

# IMPLICATIONS OF THE WAR ON THE ECONOMY AND SOCIAL WELL-BEING OF DONBAS

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## **ABSTRACT**

*The political crisis that resulted in unrest in the Donetsk and Luhansk regions of Ukraine evolved into a war between the post-revolutionary Ukrainian government and pro-Russian insurgents.*

*A large-scale military conflict has undoubtedly produced an extremely negative impact on the country's economic potential, not very strong as it was. It encompasses both the outcomes of the direct destruction of the economy in the region – both the occupied areas and those controlled by Ukraine – and problems caused to enterprises directly connected with it.*

*Implementation of an entire range of long-due political, social and economic reforms at present opens the window of opportunity to a radical response, but at the same time requires very precise coordination of specific innovations addressable specifically to Donbas, with the universal ones to be applied throughout Ukraine, and with the commitments that the state undertook within the EU association.*

*Lack of resources considerably limits the possibilities to channel budget funds for Donbas recovery; expectations of foreign investment may not materialize, therefore extremely important is the mobilization of funds of the population.*

**Keywords:** Conflict; Donbas Economy; War implications; Ukraine

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## INTRODUCTION

Conflict affected resident populations, internally displaced persons (IDPs) and refugees face shortages in food, health services, basic household items and shelter and suffer from psychological distress after more than one year and half of conflict. The resilience of the conflict affected populations, including host communities, is steadily depleting. Access to essential vital services is extremely challenging. Estimated number of people in need of humanitarian aid: 3,1million and casualties: 21 085 wounded 9187 killed<sup>1</sup>.

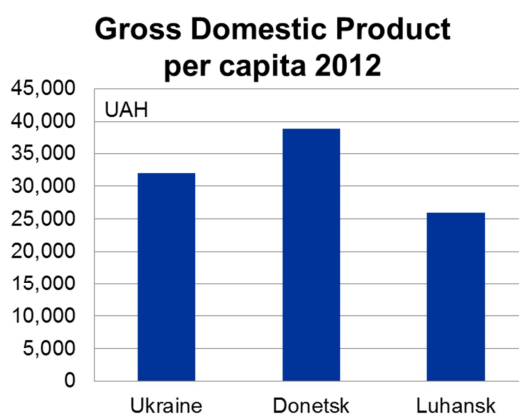
### 1. SOCIO-ECONOMIC SITUATION IN DONBAS IN THE PRE-CRISIS PERIOD

#### 1.1. Human Development

The population in Donbas formed under the influence of a large-scale migration from the countries of the former Soviet Union – more than 80% of the people born outside the country come from the Russian Federation. In the 21st century, the region has suffered significant migratory losses and at present experiences the highest rates of depopulation. Population as of 01.01.2014: 45.4 m for Ukraine, of which 4.3 m (or 10%) Donetsk and 2.2 m (5%) Luhansk.

In Donbas, there existed a powerful system of vocational education, including training and education of employees at workplace. At the same time, the Donbas labor market was influenced by structural imbalances caused by an unmet demand for skilled blue-collar workers and engineering professionals, and the industrial-type economic structure that had formed in the Soviet period was marked by the dominance of unskilled labor.

