proposed dialectic of extensive and intensive phases of global economic growth changing).

The results of the analysis, affirming the unlimitedness, but the finiteness of globalization, against the background of the impact of phase transitions that reformat the world economic structure (as a result of which the countries that were the first to acquire the maximum advantages) update the discourse on the search, definition and ways to implement the principles of the future transition in the current conditions.

Despite expansionism, world-differentiating effects, instability and the absence of self-preserving functions of globalization, the latter is a system striving for sustainability.

The global economy has created a number of effective "stabilizers" of its own stability, for example, the activities of MNCs, which were largely aimed at stabilizing and sustainable development of entrepreneurship, accumulating the advantages of monopolization, networking and autonomization from government regulation tools, overcoming the problems of limited markets; the ability to realize expansion in the virtual space, in areas of activity that initially do not imply the principle of efficiency in their functioning.

At the same time, the statistically proven assumption that the growth of globalized economic systems in the 21st century was provided, for the most part, due to the growth of consumption, reveals an additional constraint on globalization, which can be eliminated or overcome only through the transformation of consumption and understanding of the product itself (for example, the replacement of a traditional product with a certain simulacrum of consumption in the form of digital services, values of the virtual world, converted from the capital of social networks, the Internet). Such a transition will require a revision of the existing consumption model, actively promoting these ideas under the slogans of caring for nature, the finiteness of natural resources, the growth of personal freedom, social responsibility, which corresponds to the logic of the global economy's desire for stabilization.

The transition to sustainable economy in the context of geopolitical destabilization, sanctions, and trade wars, which have become both a reality of the beginning of the 21st century and clear evidence of the exhaustion of globalization as the only concept of world progress, seems to be the only possible prospect today.

Moreover, the effectiveness and efficiency of this transition, the ability of states to create a national model of sustainability, taking into account the requirements of maintaining not only the external competitiveness of the economy, but also a system for resuming and maintaining the quantity and quality of the latter, autonomous from the dynamics of the world economic environment, will provide them with leadership over tens, if not hundreds of years of further evolution within the boundaries of the future phase of socio-economic progress.

Undoubtedly, within the framework of the new structure of the world economy, a complex hierarchy of macro-regional and national models of varying degrees of stability, mutual integration, autonomy will be formed, and, consequently, a new system of international division of labor, the environment for the functioning of transnational production and distribution structures, the manifestations and prospects for the functioning of international organizations and infrastructure will be transformed.

Even the very concept of external (global) competitiveness will undergo significant changes, and its assessment will increasingly consider the factors of environmental expediency, social responsibility and orientation, concern for future generations.

The system of classification and comparison of states will move away from the idealization of macroeconomic indicators calculated in monetary units and will require a wider introduction of environmental and social, "sustainable" alternatives (for example, energy intensity, renewable energy supply, labor costs, intangible investments, for example, in human capital, etc).

At the initial stages, the system of world economic policy will become more fragmented, flexible, tied to the geography of specific countries or macro-regions. The states will be forced to abandon global positioning in favor of localizing both development resources and product sales markets, and implement a more selective and differentiated strategy in relations with foreign partners.

Of course, even within the framework of the world economic system segregated into regional or national models of a sustainable economy, a cast of new leaders and outsiders will form in the future, who will begin to spread their own experience, creating a globally sustainable economy, but this, obviously, will be a relatively optimistic scenario for the next, in a hundred(s) years of transformations progress, which it seems inappropriate to conceptualize today.

A more timely problem is a smooth, non-catastrophic transition of countries to national models of economic sustainability, the process of controlled de-globalization and the setting of new strategic guidelines and narratives for socio-economic development.

The state is not a representative of an ideal market, its functions are not determined by the priorities of reproduction, expansion, efficiency, but also not by an abstract concentrate of the pluralism of the interests of social groups, capable of ideally broadcasting, representing and protecting them, but by a complex system of structures, institutions and organizations that are not capable of performing the functions of the market, capital, entrepreneurship.

