

**Секція 4. ВПЛИВ ВОЄННИХ КОНФЛІКТІВ ТА ТЕХНОГЕННИХ КАТАСТРОФ
НА ЛОКАЛЬНІ ТА ГЛОБАЛЬНІ ЕКОСИСТЕМИ**

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**ECONOMIC CONSEQUENCES OF ARMED CONFLICT IN THE EAST OF
UKRAINE: SOME ASPECTS**

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**ЕКОНОМІЧНІ НАСЛІДКИ ЗБРОЙНОГО КОНФЛІКТУ НА СХОДІ УКРАЇНИ:
ДЕЯКІ АСПЕКТИ**

Many studies show that wars cause long-term losses to states and society [1]. Before the conflict Donetsk and Luhansk regions contributed significantly to the Ukraine's GDP (almost 15%) and its share in export was accounted for a quarter of the country's total one [2], supplied a number of raw materials to many industries, etc. The war in Donbass cost the government € 80 million a day [3]. It is stated in [4] that "...Ukraine's war-ravaged eastern regions face further depopulation, economic decline and erosion of development".

Research results [5] from the counterfactual estimation by the synthetic control method testify that Ukraine's per capita GDP decreased by an average of 15.1% between 2013 and 2017 due to the Donbass war. It is concluded by the authors that in its absence, this indicator would have instead followed a rather stable, slowly increasing trend. The disruption to production, trade and employment, agricultural and financial losses, compression of public expenditures, a partial military mobilization coupled with growing political instability as well as other losses like human capital, social, and psychological effects and migration dynamics have been identified as key consequences of the conflict in the East of Ukraine. The reduction of Ukraine's economy attractiveness to investors is also its negative consequence.

The issues of the conflict improper management at the governmental level, economy structural imbalances and the unfavorable external environment during the war still remain debated. The pandemic of 2020 made its own impact on the country's economic (and not only) performance and in combination with the war were among the most important causes of Ukraine's GDP decrease by 4% in 2020 compared to 2019 [2].

Although, Minister for Development of Economy, Trade and Agriculture Ihor Petrashko considered [6] that Ukraine has coped well with the unprecedented challenges of 2020, and the actions of the government and the National Bank of Ukraine have contributed to the formation of certain positive trends in the economy.

According to Deputy Prime Minister of Ukraine – Minister for Reintegration of the Temporarily Occupied Territories Oleksii Reznikov [7] the government's ultimate goal is to create a "success belt" in Donbas and \$21 billion are needed to eliminate the consequences of the Russian aggression on its territory. Four sources of funding are planned to be attracted for the recovery and development of the Donetsk and Luhansk regions economies: national budget, donors assistance, external loans and investments.

Next to all the measures to be undertaken by the government, maintaining the international sanctions against the aggressor in the East of Ukraine until the full restoration of Ukraine's territorial integrity must be included to the permanent agenda of our country's partners.

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MILITARY ACTION IN EASTERN UKRAINE - ENVIRONMENTAL CONSEQUENCES

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БОЙОВІ ДІЇ НА СХОДІ УКРАЇНИ – ЕКОЛОГІЧНІ НАСЛІДКИ

One of the most dangerous environmental consequences of hostilities in the Donbass is environmental pollution in the event of an emergency disruption of large industrial enterprises. As a result of direct damage to production infrastructure and equipment, emergency shutdowns of enterprises due to damage and lack of raw materials, energy and electricity, the risks of negative impact on the natural environment of the region increase significantly. In some cases, this leads to accidental volleys of emissions and discharges of harmful substances, in others - to a longer impact on the environment by reducing the efficiency of treatment and use for the production of low-quality, often non-standard raw materials.

Among the many industrial enterprises damaged as a result of hostilities were the most environmentally hazardous industries: Yasynivsky, Avdiyivsky and Yenakiyevo coke plants, Yenakiyevo metallurgical plant, Lysychansk refinery, Donetsk state chemical plant, Slovyansk, Luhansk Severodonetsk "Nitrogen" and Gorlovka "Styrene". At all the listed enterprises cases of destruction of infrastructure, disturbance of electric and water supply, raw materials and materials are fixed. Some enterprises were destroyed after the signing of the Minsk agreements. For example, on May 23, artillery shelling at the Avdiivka Coke Plant caused a fire and a coke oven gas leak. All four high-voltage lines supplying the enterprise were broken by shells, resulting in a volley of coke oven gas with a high content of benzene, toluene, naphthalene, hydrogen sulfide, mercaptan, hydrocyanic acid and ammonia. On May 27, after the projectile hit the open switchgear of Luhansk TPP, one of the power units was stopped. Due to technical reasons and the impossibility of carrying out major repairs in the conditions of hostilities, unit № 9 was disconnected at the station on May 29. One example of such "indirect" effects of hostilities is the study of air quality. In addition to the mentioned negative effects of the conflict, it is worth paying attention to soil pollution. As a result of flooding of territories, increase of emissions of harmful substances, and also at large-scale spill and combustion of fuels and lubricants there is a soil pollution in rather considerable territories. Given that the area set aside for arable land, for example, in the Donetsk region,