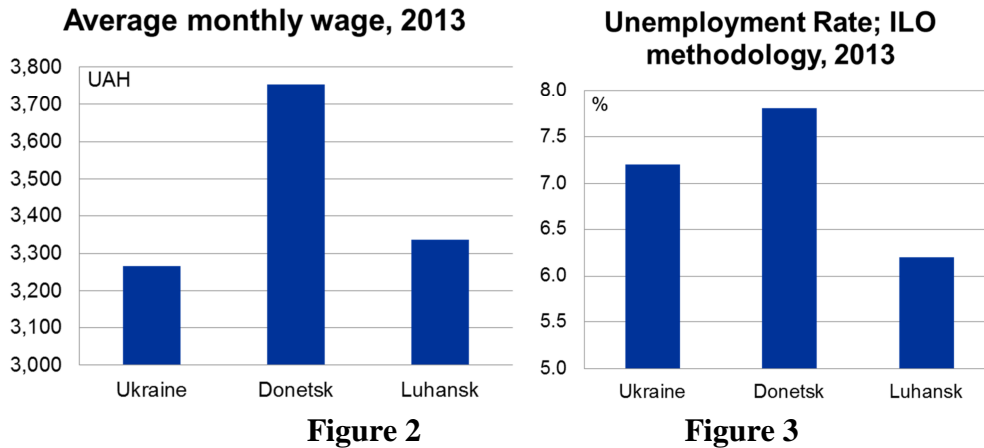
The Donbas contributes 16% to Ukraine's GDP, with Donetsk's share three times bigger than Luhansk's. The GDP per capita is in Donetsk higher than the national average, while Luhansk's GDP is lower (see Figure 1).



**Figure 1**

The population in the region has always been characterized by relatively high levels of material well-being, incomes and wages. In that respect, the structure of incomes was marked by a high share of pension benefits related to occupational privileges and compensations for work in dangerous, difficult and hazardous conditions, which were among of the most hazardous to Ukraine.

<sup>1</sup> As of end December 2015 (Sources: UNHCR, OCHA)



While the average wage in Luhansk is quite similar to the national average, wages in Donetsk are significantly higher (see Figure 2). Donetsk unemployment rate is higher and Luhansk clearly lower than the national average (see Figure 3).

The social environment in Donbas was characterized by high levels of crime and suicide, and the situation with the tuberculosis prevalence was difficult.

### 1.2 Social, Industrial and Rural Infrastructure

Health infrastructure had an extensive network of treatment and prevention institutions; the region had 44.3% of all preschool establishments with sanatoria groups. A feature specific to the school network in Donbas was a large proportion of city schools, the largest number of public secondary schools and one of the country's most powerful networks of evening schools with the highest number of students. Donetsk Oblast concentrated the largest number of vocational and higher education institutions in Ukraine, and the number of university students, along with students of vocational schools, exceeded 280 thousand.

Social infrastructure expenditures per 1 person in Donbas were below the average level in Ukraine. Among the regions of Ukraine, Luhansk and Donetsk Oblasts occupied the lowest position by the new housing supply. The level of rural infrastructure development in the region was among the lowest in Ukraine; more than a third of villages had no paved roads and houses in every fifth village had no amenities of any kind.

### 1.3 Economic Situation

Donbas formed an industrial and agricultural economic complex, with the primary development of heavy industry. The region with the area of 8.8% of the country's territory generated 25.0% of industrial and 8.0% of agricultural output. Enterprises were placed in clusters (coal, metallurgy, heavy machine-building, power engineering, and chemicals); the majority of the specialization sectors had interregional and international significance.

Due to their industrial structure, the share of both oblasts in industrial sales is significantly higher than their respective share in the overall economy (Donetsk: 19%, Luhansk: 6% and rest of Ukraine: 75%).

In 2012, total exports from Ukraine USD 68.8 bn, of which USD 14.1 bn Donetsk and USD 4.2 bn Luhansk. Share of both regions in exports is significantly higher than their shares in the overall economy (Donetsk: 21%, Luhansk: 6% and rest of Ukraine: 73%).

There are clear variations in the product structure of the exports of both regions: While Donetsk is the center of metallurgy (63%), the sectors mineral products, transport equipment & chemicals are more important in Luhansk (52%). The share of machinery (Donetsk: 4%, Luhansk: 3% and national average: 10%) is lower than the national average in both regions. The geographical structure of Donetsk's exports (Other: 57%, Russian Federation: 22% and EU: 21%) is roughly similar to the national average (Other: 49%, Russian Federation: 26% and EU: 25%). The share of the Russian Federation is much higher in Luhansk than both in Donetsk and Ukraine, while the share of the EU is similar (Other: 31%, Russian Federation: 43% and EU: 26%).