An assessment of the achievements of various economic schools and approaches to the problem of state regulation of the economy demonstrates the transformation not so much of regulatory instruments as of determining the very place of the state in the market economy system, its spheres of influence on market relations, at various stages of capital turnover.

While remaining unchanged, the goals of state regulation of the economy were achieved through the use of excellent tools: initially, the protection of the emerging market from foreign competition (protectionism), later, the protection of capital within national borders, and from the moment when first crises of overproduction appeared, various types of production and distribution became areas of active state regulation, the regulation of which was recognized as more or less effective (the demand is among the Keynesians, regulation of the money supply is among the monetarists, and the market failures is among the neoliberals).

In the course of state regulation of the economy evolution, its object moved from the final (trade) to the initial (production factors, money supply) point of the production process, which generally strengthened the role of the state as a "guiding" development, leaving fewer opportunities for market self-organization, reduced the variability of economic progress, but at the same time extended relations based on market principles (the primacy of efficiency) to an increasing number of social interactions.

On average, the share of government spending in GDP increased from 15.28% in 1995 to 17.67% in 2020 (World Bank data). Moreover, the growth was stable in five-year terms (the share of expenses was 15.3% in 2000, 15.34% in 2005, 15.63% in 2010, 16.47% in 2015). The forecast shows some adjustment of the share of government spending in GDP in 2025 (at the level of 17.52% on average in the world, with a further increase to 18% by 2030).

The state regulation of the globalizing economy is also undergoing significant changes when the state specifies its own goals, principles of regulation, tools and methods used, moving away from comprehensive "public goods and interests", actively uses results based on practice, expert assessments and experiments to develop the maximum flexible and expedient policy.

## 4 Economic Sustainability as a Post-Globalization Concept

Based on the analysis of the achievements of neoliberals (Ekelund & Hebert, 1997; Domar, 1946; Solow, 1956; 1974), ecological and economic (Kaplan, 1976; Kuznets, 1966; Aesha& Kashif, 2004; Ayong Le Kama & Schubert, 1999; Ederington et al., 2007) approaches we can determine economical sustainability as a concept of progress that does

not deny globalization, presents models of transition that are distinguished by the formal and functional participation of the state, business and society.

Sustainability as the ability of an object to be in a state of relative equilibrium under the constant influence of internal and external environmental factors is a systemic quality and is reflected in its economic, social, political, and environmental aspects.

The first problem of economic sustainability, understood as the conditions under which a certain level of production and consumption can be maintained indefinitely, is to determine the extent to which already existing markets affect the environment. The second problem is the imperfection of markets as a factor in the effectiveness oftools for managing and pricing natural capital in the context of sustainable economic development.

The problems of ecology and economic growth have come to the forefront of world science since the early 2000s, when sustainable development was recognized as a single universal concept that implies not only the state of the environment, but also considers it as a key success factor.

An alternative to the market concept of a sustainable economy, which focuses on the principles of marginal and rational use of natural resources, limiting the interchangeability of natural and anthropogenic capital, has become the school of ecological economics, the active development of which contributed to the creation of complex statistics on natural capital and its exploitation, the development of advanced and detailed business organization models aimed at amore accurate representation of the relationship between the use of capital and labor, on the one hand, and the exploitation of natural resources, on the other.

The assessment of the correlation between national GDP and environmental quality indicators in the countries of the world demonstrates the universality and global nature of the trend towards the need for environmental efficiency, differentiation of the approach to nature as a factor in economic development: in some countries, the environment is evaluated only as a resource for economic growth and a factor of attractiveness for foreign business and capital; in others, it is an important characteristic of domestic consumption, not only the habitat, but also the sphere for generating innovations, a national attribute of global competitiveness.

It is impossible to unequivocally define the concept of a sustainable economy as one that contrasts sharply with or opposes globalization. Rather, it is a form of alternative globalization with shifted strategic priorities, but driven by similar forces and market mechanisms (Table 1).

