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Sustainable overall social transformation as a way of progress.

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Abstract.

The paper concerns the fundamental issues of the sustainable social progress. As follows from the argumentation, a realistic design of institutional changes in connection with resource and organizational changes needed for sustainable progress is called for to realize in the line of overall social system transformation. This approach presupposes an exhaustive study of interconnected transformations in the main societal fields as system processes considering the influence of relatively exogenous factors (technological, demographic and climate changes). In turn, it is advisable, taking in view current world challenges, to expose an idea of universal sustainability, the property of which is inherent in all social practices, and not just mediating the relationship between society and its environment. The first result of study concludes in revealing the fundamentals of overall social system sustainability. The second result: the transition to sustainable transformation of society supposes the synergetic implementation of structure-forming system and policy-driven shifts.

Keywords*:* Sustainable Progress, Social System Transformation, Institutions, Technologies, Demographic And Climate Changes.

1. Introductory remarks.

Turning to the problem of fundamental social progress, one cannot ignore the current world crisis caused by the deadly pandemic of Covid-19. It turned out to be associated with the onset of a prolonged economic recession, further intensified because of stabilization measures taken, especially lowering interest rates. Non-economic consequences of the Pandemic manifested in the deactivation of all areas of social life in most countries are most significant.

Undoubtedly, after the end of the acute phase of the present world crisis, the need for an interconnected resolution of the thickened complex social problems will increase even more. The achievement of economic and financial stabilization should be accompanied by a dramatic improvement in the state of social sectors in almost all countries through effective and inevitably grandiose investments. Health let me note is only one of these sectors.

It has long been proven. To solve interrelated social problems, economic growth is not enough; it can be associated with increased social deformations and anti-democratic changes. The humankind really needs ever embracing social progress, caused by equally significant economic (market) and non-economic drivers, mutually complementing each other.

Overall social progress is not a chimera according to the clearly expressed position of many well-known researchers (for example, Fleurbaey ed., 2018), as well as of teams of international organizations (e.g. OECD, 2018). This position widely recognized in practical terms, expressed in the comprehensive integration of various indicators of progress in the development of modern countries (OECD, 2015; Stiglitz et al., 1998, 2018).

An interconnected resolution of tremendous social problems, including environmental and climate ones, is possible solely by means of an integrative approach, based on the recognized imperative of the sustainable existence for our planet. Proceeding from the reformist point of view (e.g. Sachs, 2015), an imminent feature of the desired development of society exactly concludes in overall progress, which can define as sustainable. It supposes the achievement of promising economic, political, status, environmental, climate and other quantitative and qualitative parameters, which believed to be sustainable in accordance with accepted criteria in the process

of development. They are expressed by the well-known imperatives of sustainable development (SD), presented in the UN adopted integrative framework concept Agenda2030 or simply Agenda (Transforming our world, 2015). To justify these imperatives, it is necessary to take into account a whole series of processes of economic and other social changes associated with fundamental, not short-term, structural shifts.

Lapidary about the existing research activity devoted to the topic of this article. To date, most researchers rely on the "three pillows" model of sustainability – ecological, economic and social, which is extensively presented in innumerable publications, including the recent ones (e.g. Enders & Remig ed., 2015; Barbier & Burgess, 2017; Purvis et al., 2018) . Undoubtedly, this conceptual model has served as the basis for fruitful concrete research in certain areas of SD and their synthesis. However, it seems insufficient in the light of today's global challenges, when the strong need arose for exactly complex research.

To a certain extent, the theoretical model of social sustainability acts as an alternative (e.g. Boström, 2012; Boyer et al., 2016; Eizenberg & Jabareen, 2017). The essence of this model is to justify social sustainability as a driver of the two other dimensions. Such a holistic methodology has obviously limited application, since the immanent autonomy of many processes of economic, technological, and other changes is not considered. Though, according to adherents of social sustainability paradigm (Boyer et al., 2016), the main point concludes in an integrative view of sustainability that understands economic, environmental, and social concerns.

Directly to publications in line with social sustainability are studies of social-ecological systems (SES). Apparently, the main achievement in this direction was the formation of the SES framework concept (Berkes & Folke, 1998; Ostrom, 2007, 2009; Partelow, 2018). It allows, reproducing the conclusion of Elinor Ostrom (Ostrom, 2007, p. 15186), to bridge the gap between biophysical and social scientific research. Moreover, a methodology based on the SES concept has successfully used in environmental design technology, especially in the Scandinavian countries (e.g. Schlüter et. al., 2019). However, the scope of this methodology seems deliberately limited, since in most cases the successful functioning of SES is available under external favorable conditions, market (financial) and others.