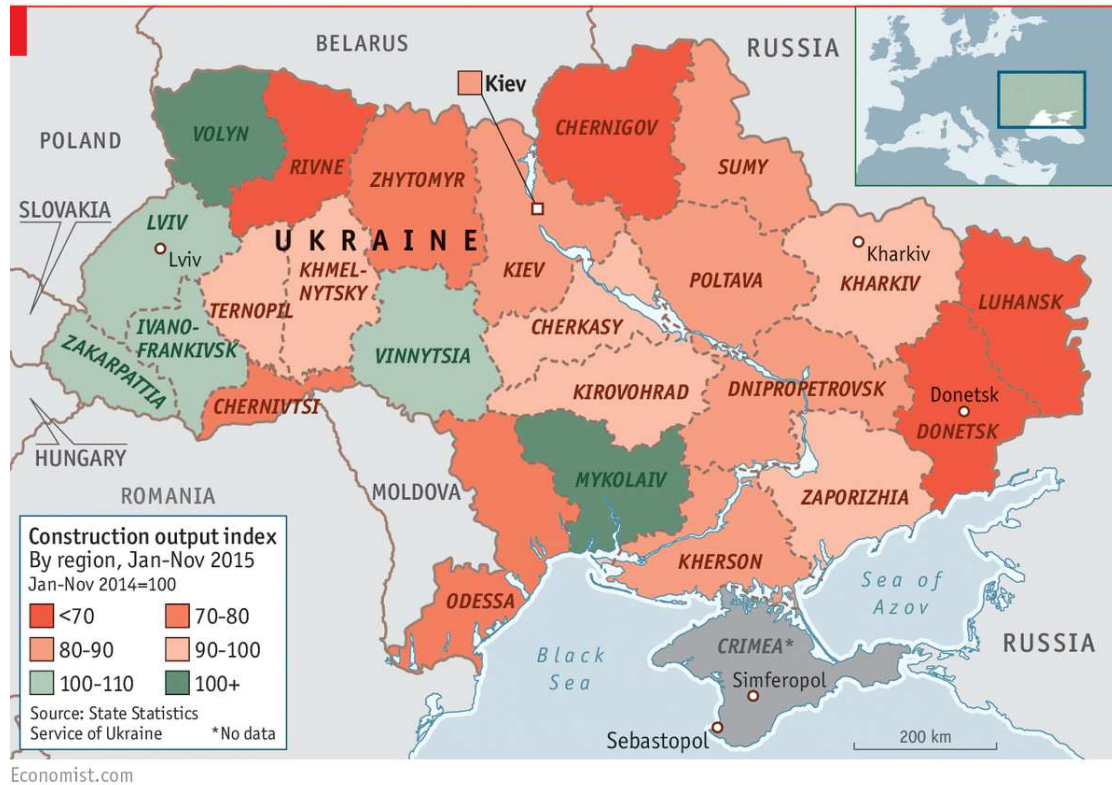
The Donetsk economic region was characterized by a developed network of roads and railways of national significance, which were part of international transport corridors. Important transit oil and gas pipelines, electric power lines and communication passed through its territory. The region was characterized by a high proportion of agricultural land. Currently, production of 70 to 90% of major agricultural crops is located in the areas controlled by Ukraine.

#### **1.4 Environmental Conditions and Specific Features of Natural Resource Management**

Historically, Donbas belonged to the regions with the highest levels of anthropogenic impact on the environment resulting from operation of its industrial complex. Shortage of drinking water reached 65% of the needs; in most residential areas in Donbas it was supplied by schedule; over 30% of residential areas did not have centralized water supply and in Luhansk Oblast, only 20% of water met the Ukrainian DSTU State Standard for drinking water.

## **2. ASSESSMENT OF SOCIO-ECONOMIC LOSSES CAUSED BY WARFARE**

The war has been concentrated in the east of the country (Donetsk and Luhansk). To show the economic damage this has caused, we've looked at how much construction is going on in different provinces (this is a decent proxy for GDP growth). Data from a warzone are hardly reliable, but there is a regional pattern to Ukraine's economic woes. In January-November 2015 Donetsk's construction shrank by an astonishing 60% on the previous year (see Fig 4).



