



MODERNIZATION OF THE ECONOMY AND PRODUCTION AREAS OF DEVELOPED COUNTRIES OF THE WORLD

BY

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Abstract

This article is devoted to the disclosure of vertical and horizontal changes in developed countries, which contributes to increased economic diversification, increased labor productivity indicators, resulting in a wider use of social indicators, in particular the development of a diversified low-carbon economic system based on renewable energy sources and renewable technologies, that resources are united by effective connections. The author highlights climate constraints, in particular, the desire of developing countries for rapid economic development, while keeping emissions into the environment, as well as resource consumption within the ecological limits of the entire planet. To solve this problem, the author proposed macroeconomic priorities necessary to overcome these limitations, which are based on investment policy and strategic interaction and coordination between the private sector and the state, as well as increasing wages and «green budget expansion». The article reveals two types of macroeconomic restrictions. The first are associated with the rejection of harsh expansion of developing countries by other foreign countries as a standard basis for regulating aggregate demand. The second macroeconomic priority is related to tracking the relationship between production and investment decisions.

Keywords: *developed countries of the world, labor productivity, growth rates, strategy, structural transformation, investment policy, commodity dependence, economic shocks, diversification strategy, economic instability, diversified low-carbon economic system, macroeconomic priorities.*

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INTRODUCTION

Uncertainty remains in the global economy. The main challenge for her at the moment is the task of developing adaptation mechanisms to ensure positive rates of economic growth in the context of the ongoing war and the consequences associated with the coronavirus pandemic. Under the influence of exogenous factors, primarily due to macroeconomic restrictions associated with the pandemic, multiple forced deformations at the level of production, logistics, demand, and social problems, probably in the near future, the world economy, on the one hand, found itself in a zone of increased inflation, with on the other hand, under the

influence of the same corona crisis and the digitalization it spurred on the entire world economy and way of life in general, as well as the «climatization» of the global agenda, the process of «energy transition» and a number of sectors of the world economy entered the booster phase of development. The strong pace of recovery in global economic indicators in the second half of 2023 contributed to hopes that the damage caused by the corona crisis in 2020 will be compensated faster than previously expected. By October 2023, the IMF had increased global GDP growth to 5,9% (up from 5,5% in January 2022), and the WTO had revised its global trade forecast to 10,8% in 2024 (up from 8,0% according to 2023) [Akimov A.V.; Yakovlev A.I.; 2020]. In 2022, the depth of



the economic crisis showed significant regional and state variations; a similar picture was observed in 2021 in relation to the pace of economic recovery. As a year earlier, the developing countries of Asia were in the most favorable condition: in 2022 they showed minimal rates of decline (-0,8% compared to -3,1% for the world economy as a whole and -2,1% for group of countries with emerging markets), then in 2023 their growth rate, according to IMF estimates, could be 6,4%. The countries of Latin America and the Caribbean also showed significant GDP growth (6,3%), but, unlike developing countries in Asia, this was not enough to compensate for the decline in GDP in 2020, which amounted to -7,0%. For the group of developed countries, the estimated growth rate is about 5,2%, with figures for the eurozone (5,0%) and especially Japan (2,4%) noticeably lagging behind those of the USA and Great Britain (6,0% and 6,8% respectively) [Deryugina L.V., 2023]. The differences in economic growth rates were based on three main groups of factors: the scale and intensity of quarantine and quasi-quarantine restrictions introduced in the context of the fight against the coronavirus pandemic (as well as the speed of lifting the corresponding restrictions); effectiveness of anti-crisis policy; foreign trade specialization of countries and the pace of recovery of markets for relevant goods and services.

The first of these groups of factors had a decisive impact on the differences in the rate of economic decline throughout 2020 and in many countries continued to play a moderating role in 2021-2022. Anti-crisis policy measures, as in the previous year, played the greatest role in economically developed countries – not only due to the scale of economic support but also due to the effectiveness of the implementation of management decisions ensured by the quality of political and administrative institutions. The main source of differences in GDP growth rates was the influence of the dynamics of world markets on the economic situation in specific countries.

The purpose of writing this article: is to determine the main macroeconomic priorities in order to create a diversified low-carbon economic system, which is an important element of the structure of economic transformation.

Materials and research methods

When writing the article, the following scientific methods were used: the theoretical method of scientific research, in particular, the method of analysis and synthesis; empirical methods, i.e. a method of scientific observation, as well as a method of forecasting (statistical method) and a method of comparison. In this work, all the methods used are interconnected, organically complement each other, and meet the objectives of scientific research, therefore the use of these scientific methods of each was carried out taking into account their specifics. So, when describing the transformation of the economic system of developed countries and their transition to diversified low-carbon economic systems, the method of analysis and synthesis is used.