The theoretical point of view shared by the author coincides with the position of proponents of the idea of universal sustainability (Giddings et al., 2002; Fisher & Rucki, 2017), which capturing on a whole the interconnected processes of sustainable changes in society. It is worth noting that this approach is consistent with concrete integrative studies of sustainable development in the main interdependent areas in the coming era of digitalization that have recently been successfully completed (TWI2050, 2018; Sachs et al., 2019; TWI2050, 2019; WBGU, 2019). Improving the information base of specific studies in these areas, to which new ones may add, objectively acts as a preliminary stage for a comprehensive understanding of the structural changes in different countries through the prism of universal sustainability.

The phenomenon of fundamental shifts in their integral unity in time and space may be figure outleaning on the recognized transformational paradigm. Its essence lies in the disclosure of the phenomenon of social development through the prism of interrelated transformation processes, reflecting long-term structural changes in space and time.The recent research contributions (Islam & Iversen, 2018; Transformation towards, 2018) as so as the fruitful experience of national indicative planning in Malaysia (Eleventh Malaysia Plan, 2015) support this approach.

The main hypothesis concerns the availability of a real future transition to a sustainable overall social progress and its further assertion. Allow me to present the arguments for such a metamorphosis precisely basing on a transformational paradigm.

The indicated project has predetermined the structuration of the rest of paper. In its second part, the conceptual vision of sustainable social progress is justified from the theoretical standpoint. In the following part, the author has revealed the conditions of system sustainability. Further, in the part 4 the central issue considers concerning the possibility of the transition to a sustainable overall social transformation. Discussion and conclusion present in the final part.

2. Theoretical considerations.

Let us turn directly to the concept of social progress. Following a positivist worldview in the spirit of Comte, it means constant, forward improvements in all areas of social life. This understanding of progress, it should be noted, is incompatible with the widespread popular idea about the possibility of achieving an ideal social order, which means "the end of history".

In order to justify the realistic vision of sustainable social progress, it seems reasonable to refer the theory of transformation of social systems (Polanyi, 1944; Parsons, 1951; Giddens, 1984; Luhmann, 1995). Following this theory, neither economic changes, nor changes of another societal type can be considered in isolation in the context of the study of the system transformation as a process. Ultimately its real picture is expressed by system social changes, which are simultaneously manifested in the interactions of economic (market) agents, political players and actors in other arenas of social life.

Transformation of the social system in its traditional understanding envelopes the three main fields of social action: economic, political and societal (status). Along with this, transformation processes in these institutionally structured fields have inevitably accompanied in large degree by non-institutionalized processes of technological, demographic and climate changes. Such as the fundamentally technological invention, the birth booms, the strengthening of solar activity.

In addition, one cannot get past the next principal point. Social system transformation is inconceivable without both inalienable and interconnected phases of the resource turnover: production and consumption of resources, on the one hand, distribution and redistribution of resources, including capital and income, on the other. Only if both sides of the coin are embraced, it becomes possible to understand precisely the phenomenon of the social system transformation.

The interpretation of overall social progress in the mainstream of the process of system transformation looks understandable. The initial postulate of the system transformational concept of progress lies in the permanent change in production, personal and social needs, based on achievable new resource, institutional and technological capabilities, expected demographic and climate changes. These requirements, in turn, predetermine the future structural / multi sector vector of the desired output in the economic space, designed to correspond with the desired vector of distribution of its results,and the vector of the desired long-term shifts in other fields of social actions. They directly act as objective guidelines for the fundamental development of the social macros as an integral system, during which, while ensuring the necessary conditions, desired transformations can occur in accordance with the sustainable progress.

We cannot ignore the following collision: a hypothetical possibility concludes in an approach to the trajectories of a sustainable overall social system transformation, which directly meet the criteria of optimality. In accordance with these criteria, optimal transformational trajectories can reveal that simultaneously satisfy various sustainability conditions as purposefully posed constraints.

Of course, everyone has seen the examples of many successful leading companies (including non-profit ones) on world arena. They convince the possibility of achieving optimal results by the market and social entrepreneurs themselves in a result of their initiative decisions. However, in many economic and social segments this possibility is unlikely. The main reason concludes in the lack of significant motivation on the part of a huge number of market and social agents to achieve optimal sustainability under conditions of maintaining high risk and uncertainty. They have caused by both manifold institutional imperfections and the manifestation of the force factor and other negative externality effects. Along with this, there are great opportunities for gaining profit through rent-oriented or opportunistic behavior.