**Figure 4 - Construction Output Indexes, by Region**

### 2.1. Socio-Demographic Losses

As a result of the fighting between armed groups and government forces in Eastern Ukraine that started in April 2014, hundreds of thousands have been forced to flee their homes and have become increasingly vulnerable. The conflict has affected over 3.7 million people, out of which 3.1 million are estimated to be in need of humanitarian assistance. The situation of the civilian population in Non-Government Controlled Areas (NGCA) and in the areas along the contact line is a matter of concern. The humanitarian situation is serious with freedom of movement and humanitarian access restricted due to continued fighting, security measures and Government enforced access and movement measures to and from the NGCA. New regulations from the Government of Ukraine on blocking commercial supply of food, medicines and other items from and to NGCA introduced in June 2015 are a major concern and may have impact on populations' needs. The obligation imposed by the "authorities" of the self-proclaimed "republics" in the NGCA in Eastern Ukraine to humanitarian organizations to register in NGCA also hamper the process of humanitarian aid delivery. The safety and security of the civilians caught in the conflict area is of great concern. Those staying in areas affected by fighting face imminent security threats due to military operations that have often been concentrated in the densely populated urban areas. Basic life-supporting services are disrupted, supplies at best intermittent and limited and lack of rule of law widespread, probably with a deteriorating trend. The resilience of the IDPs, of host communities and of the conflict affected population is steadily depleting. The affected population is in need of shelter, food and sanitation items as well as proper healthcare, psychosocial support and protection. Medical supplies are limited across Ukraine. In locations where fighting has taken place, the contamination by mines and unexploded ordnances (UXOs) remains a major issue

Civilian casualties in the military operations in Donbas exceed 9 thousand persons and continue to grow. Apart from the direct danger to life of the population during the combat operations, the deterioration of people's health in the conflict area is caused by disruption of normal living conditions, absence or delay of adequate medical care, lack of medicines, and forced failure to have access to the necessary treatment.

There exists a risk of outbreaks of socially dangerous diseases. The deterioration of sanitary and epidemiological situation is the second most significant risk, following the immediate danger to life in the active warfare, to public health and the restoration of economic activity in Donbas.

The total confirmed migration losses in the region are close to 1.5 million people. Uncertainty with any real prospects for the cessation of hostilities and the restoration of Ukraine's control over the occupied territories will result in a further increase in internal migration.