A sustainable economy is not a modernized autarchy, statism, or dirigisme, but a system consolidating the efforts of the state, business and society in achieving the country's long-term competitiveness in the dynamics of the world economy, within which the principles of actors' functioning are meaningfully transformed.

<b>Table 1.</b> Principles (values) of a global and sustainable economy (cor
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Global economy	Sustainable economy		
International mobilization of productive	Access to productive factors when needed		
factors			
Minority of geography, globalization of	Limiting the dependence of development on the		
interdependence	world markets conjuncture, striving for		
	geographical localization		
Efficiency of management and business	Efficiency of resource use		
processes			
Concentration of ownership among efficient	Balance of the economic role of all members of		
owners	the community		
Consumption dominant	Responsible consumption dominant		
Capitalocracy	Technocracy, Netocracy		
Fair efficiency	Effective fairness		

It was substantiated that a sustainable economy as an active component of the world economy striving for constant growth, having a certain level of production and consumption, the efficiency of production processes and state regulation, should have the conditions for long-term maintenance of the external competitiveness of national goods and the quality of domestic consumption, ensuring stable growth, not dependent on world market conditions.

Attempts (Husgafvel et al., 2017; Christen & Dalgaard, 2013; Sachs, 1999) to develop a system of indicators of the economic system sustainability, allowed us to assume that in this methodology, the indicators should, on the one hand, reflect the potential of the economic system for sustainable development (reproduction of traditional, human and natural capital) in the long term (predictors), and also characterize the economic system autonomy from the factors of the dynamics of the world economic environment (stabilizers).

In their synergy, the sustainable economy predictors and stabilizers should focus on strategic goals, maintaining the growth of the national economy, its external competitiveness with a gradual reduction in their determinism by external economic factors.

**Table 2**. Countries outsiders and leaders in terms of the stable economic growth likelihood (compiled by the authors, data from the World Bank)

Outsiders				Leaders	
country	probability, %	country	probability, %	country	probability, %
Ireland	5,10	Malaysia	21,44	Japan	31,15
Georgia	8,95	Nigeria	21,97	Philippines	32,56
Azerbaijan	9,21	Kazakhstan	22,58	Indonesia	33,92
Armenia	10,59	Greece	25,78	Colombia	34,58
Thailand	10,81	Portugal	25,95	Italy	36,75
UK	13,53	KSA	26,29	Spain	39,67
Russia	15,37	S. Korea	26,34	Canada	44,08
Ethiopia	15,74	Mexico	27,51	France	46,08
USA	17,41	Vietnam	27,83	Germany	47,30
Argentina	17,60	Iran	28,32	New Zealand	48,70
Turkey	18,11	China	29,35	Austria	49,20
Belarus	18,16	Pakistan	30,64	India	49,35
South Africa	20,51	Brazil	30,75	Belgium	51,87
Switzerland	21,07	UAE	30,93	Australia	61,52

In functional economic systems, any deviation from certain predetermined indicators of sustainability should serve as an impetus for the immediate mobilization of stabilizers that ensure the restoration of disturbed equilibrium.

According to the results of the study of economic growth dynamics and the likelihood of its stability among 199 countries for the period from 1980 to 2021 (the results are in Table 2), it turned out that about a third of the countries studied (67) grew faster than the world as a whole; economies of high-middle-income countries have "grown" more strongly; in the regional context, the leadership of the countries of South Asia, Africa and the Asia-Pacific region is noticeable.

Extrapolation of long-term trends demonstrates a decrease in the probability of stable economic development of the world in 2025 and 2030, albeit insignificant (to 36.72 and 36.35%, respectively). In high-income countries, the likelihood of stable economic growth will decrease from 30.6% to 30.2% and 29.1% in 2025 and 2030, respectively, a similar trend (reduction to 24.2% and 23.6%) is projected in low-income countries, while in middle-income countries the probability will change by less than half a percent.

