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THE PRODUCTIVE CAPACITY OF COUNTRIES THROUGH
THE PRISM OF SUSTAINABLE DEVELOPMENT GOALS: CHALLENGES
TO INTERNATIONAL ECONOMIC SECURITY AND TO COMPETITIVENESS

Annotation. It is established that the competitiveness that is conditional on sets of
institutions, policies and factors determining the country’s productivity transforms under the
influence of challenges of sustainable development, which is reflected in international economic
security strategies. The article’s objective is to investigate the compliance of the ideological
foundations of the Sustained Development Goals with the assignment of productivity growth in
countries. The research problem is to substantiate a stable causality between the Sustainable
Development Goals and the economic security of countries and firms in the process of gaining new
comparative advantages.

The following research methods were used to achieve the objective and solve the problem
covers a set of specific methods of empirical research, analysis and synthesis, abstraction,
idealization, generalization and induction.

The scientific novelty of the results is that the transformation potential of the sustainable
development ideology and the resulting Sustainable Development Goals were investigated in the
productivity context at macrolevel (country level) and mesolevel (firm level), which enabled: to
establish the non-static nature of a comparative advantage under the influence of dialectic
opposition of growth-based and development-based concepts in the economic security strategies of
countries; to identify the increasing productive capacity as the fundamental interest of a country,
going beyond the purely economic boundaries and overlapping with social, environmental and
resource endowment dimensions; to classify the comprehensive development of a human,
development of education and science, development of advanced machinery and technologies,
science and technology progress, organizational and managerial improvements in the production as
factors for development of productive forces.

Keywords: productive capacity, productive forces, competitiveness, economic growth,
Sustainable Development Goals, international economic security.

JEL Classification: F02

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ПРОДУКТИВНА ЗДАТНІСТЬ КРАЇН КРИЗЬ ПРИЗМУ ЦІЛЕЙ СТАЛОГО РОЗВИТКУ: ВИКЛІКИ МІЖНАРОДНІЙ ЕКОНОМІЧНІЙ БЕЗПЕЦІ ТА КОНКУРЕНТОСПРОМОЖНОСТІ

Анотація. Визначено, що конкурентоспроможність, яка визначається набором інституцій, політик і факторів, що визначають рівень продуктивності країни, трансформується під впливом викликачів сталого розвитку, які легітимізують упровадження ефективних та інноваційних рішень в управлінські процеси як на рівні державного управління, так і в бізнес-середовищі, що повністю відповідає запитам міжнародної економічної безпеки.

Метою роботи є дослідження відповідності ідейних засад Цілей сталого розвитку завданням підвищення продуктивності країн в умовах трансформації сутнісних ознак конкурентоспроможності та модифікації імперативів міжнародної економічної безпеки. Завданням наукового дослідження є обґрунтування стійких причинно-наслідкових зав’язків між Цілями сталого розвитку, продукованих на метарівні міжнародної економічної політики, економічною безпекою країн і фірм у процесі набуття ними нових порівняльних переваг на основі використання потенціалу їхньої продуктивної здатності. Для досягнення мети і вирішення завдань статті було використано такі методи загальної логіки та методи дослідження, як: аналіз і синтез, абстракція, ідеалізація, узагальнення та індукція.

Наукова новизна додержаних результатів полягає у дослідженні трансформаційного потенціалу ідеології сталого розвитку та похідних від неї Цілей сталого розвитку в контексті питання продуктивності як на макрорівні (рівні країн), так і мезорівні (рівні фірм), що дозволило: виявити нестачний характер порівняльної переваги під впливом діалектичного протистояння концепцій росту і розвитку в стратегіях економічної безпеки країн; ідентифікувати підвищення продуктивної спроможності як системоформувальний інтерес країн, який виходить за межі суто економіки, перетинаючись із соціальним, екологічним, ресурсозбереженням вимірами; захопити до факторів розвитку продуктивних сил такі, як: усебічній розвиток людини, розвиток освіти і науки, розроблення нової техніки і технології та науково-технічний прогрес, удосконалення організації й управління виробництвом.