Consequently, frontal application of optimality criteria at the macro level to identify future sustainable trajectories of structural transformations can bring obviously distorted results. It is reasonable to expect reproduction of an unacceptable gap in the dynamics of the “profitable” and other sectors. In particular, on the economic field, it will likely be expressed in the hypertrophied growth of a number of brown sectors to the detriment of social well-being and the environment, while contributing to further deterioration of the climate.

The obvious question arises. How to ensure institutional and other conditions for the implementation of shifts to the frontiers of overall social development as a system transformation in the line of sustainable progress?

There is no comprehensive answer to it yet. In accordance with modern scientific notions, the existing institutional mechanisms, including the mechanisms of market, social and political contracting, are obviously insufficient to coordinate completely the interests of the main actors. The same applies to the application of monetary, financial and tax policy instruments and other instruments of economic and social policy.

At the present period of world development, a high risk of failures of the individual markets, collapses of many national economies and the global economic crises remains, as well as pure social explosions, environmental disasters, crashing of political regimes. Majority of national governments faces with the need to reduce this risk. The way out concludes in the purposeful maintenance of a normal national development trend, without long recessions, booms and crises.

Apparently, the time has come to move from the practice of stabilization and stimulating decisions in heterogeneous directions to consolidated public policy, aimed at ensuring a balanced and constantly forward development of certain countries and reducing the risk of destabilization and regress in full correspondence to the ideology of New Normal. The current international experience testifies in favor of such a new turn, above all in EU.

To figure out the indicated new stage in the development of modern societies, it is advisable to expose an idea of universal sustainability; moreover, as applied to the system (precisely system!) transformation of the whole society. Following this idea, an inalienable attribute of the desired development of society as an all-encompassing social system refers to a sustainable transformation.

Based on the foregoing, the logical step concludes in reference to the mentioned above universal concept of system sustainability, at least in its existing preliminary version (Giddings et al., 2002; Fisher and Rucki, 2017). In accordance with this concept, the property of sustainability is inherent in one way or another with all social practices, and not just mediating the relationship between society and its environment. Thus, the spread of sustainability criteria in relation to the transformation of the entire social system and its main subsystems - economic, political, status - seems to be justified. The substantial sign of sustainable development as a system transformation is the normality / acceptability of fundamental changes in the main fields of social action.

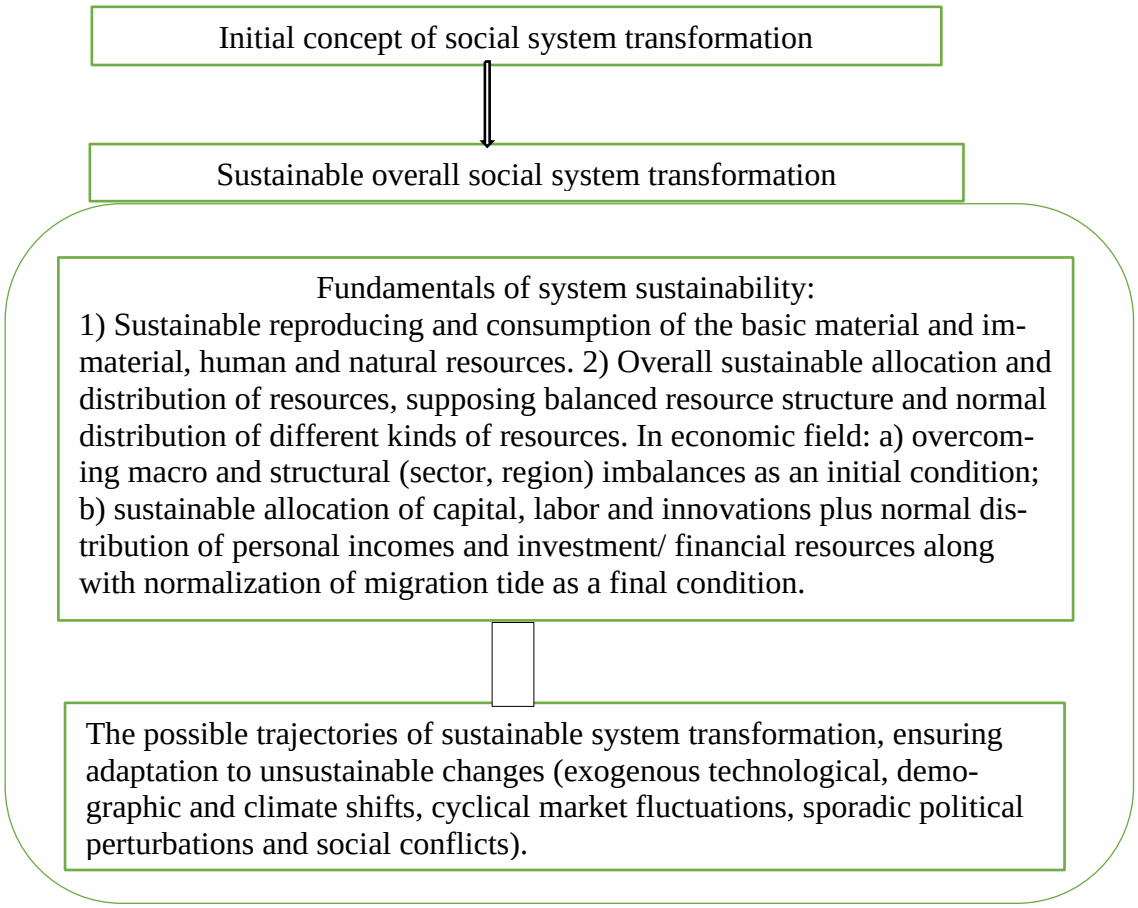
3. Result I: The fundamentals of system sustainability.