The findings confirm not only the instability of the economic growth of the countries of the world, but also the fact that the likelihood of its stabilization will decrease in the short term (2025 and 2030), which justifies the need for a transition to a sustainable development economy instead of the destabilizing narratives of globalization.

The de-actualization of the neoclassical dogma about the possibility of increasing external competitiveness only in conditions of maximum competition within the country in conditions of priority of long-term sustainability, the absence of ideal markets and societies, determines the role of states in a sustainable economy as an object of their implementation where on the external contour, the state must actively and using a wide range of tools stimulate and maintain efficiency, competitiveness in the long term. From the inside, on the contrary, to assess the prospects for long-term preservation, maintenance and development of the potential of foreign economic competitiveness, which in modern conditions is largely based not so much on the natural resource base of the country, but on the capacity of its domestic market, the quality of national demand, human capital, social stability, the destruction of tools for adapting the national economy to the trends and conjuncture of world markets.

At the same time, the external course of the national economic policy should depend on the dynamics of the global situation, but minimally affect the activity of economic and social initiatives within the country, focused not on the formation of a consumer society, but on conditions for stable and self-sufficient growth (Table 3).

Inner vector	Outer vector		
Self-sufficiency	Expediency		
Trust	Legal protection, contract law		
Equity of distribution	Freedom of market activities		
Humility	Profit maximization		
Long term orientation	Sustainable profit		
Stability	Adequacy to market trends		
Synchronization of needs and opportunities	Expansionism, constant growth		
High potential for autonomy	High potential for global leadership		
Growth of prosperity	Growth of production, trade		
Minimum debt	Efficient financial policy		
Transparency of distribution	Optimization of business processes		
The stability of each village is the stability of	The competitiveness of the firm is the		
the country	competitiveness of the nation		

**Table 3.** Basic state regulation principles in a sustainable economy (compiled by the authors)

#### 5 Conclusion

1. Global industrialism, becoming not only an economic order, a logical response of capital to the limits (natural, human potential of territories) of growth, but also a determinant of fundamentally new approaches to the social, scientific, religious, educational, political and world economic categories and institutions definition due to its inherent inflationary nature, the close relationship between production and the financial sector idealizes expansion as the only possible form of socio-economic development. At the same time, expansion is realized through the "capitalization and commercialization" of commodity, market, human, natural,

and innovative resources against the background of a growing leveling of the significance of the factor of geographical and legal belonging of the latter (mobilization of production factors); alternating in its progress phases of extensive and intensive growth.

Despite the proven effectiveness of the global capital ability to correct the natural, administrative, political limits of its development, to significantly expand the latter through the active transfer of economic processes to the virtual space, the creation of consumption simulacra, and so on; the time factor characterizing the duration of global expansion, the long-term and expediency of the strategy for its implementation, rapidly decreasing with each new quantitative and qualitative transition (due to the natural desire of capital for efficiency), is not only the main limit of globalization, but also the driving force behind the inevitable phase transition of humanity, the principles of functioning of which will be based on values and ideas of progress that are different from global capitalism, the speed of implementation of which in the socio-economic systems of modern states will largely determine the future world system, not only the division of labor, but also inter-country differentiation in the global competitiveness pyramid.

2. In the coordinates of the 21st century, characterized by maximizing the efficiency of global market mechanisms, transnational production, and distribution structures, which are, in fact, closed communication systems of high internal optimality, autonomous from traditional measures of state regulation, contributed to the lack of alternatives to the liberalization of national economies as a strategy for their development. Meanwhile, the results of economic liberalization are currently losing their stimulating national competitiveness value, becoming more of a condition for the national business integration into transnational chains of value creation and redistribution; capable of stimulating the privatization of the achievements of liberalization by foreign capital while nationalizing its negative consequences, and analogizing the strategic priorities of national progress with the corporate interests of foreign owners.