Ключові слова: продуктивна спроможність, продуктивні сили, конкурентоспроможність, економічний ріст, Цілі сталого розвитку, міжнародна економічна безпека.

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ПРОИЗВОДИТЕЛЬНАЯ СПОСОБНОСТЬ СТРАН СКВОЗЬ ПРИЗМУ ЦЕЛЕЙ УСТОЙЧИВОГО РАЗВИТИЯ: ВЫЗОВЫ МЕЖДУНАРОДНОЙ ЭКОНОМИЧЕСКОЙ БЕЗОПАСНОСТИ И КОНКУРЕНТОСПОСОБНОСТИ

Аннотация. Целью работы является исследование соответствия идеиных основ Целей устойчивого развития задаче повышения производительности стран в условиях трансформации существенных признаков конкурентоспособности и модификации императивов международной экономической безопасности. Научная новизна исследования заключается в исследовании трансформационного потенциала идеологии устойчивого развития и произоходных от нее Целей устойчивого развития в контексте вопроса производительности как на макроуровне (уровне стран), так и мезоуровне (уровне фирм), что позволило: выявить динамический характер сравнительного преимущества под воздействием диалектического противостояния концепций роста и развития в стратегиях экономической безопасности стран; идентифицировать повышение производительной способности как системаобразующий интерес страны, выходящий за рамки экономики и затрагивающий социальные, экологические, ресурсообеспечивающие аспекты; причислить к факторам развития производительных сил такие, как: всестороннее развитие человека; развитие образования, науки, разработку новой техники, технологии, научно-технический прогресс; совершенствование организации и управления производством.

Ключевые слова: производительная способность, производительные силы, конкурентоспособность, экономический рост, Цели устойчивого развития, международная экономическая безопасность.

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Introduction. From the economic point of view, the sustainable development concept relies on the understanding that the income received in the established economic system of today would not be an income in actual sense if the same income could not be received tomorrow in the similar economic system. The same applies to the optimal use of limited nature resources. The economic component is the core of the sustainable development concept, whereas the social and ecological ones are only to supplement and harmonize it. This understanding allows for a new vision of the notion «the productive capacity of country», because long-term projects implemented with account to nature and social patterns prove to be economically effective, but the ones where long-term ecological and social implications are
overlooked will be loss-making in future. The special role of the sustainable social development is in creating equal society, eliminating poverty, reducing unemployment, increasing productive employment, encouraging social integration, free participation of a human in social, political and economic life [1]. The ecological component of the sustainable development needs to ensure the integrity of nature systems, the viability and stability of the biosphere. Growth and development quite often come into dialectic conflict in the sustainable development concept. The principal dimension distinguishing between the two notions is the difference in goals sought by the processes involved in them, either through decision making mechanisms or in a chaotic manner.

**Analysis of research and problem statement.** For T. Strange and A. Bayley [2], sustainable development has become a kind of conceptual touchstone, one of the defining ideas of contemporary society. So sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. According to The United Nations approach [3], many activities relate to sustainable development, from climate change analysis to development co-operation to corporate social responsibility. Therefore, the productive capacity directly corresponds with the implementation of the Sustainable Development Goals. For experts of United Nations Conference on the Least Developed Countries, one of the options for increasing productive capacity is for governments to work through partnerships with domestic or international businesses. Private-public partnerships are recommended in areas such as infrastructure, energy, telecommunications and transportation, as well as for improving efficiency in financial services. Also highlighted by finance ministers as particularly promising are partnerships in education, public health and social services. Such activities can not only bring in new capital, but allow for technology transfer and capacity-building for domestic enterprises [4].