In the operational plan, the fundamentals of system sustainability through quantifiable resource indicators need identification. It is legitimate to formulate two unifying mutually dependent criteria for resource sustainability within the entire social system (figure 1).

The first of these criteria is sustainable, essentially rational reproduction and consumption of resources - material and non-material, human and natural, primarily based on SD goals/ targets within Agenda. In addition to this, in the future, in all likelihood, it will become expedient to incorporate additional targets, predetermining new trajectories of sustainable reproduction and consumption of distinguished resources.

The second criterion concerns the resource's allocation and distribution at overall system level. It presupposes a balanced resource structure and a normal distribution of certain types of resources at all levels of the system hierarchy in accordance with existing criteria. As applied to the economic field, at first place this condition means a balance of the main resource, material and financial flows along with the normal distribution of capital and labor and, consequently, wages/salaries in the sector and regional dimensions. Normalization of internal and external migration flows also assumes.

Figure 1. Sustainable overall social system transformation: concept view.



Along with this, such a transformation is designed to satisfy the imperative of resilience to possible unsustainable changes (Gallopin, 2006). Evidently, to the expected technological, demographic and climate changes insofar as they act as exogenous factors exactly with respect to transformation of the social system. Besides, one cannot fail to consider the existence of a huge number of processes of non-stable vulnerable changes, taking in view at least cyclical market fluctuations, sporadic political perturbations and social conflicts. The problem of neutralizing such disturbing influence in the future will be central to the design of smart institutional mechanisms for overcoming emerging risks.

The key question concludes in resilience to the implementation of numerous new technologies (Körner et al., 2018; World economic, 2018). As evidenced by numerous facts, the applying of these technologies, including digital technologies, in principle does not meet the usual condition of economic stability. Thus, according to the recent resonance studies (Acemoglu & Restrepo, 2017, 2018; Korinek & Stiglitz, 2017), the consequences of new automation accompanying the use of robots and technologies based on artificial intelligence will have a very strong impact on the labor markets. There will be a substitution of human labor in many areas of routine activity with an orderly increase in the number of highly qualified personnel of a new time, distinguished by the intellectual abilities of independent analysis, critical thinking and informal problem solving.

The fate problem of employment under the unfolding automation and digitalization is absolutely insoluble on a market basis only. Alternative-free imperative concludes in cardinal employment growth in social services. The quantity of workers in the sectors (education, health and local social work), where a wide area will emerge for the use of technological innovations as social benefits, might tremendously increase in the twenties. Also one can hope for a crucial growth in employers, including intellectuals, in the non-market environmental sector, embracing a great number of various activities.

Thus, proceeding from the formulated criteria / conditions of system sustainability and the resilience imperative, it becomes legitimate to choose the further trajectories of the overall social transformation.

In line with the sustainable overall social transformation (SOST), the time-space positioning of institutional and resource changes has a decisive value considering the influence of changes on the "adjacent" fields of social actions and relatively exogenous factors (technological, demographic and climate changes). Therefore, an adequate reflection of the integrative transformation of the entire vector of parameters of the social system becomes possible, according to the imperatives of system sustainability.

The long-term reproduction of the system sustainability determines the preference in favor of the stable and plausible long-term transformations in the main social fields. Their immanent feature is not a spasmodic, but a steadily consistent movement to the achievable boundaries, based on the identified opportunities.