The world economy fragmentation imposed by globalization, polarization of locations and jurisdictions of consumption, production, exploitation of natural resources concentration, served by an ever-improving logistics system and the activities of TNCs, created, among other things, with the aim of optimizing cross-border financial flows, represent the desire of the global economy to preserve the dynamics of progress by creating effective stabilizers of their own stability, uncontested long-term competitiveness. 3. Existing scientific approaches to the sustainable economy definition can be classified into two flanks: neoclassical (concentrated on the study of sources of stable and long-term growth, conditions for optimizing their use) and environmental economic (based on the principles of finite growth potential, environmental and economic feasibility). Common to both approaches is the allocation of productive factors that have the potential for capitalization and commercialization; a certain normativity (for neoclassicists -"utility efforts", for ecological flank - in relation to conservation of natural capital reserves); the main difference is the acceptable trajectory of economic growth, the issues of redistribution of benefits between members of society, approaches to solving the problem of maximizing benefits and minimizing resource consumption.

Meanwhile, representatives of both popular schools of sustainable economy theorizing do not evaluate the impact of, for example, the factor of discounting consumption in the future, the possibility of technological development, the substitutability of production factors, are largely retrospective, which makes the proposed models capable of being used only in the short term, tend to idealize market mechanisms and evaluate the usefulness of natural capital only as a component of the production process, and not, for example, as an environment for human capital formation.

With all the depth of knowledge of the issues of economic sustainability models' formation and functioning, at present it seems to be a limited opportunity to offer

recommendations on a national or global scale, as well as strategic transitions of modern macroeconomic systems to a sustainable development paradigm in the context of the global economy continuing dominance.

4. Methodological differences in approaches to economic sustainability theorization have determined the diversity of both systems for classifying latter's indicators and methods for their calculating, allowing not only to objectively compare the dynamics of states' progress in ensuring their own economic sustainability, their achievements in the long run, but also to determine critical points, limiting economic self-sufficiency and prospects for national economies' sustainable growth.

Regardless of what criterion (labor productivity, energy efficiency, marginal revenues, life cycle costs, ecological footprint of economic activity) was put at the forefront of the proposed comparative analytical methods, most approaches were based on the need to consider the current state and the potential for self-reproduction of factors that can be aggregated into indicators of the sustainability of traditional (anthropogenic), human and natural capital.

A simple list of sustainable development goals (compiled under the auspices of the UN) against the background of the absence of a single, universal, based on an objective assessment (taking into account generally accepted macroeconomic indicators), depoliticized and deideologized, capable of being used in any modern socio-economic system, the methodology for determining its economic sustainability limits the prospects and effectiveness of the post-global phase transition of both individual countries and the world economy as a whole.

5. The modern policy of state economic regulation is at a turning point, which is characterized by state failures in the global economic trends administering and coordinating, conflict potential increase in the of interactions between government officials and transnational entrepreneurship, actualization of competitive pressure from newly industrialized countries and countries with economies in transition already in the areas high-tech production, falling effectiveness of traditional regulatory instruments in the context of transnationalization and networking of international business, changing the paradigm of the dominant quantitative demand for the priority of competitive supply.

Ensuring the inviolability of the goals of state regulation of the economy, the balance of developing self-reproducing on opposite principles of traditional (anthropogenic), human and natural capital, require institutional and infrastructural transformations of the system of state economic regulation, determining the principles for the implementation of power competencies in initiating transition models to a sustainable economy and coordinating the process of this transition, modernization of the concept (consolidating society and business narratives) and organizational structure (balanced scorecard, methodology for their determination, monitoring of implementation) of the national economic sustainability strategy.