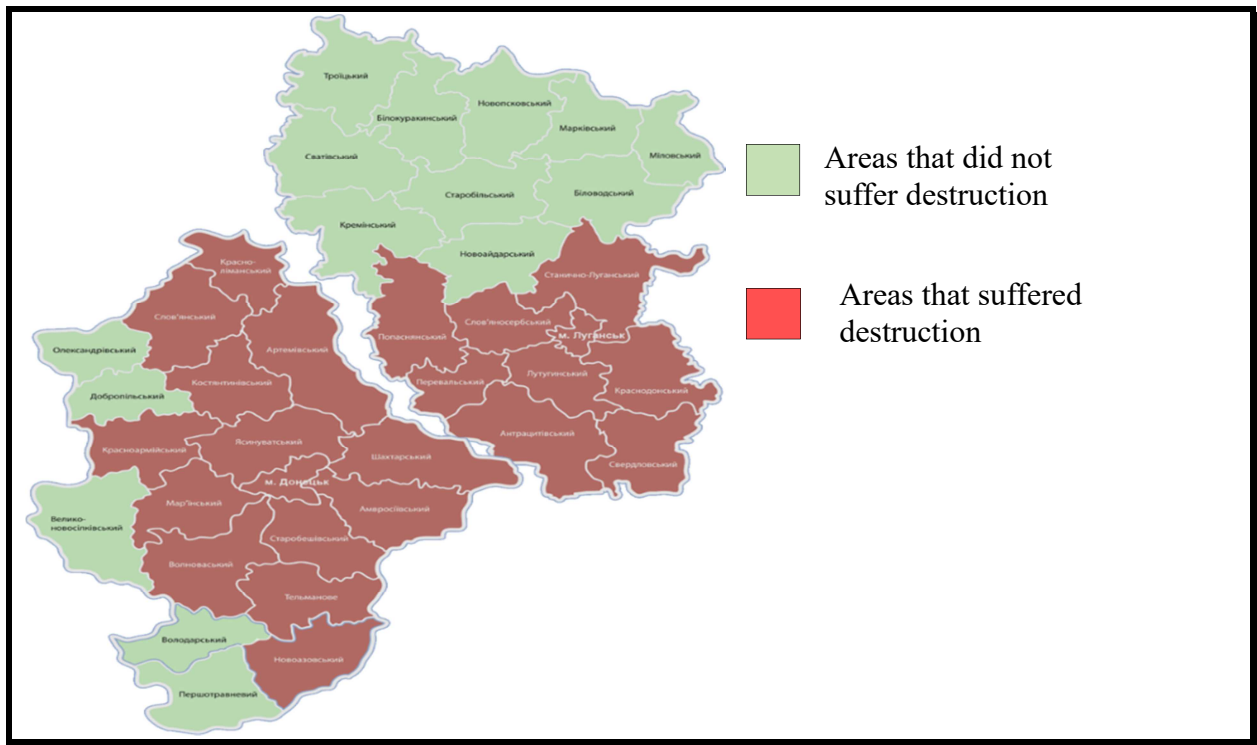
Job losses are estimated to range from 50% at large companies to 80 to 90% at small and medium enterprises in the region. Consequently, 1.1 to 1.8 million able-bodied people in Donbas has partially or completely lost their jobs and livelihood, which entailed emergence of up to 2 million economically inactive people.

The increase in poverty level among the population in Donbas due to loss of the principal sources of income, property and social status, has resulted in the emergence of the sudden poverty phenomenon and intensified the burden on the state social support system.

## **2.2. Destruction of Settlement Structures, Social infrastructure and Industrial Infrastructure**

As a result of the conflict and combat operations, densely populated and unique, in terms of urbanization, Donetsk and Luhansk Oblasts have suffered the greatest loss of population in urban areas, accompanied by the disruption of social life and provision of social services, complete or partial destruction of housing and the strategically important infrastructure assets. The average population density decreased by 20.2%, which is critical in terms of population recovery potential in the residential areas of Donbas in the near future.

The greatest damage has been caused to residential houses and systems of energy, water and heating supply. The total amount of damages in Donetsk Oblast alone exceeds UAH 1.25 billion. A large number of social infrastructure institutions have remained in the areas that are temporarily beyond Ukraine's control (see Figure 5).



**Figure 5 - Impact of Warfare on the Territories of Donetsk and Luhansk Oblasts**

Donetsk and Luhansk Oblasts, by their industrial potential, are the largest in Ukraine. The military operations significantly damaged machine-building, heavy industry and extraction industry, in particular, coal mining, since a significant share of enterprises in those sectors are located within the ATO zone. Economic activity in the areas temporarily beyond Ukraine's control decreased 5 times. In 2014, the volume of industrial output decreased in the Donetsk Oblast by 31.5%, and in Luhansk Oblast – by 42.0%. Budget losses amounted to 20% (see Figure 6).



**Figure 6 - Coal Mines in Donetsk and Luhansk Oblasts**

### **2.3 Environmental Losses and Deterioration of Natural Resource Management Conditions**

Significant damage was inflicted to water supply and water disposal infrastructure; the “Siversky Donets-Donbas” canal was damaged; water supply to cities and towns with the total population of over 2.5 million is under a threat of total disruption.

Coal mines are getting flooded, which can entail contamination and poisoning of the groundwater basin of the Siversky Donets and small rivers of the Azov Sea basin, as well as of drinking water and the environment.