Judging by the harsh contemporary realities, with respect to the national interests of individual countries the imperative of system sustainability has most clearly manifested in the guarantee of maintaining an acceptable quality of life and well-being levels. This is attainable through the interaction of all public forces, including corporate and other businesses. Thus, it is difficult to overestimate the positive effect of the initiatives of Microsoft and several other large corporations in the application of green technologies and at the same time the rejection of the polluting resources. Nevertheless, the main responsibility in the constant ensuring the sustainability of the long-run development results put unequivocally on the national state as a system regulator.

From what has been said, of course, it does not follow that the desired transformation of society is exhausted to sustainable changes due to the regulation of state collaborating with public/ civil organizations. They are designed to be complemented by more dynamic changes as the results of initiative decisions by purely market agents and social entrepreneurs, provided that overall sustainable development is maintained in the main fields of social action. One can propose that due to such decisions in the future the paths of economic and social sector transformations at the macro level in increasing degree will meet the recognized optimality criteria. At first place, the criteria for improving well-being in its broadest sense, including the state of the human environment, reflected by internationally recognized quality of life and human development indices, as so as the happiness index (subjective well-being). In addition, following a realistic research position, it is reasonable to judge the transformation progress by the criteria of rationality and efficiency of capital movement in its various forms (including natural capital), taking into account the relationships between generations (The inclusive growth, 2017).
Thus, two "floor" spherical positioning of SOST is appropriate. Initially, it proceeds in the sphere of stable/ normal development; only then in the sphere of accelerated progressive development. This positioning reflects the substantial idea of ensuring overall social progress with its economic and other components in the line of sustainability.

4. Result II: reality of the transition to sustainable transformation of society.

The first important prerequisite for the future overall social progress relates to technological driver. In comparison with previous notions, it characterizes by the incredible potential of scientific and technological changes. The problem of their implementation in specific economic and social sectors can be successfully solved thanks to the joint efforts of innovators, ordinary business and, of course, the state in collaboration with public organizations. Particularly weighty hopes are reasonably pinned on a large-scale and simultaneously smart innovation policy, which has successfully activated in several advanced countries.

As a consequence, the hard-to-overestimate global effect of the spread of new digital and other technologies in the coming period, called the fourth industrial revolution or digital revolution, will achieve. It will affect many countries far beyond the borders of the existing industrial world.

The unfolding of new industrialization/ digitalization opens the way for the maximum reduction in the consumption of renewable resources, especially hydrocarbons and other “brown” products, and the establishment of a green economy that meets the human needs. One can expect a long-awaited structural shift in charge of innovative and high-tech economic sectors, where reproducible resources and energy efficient, waste-free and low-waste, technologies will use. Quite understandably, according to the widespread opinion, digital revolution considers as a crucial premise of sustainable transformation of the whole society (Global Sustainable Development, 2019; TWI2050, 2019).

However, it would be wrong to make absolute the significance of technological and scientific progress in the twenties. In the near future (of course, after curbing the Covid-19 pandemic) unprecedented technological inputs can be complemented a number of tremendous positive and time-compressed shifts, interconnected resource and institutional, in most regions of the world (Martynov, 2019).

Following the transformation paradigm, the achievement of a sustainability of a social system presupposes its substantial qualitative change in time and space relative to the initial position. Such a transition is inevitably associated with relative changes in the root institutions of ownership and coordination, the main resource, price and financial proportions, as well as organizational mechanisms. In turn, these structure-forming system shifts are designed to act as drivers for the implementation of specific SD imperatives in accordance with Agenda.

It would be shortsighted to underestimate the multifaceted complexity of indicated transition problem (Loorbach et al., 2017, Kemp et al., 2018, Feola & Jaworska, 2019). This problem cannot be carried out without cardinal changes at the national as well as at the supranational level.

Evidently, the possibilities for the Transition to SOST are highly differentiated across different groups of countries. They are well prepared in the enclave of advanced countries (such as Switzerland, Norway, Denmark), where, according to the OECD (OECD, 2019), the achievement of SD imperatives in many directions has actually taken place or is likely to occur. Much longer and inevitably discrete shifts are required for such Transition in most other developed (industrial) countries, including post developing and after socialist ones. The main reason is due to the presence of deep structural gaps in the main market and social sectors, and therefore at the system level (Global economic, 2020).