#### References

- 1 L. I. Abalkin, Economic security of Russia: threats and their reflection. Questions of Economics, **12**, 4-13 (1994)
- A. Ayesha, M. Kashif, Effect of economic growth, trade openness, urbanization, and technology on environment of selected Asian Countries. The B.E. J. of Economic Analysis & Policy, **3(2)**, 1-24 (2004)
- A. Ayong Le Kama, K. Schubert, Growth, Environment and Uncertain Future Preferences. Papiers d'Economie Mathematique et Applications, **52** (1999)

- 4 J. Baudrillard, Consumer society: its myths and structures, from French, afterword and note. E. A. Samarskaya, Moscow: Republic: Cultural Revolution (2006)
- 5 J. Baudrillard, Simulacra and simulations, Moscow: POSTUM Publishing House (2015)
- 6 G. Beckerm, Economic theory, Hardariki (1971)
- 7 Y. Ben-Porath, The Production of Human Capital over Time. In: W. Lee Hansen (ed.). Education, Income, and Human Capital. NBER, 129–154 (1970)
- 8 N. Birdsall, Rising inequality in the new global economy, International J. of Dev. Issues, **5(1)**, 1-9 (2006)
- 9 A. I. Borodin, N. N. Kiseleva, Regional economic systems and their sustainability. Bulletin of the Udmurt University, **4**, 3-7 (2011)
- 10 J. Buchanan, Selected Works. Series "Nobel Laureates in Economics", Moscow (1997)
- 11 B. Christen, T. Dalgaard, Buffers for biomass production in temperate European agriculture: A review and synthesis on function, ecosystem services, and implementation. Biomass and Bioenergy, **55**, 53-67 (2013)
- 12 E. Dabla-Norris, Causes and Consequences of Income Inequality: A Global Perspective, IMF, Strategy, Policy and Review Department (2015)
- 13 M. Delyagin, World crisis. General theory of globalization (Moscow, Delo, 2003)
- 14 E. Diener, R. Biswas-Diener, Will money increase subjective well-being, Social Indicator Research, **57(2)**, 119-169 (2002)
- 15 R. Diwan, Relation wealth and the quality of life. Journal of Socio-Economics, **29**, 305-340 (2000)
- 16 E. D. Domar, Capital expansion, rate of growth and employment. Econometrica, 14, 137-147 (1946)
- 17 V. Draskovic, A neoliberal metaphor. Podgorica and Zagreb (2014)
- 18 J. Ederington, A. Levinson, J. Minier, Trade Liberalization and Pollution Havens, University of Kentucky (2007)
- 19 R. B. Ekelund, R. F. Hebert, A History of Economic Theory and Method, McGraw-Hill (1997)
- 20 M. S. Feldstein, The Inadequacy of Weighted Discount Rates, in R. Layard (ed.). Cost Benefit Analysis: 311-332, Penguin Books (1972)
- 21 A. G. Frank, ReOrient: global economy in the Asian Age. University of California Press Berkeley and Los Angeles, California (1998)
- 22 L. T. Friedman, It's a Flat World, After All. New York Times Magazine; Apr 3 (2005) www. nytimes.com/2005/04/03/magazine (Last accessed 12.04.2023)
- 23 A. L. Gaponenko, Strategic management, Moscow: Publishing House OMEGA-L (2008)
- 24 R. F. Harrod, An Essay in Dynamic Theory, The Economic Journal, 49, 14-33 (1939)
- 25 H. Hotelling, The economics of exhaustible resources. Journal of Political Economy, **39**, 137-175 (1931)
- 26 R. Husgafvel, N. Pajunen, O. Dahl, K. Heiskanen, A. Ekroos, K. Virtanen, Development of Environmental and Economic Sustainability Metrics for the Metal Production Industry—Experiences From University-Industry Cooperation. Sustainable Business, Management, and Economics, 2, 98-122 (2017)
- 27 B. Kagarlitsky, Political science of the revolution, Moscow (2007)