The forecasting method, in particular the statistical method, was used in presenting statistical data and material in figures

on global production volumes for various periods and years and other data. The empirical method, in particular the method of scientific observation, was used to study the indicators of renewable energy sources as a result of providing people with new jobs in the state. And the comparison method was applied when comparing in various foreign countries such as Africa and East Asia the use of green fiscal expansion.

Research results

The success of today's developed countries, as well as the catching-up countries of East Asia, is based on sustainable economic growth, closely linked to structural transformation. Essentially, this involves two sets of intertwined and complementary processes: a vertical shift in the structure of production from extractive to manufacturing industries (and to high-tech services), on the one hand, and a more horizontal shift in the allocation of resources from lower to higher productivity industries. And capital-intensive industries within and between both industries. When combined, these mechanisms have improved a wide range of social indices, including the decrease of poverty, and have enhanced labor productivity and economic structure diversity in nearly all successful development examples. Even if the world economy has recovered over the past two years, it will take some time for global income to recover from the losses caused by the COVID-19 shock. Even with an optimistic growth rate of 3,5 percent per year starting in 2023, global output will not reach its 2017-2019 trend level until 2030. The 2030 Agenda for Sustainable Development will not be able to be implemented in this atmosphere, and efforts to raise the extra funds required to solve the climate crisis would be hindered. Furthermore, the negative economic effects of COVID-19 will last longer if unanticipated shocks- financial, epidemiological, or climate-related-occur again or if attempts by policymakers to support the current recovery start to stall. Given the events that have transpired since the global financial crisis and the current disorderly condition of international policy coordination, this outcome cannot be disregarded. Additionally, a more diversified economy is less susceptible to outside shocks, which frequently impede development and transition. This holds true for climatic shocks as well, but it has grown more apparent in recent years due to the greater susceptibility of commodity-dependent face a dilemma: they must strive for economic development while keeping emissions and resource consumption within the planet's ecological limits. This challenge requires new strategies for structural transformation in a climate-constrained world. Today, as the world awakens to economic recovery from the shock of COVID-19, the opportunity cannot be missed to develop, agree, and implement a range of new policy solutions that address both environmental and development concerns [Matveeva E.V., 2020]. Policymakers in developing countries must address this challenge in the context of the structural weaknesses of today's hyper-globalized economies and the weaknesses of the institutions needed to mobilize their domestic resources. One potential offsetting advantage for economically lagging countries is the ability to use

technologies already developed in more developed countries to accelerate the transformation of their economies. This, however, is easier said than done as developing countries face a number of barriers to technology transfer, increasingly visible in the face of severe environmental constraints. The macroeconomic priorities needed to overcome these constraints must be based on pro-investment policies, as well as strategic interaction and coordination between the private sector and the government [Mazyrina V.M., 2020]. The first means moving away from austerity as the standard basis for regulating aggregate demand, and the second is necessary to track the interdependence between investment and production decisions.

These decisions involve identifying areas where the greatest barriers to investment exist; opportunities for effective investment of public and private investments in industries with high labor productivity; and ensuring that such investments provide citizens with a high-wage future and increase long-term productivity. Such regulation of investments is achieved by monitoring return indicators and stopping government support that does not achieve the set goals over a certain period of time, as well as suppressing attempts to appropriate rent by authorities and entrepreneurs. One of the main benefits of green budget expansion is increased wages. This is because growing low-carbon industries tend to be more labor-intensive than declining high-carbon industries. A recent study estimates that by 2050, the renewable energy, energy efficiency, and grid modernization sectors will create around 19 million new jobs worldwide [Lyubetsky V.V., 2022]. Assuming about 7,4 million jobs lost in the fossil fuel sector, the net gain would be 11,6 million jobs.

The greater job creation potential of the green structural transformation pathway may be of particular importance for countries where labor migration has led to the expansion of the urban informal sector, including because existing technologies are too capital intensive given the structure of their economies, as in particular some areas of Africa. While climate-related investments on a global scale are needed to transform the global energy system to prevent rising global temperatures, focused government policies (including resources) are needed to address the adaptation challenges that countries face as a result of rising temperatures already built into the current climate growth models [Mazyrina V.M., 2020]. Reconciling these global and national issues is neither easy nor automatic. It requires strategic planning and political influence. Structural transformation, characterized by a shift in the structure of production from extractive to manufacturing industries, has traditionally been the most successful way to achieve sustained economic growth and improved living standards. This path has now been followed by developed countries, as well as several successful late-industrializing countries in East Asia.