In the context of the above, the question of the differences between economies with advanced economies (AE) and economies with emerging markets (EME), post-developing and after socialist, regarding the possibility of approaching sustainable system transformation, is becoming more and more relevant. Proceeding from sustainability criteria, the serious flaws of EME preserved. In particular, the debt burden in many post-developing countries, an unacceptably sharp increase in the income differentiation / property inequality and a corresponding increase in the contingent of semi-poor undemanding consumers, infrastructural and institutional barriers to the implementation of advanced environmental and social standards (Global economic, 2019). Besides, one cannot ignore the continuing market trends in many EME to the detriment of the environment and social well-being in general (as, for example, the incredible scale of "brown" construction in Russia).

At the same time, regarding the development prospects in the coming decade, it is reasonable to take into account the significant competitive advantages of EME in the form of relatively lower costs, including wages, and a relatively higher return on investment. Based on the analysis of actual trends [McKinsey Global, 2018, The Global Competiveness, 2019], it is reasonable to make the following assumption: in the event of global stabilization after the recession of the Covid-19 Pandemic, in a near future, both conglomerates of countries will converge in terms of the quality of market institutions, infrastructure provision and other key indicators of national economic systems. It would then be feasible to bridge the gap between AE and EME in the degree to which the imperatives of sustainable development are met. True, this opportunity is critically dependent on the adopted political course of countries with emerging markets. It is quite possible that in some of these countries there will be a need for a significant change in the government-led course associated with overcoming the resistance of a part of the ruling elite and its cardinal renewal.

Much more pessimistic is the outlook for the desired Transition in most developing countries. Their position is characterized by deep structural imbalances, which are unlikely to be overcome in 10 years (OECD, 2019). Moreover, the targets corresponding to the Agenda will not be fulfilled; the optimistic result in the twenties is a dramatic reduction in the gap from these boundaries. Only in the next decade, apparently, in this part of the world, the question will arise about approaching the trajectory of sustainable development as a system transformation.

Based on the system notion of overall social transformation, in any country the approval of SOST is fully realized only if supranational economic, geopolitical and status transformations will take place in accordance with the conditions of sustainability in the main fields of social action.

Proceeding from the recognized knowledge, the indisputable condition of sustainable supranational system transformations concludes in the assertion as dominant precisely the fair world economic order. The long-term stable regimes of trade, international movement of capital and labor will achieve on the base of coordinated application of global, regional and national legislation and multilateral international competition. Following the optimistic scenario, on the globe three competing groups of countries will be comparable in market potential: 1) the United States, UK and other countries with the prevailing capitalistic institutional arrangement; 2) the number of non-Western countries with emerging markets; 3) the countries of continental Europe, apparently, in alliance with Japan and Canada. At the same time, the role of regional economic unions, which includes various sovereign countries, will remain very weighty.

Along with this, achieving a sustainable global political order is just as important. It assumes that the factor of military / sovereign potential will cease to play a dominant role in the global balance of power as a result of the proliferation of effective preventive weapons on a new digital base in many countries. The hegemony of one country or group of countries, as well as a superpower duopoly (the United States and its closest allies, on the one hand, and China and Russia, on the other) will irrevocably become a thing of the past. The desired stability in the geopolitical space will be ensured through the creation of special institutional and organizational mechanisms and the unconditional application of the international legal regime (Mazarr, 2018).

Tremendous value, though still underestimated, concludes in the achievement of a sustainable societal (status) transformation at the supranational level (The Global Sustainable Development, 2019). The considered kind of supranational transformation should be associated with gradual positive improvements in the status pyramid in favor of the middle class. Then, in the case of the parallel sustainable supranational economic and political transformations, the composition of higher status groups will constantly update, including the so-called transnational corporate class. Under this outcome there will be an improvement in the stratification structure in terms of the criterion of inter generation social well-being (e.g. Arita, 2017).

To date, there is a need to develop the feasible framework model of desired Transition at national level in advanced countries, although not fully achievable due to the likely preservation of the high weight of external, global and regional, unsustainable processes. The implementation of this model presupposes the achievement of synergistic complementarities of the ongoing system transformational and policy-driven shifts (figure 2).

The forward setting parameters of the model are distinguished SD goals/ targets for resource production and consumption. They are complemented by the accepted conditions for the sustainability of resource allocation according to the main factors of output - capital, labor and innovation (TFP), as well as the conditions for the sustainable (normal) distribution of income and capital / financial resources within the whole system. These conditions suggest ensuring not only macroeconomic stability, but also sector and regional balances.