The number of cases when dangerous toxic substances of industrial and municipal origin fall into water bodies continues to grow. There is danger in spontaneous burials that do not comply with sanitary and hygiene requirements (see Figure 7).





LEGEND:

Areas controlled by Ukraine	Damaged factory or another large enterprise
Temporarily occupied territories	Direction of resettlement
Demarcation line	Resettlement area
Losses of dwelling houses (with their number known)	
Almost totally destroyed residential areas	
Destroyed bridge	
Damaged section of an automobile road or railway tracks	
Destroyed airport	
Damaged mine	

Figure 7 - Destruction of Infrastructure and Directions for Future Resettlement for Donetsk and Luhansk Oblasts

## 2.4 Implications of the War on Agricultural Sector

Though Donetsk and Luhansk regions are considered mainly industrial areas, a large number of people especially in the western part of Donetsk and northern part of Luhansk are dependent on agriculture. Agriculture is fourth in importance; it employs around 310 000

workers or about 10 percent of the labor force. Agriculture (including livestock) is the second largest sector in Donetsk and Luhansk regions after industry.

Agriculture is a well-developed sector with about 1 295 000 hectares of arable land (about 48.9 percent of total area), out of which 988 000 hectares (about 59.1 percent of total area) are cultivated in the Donetsk and Luhansk regions respectively. According to the data available, 929 000 ha of land in Donetsk Oblast are located in the government-controlled territory, whereas the remaining 356 000 ha are located in the non-government-controlled territory. Similarly, in Luhansk Oblast 779 000 ha of land are located in the government controlled territory and 209 000 ha are located in the non-government-controlled territory.

Livestock is also important in the Donetsk region, which has some of the largest poultry-production holdings. The area is also considered as the breadbasket of the East, producing winter wheat, spring corn, barley and vegetables. It has a significant production capacity, which is sufficient for meeting the domestic needs of the region with a surplus (and exports).

The ongoing conflict in the Donetsk and Luhansk regions is severely affecting the agricultural sector across the whole of eastern Ukraine.<sup>3</sup> Many farming enterprises reported partial losses of the winter wheat harvest (June-July 2014).

The agricultural sector of the two Oblasts suffered enormous losses due to the conflict and instabilities. The number of reported and registered livestock killed reached more than 10 034 heads of cattle and about 160 000 heads of poultry. A much larger number of animals killed were not reported especially in rural areas, where access to veterinary services is limited.

Prices of basic foods have increased dramatically due to disruption of trade links and significant reduction of the local production. With the high price of fuel in the market growing insecurity, there has been a devaluation of the hryvnia against the dollar and transportation costs have increased (alternative routes across several checkpoints). The prices of most agricultural inputs have also risen.

Similarly, prices of herbicides and pesticides have risen, potentially affecting production. The limited availability of inputs, fuel and access to credit remains the main constraint.

Small farmers, many of whom are shareholders in farming enterprises and mostly unregistered producers, including pensioners, have lost a significant source of income, ranging between UAH 600 and 1 300 per hectare per year. Average monthly income in Ukraine is estimated at about UAH 3 863 in March 2015 (Minister of Finance of Ukraine, 2016).

With the increase in prices, lost and reduced incomes, devaluation of the currency, and the need to meet the increased costs (including house repair works), the capacity of many of the affected households is limited to engage/re-engage in agricultural production. Some of them reported that they were forced to slaughter their livestock, and with the winter approaching the number will likely increase.

An influx of internally displaced persons from conflict-affected areas has added to the gravity of the situation. Many are currently residing in collective centers, with little prospect of employment and high dependency on external food, cash and non-food assistance.

The food security of the population has been significantly affected, impacting both the quantitative and qualitative nutritional intake. Increasing food prices as difficulty outweigh

insecurity, and take the biggest toll on the daily lives of the population, threatening the onset of monetary poverty and consequently food insecurity. Agricultural production and food distributions have prevented severe food insecurity, although further erosion of the agricultural production will undoubtedly yield negative effects on the food security of the population. The Non-Government Control areas have been significantly more impacted in terms of agricultural production and agricultural incomes, indicating greater need for support.