However, their traditional model of intensive use of fossil fuels is unable to satisfy the efforts of many other developing countries that are trying to increase their national income through industrialization, since this will push emissions and

resource consumption beyond the ecological limits of the planet. The answer to this problem is not for developing countries to abandon industrial development. Rather, the answer is to create a diversified, low-carbon economic system based on renewable energy and green technologies, where production within and across sectors is resource-efficient. With this solution, manufacturing remains the core target, since in most developing countries, important elements of structural transformation towards a more resilient, low-carbon economy will continue to depend on diversification into high-productivity, high-wage industries. The energy transition, along with the emerging circular economy, has the potential to open up opportunities to reduce the carbon footprint of traditional manufacturing industries, as well as manufacturing equipment for a low-carbon economy.

Relying on domestic production of energy and food, while reducing imports of raw materials, can significantly reduce imports and thereby free up scarce foreign exchange to import capital goods for industrialization and catching up economically. None of these transformations can occur without a developmental state. Successful structural transformations have generally been based on active government policies and effective regulation. In addition to making large-scale public investments and financing the investment push needed for green structural transformation through green financial instruments, this will require green industrial policies and public-society relations that not only break the hydrocarbon lobby but also set clear rules that must be followed. will be able to set new trajectories for green investments and create a legitimate basis for support from a wide range of social groups.

In modernizing the developmental state, lessons from previous success stories may continue to be useful in addressing adaptation (and prevention) challenges. First, the state needs greater administrative and institutional capacity to develop industrial policy and guide structural transformation. The experience of the Covid-19 pandemic and the uncertainties associated with adaptation to climate change show that the state must also have a dynamic capacity to analyze incomplete and sometimes contradictory data; build synergies at several levels of management; quickly change the purpose of existing infrastructure; and also learn from the experience of other states [Sharova A.A., 2011]. The second lesson is the importance of accountability mechanisms for policymakers, for example through reporting requirements and other disclosure obligations, combined with more general oversight through audit, independent courts, and the press. The third lesson is involvement, i.e. close relationships between private individuals and government officials, capable of ensuring mutual exchange of information and unity of opinion. Participation will be particularly important for green industrial policy, as the social transition will involve a wide range of stakeholders and reflect a broad social consensus. When combined, the lessons two and three show how mutual control works. The state must maintain a safe distance from private enterprise, be prepared to employ disciplinary

measures to stop misuse of its support and sever failed endeavors and productions.

This is the final and connected lesson. [Kashin E.A., 2021]. Enforcement practices necessitate well-defined objectives, quantifiable performance metrics, suitable oversight and assessment protocols, and government discretion in determining when and where to deploy enforcement tools, what experimental strategies to employ, and when to veer off course when something is not working as planned. Developed countries will undoubtedly be the primary source of funding due to the extent of adaptation needed, the reality that those most impacted have the least amount of responsibility for the issue, and the fact that they are least able to pay for it. But it will be essential to fortify the mobilization of domestic resources, for example, by stepping up the operations of state banks with specialization and central banks [Krasnov Yu., 2012].

Diversification through public investment should be encouraged in climate-conscious public development. The best ways to address governance, climate risks, and challenges should be addressed by locally-led climate finance initiatives. These ways include community-led planning that strengthens and supports already-existing self-sustaining institutions and encourages: a) the social inclusion of those impacted by climate change; b) a flexible and adaptive management process to invest in resilience with an emphasis on public goods [Sukharev O.S., 2019]. Because systemic risks are complicated, the government must coordinate and control private green finance instead of just «mitigating risk» enabling others to profit and receive an unfair share of the benefits. The destructive inclinations of today's ultra-liquid financial sector, whose emphasis on profitability is incompatible with the essential global measures to avert climate change, let alone the more local adaptation that is required, should be understood as something that can be prevented by such functions. As central banks around the world were able to provide direct support to governments during the COVID-19 pandemic, the recovery period from it provides an opportunity to consider how they could also follow this path to support climate-related investments.

Because of the very nature of climate change, addressing the challenge requires that structural transformation be seen as a global challenge, and where developed countries must play an active role in driving profound changes in their production and consumption patterns, while even least developed countries will also require significant structural and technological shifts. A climate-conscious developmental state must balance addressing climate change adaptation and mitigation with long-standing goals of increasing productivity, raising living standards, and closing economic and technological gaps with more developed countries. The urgent need to scale up climate investments and direct them to where they are needed requires that international trade and finance systems be oriented to support structural transformation, particularly in developing countries. This is not currently the case, especially when it comes to adaptation. Action commensurate with ambitious goals will require

concerted reform efforts at the multilateral level. Annual adaptation costs in developing countries are now estimated at 70 billion dollars; in 2030 they will reach 140-300 billion dollars and in 2050 – 280-500 billion dollars. [Voloshin A.V., 2023].