**Unsolved aspect of the problem.** Direct and reverse relationships between the productive capacity and the sustainable development obviously exist and can be achieved by setting up the goals, obligatory and recommended for implementation, in six important areas. Yet, the conformity of the interests of a country, related with gaining competitive and comparative advantages, and its interests in enhancing its adaptability in implementing the Sustainable Development Goals remains uncertain; because it is well known that such interests sometimes may be in conflict with each other. This calls for seeking for a compromise, including one on the side of medium and large business that has to focus on not only the indicators of profitability of projects and their payback period, but on more effective utilization of resources, which fully conforms to the principles of the productive capacity enhancement in the context of the sustainable development ideology.

**The purpose of the article** is to analyze the conformity of the ideological principles of the Sustainable Development Goals adapted by the Millennium Development Goals and approved by countries for implementation till the year of 2030 to the national objectives of productivity growth in the context of transformation of the essential features of the competitiveness.

**Research results.** Today, the global agenda of economic development of countries and regions includes the sustainable development principle as a foremost imperative. This idea, first articulated in the Declaration of Rio de Janeiro in June 1992, gains momentum today. In the Resolution «Transforming our world: the 2030 Agenda for Sustainable Development» [6] approved by the UN General Assembly on September 25, 2015, the above concept was clarified in greater detail in the definitions of 17 goals and 169 objectives in the sustainable development field. The objectives are all-embracing and set the balance of all the three sustainable development components: economic, social and ecological (Fig.).

The economic interest of a country denotes its effort to promote higher production effectiveness, higher labor productivity, lower production cost and innovation. The productive capacity of a country, therefore, depends on the success in setting the conditions required to create growth drivers and exploit the capacity of growth points. The competitiveness of a country is no long determined by its size or military power, because neither the former nor the latter is critical for its productivity. Therefore, the country’s capacity in implementation of SDG depends, inter alia, on the creation of business environment and the development of human potential (in parallel with supporting institutes), which will enable to exploit productively and improve the abovementioned factors exposed to the impact of demographic, technological, innovation and ecological challenges.
The conformity between the Millennium Development Goals and the Sustainable Development Goals

Source: Constructed by the authors.

Fig. The conformity between the Millennium Development Goals and the Sustainable Development Goals.

Source: Constructed by the authors.
Higher productivity means that either a certain output can be produced by smaller inputs like labor, energy or raw materials or a larger output can be produced with the unchanging inputs (labor, energy and raw materials). The productivity will grow when the output per unit of input resources grows. It follows that a productivity growth can be achieved by organizing more effective production and technology process and by improvements in management.

On corporate web-sites of many companies, sections devoted to the sustainable development appear next to the ones on corporate social responsibility. Analysts of «Deloitte» company [7] say that companies seeking for the sustainable development and working in this field are becoming market leaders by setting more effective interactions with staff, partners, consumers, regulators and investors. The analysis of business strategies of the companies included in the list of FTSE 350 allows one to say that the most clearly defined objectives of overall business development include supply of goods and services to clients and increase of profit or shareholder value. But this poses the danger. Ha-Joon Chang [7] argues that higher dividends and greater own-share buybacks reduce retained profits, which are the main sources of corporate investment in the US and other rich capitalist countries, and thus reduce investment. The impacts of reduced investment may not be felt in the short run, but in the long run make a company’s technology backward and threaten its very survival.

If the principle goal is understood as the phrase explaining the fundamental reason for the existence of an organization, which has to contain a reference to the causal relationship between the organization’s business interests and its broader objectives of social, ecological and economic nature, then the result will be disappointing. Although the principle goals of companies can hardly be categorized, most of them have nothing to do with the sustainable development, and only few implicitly reflect the sustainable development objectives such as Goal 3 «Ensure healthy lives and promote well-being for all at all ages»; Goal 8 «Promote inclusive and sustainable economic growth, employment and decent work for all»; Goal 9 «Build resilient infrastructure, promote sustainable industrialization and foster innovation».