- 28 S. Kaplan, Bread, Politics and Political Economy in the reign of Louis XV. Hague, I, 113—148 (1976)
- 29 D. E. Kaun, Income and happiness: earning and spending as sources of discontent. J. of Socio-Economics, **34**, 161-177 (2005)
- 30 A. Kenneth, B. Bert, Economic growth, carrying capacity, and the environment. Environment and Development Economics, **1(01)**, 104-110 (1996)
- 31 S. Kuznets, Modern Economic Growth: Rate, Structure, and Spread. The National Academy Press Washington, D.C. (1966)
- 32 O. Lange, Introduction to economic cybernetics (Moscow, Progress, 1968)
- 33 V. V. Leontiev, Economic Essays. Theories, research, facts and politics (Moscow, Politizdat, 1990)
- 34 R. López, G. Galinato, A. Islam, Fiscal spending and the environment: Theory and empirics. Journal of Environmental Economics and Management, **62(2)**, 180-198 (2011)
- 35 D. Lukacs, Old culture and new culture. Political texts. Moscow (2006)
- 36 M. A. Maksimov, "Rebellious Man" in the Modern Socio-Cultural Environment. Knowledge. Understanding. Skill, **3** (2008)
- 37 D. H. Meadows, D. L. Meadows, J. Randers, The Limits to Growth. Universe Books, New York (1972)
- 38 E. Mesagan, Economic Growth and Environment Nexus: the role of foreign direct investment. A Research Journal on Contemporary Issues and Development, **3.4**, 44-52 (2015)
- 39 V. M. Mezhuev, The idea of culture, Moscow (2006)
- 40 B. Milanovic, Global Inequality, A new Approach for the Age of Globalization. The Belknap Press of Harvard University Press, Cambridge (2016)
- 41 K. J. Noorman, Exploring Futures from an Energy Perspective a Natural Capital Accounting model study into long term economic development potential of the Netherlands, PhD Thesis, Groningen (1995)
- 42 S. Pereslegin, Self-instruction manual for playing on the world chessboard, Moscow, AST (2006)
- 43 S. Pereslegin, Occam's dangerous razor, Moscow, Astrel (2010)
- 44 T. Piketty, Capital in the twenty-first century. The Belknap Press of Harvard University Press (2014)
- 45 K. Polanyi, The Great Transformation: The Political and Economic Origins of Our Time. St. Petersburg, Aletheia (2002)
- 46 I. Sachs, Social sustainability and whole development: exploring the dimensions of sustainable development. In B. Egon & J. Thomas, Sustainability and the social sciences: A cross-disciplinary approach to integrating environmental considerations into theoretical reorientation. London: Zed Books (1999)
- 47 A. Sen, Development as Freedom, Anchor Books, New York (1999)
- 48 T. Shultz, Investments in human capital, London (1971)
- 49 R. Solow, Contribution to the Theory of Economic Growth, Quarterly J. of Econ., **70**, 65-94 (1956)
- 50 R. Solow, Intergenerational equity and Exhaustible Resources. The Review of Economic Studies, Symposium supplement, 29-46 (1974)

- 51 J. Stiglitz, Inequality is holding back the American economy. La Tribune, 4. September www.euractiv.com/section/euro-finance/interview/ stiglitz-inequality-is-holding-back-the-american-economy/ (Last accessed 16.05.2023)
- 52 J. Stiglitz, Growth with Exhaustible Natural Resources: Efficient and Optimal Growth Paths. Review of Economic Studies, Symposium on the Economics of Exhaustible Resources, 123-137 (1974)
- 53 R. K. Turner, Environmental and ecological economics perspectives, in J.C.J.M. van den Bergh (ed.), Handbook of Environmental and Resource Economics, 1001-1033, Edgar Elgar (1999)
- 54 I. Wallerstein, Globalization or the Age of Transition? A Long-Term View of the Trajectory of the World-System. International Sociology, **15(2)**, 249–265 (2000)
- 55 G. C. Winston, The Timing of Economic Activities, Cambridge University Press (1982)
- 56 A. Yakovlev, Where is global capitalism going? World of Russia. Sociology. Ethnology, 3 (2021)
- 57 L. Zingales, R. Rajan. Saving capitalism from capitalists: The hidden forces of financial markets wealth creation and empowerment (Moscow, IKSI, 2004)