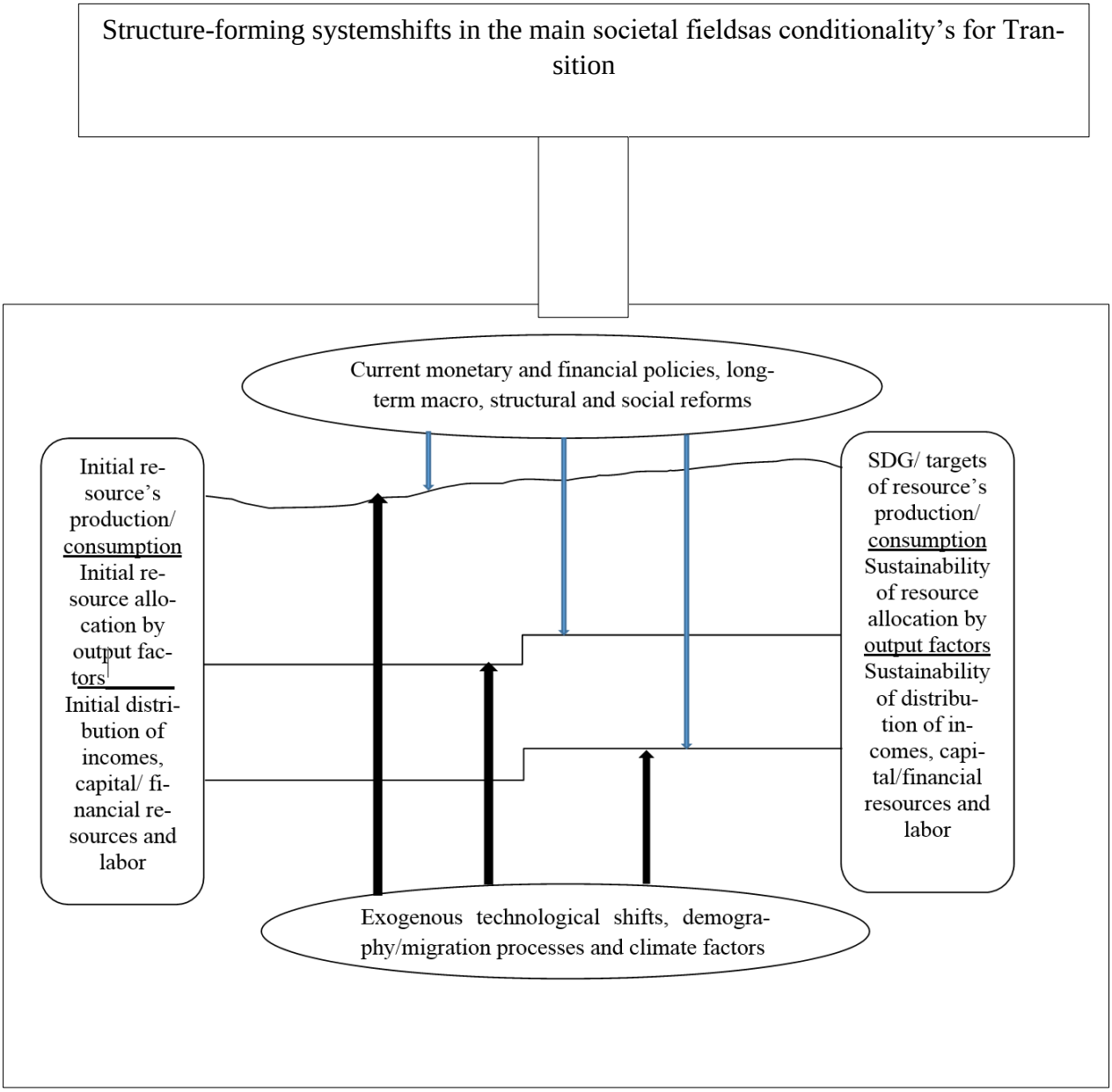
True, it makes sense to pay attention to the problematic identification of sustainable distribution conditions. The validity of the normative specification of the desired levels of the Gini coefficient and other indicators of the distribution of income and capital is highly doubtful due to information restrictions. On the way to implementing such a normative approach, a particularly difficult task is the reliable assessment of the consequences of deepening wage differentiation (e.g. Vo et al., 2019), which will definitely increase in the coming decade of digitalization. A more flexible and pragmatic approach concludes in determining ranges of the sustainable distribution of income and capital specific to certain countries, based on the steadily positive impact of these processes on economic output and its main factors (Cingano, 2014; Dabla-Norris et al., 2015, Taylor et al., 2016).

The current stabilization solutions (monetary, financial, etc.) as so as long-term reforms (macro, structural, social) also present "input" parameters. In particular, the reform relates to stimulating the development of a green economy through the creation of new jobs.