Basically, Goal 8 can be implemented through productivity growth, especially when its cyclic nature is born in mind, because cyclic change is a reason for low productivity. Companies did not dismiss employees in time of recession, expecting for the recovery of demand; it resulted in the accumulated extra workforce. Once the demand recovers, these employees will be used more effectively, and their productivity will grow. If these untapped capacities are utilized, productivity can grow faster than in the pre-crisis period, and the gap occurring in the crisis year will be shrinking.

The goals such as Goal 11 «Make cities inclusive, safe, resilient and sustainable» and Goal 6 «Ensure access to water and sanitation for all» are mentioned in business strategies of companies included in FTSE 350 list to even lesser extent. Although Goal 7 «Ensure access to affordable, reliable, sustainable and modern energy for all» and Goal 12 «Ensure sustainable consumption and production pattern» are not clearly defined in business strategies, orientation on growth in the share of renewable energy sources in the energy balance of countries and introduction of resource saving technologies will have implications for the investment attractiveness of the projects focused on such technologies introduction. It is remarkable that only 3% of companies or less, included in FTSE 350, are willing to contribute in the implementation of Goal 10 «Reduce inequality within and among countries», Goal 4 «Ensure inclusive and quality education for all and promote lifelong learning» and Goal 1 «End poverty in all its forms everywhere». The relation of the principal goal of companies with some of the Sustained Development Goals is sector- specific.

The growing specialization of service producers leads to additional benefits from the trade in services on account of higher diversity and expansion of markets [8]. A lower price, a better quality or a wider choice of services allows one to have a more sophisticated organizational structure of production and fragmentation of production activities [9]. Outsourcing of services [10] by companies operating in rapidly developing industries makes allocation of production factors more effective, which leads to economic growth, and, finally, contributes in the implementation of Goal 8 «Promote inclusive and sustainable economic growth, employment and decent work for all» and Goal 9 «Build resilient infrastructure, promote sustainable industrialization and foster innovation».
In overall, utilization of the market capacities contributes in the implementation of Goal 12 «Ensure sustainable consumption and production patterns» and, indirectly, Goal 10 «Reduce inequality within and among countries».

Conclusions. In spite of a number of country-specific problems of productivity, which call for solutions (the reducing labor costs; the increasing production output; the increasing cumulative demand; promoting integration of R&D and industrial sectors for quicker and more effective commercialization; the accelerating process of transformation of knowledge into technologies; dissemination of information and communication technologies and results of R&D), each country has to face its own unique challenges – the resource curse (also known as the paradox of plenty), the rapidly ageing population, the outflow of highly skilled labor force, the technological handicap, the unemployment due to robotizing or automation, the de-industrialization, etc. In order to overcome these and other negative trends, the governments of the countries should implement measures of a different direction and scope in order to take advantage of technological development, but not at the expense of socio-economic development.

The performed analysis of the conformity between ideological grounds of the Sustainable Development Goals and objectives of productivity growth at country level gives evidence that the «three ones» approach by which the sustainable development has three dimensions – economic, ecological and social – assumes economic, social and ecological sustainability both at macrolevel and corporate level. This sustainability is supposed to lay the fundament for further growth in the productivity of capital, the productivity of labor and the productivity of ecological system, making up the potential for productive capacity growth at country level.

The achievement of the Sustainable Development Goals must not be a country-specific mission, nor must it remain an exclusive objective of governments. The growth of countries’ productive capacity and the achievement of the Sustainable Development Goals will promote the sustainable development of companies. The sustainable development of companies has to represent a new management philosophy involving rethinking of the role of business organizations in the socio-economic development, the high social responsibility of companies in economic and social spheres; the awareness of the need to formulate development strategies conforming to the requirements of the socially oriented innovation-driven economy. Programs for stimulating productivity, launched at government level, have to be paralleled with companies’ operation focused on reproduction of their economic, intellectual, human and social capital on the basis of the sustainable development principles.

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