

GREEN TRANSITION AND THE PRECONDITIONS FOR UKRAINE'S POST-WAR RECOVERY.

The events that took place in Ukraine in 2022 had a significant impact on the dynamics of many processes and increased the demand for scientific analysis of economic integration processes. Russia's energy blackmail has given momentum to the issues of green transition and energy security for European countries. The impact of the pandemic on the logistical sustainability of value chains and the exacerbation of east-west political tensions in the context of the war in Ukraine have necessitated sustainable models to explore alternative directions.

Undoubtedly, the main issues today are the conduct of successful military operations to defend the country. However, behind their effectiveness is the resource and logistical support that is being created in Ukraine not only through the selfless work of our people, but also through the unprecedented help and support of the entire civilised world. The cohesion and incredible motivation of all the people in the country and our friends abroad makes the scenario of Ukraine's victory in this war clear. The only question is the timing and the price to be paid by military and civilian casualties in Ukraine and the destruction of residential, social, transport and industrial infrastructure. This is what determines the unambiguous scenario of Ukraine's victory in this war.

The war was a catalyst for many political and economic processes: from Ukraine's integration into the European Union to the technological shifts in the economy caused by the refusal to import fossil fuels and the consequent need for their replacement.

It is very important to start a dialogue now and decide on possible scenarios for the recovery of the Ukrainian economy, possible support of this process by the international community, provision of resources, choice of priorities and directions of possible specialization of the Ukrainian economy.

Russia's military aggression against Ukraine has revealed a huge range of governance studies, which, combined with the context of the digital and energy (green) transition, exacerbate the bifurcation potential for change for traditional models of governance institutions. This situation opens broad horizons for scholarly analysis and transdisciplinary research. The aftermath of the war in Ukraine has actualised the issue of changing the whole system of international business [1].

D. Cumming [2] looks appealing as he examines possible scenarios for reducing the EU economy's dependence on foreign manufacturers by outsourcing many of their production and service activities predominantly to China. The relatively low level of geographical burden on the territory of Ukraine (compared to central European countries), as well as the significant transformation of production capacity due to military operations create the ground for scientific justification of a new business localisation model.

In addition, the aforementioned outsourcing has put its imprint on the human resource capacity of EU countries. Of scientific interest is also the assessment of retraining and skills development opportunities to ensure the specialisation of Ukrainian labour potential[3] in the EU-wide division of labour, as well as the issue of migrants from Ukraine who will not return for various reasons to fill the EU labour market. This issue will be particularly relevant for the Czech Republic, which has become the country with the highest ratio of refugees from Ukraine to its population.

The pronounced agrarian specialisation of the Ukrainian economy and the much lower level of efficiency of their use reveals another gap of scientific interest in the context of interdisciplinary analysis involving specialists in agro-industrial technology, management and sustainable development. Ukraine's potential in this respect has been extensively explored by G. Fischer [4], and the developments associated with accelerated decarbonisation and the tightening of relevant EU directives may become one of the main drivers for the mainstreaming of the Eastern Partnership and economic convergence both around energy cooperation and through the development of a low-carbon footprint production system.

On the basis of the above, several directions can be identified that can form the base of the logic of economic recovery and modernisation in Ukraine:

1. Economic recovery policy should be based on a clear choice of Ukrainian economic specialisation. The logic of regional innovation strategies of smart specialisation (RIS3) developed by the EU can be a good basis. The implementation of this policy at the level of individual territories and projects, subject to their clear prioritisation and ensuring technology transfer has good prerequisites, taking into account the experience of the pre-war decentralisation reform in Ukraine. One of the key domains of Ukraine's future economic specialisation could be military-industrial and dual-use technologies, primarily drones and unmanned aerial vehicle technologies. The removal of barriers in this area could provide a significant contribution to the dynamics of economic development of the Ukrainian economy.

2. Ukraine has an enormous biomass resource and almost 70% of its arable land not only enables food production but, more importantly, sharply shapes the implementation of a progressive bioeconomy model. This creates an opportunity for green energy generation and low-carbon industries to cover the needs of the EU-wide green transition and substitute fossil fuels with clean biomass energy. The rebuilding of ravaged cities in Ukraine with a focus on the principles of the bioeconomy will allow the location of equipment and production facilities for housing infrastructure and green industries. With the exhaustion of the geographical potential for localisation of such production facilities in EU countries this will additionally attract private investors. The considerable potential of biomass will provide the basis for new value-added chains in the creation of chemical industries based on biomass processing. Also the localisation of such facilities will be determined by the low logistical efficiency in transporting biomass and the synthesis gas that can be obtained from it. Synthesis gas is obtained from fossil hydrocarbons or directly from biomass (which might be cheaper in the new environment!). It is the main raw material for chemical industries. Such approaches would contribute to the whole range of UN 2030 Sustainable Development Goals?

3. On a global scale, the establishment in Ukraine of production of equipment for biomass gasification and processing would make a significant contribution to solving global problems of ecological development in the tropical zone countries where Ukraine is a traditional supplier of food. And potentially, it could also become a supplier of equipment for solving global environmental problems.

4. One of the key prerequisites for economic development in the future is a significant transformation of the system of socio-economic relations and growth of trust in society. As a result of the aggression against Ukraine, a significant number of self-organised socio-entrepreneurial groups of a networked and often transnational character have emerged, which can significantly reinforce the positive dynamics of cluster structures that emerged before the war in various sectors of the economy. Currently, such groups focus mainly on volunteer projects and humanitarian aid. The established forms of coordination in such groups have a high level of effectiveness and are supported by a high level of trust. The level of their effectiveness in solving urgent tasks often exceeds the effectiveness of state institutions. The possibility of transforming such groups into a sustainable network in the future can enhance economic growth processes. The main challenge in this context will be the transformation of operational models of such networks functioning, assessment of opportunities to form a quality value proposition and investigation of opportunities to implement mutually beneficial models of cooperation and to form appropriate sustainable value chains between representatives of business structures of Ukraine and European countries.

References:

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