## CONCLUSIONS

The safety and security of the civilians caught in the conflict area is of great concern. Those staying in areas affected by fighting face imminent security threats due to military operations that have often been concentrated in the densely populated urban areas. Basic life-supporting services are disrupted, supplies at best intermittent and limited and lack of rule of law widespread, probably with a deteriorating trend. The resilience of internally displaced persons (IDPs), of host communities and of the conflict affected population is steadily depleting. The affected population is in need of shelter, food and sanitation items as well as proper healthcare, psychosocial support and protection. Medical supplies are limited across Ukraine. In locations where fighting has taken place, the contamination by mines and unexploded ordnances (UXOs), remains a major issue.

Despite the globally confirmed reduction of ceasefire breaches, the humanitarian situation is highly concerning in Eastern Ukraine, which remains unstable and volatile. Humanitarian access is needed to ensure that aid delivery is not hampered and reaches all the people in need. All parties to the conflict should respect International Humanitarian Law and humanitarian principles.

There are two alternatives for the future of the region, according to Anders Aslund, senior fellow at the Atlantic Council.

One is a frozen conflict, similar to Russian-backed unrecognized states in Moldova (Transnistria) and Georgia (Abkhazia). But this would make western sanctions against Russia “persist forever”, argues Aslund. Since the sanctions began last year, Ukrainian trade with Russia has collapsed. In 2013, this trade accounted for between 20 and 30 per cent of all imports and exports through Ukraine. This fell by 30 per cent in 2014 and by almost half in 2015.

The other alternative is for Russia to “reinsert” occupied Donbass into Ukraine with huge costs for its redevelopment, especially since the rebel leadership appropriated large amounts of real estate and businesses.

It is unclear what the Kremlin wants to do with Donbas, and no good solutions are apparent. This is not only a humanitarian but also an industrial disaster area. The material destruction has gone so far that the economy cannot recover without serious reconstruction, and that cannot take place until a reasonably secure peace has been established. Nor is it evident that the old Soviet industry can be profitably reconstructed. The most probable development is that most of the population will emigrate, as has happened in Abkhazia, Transnistria, and South Ossetia. Donbas is likely to remain a disaster area for years to come.

## REFERENCES

- ANGELOVSKI, D. (2015), Socio-Economic Impact and ends assessment-Donbass-Ukraine, FAO, United Nations.
- ASLUND, A. (2014), Is it possible to salvage the economy of Donbas? Peterson Institute for International Economics (Available on: <https://www.piie.com/publications/opeds/print.cfm?ResearchId=2717&doc=pub> (Data Accessed on 16 April 2016).
- BIRD, M., VDOVII, L. and TKACHENKO, Y.. The Donbass Paradox: Russian-backed separatists have plundered the rebel-held regions in Ukraine's industrial heartland and created an economy stricken with fear, hypocrisy and contradiction. (Available on: <http://www.theblacksea.eu/donbass/> (Data Accessed on 17 April 2016)
- BUGRIY, M. and TRETIAK, T. (2015). Destruction of Donbas economy supports local Russia-backed 'insurgency'. Eurasia Daily Monitor (Available on: <http://www.ukrweekly.com/uwwp/destruction-of-donbas-economy-supports-local-russia-backed-insurgency/> (Data Accessed on 17 April 2016)
- EUROPEAN COMMISSION, Humanitarian Aid and Civil Protection-Ukraine (Available on: [http://ec.europa.eu/echo/files/aid/countries/factsheets/ukraine\\_en.pdf](http://ec.europa.eu/echo/files/aid/countries/factsheets/ukraine_en.pdf) (Data Accessed on 15 April 2016)
- KIRCHNER, R. and GIUCCI, R. (2014), The Economy of the Donbass in Figures, The Institute for Economic Research and Policy Consulting, Germany.
- MINISTER OF FINANCE OF UKRAINE (2016) (Available on: <http://index.minfin.com.ua/index/average/> (Data Accessed on 19 April 2016).