Undoubtedly, political decisions are designed to proceed exclusively from real opportunities. In turn, they are strongly depended from exogenous technological shifts, changes in the demography/ migration situation and the influence of climate factors. Ultimately, among the possible alternative scenarios, the most likely feasible and resilience can be selected, following the practice of expert consensus (e.g. Congress Budget Office, 2019).

Thus, the presented sketch model can attribute to the targeted and not optimized. At the same time, in the process of selecting sustainability transformation paths for individual sectors, the option to reveal their possible additional growth arises due to the proposed optimal entrepreneurial and consumer decisions, in line with traditional theoretical concepts. For this purpose, an appeal to agent-based models (ABM) looks uniquely fruitful. Following recent studies (David &Gatti, 2018; Dosi et al., 2019), the application of these models allows to evaluate the optimizing effects due to the decisions of market and social agents under a favorable sustainable environment.

Figure 2. Outline framework scheme of the Transition to sustainableoverall social transformation at national level



In the future, a likely consequence of automation and digitalization concludes in the formation of a reliable and transparent information base. It can exhaustively reflect the sector and regional levels of social activity and even selectively its local level, primarily in relation to the state of social capital. One would like to hope for a system synthesis of socio-economic information at various levels. Then the way will open for a reliable design of the

spatial-temporal approach to SOST due to the overall complete information using the comprehensive multi-dimensional models.

5. Discussion and conclusion.

A substantive discussion issue concerns the possibility of integrative research of SD as a transformational process and, on this basis, the implementation of a long-term strategy. To date, widespread opinion in public circles prevails in favor of the need to first resolve the climate threat and other "burning" problems, and then only apply the existing arsenal of means, models and methods to achieve other recognized SD imperatives. In our opinion, the following counterargument is valid. The achievement of environmental improvements and relative climate stabilization depends on the expected integrative consequence of positive transformational shifts in all areas of social activity. At the same time, what has been said, does not call into question the exceptional importance of public policy directly in the field of ecology and climate stabilization, objectively implementing in a relatively autonomous mode.

In addition, a debatable problem concludes in the alternative selection of criteria of sustainability or optimality for assessing the results of sustainable overall social transformation. Implementation of optimization macro structural models can yield well-interpreted results regarding the future distribution of resources and revenues. However, these pleasant results seem too unreliable, at least for two very significant reasons. Firstly, the extreme uncertainty of setting changes in time, both as restrictions reflecting the conditions for sustainable consumption of resources and existing market and non-economic restrictions. Secondly, the factual lack of information to assess the risk of the consequences of violations of accepted restrictions, taking into account the enormous scale of the apparently non optimal activities of economic and other social agents. As follows from our research, a realistic positivist approach is advisable: primary, achieving sustainable and resilience trajectories of transformation, then optimization in relation to the limited areas where real motivation of market and social entrepreneurs to rational decisions has provided.

The applicability of long-term projection of transformation processes in the main social fields also presents a disputable question. The well-known objection to modeling indicators of long-term sustainable transformation, including a key economic indicator - long-term potential output, concerns their forecast applicability. I recognize that the probability of a significant deviation of these variables from the projected levels may be rather high. However, the meaning of constructing the described framework model does not consist in predicting the actual transformational trajectories within a sufficient time horizon. It consists in substantiating scenario-based interconnected solutions to achieve the desired results proceeding from the sustainability criteria in a wide digital range.

A few words about thepurely theoretical discourse related to the research. The presented theoretical results definitely do not compatible with the well-known concept of institutional evolutionism. Its adherents usually emphasize the broad possibilities of evolutionary adaptation of contract and other institutional mechanisms to emerging social preferences (e.g. Hodgson, 2015). But, unfortunately, one really does not have to count on the self approaching of the existing inertial trajectories of institutional changes to trajectories corresponding to the imperatives of sustainability. To achieve them, there are no alternatives for radical changes associated with targeted actions in the field of economic and public policy as well as the long-term institutional and structural reforms. The justification of these changes becomes possible precisely on the base of the system transformation paradigm.

To conclude: sustainable overall social transformation in its main interconnected fields performs as an indispensable attribute of future progress, though accompanying by the likely weightiest costs. Undoubtedly, the implementation of updated sustainable development strategy based on overall social transformation vision a will come across serious various obstacles - sources of risks. Even in the best scenario suffice it to say at least about the threats of tech-gen disasters, unexplored before epidemics similar to Covid-19 and ethnic-national conflicts. However, these obstacles might be overcome in an acceptable way without long crises and immense social damage, on the base of global, regional and national consensus.

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