Funding currently covers less than half of what is currently needed and will not reach the 2030 target without a fundamental change of direction. International assistance in adapting to climate change continues to rely on official development assistance, multilateral lending, and catastrophic risk self-insurance systems, in varying combinations on a case-by-case basis. However, this is woefully inadequate to address the systemic impacts of recurring and increasingly frequent climate change shocks. For many foreign countries, the result has been an endless cycle of faltering development and rising debt. From a development perspective, grant financing or maximum concessional lending mechanisms are key to solving the adaptation problem. At the international level, two levels of reform for adaptation financing can be identified: first, steps to support climate-conscious development states mobilizing financial resources for investment in climate change mitigation and adaptation, and second, reforming the way climate change management at the international level.

The first group of reforms should set the following goals: 1. The organization's commitment to and delivery of risk assessments must be met and further progress must be made to increase the share of additional funding dedicated to climate change adaptation and resilience building. Maximum concessional loans and gratuitous assistance are extremely important for adaptation. These could be financed by issuing green bonds and a Tobin tax-type tax, or by redirecting fossil fuel subsidies. This must take into account the special needs of least developed and lower-middle-income countries, as well as fossil fuel exporting countries, which require gradual transformation of these carbon-intensive industries and an appropriate safety net to cover climate debt. 2. Debt relief and debt restructuring for developing countries must be included in the climate agenda. An obvious starting point would be the debt of Group of Twenty vulnerable countries (G20), but linking the climate and debt crises requires more systemic reforms in the international debt architecture. 3. Multilateral development banks need additional capital to increase support for green investments while decreasing financing for industries associated with the extraction and use of fossil fuels or environmental pollution. Their activities must be aligned with the Paris Agreement and commitments to «build back better» by exiting the oil, gas, and coal sectors and integrating into the transition processes that help people and these industries make that leap. Political conditionalities will need to be lifted and rating straitjackets loosened to support experimental or new green technologies and businesses. Foreign G7 countries need to use their shareholder powers to steer MDBs in this direction. Regional development banks and multilateral development banks could also purchase green bonds from developing countries, ensuring more stable demand for such bonds and easier access to long-term capital

for developing countries. This could also have a beneficial effect on their profitability and thus, to a certain extent, help reduce the burden of servicing external debt. 4. Green bond markets are one way to raise long-term financing. However, regulatory standards lag behind the growth of these markets, and “green camouflage” is common. In light of the scale of the problem, the regulatory framework for the green bond market must be supported by appropriate levels of funding and staffing at the national and international level.

The second step would be to declare the problem of adaptation a global emergency and create appropriate mechanisms to manage what is essentially a global public good. This would reflect the reality that developing countries already face as they struggle to finance the necessary climate change adaptation efforts, and would help create a framework that allows them to access finance on appropriate terms and adapt green technologies to their development trajectories.

A Global Green Structural Fund could support transition in developing countries and provide funding for both adaptation and mitigation initiatives as an absolute priority. This would bring dividends not only to developing countries but also to developed countries.

Conclusion

Thus, in conclusion, I would like to note that the conditions for carrying out economic transformation in developed countries are specific, therefore management decisions made in foreign countries that solve problems similar to the Russian Federation or are ahead of our state, in particular the Lugansk People's Republic, on the path of future reforms may be useful as a guide pointing to current trends in transformations in the economic system and the sphere of production, as well as public administration. Developing countries have felt the brunt of the negative impacts of rising global temperatures, and the worst is yet to come. However, given their peripheral position in the current global environmental governance architecture, or more precisely the reluctance of negotiating partners to address their concerns, they have not received the necessary multilateral support to address adaptation (including loss and damage). The lack of bold and generous leadership has led to mistrust, further weakening the international cooperation needed to address the climate challenge in all its dimensions.

At the international level, two levels of reform can be distinguished for financing adaptation efforts. The first group of reforms sets the following goals: 1) financial obligations to assess the organization's professional risks and promises to provide it must be fulfilled and go further to increase the share of additional funding intended for adaptation to climate change and increasing stress resilience; 2) debt relief and debt restructuring of developing countries must be included in the climate agenda; 3) multilateral development banks need additional capital to increase support for green investments while reducing financing for industries associated with the extraction and use of fossil fuels or environmental pollution; 4) green bond markets serve as one of the ways to attract long-term financing. The second step would be to declare the

adaptation problem a global emergency and create appropriate mechanisms to manage what is essentially a global public good.

Generally, one potential offsetting advantage for economically lagging countries is the ability to use technologies already developed in more developed countries to accelerate the transformation of their economies.

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